

NEWSLETTER

No. 179

Spring 2004

ONS News

Our Printers

We would like to extend a warm welcome to our new printers, Pardy & Son Ltd, who made a very good job of newsletter 178. We should also like to thank Seth Freeman of Baldwin's Auctions Ltd for his invaluable assistance in making the text of the newsletter suitable for the printing process.

Supplement

With this newsletter we are publishing a supplement by Bob Senior entitled "The Indo-Greek and Indo-Scythian king sequences in the second and first centuries BC". The author has informed us of a few small errors that need to be corrected, as follows:

"Adrian Hollis of Oxford has kindly pointed out that in several Greek forms used in my article I should have used the nominative case, ΜΕΓΑΣ rather than ΜΕΓΑΛΟΣ for example. On page 13 the Greek titles of Menander should have been '..ΝΙΚΗΦΟΡΟΥ, ΑΝΙΚΗΤΟΥ'. I also misspelled Philopator on page 22. Since I have also written Plato and Strato (the latin forms, the Greek being Platon and Straton) I should have called Thrason by the latin form Thraso, to be consistent. In note 13 on p. 24 I mentioned a nickel coin of Diodotos and this important coin is in the collection of A. Hollis."

London

The next ONS meeting in London is due to take place at the British Museum on Saturday 20 March 2004, commencing 11 am. The programme has, at the time of writing, not yet been finalised but will include talks by Joe Cribb on Multan coins and Robert Tye on metrology.

Oxford

An ONS meeting is being planned for Saturday 24 April 2004. Details are not yet available. Please contact Shailendra Bhandare for more information: shailendra.bhandare@ashmus.ox.ac.uk

Annual General Meeting

This will take place on 5 June 2004, at the London Coin Fair, Holiday Inn, Coram Street, London WC1, commencing 1 pm, to transact the following business:

To receive the Council's report on the activities of the Society during the previous year; and

To receive and consider the accounts of the Society for the previous year.

After the formal business of the meeting there will be the Michael Broome and Ken Wiggins memorial lectures - speakers yet to be confirmed.

Tübingen (Blaubeuren)

This year's meeting will take place on 8 and 9 May in Blaubeuren at the Heinrich-Fabri-Institut. Papers and talks will be given on the Saturday afternoon and Sunday morning. The programme is as follows:

Rolf Ehlert: "Circulation of European silver coins in the Levant from the 15th to the 18th century".

Wolfgang Schulze: "New - fake - questionable countermarks on copper coins of the Byzantine-Islamic transitional period".

Lutz Ilisch: "The relationship of the Umayyad and early Abbasid imperial currency to the regional currencies on the periphery of the Caliphate".

Aram Vardaniyan: "The coinage of the Sajids in Azerbaijan and Armenia"

Dietrich Schnädelbach: "Coins of the Muzaffarids: Shah Shuja' type 1".

Hans Herrli: "Political propaganda on Muslim coins of India and Afghanistan".

Johann-Christoph Hinrichs: "The tughra on the coins of the Beyliks"

Necdet Kabaklarlı: "Ottoman coins with the figure of an eagle issued in Tire"

Stefan Heidemann: "Ottoman hoard coins from Syria, 1516-1922".

Hans Wilski: "Kurusch or Zolota? The first large silver coins of the Ottomans".

Reinhard Hüther: "Two important new discoveries in Ottoman numismatics"

More information can be obtained from the Oriental Seminar's website at www.uni-tuebingen.de/orientsem/ons.htm or from Patricia Stasch, Forschungsstelle für Islamische Numismatik Wilhelmstr. 26, D-72074 Tübingen

Tel.: ++49 7071 297 8532,

Fax: ++49 7071 295387

Coinage and Money in the Seventh Century Near East
Oxford 29-30 November 2003

Summary by Tony Goodwin, Marcus Phillips, Susan Tyler-Smith

Although billed as the 8th Numismatic Round Table this was really the 11th such meeting the first of which was held in the British Museum in 1993. This time Oxford University was the host. The first day's proceedings were held in the Headley Lecture Theatre in the Ashmolean Museum and the second in Corpus Christi. The respective organisers, Luke Treadwell and James Howard-Johnston, provided efficient organisation and generous hospitality.

Clive Foss began the proceedings with a general overview lecture. This was a general survey of recent progress much of which was familiar to many in the audience but also included some challenging suggestions.

Historians now regarded the Arab 'invasions' as a much less violent and disruptive process than hitherto. There was a precedent of foreign rule by the Persians who, like the Arabs, had retained the traditional administration and its personnel. On the other hand a recent Israeli book had taken this idea to extremes. It had a chapter on numismatics where the authors had made a number of mistakes, for example, taking the XII found on coins of Jerash as a real date referring to 12H (!) and stating that Muhammad's name is not mentioned on coins until after 690.¹ CF regarded the Caliph Mu'awiya (41-60/661-80) as the key innovator anticipating the reforms of 'Abd al-Malik. He argued that his administrative reforms, though poorly described in the sources, were sufficiently far-reaching to justify a first attempt at coinage reform apparently referred to in the much disputed passage of the Maronite Chronicle.² There were also parallels with Iran where the coinage of the governors replaced anonymous issues about the same time.

Among the various suggestions put forward in the course of his survey CF argued that it could usefully be divided into imitative and derivative – the latter being essentially new types whereas the former were simply copying the official Byzantine types. He also suggested that the two standing caliph type usually attributed to Baisān, though in his opinion more likely to have been struck at Jerash, represented 'Abd-al-Malik and his brother 'Abd al-'Aziz on the occasion when their father Marwan obliged the Arab leaders to swear allegiance to them in 65/684-5. He also wondered if the 'Standing Caliph' on the coins of Ilya Filistīn might be intended as a portrait of Muhammad.

Wolfgang Schulz discussed the Heraclian countermarks found on Byzantine coins in seventh century Syria. They appear to be confined to the period 630-6 but the provenances were strange. By far the greatest number had been found in the excavations at Caesarea Maritima but they were also curiously common in Cyprus. He considered and rejected, recent attempts to attribute one of the monograms to Heraclius' brother Theodore and also the idea of some kind of revaluation in connection with Heraclius' monetary reforms. After discussing the typology and the reading of the countermarks he rejected the older proposals that the countermarks served for reasons of propaganda or monetary policy in connection with the Heraclian monetary reforms. Statistical analyses of 122 (now 157) specimens and their provenances as well as comparisons with contemporary finds led him to the conclusion that the countermarks were applied between circa 633 and 636 in Palestine. Regarding the historical background, they were presumably produced in Byzantine military mints during the struggles with the invading Arabs.

Circulating copper coins (old and new – folles, three quarter and half folles) became revalued by countermarking because of the serious lack of cash at that time in Syria.

Tasha Vorderstrasse illustrated a few Umayyad imperial image and standing caliph coins found from sites (Catal Hüyük, Tell Kurdu, Tell al-Juda'dah) in the coastal plain of Antioch. These were by-products of excavations primarily concerned with pre-historic sites and the coins were merely described as having been found in 'chutes'.

Tony Goodwin described the 7th century Byzantine and Arab-Byzantine coinage of Egypt, and pointed out that there were a number of problems in the generally accepted succession of types in the Byzantine series. In particular the evidence appears weak for assigning a common type with a star and crescent on the obverse to the period of Sasanian occupation of the 620s, and it might more plausibly be regarded as the first issue of Heraclius. The two main types of Constans II also present some difficulties as it is hard to imagine this volume of coinage being minted between the start of Constans' sole reign in October 641 and the Arab occupation of Alexandria in September 642. So far as the Arab-Byzantine coins are concerned, the recent work of Lidia Domaszewicz and Michael Bates has clearly differentiated them from their Byzantine predecessors.³ It is now apparent that this coinage is a close parallel to the Umayyad Imperial Image coinage in Syria, with three different mints in operation, each with their own mint-mark. He concluded with another problem coin: a rather scarce issue with two busts on the obverse and the letters $\alpha - \omega$ either side of a cross-on-steps on the reverse, with the mint name ΠIAN. He rejected the suggestion of Domaszewicz and Bates that this copied a coin from the mint of Rome, and suggested that it was a local coinage, probably minted by some ecclesiastical authority, either just before or just after the Arab conquest.

Jeremy Johns gave an overview of the evidence provided by archaeology for the development of the Islamic state. He described a number of recent excavations of mosques and governor's palaces from the late 7th century, none of which appeared to date from earlier than the reign of 'Abd al-Malik (685-705). Whilst earlier scholars had proposed layouts for mosques of an earlier date, there is still no firm archaeological evidence for monumental building prior to 'Abd al-Malik. Interesting evidence is also provided by surviving Islamic inscriptions: the earliest known example dates from 22 AH (642/3) and the earliest Muslim tombstone from 31 AH (651/2). However, there are no references to Muhammad until the Dome of the Rock inscriptions of 72 AH (691/2), following which such references become common, indicating a change in the way Islam was incorporated into public propaganda. All this points to a profound change from a loose confederation under Mu'awiya (661-680) to a much more centralised Islamic state under 'Abd al-Malik, a picture that is supported by the evidence of papyri, coins and the comments of slightly later Christian writers. Dr Johns concluded by saying that archaeology was unlikely to throw much light on the extent to which the changes had started under Mu'awiya, but that the detailed study of the copper coinage may prove to be of some help.

Andrew Oddy reported on progress in a die study on the Umayyad imperial image coinage of Scythopolis and Gerasa (modern Beth Shean in Israel and Jerash in Jordan). These unusual coins copy the design of 6th century Byzantine folles of

¹ Y.D. Nevo and J. Koren, *Crossroads to Islam: the Origins of the Arab Religion and the Arab State* (Prometheus Books, 2003) ISBN 159 102 832.

² A. Palmer, *The Seventh Century in the West Syrian Chronicles*, (Liverpool, 1993), p. 31 ff.

³ Lidia Domaszewicz and Michael Bates in 'The copper coinage of Egypt in the seventh century', in Jere I. Bacharach (ed), *Fustat Finds - Beads, Coins, Medical Instruments, Textiles and Other Artifacts from the Awad Collection* (The American University in Cairo Press, Cairo, 2000), pp. xi, 235. ISBN 977 424 3935.

the emperor Justin II, but with the emperor's name replaced by a mint name. He said that he was surprised at the large number of dies already identified, over 40 obverse and 60 reverse, numbers which are comparable with the largest Syrian mints of this period. A few coins have obverse legends which do not approximate to either Scythopolis or Gerasa and he has identified the letters **ABA** on these, which could be an abbreviation for the nearby Decapolis city of Abila.

Rika Gyselen discussed two aspects of the coinage of Khusrau II. Clay bullae have long been used for identifying Sasanian mint abbreviations. A recently discovered archive of bullae has provided new information about the administration of Iran in the sixth century as well as giving the names of 30 provinces which had not previously occurred on bullae. It has also become clear that the same abbreviation could be used to represent two different towns. This is important since it could allow the contentious identification of **WYHC** to be resolved. RG's identification of it as the town of Veh az Amid Kavād, (re)founded by Kavād I could be correct when it first appears on the coins of Kavād I, whereas Mochiri's identification of the same abbreviation as one of the towns of the capital, Ctesiphon, seems much more likely for coins struck by the late, short-lived, kings and queens ruling after Khusrau II.

RG also suggested new translations of two legends found on Khusrau II's coins. The legend *huslwy apzwt GDH* found on all Khusrau's regular drachms from year 2 onwards should be translated as 'Khusrau has increased the royal glory'. The legend found on the 'commemorative' gold and silver issues, with the facing bust in a flaming halo on the reverse, should be translated as 'Khusrau has increased Iran and is well omened' (*hujadag*). This latter translation has been made possible by one of the words, which had previously only been known in the cursive Pahlavi found on coins, appearing on a bulla in the much clearer lapidary script.⁴ The 'commemorative' silver issues should be associated with Khusrau's wars in the east rather than his wars with Byzantium. RG suggested a number of events with which they might be linked.

Susan Tyler-Smith discussed some problems associated with the so-called 'Shiraz' or 'Year 12' hoards of Sasanian drachms. The latest coins in this hoard are dated year 12 (or possibly 13) of Khusrau II, i.e. 601-3 AD. It is a characteristic of hoards buried before the end of Sasanian rule that they contain very few coins dated before about 601 in contrast with hoards buried in Islamic times. Year 11 saw the introduction of the marginal legend *apd*, probably meaning 'excellent', on some of the coins struck at most mints throughout the empire. Issues of *apd* coins continued for the remainder of Khusrau's reign but then ceased. They appear to have been struck to a higher standard of purity than non-*apd* coins. The hoard and metallurgical evidence suggests that the reform of the coinage, which took place in 600-1 and must have been intended to raise money for Khusrau's wars, may have involved the withdrawal of all earlier issues. The methods by which the *apd* coins were used to extract surplus money from the population and the way in which they were put into circulation is not clear.

Tim Greenwood considered Byzantine and Sasanian coin finds in the Republic of Armenia, particularly in connection with the recent *Moneta* publications. The modern Republic includes only a fraction of the original medieval kingdom but has the advantage that it includes part of both the Sasanian and Byzantine controlled areas. In Armenia itself Sasanian coins have been better studied than Byzantine but academic study is hampered by the poor publication of hoards. Coins from one hoard may have been muddled with other hoards and 'hoards' may be only partial or

even just an accumulation of coins from one site. The *Moneta* publications need to be used with caution, especially with regard to their historical reconstruction, discussion of coin circulation and proposed burial dates of hoards.⁵ TG suggested that since the Armenians evidently copied Sasanian coins of Hormizd IV and Khusrau II they may have copied Byzantine hexagrams as well. We have evidence that gold and silver was mined in Armenia in the sixth and eighth centuries, when the Armenians themselves did not control their territory, so it is possible that during the seventh century the mines were in Armenian control.

Bibliographical Bulletin

Many of the points made by Clive Foss are now argued by him in detail in the following

'A Syrian coinage of Mu'awiya?', *RN* 2002 pp. 353-65.

'The Persians in the Roman Near East', *JRAS* 3 13, 2 (July, 2003) pp. 149-170.

'The two-caliph bronze of 'Abd al-Malik', *ONSNL* 177 (Autumn 2003) p.4-5.

The idea that the countermarks involved a revaluation is put forward by K.N. Economides, 'Byzantine folles countermarked with Heraclian inscriptions found in Cyprus', *NC* 2003, pp. 261-186.

A long version of the paper on Heraclius countermarks will be published under the common authorship of Wolfgang Schulze, Ingrid Schulze and Wolfgang Leimenstoll in the journal *Byzantine and Modern Greek Studies* of Birmingham University.

A critique of the Domaszewicz and Bates' study of Alexandrian coins by Michael Metlich and Nikolaus Schindel appears in this newsletter.

Andrew Oddy's attribution of certain Justin II imitations to the mint of Abila will appear in the 2004 *NC*.

Susan Tyler-Smith's study of part of the 'Shiraz' hoard will appear in the series *Jaenaer Beiträge zum Vorderen Orient*.

⁴ R. Gyselen, *The four generals of the sasanian empire: some sigillographic evidence* (Rome, 2001).

⁵ K. Mousheghian, A. Mousheghian, C. Bresc, G. Depyrot, F. Gurnet, *History and coin finds in Armenia. Coins from Duin, capital of Armenia (4-13th c.). Inventory of Byzantine and Sasanian coins in Armenia (6-7th c.). Collection Moneta 18.* (Wetteren, 2000) and *History and coin finds in Armenia. Coins from Ani, Capital of Armenia (4th c. BC - 19th c. AD Collection Moneta 21* (Wetteren, 2000).

New and Recent Publications

Los Reyes de Taifas. Estudio Numismático de los Musulmanes Españoles en el Siglo V de la Hégira (XI de J. C.), Facsimile edition of the original work by Antonio Prieto y Vives with the inclusion of plates and a supplement by Tawfiq ibn Ibrahim and Alberto Canto García; coedited by the Universidad Autónoma de Madrid e Ibersaf. 222 pages, format: 21 x 29 cm

ISBN: 84-95803-17-8; price €108.20; Published December 2003. This expanded reprint of the important work by Prieto, first published in 1926, has 91 plates and the supplement contains coins that have come to light in recent years. For more information please contact Ibersaf C/ San José, 21, 28014 Madrid, Spain; Tel ++34 (9)1 429 95 34 – (9)1 429 30 96; Fax ++34 (9)1 420 39 48; safel@ibersaf.es

Volume 14 of *Studies in South Indian Coins* has recently been published. This contains various articles on south Indian numismatics.

The Indian Coin Society has been resurrected as has its newsletter under the editorship of Dilip Rajgor.

IIRNS Publications have recently released the book *Foreign Coins Found in the Indian Sub-Continent*, edited by David MacDowall and Amiteshwar Jha. This contains the proceedings of the 14th International Colloquium organised by the institute. There are 23 varied articles on 140 pages. Price US\$25 for normal version, US\$40 for hardbound version plus postage. ISBN: 81-86786-17-1 For additional information please contact IIRNS, PO Anjaneri, Nasik 422 213, India. E-mail: info@iirns.org.

Lists Received

1. Stephen Album (PO Box 7386, Santa Rosa, Calif. 95407, USA; tel ++1 707 539 2120; fax ++1 707 539 3348; album@sonic.net) lists 194 (January 2004), 195 (February 2004)
2. Jean Elsen & ses fils s.a. (Tervurenlaan 65, B-1040 Brussels, Belgium; tel ++32 2 734 6356; fax ++32 2 735 7778; numismatique@elsens.be; www.elsens.be) list 227 (Jan-March 2004) has around 300 items of oriental interest.

Auction News

1. Jean Elsen & ses fils s.a. (see details above), auction 78, 20 March 2004, had some 300 lots of oriental interest.
2. Gorny & Mosch, Giessener Münzhandlung GmbH (Maximiliansplatz 20, D-80333, Munich, Germany; tel ++49 89 2422643-0; fax ++49 89 2285513; info@gmcoinart.de; www.gmcoinart.de) auction 130, 8-9 March 2004, had some 450 lots of oriental interest relating to various ancient series.

Other News

From 10 February to 11 April this year the Museo Casa de la Moneda in Madrid, Spain, has an exhibition of Islamic coins entitled "Un resplandor del Islam: los dinares del Museo Casa de la Moneda". The display, organised by Tawfiq Ibrahim and Alberto Canto, comprises 143 coins, mostly dinars, from the museum collection arranged in six sections: origins, the Umayyads, the Abbasids, the fragmentation of Islam, the Fatimids, the north African dynasties (up to the Marinids).

A collector from Göttingen has donated his collection of 307 mediaeval Yemeni coins to the Friedrich-Schiller-Universität Jena. About 130 coins of this collection were struck by the Rasulids, who ruled the Yemen between the 13th and early 15th century. Many of the silver coins are characterised by a symbol which became significant for their mints: for example a sitting man, a lion, or a lion attacking a cow, which are typical for the

city of al-Mahjam. There is also a light gold dinar citing an Isma'ili propagandist and missionary of the late 5th/11th century.



Three Rasulid coins from the mint al-Mahjam showing different images:

- al-Mujahid Ali ibn Da'ud (721-764/1321-1363) with a lion. (2003-31-55)*
- al-Ashraf Isma'il (778-803/1376-1400) a lion attacking a bull. (2003-31-62)*
- al-Ashraf Isma'il, a sitting man. (2003-31-65)*



The light dinar names the Isma'ili propagandist and missionary al-Mansur Abu Himyar Saba' ibn Ahmad, who is known to have been active between 484/1091 and 492/1099. The coin is not dated according to the Islamic calendar, but mentions the 19th year of "the lord king" (*al-malik al-sayyid*). This date probably refers to the Sulaihid rulers.

Information and illustrations from Stefan Heidemann

A Correction

A Zangid Coin in Central Asia: A note to an article by M. Fedorov
by Stefan Heidemann

In ONS Newsletter 178, pp. 46-8, M. Fedorov drew our attention to an enigmatic coin apparently found in Central Asia and which is in the ownership of a private collector. It is in fact a coin of the Zangid ruler of Aleppo, al-Salih Isma'il (569-577/1174-1181) minted in Aleppo in the year 571 h. (See W. F. Spengler - W. G.

Sayles, *Turkoman Figural Bronze Coins and Their Iconography II*, Lodi 1996, p. 74 type 77.1).

The coin was intended for local circulation in northern Syria. The findspot is indeed curious, if it was really found in Central Asia and this will have been misleading to the original author. But sometimes single coins travel far. A coin from the same year 571 h. (Spengler - Sayles, type 76) made its way to Oldenburg, Germany where it was found in a controlled excavation (G. Hatz - G. Rispling, *Münzfunde aus Oldenburg in Holstein* (1981-1986), in: *Offa* 52(1995), pp. 153-162, no. 41).

Articles

Collections of Oriental Coins in Germany

By Stefan Heidemann

Islamic coins are designed to be objects of art but at the same time they are textual documents with political and religious formulae. Their design is influenced by a wholly different set of conditions which plays no role in the design of other objects of Islamic art: the currency system, their legal validity according to Islamic law, conservative cultural expectations towards the design of money which influenced their acceptance, the respective technical procedures of a mass product manufactured on the principle of the division of labour, the political message as well as the administrative structures which lay behind all these factors. Classical Islamic law saw gold and silver coins as absolute equivalents, meaning legal money. Copper coins were only money under certain conditions. They had a different, variously defined, juridical position in the currency systems as tokens. This special status allowed for greater freedom in the design of copper coins than was permitted with precious metal coins.

Islamic coins are characterised above all as the bearers of texts of up to 150 words. The inscriptions on the coins struck during the first six and a half centuries of Islam - a period for which we have, with few exceptions, no other primary historical documents - often mention from three to five names, providing the names and titles of the whole hierarchy of power - from the local governor up to the caliph. They usually state the town where the coin was minted, sometimes more precisely the district, then the year of minting, sometimes even noting the month and the day. Religious legends give hints of the political orientation of the ruler. In Islamic history the inclusion of the name of the ruler in the coin protocol and in the Friday prayers served as proof that he actually ruled. They had an identical juridical and political value. Mention in the Friday prayers, however, was purely verbal; on coins the protocol can be found permanently stored on a metal object that was frequently reproduced. Islamic copper coins could also offer a wealth of images of mythical creatures, humans, flora and fauna which are still not fully understood.

After centuries of mere curiosity regarding Oriental coins appearing in collections from the time of the renaissance, Islamic numismatics started as an offspring of theology in the eighteenth century. In 1724, the orientalist Georg Jacob Kehr (1692 - 1740), from Leipzig, wrote the first monograph on Islamic numismatics, which described a hoard of Islamic coins found near Gdansk. Richard Ettinghausen regarded this monograph as marking the beginning of Islamic archaeology (Ettinghausen, R.: *Islamic Art and Archeology*. In: T. Cuyler Young (ed.): *Near Eastern Culture and Society*, Princeton 1951, 17-47, esp. 21). By the end of the 18th century, in the period of the theology of the Enlightenment, a scientific discourse had come into being in Germany conducted by Protestant theologians who were both interested in historical matters and able to read Arabic. Their interest was often initially aroused by Islamic coins found in their native regions, usually around the Baltic Sea. These dated mainly from the tenth century, a period when the Vikings had established trade contacts with the core lands of the Islamic empire and then with Central Asia. The

first specialised collections were also formed in the time of the theology of the Enlightenment. In 1794, the theologian and orientalist, Oluf Gerhard Tychsen (1734 - 1815) of Rostock, published his *Introductio in rem numariam muhammedanorum*, the first scholarly manual of Islamic numismatics. Tychsen's collection is still part of the university collection in Rostock. His colleague in Göttingen, Thomas Christian Tychsen (1758 - 1834), was able to build up the Oriental holdings of the university collections with the assistance of generous patrons, in particular alumni living in imperial Russia.

In Germany, the second and third decades of the nineteenth century saw a new kind of Oriental scholarship emerge, emancipating itself from theological studies. A generation of young scholars fostered this change. Most had studied at the *École spéciale de langues orientales vivantes* in Paris with Antoine Isaac Silvestre de Sacy (1758 - 1838). He established Oriental studies as the philology of Oriental languages and liberated these studies from their previous spiritual and institutional dependence on theology. From now on, the major task of Oriental philology was seen as the collection of textual sources of all kinds, not only manuscripts, but also papyri, inscriptions and coins. Many of the students of Silvestre de Sacy included numismatic studies among their publications.

In 1840 one of his students, Johann Gustav Stickel (1805 - 1896), was able to found the Grand-Ducal Oriental Coin Cabinet in Jena with the financial support of the Grand-Ducal house in Weimar. He served as its director and as Professor for Near Eastern Languages in Jena up to his death. At this time, the Grand-Ducal Oriental Coin Cabinet was the only specialised research institution of its kind. The eighteen-forties and fifties in Germany saw the climax of academic research on numismatic sources within the scope of Oriental studies, measured by the number of authors and articles appearing in the *Zeitschrift der Deutschen Morgenländischen Gesellschaft*, the monographs published and the private collections formed. In the eighteenth sixties and seventies, Islamic numismatics stagnated and interest in the field began to decrease as the generation of students of Silvestre de Sacy in Germany were replaced by younger scholars. From the sixties onwards the collections formed by the older generation of orientalist entered universities and public coin cabinets. For example, in 1866 the collection of Frédéric Soret (1795 - 1865) came to Jena, in 1867 the collection of Ernst Meier (1811 - 1866) to the University of Tübingen, in 1873 - after detours - the collection of Otto Blau (1826 - 1879) to the university library in Leipzig, in 1888 that of Heinrich Leberecht Fleischer (1801 - 1888) to the library of the Deutsche Morgenländische Gesellschaft in Halle. In 1877 the collection of the British officer, Seton Guthrie, of about 15,000 specimens was the new starting point for the development of the Oriental holdings in the Royal Coin Cabinet in Berlin. The young orientalist Adolph Erman (1854 - 1937) was hired for this task. He was the first to invent the ordering of a collection according to mint and dates instead of by dynasties, but for him the coin cabinet was only one stop in his career to a professorship of Egyptology, which he obtained in 1883. In spite of the considerably enlarged material base, Islamic numismatics in Germany did not make a new start. In 1896 with the death of Johann Gustav Stickel, studies in Oriental coins at German universities came to an end for nearly a century. Erman's successor in Berlin, Stickel's student Heinrich Nützel (1863 - 1934), ceased publishing after the First World War. This was also the end of Oriental numismatics in public coin collections for the time being.

From the middle of the nineteenth century the humanities had diversified more and more, to the disadvantage of Islamic numismatics. On the numismatic side the linguistic competence to put the information into its proper historical context was absent

and knowledge of numismatic methods was lacking on the part of orientalists. Only a few orientalists at the end of the 19th century still worked with numismatic sources.

For this reason, attempts to revive Islamic numismatics after the Second World War by numismatic institutions in the former Federal Republic of Germany and the German Democratic Republic failed. In 1949 the acquisition of the above mentioned collection of Frédéric Soret (4,010 specimens) by the Bavarian State Collection in Munich might have allowed a fresh start. Being originally only a loan of the Grand-Ducal house, Soret's collection had been returned to it by the University of Jena in 1939. In 1969 the person in charge for the Oriental collection at Munich, the classical archaeologist and art historian Peter Jaeckel (1914 - 1996), was promoted to be the director of the Army Museum in Ingolstadt. Work on the Oriental part in Munich stopped.

The revival of Islamic numismatics in Germany as an academic subject came about on the initiative of the Oriental institutes of the universities. Now, due to a new self-definition as an interdisciplinary regional subject, historical Islamic studies were in search of new research tools. In 1990 a research unit for Islamic numismatics was founded at the University of Tübingen. A private American collection of about 30,000 specimens was purchased by the Volkswagen Stiftung as a base. In 1994 the chair of Semitic Philology and Islamic Studies was established at the University of Jena after a vacancy of 75 years. Since then, the former Grand-Ducal Oriental Coin Cabinet has been reconstituted and made available for study. Both collections have since almost doubled in number and quality - Tübingen about 65,000 and Jena about 15,000 coins - in each case with the support of an active circle of private patrons and sponsors. In spite of the renewed importance of Islamic numismatics not only for historical research, but also for art history and archaeology, no other German Islamic coin collections are now curated by an orientalist. Efforts were made, however, by Tübingen and Jena to survey other medium-sized Oriental collections from the 19th century and to make them again accessible for researchers.

The material base of Islamic numismatics multiplied substantially world-wide in the last quarter of the last century. In Germany alone, 135,400 Oriental coins at least are available for study in public collections, including 30,600 Indian coins and, in addition, at least 24,600 East Asian coins. Today Islamic numismatics is in the position of possessing a rich supply of material evidence from many places and periods of the Islamic world which can be "read" parallel to the historical tradition and be "seen" parallel to the development of Islamic art. Due to the ambivalent nature of coins both being textual documents as well as miniature works of art there is no permanent exhibition of Islamic coins in Germany. As in any archive, the visitor usually has to make an appointment to see the coins on a one to one basis.

General Literature

- Heidemann, Stefan (2000): *Islamische Numismatik in Deutschland*. In: Heidemann, Stefan (ed.) 2000: *Islamische Numismatik in Deutschland - eine Bestandsaufnahme* (Jenaer Beiträge zum Vorderen Orient 2), Wiesbaden 2000. (cited below as Heidemann 2000).
- Mayer, Leo Ari: *Bibliography of Moslem Numismatics India Excepted* (Oriental Translation Fund 35), 2nd revised edition, London 1954.

Collections

The following information has been collected from the literature and by direct inquiries at the respective institutions about their Islamic Oriental holdings. Due to the specific organisation of each collection sometimes Indian and East Asian coins are included, sometimes not. Only where additional information about East

Asian coins was available, has this been given as well. The literature is by no means complete, but an introduction into the coin collections and their Oriental holdings.

Abbreviations

Cat.: Catalogues of at least a significant part of the Oriental coins within the collections.

Lit.: Monographs or articles about the history of the collection either in general containing some information about the Oriental coins or, if available, in particular about the Oriental holdings.

ZDMG: Zeitschrift der Deutschen Morgenländischen Gesellschaft.

Collections with more than 10,000 Islamic coins

Berliner Münzkabinett, Staatliche Museen - Preußischer Kulturbesitz

director: Prof. Dr. Bernd Kluge

Bodestrasse 1-3, D-10178 Berlin

tel. and fax: +49 (30) 20905701, 20905702 (fax)

e-mail: mk@smb.spk-berlin.de

<http://www.smb.spk-berlin.de/mk/index.html>

ca. 20,000 Islamic, 10,000 Indian, 5,000 East Asian coins. It includes the collection of Peter Philipp Adler (1726 - 1814), Heinrich Friedrich von Diez (1751 - 1817), Georg Bühler (1837 - 1898; 1,233 Indian coins), Seton Guthrie (bought in 1876; 15,000 coins), Andreas David Mordtmann der Ältere (1811 - 1879) and a part of the almost lost Oriental coins from the Coin Cabinet in Gotha (acquired in 1935; 60 coins, see below). Substantial in number are 10,000 Abbasid coins from the Babylon hoard (tpq 204/819-20) excavated by Richard Koldewey, which entered the collection in 1926.

Lit.:

Friedländer, Julius - Sallet, Alfred von: *Das königliche Münzkabinet*. Geschichte und Übersicht der Sammlung nebst erklärender Beschreibung der auf Schautischen ausgelegten Auswahl, 2nd revised edition, Berlin 1877.

Cat.:

Nützel, Heinrich: *Katalog der orientalischen Münzen* 1. Die Münzen der östlichen Kalifen, Berlin 1898.

-, *Katalog der orientalischen Münzen* 2. Die Münzen der Nordafrika, Berlin 1902.

-, *Münzen der Rasuliden nebst einem Abriss der Geschichte dieser jemenischen Dynastie*, Berlin 1891. [collection Eduard Glaser (1905 - 1908) acquired during his Yemen expeditions before 1892. Eight of these coins entered the Oriental Coin Cabinet in Jena]. Reprint and Translation: *Coins of the Rasulids Comprising a Synopsis of the History of that Yemenite Dynasty*, Mainz 1987.

Pertsch, Wilhelm: Bericht über eine Sammlung indischer Münzen. In: *ZDMG* 25 (1871) 605-617, 2 plates. [collection Georg Bühler].

Simon, Hermann: "Die sasanidischen Münzen des Fundes von Babylon. Ein Teil des bei Koldeweys Ausgrabungen im Jahr 1900 gefundenen Münzschatzes", in *Acta Iranica*, 12 (Textes et Mémoires 5, Varia 1976), Leiden 1977, 149-337.

Orientalisches Münzkabinett der Universität Jena

director: Prof. Dr. Norbert Nebes, coordination: Priv.-Doz. Dr. Stefan Heidemann

Löbdergraben 24a, D-07743 Jena

tel. and fax: +49 (3641) 944850, 944864, 944852 (fax)

e-mail: gnn@uni-jena.de, x7hest@uni-jena.de

<http://www2.uni-jena.de/philosophie/iskvo/omj.htm>

ca. 14,000 Islamic, 1,100 East Asian coins. It includes the collection Heinrich August Zwick (1796 - 1855; 1,500 coins), parts of the collection von Spewitz (bought 1846; 175 coins); Justin Sabatier (bought 1852; 728 coins), August Otto Rühle von

Lilienstern (1780 - 1847; 870 coins), part of the collection of Frédéric Soret (1795 - 1865; ca. 1,000 coins, see also Bavarian State Collection, Munich), Heinrich von Siebold (1852 - 1908; 343 East Asian coins and amulets), Peter Jaeckel (1914 - 1996; 1,200 coins), Christof Baum (donated 2003; 307 Yemenite coins).

Lit.:

Heidemann, Stefan: Orientalistik und Orientalische Numismatik in Jena. In: Heidemann (2000) 87-106.

-, Bibliothek des Großherzoglichen Orientalischen Münzkabinetts. In: Friedhilde Krause (general ed.) - Felicitas Marwinski (ed.): *Handbuch der Historischen Buchbestände in Deutschland 20. Thüringen* H-R, Hildesheim, Zürich, New York, 162-163.

Vollers, Karl: Das orientalische Münzkabinett der Universität Jena im Jahre 1906. In: *Blätter für Münzfreunde* 41/6 (1906), cols 3515-3524, 41/7-8 (1906), cols 3529-3537.

Cat.:

Heidemann, Stefan - Sode, Claudia: Christlich-orientalische Bleisiegel im Orientalischen Münzkabinett Jena. In: *Aram* 11-12 (1999-2000) 533-593.

Mayer, Tobias: *Sylloge Numorum Arabicorum Jena*. Die Münzen des Kaukasus und Osteuropa im Orientalischen Münzkabinett Jena (Jenaer Beiträge zum Vorderen Orient), Wiesbaden (Harrassowitz) forthcoming.

Stickel, Johann Gustav: *Handbuch zur morgenländischen Münzkunde*. Das grossherzogliche orientalische Münzcabinet zu Jena, erstes Heft, Omajjaden- und Abbasiden-Münzen, Leipzig 1845.

-, *Handbuch zur Orientalischen Münzkunde*. Das grossherzogliche orientalische Münzcabinet zu Jena. Zweites Heft, älteste Muhammedanische Münzen bis zur Münzreform des Abdulmelik's, Leipzig 1870.

-, *Handbuch der morgenländischen Münzkunde*, Leipzig 1975. [reprint of the parts of 1845 and 1870].

Forschungsstelle für Islamische Numismatik der Universität Tübingen

director: Dr. Lutz Ilisch

Wilhelmstrasse 26, D-72074 Tübingen

tel. and fax : +49 (7071) 2978532, 295387 (fax)

e-mail: lutz.ilisch@uni-tuebingen.de

<http://www.uni-tuebingen.de/orientsem/fint/fint1.html>

ca. 65,000 Oriental Coins, including 12,600 Indian coins. It includes the Ernst Meier collection (1811 - 1866; 700 coins), Stephen Album (bought 1988; ca. 30,000 coins), Lutz Ilisch (7,000 coins), Jean-Louis Thau (bought 1996; 2,371 coins) and a part of the collection of Hans Herrli (3,200 coins).

Lit.:

Ilisch, Lutz: Silber des Kalifen auf dem Hippie-Trail. In: *Tübinger Blätter* (1992-3) 71-75.

-, Die Tübinger Sammlung Orientalischer Münzen. In: Stefan Heidemann (2000) 129-137.

Cat.:

Ilisch, Lutz: *Sylloge Numorum Arabicorum Tübingen*. Palästina, IVa Bilād aš-Šām I, Tübingen 1993.

Korn, Lorenz: *Sylloge Numorum Arabicorum Tübingen*. Ḥamāh, IVc Bilād aš-Šām III, Berlin 1998.

Mayer, Tobias: *Sylloge Numorum Arabicorum Tübingen*. Nord- und Ostzentrasien, XVb Mittelasien II, Tübingen, Berlin 1998.

Schwarz, Florian: *Sylloge Numorum Arabicorum Tübingen*. Ġazna/Kabul, XIV d Ḥurāsān IV, Tübingen, Berlin 1995.

-, *Sylloge Numorum Arabicorum Tübingen*. Balḥ und die Landschaften am oberen Oxus, XIV c Ḥurāsān III, Tübingen, Berlin 2002.

Collections between 5,000 and 10,000 Oriental coins

Sammlung Köhler-Osbahr, as part of the Köhler-Osbahr-Stiftung zur Förderung von Kunst und Wissenschaft im Kultur- und Stadthistorischen Museum Duisburg

deputy director: Ralf H. Althoff M.A.

Johannes-Corputius-Platz 1, D-47049 Duisburg

tel. and fax: +49 (203) 2832647, 2834352 (fax)

e-mail: r.althoff@stadt-duisburg.de

<http://www.koehler-osbahr-stiftung.de/sammlung.html>

ca. 1,250 Islamic, 6,000 Indian, 17,300 East Asian coins

Lit.:

Garver, Cornelia (ed.): *Sammlung Köhler-Osbahr I*. Auswahlkatalog, Duisburg 1990. [general description of the collection which includes African Asian and European art].

Cat.:

Althoff, Ralf: *Sammlung Köhler-Osbahr II/1*. Vormünzliche Zahlungsmittel und außergewöhnliche Geldformen aus China, Annam, Korea und Japan, Duisburg 1993.

-, *Sammlung Köhler-Osbahr II/2*. Vormünzliche Zahlungsmittel und außergewöhnliche Geldformen aus Südostasien, Afrika und anderen Teilen der Welt, Duisburg 1993.

-, *Sammlung Köhler-Osbahr II/3*. Vormünzliche Zahlungsmittel und außergewöhnliche Geldformen, Siamesische Porzellantoken - Collection Köhler-Osbahr II/3. Primitive Currency and Extraordinary Kind of Money, Siamese Porcelain-Tokens, Duisburg 1995.

Althoff, Ralf - Mayer, Tobias: *Sammlung Köhler-Osbahr V/3*. Byzantinische Münzen und ihr Umfeld. Orientalische Münzen, Münzen der Kreuzfahrer und -staaten sowie der europäischen Nachbarn, Duisburg 2000.

Staatliches Münzkabinett München

director: Prof. Dr. Bernhard Overbeck

Residenzstrasse 1, D-80333 Munich

tel. and fax: +49 (89) 22722121, 299859 (fax)

e-mail: smm.muenchen@t-online.de

<http://www.stmwfk.bayern.de/kunst/museen/muenz.html>

ca. 8,000 Oriental coins. It includes the collection Frédéric Soret (1795 - 1865; 4,010 coins, see also Oriental Coin Cabinet Jena) and Egon Beckenbauer (1913 - 1999; ca. 3,500).

Lit.:

Heidemann, Stefan: Obituary, Peter Jaeckel (1914-1996). In: *Oriental Numismatic Society Newsletter* 152 (1997) 1-2.

Heß, Wolfgang - Kütthmann, Harald - Overbeck, Bernhard - Szeiklies-Weber, Ingrid: *Vom Königlichen Kabinett zur Staatssammlung*. Ausstellung zur Geschichte der Staatlichen Münzsammlung München 7. 10. 1982 bis 9. 1. 1983, München 1982. [general history of the collection without any reference to the Oriental part].

Jaeckel, Peter: Staatliche Münzsammlung, Orient. In: *Münchner Jahrbuch der Bildenden Kunst* 3. Folge 2 (1951) 253-254. [collection Frédéric Soret].

Cat.: Many coins were published in various articles by Frédéric Soret, see Mayer (1954) 214-219.

Collections between 1,000 and 5,000 Oriental Coins

Münzsammlung - Staatliche Kunstsammlungen Dresden

acting director: Dr. Rainer Grund

Albertinum, Brühlsche Terrassen, D-01067 Dresden

tel. and fax: +49 (351) 4914231, 4914233 (fax)

e-mail: mk@sk-dresden.de

[http://www.staatl-kunstsammlungen-](http://www.staatl-kunstsammlungen-dresden.de/deutsch/maimus.htm)

[dresden.de/deutsch/maimus.htm](http://www.staatl-kunstsammlungen-dresden.de/deutsch/maimus.htm)

ca. 2,100 Islamic and Indian coins. It includes the Moritz Steinla collection (1791 - 1858; 18 Oriental coins).

Lit.:

Arnold, Paul: Osmanische Münzen aus dem Besitz der Kurfürsten von Sachsen. In: Staatliche Kunstsammlungen Dresden/Kunst- und Ausstellungshalle der Bundesrepublik Deutschland, Bonn (ed.): *Im Lichte des Halbmonds*. Das Abendland und der türkische Orient, Dresden 1995, 279-284.
-, Die Sammlung der orientalischen Münzen des Münzkabinetts Dresden. In: Heidemann (2000) 17-26.

Cat.:

Krehl, Ludolf: *De numis muhammedanis in Numophylacio Regio Dresdeni asservatis Commentatio*, Leipzig 1856.
-, Ueber einige muhammedanische Münzen des Königlichen Münz-Cabinetts zu Dresden. In: *ZDMG* 12 (1858) 250-263. [collection Moritz Steinla].

Archäologisches Institut und Sammlung der Gipsabgüsse der Georg August-Universität Göttingen

custodian: Dr. Daniel Graepler
Nikolausberger Weg 15, D-37073 Göttingen
tel. and fax: +49 (551) 39 7502, 39 7497; +49 (551) 39 2062 (fax)
e-mail: dgraep1@gwdg.de
<http://www.user.gwdg.de/~archo/index.html>
ca. 3,900 Oriental coins. It includes the collections of Georg von Asch (1727 - 1807), Jacob Reineggs (1740 - 1794; 106 coins), Heinrich Julius Klapproth (1761 - 1830; 147 coins), Prussian collection of the University of Königsberg, Peter Bachmann (donated 1991; 2,450 coins).

Lit.:

Bachmann, Peter: Der neue Bestand orientalischer Münzen der Universität Göttingen. In: Heidemann (2000) 83-86.
Boehring, Christof: Notizen zur Sammlung orientalischer Münzen der Universität Göttingen. In: Heidemann (2000) 61-70.
Schwarz, Florian: Von der "Türkenbeute" zur wissenschaftlichen Sammlung: Ein Überblick über die orientalischen Münzen der Universität Göttingen. In: Heidemann (2000) 71-81.

Cat.:

Nesselmann, Georg Heinrich Ferdinand: *Nummorum orientalium, qui in Nummophylacio Academio Regimontano asservantur. Definitio et Explicatio qua orationem pro loco Professoris rite obtinendo die II. Nov. anni MDCCCXLVI h.l.q.c., Königsberg 1846*.
-, *Die orientalischen Münzen des akademischen Münzcabinetts in Königsberg*, Leipzig 1858.

Collection of the Deutschen Morgenländischen Gesellschaft in Halle

director of the library of the DMG: Laila Guhlmann
Mühlweg 15, D-06114 Halle
tel. and e-mail: +49 (345) 5522043; guhlmann@bibliothek.uni-halle.de
ca. 1,100 Oriental coins. It includes the collection of Heinrich Leberecht Fleischer (1801 - 1888).

Lit. and Cat.:

Blau, Otto. In: *ZDMG* 13 (1859) 339-342; *ZDMG* 16 (1862) 606; *ZDMG* 18 (1864) 394.
Erman, Adolf: III. Münzen. In: *Katalog der Bibliothek der Deutschen Morgenländischen Gesellschaft* II. Handschriften, Inschriften, Münzen, Verschiedenes, Leipzig 1881, 55-81.
Pertsch, Wilhelm: Verzeichnis der aus Fleischer's Nachlass der Deutschen Morgenländischen Gesellschaft überkommenen Münzen. In: *ZDMG* 45 (1891) 292-294. [Heinrich Leberecht Fleischer collection].

Niedersächsisches Münzkabinett der Deutschen Bank

c/o Niedersächsisches Landesmuseum Hannover -
Urgeschichtsabteilung

scientific director: Dr. Reiner Cunz

office: Georgsplatz 20, D-30159 Hannover
tel. and fax: +49 (511) 3652577, 3652578, 3652359 (fax)
e-mail: reiner.cunz@t-online.de

ca. 2,000 Oriental coins, mostly Indian and East Asian copper coins. These were part of the huge collection of Hermann Förster, Leipzig (d. 1905; which included the copper coin collection of Wilhelm Freudenthal, Braunschweig [d. 1883]).

Lit.:

Cunz, Reiner: Übersicht zur Struktur des Bestandes. In: *Mitteilungen des Museumsverbundes Niedersachsen Bremen* 31 (März 1987) 23-28.
-, *Numismatik zwischen Haushistoriographie und fürstlicher Sammellust* dargestellt am Beispiel der Geschichte des ehemaligen Königlichen Münzkabinetts zu Hannover und seiner Betreuer 1745-1945 (Numismatische Studien 11), Hamburg 1996. [general history of the collection].

Universitätsbibliothek Leipzig - Sondersammlungen

deputy director and custodian: Dr. Christoph Mackert
Beethovenplatz 6, D-04107 Leipzig
tel. and e-mail: +49 (341) 9730509; mackert@ub.uni-leipzig.de
<http://www.ub.uni-leipzig.de/sosa/sosabestm.htm>
ca. 1,300 orientalische Münzen, 500 East Asian coins. It includes the collection of Ferdinand von Reiboldt, Leipzig (d. about 1858) and Otto Blau, Odessa (1826 - 1879; 798 coins).

Lit.:

Heidemann, Stefan: The Oriental Coin Collection of the University Library in Leipzig/Saxony - An Important Collection of the 19th Century Rediscovered. In: *Oriental Numismatic Society Newsletter* 176 (2003) 2.
Heidemann, Stefan - Mackert, Christoph: Staatsbulletins auf Münzen. Numismatische Dokumente aus dem Orient stehen nach 60 Jahren wieder der Forschung zur Verfügung. In: *Journal Universität Leipzig*, Heft 7 (Dezember 2003) 39-41.
Reiboldt, Ferdinand von: *Kurze Uebersicht eines Münzkabinetts als Handschrift in Druck gegeben*, Dresden 1844.

Cat.:

Blau, Otto - Stickel, Johann Gustav: Über einige muhammedanische Münzen. In: *ZDMG* 11 (1857) 443-459.
Krehl, Ludolf: Nachträgliche Bemerkungen zu "Blau und Stickel, über einige muhammedanische Münzen". In: *ZDMG* 12 (1858) 263-268.
Stickel, Johann Gustav: Über einige Muhammedanische Münzen. In: *ZDMG* 9 (1855) 249-255.
-, Mittheilungen über die vom Hrn. Vicekanzler Dr. Blau in Konstantinopel dem Orientalisten-Verein zu Hamburg präsentirten muhammedanischen Münzen. In: *ZDMG* 10 (1856) 292-301.

Die Archäologische Sammlung der Universität Rostock - Münzkabinett

director: Prof. Dr. Konrad Zimmermann
Universitätsstrasse 1, D-18051 Rostock
tel. and fax: +49 (381) 498 2782, 498 2787 (fax)
e-mail: konrad.zimmermann@philfak.uni-rostock.de
http://www.phf.uni-rostock.de/fkw/iaw/men_arch_Sammlung.html
ca. 1,800 Oriental Coins. It includes the collections of Carolus Aurivilius (at least 18 coins), Oluf Gerhard Tychsen (1734 - 1815), Johann Georg Christian Adler (1756 - 1834; 53 coins).

Lit.:

Klüßendorf, Niklot: Rostock als Standort der orientalischen Numismatik. In: Heidemann (2000) 27-45.
Zimmermann, Konrad: Inventare des Rostocker Akademischen Münzkabinetts. In: Heidemann (2000) 47-59.

Cat.:

Frähn, Christian Martin: Summarische Übersicht des orientalischen Münzkabinettes der Universität Rostock, und Anzeige der in demselben befindlichen unedirten oder vor andern bemerkenswerthen Stücke. [introduction] In: *Bulletin scientifique publié par L'Académie Impériale des Sciences de Saint Pétersbourg* 10 (1842), cols 80-90. [Catalogue] in: *Bulletin de la classe des sciences historiques, Philologiques et Politiques de l'Académie Imperiale des sciences de St. Pétersbourg* 1 (1842), cols 1-32. Both parts printed separately: *Das Orientalische Münzkabinet der grossherzoglichen Universität Rostock, in einer skitzirten Uebersicht und mit Aushebung der Merkwürdigkeiten desselben*, St. Petersburg 1842.

Collections with less than 1,000 Oriental coins

Universitätsbibliothek Erlangen - Handschriftenabteilung - Collection Will

director: Dr. Christina Hofmann-Randall
Universitätsstrasse 4, D-91054 Erlangen
tel. and e-mail: +49 (9131) 8522158; handschriften@bib.uni-erlangen.de

ca. 550 Oriental and 700 East Asian coins mostly from the accession in 1916 of the collection of Friedrich Will (d. 1922).

Lit.:

Zwicker, Ulrich: Keltische und griechische Münzen sowie römische Provinzialprägungen aus den Sammlungen Will und Gerlach (Schriften der Universitätsbibliothek Erlangen-Nürnberg 22), Erlangen 1922. [general description of the collection and its history].

Cat.:

Zambaur, Eduard von: Die orientalischen Münzen der Sammlung Will in der Universitäts-Bibliothek Erlangen. In: *Frankfurter Münzzeitung* Neue Folge 2 (1931) 273-276, 294-296, plate 4.

Archäologisches Landesmuseum in der Stiftung Schleswig-Holsteinische Landesmuseen Schloss Gottorf

director: Prof. Dr. Claus von Carnap-Bornheim
Schloß Gottorf, D-24837 Schleswig
tel. and fax: +49 (4621) 813 300, 813 535 (fax)
e-mail: info@schloss-gottorf.de

ca. 800 Oriental coins, mostly from Viking-age hoards

Lit. and Cat.:

Wiechmann, Ralf: *Edelmetalldepots der Wikingerzeit in Schleswig-Holstein*. Vom "Ringbrecher" zur Münzwirtschaft (Offa Bücher 77), Neumünster 1996.

Museum für Hamburgische Geschichte - Münzkabinett

custodian: Dr. Ralf Wiechmann
Holstenwall 24, D-20355 Hamburg
tel. and fax: +49 (40) 428412363, 428433103 (fax)
e-mail: Ralf.Wiechmann@HamburgMuseum.Hamburg.de
Several hundred Oriental coins, mostly fragments from one Polish Viking-age hoard.

Important Oriental collection which has disappeared Schloßmuseum - Münzkabinett

director: Uta Wallenstein
Post Box 100319, D-99853 Gotha
tel.: +49 (3621) 823431

This comprised more than 600 coins until 1934. It included the collection of Johann Sigismund von Haunold, Breslau (1634 - 1711), duplicates of the Asiatic Museum, St. Petersburg (bought in 1823; 147 coins), coins from the Orient-expedition of Ulrich Jasper Seetzen (1767 - 1811; about 150 coins), parts of the collection of von Sprewitz, Moskau (bought in 1831). The

collection disappeared after 1934, without any known record. At least sixty coins of the collection were acquired by the Coin Cabinet in Berlin in 1935 (see above).

Lit: Heidemann, Stefan: Die verschollene Gothaer Sammlung orientalischer Münzen. In: Heidemann (2000) 87-106.

Lucke, Rolf-Günther (1968): *Geschichte des Münzkabinetts Gotha*, unpublished PhD diss., Halle 1968. [a comprehensive history of the collection without, however, any reference to the lost Oriental part].

Pick, Behrendt: Das Gothaer Münzkabinett 1712-1912. In: *Gothaische Heimatblätter* 8 (1912) 1-13. [general history].

Steguweit, Wolfgang: Münzkabinett Gotha. In: Commission Internationale de Numismatique (ed.): *Compte Rendu* 30 (1983) 40-46. [general history].

Cat.: Möller, Johann Heinrich: *De numis orientalibus in numophylacio Gothano asservatis commentatio prima*. Numos chalifarum et dynastiarum cuficos exhibens, Gotha 1826.

-, *De numis orientalibus in numophylacio gothano asservatis commentatio altera*. Numos Dynastiarum Recentiores Exhibens, Erfurt, Gotha 1831.

Pertsch, Wilhelm: Zwei Merkwürdigkeiten der Herzoglichen Sammlungen in Gotha. Die Medaille des Awrangzëb. In: *ZDMG* 22 (1868) 282-285. [200-Rupi presentation coin].

An Interesting Sicilian Tarì minted by Roger II

By Giuseppe Di Martino

In the year 1844 Domenico Spinelli, Prince of Saint George, published in Naples: "*Monete Cufiche battute da' Principi Longobardi, Normanni e Svevi nell'Italia meridionale*". Number CCXXVII in his catalogue (Tab.V nr.3) is a strange tarì (quarter dinar) of King Roger II.

The author succeeded partially in deciphering the inscription on the obverse, but was unsuccessful on the reverse where the writing was unclear. A few decades later Bartolomeo Lagumina claimed that the coin was undecipherable. The true reason for the difficulty, however, was the unusual meaning of the phrase, rather than the crudeness of the inscription.

Recently a private Sicilian collector allowed me to take a photograph of two specimens of this rare and interesting type. After managing to decipher the legend on the obverse completely, I surrendered before the difficulty of interpreting the inscriptions on the reverse.

The difficulty stimulated me to ask the help of the Islamic Coins Group list¹. The long experience of its members in Islamic numismatics eventually led to the decipherment of the legend on the reverse.

Both of the coins have a pale colour due to the low gold alloy. They were struck from different dies. Each has a diameter of 12 millimeters and weighs about 1 gram. On both sides the legend is arranged in three parallel lines inside a linear circle; on the reverse it is surmounted by four dots in the shape of a cross. Unfortunately, on both specimens the legend in the margin is incomplete and almost illegible, so it is impossible to identify the mint and date of issue.



Coin A obv.



Coin B obv.

Legend on the obverse : بامر المقتدر بالله الملك الاجد
رجار الثاني

Transliteration : *bi-amr al-muqtadir billah al-malik
al-ajall rjar al-thānī.*

Translation : By the order of the Empowered by
God, the Glorious King Roger the
second.



Coin A rev.



Coin B rev.

Legend on the reverse : السير المسح هو الحق الصبح

Transliteration : *al-sayyid al-masīh huwa l-haqq
al-ṣāḥiḥ.*

Translation : The Lord is the Messiah, He is the
righteous truth.

We may note that on the first line of the obverse D. Spinelli read the
title : المعتر (al-mu'tazz). However, even if the final "ra" is
missing on both of the two specimens, until now المقتدر (al-
Muqtadir)² seems to be the most likely interpretation. The mint could be
Messina or Palermo. The date of issue is probably about 525-526 AH,
after the attribution of the royal title, but before the issue of the more
common tarīs with a Greek cross.

With the issue of this kind of tarī, there began the
"Christianisation" of the Norman coins of Sicily, which until then had,
on the reverse, the declaration of Islamic faith. For the first time King
Roger declared firmly and unequivocally his loyalty to the Catholic
Church, beginning the slow but inexorable decline of Islamic culture in
Sicily.

Bibliography :

Domenico Spinelli, *Monete cufiche battute da' principi Longobardi
Normanni e Svevi*, Napoli 1844, nr. CCXXVII (Tav.V n.3).

Bartolomeo Lagumina, *Archivio storico siciliano*, Anno XVI, Palermo
1891, p.8.

Lucia Travaini, *La monetazione nell'Italia normanna*, Roma, Istituto
Storico Italiano per il Medio Evo, 1995, nr.181, p.120, tav 12.

1. www.islamiccoinsgroup.50g.com messages 5643 to 5646 (11/3/02)

2. Jeremy Johns, *I titoli arabi dei sovrani normanni di Sicilia*,
Bollettino di Numismatica 6-7, IPZS Roma 1987, p.43.

The Twin Standing Caliph Fals

By Andrew Oddy

In ONS Newsletter 177, Clive Foss drew attention to the 'Two-
Caliph' fals, often known as the Twin Standing Caliph fals, struck
by 'Abd al-Malik.



He knew of five specimens, all from the same dies, but at least
five more can be added to this list.

No.	Weight g	Die Axis	Publication
1	8.31		Amman Museum; Walker, 1935 no.6 ⁶ ; Walker, 1956 no. A.5 ⁷
2	11.08		Amman Museum; Walker, 1956 no.A.6, Bellinger, 1938 no.551 ⁸ (Excavated at Jerash along with another, similar coin)
3	6.85	3.00	American Numismatic Society 0000.999.19132; Walker, 1935 no.7 ⁹ ; Miles, 1959 no.22 ¹⁰
4	5.27	4.00	Israel Museum no. 14610
5	4.52	11.00	Israel Museum no. 12373
6	5.96	3.00	American Numismatic Society 1998.25.139 (ex J Slocum Collection); Qedar, 1988-9 no.19 ¹¹ ; Amitai-Preiss <i>et al</i> , 1994-9 no.D.12 ¹²
7	5.84		Hess Sale 254 no.468
8	6.41	3.00	American Numismatic Society 1998.25.138 (ex J J Slocum Collection); Sternberg Sale 6 (Nov.1976) no 1075
9	5.6	1.00	Goussous 1996, no.69 ¹³
10	6.29	11.00	Private Collection (probably ex Sir A Kirkbride Collection and therefore found in Transjordan and possibly at Jerash. This may be the coin referred to under 2 above)

Walker suggested that these coins were struck at Scythopolis¹⁴
because the size and fabric resembles the usual Proto-Umayyad
Scythopolis coins that imitate folles of Justin and Sophie struck at
Nicomedia for 12 years from AD 566. Since Walker wrote the
British Museum catalogue, another mint for this type of coin has
been discovered - Gerasa, first published by Shamma in 1980.¹⁵
These Twin Standing Caliph coins continue to be attributed to
Scythopolis by most commentators,¹⁶ but Goussous has recently
suggested that they may have been struck in Gerasa (modern

6 J Walker, A new Byzantine mint and some early Umayyad coins,
Numismatic Chronicle 15 (5th Series) 1935 (Part II) 120-126

7 J Walker, *A Catalogue of the Arab-Byzantine and Post-Reform
Umayyad Coins*, British Museum, London, 1956

8 A Bellinger, Coins from Jerash, 1928-1934, American Numismatic
Society Numismatic Notes and Monographs No.81, New York, 1938

9 J Walker, *A Catalogue of the Arab-Byzantine and Post-Reform
Umayyad Coins*, British Museum, London, 1956, p.43 claims that his two
coins A.5 and A.6 are identical with J Walker, A new Byzantine mint and
some early Umayyad coins, *Numismatic Chronicle* 15 (5th Series) 1935
(Part II) 120-126 nos. 6 and 7. This is clearly not so and above they are
listed as three coins. The illustrations show that A.6 is the same coin as
Bellinger, *op.cit.* no.551.

10 G C Miles, The Iconography of Umayyad Coinage, *Ars Orientalis*, 3
(1959) 207-213, no.22

11 S Qedar, Copper Coinage in Syria in the Seventh and Eighth Century
A.D., *Israel Numismatic Journal* 10 (1988-9) 28-39

12 N Amitai-Preiss, A Berman and S Qedar, The Coinage of Scythopolis-
Baysan and Gerasa-Jerash, *Israel Numismatic Journal* 13 (1994-99) 134-
151

13 N Goussous, *Umayyad Coinage of Bilad al-Sham*, Arab Bank,
Amman, 1996

14 J Walker, *A Catalogue of the Arab-Byzantine and Post-Reform
Umayyad Coins*, British Museum, London, 1956, p.xxxviii

15 S Shamma, *The Islamic Coins struck in Palestine* (in Arabic), 1980,
no.4

16 S Qedar, *op.cit.* p. 34; S Album and T Goodwin, *Sylloge of Islamic
Coins in the Ashmolean Museum: Volume I: The pre-reform coinage of
the early Islamic period*, Ashmolean Museum, Oxford, 2002, p.97

Jerash)¹⁷ on the basis of another coin from the same obverse die but from a reverse die with a large **M** and the inscription **ANNONIKO** reading anti-clockwise¹⁸ (illustration A).



This reverse die is, perhaps, nearer to the style of Gerasa than of Scythopolis. Foss concurs with this attribution.¹⁹

One other coin from the same twin standing Caliph obverse die but from another reverse with a garbled Greek legend has been illustrated by Amitai-Preiss et al. The **M** on the reverse has **★ИИ** downwards to the right, **Ι ΙΙ [//]** downwards to left. There appears to be a rudimentary letter in the exergue and the 'officina' letter is **Г** (retrograde **Г**) (illustration C).



Now another coin has been discovered in a private collection that has the same reverse die as C, but an obverse die of the enthroned Justin and Sophie type (illustration D).



Unfortunately the obverse legend is illegible, but as the only other known Justin and Sophie types with a star in the reverse legend and either **Г** or **Г** for the 'officina' letter can undoubtedly be attributed to Gerasa,²⁰ it must be concluded that the Twin Standing caliph coins were struck in that mint. This is supported by the fact that the only recorded find-spot for this type is Jerash, from where at least two specimens have been recovered.

Why should this Twin Standing Caliph obverse type be associated with two 'Greek' reverse types? Amitai-Preiss suggests that those with the Greek reverses precede those with the Arabic

reverse, but this seems unlikely.²¹ The Arabic reverse is totally in keeping with the Twin Standing Caliph obverse, and it seems more likely that the Arabic reverse die wore out before the Twin Standing Caliph obverse and that the coiners then paired this obverse with two previously discarded reverse dies. That one of them had been in use is now certain from the coin published here (illustration D), but the other one (illustration A) is, so far, unique.

One other piece of evidence to suggest the Gerasa attribution for the Twin Standing Caliph coins is that Scythopolis, or Baisan as it was called by the Arabs, struck a well-known type of Justin and Sophie imitation reading **СΚΥΘΟ ΠΟΛΗΣ** on the obverse and, on the reverse, **ANNO** downwards left, **ΝΙΚΟ** downwards right, and **مسلس** (Baisan) in the exergue. The 'officina' symbol is **Ι •** (illustration E).



It seems likely that these coins in Baisan, which represent a definite step towards 'Arabisation' of the Proto-Umayyad coinage, were struck at about the same time as the Twin Standing Caliph coins in Jerash. Foss persuasively argues that this was early in the reign of 'Abd al-Malik,²² that is in or soon after AD 685.

Egyptian Copper Coinage in the 7th Century AD. Some Critical Remarks

by Michael A. Metlich and Nikolaus C. Schindel*

The publication of small finds from the site of Early Islamic al-Fustat which were collected over the years by Dr. Henri Amin Awad has to be warmly welcomed²³. It includes two numismatic contributions: A list of coins from the Greek to the Ottoman period found locally²⁴, and an article on the copper coinage of Egypt in the seventh century by Lidia Domaszewicz and Michel Bates²⁵.

The article by Domaszewicz and Bates is based mostly on a large collection of seventh-century Egyptian copper assembled by

21 N Amitai-Preiss, A Berman and S Qedar, *op.cit.*, p.140

22 C Foss, *op.cit.*

* M. A. Metlich is responsible for the comments on the Byzantine coins, N. C. Schindel for those on the Arab-Byzantine issues. For highly useful comments, we have to thank M. Phillips.

23 J. L. Bacharach (ed.), *Fustat Finds. Beads, Coins, Medical Instruments, Textiles and Other Artifacts from the Awad Collection, Cairo 2002*. While we were preparing this note, a review by T. Goodwin has been published in *Numismatic Chronicle* 2003, p. 417-420.

24 J. L. Bacharach, *Coins*, in: Bacharach (note 1), p. 44-87. He does not offer any illustrations, and a quick glance at his list reveals so many errors that the use of this contribution appears to be rather limited: There are typos, such as "Tiberias" for Tiberius, p. 49, but also more serious errors such as a "Diocletian?" provincial coin (p. 50), said to come from "Philadelphia?", but the legend, only a part of which reading ICON is given, hints at Iconium which was no longer active under this ruler, however; on p. 50, the equation of "ST" with Rome on a Maxentius coin also provokes some distrust, as do many "officina" letters on Byzantine coins (p. 53). The absence of total numbers of specimens for each category has already been noted by Goodwin (note 1), p. 418, who provides them.

25 L. Domaszewicz / M. L. Bates, *Copper Coinage of Egypt in the Seventh Century*, in: Bacharach (note 1), p.88-111 (referred to as "Domaszewicz and Bates" in the following pages).

17 N Goussous, *op.cit.*, p.81

18 N Goussous, *op.cit.*, fig.70

19 C Foss, *The Two-Caliph Bronze of 'Abd Al-malik*, *ONS Newsletter* 177 (2003) 4-5

20 A Naghawi, *Umayyad Filises minted at Jerash, Syria* 66 (1989) 219-222, coin no. 1; J Walker, *A Catalogue of the Arab-Byzantine and Post-Reform Umayyad Coins*, British Museum, London, 1956. Coin no. A.7; S Shammar, *op.cit.* no.4

Dr. Awad and now stored in the American Numismatic Society. This, as the authors claim rightly, is a large assemblage of material, which was not available to any previous student of the series. Unfortunately, the presentation of the material is only very sketchy, lacking a catalogue and only providing very few illustrations. These illustrations are even in various ratios especially on plate 3 and 4 where ratios change without any indication, a fact that may be difficult for users. It is only a mishap that the reverse of pl. 3, 7 is upside down.

As far as the scientific content is concerned, the authors proposed several new arguments on the coinage of this period that need to be commented upon.

A large part (UI, p. 100-102 with pl. 1, 1f) is concerned with the reattribution of the anonymous 12 nummi minted during the Persian occupation²⁶. Domaszewicz and Bates argue that these coins (the small and light (fig. 1, 2) as well as the large and heavy (fig. 3) issue) were minted by the Byzantine Emperor Anastasius I and therefore represent the first Byzantine issues of Alexandria. That this is not the case will be shown with respect to each of their arguments²⁷.

They believe that the style of the known examples is of high quality and overall very uniform and, not least because of this fact, have to be reattributed. If one takes a look at a broader selection of examples of the Persian occupation coins one can see that style and execution are not as uniform and of high a quality as the authors suggest²⁸. In fact it is much more so that some resemble the coarse style of the later coins of Heraclius which are even worse. A suggested importance of the rim on obverse and reverse cannot be conceded as a quick glance at their own plates shows that all coins of this period minted in Alexandria feature this rim. It also appears unlikely that Anastasius used an obverse type that provides neither a depiction of the emperor, nor an inscription denoting him. Another argument against their attribution of these issues to Anastasius I are the 6 (fig. 4, 5), 3 and the 1 nummi pieces of Alexandrian origin which metrologically and typologically fit in the early 7th, but not in the early 6th century. That these are only alluded to in a footnote (note 51) is also unfortunate. Domaszewicz and Bates also ignore the first known coins from the Byzantine mint of Alexandria and call the coins of Justinian I the first ones. Nevertheless, two clear coins of Justin I are known and development of style and the position of the cross which moves down from Justin I over the first period of Justinian I to the middle between the IB on the reverse make this quite clear²⁹. That metrology is not a topic discussed by the authors is a pity as they have access to the largest group of this material.

We also know of a hybrid coin (fig. 6) that most likely was produced using an obverse die of MIB 200 (fig. 7) and a stylistically better reverse die of the small 12 nummi series in question, an additional hint that these coins belong to the period of the Persian occupation (618-628) of Egypt. This would also indicate that the lighter 12 nummi were followed by the heavier ones. The sequence of MIB 200 (fig. 7) and 201 (fig. 8) might also need a revision³⁰. First there was MIB 201 followed by MIB 200, which regularly shows a much larger head of Heraclius Constantine that can be used as a probable indicator for the chronology.

But even if the arguments against the dating proposed by Domaszewicz and Bates brought forward here are not accepted, the last doubts about the correct attribution should be dispelled once we take a look at Noeske's text on the coins found in Abu

Mina, Egypt³¹. The excavation of Abu Mina offers stratigraphical information that makes it absolutely clear that none of these 12 nummi coins, neither the small and light nor the large and heavy ones, belong to the period of Anastasius I but to the seventh century and most likely to the period of the Persian occupation³².

Another reattribution has to be reviewed critically, too. It is suggested by Domaszewicz and Bates (UI, p. 102f with pl. 1, 7f) that the coins (MIB X48) showing Heraclius and Heraclius Constantine with a long cross between them on the obverse (as MIB 203-205 (fig. 9)) and a cross between A and Ω and ΠAN in the exergue (fig. 10-12) were actually minted in Rome. They base their interpretation on the letters in the exergue which they think read ROM. That these letters have to be read as ΠAN is clear because the form of the A in A-Ω is the same as in the exergue³³. This indicates that the reverse is not a senseless mixture of types which, by the way, are African, and not Italian³⁴, but most likely even denotes the mint of these coins, namely Panopolis. That they might have been produced out of necessity can be deduced by the fact that they are cast and not struck³⁵. Only MIB X48 itself, being struck, (fig. 12) is an exception and possibly stood at the beginning of the series, still showing a cross base on the reverse for which the "Δ" of MIB 205 might have been the original.

Domaszewicz and Bates offer a very informative and useful overview on the Egyptian issues which are believed to have been struck under Arab domination before the monetary reform of 'Abd al-Malik in 77 AH = 697 AD (p. 95-99 with plate 3f). We would like to add some additional remarks regarding these coins. For the sake of clarity, however, first a short compilation of the ideas of Domaszewicz and Bates might be useful.

They divide the Byzantine type coins which they believe to have been struck under Arab rule into three categories: AI, AII and AIII. The first group of coins (AI, p. 96f with pl. 3, 24-28) consists of 12-nummi-pieces modelled after MIB 189f, showing a standing emperor on the obverse (fig. 13). The main problem with these coins lies in the fact that it is very difficult to distinguish official and non-official issues. Domaszewicz and Bates emphasize especially the "distorted headdress" of the standing figure on the obverse, but it seems to us that the wide range of styles is a more important criterion. Judging from the few coins depicted by Domaszewicz and Bates, and from the limited number of specimens in the Numismatic Central Card File at the Institute for Numismatics, Vienna University, it seems most probable that not one single mint, but various different ones were responsible for issuing these pieces. One specific point is the treatment of the crosses on the reverse as well as the obverse. As we will show below, the typological and stylistic continuity is stronger between AIII and the last original Byzantine issues than between AI in general and the latest coins of Constans II. One distinctive group

31 H.-C. Noeske, Münzfunde aus Ägypten I – Die Münzfunde des ägyptischen Pilgerzentrums Abu Mina und die Vergleichsfunde aus den Dioecesen Aegyptus und Oriens vom 4.-8. Jh. n. Chr., Berlin 2000.

32 See Noeske (note 9), folding chart no. 39. Noeske also confirmed the stratigraphical position of these 12 nummi issues at various unpublished excavations in a private conversation.

33 Goodwin (note 1), p. 419 rightly emphasizes that the Π is clearly recognisable as such, and thus also rejects the reattribution of these coins to Rome.

34 Cp. W. Hahn *Moneta Imperii Byzantini II. Von Justinus II. bis Phocas (565-610) einschließlich der Prägungen der Heraclius-Revolution und mit Nachträgen zum ersten Band*, Vienna 1975, no. 61 (Mauricius Tiberius) and no. 56 (Phocas) for silver issues from Carthage featuring A-Ω flanking a cross.

35 A fact that is not mentioned in the article, which is unfortunate as it is also a hint to the place of origin. One just has to think of the long tradition in producing cast coins in Egypt using anything from late Roman centenionales to Axumite coins as models, while no examples of this technique are known to have originated in Italy in this period. See also S. Album and T. Goodwin, *Sylloge of Islamic Coins in the Ashmolean. Volume 1: The Pre-Reform Coinage of the Early Islamic Period*, Oxford 2002, p. 108.

26 Cp. W. Hahn, *Moneta Imperii Byzantini III. Von Heraclius bis Leo III. / Alleinregierung (610-720)*, Vienna 1981, p. 113f.

27 Against this reattribution cp. also Goodwin (note 1), p. 419.

28 In this sense also Goodwin (note 1), p. 419.

29 W. Hahn / M. A. Metlich, *Money of the Incipient Byzantine Empire Anastasius I – Justinian I, 491-565*, Vienna 2000, p. 37.

30 For a detailed stylistic analysis of MIB Heraclius 200 cp. T. Goodwin, *A Hoard of Seventh Century Byzantine Dodecanummia*, *Numismatic Chronicle* 2003, p. 355-357.

among the AI coins³⁶ can be easily distinguished by its small diameter and weight³⁷. There can be no doubt that these coins, which represent a fractional denomination of the main unit, were struck under Arab rule, since it is impossible to imagine a Byzantine copper coin which would not bear the indication of its actual value. Anyway, further research and more published material will be needed, until a classification of the various imitative groups can be done.

The second group according to Domaszewicz and Bates (p. 97 with pl. 3, 29; fig. 15) is modelled basically after the imperial bust coins of Constans II, MIB 188 (fig. 14), but shows considerable typological changes. First of all, the globus cruciger in the ruler's right hand is replaced by a palm-branch resting on a globe. In the right field, an eight-pointed star is added, below which various letters occur, such as E (Domaszewicz and Bates, pl. 3, 29)³⁸ and N (fig. 15). On the reverse, the large cross of MIB 188 disappears, whereby the M gets much larger. Apparently to fill the empty space above, the letter A is added above. Instead of AΛEΞ, the word ABAZ can be read in the exergue³⁹. This "mint signature" apparently neither represents a distortion of AΛEΞ, nor of MACP⁴⁰.

The most interesting observation is the total removal of Christian symbols. A similar phenomenon can be observed on a group of rare Syrian copper coins (fig. 16) on whose obverses the entire imperial figure has been replaced by a palm branch⁴¹. Since these coins do not bear any Arabic legends, and since their fabric is rather irregular, they should belong to the earlier period of Syrian issues, called "Pseudo-Byzantine coinage" by Goodwin⁴². There is no proof, however, that there is any direct connection between AII and the Syrian fulus. Since group AII, as well as the MACP coins discussed below, feature the star on the obverse, which is missing from the purely imitative issues AI, one can certainly assume that these AII pieces are later than AI. Because of the consistent style, lettering, and typological details of this group, it seems very likely that it was issued by an official mint, which one might locate in al-Fustat.

The third group of Arab-Byzantine coins can be easily identified by their homogenous style, and by the mint indication MACP (sometimes MACAP⁴³) in the exergue (AIII, p. 97f with pl. 4, 30-34; fig. 17, 18; cp. also fig. 19). Once again, these issues are modelled after MIB 189f. The same eight-pointed star as in group AII can be seen in the right obverse field. These coins are

"Arab-Byzantine" in the full sense of Bates's definition⁴⁴, insofar as their style and engraving is of considerable quality and consistence. According to Goodwin's classification, however, they have to be called more accurately "Umayyad Imperial Image" coinage⁴⁵. It seems very likely that their issue has to be seen in connection with the respective coinage in Syria, and that these coppers in general outline – not when it comes to metrology or style – followed the respective coins of Syria.

One special feature has to be emphasized: the way the standing figure's dress is depicted with a series of small diagonal lines (Domaszewicz and Bates, pl. 4, 30-34; fig. 17, 18; to provide a clearer sketch of the layout, we have added the drawing fig. 19) reminds us of the standing caliph's dress of the Iliya fulus (fig. 20). Since there are no local Byzantine parallels for this representation, and since Iliya is the only standing caliph mint to employ this specific type of dress, we are convinced that the MACP coins are stylistically influenced by the Iliya issues, which can be dated ca. 685⁴⁶. There are some other Syrian mints where a similar depiction of the dress occurs⁴⁷, but in these cases the diagonal lines point the other way round. Since only in Iliya and Egypt the same design is encountered throughout the entire series, we believe that this is a case of direct influence of Syrian or Egyptian copper coins.

While the crosses on the coins of group AI show a wide range of execution (cp. Domaszewicz and Bates, pl. 3, 24-28), in group AIII there always occur Greek crosses with the same execution as on the latest official Byzantine issues from Alexandria (fig. 13, 14). This evidence might indicate that mint workers from the former imperial mint were in some way connected with the issue of the group AIII coins, even if the mint place was moved from Alexandria to al-Fustat.

One should not ignore the fact that also local imitations of the MACP coins exist, among which struck (fig. 21) as well as cast⁴⁸ examples can be found.

Considering the connection between AII and AIII, there are various features which make us believe, other than Domaszewicz and Bates (p. 98f), that both types come from the same mint. The occurrence of the eight-pointed star has already been noted. The style, consistent within both groups, is another argument. The treatment of the body of the standing figure in group AIII with diagonal lines has strong parallels in group AII, but none among the AI coins known to us.

We thus believe that AII and AIII were struck in the same mint, with all probability al-Fustat, but at different times. The question as to which of these starts first cannot be answered with certainty (in this sense also Domaszewicz and Bates, p. 98f). It seems more plausible, however, that first group AIII was issued, and afterwards AII. The main argument is typology: In group AI, as far as we can see, only imitations of MIB 189f featuring the standing emperor were produced. It would appear very unusual that first AII with the imperial bust and only afterwards AIII, once again showing a standing figure, would have been issued. A typological argument against this idea, however, is the evidence from Hims where first standing figure and only later imperial bust

36 First published by H. A. Awad, Seventh Century Arab Imitations of Alexandrian Dodecanummia, American Numismatic Society Museum Notes 18, 1972, p. 117, pl. 23, no. 16; Domaszewicz / Bates, p. 96, pl. 3, 27f, although, due to the fact that both coins are depicted on the scale 1:2, this group of small coins appear to bigger than the normal size coins.

37 The weights recorded by Awad (note 14), p. 117 are 0,80g; 0,87g; 1,36g; 1,81g; 2,00g.

38 Domaszewicz / Bates p. 97 believe that always an "A" is shown, but the specimens mentioned above prove that this is not the case. We have been able to make out only an "N" and an "E", clearly recognisable from its round form. An "E" can be seen also on Goodwin (note 13), pl. 47, no. 735.

39 One specimen in the catalogue of Goodwin (note 13), pl. 47, no. 735 has a word in the exergue which he read as "OBN"; however, it seems to us that the coin has been tooled, and that at least the first letter is the usual "A".

40 Older interpretations, listed by Domaszewicz / Bates in note 37, can certainly be disregarded, but their idea that ABAZ is "merely a blundered form of AΛEΞ" is also not convincing, considering the consistent writing. Goodwin (note 13, p. 108) thinks that ABAZ is "meaningful, though still unidentified", especially since the changes in typology clearly show intentions on behalf of the minting authorities.

41 This type has not yet been dealt with in scholarly literature. It is my intention to discuss it in some detail in the near future.

42 Album / Goodwin (note 13), p. 74.

43 E.g. Domaszewicz / Bates, pl. 4, 33, though not mentioned by the authors. The occurrence of the spelling variant MACAP has also been noted by Album / Goodwin (note 13), p. 108.

44 E.g. M. Bates, The "Arab-Byzantine" Bronze Coinage of Syria: An Innovation by 'Abd al-Malik, in: A Colloquium in Memory of George Carpenter Miles (1904-1975), New York 1976, p. 19f.

45 Album / Goodwin (note 13), p. 74.

46 According to the chronology first proposed by S. Qedar, Copper Coinage of Syria in the Seventh and Eight Century A.D., Israel Numismatic Journal 10, 1988/89, 30; 36, and with respect to this very issue, accepted with some reservation by Goodwin 2002, p. 100f.

47 Cp. Album / Goodwin (note 13), no. 567 (Dimashq), no. 583 (Baalbek), no. 625 (Halab). Thanks to M. Phillips for his comments on this point.

48 Noeske (note 9), vol. II, p. 200, no. 861 (referred to as "Awad 10ff", and thus most likely a MACP coin, although no picture is provided); on Egyptian cast coins in general cp. H.-C. Noeske, Bemerkungen zum Münzlauf vom 5. bis zum 7. Jahrhundert n. Chr. in Ägypten und Syrien, in: B. Kluge / B. Weissner (eds.), XII. Numismatischer Kongress Berlin 1997, Akten II, Berlin 2000, p. 812-820.

fulus were struck⁴⁹. If one compares AII and AIII with the main groups of Arab-Byzantine coinage in Syria, one could compare AIII with the "Umayyad Imperial Image" issues, while AII has parallels in the removal of Christian symbols with the "Standing Caliph" coins, although certainly not with respect to legends or typology. The statistical relationship between AIII and AII both in the Numismatic Central Card File and also among the coins in the ANS⁵⁰ equals roughly 1:2 and would fit the pattern of the most prolific Syrian mints such as Dimashq and Hims⁵¹. If one accepts this theory, there might even be an explanation, albeit far-fetched, for the exergual legend ABAZ on the AII coins. As we have said above, it seems very unlikely to us that it represents merely a blundered form of ΑΛΕΞ, especially since the mint name MACP is written consistently correct in group AIII. Apart from that, if these coins were struck in al-Fustat, a place name would not make sense at all. Therefore, we tentatively propose that ABAZ refers to a personal, and not to some geographical name. Since 'Abd al-Malik's brother 'Abd al-'Aziz was governor of Egypt from 65 AH till his death in 85 AH⁵², could it be possible that ABAZ is a shortened and somewhat distorted Greek rendering of his name? This idea, it goes without saying, is highly hypothetical, but considering that, on the "Standing caliph" issues from Syria, 'Abd al-Malik is often cited, and that the names of governors occur on early Islamic coins as well, one could imagine that 'Abd al-'Aziz placed his own name on the coins issued in his province, thus following his brother's example⁵³.

A short look at the first purely inscriptional Umayyad copper coins from Egypt⁵⁴ which are not dealt with by Domaszewicz and Bates might be useful, especially when it comes to the Syrian influence on Egyptian copper postulated by us. These first post-reform fulus do not bear a mint indication, but can be attributed easily to Egypt because of weight, fabric of the flans, and find evidence. Since these very common issues are identical in typology with the respective Syrian fulus, and since in Egypt, as well as in Syria, the taxation system was based on a continuous exchange of copper to gold⁵⁵, we are convinced that the issue began at the same time as in Syria, that is to say, in AH 77 = 697 AD, when the first post-reform dinars were struck⁵⁶. If one accepts

49 Album / Goodwin (note 13), p. 85.

50 According to the ANS website, there are 33 ABAZ and 65 MACP coins.

51 However, there are some exceptions from this pattern: Tabariya, for the example, did not issue any "Standing Caliph" coins at all, while in Iliya "Umayyad Imperial Image" issues are much rarer than the common "Standing Caliph" fulus.

52 For general information on this man cp. Encyclopaedia of Islam, vol. I, 58 s.v. "'Abd al-'Azīz b. Marwān" (K. V. Zettersteen); on his administration of Egypt, cp. M. A. Shaban, Islamic History. A New Interpretation I A.D. 600-750 (A.H. 132), repr. Cambridge 1999, 112f.

53 Whether a rendering of the Arabic name "'Abd al-'Aziz" as ABAZ is possible in 7th century Greek is beyond our knowledge. A glance at the index e.g. of Theophanes (ed. C. de Boor, Leipzig 1885, vol. II, p. 556) implies that the name 'Abd al-'Aziz was written Ἀβδελᾶς by this author.

Apart from correct forms of "'Abd"-names such as Ἀβδερᾶχμᾶν, however, also more distorted forms such as Ἀβιμέλεχ occur, which show some similarity with ABAZ. Remarkably enough, the letters "i" and "z" are dropped also in form Ἀβδελᾶς cited above, thus offering a kind of parallel with ABAZ.

54 G. C. Miles, The Early Islamic Bronze Coinage of Egypt, in: H. Ingholt (ed.), Centennial Publication of the American Numismatic Society, New York 1958, p. 473, no. 1.

55 Cp. on this topic in general Hahn / Metlich (note 7), p. 8.

56 Domaszewicz / Bates, p. 99, cite a passage from al-Jahshiyari which they use in a chronological context. We have some reservations about this, however. Unfortunately, we were not able to find a copy of al-Jahshiyari's text ourselves. First of all, would the Arabic word which they translate as "copper" be قلوبس? If this was the case, then the sentence might refer also to "money" in a more general meaning. There also is a difference between "made in the land of Rome" and "modelled after Roman types". Last, but not least, even if al-Jahshiyari's text really did refer to Byzantine-style copper coins in the possession of Yanas b. Khumayy in 85 AH = 704/5

this dating of the earliest Egyptian post-reform issues, then they represent another example of Syrian influence on Egyptian copper coinage.



fig. 1



fig. 2



fig. 3



fig. 4



fig. 5



fig. 6



fig. 7



AD, this certainly does not mean that "...as late as 85/705 the bulk of coinage circulating in Egypt was still of Byzantine type", since al-Jahshiyari solely refers to the treasure of Yanas b. Khumayy, and not to the entire monetary circulation of Egypt.

fig. 8



fig. 9



fig. 10



fig. 11



fig. 12



fig. 13



fig. 14



fig. 15



fig. 16



fig. 17



fig. 18



fig. 19



fig. 20



fig. 21

A unique fals of Binkath (Shâsh province) dated 186 AH
By Vladimir Kalinin and Luke Treadwell

A unique copper coin from the mint of Binkath (al-Shâsh) dated 186 AH from a private collection in Russia is published here for the first time. The fals is significant because it establishes the identity of one of the earliest members of a hitherto little-known Arab family of the tribe of Bakr b. Wâ'il which played an important role in the government of 'Abbâsîd Transoxania in the 2nd century AH. The remarkable longevity of the family's hold on power is signalled by the fact that the last known member of the family is identified as the commander of the army of Samarqand in the second quarter of the 4th century, thus well into the period when the Samanid dynasty was at the height of its power. The glimpses which the numismatic and textual evidence give us of the family's biography over more than a century and a half serve as an important corrective to the mainstream chronicle tradition which tells us that Samanid Transoxania was dominated by Turkish *mamlûks* and Persian *dihqâns*.



The coin (diam: 19-21 mm; wt: 1.76 g) bears the following inscriptions:

Obverse field: *lā ilāha illā / allāh waḥdahu / lā sharīka lahu*
 Obverse margin: (*ḍurība hādihā al-fals bi-binkath sanata sitt wa thamānīn wa mi'a*)
 Reverse field: *muḥammad / rasūl / allāh / Symbol*
 Reverse margin: (*mimmā amara bihi*) *al-amīr sibā' b. mas'ada abqāhu allāh*

The inscriptions follow the standard numismatic formulae of this period. They identify the mint as Binkath, the capital city of the Turkish province of al-Shāsh in northeastern Transoxania, which lay on the frontier with the steppe. The only other 2nd-century copper coin from this province was struck in 149 AH (with the mintname al-Shāsh) by an otherwise unknown governor by the name of Sa'id b. Yaḥyā (see Nastich 2000: 107; Farr and Nastich 2001). At first glance the final letter of the governor's name (*ism*) on our coin looks like a *ḥā* rather than an *'ayn*, but close inspection shows that this part of the coin has been damaged and that the top of this letter is no longer visible on the flan. It is evident from the name of the governor's father and the supporting textual evidence however that the three radicals should be reconstructed as *sb'*, yielding the name Sibā'. All other recorded Transoxanian coppers dated to the 2nd century bear either the name of the caliph and/or the name of the governor of Khurasan in addition to that of the issuing governor. Our *fals* is exceptional in that it bears only the names of Sibā' and his father.

The first member of the family to hold high office in Transoxania was Sibā's father, Mas'ada b. Bujayr al-Bakrī whose name appears on a well-known *fals* of Samarqand dated 172 AH (specimens exist in the Hermitage, Berlin, and Tübingen collections). Mas'ada had three sons: Faṭḥ (see Nasafi 1999: 669, no. 1177); Sibā', the issuer of our coin, who in *circa* 191 AH attempted without success to arrest the rebel governor Rāfi' b. Layth in Samarqand when Rāfi' rebelled against the caliph Hārūn al-Rashīd (Ṭabarī 1879–1901: III, 708); and al-Naḍr, who was probably Sibā's successor as governor of the province and whose name appears on the dirhams of al-Shāsh dated 189–190 AH (see Mayer 1998: 30–33, nos 136–172 which have the letters (*al-nṣr* [=al-Naḍr] inscribed below the reverse field).

It was the descendants of al-Naḍr b. Mas'ada who sustained the family's fortunes in later generations, both through good works and the control of senior posts within the army. Abū Muzāhim Sibā' b. al-Naḍr (d. 269) returned to Transoxania from Iraq in 233 AH and established a colony of Bakrī tribesmen in Wadhār, a village situated only a few *farsakhs* from Samarqand, near the *ribāṭ* of Khartang, the site of the tomb of the author of the famous compendium of *ḥadīth*, Muḥammad b. Ismā'il al-Bukhārī. He was a military commander who played an important role in Samarqandī politics during the first half century of Samanid rule. Sam'ānī describes him as one of the most eminent men of the region, known for his generosity and piety with many buildings, pious endowments and other good works to his name, including the construction of the mosque of Wadhār (Sam'ānī 1982: XIII, 295; Nasafi 1999: 231–232, no. 378).

A son of Abū Muzāhim's, Abū Bakr Muḥammad (d. 290) related *ḥadīth* from his father and from Naṣr b. Aḥmad b. Asad the Samanid, thus proving that a direct link existed between this family and the Samanid court in the 3rd century (See Sam'ānī 1982: XIII, 295–296; see also Nasafi 1999: no. 378). Abū Bakr Muḥammad's brother, Ibrāhīm, probably also settled in the region of Samarqand. Although his biography is not known, his great-grandson, Abū Ishāq Ibrāhīm b. Aḥmad b. Muḥammad b. Ibrāhīm (d. 348), was the commander of the "army of Samarqand" (*sāhib al-jaysh al-samarqandī / sāhib al-jaysh bi-samarqand*) during the second quarter of the 4th century (Nasafi 1999: 47, no. 5). After Abū Ishāq Ibrāhīm we hear nothing more of the family, but their memory lived on in the Samarqand region for generations.

Sam'ānī himself (d. 562) visited the grave of Abū Muzāhim Sibā' in Wadhār and prayed at the nearby mosque.

Bibliography

- Farr, J.A. and Nastich, V.N. 2001, "An unrecorded 'Abbāsīd *fals* of al-Shash, AH 149, in the name of al-Mahdī, *ONSN* 168, Summer 2001, 12–14.
 Mayer, T. 1998, *Nord- und Ostzentrasien* (Sylloge Numorum Arabicorum, XVb Mittelasien II), Tübingen and Berlin.
 Nastich, V.N. 2000, "Novye dannye o mednoi monetnoi chekanke v Srednei Azii VIII–nachala IX v.", *Arkheoliia, numizmatika i epigrafika srednevekovoi Srednei Azii (Materialy nauchnoi konferentsii, posviashchennoi 60-letiiu so dnia rozhdeniia doktora istoricheskikh nauk Borisa Dmitrievicha Kochneva*, ed. T. Shirinov, Samarqand, 104–110.
 Nasafi, Najm al-Dīn 'Umar b. Muḥammad 1999, *al-Qand fi dhikr 'ulamā' Samarqand*, ed. Y. al-Hādī, Tehran.
 al-Sam'ānī, Abū Sa'd 'Abd al-Karīm b. Muḥammad 1982, *Kitāb al-ansāb*, XIII, Hyderabad.
 al-Ṭabarī, Muḥammad b. Ja'fir, 1879–1901, *Ta'rikh al-rusul wa al-mulūk*, III, ed. de Goeje, Leiden.

Money circulation of Khwarezm in the early-mediaeval period (6th–first half of 8th centuries AD.).

By Michael Fedorov

Khwarezm, an ancient country mentioned in the *Avesta*, was situated in the lower basin of the Amu Daria including its delta. From time immemorial it was a land of highly developed agriculture based on the intricate and ingenious net of irrigational channels fed by the Amu Daria. The adjacent steppe and desert areas populated by nomads were within its cultural, economic and (sometimes) political influence. The fertile oasis was surrounded by arid steppes and formidable sand deserts which made Khwarezm somewhat isolated from other ancient regions of agriculture and sedentary life, such as Sogd, Chach or Khorasan. The deserts, however, were an insurmountable obstacle neither for enterprising merchants nor for daring (especially nomad) conquerors. Caravan routes crossed scorching deserts and connected Khwarezm with Sogd, Khorasan and the lower basin of the Volga. And most of the time there was a brisk traffic along these routes. Due to the proximity of the steppes, the economic, cultural and, especially, political life of Khwarezm was influenced by nomads. Now and then nomads (born horsemen, hunters and warriors) used to invade Khwarezm and create there new dynasties, only to be conquered by the higher culture of the sedentary population.

The history of early-mediaeval Khwarezm is obscure. Native chronicles have not survived. Biruni wrote: "Qutayba ibn Muslim eradicated the people who knew the Khwarezmian written language, were versed in their traditions and taught (it to others)... and it became concealed so that one cannot know exactly what (the history of Khwarezm) was even since the time of Islam. Qutayba ... killed Khwarezmian scribes and priests and burned their books and scrolls; the Khwarezmians... relied on their memory for what they needed (Biruni meant the Khwarezmian calendar)" (Biruni 1957, 48, 63). Foreign chronicles provide scanty information. The Chinese chronicle states that *Holisimi* (*Hosiu* or *Bolo*) was on the southern side of the *Uhu* (Oxus, Amu Daria). It was also called "the country of the town *Yuegian/Yuetsian*". Scholars are unanimous that *Yuegian* is Gurganch/Urganch (now Kunia Urgench). The ruler of the country resided in *Tsidobeichje*. Of all the Turk lands only in this country were carts drawn by oxes used. In 751 and 762 AD the ruler of Khwarezm, *Shaoshifen*, sent an embassy to China (Bichurin 1950, 315–316).

Some information is provided by Arab chronicles. In 712–713 the Arab governor of Khorasan, Qutayba ibn Muslim, conquered Khwarezm. The Khwarezmshāh, Cheghan (Vainberg, 1977, 91–93, identified him with Azkajvar of coins), asked him for help because his brother, Hurzad, had rebelled. The Arabs defeated and killed Hurzad. Cheghan became a subject of the Arabs and had to pay them an indemnity. He imposed tax to collect the money. The Khwarezmians rebelled and killed him.

Qutayba reconquered Khwarezm, put Azkajmuk, son of Azkajvar, on the throne and marched to Samarqand. The King of Samarqand, Ghurek, asked the Turks and rulers of Chach and Farghana for help. The Arabs defeated the allies, whereupon Ghurek fled to Samarqand. In the siege of Samarqand, troops of Khwarezm and Bukhara participated. Finally Samarqand capitulated. Qutayba banished Ghurek from Samarqand and gave it to his brother whom he made governor of Samarqand. Then he returned to Khorasan. In his absence, the Sogdians rebelled and asked the Turks for help. The Turks besieged the Arabs in Samarqand. In the spring of 713 AD Qutayba returned to Mawarānnahr and the Turks retreated. Qutayba demanded of the rulers of Neseif, Kesh, Bukhara and Khwarezm to send him 20,000 warriors. He sent this army to Chach to punish the ruler of Chāch, who had helped the people of Samarqand, and led his army to Farghāna with the same purpose. So the Arabs conquered Mawarānnahr (Bartold 1963, 241-243; 1964, 381-384; 1968, 289-296, 304-305; Smirnova 1970, 199). But in contrast to Iran, it took the Arabs 100 years to pacify the country, because anti-Arab uprisings broke out in Central Asia every few years with striking regularity. The uprisings broke out mainly in Sogd, but some of them took place in Farghana and Khwarezm. So in 728 the Arabs quelled an uprising in Kurder/Kerder, a principality in the right-bank delta of the Amu Daria. According to Vainberg there was also a principality in the left-bank delta of the Amu Daria, where coins were minted with the image of a horse. Like other countries of Central Asia, Khwarezm was a confederation of principalities, headed by the ruler of the strongest of them, the Khwarezmshah, whose capital was Kāth/Kāt. The principality of Khamjird was ruled by a brother of the Khwarezmshah. Vainberg identified this as Gurgānj (Urgench). She wrote that, after the ruler of Gurgānj was defeated, Gurgānj was made the residence of Arab governors in Khwarezm. The fortress of Hazarasp mentioned in the chronicles was probably the capital of one more principality (Vainberg 1977, 79, 98-99; Bartold 1965, 546).

At the time of the Hephthalite conquests Khwarezm escaped the destiny of the southern regions of Central Asia and retained its independence. But several decades later it became the first country of Central Asia to be subjugated by the Turks. Istemi (died in 575), the brother of the Turk qagan Bumyn (551-553), actually proclaimed himself Qagan during Bumyn's lifetime and was actually independent in the western part of the state. It was Istemi who headed Turk expansion to the west. In 555 the Turks reached "the Western Sea" (either the Aral or Caspian). So Semirech'e (Jety Su), the Kazakh steppes and Khwarizm were subjugated by Istemi. In 558 AD the Turks advanced to the Volga driving in front of them defeated native nomad tribes. Then Istemi started his advance to the south (to Central Asia). And here the Turks were confronted by the Hephthalites. The first clashes took place at the end of the 550s (Gafurov 1972, 215; Gumilev 1967, 35). As was later also the case in Sogd, the Turks did not abolish the native ruling dynasty. The Khwarezmshahs became vassals of the Turks, paid them tribute and were supervised by representatives of the Turk qagans but continued to rule their country.

Just as the science of Sogdian numismatics was created and developed mainly owing to the efforts of Smirnova, so the science of ancient and early-mediaeval numismatics of Khwarezm was created and developed mainly owing to the efforts of Vainberg assisted by Livshits, who contributed greatly in reading the names of the Khwarezmshahs placed on the coins. But notwithstanding their efforts, the numismatics (and the history) of early-mediaeval Khwarezm remains one of the most intricate and obscure parts of the early-mediaeval numismatics of Central Asia.

Vainberg's main success was to establish a comparative chronology, i.e. which series of coins was preceded or followed by which other series of coins. She used the archaeological data for this: such coins were found in the strata of the 4th century, and such coins were found in the strata of the 7th century; or (in some rare cases) such coins were found together with Sasanian or Sogdian coins. Sometimes coins of one series were overstruck on coins of another series and, therefore, the series of the host coins preceded the following series. The degree to which the original Greek legend had degraded was also important: the more degenerate the legend had grown, the more distant

chronologically it was from the original type. She used analogies between some Khwarezmian and Sasanian (or other) coins. For instance the haircut of this ruler of Khwarezm resembled the haircut of this Sasanian ruler etc. In other words, all imaginable and possible ways were used to establish the comparative chronology. As for the absolute chronology, it was not possible to establish this for most of the series of Khwarezmian coins. Just like other contemporary coins of Central Asia, Khwarezmian coins bear neither date nor mintname, and, as Biruni told us, the Khwarezmian chronicles and sacred books were burned on the order of Qutayba. The situation somewhat improved in the 8th century. Thanks to the Chinese and Arab chronicles we know the names (and approximate dates of reign) of the Khwarezmshahs at the time of the Arab conquest of Central Asia.

The coins of the period under study are represented by the "T I" series, according to Vainberg's classification. She singled it out because a new type of titulage "MR'Y MLK'+name of ruler" appeared on the coins of this series. On the coins minted in the period of Developed and Late Antiquity it was "name of ruler+MLK'". Moreover, in the "T I" series copper coins usually repeat the pattern of silver coins.

"T I". Silver (Vainberg 1977, 58, 146 [Nr. 919-920], pl. XXIII). *Obverse*: within beaded (one oval, one round bead) circle, head of beardless king with crown (to right). *Reverse*: royal horseman (to right) and tamgha "T4" (8-10 o'clock). Circular legend: MR'Y MLK' hmw/y/zsy(?). Weight 5.54g, diameter 25.5 mm.



Vainberg failed to determine the absolute chronology of the "T I" type. But she considered it to be the earliest of the "T" series because it still has some affinity to the Late Antiquity series "B²VI, VII" and "B I" types while differing from them in the titulage.

"T II". Silver (Vainberg 1977, 58, 146 [Nr. 921-923], pl. XXIII). *Obverse*: within beaded (one oval, two round beads) circle, head of beardless king in crown (to right). *Reverse*: royal horseman (to right) and tamgha "T4" (10-11 o'clock). Circular legend: MR'Y MLK' br w/y yk. Livshits read brwyk=frawik and considered this name the only one which was close to the name Afrigh mentioned by Biruni (I shall return to the genealogy of the Khwarezmshahs, given by Biruni, somewhat later). Weight 5.79, 5.54, 5.47g, diameter 27, 27.2, 27.5 mm.



According to Vainberg (1977, 59) "T II" opens a series of new style coins differing from the preceding types in that the character of the images changed. They, especially the king's portrait, grew less stylised and more realistic. They (Vainberg probably meant the silver coins) "still had a very high weight (about 5.5g)". And, what is important, there appeared new large, heavy copper coins extremely close in type to the silver coins. Vainberg rightly concluded that this was the result of the monetary reform carried out in Khwarezm by Bravik/Fravik.

"T II/1". Copper (Vainberg 1997, 59, 146-148 [Nr. 924-958], pl. XXV, XXVII). *Obverse*: in beaded (round beads) circle: head of beardless king with crown (to right). In front of him: MR'Y MLK'. Behind him: brwyk. *Reverse*: Sometimes within a linear circle (sometimes there is no circle), royal horseman (to right) and tamgha "T4" (10-11 o'clock). The legend has not been deciphered. Weight 3.4-9.1g, diameter 19-25.5 mm.



"T II/2". Copper (Vainberg 1997, 59, 148 [Nr. 959], pl. XXV). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right) but, instead of the usual Khwarezmian crown, his crown is shaped like a two-humped camel with legs tucked up beneath it. In front of him: MR'Y MLK'. Behind him: brwyk. *Reverse*: like "T II/1". Weight 2.65g (it is a fragment), diameter 25 mm.

Vainberg (1977, 59) dated the coins of Bravik/Fravik to the 7th century. Biruni (1957, 47-48) wrote that Khwarezmshah Afrigh built a citadel in Kāth (on the bank of the Amu Daria) in the year 616 of the "Alexander Era", which would be 305 AD. Vainberg (1977, 59, 80) supposed that it was actually the Khwarezmian Era (I shall return to the Khwarezmian Era somewhat later) which would make it circa 656-670 AD. She was very cautious with this supposition and added that it is acceptable only in the event that the Bravik/Fravik of the coins and Afrigh of Biruni was the same person. I consider her supposition to be very plausible.

Type "T III" is like "T II" type but differs in the portrait and the name of the ruler.

"T III". Silver (Vainberg 1977, 60, 148-149 [Nr. 960-968], pl. XXIII). *Obverse*: within beaded (1 oval, 2 round beads) circle, head of beardless king with crown (to right). *Reverse*: royal horseman (to right) and tamgha "T4" (10-11 o'clock). Circular legend: MR'Y MLK' šr'm. Weight 4.86, 4.8, 4.74, 4.73, 4.67, 4.39, 4.37, 4.35, 4.35g, diameters 27.2, 27, 26.5, 26, 25.3 mm.



"T III/3". Copper (Vainberg 1997, 60, 149-150 [Nr. 969-996], pl. XIX). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right). *Reverse*: exactly the same as the reverse of "T III". It is the earliest case of exact coincidence of reverses of copper and silver coins. Weight 3.3-6.3g, diameter 19.5-23.5 mm.



"T III/4". Copper (Vainberg 1997, 60, 150 [Nr. 997-999], pl. XIX). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right). *Reverse*: exactly the same as

the reverse of "T III", and the same comment applies. Weight 5.4, 4.04g (the third coin is chipped), diameter 22, 21, 20.5 mm.

"T III/5". Copper (Vainberg 1997, 60, 150 [Nr. 1000-1003], pl. XIX). Is like "T II/2". *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right) but, instead of the usual Khwarezmian crown, his crown is shaped like a two-humped camel with legs tucked up beneath it. In front of him: MR'Y MLK'. Behind him: šr'm. *Reverse*: within a linear circle, royal horseman (to right) and tamgha "T4" (10-11 o'clock). The legend has not been deciphered. Weight 7.1, 5.82, 4.51g, diameter 27, 26.5 mm; fractional coin 1.48g, 23 mm.

"T IV". Silver (Vainberg 1977, 60, 151 [Nr. 1004-1006], pl. XIX). *Obverse*: within beaded (one oval, two round beads) circle, head of beardless king with crown (to right). *Reverse*: royal horseman (to right) and tamgha "T4" (10-11 o'clock). Circular legend: MR'Y MLK' k'nyk (Livshits' reading). Weight 4.55, 4.15, 3.79g, diameters 28, 27.5 mm. "T IV" is like types "T II" and "T III" but differs in the portrait and the name of the king.



"T IV/7". Copper (Vainberg 1997, 60, 151 [Nr. 1007-1017], pl. XIX). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right). The crown differs from the crowns of Fravik and Shram. In front of him: MR'Y MLK'. Behind him: k'nyk. *Reverse*: within a linear circle, royal horseman (to right) and tamgha "T4" (10-11 o'clock). The legend has not been deciphered. Weight 5.59, 5.42, 5.1, 4.55, 4.53, 4.34, 4.24, 4.15, 3.9, 3.79g, diameter 29, 28.5, 28, 27.5, 27, 26 mm. Similar to "T II/2" and "T III/5".

"T IV/8". Copper (Vainberg 1997, 60-61, 151-152 [Nr. 1018-1029], pl. XXV). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right). The crown differs from the crowns of Bravik and Shram. *Reverse*: within a linear circle, royal horseman (to right) and tamgha "T4" (10-11 o'clock). Circular legend MR'Y MLK' k'nyk. This is the same as the reverse of silver coins of type "T IV". Weight 8.35, 6.79, 5.75, 5.63, 4.6, 3.87, 3.67, 3.6, 3.58, 2.21, 2.2g, diameter 32, 31, 30.5, 30, 29, 28.5, 28, 24 mm. This is like "T II/2" and "T III/5".



Type "T V" differs from preceding types. It is bilingual (has Khwarezmian and Sogdian legends).

"T V". Silver (Vainberg 1977, 61, 152-154 [Nr. 1030-1049], pl. XX). *Obverse*: within beaded (one oval, two round beads) circle, beardless king in crown (to right). In front of his face Sogdian legend š'wšprn (Livshits' reading). *Reverse*: Royal horseman (to right) and tamgha "T4" or its variant "T13" (10-11 o'clock). Circular legend: MR'Y MLK' sy'wršpn (Livshits' reading). The Sogdian legend on the obverse is a translation of the Khwarezmian name saw(ə) šfan(n). Biruni (1957, 48) wrote it as Shaw.sh.fr. The Chinese chronicle states that Shaoshifen sent an embassy to China in 751 and 762 (Bichurin 1950, 315-316). The weight histogram gives a peak of 3.2g, diameter 27-24 mm.



"T V9". Copper (Vainberg 1997, 60-61, 154-158 [Nr. 1050-1141], pl. XXV). *Obverse*: within beaded (round beads) circle, beardless king with crown (to right). *Reverse*: within a linear circle, royal horseman (to right) and tamgha "T4" (11-12 o'clock). Circular legend MR'Y MLK' sy'wršpn. It is the same as the reverse of silver coins of type "T V". Weight 2.31-5.97g, diameter 21-29 mm.



"T VI". Silver (Vainberg 1977, 62, 159-161 [Nr. 1142-1167], pl. XX). *Obverse*: within beaded (as on "T V") circle, head of beardless king with crown (to right). In front of his face, the Sogdian legend 'k'ncw'r (Livshits' reading). *Reverse*: royal horseman (to right) and tamgha "T4" or its variant "T13" (10-11 o'clock). Circular legend: MR'Y MLK' w y/z k'nšw'r (Livshits' reading). The Sogdian legend is a translation of the Khwarezmian name. Wzk'nšw'r may be identified with ازکاجوار (Azkajvar) of Biruni (1957, 48). The weight histogram gives a peak of 1.9g, diameter 26.5-23.5 mm.



There are 3 subtypes. "T VIa" has a rosette above the horse's crupper (on the reverse). "T VI6" has an important distinction. Above the horse's crupper (on the reverse) there is an Arabic legend: the Arabic name Faḍ l, or Muḥammad, or Ja'far. "T VIb" instead of Sogdian legend (on obverse) has the Arabic legend: name 'Abd Allāh b. ... (Yanina's reading). On the reverse, above the horse's crupper, there is an Arabic legend: name Muḥammad. Biruni (1957, 48) mentioned the Khwarezmshah 'Abd Allāh who was a grandson of Shaw.sh.fr. There is no doubt that 'Abd Allāh on obverse and wzk'nšw'r on reverse is the same man. On other coins his name was repeated in Sogdian while, on this coin, his new Muslim name 'Abd Allāh is cited. Vainberg (1977, 62) dated his coins to the last quarter of the 8th century AD (but not earlier than 762).

So in fact coins of "T VI6" and "T VIb" type already constitute Arab-Khwarezmian drachms.

Tolstov (1938, 131) identified Faḍ l and Ja'far with the Arab governors of Khorāsān, Ja'far b. Muḥammad (787-789) and Faḍ l b. Yahyā Barmakī but gave a mistaken date for Faḍ l's governorship: 787-795. Masson (1955, 187) identified Faḍ l as the governor of Khurāsān, Faḍ l b. Sulaimān (783-787) who was followed by Ja'far b. Muḥammad (787-789). I totally agree with him. Masson also corrected the Tolstov's mistake and wrote that Faḍ l b. Yahyā Barmakī was governor in 794-795. In my opinion the name Muḥammad belonged to Muḥammad al-Mahdī. In 140/757 caliph al-Manšūr (136-158/754-775) appointed his son, Muḥammad al-Mahdī, governor of Khurāsān. Muḥammad al-Mahdī was governor of Khorāsān till 775 when he became caliph (775-785).

"T 11a". Copper (Vainberg 1997, 62-63, 161-168 [Nr. 1168-1314], pl. XXVI). *Obverse*: within beaded (round beads) circle, head of beardless king with crown (to right). *Reverse*: within a linear circle, instead of a royal horseman a big tamgha "T11". Around it, the legend MR'Y MLK' w y/z k'nšw'r (Livshits' reading) and a small tamgha "T4" (10-11 o'clock). The legend is the same as on the reverse of the silver coins of type "T VI". Weight 1.26-3.57g, diameter 20-28 mm.



Subtype "T 116". Copper (Vainberg 1997, 63, pl. XIX, XXVI) does not have "T4" on the reverse.



"T 12". Copper (Vainberg 1997, 63, 168-171 [Nr. 1315-1363], pl. XIX). *Obverse*: head of beardless king with crown shaped like a two-humped camel (to right). *Reverse*: within a linear circle, instead of a royal horseman, a big tamgha "T12". Around it, the legend MR'Y MLK' hwsrw (Livshits' reading). Weight 1.6-5.1g, diameter 20-28 mm.



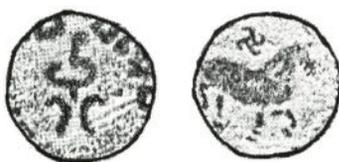
These coins are scarce in Central Khwarezm but copious in Kurder/Kerder (the principality on the right-bank delta of the Amu Daria). This fact and the fact that many coins of Khusru were struck over the coins of Azkajvar (and the fact that some coins of Azkajvar were struck over coins of Khusru led Vainberg (1977, 63) to infer that Khusru was an appanage ruler of Kurder and contemporary of Azkajvar.

"T 13". Copper (Vainberg 1997, 63, 171-172 [Nr. 1364-1384], pl. XX). *Obverse*: beardless king with crown (to right). *Reverse*: royal horseman (to right). Tamgha "T14" (9-11 o'clock), which is a variant of "T4". Around it, legend MR'Y MLK' š'w/ysy/wk/r. Weight 1.25-3.97g, diameter 17-24 mm.

Such coins are scarce in Central Khwarezm but copious in Kurder. This fact and the fact that on these coins there is another tamgha (not "T12") led Vainberg (1977, 63) to infer that š'w/ysy/wk/r was an appanage ruler of Kurder, but not from the dynasty of Khusru who most probably perished when the Arabs quelled the Kurder uprising of 728. It is strange that appanage rulers of Kurder had the same titulage MR'Y MLK' as the Khwarezmshahs.

Types "T 14" and "T 15" are peculiar and form a special subgroup.

"T 14". Copper (Vainberg 1997, 63, 172-173 [Nr. 1385-1387], pl. XX). *Obverse*: horse trotting to right. Above it, a swastika with a circlet in the middle. *Reverse*: large tamgha "T13" which is a variant of "T4". Around it, legend MR'Y MLK' ... Weight 0.99, 1.32, 2.68g, diameter 16, 18, 22 mm.



"T 15". Copper (Vainberg 1997, 63, 172-173 [Nr. 1385-1387], pl. XX). *Obverse*: horse trotting to right. Above it, a swastika with a circlet in the middle. Around it, an Arabic legend (badly effaced). *Reverse*: typical of Abbasid fulūs. Within the beaded circle: محمد/رسول/الله. Marginal legend (badly effaced). Weight 1.15g, (no weight, no weight), diameter 21, (no diameter), 22.8 mm.



Vainberg (1977, 98) wrote that such coins were found in the left-bank delta of the Amu Daria and supposed that it could have been the coinage of some appanage principality. Ernazarova (1979, 118-119, Nr. 188, 189) published such coins (found in Samarqand and its vicinity). She read the marginal legend of the obverse: عَشرون و مائتين ... الفس She also read the marginal legend of the reverse: ... مما امر به الامير Thus, according to Ernazarova, such coins were struck in AH 22... , i.e. between AH 220 and 229 (AD 835-844). Weight 1.7, 1.95g, diameter 21 mm.

Kochnev (1984, 186) published a fals with a horse and swastika on the obverse. In the obverse marginal legend there is the mintname خوارزم and date 228/842-3. In the reverse marginal legend: الامير ميكال مولى طاهر (?). If his reading is correct, amir Mikāl was a governor of Khwarezm appointed by the Tahirids.

Whatever the case, this fals proves conclusively that coins with a horse and swastika were minted in Khwarezm.

Vainberg (1977, 63-64, 91-92) wrote that in the 8th century AD, there were two Azkajvars: Azkajvar-Cheghan and Azkajvar-'Abd Allāh. The first one ruled Khwarezm in the beginning of the 8th century. Around the year 711 his brother, Hurzād, rebelled against him. Khwarezmshāh Cheghan-Azkajvar asked the Arab governor of Khorāsān, Qūṭayba, for help. The Arabs defeated and killed Hurzād. Cheghan became the subject of the Arabs and pledged to pay them an indemnity. He imposed a tax to collect the money but the Khwarezmians rebelled and killed him. Qūṭayba reconquered Khwarezm. He put on the throne Azkajmuk, the son of Azkajvar. Azkajvar-'Abd Allāh was a contemporary of the Arab governors of Khorāsān, Muḥammad al-Mahdī (757-775), Faḍ l b. Sulaimān (783-787) and Ja'far b. Muḥammad (787-789). He cited them on his coins, as his suzerains. His reign could not have started earlier than 762 since, in 762, the ruler of Khwarezm was *Shaoshifen*, who sent an embassy to China (Bichurin 1950, 315-316).

Vainberg (1977, 62), describing silver coins with the name of *wzk'nšw'r* /Azkajvar ("T VI") did not try to distinguish the type of these two rulers. One could suppose that subtype "T VIa", citing only *wzk'nšw'r*, was struck by Azkajvar, killed in 712-3, while subtypes "T VIb" (citing Faḍ l or Ja'far) and "T VIc" (citing Muḥammad) were struck by Azkajvar-'Abd Allāh, the contemporary of those governors of Khorāsān. But the king's face on these coins looks alike (at least to me) differing mainly in age: unoustached, moustached, moustached and plump-cheeked, moustached and flabby-cheeked. Most probably it was one and the same Azkajvar-'Abd Allāh, the contemporary of Muḥammad al-Mahdī (757-775), Faḍ l b. Sulaimān (783-787) and Ja'far b. Muḥammad (787-789). His reign started no earlier than 762 and no later than 775. And if it started in the early 760s it continued for not less than 25 years. So it is natural that his face changed during that period. Khwarezmian-type coins minted by the Khwarezmshahs, the successors of Azkajvar-'Abd Allāh, are not known. But, anyway, the Khwarezmshahs retained their own currency for about 30 years longer than the *ikhshids* of Sogd. Turghar, the *ikhshid* of Samarqand, was the last to issue old-type Sogdian coins. Starting in the year 755 AD, coins in Sogd were already being struck in the name of Arab governors of Khorasan and, later, in the name of the caliphs.

It is easier with copper coins ("T II") since they have a tamgha ("T11") that is different from the traditional Khwarezmian tamgha "T4". But there is a difference between subtypes: "T 11a" has two tamghas ("T 11" and "T4"), "T 11b" has only one tamgha ("T11"). It is noteworthy that the crown (merloned) on copper coins ("T II") is different from the crown (the usual Khwarezmian one) on silver coins "T VI".

Arab chroniclers al-Kūfī, Ṭabarī and Bal'amī wrote that Khwarezmshah جيفان (Ṭabarī, Bal'amī) or جنغان (al-Kūfī) in 711 asked Qūṭayba for help against his mutinous brother Hūrzād. The Arabs defeated and killed Hūrzād in 712. Cheghan, now a subject of the Arabs, agreed to pay an indemnity. He imposed a tax to collect the money. The Khwarezmians mutinied and killed him. Qūṭayba reconquered Khwarezm, put on the throne Azkajmuk, the son of Azkajvar, and went to conquer Samarqand. But neither Birūnī, (1957, 48) who wrote "when Qūṭayba b. Muslim conquered Khwarezm for the second time he made Askajmuk b. Azkajvār the Shah" nor Khwarezmian coins mention Cheghan. Vainberg (1977, 91-92) identified Cheghan with Azkajvar of Birūnī and *wzk'nšw'r* on the coins and advanced a theory that Cheghan, who captured the throne of Khwarezm at the end of the 7th -beginning of the 8th century, belonged to the Hephthalite dynasty of Chaghāniān rulers.

Rtveladze (1980, 51-58) disproved this hypothesis. He wrote that Kurat (1948, 394) had noted that the name Cheghan resembled the title (چغان خد) of the Chaghanian rulers but did not consider it possible to identify this title with the ruler of Khwarezm. Moreover, the Khwarezmshah's name was written جيفان or جنغان while the name of the country was written جغانيان or ضغانيان (i.e. there was no letter between ج and ض as in the name of the Khwarezmshah). To prove her hypothesis

Vainberg used the tamgha (T15), which she called "the tamgha of the Hephthalite dynasty of Chaghanian". This tamgha was placed as the countermark on the Tokharistan imitations of Sasanian drachms of Peroz I (459-484 AD). She asserted that there is a resemblance between the tamgha placed on the copper coins ("T 11" type) citing *wzk'nšw'r* /Azkajvar and the one which she called "the tamgha of the Hephthalite dynasty of Chaghanian". But Rtveldze (1980, 53-54) established that the tamgha (T15) in question has nothing to do with Chaghanian since coins with such a tamgha were found in the Termez and Guftan principalities situated to the south and south-west of Chaghanian. As for Chaghanian itself, a quite different tamgha was placed on its coins. Rtveldze (1980, 57) also wrote that, although the upper (lyre-shaped) part of both tamghas have some affinity, the lower part of those tamghas differs considerably. Vainberg (1977, 92-93) wrote that, in Northern Tokharistan, bronze coins were issued with a round circle in the middle and that, among the "T 11" type coins, there are 4 coins with the round hole in the middle. She thought this served as additional proof that Khwarezmshah Cheghan came from Chaghanian. Rtveldze (1980, 57) wrote that the coins with a round hole in the middle were found in the Vakhsh valley and had nothing to do with Chaghanian (upper and middle Surkhan Daria valley). Moreover I am convinced that the hole was made in the coins after they were issued. This hole is placed in the middle of the king's face and no king would approve or sanction such a thing. So Vainberg's theory is, to my mind, quite unrealistic.

But there is another possibility. Ṭabarī, when describing the conquest of Khwarezm by Qūṭayba, mentioned the town of Khamjerd, ruled by the brother of the Khwarezmshah (Bartold 1965, 546). Vainberg (1977, 99) identified Khamjerd with Gurgānj because the events of the campaign of Qūṭayba's brother, 'Abd al-Rahman, against Khamjerd are the same as the events of 'Abd al-Rahman's campaign against Gurgānj as they were told by Bal'amī. I agree with her on this. She considered it doubtful that Khamjerd was the name of the principality while Gurganj was the name of its capital. But it could be that Khamjerd was a fortress, a stronghold of the Khwarezmshah's brother after he rebelled against the central government.

I think that Gurganj was an appanage principality of Chegan (Azkajvar) before he captured Kāth and became Khwarezmshah. And that tamgha "T11" belonged to the appanage rulers of Gurganj. There are coins "T 116" with only one tamgha ("T11"). They were minted by Azkajvar when he was ruler of Gurganj. The coins "T 11a", with two tamghas ("T 11" and "T4"), were minted when he captured Kāth and became Khwarezmshah. It was exactly the same in Sogd. When the appanage ruler of Kesh, Shishpir (second quarter of the 7th century), captured Samarqand and created a new dynasty of Samarqandian *ikhshids*, he placed on his coins two tamghas: the y-shaped tamgha of Samarqand and the triskelion-tamgha of the rulers of Kesh. It is noteworthy that the crown of Cheghan-Azkajvar (merloned) is different from the usual crown of the Khwarezmshahs which appeared on coins at least from the time of *sy'wršpn*.

On the coins of 'Abd Allāh-Azkajvar there is only the usual Khwarezmian tamgha "T4" and he wears the usual Khwarezmian crown. It shows that he belonged to the old, legal dynasty of Khwarezmshahs from which the usurper, Azkajvar-Cheghan, took the throne.

I come now to the genealogy of the Khwarezmshahs as given by Bīrūnī in "*Āthār al-baqiya*". He wrote: "the rule over Khwarezm was in the hands of this (Banu 'Iraq – M.F.) family or in other hands till the dignity of the ruler and title of shah went from them (in 995) after the martyr, Abū 'Abdallāh Muḥammad ibn Aḥmad ibn Muḥammad ibn 'Iraq ibn Manšūr ibn *'Abdallāh ibn Trk.s.bāth ibn Shaw.sh.fr ibn .s.k.j.mūk ibn .zkājwār ibn S.brī ibn S.kh.r ibn .r.th.mūkh*; in whose time, as I have mentioned, the Prophet's divine mission took place". Bīrūnī also traced the genealogy of the Khwarezmshahs back to Afrīgh, who had built the castle of al-Fīr on the bank of the Oxus in the year 616 of the Era of Alexander (=305 AD) and in this way Kāth was founded (Bīrūnī 1957, 48). But as Livshitz (1970, 166-167) had shown, Bīrūnī's genealogy of Khwarezmshahs before the 8th century did not coincide with the names of the Khwarezmshahs known from coins and epigraphic evidence. Like many other

newly-established dynasties, the Khwarezmshahs of the Banū 'Irāq dynasty may have pretended to descend from famous rulers of the past, just as the Buyids, obscure Daylamī mercenaries in origin, were provided by the court genealogists with a glorious family-tree going back to the Sasanian Shahs of Iran (Bosworth 1973, 51-62). So it is quite possible that an imposing genealogy was invented for the Banū 'Irāq tracing them back to Afrīgh and the ancient Khwarizmshahs, whose names were still vaguely remembered in the 10th century in Khwarezm. Anyway, Bīrūnī was quite definite: it was the Banū 'Iraq, and not the the house of Afrīgh, which nurtured him in his early years (Fedorov 2000, 73). And it was Abū Naṣr Manšūr from the house of 'Iraq, and not from the house of Afrīgh who reared him.

The Khwarezmian Era.

By now it is a well established fact that, for at least during eight centuries, Khwarezm had its own dating system. Documents found at the excavations of Toprak Kala were dated to years 188-231 of the Khwarezmian Era, while ossuaries found in Tok Kala were dated to years 658-738 of the Khwarezmian Era (Vainberg 1977, 79, 88). Scholars have given various dates for the beginning of this era. According to Henning (1965, 168-169) it is 42 AD. According to Livshits and Gudkova (1967, 8) it is between years 1-33 of the first century AD. According to Tolstov (1961, 69) it is 78 AD. According to Vainberg (1977, 79) it is between years 40-54 of the first century AD. Altheim and Stiehl (1965, 140-144) thought that the Khwarezmian Era was identical with the "Era of Afrīgh" (which, according to Bīrūnī, started in the year 616 of the Era of Alexander =305 AD) but Livshits and Gudkova (1967, 10) had shown that that is out of the question: if the Khwarezmian Era were the same as the Era of Afrīgh (started in 305 AD) then the date "738 of the Khwarezmian Era", written at one ossuary found in Tok Kala, would be (305+738) 1043 AD, but according to the archaeological data the settlement of Tok Kala was destroyed in the 8th century and was not inhabited after that. Vainberg (1977, 79) wrote that such an event as the introduction of its own chronology in Khwarezm was connected with the establishment of a new dynasty in Khwarezm, as when on the coins of "B 1" type there appeared for the first time the dynastic tamgha "T4", which remained traditional for coins of Khwarezm until the end of the 8th century AD. She considered that the Khwarezmian Era was the Era of the dynasty with the "T4" tamgha. As for the Era of Afrīgh, which according to Bīrūnī started in the year 616 of the Era of Alexander, she wrote that there is no evidence whatsoever that this era was used in Khwarezm. She supposed that Bīrūnī somehow got some information that Afrīgh built the citadel of Al-Fīr in the year 616, and, since he knew nothing about the Khwarezmian Era, he decided that it was "the Era of Alexander" (i.e. the Seleucid Era). In his book "*Āthār al-baqiya*" dedicated to the calendars and chronology of various countries, dynasties and religions, he never mentioned the Khwarezmian Era. Describing the Khwarezmian calendar Bīrūnī wrote (1957, 48, 63): "after Qūṭayba ... killed Khwarezmian scribes and priests and burned their books and scrolls, Khwarezmians... relied on their memory for what they needed (Bīrūnī meant their calendar)". They still remembered the Khwarezmian names of the months but, after the introduction of the Hijra Era, they had forgotten the Khwarezmian Era totally. So Vainberg (1977, 80) was of the opinion that Afrīgh (Fravik) built the citadel of al-Fīr not in 305 AD but between 656-670 AD, a view that I totally agree with. She dated the reign of Afrīgh (Fravik) and Shram to the second half of the 7th century AD.

Now some information about the metrology of Khwarezmian coins (Vainberg 1977, 67-70, 48-63, 106, 116, 139, 146, 148-149, 151-153, 159).

Silver coins

Data on the metrology of the silver coins is scanty. Nevertheless the picture is clear enough. Vainberg (1977, 48) divided the coins of Khwarezm into four groups. "A" – with Greek legend. "B" – with Khwarezmian and Greek legends. "B'" – with Khwarezmian legend. "T" – with the new titlage *MR'Y MLK'* and legends in: Khwarezmian and Sogdian ("T V"; "T VIa"), Khwarezmian,

Sogdian and Arabic ("T VI^B"), Khwarezmian and Arabic ("T VI^B"). It is the fourth series that concerns us here.

"T I" (not earlier than the 7th century AD, King Hmw/y/zsy) - 5.5, 5.54g, 25.5, 26 mm. "T II" (third quarter of the 7th century, King Fravik) - 5.79, 5.54, 5.47g, 27.5-27 mm. "T III" (last quarter of the 7th century, King Shram) - 4.86, 4.8, 4.74, 4.73, 4.67, 4.39, 4.35, 4.37g, 27, 26.5, 26, 25.3m m. "T IV" (first quarter of the 8th century [?], King Kanik) - 4.55, 4.15, 3.8 (chipped?)g, 27.5-28mm. Further reduction in weight. "T V" (King Sawshafan circa 751-762) - weight histogram gives peaks of 3.2g (5 coins) and 3.15g (3 c), 25-27mm. "T VI" (Azkajvar-'Abd Allāh circa 762-789) - weight histogram gives peaks of 1.9g (4 c), 2g (3 c), 2.4g (3 c), 23.5-26.5 mm.

In the time of Fravik/Afrigh a monetary reform was carried out. The weight of silver coins was reduced once again (but they were still heavy - 5.47-5.79 g, and new types of large, heavy copper coins (3.38-9.1g, main group 3.6-4.8g) were introduced. Certainly there was a main unit and its multiple or fraction. The copper coins copy or closely resemble the silver coin types.

The next monetary reform was carried out by Sawshafan. He introduced a Sogdian legend on his coins and adjusted their weight to the weight of the Sogdian drachm (3.2g, 26-27 mm, Davidovich 1979, 107). Vainberg (1977, 66, 99) wrote that it reflected the economic policy of Khwarezm under Sawshafan which aimed to capture the eastern market (south-eastern Kazakhstan, eastern Central Asia and East Turkestan where the Sogdian language was *lingua franca*, where Sogdian trade, Sogdian merchants (and Sogdian drachms) dominated before the the Arab conquest. It was also aimed at establishing there the economic influence of Khwarezm, because the Sogdians lost their positions there owing to the economic crisis caused by the Arab conquest and the numerous anti-Arab uprisings in Sogd which were mercilessly quelled. It is not clear whether silver coins of Sawshafan were *nummi subaerati* as was the case with Sogdian drachms.

Next came the reform carried out by Azkajvar-'Abd Allāh who reduced the weight of his silver coins and made it equal to two thirds of a Sogdian drachm. Sogdian drachms were *nummi subaerati* and contained about 60% silver. The coins of Azkajvar-'Abd Allāh were probably not *subaerati* and, weighing two thirds of the Sogdian drachm, contained about the same quantity of silver as the Sogdian drachms, so that they had the same value and the same purchasing power.

Unfortunately Vainberg did not pay any attention to this problem and did not provide any information about the standard of fineness and texture of the Khwarezmian silver coins.

Copper coins

At first Khwarezm had no copper coins of its own and imported coins (overwhelmingly Kushan ones) were used. Then Khwarezmian countermarks began to be applied to them, while, later, they were overstruck with Khwarezmian dies. After that, a sporadic mintage of Khwarezmian copper coins started. It was not until the reign of Khwarezmshah Wazamar (last third of the 3rd century AD) that a massive and regular minting of copper coins in Khwarezm started, series "B² V/I-5" (Vainberg 1977, 55, 67-69). Khwarezmian copper coins were minted *al marco*, i.e. from certain amount of metal a certain amount of coins were minted. Details of the weight and diameters of the copper coins are set out in the appendix to this paper.

At first glance, the weight of Khwarezmian copper coins is something chaotic. But it is possible to discern some system there. To begin with there was such a thing as the Intended Average Weight- IAW. Khwarezmian copper coins were minted *al marco*, i.e. from a certain amount of copper a certain amount of coins were minted. Thus if 300 or 100 coins were minted from 450g copper, the IAW would be 1.5 or 4.5g. The coins with IAW, or close to it will be more frequent than others. Out of the total 38 series of Khwarezmian copper coins, in 18 series coins of 1.3g (5 times), 1.4g (7 times), and 1.5g (6 times) are comparatively frequent. In contemporary Sogd there was a system of IAWs (for bronze *fen*s) comprising a main unit (MU) and its fractions (or multiples): MU, 2 MU, 3 MU, 4 MU, 5 MU. If the IAW for the Khwarezmian copper coins MU was 1.4g plus/minus 0.1g, then

the IAW for the next monetary unit should be (1.3, 1.4, 1.5g) x2 = 2.6, 2.8, 3g. Indeed in 18 monetary series there are coins of 2.4-3g (2.4-2.5g are somewhat more frequent but it is understandable, bearing in mind that coins lost weight in circulation). Then the next IAW should be (1.3, 1.4, 1.5g) x3 = 3.9, 4.2, 4.5g. Again, at least in 7 monetary series there are coins of 3.7-3.9 and 4.2-4.6g. The next IAW would be (1.3, 1.4, 1.5g) x 4 = 5.2, 5.6, 6g. In fact in 7 series there are coins of 5-6g. The next IAW would be (1.3, 1.4, 1.5g) x5 = 6.5, 7, 7.5g. Such coins are found among the copper coins of Khwarezm (for instance 6.3, 6.8 and 7.1g), though they are quite rare. There are even coins of 8.35 and 9.1g, which is 6 MU (1.4x6=8.4, 1.5x 6=9). Bearing in mind that Khwarezmian copper coins were minted *al marco* and lost some weight in circulation because of wear, one should not expect 100% coincidence.

In my article "Money circulation in early-mediaeval Sogd (6th - first half of 8th century.)" in the supplement to Newsletter 175 I dwelt on the mode of coining money in early-mediaeval Sogd, and gave some information on prices, or rather the purchasing power of early-mediaeval Sogdian coins. The prices were about the same in early-mediaeval Khwarezm. As to the mode of coining money there were some differences. Sogdian drachms were *subaerati*, Sogdian *fen* were cast from bronze. Khwarezmian silver coins were of solid metal (no scholar of ancient and early-mediaeval Khwarezmian numismatics has indicated that they were *subaerati*). Khwarezmian coins of small denominations were copper and struck. Gold coins are not known. Some (mainly appanage) rulers minted only copper coins. Originally in Khwarezm only silver coins were struck and they imitated the tetradrachms of the Graeco-Bactrian king, Eucratides. Together with the coin type, the Khwarezmians also adopted the Graeco-Bactrian minting techniques. Obverse images were in higher relief, reverse images were in lower relief. Later, however, the relief flattened. Images on the earliest coins (especially the obverse ones) were highly artistic and realistic. Then they started to deteriorate. It was not, however, a constant process. It was more an intermittent retreat and advance with some coins being better and some worse. but the common trend was for a deterioration and stylisation of the images (especially the reverse ones). The reform of Fravik/Afrigh (third quarter of the 8th century) resulted in an improvement to the quality of the silver coins both in terms of metal content and appearance but their weight was again reduced and they now weighed about three times less than the earliest Khwarezmian coins. The appearance of a Sogdian legend on Sawshafan's coins and the adjustment of their weight to the weight of the Sogdian drachm (3.2g) was economically motivated: Khwarezmian silver coins were now meant not only for Khwarezm, but for a broader area of circulation. The appearance of Arabic legends, on the other hand, was politically motivated: the Khwarezmshah had become a vassal of the Arabs.

1	2	3	4	5
				
6	7	8	9	10
				
11	12	13	14	15
				

Table of tamghas

1-14: Khwarezmian tamghas 15: tamgha of Tokharistan

References

- Altheim, F. und Stiehl, R. 1965. "Chwarezmische Inschriften", *Biblioteca Orientalis*, XII, 3/4.
- Bartold, V. V. 1963. *Turkestan v epokhu mongol'skogo nashestviia*, *Sochineniia*, t. 1, Moskva.
- Bartold, V. 1964. "K istorii arabskikh zavoevaniy v Srednei Azii", *Sochineniia*, t. 2, ch. 2, Moskva.
- Bartold, V. V. 1965. "Khorezm", *Sochineniia*, t. 3, Moskva.
- Bartold, V. V. 1968. "Drevnetiurkskie nadpisi i arabskie istochniki", *Sochineniia*, t. 5, Moskva.
- Bichurin, N. Ia. 1950. *Sobranie svedeniĭ o narodakh, obitavshikh v Srednei Azii v drevnie vremena*, t. 2, Moskva-Leningrad.
- Biruni, Abu Reihan. 1957. *Pamiatniki minuvshikh pokolenii*, *Izbrannye proizvedeniia*, t. 1, perevod i primechaniia M. A. Sal'e, Tashkent.
- Bosworth, C. E., 1973. "The Heritage of Rulership in Early Islamic Iran and the search for Dynastic Connections with the Past", *Iran*, XI.
- Davidovich, E. A. 1979. *Klady drevnikh i srednevekovykh monet Tadzhikistana*, Moskva.
- Ernazarova, T. 1979. "Novye monety Afrasiaba i ego okrestnostei", *IMKU*, 15, Tashkent.
- Fedorov, Michael. 2000. "The Khwarazmshahs of the Banū 'Irāq", *Iran*, XXXVIII.
- Gafurov, B. G. 1972. *Tadzhiki. Drevneishaiia, drevniaia i srednevekovaiia istoriia*, Moskva.
- Gudkova, A. V., Livshits, V. A. 1967. "Novye Khorezmiiskie nadpisi iz nekropolia Tok-kaly I problema "khorezmiiskoi ery", *VKF AN UzSSR*, 1, Nukus.
- Gumilev, L. N. 1967. *Drevnie Tiurki*, Moskva.
- Henning, W. B. 1965. "The Choresmian Documents", *Asia Major*, new series, XI, pt 2, London.
- Kochnev, B. D. 1984. "Zametki po srednevekovoi numizmatike Srednei Asii. Chast' 6. (Ranee srednevekov'e, Samanidy, Karakhanidy)", *IMKU*, 19.
- Kurat, A. N. 1948. "Kuteibe bin Muslim'in Hvarizm ve Samarqand'i Zabiti", *Ankara Universitesi Dil ve Tarih-Gografya Fakültesi Dergisi*, VI, 4.
- Livshits, V. A. 1970. "Khorezmiiskii kalendar' i ery drevnego Khorezma", *PS*, vyp. 21 (84), Leningrad.
- Masson, M. E. 1955. "K voprosy o "chernykh dirkhemakh" museiabi", *TIIANUZ*, 7, Tashkent.
- Rtveladze, E. V. 1980. "Po povody dinasticheskikh cviazei Khorezma i Chaganiana v rannee srednevekov'e", *VKF AN UzSSR*, 1.
- Smirnova, O. I. 1970. *Ocherki iz istorii Sogda*, Moskva.
- Tolstov, S. P. 1938. "Monety shakhov drevnego Khorezma i dernekhorezmiiskii alfavit", *VDI*, 4.
- Tolstov, S. P. 1961. "Datirovannye dokumenty iz dvortsa Toprak-kala i problema "Ery Shaka" i "Ery Kanishki", *PV*, 1, Moskva.
- Vainberg, B. I. 1977. *Monety drevnego Khorezma*, Moskva.

List of abbreviations

- IMKU* *Istoriia Material'noi Kul'tury Uzbekistana.*
PS *Palestinskii Sbornik.*
PV *Problemy Vostokovedeniia.*
TIIANUZ *Trudy Instituta Istorii i Arkheologii Akademii Nauk UzSSR.*
VDI *Vestnik Drevnei Istorii.*
VKF AN UzSSr *Vestnik Karakalpakskogo Filiala AN UzSSR*

Appendix

Weight and diameter of copper coins

Abbreviations: **D**-diameter, **CFW**- comparatively frequent weights, **MFW**-more frequent weights, **MG**-main group of coins.

"B² V/1"-0.9-5.82g. **MG** 1.1-3.5g. **MFW** 1.4, 1.9-2, 2.4-2.5, 3.3g. **D** 10-19mm, 13-14mm prevails.

"B² V/2"-0.9-3g. **MFW** 1.4, 1.7, 2.1-2.2, 2.5g. **D** 10.5-18mm, 13-15mm prevails.

"B² V/3"-1.15-4.76g. **MG** 2.55-3.9g. **CFW** 2.8, 3.4g. **D** 13-19mm, 14-16mm prevails.

"B² V/4"-1.3-5g. **MG** 2.3-3.8g. **CFW** 2.5, 3.2, 3.8g. **D** 10-18mm, 13-16mm prevails.

"B² V/5"-3.25g. **D** 18mm.

"B² VI/6"-0.62, 0.67, 1.57, 1.66, 1.88, 2, 2.14, 2.66, 2.83, 3.4g. **D** 8.5-17mm, 13-14.5mm prevails.

"B² VII/7"-1.82, 1.86, 2, 2.1, 2.22, 2.3, 2.37, 2.43g. **MG** 2.05-2.43g. **D** 12-15mm, 13-15 prevails.

"B² VIII/8"-1.65, 2.1, 2.24, 2.68, 3.26, 3.37, 3.5, 4.6g. **MG** 2.1-3.5g. **D** 11-20, 13-14mm prevails.

Then copper coins grew lighter.

"B² 9"-0.3-2g. **MG** 0.4-1.2g. **MFW** 0.6-0.7, 0.9-1g. **D** 9.5-18mm, 10-11.5mm prevails.

"B² 10"-1.1-3.76g. **MG** 1.3-2.75g. **MFW** 1.4-1.5, 1.8mm. **D** 10-18.3mm, 13-15mm prevails.

"B² 11"-0.47-2.99g. **MG** 1.2-2.83g. **MFW** 1.3, 2.8g. **D** 9-16mm, 13-14mm prevails.

"B² 12"-0.97-5.12g. **MG** 1.2-2.9g. **MFW** 1.7 g. **D** 12-17mm, 13-14mm prevails.

"B² 13"-0.65-4.2g. **MG** 1.2-3.44g. **MFW** 1.4, 1.7-1.8, 2.7, 3.4g. **D** 12-17mm, 13-14.5mm prevails.

"B² 14"-0.61-3.15g. **MG** 0.61-2.62g. **MFW** 1.2-1.8g. **D** 10-15mm, 12-14mm prevails.

"B² 15"-0.4-3.1g. **MG** 0.4-2.2g. **MFW** 0.7-1.1, 1.4g. **D** 10-13mm, 10-12mm prevails.

"B² 16"-0.79-3.61g. **MG** 1.1-2.2g. **MFW** 1.1, 1.4g. **D** 10-17mm, 11-15mm prevails.

"B² 17"-0.5-2.52g. **MG** 0.5-1.8g. **MFW** 0.6, 0.8-1.1g. **D** 9-14mm, 10-12mm prevails.

"B² 18"-0.5-1.9g. **MFW** 1.3g. **D** 10-13mm, 10-12mm prevails.

"B² 19"-0.55-2.25g. **MG** 0.7-1.9g. **MFW** 0.9, 1.1-1.2g. **D** 8.3-13.5mm, 10-12mm prevails.

"B² 20"-0.89-4.7g. **MG** 1.5-3.22g. **MFW** 1.5g. **D** 12-20mm, 15-15.3mm prevails.

"B² 21"-2.17, 2.41, 2.46, 2.57, 2.6, 3.24, 3.28g. **D** 12-15mm, 13.5-14mm prevails.

"BI/1"-0.52-4.96g. **MG** 1-2.6g. **MFW** 1.5, 1.8, 2.4g. **D** 11.4-16.2mm, 12-13mm prevails

"BI/2"-2.02, 2.68, 2.98, 3.07, 3.19, 3.2g. **D** 11-13mm, 12-13mm prevails.

"BI/3"-1.72, 1.9, 1.94, 1.96, 2.25, 2.8g. **D** 11.5-13.5mm, 13-13.5mm prevails.

Then Khwarezmshah Fravik/Afrigh carried out a monetary reform, copper coins grew heavier.

"T II/1"-3.4-9.1g. **MG** 3.6-4.8g. **CFW** 3.8, 4, 4.4 g. **D** 19-25.5 mm, 20-23mm prevails.

"T II/2"-2.65g. **D** 25mm.

"T III/3"-3.3-6.3g. **MG** 3.3-5.1g. **MFW** 4.3, 4.9g. **D** 19.5-23.5mm, 21-22mm prevails.

"T III/4"-4.04, no weight, 5.41g. **D** 20.5, 21, 22g.

"T III/5"-1.48, 4.5, 5.82, 7.1g. **D** 23-27mm, 23, 26.5, 27mm prevails.

"T IV/7"-3.9, 4.24, 4.34, 4.53, 4.6, 5.1, 5.42, 5.59, . **D** 23-31g, 27-30mm prevails.

"T IV/8"- 2.3, 3.15, 3.6, 3.67, 3.87, 4.6, 5.63, 5.75, 6, 6.8, 8.35g. **D** 28-32mm, 29-30mm prevails.

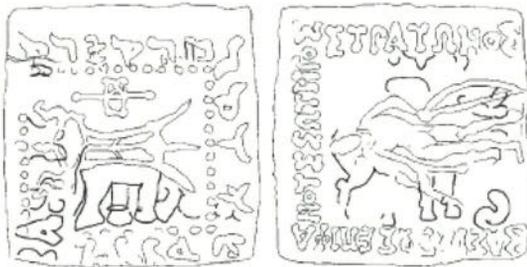
"T V/9"-2.31-5.97g. **MG** 2.31-4.98g. **MFW** 3.5, 3.7, 4.1g. **D** 20.5-29mm, 23-25mm prevails.

"T V/10"-2.2, 2.25, 2.26, 2.5, 2.5, 2.8, 3, 3.3, 3.55, 3.9, 3.9, 4.3g. **D** 22-25mm, 22-23mm prevails.

"T 11"-1.26-3.57g. **MG** 1.9-3.57g. **MFW** 2.5, 2.8, 3.1g. **D** 20-28mm, 21-25mm prevails.

"T 12"-1.6-5.1g. **MG** 1.6-4.7g. **MFW** 2, 2.2, 2.6, 3.2-3.3, 3.8g. **D** 20-28 mm, 23-26mm prevails.

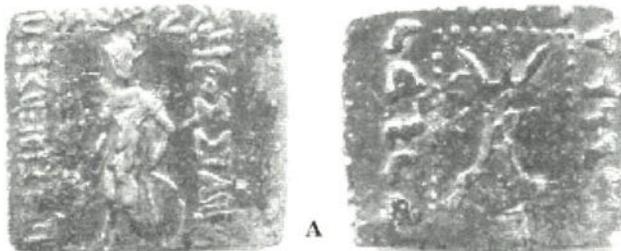
"T 13"-1.25-3.97g. **MG** 1.4-2.5g. **MFW** 1.5, 1.8-1.9g. **D** 17-24mm. More frequent 19-23mm.



The copper here illustrated is of Strato **over** Heliocles II. To be fair one might have suspected there was a close proximity between Strato and Heliocles since the Heliocles II coins over Strato are quite common while all the other overstrikes seem very rare. Now we can see that their reigns must have overlapped, at least in one geographical region. Firstly the coin:

The coin is 22mm square and is BN series 31c. Under the obverse one can clearly see a Bull walking right while on the reverse the undertype is an Elephant with lowered trunk walking also right. Traces of the legends are visible, part of ΒΑΣΙΑΣ on the Elephant side and a *Ha* in Kharosthi from *Maharajasa* and *Mi* from *Dhramikasa* on the Bull side. Only one coin fits this description - Heliocles II BN series 8. It is the only coin with these types (apart from Maues and Azilises copper which are of different style) and the trace of *Dhramikasa* confirms the identification.

At this point I looked at another overstrike that I had published in 1997 in ONS 151, page 10 – the coin is shown below (A):



The issue is the same as the new overstrike, though of a different mint and cruder in style and legend. The undertype at that time I could only equate with a coin of Lysias – a possible portrait obverse and Elephant reverse with the latter walking right with lowered trunk. Despite the fact that Lysias' \AA are on a smaller module there seemd no possible alternative. However, in a private collection is the following coin of Heliocles II, previously unpublished, (B):



On coin A I had stated the undertype possibly showed 'NIK' on the obverse at the top but it would seem that ΔΙΚΙΣ is more likely. The reverse clearly showed an Elephant as depicted here (the coin turned 90 degrees for re-striking). If this re-assessment of the coin is correct then we now have two Strato coins over Heliocles II types.

Of the Strato \AA issues, BN29 and 30 were issued for a very different region than the scarcer issue 31 and 32, as is evidenced by their different monogram set. These last two issues, apart from having an additional epithet ΕΠΙΦΑΝΟΥΣ/*Pracachasa* can be

dated to the latter part of Strato's reign since the corresponding silver bear his most mature portrait.

The Heliocles undertypes are extremely rare in themselves, and no more than one or two examples are known of these issues with Elephant **to the right**.

Since the examples of Heliocles overstriking Strato far outweigh the reverse numerically, we may assume that the kings came into contact (conflict?) in a particular province, towards the end of Strato's reign and that Heliocles was the victor, or at least outlived Strato. I would place the province where this may have taken place towards the East of Strato's kingdom based upon the monograms used being found there and the association of the Elephant/Bull issues with those of Maues and Azilises in the Hazara region.

There are other important conclusion that can be drawn from this new evidence: that after Menander came Lysias and Antialcidas but the main successor was then Philoxenos; That Hermaios, Diomedes and Archebios come before Strato and Heliocles II. This places the posthumous Hermaios coinage and that of Vonones overlapping the Indo-Greek kings after Strato in a way not previously imagined.

Further revisions of the paper I have been working on are required but the picture now presenting itself, and which I hope to reveal, is going to be more complete and accurate than any so far presented.

Two Coinage Types of Eukratides II and the Murderer of Eukratides I

By L.M. Wilson

The ancient historian Justin¹ tells us that Eukratides I was killed while 'on the road returning from campaign in the Indian areas, by his son', presumably in about 145 BC or slightly earlier since these dates for Eukratides I are approximate, and that this murderous son had been 'associated with Eukratides I of Bactria has usually been taken as Eukratides II, Heliokles I and Plato. By considering several points discussed previously², it is suggested that Demetrios II was contemporary with the sons and successors of Eukratides I (as also suggested in ref. 3) and cannot be excluded from the list. Thus Eukratides I probably had at least two sons, Heliokles I, Eukratides II and possibly Demetrios II (and possibly even Plato⁷). Presumably any of these could have murdered him, as unfortunately the name of the patricide is not given¹.

The coin portraits of Eukratides I and II and Plato bear striking similarities, as do many of Eukratides II and Heliokles I and even some of Eukratides II or Heliokles I and Demetrios II, as illustrated. While it is easy to suppose that Heliokles I and Eukratides II were the (older and younger respectively) sons of Eukratides I, because they have the names of his father (Heliokles) and of himself following the normal Greek custom, it is not so obvious in the case of Plato and Demetrios II. It seems less likely that Plato was a son of Eukratides I for three reasons. Firstly his coin portrait simply looks too old. If, as assumed here, Heliokles I was the eldest son, Plato looks at least as old or older than many (earlier) coins of Heliokles and certainly older than Eukratides II, the second son. So there is no room to fit another older son into the family. Secondly, there is only one monogram on the very rare coins of Plato, so his realm was very restricted indeed, which seems unlikely for a son and legitimate successor king. Eukratides II has many more mint marks than Plato. The third point is discussed below. It may be more plausible that Plato was in fact a short-lived usurper who took advantage of the death of Eukratides I (or around that time) to gain power (as in ref. 6), copying the obverse type of Eukratides' tetradrachms on some of his coins. The grandiose epithet ΕΠΙΦΑΝΟΥΣ on the coinage of Plato would be quite suitable for a usurper. We cannot be sure, but the choice of patricide may now be between Heliokles I and

Eukratides II and perhaps Demetrios II if he was a son. This can possibly be narrowed down to simply a choice between Eukratides II or Demetrios II using the following observations.

It is interesting to note that the coinage of Eukratides II can be divided into early and late issues, just like the coinage of Eukratides I. The earlier issues have the simple ΒΑΣΙΛΕΩΣ ΕΥΚΡΑΤΙΔΟΥ, without epithet, while the later (and scarcer) issues have the inscription ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΕΥΚΡΑΤΙΔΟΥ, as illustrated. This is in contrast to Heliokles I, who always has the ΔΙΚΑΙΟΥ epithet, from the beginning of his coinage. In fact it is quite odd for any king not to have an epithet from the time of Eukratides I onwards, as *all* the subsequent rulers (except for Demetrios II and some coinage of Eukratides II, as discussed here) have at least one on their coinage. It may signify that these sons (Heliokles I and Eukratides II) were actually associated with Eukratides I in the government, and that both issued coinage during the lifetime of Eukratides I. There are of course several precedents for this system: Seleukos I and Antiochos I, probably Diodotos I and II⁴ and also Euthydemos I and Demetrios I². It could have been possible for the sons of Eukratides to be allowed to issue their own coinage successively as they became older, after Eukratides' acquisition of the 'Indian' territories on the defeat of Menander. Since Eukratides I then gave himself the title ΜΕΓΑΛΟΥ (the Great), Heliokles could also have issued coinage with an epithet (if he was not actually later⁸). The system here could have been that while Eukratides I was alive the elder son (Heliokles) issued coinage with his epithet, while the younger son issued his coinage without the title. After the death of Eukratides I, the younger son adopted the ΣΩΤΗΡΟΣ epithet (meaning 'saviour') and issued his later type coinage, but perhaps not for very long. If correct, this may lead first to the conclusion that the patricide was Eukratides II, who murdered his father and saw himself as a 'saviour' from the tyranny of the public enemy Eukratides I. This may fit the description given by Justin¹, who states that the patricide 'drove his chariot through the dead king's blood', and ordered that 'his body be cast out unburied' because 'he had killed not a parent but a public enemy'. Secondly it may lead to the conclusion that the argument over Heliokles I being the patricide and (shockingly) taking the ΔΙΚΑΙΟΥ title (meaning 'just') after the murder⁵, mentioned in ref. 6) is spurious, if he already had the title before this murder occurred. Thirdly there is an implication for the *numbers* of coins considered to be from the reigns of these kings *after* Eukratides I. If this coinage consisted only of the ΣΩΤΗΡΟΣ coinage of Eukratides II and *some* of the known issues of Heliokles I, and possibly *none* of the coinage of Demetrios II, then the lengths of some of their reigns *after* Eukratides I may have been shorter than previously thought.

An examination of the early and late coinage of Eukratides II shows that there is hardly any change in the apparent age of the portraits on the coinage before and after the adoption of the epithet. There may have been only a short time between the first issues, when Eukratides II was associated with Eukratides I and the later issues. There are also examples of portraits from the early issues, such as BN series 1 of Eukratides II, number 1 and 2⁶ that have a very similar linear arrangement of the drapery from the shoulder to under the chin as most of the coinage of Eukratides I. These stylistic similarities for Eukratides II and perhaps Heliokles I at particular mints could help to indicate a link of these 'earlier' issues to the lifetime issues of Eukratides I. Justin¹ states that the patricide was associated 'in the government', which does not exclude the possibility that more than one son was associated in this way. It would have been particularly useful for Eukratides I to associate his son(s) in the government after the conquest of the 'Indian' territories in order to run his affairs in Bactria while he was off on campaign. The third point concerning Plato is that his coinage *all* has the epithet ΕΠΙΦΑΝΟΥΣ, so it may be unlikely that he was a younger son of Eukratides I, since we have no coinage (so far) without the epithet. One way out of this would be to postulate that *both* Plato and Heliokles I were older sons, so

were allowed to mint coinage with their epithets, but this seems unlikely due to the scarcity of his coinage and mint marks, as already noted.

While Demetrios II has no known 'Indian' type coinage and so was not the 'king of the Indians' described in the ancient sources¹ and all the monograms (mint marks) of Demetrios II appear to be Bactrian since they are similar to the purely Bactrian monograms of Eukratides II and Heliokles I and his coins are found in Bactria. Demetrios II issued only Attic weight silver tetradrachms and drachms, just as Eukratides II and Heliokles I, so the rather mysterious Demetrios II does not appear to be the same Demetrios who fought against Eukratides I at the beginning of his reign. Rather than being a king of the 'Indian' areas, Demetrios II seems to have been a rather minor late Bactrian ruler^{2,3}. Unfortunately the actual origin and identity of Demetrios II is unknown, but is relevant to the patricide question. Since he was a later king, as proposed, there are several possibilities. He could have been a son of Eukratides I or possibly a son of Heliokles I or simply a usurper; or perhaps even a descendant of the Euthydemids, trying to regain their lost kingdom. For the moment it seems most likely that he was a younger son of Eukratides I or at least related in time and place to the sons Eukratides II and Heliokles I (if Heliokles I was not in fact slightly later, as in⁸). Thus he must be considered as a possible candidate for the patricide, but we simply do not know if he was a son or not. It is not obvious from his name, although it may well be that Eukratides I was cynical enough to use the name of his former enemy and monarch for his own son, perhaps as part of some political moves towards reconciliation such as marriage with a Euthydemid. If he was actually the product of some political marriage and was thus related to the Euthydemids, it could have been a motive for his murdering his father, as the 'public enemy' described above. However, one possible counter to him being the patricide is that he simply looks too young on most of his coinage. If he was only a teenager it is hard to see how he could carry out such a murder or hope to profit by it, but perhaps not impossible. The fact that Demetrios II does not have any epithet on his coinage may suggest that it was minted during the lifetime of his father (probably Eukratides I), in a similar way to the early coinage of Eukratides II. The fact that there is no later coinage with an epithet may then signify that Demetrios II was quickly eliminated, a common fate of younger sons. A lot more information is needed before these types of interpretations of the numismatic record can be made more firm. But the argument for Demetrios II being the patricide still seems weak, as does the motivation for Heliokles I and so the favourite 'numismatic' candidate appears to be Eukratides II. The successors of Eukratides I ruled in Bactria from about 145 BC according to the dating in⁶ but Senior has now proposed a more likely date nearer to 139 BC on the basis of dates on some of the coinage⁸.

The coins of Plato and Demetrios II are the most scarce and so they probably had the shortest reigns. In fact, Demetrios II may never have had a significant reign at all, fitting with the discussion above, while Eukratides II had an appreciable reign but the longest was Heliokles I. The reign of Eukratides II may have only lasted for a year or two (if his coinage only consisted of the ΣΩΤΗΡΟΣ issues) *after* Eukratides I. With the death of Eukratides I, the surviving sons (perhaps Heliokles I and Eukratides II) could of course have been fighting each other for the succession, as so often happened, but Heliokles seems to have been the king that reigned until the end of the Bactrian kingdom⁸ north of the Hindu Kush, as in the table.

Table. Kings in Bactria with approximate dates of reigns

Demetrios I	c.185 – 175/1 BC
Eukratides I	c.175/1 – c.140
Demetrios II	c.150/145
Eukratides II	c.145 – 140/137
Plato	c.140
Heliokles I	c.145 – 130

The Coins of the Bombay Presidency

The Bankot Mint
By Dr Paul Stevens

Introduction

During the eighteenth and nineteenth centuries, the British acquired more and more territories in India. The major mints of Calcutta, Madras and Bombay did not have the capacity to supply coins to all these new areas and other mints were used to provide coins locally.

Around Bombay itself, and down the coast, was the area known as the Concan which had a Northern and Southern district, some of which came under British control as early as the mid-eighteenth century, but mostly fell under their control after about 1817.

The British are not known to have produced any coins in the Northern Concan and this area will not be discussed further. However, this is not true of the area known to the British, in the early nineteenth century, as the Southern Concan. This district lay on the west coast of India to the south of Bombay (Mumbai). Bankot, with its fort and nine surrounding villages, had been ceded to the British by the Peshwa in 1755 and 1756 but it was not until 1819, following the final Mahratta war and the acquisition of further territory, that the area was formed into the separate collectorate of the Southern Concan. Initially Bankot, which was also known as Fort Victoria, was the headquarters of the collectorate but in 1820 this was transferred further south to Ratnagiri, and in 1830 the three subdivisions to the north of Bankot Creek were transferred to the Northern Concan Collectorate and the Southern Concan was reduced to the rank of sub-collectorate. This situation only lasted for two years and in 1832 the Southern Concan was again raised to the status of collectorate¹. The Southern Concan was also known as Ratnagiri after the place of its headquarters.



Eukratides II, early type



Eukratides II, later type with "Soter" title



Heliokles I, with "Dikaios" title



Demetrios II (no title)



Plato, with "Epiphanes" title

Illustrations all courtesy of CNG inc.

References

- Justin, M. *Iuniani Iustini. Epitoma Historiarum Philipparum Pompeii Trogi. Accedunt Prologi in Pompeium Trogum*, ed. O. Seel, Stuttgart, 1985
- Wilson, L.M., "King Demetrios of India and Eukratides of Bactria", *ONS* 174
- Kraay, C. M., "Demetrios in Bactria and India", *Numismatic Digest*, vol. 9, 1985 pp12-30
- Holt, Frank, *Thundering Zeus*, University of California Press, 1999
- Mionnet, *Description de Medailles Antiques, Supplement 8*, Paris, 1837
- Bopearachchi, Osmund. *Monnaies Greco-Bactriennes et Indo-grecques*, (in French) Bibliotheque National Paris, 1991
- Narain, A.K. *The Indo-Greeks*, Oxford, 1957 pp.72

Fig 1. Map Showing Bankot and surrounding areas in c1890



From a numismatic standpoint, the Southern Concan is not known to have had a separate mint for striking gold or silver coins. None of the rulers who from time to time gained semi-independence, like the Angrias, are known to have created a mint there. The

¹ Bombay Gazetteer (1880). Volume X, Ratnagiri & Savantvadi, p200. Government Central Press Bombay.

currency was mixed, the brisk sea trade bringing into the district every sort of Indian coin. Up until 1835, the main coin was the Chinchoree rupee (struck at Poona), and later the Surat rupee (struck at Surat and Bombay), supplemented by various older rupees known as Chanvad, Doulatabad, Hukeri, Chikodi and the Emperor Akbar's Chavkoni, or square rupee. After 1835, the Company's rupee gradually superseded this heterogeneous currency until, by 1880, the Imperial currency was the sole circulating monetary medium².

Following the creation of the collectorate in 1819, a copper coinage was issued to meet the needs of local tradespeople and Pridmore has catalogued the coins³. They are crudely struck, consisting of three denominations: double pice, pice and half pice, and variously dated 1820, 1821, 1828 and 1829, but the full story of these coins has not previously been told.

A study of the India Office records held in the British Library (referred to here as India Office Records or IOR) has shown that Pridmore overlooked a number of important points in his discussion of the events surrounding the production and use of these coins. The present paper is an attempt to address this issue.

The Coins and their Use

On the 30th June 1820, Mr. Pelly, the collector responsible for the Southern Concan, wrote to the Governor and Council of the Bombay Presidency stating that the people of the area were suffering considerable inconvenience because of the lack of copper coins available for everyday commerce. He believed that this was caused because the copper coins were exported more profitably for their metal content rather than being exchanged for rupees. He had tried to intervene by sending pice from areas where there were fewer difficulties, to those where the problem was most acute, but this had not succeeded. He therefore proposed that a copper coinage should be undertaken, either locally or in Bombay, consisting of pice and half pice exchangeable at the rate of 64 and 128 to the rupee respectively. Pelly's proposal was referred to the Mint Committee who agreed that it seemed sensible, given the circumstances, and recommended that the contract for striking the coins should be open to competition and, before authorising the coinage, the collector should send specimens to Bombay for examination⁴.

Accordingly, in September 1820, Pelly advised the Bombay Government that he had issued an advertisement inviting tenders for making the new copper coins but that he had received only one reply, from Sootoophoo Din Purkar, who had recommended that 25,000 rupees-worth of each of three denominations should be struck. The three proposed denominations were double pice, single pice and half pice, specimens of which were sent to Bombay, via Pelly, as had been requested by the Mint Committee. The original advertisement called for denominations of pice and half pice, and it is clear that the addition of the double pice denomination originated with Sootoophoo Din Purkar, although Pelly subsequently supported it. The Mint Committee was very complimentary about the process that Pelly had used to get the proposal from Sootoophoo Din Purkar and they considered the terms 'as advantageous to the community as could be wished or expected'. The quality of the copper and the workmanship in the specimens submitted to the committee 'will do great credit to the individual undertaking the coinage, if the whole shall be completed in the same style'. To ensure that future coins were of

the same standard, Pelly was asked to send specimens, regularly, to Bombay for assay⁵.

Sootoophoo Din Purkar had signed the contract by November 1820, and Pelly requested permission to advance him 25,000 rupees so that he could begin work on the first batch of coins⁶. By early May of 1821 he had produced about 20,000 rupees worth of the pice and permission to start issuing the coins was sought and received⁷. In that month he was advanced another 25,000 rupees for the next batch of pice and the final 25,000 rupees in early November 1821⁸.

In November 1821, Sootoophoo Din Purkar asked for another contract for a further 50,000 rupees-worth of pice on the grounds that he had all the people and tools necessary to undertake the coinage, which meant that it would be cheaper to strike another batch immediately, rather than have to start again⁹. However, the Accountant General had noticed the final advance of 25,000 rupees and drew the attention of the Bombay Government to the fact that no specimens of the new coinage had been received at Bombay for examination since the original specimens sent before the contract was agreed¹⁰. Following this, the Mint Committee examined specimens in January 1822 and they reported that the quality of the coins was not equal to that of the specimens sent in September 1820, although they had to admit that the Assay Master was away, and that this was merely their opinion. However, they felt strongly enough to recommend that the coinage should be stopped and no further pice should be issued. The Bombay Government instructed the Collector to stop issuing the coins, but not to stop making more¹¹.

In May 1822 a further ten specimens were sent to Bombay and were again found to be of lower quality than the first samples and to be of slightly lower weight. This time the collector was instructed to stop the production of the coins and to report how many had already been struck¹². He replied that of the original planned 75,000 rupees-worth, 70,897 rupees, 2 quarters and 44 reas worth had then been received into the treasury and that the greater proportion of the outstanding amount had already been

5 Bombay Consultations, 15th September 1820. Letter from the Collector in the Southern Concan to Mr Chief Secretary Warden dated 4th September 1820. IOR, P/411/40 p115.

Bombay Consultations, 4th October 1820. Letter from the Mint Committee to Mr Secretary Farish, dated 23rd September 1820. IOR, P/411/40 p126.

6 Bombay Consultations, 28th November 1820. Letter from the Collector in the Southern Concan to Mr Secretary Farish dated 18th November 1820. IOR, P/411/40 p137.

7 Bombay Consultations, 18th May 1821. Letter from the Acting Collector (A. Burnett) in the Southern Concan to Mr Secretary Farish dated 5th May 1821. IOR, P/411/40 p11.

8 Bombay Consultations 31st May 1821. Letter from the Acting Collector in the Southern Concan to Mr Secretary Farish dated 18th May 1821. IOR, P/411/40 p23.

Bombay Consultations, 17th November 1821. Letter from the Accountant General to Mr. Secretary Farish. IOR P/411/40 p91.

9 Bombay Consultations, 10th November 1821. Letter from the Collector in the Southern Concan to Mr Chief Secretary Warden. IOR P/411/40 p88.

10 Bombay Consultations 31st May 1821. Letter from the Acting Collector in the Southern Concan to Mr Secretary Farish dated 18th May 1821. IOR, P/411/40 p23.

Bombay Consultations, 17th November 1821. Letter from the Accountant General to Mr. Secretary Farish. IOR, P/411/40 p91.

11 Bombay Consultations, 30th January 1822. Letter from Mint Committee dated 14th January 1822. IOR P/408/51 p64

12 Bombay Consultations, 12th June 1822. Letter from the Collector in the Southern Concan (Mr. Sparrow) dated 29th May 1822. IOR, P/408/52, p425.

Letter to the Mint Committee from the Finance Committee, 6th June 1822. Ibid.

From the Mint Committee to the Finance Committee, 13th June 1822. Ibid.

From the Finance Committee to the Collector of the Southern Concan. Ibid.

From the Finance Committee to the Mint Committee. Ibid.

2 Bombay Gazetteer (1880). Volume X, Ratnagiri & Savantvadi, p154. Government Central Press Bombay

3 Pridmore F. The Coins of the British Commonwealth of Nations. Part 4, India, Vol. 1 East India Company Presidency Series c1642-1835. Spink & Son Ltd, 1975.

4 Bombay Consultations, 12th July 1820. Letter from the Collector in the Southern Concan (Mr. Pelly) to Bombay dated 30th June 1820. IOR, P/411/40, p67.

Bombay Consultations, 26th July 1820. Letter from the Mint Committee to Mr Secretary Farish dated 15th July 1820. IOR, P/411/40, p74.

struck and were awaiting delivery. Sootoophoo Din Purkar sent a petition to the collector for transmission to Bombay, in which he tried to explain why the coins were of lower quality than the original specimens and requesting that he should be allowed to complete the contract, which he was allowed to do¹³.

Fig 2. The 1820/21 coins

Obverse: Balemarm with date below. All within a toothed border.
 Reverse: Balanced scales with Hindi inscription (*Nim ana* = Half anna, Paisa = Pice, Adha Paisa = Half Pice) between the pans. The date below in Devanagiri script. All within a toothed border.
 Edge: Plain



However, getting the coins into circulation was not proving easy. In December 1821, the Commander in Chief of the Bombay Presidency raised the matter of the troops in the Southern Concan losing as much as a quarter of their pay because they were being forced to receive part of it in 'the Bankote pice'. The exchange rate of 128 new pice per rupee (this must refer to the half pice denomination) compared unfavourably to the old exchange rate of 160 old pice per rupee, and the use of the new pice to pay the troops was stopped. This incident does reveal the hitherto unknown fact that the new copper pice were struck in a mint established at Bankot. This is evident not only from the above quote but also a reference to 'the new copper currency issued from Bancote' in the same series of correspondence¹⁴.

By 1823 it had become obvious that it would be impossible to get more than a small part of the 75,000 rupees-worth of pice into circulation in the collectorate within a reasonable timeframe. The new collector in the Southern Concan, Mr Dunlop, gave serious consideration to various possible options. Firstly, he thought about reducing the value of the pice so that the number per rupee was increased from 64. This was rejected on the grounds that, once started, the value would continue to decrease until it reached the value of the intrinsic copper content, at which point the pice would be sold for scrap metal and the whole *raison d'être* for issuing them would be lost. In addition the reduction in value would cause a considerable financial loss to Government.

13 Bombay Consultations, 7th August 1822. Letter from the Assistant to the Collector in Charge of the Southern Concan (L.R. Read) to Government dated 27th July 1822. IOR P/411/41
 Petition from Sootfoodeen Purkar to the Collector in the Southern Concan, dated 11th July 1822. Ibid.
 Letter from Government to the Assistant in charge of the Southern Concan dated 6th August 1822. Ibid.

14 Bombay Consultations, 13th December 1821. Letter from Commander in Chief to Bombay Government dated 13th December 1821. IOR, P/411/41.

The second option was to keep the pice in the treasury for a number of years and release them slowly, at the authorised Government rate of 64 per rupee, as the community needed them. This would also confer a financial loss on the Government¹⁵. However, this second option seems to have been adopted almost by default, and there was a very slow release of the coins into circulation over the next few years.

Fortunately, in 1824, the Judge at Surat had another idea. For some time there had been a shortage of copper coins in Surat and the Judge suggested that some of the surplus coins in Bankot, in fact 10,000 rupees-worth, could be used to fill the gap¹⁶. As soon as the Surat shroffs heard about this proposal they issued a petition stating that they had plenty of copper pice and could meet the requirements themselves if only the Government would allow them to over-stamp the coins with the Company's mark¹⁷. The British authorities did not trust the local shroffs and this petition was rejected¹⁸.

'...that after a deliberate review of all the circumstances of the case, we are of the opinion that the native community of Surat cannot be in such great want of an addition to their copper currency as the money changers would wish us to believe and that it seems pretty plain that the object of the latter, in wishing to obtain the Government stamp on the pice in their possession, is to force a spurious coinage on the public at a rate above its marketable value.

That the copper circulation of Surat stands in need of a reform in common with that of every subordinate district, we do not in the least doubt, but conceive it would be idle, with the prospect of our efficient mint before us [this is a reference to the new steam-driven mint to be built at Bombay], to make the attempt with our present means, nor do we think it would tend to any good end, to allow of any further coinages of copper being undertaken, under the sanction of Government, as a private speculation.

We incline therefore to recommend, that the copper currency of Surat be left for the present as it is, that is, the old pice passing as heretofore, at their marketable value, and the circulation of the new (Concan) pice being under the proclamation which we presume has been issued, entirely optional, which will afford at least some sort of security to the lower classes against a worse currency being imposed on them, until we shall be able to supply them with an entire new coinage which cannot be imitated without machinery.'

Ten thousand rupees-worth of Concan pice were shipped to Surat via Bombay, and a further 5,000 to Broach, which was also very short of copper coin. In fact the collector at Broach had already agreed a contract with local moneyers to strike 7,000 rupees-worth of pice, but was instructed to stop this, if possible, and wait for the Concan pice to arrive¹⁹. The pice were to be exchanged at

15 Bombay Consultations 11th September 1823. Extract of a letter from the Collector in the Southern Concan dated 16th August, Paras 11 & 15 with enclosure transferred from the Revenue Department. IOR, P/411/41 p53.

16 Bombay Consultations, 28th January 1824. Letter from J Farish (Secretary to Government) to the Accountant General dated 2nd January 1824. IOR, P/411/42 p7.

Bombay Consultations, 18th February 1824. Letter from the Accountant General to Government dated 5th February 1824. IOR, P/411/42 p8.

17 Bombay Consultations 7th April 1824. Substance of a petition from Muncharam Nahana Lall on behalf of the moneychangers of Surat to the Honourable Mountstuart Elphinstone, Governor in Council, dated 5th March 1824. IOR P/411/42 p37.

18 Bombay Consultations 12th May 1824. Letter from the Mint Committee to Government dated 18th April 1824. IOR, P/411/42 p56.

19 Bombay Consultations 18th February 1824. Letter from the Acting Collector of Broach to Government. IOR, P/411/42 p8.
 Letter to the Acting Collector of Broach from Government, dated 18th February 1824. Ibid.

64 to the rupee, but the Surat shroffs refused to trade in the coins at that rate, and the experiment was not successful there²⁰. However, in Broach there was no such resistance and the coins quickly gained acceptance²¹.

In 1826, the shortage of copper coins in Surat was felt even more acutely, and the Judge asked that the Collector be given permission to strike copper coins locally²². However, the Bombay Government would not accept the proposition that the Bankot pice could not be used, basing their conclusion on the fact that they had been successfully adopted in Broach in 1824²³. They therefore sent a further 10,000 rupees-worth of the Bankot pice together with a proclamation declaring that they would be issued at 64 to the rupee and would be accepted back at the treasury at 64 to the rupee. A further 5,000 rupees-worth was also sent to Broach²⁴.

This time the pice were accepted and the following year, 1827, a further 20,000 rupees-worth were requested although the records are not clear about whether or not they were actually sent²⁵. A petition from the Surat shopkeepers of 1828 implies that they were not²⁶. What is certain is that 5,000 rupees more were sent to Broach in 1827²⁷, making a total of at least 35,000 rupees-worth that were sent to Surat and Broach (and possibly 55,000), of the original 75,000 that were produced.

This exhausted the stocks of the pice in the treasury of the Southern Concan, and when further demands were made in 1828, the collectors at both Broach and Surat were instructed to strike pice locally²⁸.

In 1831, a certain Nathooset bin Abaset sent a petition to Bombay asking for permission to open a copper mint at Penn in the Southern Concan. This petition was passed to the collector in the Southern Concan and he was asked for his opinion. He confirmed that all of the 1820/21 pice were now in circulation and that there was a need for more copper coins. Having spoken to Nathooset bin Abaset, he was able to confirm that the petitioner wanted to produce 50,000 rupees-worth of pice, 'half to be of the description coined at Bankote by Mr George Pelly in 1820/21 at the rate of (64) sixty four per rupee, and half, Doodandees, or old

Poona pice, at the rate of (60) sixty per rupee, weighing 57 [per] Chinchoree rupee²⁹.

This coinage was not allowed to proceed. However, the same letter went on to state that

'The profit on a coinage of this weight is so great that a spurious pice very nearly resembling the original has been brought down in considerable quantities from the distant town of Ruhimutpoor in the Putwurdhun's territory. These counterfeit pice are not quite so well executed as the Bankote coinage. The copper is of a little inferior quantity [quality?] and there is a very slight difference of weight'.

This quote, written in 1830, appears to establish that the coins dated 1828 and 1829, were not a second official issue of pice for the Southern Concan, but were, in fact, imitative pieces produced outside of the collectorate and sold for a profit. Usually copies of this nature would closely follow the design of the original coin, but these 1828/29 pieces have a slightly different design, and obviously bear different dates. This fact misled Pridmore into believing that they were a later official issue, albeit rather more crudely struck.

Following this petition and its rejection, the whole focus of the Mint Committee fell on the new copper quarter annas (pice) produced in the new steam driven mint supplied to Bombay by Boulton & Watt of Soho, Birmingham, England. Because of the great shortage of copper coins throughout the Presidency, the new mint concentrated first on meeting this need as opposed to the silver coinage. Once the mint was up and running so that the coins could be produced in sufficient numbers, a difficult enough process in itself³⁰, it soon became clear that getting the coins into circulation was going to be yet another challenge. At first the coins were simply sent to the different collectorates throughout the Presidency in the expectation that they could be exchanged for the old pice when these came into the treasury. However, the rate of exchange of 64 quarter-annas for one rupee, inhibited this to such an extent that, for instance, in Bombay itself there was little or no demand for the new coins, with less than 50 rupees-worth having been issued by November 1831³¹.

A new approach was taken in 1833³², the intention being to target the collectorates one by one and offer favourable terms of exchange for a short period to get the new coins accepted. The Northern Concan was chosen as the first place for this new approach, which proved to be successful, and, in 1834, the second collectorate to receive the new coins was the Southern Concan, by then referred to as Ratnagiri³³. Henceforth, the copper coinage for the Southern Concan would be the uniform coinage of the Bombay Presidency eventually replaced in 1844 by the uniform copper coinage for all of British India.

Fig 3. The 1828/29 Coins of the Southern Concan

Obverse: Balemarm with date below. All within a toothed border.
Reverse: Balanced scales with the date below.
Edge: Plain

Copper Half Anna, 1828



29 Bombay Consultations 1st September 1830. Petition from Nathooset bin Abaset to Bombay Government. IOR, P/411/49.

30 Doty R., *The Soho Mint and the Industrialization of Money*, Spink & BNS, London. 1998

31 Bombay Consultations, 29th February 1832. IOR P/411/51.

32 Bombay Consultations, 1833. IOR P/411/52.

33 Bombay Consultations, 1834. IOR P/411/53.

Bombay Consultations 10th March 1824. Letter from the Acting Collector at Broach (Robert Boyd) to Government dated 28th February 1824. IOR, P/411/42 p24.

Letter from Government to the Acting Collector at Broach, dated 10th March 1824. Ibid.

20 Bombay Consultations 11th April. Letter from the Collector of Surat to Government dated 29th March 1824. IOR, P/411/42 p43.

21 Bombay Consultations, 12th April 1826. Letter from the Mint Committee to Government dated 27th March 1826. IOR, P/408/65.

22 Bombay Consultations, 15th March 1826. Letter from the Judge at Surat to Government, dated 7th March 1826. IOR, P/408/64

23 Bombay Consultations 12th April 1826. Letter from the Mint Committee to Government dated 27th March 1826. IOR P/408/65.

24 Bombay Consultations, 3rd May 1826. Letter from the Collector in the Southern Concan to Government, dated 2nd May 1826. IOR, P/408/65.

Letter to the Acting Sub-Treasurer from Government, dated 2nd May 1826. Ibid.

Letter to the Superintendent of Marine from Government, dated 2nd May 1826. Ibid.

25 Bombay Consultations, 18th April 1827. Letter from the Judge at Surat to Government, dated 29th March 1827. IOR, P/409/1

26 Bombay Consultations, 30th January 1828. To the Judge at Surat from Doolubh Narun and other inhabitants of Surat dated 9th January 1929. IOR, P/409/5

27 Bombay Consultations, 28th February 1827. IOR, P/408/68.

Bombay Consultations, 21st March 1827. IOR, P/408/68.

28 Bombay Consultations, 16th April 1828. Letter from the First Assistant in Charge of Broach to Government, dated 26th March 1828. IOR, P/409/6

Letter from Government to the first Assistant in Charge of Broach, dated 11th April 1828.

Bombay Consultations, 20th February 1828. Letter to the Judge at Surat from Government, dated 14th February 1828. IOR, P/409/5

Letter to the Collector of Surat from Government, dated 24th February 1828. Ibid.

Copper Pice, 1829



Copper Pice, 182[x]. Square-Shaped



An unpublished Umayyad dirham of Harat dated 80h, with Pahlawi mint-name

By Stephen Lloyd



Obverse field:

لا اله الا
الله وحده
لا شريك له
سليمان

Obverse margin:

بسم الله ضرب هذا الدرهم بهراة في سنة ثمانين

all within four concentric serrated circles, the two outer ones separated by eight plain annulets; point between هذا and الدرهم.

Reverse field:

الله احد الله
الصمد لم يلد
و لم يولد و لم يكن
له كفوا احد

within serrated circle.

Reverse margin:

محمد رسول الله ارسله بالهدى ودين الحق ليظهره على الدين كله ولو كره المشركو
(sic)

within two serrated circles divided by six plain annulets.

Weight: 2.93g; diameter: 25.6mm

Until recently, Marw was the only mint known to have issued bilingual dirhams with the mint-name in both Arabic and Pahlawi. Two years ago, a unique dirham dated 81h with the Arabic mint-name *Marw* and Pahlawi signature MRWRUT (Marw al-Rudh) appeared at auction (Baldwin's/ACM Islamic Coin Auction 4, London, 8 May 2002, lot 78). The present piece, with the mint signature HRA placed in the lower obverse field (as on the Marw issues), thus makes Harat the third mint known to have issued bilingual post-Reform dirhams. All three mints were situated in the province of Khurasan; Harat is roughly 120 miles south of Marw, with Marw al-Rudh roughly half-way between the two.

With the exception of a handful of pieces dated 79h, no other dirhams of Harat are known from the first period of the post-Reform dirham coinage (i.e. from the striking of the first experimental pieces dated 78h to the foundation of Wasit and concentration of minting there in 84h). Unlike Marw, where all dirhams struck from 79-84h bear the Pahlawi mint signature, all five extant dirhams of Harat 79h have the mint-name in Arabic only. Klat distinguishes three different types: with the Arabic mint-name given in full as "Harat" (Klat 652.b); abbreviated to "HR" (Klat 651); and mistakenly engraved from left to right giving the retrograde "AH BHR." Unusually for dirhams of this early period, there is also variation in the number of annulets. The "HR" and "AH BHR" types both have the usual five plain annulets on each side, while the "Harat" dirhams (Klat 652.b) have seven annulets on the reverse. The current specimen has yet another combination, with eight annulets on the obverse and six on the reverse.

Even though very few early Harat dirhams survive today, we cannot conclude from this that they were not originally struck in quantity. However, it is certainly suggestive that there should exist four different varieties among the six recorded dirhams of Harat from this early period, giving the impression that the mint was still experimenting before settling on a final design for the new coinage. Since the other five coins were struck in 79h, the present specimen presumably represents the format which was ultimately chosen. Whether it was decided that no further coins should be struck at Harat (possibly because Marw produced enough dirhams to supply local requirements), or whether they have simply not survived to the present day, must remain a matter for speculation until, perhaps, further specimens come to light.

Table 1. Bankot Catalogue

Cat No.	Pr. No.	Denom	Date	Official Weight (g)	Actual Weight (g)	Diam (mm)	Comments
1.	322	Half Anna	1820	15.06	14.0-15.33	21.2-23.5	
2.	323		1821				
3.	324	Pice	1820	7.53	7.2-8.85	19.5-22.0	
4.	325		1821				
5.	326	Half Pice	1820	3.76	3.87-3.93	15.3-16.2	
6.	327		1821				
7.	-		"				Mule 1820 obv/1821 rev. Ref: Noble (1995), sale 48, lot 2121
8.	328	Half Anna	1828		13.61-14.15	21.4-23.3	
9.	329		1829				
10.	-	Pice	1828		10.34	20.0	Date 8281, Noble (1995), sale 48, lot 2122
11.	-		1828				
12.	330		1829				Noble (1995), sale 48, lot 2122

For most coin series there is a basic orthodox history that supports the chronology and sequence of issues but for the coinage examined here no such history exists. Over the last century, in order to try and understand the coinage, a sort of orthodoxy has been built up but it has served only to hinder any new attempts at reappraising the actual facts. We all like to proceed from the known to the unknown, to have one foot on firm ground while testing the quicksand before us. With the Indo-Greek and Indo-Scythian coinage it has been a mistake to count on anything, that we thought we knew, as 'firm ground'.

Over these last decades, I have repeatedly gone over the evidence that we have for the chronology and monarch sequences during this period and I have often ameliorated my views in the light of new material. Here again I amend my previous writings since more such new evidence allows me to improve on the theories I expounded then.¹ Not all my ideas have been generally accepted but in common with others who have attempted to overturn long held orthodox beliefs I share their disappointment in not only seeing some of one's fellow travellers continue in the error of their ways but to compound them. Time will tell and *veritas omnia vincit!*

It was the ambition of Alexander the Great to fuse Hellenistic and Asian culture by a process of intermarriage between the peoples of his Empire. This aim died with him on his early demise, except that is for that part of his empire which lay furthest east from his native Macedonia. He himself had married Roxane, the daughter of his Bactrian (Scythian) foe Oxyartes, and similarly his successor in the East, Seleucos, had married Apama, the daughter of another Scythian foe, Spitamenes. Seleucos lost the truly Indian part of these eastern territories in 305-3BC to Chandragupta Maurya. When Seleucos' son, Antiochos I, the product of his interracial marriage, then acceded to the Seleucid throne, he inherited a huge empire the easternmost provinces of which were now Bactria and Sogdia (Sogdiana).

Both Bactria, that area of northern Afghanistan south of the Oxus river, and Sogdia, the area between the Oxus and the more northerly Jaxartes river, remained in Seleucid (Syrian) hands until 256 BC when its Greek Satrap (governor), Diodotos, declared himself independent. Over thirty kings and queens bearing Greek names issued coins as successors of Diodotos in this independent eastern kingdom. This paper is a further attempt to put them in their correct sequence of rule and against a chronological framework. It also reinforces the view that they evolved into the Greek-Asian cultural and ethnic mix that Alexander had envisaged.

The term Bactrian, in numismatic terms refers to the coinage struck for that province on the Attic standard and which bore Greek-only legends. This term is used to distinguish it from that of the Greeks who later occupied the areas south of the Hindu Kush and whose coinage was issued on a lighter Indian standard bearing bilingual inscriptions. These latter rulers are generally termed 'Indo-Greeks'. A further group of coins that were struck in many of the same areas that the Indo-Greeks had occupied and which are also both bilingual and on the same Indian standard are called Indo-Scythian. These coins are generally distinguished by the fact that, unlike the Indo-Greek coins, the silver tetradrachms do not bear portraits, the rulers have non-Greek names and the king usually bears the title 'King of Kings' which was never used by the Greeks.

Conventionally the chronological sequence of coinage has been a simple one; that the Bactrian coins came first, then the Indo-Greek as the Greeks migrated south, and finally the Indo-Scythian. Ordering the sequence of kings has been a gradual process of discovery dependent upon the periodic surfacing of new material, principally the cataloguing of coin hoards and the identification of overstrikes (coins of one monarch that are overstruck with the dies of a contemporary or successor king).

One of the greatest revelations came with my discovery of a coin

bearing the Kharosthi legend '*Rajatirajasa Moasaputrasa Artemidorasa*' on a coin of the Indo-Greek king Artemidoros, which clearly states that he is the 'son of the [Indo-Scythian] King of Kings, Maues'. This was published in 1998 in a paper (DIG - see note 1) that was an earlier attempt to re-order these kings. This coin alone confirmed that a simplistic picture of two ethnically different races ruling this area South of the Hindu Kush (which subsequently included Gandhara - much of the present Punjab), one in succession to the other, was not so quite straightforward. Bearing a Greek name and issuing Greek coin types did not necessarily mean the issuer was Greek. Both G. MacDonald² and Tarn³ had written how the Greek inhabitants of Bactria and subsequently India must have intermarried with the local population in order to survive.

Who were these Greeks who ruled in these eastern territories and where did they come from, and who were their Scythian allies or foes? Before Alexander arrived in Central Asia the population of Sogdia and Bactria was predominantly Scythian. The Scythians were a group of Central Asian peoples who allied themselves into various clans or federations and who called themselves Saka. The name of Sogdia itself is derived from this latter name.⁴ There is evidence that Greeks had also migrated to these areas prior to Alexander and that they had interbred with the local population.⁵ Alexander created several new cities in Asia and settled men from his army in them. He also pacified the nomadic Scythians who began thereafter to live in towns and villages. His army had been dominated by his fellow Macedonians but there were also many Greeks from the various city states. These two groups were not entirely sympathetic to one another and this rivalry probably played some part in the fractious dynasties that later emerged in Bactria, vying for control of the state. There will also have been an element of mercenaries from other nationalities. To replace those he settled in his Asian territories he could expect a good flow of new men looking for adventure from the Greek States and Macedonia, but after his demise this situation probably changed and the supply would have declined. The remaining settlers themselves will have almost certainly found a shortage of Greek women partners and thus married local girls. After Macedonia fell to the Celts in 279 BC the balance of power amongst the 'Greek' element in Bactria and Sogdia will have changed as more of the new migrants would have been Greek rather than Macedonian. Post 256 BC when Bactria became separated from the Seleucid Empire the flow of new Greek blood must have slowed to a trickle. We know that for a while some Greeks *did* make their way to Bactria since it is recorded that its third independent king, Euthydemos, was born in Magnesia. Direct contact with the Seleucid empire was made again in 208 - 6 BC when Antiochos III temporarily regained some suzerainty over the provinces of Bactria and Sogdia during the reign of Euthydemos but thereafter it remained independent and separated. Sogdia seems to have gradually fallen out of Bactrian control in the time of, or shortly after this king Euthydemos. The principal coinage of Sogdia thereafter consisted mainly of *imitation* Euthydemos tetradrachms struck by a new wave of nomadic Scythians.⁶ Eventually these were to cross the Oxus and press the Bactrian rulers southwards.⁷ Finally cut off from the rest of the Greek world and with the threat of nomads to the north these Greeks, who were probably largely of mixed race by that time, would have increasingly allied themselves with other more settled and powerful Scythian families in order to survive and maintain their hierarchical position. The Greeks must have been in a somewhat less powerful position than the Normans were in Anglo-Saxon England, but what they did successfully impose on this part of Asia was their culture.

The first and most powerful Scythian ruler to strike coins is called Maues, and as mentioned above, he had at least one son with a Greek name who issued 'Greek' style coins. It would appear that

Maues had arrived in the Kashmir-Hazara region after he or his forebears had crossed the Pamirs.⁸ He issued coins jointly with Machene who is likely to have been the daughter of one of the Greek kings and it seems clear to me that from his time, several of the kings ruling south of the Hindu Kush, previously considered to be Greek, are in fact predominantly Scythian.

The Bactrian Kings

The main purpose of this paper is to look at the succession of the so-called 'Indo-Greek' kings but one cannot examine their coins without first looking at the kings who ruled and struck coins in Bactria proper. We know precious little concerning the reigns of any of these kings but some historical facts do come from a few ancient western and one or two Indian sources. The Western sources for accounts of Bactrian and Indo-Greek history are;

Polybius, a Greek born c. 200 BC; Strabo, a Roman who drew on the lost history of Apollodoros of Artemita (c. 130 - 87 BC), and Justin, who drew on Troguus, a post 87 BC writer.

Polybius informs us that Diodotos, the Seleucid Satrap of Bactria declared himself independent and that sometime later the Scythian, Arsakes, overthrew Andragoras, the Seleucid Satrap of Parthia (the province immediately to the west of Bactria). Parthia therefore became a buffer state between Bactria and the Seleucid Empire. Shortly after the Parthian revolt Diodotos died and was succeeded by his son, also called Diodotos (II).

It is generally accepted that the Bactrian breakaway took place between 256 and 250 BC. Arsakes founded the Parthian Era c.248 BC on being elected chief and it was after this date that he defeated Andragoras, the Seleucid Satrap. He probably founded his kingdom around 238 BC after concluding an alliance with Diodotos.

According again to Polybius, Diodotos II was overthrown by Euthydemus, possibly as early as 235 BC but probably a decade later.⁹ Euthydemus was a native of Magnesia (though which of the two cities of that name is a matter of conjecture) and may himself have been a satrap under Diodotos.

Euthydemus had a son Demetrios, mentioned by Polybius, and it was he who became the next ruler of Bactria. When this happened is not certainly known but it now seems most likely that Demetrios was the founder of the newly discovered Greek Era of 186/5 BC.¹⁰ Demetrios has the reputation of having conquered India but this may be an exaggeration and his exploits more of a temporary invasion in that direction. However, Demetrios *does* seem to have conquered Arachosia since Isidore of Charax mentions the city of 'Demetrias in Arachosia' which must have been his foundation.

Attic Standard

No Epithet	Epithet
Diodotos I	<u>Indian Standard AR</u>
Diodotos II	
Euthydemus I	<i>Æ between the dotted lines are on a 9.8 gm standard, those below are on an 8.5 gm standard</i>
Demetrios I	
Euthydemus II	
Pantaleon	→ <i>Æ</i>
Agathocles - Dikaios	→ <i>Æ</i>
Apollodotos	<u>Soter</u>
Eukratides - Megalos	→
Demetrios II	<u>Antimachos Theos</u> - Nikephoros
Eukratides II - Soter	← Menander Soter
Plato Epiphanes	← Zoilos Dikaios
Theophilus Autokratoros	← <u>Dikaios</u>
	← Lysias Aniketos
	← Antialcidas Nikephoros
	← Philoxenos Aniketos
	← Diomedes Soter
	← Hermaios Soter
Heliocles - Dikaios	→ ?
	← Archebios Nik. + Dik.
	← Amyntas Nikatoros

Table 1 The use of Epithets on Attic coins of the Bactrians

The ancient sources for the rulers who followed Demetrios are scanty to say the least and the principal king mentioned is a rival called Eukratides who, according to Justin, held his own against Demetrios' vastly superior forces.

At this point we need to look at the coinage to try and sort out what appears to be a congested succession of kings. L. M. Wilson has analysed the form of the diadem ties depicted on the portraits of the Bactrian kings (see note 9, 1) as well as the monogram progression in order to arrange the kings and has arrived at a satisfactory sequence broadly accepted here, but a further chronological line can be drawn by the use of epithets or titles on their coinage.

Table 1 shows all the known kings who struck Attic silver and whose coinage can be divided along this time line according to their use of epithets.

From Diodotos I to Pantaleon no living ruler included a title on his coinage and just one further king, Demetrios II, also issued coins without one. We have four kings who issued coins both with and without titles; Agathocles, Eukratides, Apollodotos I and Eukratides II. Of these Apollodotos differs in that his titled coins are known *only* on the Indian weight standard¹¹ though Eukratides issued coins with titles on *both* standards. Two kings have titles on all their coins but the title differs on their Attic and Indian series, though in the case of Antimachos this *may* be because we are dealing with two kings, father and son, the other king using two titles being Theophilus.¹²

Just two kings are known with Attic only coins and a title, Plato and Heliocles I (this is assuming that he is not one and the same king as his namesake who struck Indian standard coins).

All the other kings bore titles on all their coins which were principally on the Indian standard with just a few, seemingly almost token, Attic coins. Of all the succeeding Indo-Greek kings the ones of whom we have *no* Attic coins are;

a) the ephemeral rulers Thrason, Nicias, Demetrios III, Epander, Polyxenos and Peucolaos, and this may be due to their extremely short rule, limited geographical influence or the fact that some of them may have been more Scythian than Greek.

b) Artemidoros, Menander II and also, I feel, Apollodotos II and Hippostratos, all of whom I regard as more Scythian than Greek, and,

c) Heliocles II and Strato. These were both major kings and it is surprising that no Attic coins of the latter king have surfaced, but they may in time, unless there is a special reason for it.

So who followed Demetrios I and in what order? The coins of Euthydemus II are scarce and only known with an identical young portrait. Since we know that Eukratides fought against Demetrios and thereafter succeeded him, we can place these Euthydemus II issues alongside the earliest Eukratides issues 'without a title'. It may be that the latter was responsible for the demise of this young Euthydemus, possibly during the last years of Demetrios' life. According to Justin, Eukratides' reign began at the same time as that of Mithradates I of Parthia, around 171 BC. He is stated to have 'expelled the reigning king'. This could have been either Demetrios or Euthydemus II, or both.

If this was the scenario then the Euthydemids would have needed to find a successor and the table shows a possible sequence. Pantaleon on his coins is shown as a mature man who is linked to a contemporary king Agathocles both by his use of Zeus on his reverses and their identical bilingual copper type, plus both are linked to Euthydemus II by their use of nickel coins. Nickel was not used by any previous or subsequent kings.¹³ I would suggest that Pantaleon and Agathocles were father and son and probably joint kings. Pantaleon was possibly a younger brother of Demetrios who took the Diodotid Zeus type to garner support from a wider Greek audience (see later). His silver is extremely rare and we know that he died first because Agathocles included him on his subsequent pedigree coins (see below).

There seem to be two other Euthydemid 'contenders' for the throne, Antimachos and Apollodotos of whom the latter probably was the first since he adopted no title on his Attic coins. Apollodotos' Attic coins are as rare as those of Pantaleon and introduce a

new monogram (struck in a different location and not necessarily therefore a rival to either Pantaleon or Agathocles). He is possibly the first king to adopt a title during his lifetime - Soter (the same title was allocated to Diodotos I, the founder of the Kingdom) though this is not on his Attic coins but on his Indian series, of which he is the first king to strike any in a large quantity (both in silver and copper). Did Apollodotos regard himself as the 'founder' of a new kingdom, i.e. India? It seems to me that there is no evidence that Apollodotos *opposed* Agathocles but that he did indeed lay the foundation of the Indian kingdom south of the Hindu Kush, being the first king to strike Indian standard silver coins there.

The Attic tetradrachm weighs 17.00 - 17.02 gm and Apollodotos struck an initial series of Elephant/Bull types for the province (types taken from the \AE coins of the city state of Taxila¹⁴) which were in fact Attic hemidrachms. These were quickly replaced by new 'Indian standard' coins, with the same types but weighing around 2.40 - 2.45 gm. They were struck in large numbers and were probably intended to exchange at 7 to the Attic tetradrachm. This is a simple calculation and did not complicate the currency since Attic *drachms* were very rarely used and in this initial phase there were no Indian tetradrachms to confuse the mathematics. His equally plentiful \AE were on a standard of 9.8 gm.

At some time during this period both Agathocles and Eukratides took titles and both issued special coins that depicted their forebears (the so-called Pedigree coins). Since Apollodotos seems to have removed himself south of the Hindu Kush when he took his title, we can postulate that both Eukratides and Agathocles were his contemporaries and adopted their titles in the same time frame. Agathocles coins are *mostly* without the title (Dikaios) and therefore he must have adopted it towards the end of his (short) rule and it is with this title that he issued his pedigree series - probably to seek support against his more powerful rival. Eukratides for his part struck coins *mostly* with the title (Megalos) and his special 'pedigree' issue showed his parents, Heliocles and Laodice. There is some conjecture that his mother was a Seleucid princess since she, but not Heliocles, wears a royal diadem.¹⁵

Pedigree coins

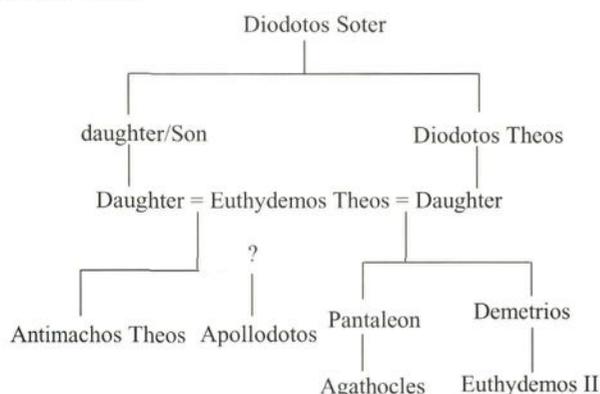


Table 2 Possible Bactrian pedigrees

The coins which bear on their obverses portraits and names of previous monarchs are known for just two Bactrian rulers, Agathocles and Antimachos. There is also a related rare group that do not bear the name of the *issuer* but which date from the same period and bear only the portraits and names of the deceased monarchs *plus* epithets not appearing on their lifetime issues. A third monarch, Eukratides issued, as mentioned above, the coins depicting his parents.

These coins obviously served some propaganda purpose and since Eukratides is known to be a usurper who is contemporary with both the other kings, we can guess that they were issued to persuade the Greek population that the issuer had the most legitimate claim to rule - *through his ancestry*. One question that may be postulated is whether Antimachos and Agathocles had *rival* claims against each

other or whether theirs was a simple case of the former succeeding the latter in their claim against Eukratides. In either case what is apparent is that Antimachos' claim was not identical to that of Agathocles and there may be a simple explanation of how this came about.

Agathocles' coins portray Pantaleon (Soter), Demetrios (Aniketos), Euthydemos I (Theos), Diodotos (Theos), Diodotos (Soter), Antiochos (Nikator) and Alexander (son of Philip). I do not think that Agathocles claimed genealogical descent from all these since he was *not* related to Antiochos nor Alexander, and Demetrios was most likely a brother of Pantaleon. However, since he might claim a family relationship to the first five who *had* been the legitimate rulers of Bactria and possibly by a divine right, the successor by extension, of Antiochos and Alexander, his claim was extensive (and possibly his position therefore weak!). The title Soter is the most popular amongst the Greeks in Bactria and India, probably because the founder of the empire, Diodotos I, was given it. Agathocles gives the grandiose title Theos not only to the originator of his line, Euthydemos, but also to the second Diodotos. Antimachos on the other hand only portrays Euthydemos (Theos) and Diodotos (Soter) on his pedigree coins - but why?

Table 2 offers an explanation. It was usual in those times for a king to take several wives in order to cement political alliances or strengthen his legitimate claims to kingship and it could have been that Euthydemos had married *two* granddaughters of Diodotos Soter, only one of whom was the daughter of Diodotos II. Since Antimachos couldn't claim this extra strengthening of legitimacy Agathocles might have elevated Diodotos II to Theos in order to dramatise the fact. This is not the only possible way of ordering such a tree of course, but it does fit the coins perfectly. See Holt for a different view.¹⁶

Euthydemos II used a Heracles reverse type on his coins as had Demetrios, implying that he was his son, while Pantaleon and Agathocles used types depicting Zeus holding Hecate. Agathocles included Pantaleon amongst his series of 'Pedigree' coins showing that he dates *after* him and with their portraits differing in age so much I suggest that they too were father and son. I would suggest that the use of Zeus on the coins of Agathocles and Pantaleon is significant. Euthydemos I, in his communications with the Seleucid king, Antiochos III (who was attacking him in 208 - 6 BC) is reported to have claimed to have destroyed the Diodotids (whose reverse coin type was Zeus). This was his way of saying that *they*, the Diodotids, were illegal usurpers and that by destroying them *he*, Euthydemos, was the friend and not the enemy of the Seleucid. It allowed the latter to save face and leave Euthydemos in control, as a destroyer of usurpers rather than as a usurper himself. After the death of Euthydemos II, Pantaleon might see the advantage in stressing his link *beyond* Euthydemos to the Diodotids (now that there was no danger from the weakened Seleucids and it was politically safe and advantageous to do so) and adopted Zeus as his type in preference to Heracles. It also distinguished his line from his brother's. It may have been he who issued the anonymous pedigree coins as a first response to Eukratides' usurpation. The coins bear the names of Antiochos Nikator¹⁷, Diodotos Soter¹⁸, and Euthydemos Megalos¹⁹. These could as well have been issued either by the short lived Euthydemos II or be a first pedigree series by Agathocles. Interestingly, Euthydemos I is on them called the 'Great' and not 'God' as on the Antimachos and subsequent Agathocles coins.

Apollodotos I wears the same kausia (cap) as Antimachos Theos and may well be from the same genealogical line. In fact they could have split the territory that they controlled as joint kings with Antimachos Theos holding the Bactrian side and Apollodotos conquering the new kingdom in India (taking the founder's title Soter) with Antimachos taking over both areas at a subsequent date. To repeat, after the death of Demetrios we could theoretically have four contemporary kings ruling at the same time - Agathocles, Antimachos and Apollodotos who may all be Euthydemid, and Eukratides who was a usurper. That there were *two* kings by the name of Antimachos, one striking Attic coins with the title Theos

and the other striking Indian coins with the title Nikephoros has been generally accepted by most authors, including myself. However, we know that Theophilos, chronologically not that far removed, struck both Attic and Indian coins bearing different titles and now we may have to reconsider our two Antimachoi.

A Tax receipt of Antimachos Theos dated in year 4 (of his reign) bears the name of two other persons, Eumenes and a second Antimachos.²⁰ Presumably these were his sons and this *may* be evidence for a second Antimachos as king but unfortunately the word (his epithet?) after the second Antimachos is unreadable on the document and one cannot confirm whether it is a title or not.

The coin sequences that follow are quite unusual. The Indian silver coins in the name of Antimachos Nikephoros' as a series can be shown to begin *after* the inception of those of Apollodotos,²¹ but they share no monograms. The monograms of *both* series were used, however, on the Attic coins of Antimachos Theos. Unless coins with a particular monogram were struck *for* circulation in both different systems we must assume that in some (border?) area the two systems operated alongside each other. The exchange rate as stated above was one Attic tetradrachm to 7 Indian drachms. I suspect that Apollodotos and Antimachos Nikephoros are partly contemporary rather than the latter succeeding the former and that there may, after all, have been just the one king Antimachos. Antimachos (Nikephoros) struck almost no \AA to accompany his silver but equally plentiful, and on the same 9.8 gm standard we find the \AA of Eukratides filling the gap - yet *his* bilingual silver are incredibly rare! How to account for these disparities?

Some of these Eukratides bilingual coins bear the monogram used on Apollodotos' Attic tetradrachm and which also appears on the silver of Antimachos. The Eukratides drachms are round like the Antimachos drachms but his hemidrachms are square²² (unique to Eukratides) like the drachms of Apollodotos. These latter are probably Attic hemidrachms and therefore date from the same period as the similar Apollodotos coins (BN série 2). In fact, if they were issued concurrently this would enable the populace to distinguish between the two rulers coins - Eukratides Indian drachm being round and his Attic hemidrachm square²³ while Apollodotos' identical denominations were the opposite shapes.

Justin refers to a *joint-king* being implicated in the murder of Eukratides and we must ask whether some accommodation even at this early stage might have been made between Eukratides, Apollodotos and Antimachos. There is mention of Eukratides being attacked by Mithradates I (171 - 138 BC) as well as by the nomads from the north. An external threat may have caused even rivals to form an alliance. Before looking at the rest of the Indo-Greek series and what happened next we need to look at the remaining kings striking Attic tetradrachms from **Table 1** above.

Firstly are the coins of Demetrios II on all of which the king bears no epithet. Unlike L. M. Wilson, I would place Demetrios for this reason before Eukratides II, on some of whose coins we *do* see a title. The cruder style of the coins is determined, I think, more by their different geographical mintage (different monograms) than a chronological explanation. Demetrios II uses Pallas as a type and Eukratides II has Apollo - both types used by Apollodotos I (on his Attic silver and Indian \AA) and I would place them alongside the coins of Eukratides I, as sub-kings, with Eukratides II succeeding Demetrios II.

Eukratides I struck a plentiful coinage and his reign may have lasted a considerable time. We do not know who the 'son' was who killed him and who rode through his blood with a chariot (Justin) but we do find that the portrait of the next king, Plato suggests a familial likeness to Eukratides. All his coins bear titles and therefore postdate the Eukratides II issues and one series BN 4 have reverse type 'Artemis facing' with the legend appearing as on the Eukratides II issues with epithet. BN 2 and 3 have the legend similarly arranged but with a date in the exergue. There is also an issue BN1 with legend arranged as on the later Eukratides coins. All these other issues have 'Artemis in chariot' reverses. Série BN 3 are helmeted and the portrait remarkably like that of Eukratides. The dates on these coins can be read as 47 and 48 which, in the

newly discovered era equate to 139/8 BC. Mithradates I of Parthia (considered by Tarn to be the person responsible for Eukratides' death) struck some remarkable coins in 139/8 BC which bear Heracles on the reverse (the Euthydemid type) and the additional epithet 'Philhellene' - friend of the Greeks.

Surely this could refer to the successes of Mithradates in Bactria where he appropriated two provinces, and the demise of Eukratides?

The only substantial issuer of Attic coins thereafter is Heliocles and his coinage is both extensive and varied in quality. The coinage seems to have been debased in at least one issue (BN série 3). Some of Heliocles' coins may be the only other dated coins in the Bactrian series - a few bear the letters NZ which equates to year 57 = 129 BC while others, one slightly base, have ΠΓ which equates to year 83 = 103 BC. If these *are* dates then it would seem most likely that the Indian standard coins of the identically named Heliocles Dikaïos, whose initial coins show a boyish portrait, are those of his son. It is difficult to explain these letters other than date but at the same time, why are only these two dates known?

138 BC being the year of Eukratides I's death has been proposed before, by Altheim,²⁴ though dates ranging from 159 (Tarn) through 155 (Narain) to 145 (Bopearachchi) have been proposed. Bopearachchi's date was based upon an interpretation of an inscription found at Ai-Khanoum in 'year 24'. He follows P. Bernard who proposed that this must have been a regnal year of Eukratides and that the fall of Ai-Khanoum was equivalent to the *last* year of Eukratides. The inscription doesn't mention Eukratides and of course the fall of the city did not necessarily mean that Eukratides had died but even more likely, to my mind, is that this 'year 24' was in fact using the Greek Era of 186/5 BC and represents 162/1 BC.²⁵

In the Indian standard coinage the silver remains constant but there was a revaluation of the \AA and this provides the next timeline. The \AA of Apollodotos I and Eukratides was struck in large quantities and the standard seems to have been 9.8 gm. The few \AA of Antimachos (Nikephoros) follow the same standard. Only two of the following Indo-Greeks adopted this standard and as we shall see they were contemporaries - Menander and Zoilos. After them the standard weight for \AA was reduced to 8.5 gm and thus we have a point of separation for our Indo-Greek sequences.

Menander

The sole remaining Indo-Greek king to be mentioned in literature is Menander, the next monarch to come on the scene, and perhaps the greatest of all the Greek kings of India. From the monogram sequences and his coinage he would seem to be the principal heir of both Eukratides and Antimachos II and it is from his reign that we can arrange the sequences for the remaining Indo-Greek monarchs. When Strabo mentions that '*Those that came after Alexander advanced beyond the Hypanis to the Ganges and Polibothra (Pataliputra)*' this can only refer to the conquests of Menander. A pillar was discovered in 1979 at Reh, some 350 km south-east of Mathura, bearing the name and titles of Menander.²⁶ This lies in the Ganges valley on the right bank of the river Jamuna. The four line Prakrit inscription reads;

maharajasa rajarajasa/mahamtasa tratarasa dhammi/kasa jayamtasa ca apra/[jitasa] Minanada [de?]/rasa.....

this seems to be a straight translation of the Greek; ΒΑΣΙΛΕΩΣ ΒΑΣΙΛΕΩΝ ΜΕΓΑΛΟΥ ΣΩΤΗΡΟΣ ΔΙΚΑΙΟΥ ΝΙΚΕΤΟΡΟΥ ΚΑΙ ΑΝΙΚΕΤΟΥ ΜΕΝΑΝΔΡΟΥ

The last line is imperfect, being cut through the bottoms of the letters where the pillar ends. The inscription almost certainly continued lower down on a part of the column which is now missing.

The most famous Indian source to mention a Greek king is the *Milinda-panha* or 'Questions of King Milinda (Menander) which is well known but doesn't have much bearing on our chronology though its statement that Menander was born in a village Kalasi-grama, if true, might make him the first 'Indian' born Greek king.

According to Plutarch, Menander died in camp while on a

campaign against the Indians in the valley of the Ganges. His ashes were fought over by several cities and they were divided amongst them so that all could share the honour of harbouring them. Western sources do not refer to what happened next but another Indian source states that he 'retired from the world' and left only a minor son to succeed him.²⁷

For Menander to accomplish his ambition of conquest in the East he would need to have had security on his western frontier (unless he was being pushed!) and before examining the sequences of his successors we have to place him in relation to Eukratides and the remaining Bactrians who had issued Attic coins.

We have no authority that places Eukratides in *competition* with Menander and in fact Menander seems to have succeeded Antimachos south of the Hindu Kush taking over his same role. Some monograms used by Antimachos pass straight to Menander and are not used by Eukratides. Of the monograms shared by Eukratides and Menander there are just four, BN 44 (E - see Overstrike 1 below), 63 (9 on **Plate 6**), BN 182 and BN 149. The first two are very common for Eukratides on his Attic silver but the third only occurs on rare silver and the unique gold 20-stater while the last was used only on bilingual Æ. These 'mints' must lie along the border zone between the two currency systems since Eukratides struck Attic coins there while Menander struck only Indian standard coins. It would seem that Eukratides was first to use these monograms though maybe there was some to-ing and fro-ing. Either that or they were actually joint sovereigns, protecting each other's backs against their respective enemies who surrounded them.

As for dates, I concur with L. M. Wilson that Menander could be as early as 165 BC and probably survived Eukratides, dying in c. 135 BC (or preferably 130 BC as OB prefers).

Main King	Joint King	date BC
Diodotos I + II		c. 256 - 220
Euthydemus		c. 220 - 186
Demetrius I	Euthydemus II	c. 186 - 170
Pantaleon	Agathocles	c. 175 - 165
Apollodotos I		c. 175 - 165
Antimachos		c. 170 - 160
Eukratides	Demetrius II Eukratides II	c. 171 - 139
Menander		c. 165/160 - 135/130
Zoilos		c. 150 - 140
Plato		c. 139 - 135
Heliocles I		c. 135 - 100

Table 3 Some suggested dates

The dates that I have allocated to the principal monarchs in **Table 3** are mostly approximate and are intended to give a general impression only.

Before looking at the hoards and overstrikes it is convenient to mention here the other known Indian inscriptions. At Besnagar near Bhilsa there is an inscription on a Garuda pillar which mentions that Heliodoros, a native of Taxila and son of Dion came to the court of Kasiputra Bhagabhadra as an ambassador of King Antialcidas. Interestingly, Heliodoros, ostensibly a 'Greek' was a Bhagavata, a worshipper of Vishnu-Krishna.

Further on this theme that the 'Greeks' had become indianised are inscriptions mentioning two men by the name of Theodoros who made donations to Buddhist sanctuaries. One of them, Theodoros Datiaputra, is referred to in an inscription dated 'year 113'. This would be 73 BC if dated in the Greek Era which will be discussed next. Another inscription, in Brahmi, the Maghera stone inscription (found 17 km from Mathura), contains the phrase 'In the 116th year of the Greek kings.'²⁸

The Yona (Greek) Era Inscription

Richard Salomon will publish this inscription fully later this year (see note 10)

The translation of the inscription reads;

In the twenty-seventh - 27 - year in the reign of Lord Vijayamitra, the King of the Apaca; in the seventy-third - 73 - year which is called 'of Azes', in the two hundred and first - 201 - year of the Yonas (Greeks), on the eighth day of the month of Sravana; on this day was established [this] stupa by Rukhana, the wife of the King of Apraca, [and] by Vijayamitra, the king of Apraca, [and] by Indravarma (or Indravasu?), the commander (stratega), [together] with their wives and sons.

This inscription positively identifies the Greek Era for the first time with a method to calculate it. We have already seen that that it was most likely introduced by Demetrios I. Hopefully in the future more inscriptions that can be tied to this era will be discovered and these may eventually prove decisive in fixing some of the dates of the Indo-Greek kings that follow.

One important aspect of the inscription is that it fixes the inaugural year of Vijayamitra, the Apracaraja, at 12 BC, proving my chronology of the Indo-Scythian succession as outlined in ISCH. I had shown that there was only one king called Azes and that he was succeeded on his demise by both the Apracaraja Vijayamitra and Gondophares I. For this to be true it had to happen around the second decade BC, and I gave all the evidence for this. One important piece of evidence that seemed to *confirm* what I had *already* deduced was the relic casket of Indravarma published by H. W. Bailey (JRAS, 1978) which was dated in the 63rd year of Azes. The inscription gave the Apracaraja as Vijayamitra and at the end of the inscription it gave an additional date 'in the year 25'. Knowing that Azes must have died in the last decade or so BC, I took this to be a *regnal* year of Vijayamitra i.e. his first year would have been c. 20 BC. Professor Salomon took the year 25 to be a *later* addition referring to when the casket was *reburied*, and along with most other scholars placed a *much* later date on the inscription. In the assumption that it was added later he is correct but the new inscription validates my original hypothesis concerning the death of Azes and the early dating of Gondophares, albeit being just 8 years later than I had proposed.

For my theory to be correct that there was just **one** king called Azes and that Gondophares succeeded him, Vijayamitra had to die around 19/20 AD and be followed for a very brief interlude by his son Itravasu (ISCH issues 177 - 179). This was because Itravasu (Indravasu) was immediately followed by **Gondophares Sases** who I interpret as the Gondophares of the Takht-i-Bahi inscription (which is date in year 103 [of Azes], year 26 of Gondophares, i.e. year 1 = **19/20 AD**).²⁹ The two latest inscriptions of Vijayamitra dated now according to this *new* information are;

1) The Bhagamoya Inscription³⁰ of Azes year 77 = **19 AD**

2) The Prahodia Inscription³¹ of Vijayamitras' year 32 = **20 AD**

This new inscription is interesting for several reasons: Obviously Azes was long dead by then but there is no mention of a non-existent Azes II, which surely there would have been had such a king existed, simply to avoid confusion. Then we have the coins of Itravasu, son of Vijayamitra coming as they do at the *end* of a long series of imitation Azes coins and coinciding with the end of the reign of Abdagases, Gondophares I's successor (see Chapter on Hoards pp. 173 - 197 in ISCH Vol. 1, especially No. 34, my interpretation of the Malakand Hoard). In the old orthodox chronology, Gondophares died post 45 AD and Abdagases must have ruled another 20 years and so Abdagases' end and the first coins of Itravasu and Aspavarma (seem to begin their rule about the same time) would have been c. 65+ AD. I would welcome suggestions explaining how the Apracaraja coinage could be spread from 12 BC to 65+AD between the father Vijayamitra and his son Itravasu with the latter issuing coins in his own name for maybe a year only?

In his forthcoming paper Professor Salomon questions whether some other known inscriptions can be attributed to this new Greek era. One of them he lists is the Taxila Copper Plate inscription of year 78.³² This inscription refers to King Moga (Maues) and if it were in the Greek era this would place him in year 107 BC. In fact, as we shall see later, this is not a problem, an even earlier date still would be good. However, I personally read the inscription as

meaning that it was written in year 78 of Maues, i.e. in his era. The reason for this is that it mentions Liaka Kusulaka and Patika, Kshaharata Satraps, the latter of which also appears on the Mathura Lion capital (see CHIS pp. 95 - 101) which I calculate to have been made just before 16 BC. I cannot see that Patika can be on two inscriptions around 90 years apart, though of course there *could* be two Satraps of that name, though I don't believe it.³³

OVERSTRIKES (see Plates 2 - 6)

When one king overstrikes the coinage of another one can state that the king who issued the undertype is at the *latest* a contemporary of the overstriking king but may possibly pre-date him. Below is a list of the known Indo-Greek overstrikes. Many of these were listed by Osmund Bopearachchi who made a similar list in 1989.³⁴ (those taken from that paper are marked Bop. below). The illustrated coins are on **Plate 1**.

1) Menander over Zoilos I

i) R. C. Senior ONS 150, p. 12. The Menander tetradrachm type is BN series 12A (**ill. 1**) and the under-type is Zoilos 2A (**ill. 1b**). On the obverse of Menander's coin one can see the outline of Zoilos' bust and the top of the letters ΖΩΙΛΑΟΥ while on the reverse under Athena's shield one can see streamers, below which is a monogram (C), found on Zoilos' unique tetradrachm (**ill. 1a**). This monogram is known for Menander but so far solely on drachms. Only these two rulers used this monogram.



The above monograms appear on Zoilos' coins. Monogram A was used previously only by Diodotos I and II, Euthydemos and Demetrios. It disappears after Zoilos. Monograms B and C are used only by Zoilos and Menander. Monograms D and E appear on the coins of Eukratides and Antimachos Nikephoros, Zoilos, and Menander. Monogram E ceases after Menander/Zoilos' reign but D passes to their successors. Zoilos used the Heracles reverse on his coins and this suggests that he was a successor of Euthydemos I, Demetrios and Euthydemos II who all had this deity as their 'type'.³⁵ Zoilos' use of monogram A would seem to confirm this link. Monogram E appears on Indian weight drachms of Eukratides as well as the drachm-only coinage of Antimachos Nikephoros and Zoilos would seem to be close to these two rulers. Since this monogram appears on Menander's coins in the earliest and also latest issues but not those of the middle period, one may conclude that Zoilos struck his tetradrachms at that time and that this overstrike represents the reacquisition of temporarily lost (or shared?) territory. The Menander tetradrachm over-type dates from this middle period and implies that Zoilos's tenure was quite short. Only one genuine tetradrachm of Zoilos I is known and maybe, like this overstruck coin, they were all called in and recoined by Menander. Further evidence confirming that Menander and Zoilos are close is the fact that they were the last two kings to issue \AA on a standard weight of 9.8 gm.

2) Menander over Zoilos I

i) A drachm illustrated in CNG catalogue March 1996, lot 825. The drachm is Menander BN series 16, plate 30, 141 - 9 (his latest issue) overstruck on Zoilos series 3. On the obverse of the coin one can clearly see, from the reverse of the Zoilos coin, the hand of Heracles holding a wreath with streamers. There is possibly the top of the monogram of 3A to the right of the ties. On the reverse of Menander's coin can be seen the outline of the diademed head of Zoilos with Ω above it. Zoilos may have predeceased Menander.

3) Agathocleia over Menander

Pandayala hoard 2000. Reported by OB The under-type is reported as BN 36, 'Forepart of a Boar right', under the bust of Athena on the over-type. On the reverse are traces of Kharosthi' letters. I haven't seen this coin to confirm the identification.

4) Agathocleia over Diomedes

i) \AA OB ONS 172, p. 15, mon. 15. The monogram on the undertype is not visible. *There is no actual evidence that Agathocleia was the mother of Strato and acted as regent.* On the joint coins the portrait of Strato does seem young but he issued coins in his own name alone that bear an even younger portrait and without the 'Dhramikasa' title appearing on most of the joint coins. See next.

5) Strato over Diomedes

i) CNG May 22nd, 2002 Sale 60 coin 1118 - mon. -/11. Obverse Strato Bust right/Nike right, BN 30 (**ill. 5**), over Diomedes Dioscuri/ Bull right. The monogram, 11 of the under-type is clearly shown (**ill. 5a**) - and is unlisted in BN but I reported one in ONS 170, p. 15, 3. These overstrikes clearly place Diomedes before Strato and Agathocleia.

6) Strato over Heliocles II

i) RCS (ONS 179) Apollo/Tripod type of Strato (**ill.6**) over Elephant **right**/ Bull right of Heliocles II (**ill. 6a**).

ii) RCS (ONS 179) Apollo/Tripod type of Strato (**ill.6b**) over Bust right/Elephant **right** type of Heliocles (**ill.6c**). This last Heliocles type wasn't known in 1997 when I published this overstrike originally in ONS 151 p. 10 as a coin of Strato over Lysias. The coin was acquired by W. Pieper and appears in 'Ancient Indian Coins' by Bopearachchi and Pieper, 1998, p. 205. The only link to Lysias was the Elephant right reverse and possible traces of 'NIK..' from the under-type obverse. Lysias flans tend to be rather small and compact and I now think that this broader coin should be re-attributed to Heliocles II and the visible letters probably read ' Δ IK..'.

These coins are particularly important because they demonstrate that chronologically there isn't a *gap* between the reigns of Strato and Heliocles II, but that they actually overlap.

7) Artemidoros over Hermaios and Calliope

RCS 2 Silver tetradrachms. I first identified this overstrike around 1995 but didn't publish it properly and the second coin (Sales list 1996/51) surfaced a year later. Sometimes an uncleaned coin can show the under-type better than a cleaned one (through differential corrosion) and the coin (i) is not so clear now, since I cleaned it, as it was previously.

i) The obverse (**ill. 7, 7a**) shows traces of an under-type with bust that practically touches the legend on the right side of the coin. There is also trace of a second, conjoined bust. The original flan must have been flattened but one can still clearly see parts of several letters of the Greek legend e.g. ΒΑΣΙΛΕΩ.. /ΚΑΙ ΚΑΑ[ΛΙΟΠΗΣ] from 7 - 12 o'clock. On the reverse a galloping horse (though no rider) is visible. There also seems to be a monogram resembling 9, which isn't recorded for the Hermaios & Calliope type (see **ill. 7c** for the 'type').

ii) A second specimen shows the obverse bust(s) much more clearly (not illustrated here) and one can also see the horse faintly on the reverse. It is the same Artemidoros type as this coin but the monogram is a Greek Delta (as coin 7) but with a vertical line with curved top (hooked to the right) through it. See ISCH Vol. II, p. 231, H1.9T for the actual coin. There is no other tetradrachm that fits the bill for the under-type. The importance of the overstrike is that we know that Artemidoros is the son of the great Scythian king Maues. If this Hermaios under-type comes *at the beginning* of his reign then it suggests that Artemidoros' father Maues must predate Hermaios. Since both Maues and Hermaios use the 'Enthroned Zeus' reverse on their coins it might also suggest a possible familial relationship.³⁶ It would also mean that the Posthumous-Hermaios coinage began somewhat earlier than previously supposed i.e. pre-Strato I. With another overstrike (9) and the previous ones (4) and (5) we have some clues to the chronology of Diomedes, Hermaios, Strato, Heliocles, Maues and Artemidoros.

We have seen that the reigns of Strato and Heliocles overlap and that Heliocles seems to have succeeded Strato. There are strong links between the coins of Diomedes and Hermaios and in deciding



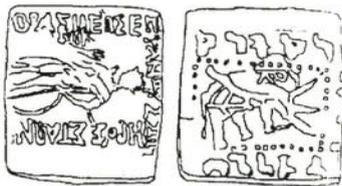
1



1a



1b



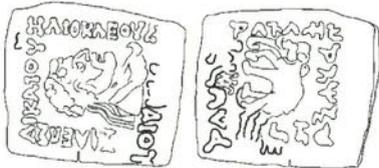
6b



6c



9



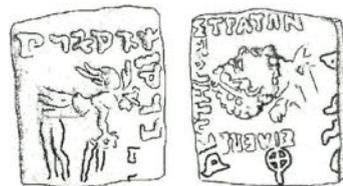
9a



17



5



5a



6



6a



7a



7b



7c



17a

which of these rulers came first it would seem that, on the evidence of the overstrikes alone, Diomedes was the earlier since Strato overstruck his coins while the later king Heliocles overstruck Hermaios. Hopefully a future overstrike between these two kings might prove this. The fact that both kings used the same title 'Soter' suggests to me that Hermaios at some time *succeeded* Diomedes. However, at the moment Strato and Hermaios, both using this title, seem to be contemporary. Artemidoros is contemporary with or precedes Hermaios and therefore Maues, his father must be contemporary with Diomedes.

8) Heliocles II over Eukratides

OB. 'De L'Indus A L'Oxus', Catalogue of the Exhibition, Lattes 2003, p. 135. A coin of Bust/ Elephant left type over Helmeted bust right/ Dioscuri. The Eukratides coin is a lifetime and not a Posthumous-issue. Whereas most overstrikes seem to be on 'current' or recent coins, this one is on a much older coin. It seems unlikely that a heavier (9.8 gm) type would be reused in a re-coinage on an 8.5 gm standard but the undertype was probably worn when struck. It weighs less than 8.5 gm now.

9) Heliocles II over Antialcidas/Epander?

i) Kirkpatrick - Numismatic Circular march 1979, p. 98. (Bop. 9, p. 59) The under-type on this piece seems to have been identified from the visible epithet ΝΙΚΗΦΟΡΟΥ on the reverse but without further visible details (Kirkpatrick mentioned the Caps of the Dioscuri being visible - but I cannot see them on the photograph), this coin *might* be of Epander who is much closer to Heliocles II chronologically. If it is Epander then it is significant in showing that Epander's very short rule overlaps that of Heliocles II.
ii) Coin in Hollis collection Heliocles BN 7A over Antialcidas BN 17 - '...kidasa' visible on obverse where HAI..should be and signs of 'Zeus Head' under the reverse type.

10) Heliocles II over Hermaios

The following are all \AA of Heliocles II Bust right/ Elephant left type over Hermaios' Mithras/Horse right type.

- i) MacDonald 'The Decline of the Indo-Greeks' Hellenic Numismatic Society Monograph 2, pp. 9 - 14. Mon. 9.
- ii) MacDonald ONS 163, p. 21 mons. 17/15 on the under-type
- iii) Bopearachchi ONS 169, p. 20 mon. unc., possibly 15.
- iv), v) RCS iv) mon. 11, v) mon. 15/ 15? (ill. 9/9a)

It is interesting that only a small number of the same few monograms are found on both under- and over-types and that these also occur on several of the previous overstrikes. If the coins had limited circulation then this sort of information may identify the contended province(s) and suggests that they were limited in number.

11) Heliocles II over Agathocleia

The following are coppers of Heliocles type Bust right/ Elephant left struck over Agathocleia Athena bust right/ Heracles seated left and all with monogram 15.

- i) ii) \AA BM (Bop. No. 3, p. 56; Bop 7, p. 58, monogram 52),
- iii) Ashmolean (Bop. 4, p. 56 - monogram 15),
- iv), v), Bib. National (Bop.5, p. 57, Mon. 15; Bop. 6, p.58, monogram 10).
- vi) MacDonald ONS 150, p. 11/12.

This and the next variety show how common are Heliocles' overstrikes generally. Certainly he was the most prolific Indo-Greek overstriker. Their number also implies that he had considerable success against and probably succeeded Strato.

12) Heliocles II over Strato I

The following are \AA of Heliocles of Bust right/ Elephant left, struck over Strato of Bust right/Nike right type.

- i) \AA BM (Bop. 8, p. 59, monogram 14),
 - ii - vi) RS (5 examples) - monograms 14, 15, 15/14, 17
- I have actually seen over a dozen of this, the commonest overstrike. It must represent some triumphal re-coinage by Heliocles upon the

demise or defeat of Strato. Both BN series 29 and 30 occur as the under-type of Strato but only BN series 7 of Heliocles as the over-type. This limits the monograms concerned.

13) Epander over Strato I

i) \AA ANS (Bop. p. 65, 13) the under-type was identified from the king's name being evident. Types not visible. This overstrike would make 12) more likely, suggesting that Epander was a contemporary of Heliocles II.

14) Epander over Philoxenos/(Heliocles II?)

i) Lahiri 'Corpus of Indo-Greek coins' Calcutta, 1965, p. 119. Singhi collection. \AA This coin is lost and no photograph survives. The Singhi collection was dispersed in the 1970's. As with 12) the under-type *may* have been accurately identified but another specimen is awaited.

15) Archebios over Strato I

i) Taxila III, p. 237/76. \AA Bust right/ Caps of the Dioscuri over Bust of Apollo/Bowcase type of Strato I. This under-type is very rare and limited to monograms 9, 17, and 52. The over-type of Archebios uses monograms 17, 52 and 33. Most unusually, we have a square coin being struck over a round one - suggesting a shortage of \AA needed at short notice for re-coinage.

16) Archebios over Zoilos I/Heliocles II

i) \AA (Bop. 15, p. 69) The only evidence of the king on the under-type is the Kharosthi legend 'Dhramika..' which R. B. Whitehead allocated to Zoilos but in view of the recently identified overstrikes this is more likely to be a Heliocles II under-type. See also note (2) to issue 8 on p. 103 of Lahiri 'Corpus of Indo-Greek coins'.

17) Archebios over Epander

i) RCS \AA ONS 175, p. 11. (ill. 17, 17a).

18) Archebios over Peucolaos

i), ii) Silver tetradrachm BM mons 17-49, BM mon. 22 (Bop. 16, 17 pp. 71/2). Peucolaos is one of the rarest kings and linked to Maues by his Zeus reverse type and to Artemidoros by his use of Artemis on the reverses of his coppers. I had postulated (in ISCH³⁷) that he may have been related to Maues and since these two overstrikes suggest that he was a contemporary of the much later Archebios then one is lead to conclude that he may have in fact been another son of Maues.

19) Amyntas over Heliocles II

i) Senior and Mirza ONS 149, p. 5. Mon. 17. This overstrike places Amyntas towards the end of the Indo-Greek sequence.

20) Amyntas over Epander

i) CNG Sale 64, September 24th 2003, coin 551. This coin is turned 90 degrees over the under-type. The monogram of the over-type is 61 (BN series 15A/B. The legends of the under-type ΒΑΣΙΛΕΩΣ ΝΙΚΗΦ[ΟΡΟΥ] and on the reverse *Maharajasa Jaya[dharasa]* are those of Epander. In fact the *Jaya* isn't clear to me but I have no reason to doubt the identification.

21) Telephos over Archebios

OB 'Ancient Indian Coin' p. 211. Telephos series 3 over Archebios series 13. Telephos followed Maues (monograms 24 and 40 unique to these two kings) yet Archebios, Heliocles II, Polyxenos and Strato followed Maues at Taxila with monogram 52. See notes on the monograms and **Table 4** for an explanation of how they could all fit into a time frame that allows this.

22) Apollodotos II over Maues

i) (Bop. 18, p. 72) \AA Apollo/Tripod over Seated King/Elephant type of Maues (ISCH 15). The under-type is not certain but seems probable, and there is no reason why this isn't a correct

identification. Apollodotos II can be shown to succeed Maues in monogram progression.

23) Vonones with Spalahores over Strato

i) *Æ* RCS ONS 171, p. 13. ISCH 66.1 over Strato BN series 31. This is an important overstrike, especially if the issuer of the under-type was contemporary with that of the over-type. Above I have suggested that Maues pre-dates Hermaios and Strato and we know that Vonones with Spalahores comes shortly after Maues and is contemporary with the earliest Posthumous Hermaios coins (see CHIS). The monogram on the over-type is scarce and was only used on the earliest Vonones issues. The Strato under-type is the same as that which he used to overstrike Heliocles II (see 5 above). It is possible therefore that at this time this was a troubled region with much to-ing and fro-ing. The Strato BN série 31E & 31F monograms appear only on that issue and then disappear.

24) Spalirises with Azes over Posthumous Hermaios

i) RCS Oriental Numismatic Studies 1996, p. 14. This coin, now in the Ashmolean Museum, shows ISCH 74.1T over CHIS 16T.1 in the name of Hermaios, which uses the same monogram as the Vonones with Spalagadames coin ISCH 67.3aT.

25) Posthumous Eukratides over Spalahores + Spalagadames

i) 'Indo-Greek, Indo-Scythian and Indo-Parthian Coins' Bopearachchi, 1993, p. 73, No. 45. The over-type is CHIS ES-30 (pl. XXII) and the under-type ISCH 69. I have explained in ISCH (Vol. I, p. 41) why I identify the obverse king as Spalahores and not Spalirises on these coins.

26) Posthumous Eukratides over Posthumous Apollodotos

i) *Æ* BM (Bop. I, p. 51) This coin is of the rare CHIS E-29S type which shares monograms with Posthumous Hermaios silver coins. The Apollodotos under-type is almost certainly of the Posthumous type too (see illustrations on Plate XX of CHIS) which from their monograms we can say were issued prior to the Posthumous Eukratides coins.

This brings the Indo-Scythian overstrikes down to the period of Azilises, Azes, Apollodotos II and Hippostratos, and I have written about those overstrikes in ISCH.

HOARDS (see Plate 2)

Once again a debt is owed to Osmund Bopearachchi who has put together a list containing many of these hoards. The most concise can be found in 'Ancient Indian Coins' 1998, pp. 183 - 7. Where no further information about the source is given then the hoard will be found in AIC. With the exception of hoard 17 I am listing only hoards that contained Indian standard coins (not Attic).

1) Hamirpur hoard

Smith, V. "Indian Antiquary", XXXIV, p. 252. 3 coins of Eukratides, 34 of Apollodotos I, 21 of Antimachos II, 40 of Menander. This hoard was found just 20 km west of Reh where the Menander stone inscription was discovered in 1979. It would seem to confirm that Menander did occupy areas a long way from his base in Gandhara though no mints are allocated to these southeastern regions.

2) Swabi hoard

75 coins of Apollodotos I, Antimachos II and Menander

3) Siranwali I hoard 1990

400 coins Apollodotos I, Antimachos II and Menander (+ (x) Amyntas coins - see comment to hoard 9).

4) Bajaur hoard 1993

800 drachms of Apollodotos I, Antimachos II, Menander I.

5) Bajaur hoards 1926 and 1942.

These two hoards contained coins of Apollodotos I, Antimachos II,

Zoilos and Menander. The former hoard had c. 970 coins The latter hoard had c. 1000 Indo-Greek coins.

6) Mian Khan Sanghou hoard 1993

8 tetradrachms, 75 drachms of Apollodotos I, Antimachos II, Zoilos I and Menander I.

7) Surana hoard

A hoard of several hundred coins of Apollodotos I, Antimachos II and Menander plus the unique drachm of Thrason. In a private collection in Bombay. The coin was the best preserved in the hoard and virtually indistinguishable from a coin of Menander. See DIG, p. 31.

8) Wesa Hoard 1994

Circa 220 tetradrachms, 1000 drachms of; Eukratides (bilingual), Apollodotos I, Antimachos II, Menander I, Lysias and Antialcidas.

9) Attock hoard

93 tetradrachms and 600 drachms of Zoilos I, Menander I, Lysias and Antialcidas. *In the late 1980's a very large hoard of Amyntas drachms was found near Gujranwala and several dealers bought parcels of the hoard. One of them in Wazirabad artificially toned his coins black. These coins were then 'salted' into other hoards to get rid of them and I believe that OB's accounts of this and other hoards did not take this into account.. Where I believe that this was the case I have put (x) in brackets on Plate 2..*

10) Swat hoard

Reported by O. Bopearachchi in 2002. Antimachos II, Zoilos I, Menander I, Lysias, Antialcidas, Nicias.

11) Charsada hoard

Bivar NC 1965 p. 71-9. Antimachos II, Zoilos I, Menander I, Lysias, Antialcidas, Nicias, Theophilos and Philoxenos.

In this NC article Dr. Bivar pointed out that the theory that Agathoclea was the wife of Menander and regent of Strato was extremely tenuous - though it has been generally 'accepted' ever since Rapson proposed it in 1906. He pointed out that Strato must be later than generally thought, on the basis of hoard evidence, and has been proven correct.

12) Khauzikhelai hoard 1992

c. 800 coins Apollodotos I, Antimachos II, Menander I, Lysias, Antialcidas, Nicias and Philoxenos

13) Siranwali II hoard 1993

300 coins of Apollodotos I, Antimachos II, Menander I, Lysias I and Philoxenos (+ (x) Amyntas)

14) Rawalpindi hoard 1971/2

Acquired by a private (American) collector there. Apollodotos I (3 dr.), Antimachos II (6 dr.), Zoilos I (1 dr.) Menander I (6 tet. 32 drachms), Lysias (2 dr.), Antialcidas (10 dr.), Hermaios with Calliope (1 tet. and 1 dr.) and Hermaios (2 tet. 2 drachms.) the latter 6 coins were in mint state. I have the full correspondence and some photographs of this hoard which deserves fuller publication someday.

15) Sotheby hoard

Part of a hoard came up for sale at Sothebys in 1993 - the coins that appeared were; Menander, Philoxenos, Hermaios and Strato.

16) Haripur II hoard 1997

This hoard ended up with Kushal Khan in the Peshawar Sarafa bazar. 112 drachms in total. 10 drachms of Apollodotos I, 26 of Menander I, 5 of Lysias, 40 of Antialcidas, 15 of Philoxenos, 2 of Diomedes, 13 of Hermaios and Calliope and 1 of Hermaios of the rare Horseman/Enthroned Zeus type.

These last 14 coins suggest that the conjoined bust type and non-portrait type do precede the regular type.

17) **Tatta Hoard**

Gardner, *NC* 1887. Coins of Philoxenos, Diomedes, Hermaios, Strato with Agathocleia and Strato alone.

18) **Pandayala hoard**

22 bronze coins found in 2000. Reported in *ONS* 169 pp. 19 - 21. Coins of Apollodotos I, Menander I, Lysias, Antialcidas, Nicias and Heliocles II. Amongst them were the overstrikes Heliocles II over Eukratides, Agathocleia with Strato I over Menander, Agathocleia with Strato over Diomedes, Heliocles II over Agathocleia with Strato, Heliocles II over Strato and Heliocles II over Hermaios.

19) **ONS hoard**

I reported this group of four coins in *ONS* 160, p. 14. There was a joint Hermaios and Calliope drachm with monogram 17 (**Plate 6**) and two of Strato's last issue drachms (BN série 27) with monograms 17 and 9. These were slightly worn. The Epander coin was extremely fine and with the unreported monogram 26, combining 27 with 9. This group would seem to confirm that Epander postdates Strato.

20) **Rawalpindi/Hamidi/Pieper hoard** 1987

This hoard surfaced in Rawalpindi and contained 60 - 70 drachms of Philoxenos, Strato I, Polyxenos and Heliocles II. (See *Ancient Indian Coins* 1998 page 245, coin 154). The Polyxenos coin was 'as struck' and amongst the latest in the hoard. There were a few other earlier coins too. See *Decline of the Indo-Greeks* page 16, hoard 11.

21) **Rawalpindi hoard**

Whitehead *NC* 1923 Coins of Philoxenos, Diomedes, Hermaios, Strato and Archebios.

22) **Shaikano Dheri hoard**

Reported by General Haughton in the *Numismatic Chronicle* 1946. Some coins also appear in his collection sold at Sotheby's in 1958. The full hoard reported in *IGCH* 1956 as; Menander 15 coins, Antialcidas 7 coins, Philoxenos 25 coins, Diomedes 7 coins, Hermaios 20 coins (2 + Calliope), Strato with Agathocleia 2 coins, Heliocles II 1 coin, Archebios 2 coins, Amyntas 2 coins. An Amyntas tet. was shown to be fake by Shortt in *NC* 1963.

23) **Sonipat hoard** 1871

Cunningham '*Coins of Alexander's successors in the East*', p. 2/3. Coins of Apollodotos I, Antimachos II, Menander I, Lysias, Antialcidas, Philoxenos, Diomedes, Hermaios, Strato I Heliocles II and Amyntas.

24) **Qunduz hoard** 1946

The hoard contained 627 coins, all of Attic weight. There were three Seleucid coins, 5 of Diodotos, 12 of Euthydemos I, 8 of Demetrios I, 5 of Euthydemos II, 3 of Agathocles, 14 of Antimachos I, 147 of Eukratides I, 50 of Demetrios II, 130 of Eukratides II, 12 of Plato, and 221 of Heliocles I. The following rulers who issued normally only Indian weight standard coins also were represented in Attic coins, Lysias 4, Antialcidas 3, Theophilos, 1, Philoxenos 1, Hermaios I, Archebios I and of Amyntas there were 5 double-decadrachms which may be medals rather than coins.

25) **Shinkari hoard**

See Lahiri p. 105, 3 Artemidoros, note 3 to Pl. XI,1 One Artemidoros tetradrachm with 2 Menander drachms and 2 Philoxenos drachms.

26) **Sarai Saleh or Haripur hoard** 1994

500 tetradrachms and 1,500 drachms. The hoard was rapidly dispersed and it isn't possible to make a complete listing but the following monarchs were represented; Zoilos I, Menander I, Lysias I, Antialcidas, Nicias, Philoxenos, Diomedes, Hermaios (+ Hermaios with Calliope), Strato (+ Strato with Agathocleia),

Polyxenos, Heliocles II, Epander, Archebios, Amyntas, Menander II, Maues, Artemidoros, Telephos, Apollodotos II, Hippostratos, Vonones with Spalahores, Vonones with Spalagadames, Spalirises, Spalirises with Azes, Azes and a Posthumous Hermaios coin.

27) **Ambala hoard**

Part of this hoard arrived in Dehli from Ambala with a dealer but the rest of the hoard surfaced from Kashmir. Some few strays appeared later in London. A few coins of: Antimachos II, Menander, Antialcidas and Hermaios plus a mint state Artemidoros tetradrachm and two Menander II drachms. 3 tetradrachms of Apollodotos II (two of which had short legends, unpublished, now in the ANS collection), two Hippostratos drachms and 12 coins of Maues including tetradrachms and drachms of the extremely rare ISCH issue 3 types. There were drachms of Azilises, many of Vonones with Spalahores/Spalagadames and also Spalirises, Spalirises with Azes and four drachms of Azes alone of the earliest types (3 Zeus/Nike, one KMS/Pallas).

28) **Kashmir hoard**

Basically a hoard of the rare Azilises KMW types plus a worn Philoxenos tetradrachm, a Hippostratos tetradrachm, just one Spalirises drachm and 10 very early unworn Azes drachms. Confirming that Azilises predates Azes.

29) **Nul Guniar hoard**

A Hippostratos tetradrachm was found with five Azes tetradrachms. Photographed by me in Peshawar, the coins, owned by an Afghan, were auctioned in Germany.

30) **Mohmand Hoard**

Jenkins *JNSI* XVII, II, pp. 23 - 5. This hoard contained coins of the Posthumous-Hermaios types plus coins of Azes but also, importantly, Parthian coins of Orodes II which were clear evidence for the dating of the sole king Azes as well as the P-H coinage (see *ISCH* pp. 182/3).

Plates 3 - 5 and the sequencing the hoards

Plate 2 shows the 30 hoards and though there is more than one possible way of ordering them, the one I have chosen conforms best to the order suggested by the overstrikes as well as indicating which ruler's coins are probably the *latest* coins in each hoard. To have integrated hoards 25 to 30 would have distorted the table by creating gaps and I have elected to not do this since the issuers of the coins from Artemidoros to Azes in those hoards may be either regarded as more Scythian than Greek or located in a different geographical region. The series begins with the coinages of Eukratides, Apollodotos I and Antimachos II as has been discussed previously. The overstrike of Zoilos' coins by Menander show that Zoilos' reign probably falls in the middle but towards the end of Menander's reign. Where two rulers overlap one can place them in a table before or after each other but in this case it would appear that Menander rose to power *before* Zoilos and hence the order I have chosen in the table.

For the Ephemeral rulers such as Theophilos and Polyxenos, again one could place them up or down the table one row without distorting the chronological implications. The table practically orders itself and the sequence implications are clear *but* it is possible that a distortion can take place if a particular ruler's coins are missing from a hoard (if it was accumulated perhaps in a town over which he, though predating another king, had little or no sway). In **Plate 2** the position of Diomedes and Hermaios looks more satisfactory since hoards 14 and 15 contain Hermaios coins but no Diomedes coins. One might conclude that Hermaios preceded Diomedes from this fact but I suspect that the sequence could well be the reverse as is discussed later. Something similar might apply to Archebios and Amyntas.

From the overstrike evidence one can place Artemidoros, son of Maues, before and probably overlapping the reign of Hermaios with Calliope. The Shinkari hoard (24) would seem to bear this

Monarch	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	18	17	19	20	21	22	23	24	25	26	27	28	29	30	
Eukratides	x							x															x								
Apollodotos I	x	x	x	x	x	x	x	x				x	x	x		x	x						x			x					
Antimachos II	x	x	x	x	x	x	x	x		x	x	x	x	x									x				x				
Menander I	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x	x					x	x		x	x	x			x	
Zoilos I					x	x			x	x	x			x																x	
Thrason							x																								
Lysias								x	x	x	x	x	x	x		x	x						x			x					
Antialcidas								x	x	x	x	x		x	x	x	x					x	x	x		x	x				
Nicias										x	x	x					x														
Theophilos											x													x							
Philoxenos											x	x	x		x	x		x	x	x	x	x	x	x	x	x	x		x	x	x
Hermaios														x	x	x	x	x	x		x	x	x	x		x	x				
Diomedes															x		x				x	x	x			x					
Polyxenos																x					x					x					
Strato I																		x	x	x	x	x	x			x	x			x	
Epander																			x												
Heliocles II																					x		x	x		x					
Archebios																						x	x		x					x	
Amyntas			(x)						(x)			(x)											x	x	x		x				
Menander II																										x	x				
Artemidoros																									x	x	x				
Maues																										x	x				
Apollodotos																										x	x				
Vonones																										x	x	x			
Spalirises																										x	x	x			
Azilises																											x	x			
Hippostratos																										x	x	x	x		
Azes																										x	x	x	x	x	

Plate 2 Indo-Greek hoards

Because there is a geographical division between the Indo-Greek and Indo-Scythian coinage, the hoards 24 - 9 containing the latter coins are placed outside the bold line and are not necessarily ordered chronologically. Hoard 24 is of Attic coins only.

Hoard Key

- | | |
|--------------------------|------------------------------|
| 1 - Hamirpur | 2 - Swabi |
| 3 - Siranwali I | 4 - Bajaur 1993 |
| 5 - Bajaur 1926 and 1942 | 6 - Mian Khan Sanghou |
| 7 - Surana | 8 - Wesa |
| 9 - Attock | 10 - Swat |
| 11 - Charsada | 12 - Khauzikhelai |
| 13 - Siranwali II | 14 - Rawalpindi 71/2 |
| 15 - Sotheby 1993 | 16 - Haripur II 1997 |
| 17 - Tatta 1887 | 18 - Pandayala |
| 19 - ONS 160, 1999 | 20 - Rawalpindi/Pieper |
| 21 - Rawalpindi 1923 | 22 - Shaikano Dheri |
| 23 - Sonipat hoard 1871 | 24 - Qunduz (part) 1946 |
| 25 - Shinkiar | 26 - Sarai Saleh (Haripur I) |
| 27 - Ambala | 28 - Kashmir |
| 29 - Nul Guniar | 30 - Mohmand Hoard |

out. In which case Maues also predates Hermaios. Vonones with Spalahores coins are thought to postdate Maues and there seems to be a strong link between their silver and Æ and the coins of Heliocles II and Amyntas. The overstriking of a Strato I coin (of his latest period) by Vonones and Spalahores takes on a special significance in this regard (see **Plate 3**), reinforcing this early chronology. **Plate 3** puts the overstrikes and hoards together plus some information on the reverse types used by the various monarchs.

One can see that Eukratides, Apollodotos I, Philoxenos and Maues, who all issued square silver coins are not so far apart chronologically and the use of this shape by Maues no longer seems so inexplicable. In the final column of **Plate 3** I have indicated those rulers who used unusual letter forms on some of their coins, square omikrons, cursive omegas etc. and one can again see that these experimental forms begin at about the same time. Such letter variations continued on the coinage of Azilises, the Vonones family, Azes, and the Posthumous-Hermaios from amongst the 'Scythian' rulers but were rejected by those rulers bearing Greek names until the time of Hippostratos.

When I gave a talk on this subject in Oxford in 2002 I showed that putting the monarchs in this order threw up an intriguing fact, as can be seen from **Plate 4**. Whereas previously there seemed no pattern to the particular titles adopted by each monarch, now something unusual had emerged. At first glance it would seem that very few contemporary, and possibly therefore joint, kings bore the same title. When one arrives at the coinage of Strato we see the beginning of multiple titles. Strato, Polyxenos, Peucolaos and Archebios all used more than one title, as did the Eastern monarchs Apollodotos II and Hippostratos.

We know from the overstrikes (6 and 12) that Heliocles II and Strato 'clashed' towards the end of Strato's reign and perhaps the fact that Strato had adopted the additional title 'and Dikaios' to his previous title of Soter reflects this.³⁸

I have indicated on **Plate 4** those monarchs who issued coin 'types' that are also found on the coins of Maues and the Vonones family. The imitating seems to take place in both directions. However, it is clear that the Maues imitations predate those of Vonones, as one would expect. This imitating also gives a time frame in which we can place Maues and Vonones vis à vis their contemporary Indo-Greeks.

Plate 5 shows the principal reverse types used by these Indo-Greek kings and their Indo-Scythian contemporaries. It seems less than reasonable to assume that the images adopted by each king were meaningless or chosen at random and we can assume that they meant something both to the issuer and the population who used them. The actual deity chosen for the silver coinage seems to have been of special significance, at least in the earlier phase of the coinage. I would suggest that the 'Heracles' type used on the coins of Euthydemus was taken up by those with a familial lineage to him to emphasize their legitimate descent. Agathocleia, on her copper coins, adopted a type imitating the Euthydemus silver reverse type of seated Heracles, probably to indicate this same line of descent (and her name suggests that she was also descended from Agathocles). That Spalahores with Spalagadames, Azilises and their successor Azes adopted the same type for their copper (and a Standing Heracles on Spalahores with Vonones' copper) is probably *not* for the same reason but that by the time this branch of the Indo-Scythians became dominant they desired simply a type that was current and popular. Using no types that were peculiarly Scythian of their own, they may also have not understood the more Greek ruler's preference for dynastic types and particular epithets.

I think that with these types there is definitely a dynastic aspect to them down to the period of Strato but at that time other considerations begin to have influence. Especially where multiple reverse types are used by one monarch one can consider whether a type is adopted simply because it is current or popular in that area (e.g. Artemidoros' and Menander II's 'King on Prancing horse' types) but in some cases we may be dealing again with a dynastic claim. The Hermaios with Calliope reverse has the 'King on Prancing horse' type whilst Hermaios-alone has the 'Enthroned Zeus' type.

The very rare issues with *both* types and no bust are almost certainly medallic and I feel represent a pointed representation of the union between two dynasties or clans - the King on Prancing horse being the badge of Calliope suggests that she is of the 'house' of Philoxenos/Antimachos II. The 'Enthroned Zeus' reverse of Hermaios may, as already postulated, indicate a relationship to Maues. A similar reverse was also used by Antialcidas of course.

On the copper coins we see further allusions to family lines but more often the types have a stronger connection to the place of issue. The latter may be represented by an animal, and we are familiar with the Bull and Elephant found commonly on the tribal coins struck by the independent city states of Taxila and Pushkalavati in the time of the early Bactrian coinage. Other symbols occur such as the horse, the bow and arrow, which suggest a desire to ingratiate the regime with the numerous and increasing Scythian population. One of the most popular deities is Nike, goddess of victory, but she too becomes particularly associated with the Scythians and is one of the principal deities appearing on the coins of Maues and Artemidoros and is *the* reverse type for the Indo-Scythian coinage of Arachosia.

Monogram sequences (Plate 6)

To do a full monogram sequence study, and for each metal, would require much more space and time than this paper would allow, so this is more of a summary. Far more coins are known today than previously but perhaps the time to do a complete study will be when the long awaited Corpus of Indo-Greek coins is completed by Osmund Bopearachchi. However, precious few *new* monograms are being discovered and almost none that we haven't already recorded for a particular sovereign. We can therefore report sequences that are unlikely to be changed much in the future and the fact that there are so few gaps in these sequences indicate that we are approaching the complete and correct order of kings.

Our starting point on **Plate 6** is the demise of Menander. We have seen from the overstrikes that Zoilos and Menander overlap in their reigns but it isn't certain whether Zoilos outlived Menander or not. It is curious that on his copper Zoilos used a Bow and quiver as a type. A quiver was a badge used by the Parthians (Scythians) and had been used previously by Diodotos, who we know had made a treaty with them. Did Zoilos use Scythian mercenaries in his quest against Menander perhaps? The obverse showing a head of Heracles may also have a bearing on this since the Scythians believed that they were descended from that hero (ISCH Vol. 1, p. 7). The wreath on the coins also appears on the rare coppers of Antimachos II. The main 'type' of Zoilos' silver, however, was Heracles standing as depicted on the coins of Euthydemus II and I feel that this gives a link to the Euthydemid line that is then carried on by Menander's successors, Theophilos and Lysias.



Monogram 1

We can see from **Plate 6**, column A, that, though similar to monogram 2, this monogram is distinguished by having a loop over the middle apex. Since this monogram was used solely by Menander, Thrason and Nicias I fail to see why, in the BN catalogue, Osmund thought it had been discontinued by Menander and resurrected 40 years later. The hoard evidence is quite clear - the Swat hoard (**Plate 2**, hoard 10) has Nicias' coins amongst the latest in the hoard and even more clear is the Surana hoard which contained the unique Thrason drachm. Not being published with a photograph makes the unique Thrason coin doubtful in some people's minds. Despite promising me (as its discoverer) a photograph, the owner of the coin, Pukhraj Surana, refused to hand it over but, he did show the coin and photograph later to Bill Spengler and Dr. D. MacDowall amongst others. I believe that the coin became separated from the rest of the hoard but it was obvious to me in 1982, when I discovered it, that this was the latest coin in a hoard of fresh (i.e. good condition) coins (DIG p. 31). If Menander had a son, then Thrason was it. Menander struck his Diademed portrait Attic tetradrachms with this monogram.

	Ruler	Hoard appearance	Overstrikes	Dynastic links	other
1	Apollodotos I	1/8, 12/14, 16, 18, 22, 25		AS	☐
2	Antimachos II	1/8, 10/14, 22, 26		N, PH	
3	Eukratides	1, 8		D	☐
4	Zoilos	5, 6, 9/11, 14		H	
5	Menander	1/16, 18, 21, 22, 24/26	over 4	AP	
6	Thrason	7		AP	
7	Theophilos	11		AS, H	
8	Lysias	8/14, 16, 18, 22, 25		H	
9	Antialcidas	8/12, 14/16, 18, 21/23, 25, 26	over 8? Mule with 8	ZE	letters
10	Nicias	10/13, 18		AF, PH	letters
11	Philoxenos	11/13, 15, 16, 17/25, 27		PH	☐
12	Diomedes	16, 18, 20/22, 25		D	
13	<i>Maues/ Mach</i>	26, 27		ED, N, ZE, ZL	☐ letters
14	Hermaios/Cal	14/17, 20/23, 25, 26		PH, ZE	
15	<i>Artemidoros</i>	24/26	over 14	AR, N, PH	
16	Agath/Strato	17/22, 25, 26	over 5, 12, 17	AP, AF	
17	Heliocles II	19, 21, 22, 25	over 3, 9?, 14, 16, 19?		ZF
18	Polyxenos	18, 19		AP	
19	Epander	nil	over 11?, 16	AP	
20	Peucolaus	nil -leg. as on latest Strato			ZL
21	Archebios	20, 21, 23, 25	over 4/17?, 16, 19, 20		ZF
22	Demetrios III	nil			ZF
23	Amyntas	21/3 25 (+ 3, 9, 13 doubtful)	over 17, 19	AP, HA ZE	
24	Menander II	25, 26		N PH ZE	
25	Apollodotos II	25, 26	over 13?	AP, PH	
26	Telephos	nil	over 21	Indian deities	
27	Vonones grp	25/27	over 16, 31		ZF letters
28	Azilises	26/7	over 27, 30	AP,D, ZE, ZL	letters
29	Hippostratos	25/28		HA,PH	letters
30	Azes	25/28, 29	over 25, 28, 29	ED, N, ZF, ZL	letters
31	Post-Herm/Euk	25, 29	over 27	ZE	letters

Plate 3

Dynastic 'Type' Key

AS = Athena seated, AP = Pallas Athena, AF = Pallas facing, AR = Artemis, D = Dioscuri, H = Heracles, HA = Hariti, N = Nike, PH = King on Prancing Horse, ZE = Zeus enthroned, ZF = Zeus Facing, ZL = Zeus left, and ED = Enthroned female deity

☐ = Issued square silver coins

God	Conqueror	Invincible	Victorious	Just	Saviour	Illustrious	Great
ΘΕΟΥ	ΝΙΚΑΤΟΡΟΣ	ΑΝΙΚΗΤΟΥ	ΝΙΚΗΦΟΡΟΥ	ΔΙΚΑΙΟΥ	ΣΩΤΗΡΟΥ	ΕΠΙΦΑΝΟΥ	ΜΕΓΑΛΟΥ
<i>Diodotos II c</i>	(<i>Antiochos c</i>)				<i>Diodotos I c</i>		
<i>Euthydemos I c</i>		<i>Demetrios I c</i>			<i>Pantaleon c</i>		<i>Euthydemos I c</i>
Antimachos I			Antimachos II	Agathocles	Apollodotos I		
				Zoilos I	Menander *		Thrason
		Lysias	Antialcidas *	Theophilos *	Nicias		
		Philoxenos *			Diomedes		
		Artemidoros		Menander II	Hermaios *		
		Demetrios III			Strato *#		
				Heliocles II #	Polyxenos		
			Epander **		Peucolaos *		
	Amyntas #			Archebios *#	<i>Apollodotos II</i>		<i>Apollodotos II</i>
					<i>Hippostratos</i>		<i>Hippostratos</i>

Plate 4 Greek titles used on Bactrian and Indo-Greek coins

c = Title found on Pedigree coins of Agathocles/Antimachos.

The title ΑΥΤΟΚΡΑΤΟΡΟΣ was used solely by Telephos just as ΕΥΕΡΓΕΤΟΥΣ was used only by Telephos.

* = Types of this monarch imitated by Maues (or imitate Maues), # = Types imitated by Vonones,

bold = issued Attic coins (below the line - all above are Attic)



Monogram 2

is similar to (1) and it was also used by Menander, followed by Nicias (Column B). In ONS 170 (p. 17, coin 22) I illustrated a unique drachm of Nicias with reverse 'King on Prancing horse' about which I observed then that its depiction was much closer to that on the coins of Antimachos II than the depictions used by later kings. I suggested an earlier date for him and I think that when we compare hoard 10 with hoards 11 and 12 we can be sure that he precedes Philoxenos who used the same reverse 'type'. In fact we have thus a possible direct link - Antimachos II - Nicias - Philoxenos. Of Nicias' other two silver types, one shows a three quarter facing Pallas Athena which presumably has some connection to the same deity appearing on Menander's coins. The other shows a soldier with palm which could be a representation of Alexander but may be a reference to the all-conquering Menander.

This monogram was also used by Theophilos - see next.



Monogram 3

Plate 6 shows that there is a split between the monograms that postdate Menander and those that precede Philoxenos. One group falls to Lysias and Antialcidas (columns E - J), the other to the ephemeral rulers Thrason, Nicias and Theophilos (A - D). The fact that Menander had used most of the monograms adopted by his successors would seem to confirm that his empire was split on his sudden demise, as reported by the Indian sources. This monogram, like the last, was used by Theophilos, Nicias and Philoxenos. It isn't possible to be 100% certain which of the ephemeral rulers Theophilos and Nicias came first since no overstrikes have surfaced and the hoard evidence is ambiguous. Theophilos adopts the Heracles type of Zoilos on his silver and the Heracles head obverse on one of his Æ issues as on Zoilos' Æ. That and the fact that his Attic coins follow the type of Apollodotos would seem to place him earlier than Lysias chronologically. Perhaps therefore his very short reign predates, just, that of Nicias too. In which case he may well have been contemporary with Menander. Nicias' coins exhibit some unusual letter variations, as do those of Antialcidas and this also hints at their possible sequential order. The monogram appears again, on the Æ of Diomedes, together with a Greek sigma (monogram 19) which was also the most popular combination on the coins Philoxenos. I have suggested elsewhere that the combination of Sigma with other monograms may be due to their being struck in a travelling 'camp' mint (DIG p. 23). Since the monogram then disappears this would seem also to be confirmation that Diomedes preceded Hermaios. Hermaios acquires all but two of Diomedes' monograms. The exceptions being this one and the Kappa-Rho (9) monogram (though see overstrike (7, i). Diomedes and Hermaios share the same epithet and this is another reason for proposing that they succeed one another.



Monogram 4

This monogram is unique to Theophilos



Monogram 5

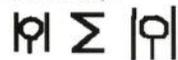
This pair of monograms is limited to Lysias (silver and Æ) and Antialcidas (Æ only). This clearly fixes them together. The rare coins of Strato bearing a similar monogram are in fact a different pair with the 'A' having no tail to the left leg and having a diagonal central bar (see Bop. & Rahman coin 419). This 'A' is more like that found on coins of Azilises (ISCH 50.1) and the combination may follow that of Maues (ISCH 2.5).



Monograms 6, 7 These monograms are similar to (2) but with

straight sides and sometimes without the vertical line in the centre (hard to be sure on some drachms which variety is meant). Antimachos II, Eukratides I and Menander all used (6) but only Menander used (7). They could therefore represent more than onemint/officina. (6) is the only monogram shared by both the groups Nicias/Theophilos and Lysias/Antialcidas and Menander struck his Attic helmeted spearthrunder tetradrachm with it. It is interesting that none of this pre-Philoxenos group of monarchs share the same titles, Thrason, Theophilos, Nicias, Lysias and Antialcidas. It certainly cannot be ruled out that there may have been some form of joint rule between some of these kings. The coins of Nicias and Theophilos bearing this monogram are rare, as are all coins of those kings, but of Lysias we have only Æ, no silver. Could this mean that his status was inferior, or that he only acquired the 'mint' at the last moment? Antialcidas struck plentifully in both metals, silver and Æ. Two mules exist in Æ of Lysias and Antialcidas, one each bearing their obverses, suggesting that they *are* mint errors and not coins suggesting one ruler having predominance over the other. The two rulers were obviously very close chronologically. The fact that Lysias' types follow closely those of Zoilos and his Attic coins bear monogram (5) only known in copper for Antialcidas may suggest that of the two, he comes first.

After Antialcidas (hoards 8 and 9 where there are no Philoxenos coins), came Philoxenos, then Diomedes, Hermaios and (monogram 7 only) Strato. A form of the monogram also seems to appear on coins of Artemidoros (23, 55 - who is contemporary with Hermaios).



Monogram 30 (and 8)

This monogram was used by Menander on its own or in combination with another monogram or letter (as 30, above). It appears on a few rare tetradrachms with monogram 1. The only other occurrence of the monogram is on the coins of Lysias and Antialcidas, confirming their proximity to Menander. The fact that monograms 1 and 8 are combined on some of Menander's coins and that our two groups of successors, Thrason/Nicias and Lysias/Antialcidas acquire them separately may be further evidence that the successors were in some way 'joint' rulers.



Monogram 9

This is clearly different to monogram (10) in that the extra vertical line in the Kappa, which makes it resemble an 'A' on its side, is missing from that monogram. They do however seem to be connected or related and they both sometimes appear jointly with other monograms (12, 26, 42). One other form (25) may also be a late derivation of the same monogram.

In its sole form the monogram was used by; Demetrios I, Eukratides I, Menander I, Lysias, Antialcidas, Philoxenos, Strato, Heliocles II and Archebios. It is a very rare monogram for Archebios but 25 is common and may therefore be the latest version of the monogram. Strato's coins using this monogram are only of his late eastern (with Epiphanes epithet) issue and it is the copper of that issue that is found overstruck on Heliocles II's coins (overstrikes 6, i and ii).

We therefore have two gaps in the sequence - Apollodotos I and Antimachos II struck no coins with this monogram and then a gap comes in the period after Philoxenos, there being no examples of Diomedes and Hermaios nor the early issues of Strato. The first gap may be accounted for on geographical grounds - that Eukratides held sway over this area and it never came under the purview of his two contemporaries. The overstrike 7i, as previously mentioned may be of Artemidoros over a Hermaios and Calliope coin bearing this monogram. A similar gap occurs for the next monogram and one may conclude that Artemidoros, Maues and possibly his predecessors, made some inroads at this time. Maues used monograms (24 and ISCH 2.6) that may possibly be connected. There is also the strange monogram of Menander II (45) that isn't

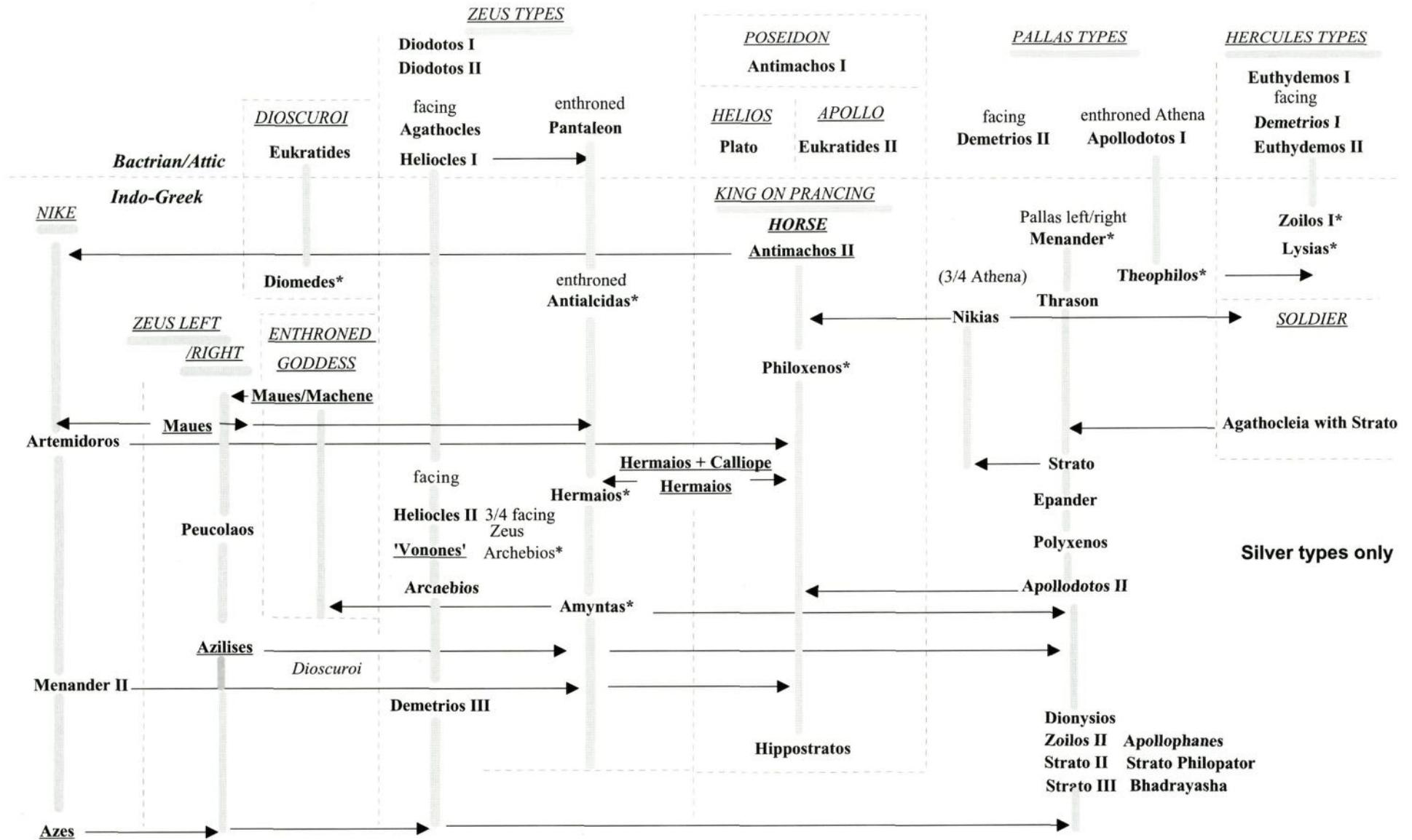


Plate 5 Dynastic types in the Indo-Greek/Indo-Scythian succession Maues king's name underlined indicates no portrait - coins with 2 types. * = Attic coins known

far removed from this one. On the very earliest Posthumous-Hermaios coins there is also a monogram (CHIS p. 6, 15) which certainly has the Rho-Kappa as part of it.



Monogram 10

As with the last monogram the story of this one begins in the Bactrian period, but a generation earlier with Euthydemus I. In this form it was also used by Demetrios I, Euthydemus I, Agathocles, Antimachos I and Eukratides I. This variant is known to be used by Apollodotos I, but not by Antimachos II nor Menander. This might be evidence that Apollodotos survived through Menander's reign and wasn't simply displaced by him. No Antialcidas coin is found with this variant monogram and only one doubtful Lysias \AA . Philoxenos followed and he also issued coins with an additional Sigma (12). Thereafter comes one rare Diomedes drachm and then the same gap as for the last monogram. Strato issued a few late silver coins as did Polyxenos, confirming their close proximity. Epander used the monogram jointly with his own rare monogram (26). No Heliocles II example has surfaced so far and the fact that Polyxenos adopted the last epithets of Strato (see **Plate 4**) probably means that he was contemporary with Heliocles and may have been a joint ruler. Heliocles may have ceded the 'mint' to him. As with monogram 9 this is fairly scarce for Archebios and more often occurs jointly with another monogram (42).



Monogram 11

This monogram is recorded by OB in his BN catalogue for Eukratides (BN series 8) but on the illustrated coin (ANS collection, 484) note the two dots on either side of the monogram - the style is crude and it may be just a poor representation of the usual monogram for that type. OB's Series 19F also is most likely a misread monogram on a posthumous type.

The series really begins with Philoxenos and is followed, as we would expect from the hoard evidence, by Diomedes and Hermaios. There is a rare type of Hermaios coin (CHIS H2dT, pl.1) known from an Utmanzai forgery which means there is almost certainly a genuine coin out there to be found someday. The coppers are known but all the other silver (CHIS pl.IV, issue 9) are almost certainly 'Posthumous' types. These may postdate the very rare Strato coins with this monogram which are only known for his very first issue. Perhaps Heliocles II recovered the area temporarily since he issued a few rare coins with this monogram too. Demetrios III is an enigmatic as well as ephemeral ruler who issued coins with a variant of the monogram, (28).



Monograms 13, 14

Though this monogram, or letter Sigma, appears sometimes on its own, it often appears in combination with others or slightly amended (as 13). Menander seems to have spent most of his career in conquest, as did Eukratides before him. If, as I believe, the appearance of this letter signifies a 'camp' mint then it would suggest that those kings who used it, especially in combination, had to keep moving in order to maintain and protect their kingdoms. In column P we see Philoxenos followed by Diomedes but then no Hermaios before Strato. We do find a Sigma in combination with monogram 15 (see 31) for Philoxenos and then Hermaios and we know that Hermaios' coins were overstruck by Artemidoros who makes much use of monograms 14 and 13. In fact Artemidoros seems to be the most peripatetic of all the Greek/Scythian kings (see ISCH II, p. 231, mons. 4 and 5 on the table). He makes prolific use of monogram 13 in succession to Philoxenos and Hermaios (the latter as mon. 47). After Strato, monogram 14 appears on the coins of Heliocles II either alone or in combination (29). It occurs frequently on the overtypes of the Heliocles II on Strato \AA (overstrike 12), as would be logical for a camp mint striking an emergency coinage.



Monograms 31, 15

Philoxenos was the first to use monogram 31, followed by Hermaios. No Diomedes coins are known at present and, unless some eventually surface, we need to account for this gap. Diomedes and Hermaios use the same titles (**Plate 4**) which suggests, if I am correct about their usage, that they follow one another. To account for the gap one may assume that Diomedes was a co-regent with Philoxenos but died before he had occasion to use it himself, and that Hermaios replaced him. Or perhaps 31 (and 47) were temporary camp mints. The use of 'King on Prancing Horse' obverse type on some of Hermaios' coins suggest that his links with Philoxenos (through Calliope) were very strong. Under Hermaios the Sigma is dropped and monogram 15 used alone. As such it appears not only on Hermaios' regular coinage but his joint coinage with Calliope and then the similar joint coinage of Agathocleia with Strato. In fact, apart from one extremely rare issue, it is the principal monogram for all the Agathocleia coins and the rarest Strato issues - the principal mint? It figures prominently on both under and over types of the Heliocles II overstrikes on Agathocleia and Strato coins. Heliocles II was the last king to use the monogram.



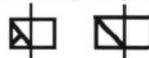
Monograms 26, 27

In ONS 172, p. 17, coin 45, I published the first known non-Epander coin to bear monogram 27, on a coin of Strato. Overstrike (13) puts Epander in the time of, or after Strato and overstrike (9?) and (17) place him in the time of or before Heliocles II. Since Strato and Heliocles overlap at the end of Strato's reign we can place him as 'joint' king at some time during this changeover. His epithet clashes with neither king. His silver 'Pallas' type associates him more with Strato, as does his use of Nike on his \AA , but his use of Bull and Elephant reflects more the types on Heliocles' \AA .



Monogram 16

Though this monogram appears on both Attic and Indian weight coins of Hermaios, for reasons given in CHIS pp. 29 - 30, I consider those coins to be Posthumous-Hermaios or Scythian issues. The same possibly applies to the coins bearing the name Menander, though these may have been issued by Menander II (see CHIS) who I consider to have been a scion of the house of Maues. The regular but rare issues of Amyntas with this monogram may be an indication of his genetic lineage as much as of his possible acquisition of territory. The lack of coins in the name of Strato and Heliocles II bearing this monogram indicate the probable correctness in my assumption that the coins bearing the name of Hermaios are posthumous issues in his name struck by the Scythians and are contemporary with the reigns of Strato and Heliocles.



Monograms 17, 18

As with monograms 10 and 11, these two are so similar that they are surely closely linked. Philoxenos was the first to use the monograms and in the form 17 struck Attic tetradrachms with it. His co-regent/successor Diomedes also struck an Attic tetradrachm similarly. The monogram form 18 allocated to Philoxenos is probably a mistake. Philoxenos struck no \AA with this monogram. Diomedes' coins are commoner with the two monograms but again there seem to be no \AA issues. All Hermaios' lifetime issues are known with the monograms but just a few incredibly rare \AA (see ONS 171, p. 12, coin 29).

Under Strato the 'mint' expands and we not only see more silver, and a late issue of bronze, but several variations of the monogram such as 37 and 33. This last form appears on a joint Agathocleia

with Strato tetradrachm, the rarest type, with her name included on the reverse. We have seen above that Polyxenos squeezes between Strato and Heliocles II so that his rare silver and Æ comfortably follow next. Heliocles II not only struck in both metals with monogram 17 but added a few new variants to those used by Strato, such as 50 and possibly 29 which may also be related.

Peucolaos combined 17 with 33 and since (plate 4) his titles seem to be adopted from both Heliocles II and Polyxenos and his coins are overstruck by Archebios, - we can place him just after Heliocles II. He seems to come at the beginning of Archebios' reign. Archebios used the monograms 17 and 33 both singly and combined on his silver but only separately on the Æ. Both Archebios and Amyntas struck Attic coins with monogram 17 and Amyntas issued both his reverse types using it. The use of monogram 18 on the coins of the later kings isn't so certain since the tiny diagonal bar is often hard to distinguish. The Menander II coin with monogram 34 may be unrelated to this monogram, or be a blundered version?



Monogram 22

This monogram is similar to 16 in appearing on Posthumous Hermaios coins (see CHIS pp. 31 - 32). The Strato coins bearing the same monogram I also consider possible imitations though it is likely that both issues fall in the *time* of Strato. These coins are followed by issues in the name of Vonones with Spalahores and possibly Apollodotos II (mon 38 - see DIG pl II, 14). The next issue to bear a monogram like this is one of the earliest issues of Azes (ISCH issue 76 - see Vol. I, p. 66).



Monogram 52

Monogram 52 is generally accepted as being used in Taxila and since it is coupled with monogram 54 on a coin of Apollodotos II (mon 53) it is thought that they are both related. They certainly are the commonest monograms used by Maues on his silver coins. The origin of 52 may be monogram 20 used by Eukratides and it is close also to 36 used by Philoxenos. The commonest copper coins of Maues are ISCH issue 5 and along with issue 6 they bear the simple legend 'King Maues' plus the monogram 52 (apart from just two known with monogram 24). We place Maues before Strato and Hermaios because his son Artemidoros overstruck Hermaios with Calliope silver. Since ISCH 5 and 6 are Maues' *earliest* coins I think that it is safe to assume that he struck them in this pre-Hermaios period. It is interesting that on issue 6 we have a bowcase and on the copper of the next ruler to use this monogram, Strato we also find a bowcase. Maues' and Strato's reigns overlap but Strato only acquired this monogram towards the end of his reign (when he adopted the epithet Epiphanes). Incidentally, in Parthia, Mithradates II (123 - 88 BC) introduced the title Epiphanes and also, around 109 BC, 'King of Kings'. Earlier numismatists assumed that Maues adopted this title in imitation of Mithradates but after his death (hence the dating of Maues c. 80 BC in most catalogues) but I suspect that Mithradates, who settled many Scythians in his realm, could just as easily have been imitating Maues. The accommodation that Maues may have made with the Greeks may also have influenced Mithradates to adopt the title 'Philhellene' on his last issue. One issue of Mithradates is unique in the Parthian series (Sellwood 25³⁹) in that on it he bears the title 'Soter', the commonest Indo-Greek title.

In ISCH volume 1, pp. 29 - 35 but particularly Figures 1 and 2 and Table 4, I show that Maues' successor in Hazara was Azilises. The monograms adopted by Azilises do not occur on 'Indo-Greek' coins. In the North Western region we find that Telephos acquired monograms 40 and 24. We *know* that Artemidoros was Maues son but *none* of his monograms were acquired by him. Apollodotos II acquired monogram 54. These might *all* have been his sons, or relations - could Strato also have been related?

Strato was succeeded by Polyxenos. Interestingly, his Æ imitate the Maues reverse ISCH 9.1 exactly, and bear this same monogram.

Heliocles II struck coins next (and his Bull/Elephant Æ types mirror the same types of Maues), and he was followed by Archebios. The only other person to use the monogram was Amyntas whose Æ is closely related to both that of Hermaios and that of the Vonones group. With the latter coins the question is - who imitated who?

In ISCH I identified three different regions where Maues ruled and which have distinctive coinages. We cannot assume that he began his rule at the same time nor ended it simultaneously in all three regions. However, he seems to have relinquished Taxila first, to Strato, but it is certain that these three regions all fell into different hands after his death.



Monograms 54, 55

Maues introduced monogram 54 and it appears on his joint coins with Machene. On his demise it would appear that monogram 54 went to Apollodotos II (see further comment under Apollodotos II below). The monogram 54 becomes reversed to monogram 55 and is then passed to Hippostratos. We know that Azes, Azilises' successor overstruck coins of Apollodotos II and Hippostratos and so we have a time frame that puts Apollodotos and possibly some part of Hippostratos' reign against that of Azilises, successor of Maues. For monogram 54 we have a simple succession Maues - Apollodotos II - Hippostratos and we can be confident that Azes then followed.

THE MONARCHS AND THEIR SEQUENCES

I shall take 130 BC as the base line for the demise of Menander but of course, that date is by no means certain. The next fixed point only comes in 58/7 BC with the inception of the Vikrama/Azes era and all other dates are guesstimates. The reader should bear this caveat in mind and that the length of reign for each monarch, rounded off, is based upon a sense of proportion related to their coin output, variety and stylistic evolution. However, the overall *order* is sound and in the future only minimal tinkering and adjustments should be necessary as new material surfaces.

Thrason c.130 BC

The sole coin known for this king shows a young boy, identical to Menander, and the 'newest' coin in a hoard of coins containing no other coins later than Menander. He uses a monogram (1) that was a principal one for Menander but which only one other ephemeral king, Nicias, subsequently uses. I think that he must have been a son of Menander, especially since his types were identical, and that his life was short. His title - Megalos - was the same used by Eukratides and could only have been adopted after that king's demise. Whether he was elevated on this latter occasion, as joint king with Menander, or subsequent to his father's death shortly afterwards cannot be determined.

Theophilos c. 130 - 129 BC

As has already been pointed out, Menander's empire appears to have been divided upon his death and Theophilos seems to have been one of the inheritors. He struck Attic and Indian standard coins bearing different epithets for which there may have been just one precedent - Antimachos Theos/Nikephoros. Like that king his Attic epithet is unusually arrogant and more importantly his reverse type on those coins links him to Antimachos's possible brother, Apollodotos I. On his Indian standard coins he adopts the Heracles type of Zoilos I which is the principal Euthydemid type. He also adopts Zoilos' epithet - Dikaios. On his copper he also portrays Heracles on the obverses and on one issue the deity wears a lions-scalp headdress, as on the Zoilos coins. The reverse of the latter coin bears a club which is a reverse type for some Menander coins (BN série 28). In hoard 11 his coins appear alongside those of the other main successors of Menander with Philoxenos' coins being the latest in the hoard. Apart from monogram 4 (unique to Theophilos) and the main monogram 6, he shares monograms 2 and 3 with just Nicias and Philoxenos. One other distinguishing feature on his

coinage is that he uses the Kharosthi form *Dhramiasa* on some of his coins while on others he uses *Dhramikasa* - the form which all subsequent monarchs used. This variation occurs on the coins bearing monogram 6 and I suspect that for a short while Theophilos held sway there in the time of, or as a successor of Menander, probably as the heir of Zoilos. His \AA coins are on the new 8.5 gm small flan module.

Nicias c. 129 - 125 BC

Nicias struck coins bearing the monograms (1, 2, 3 and 6) of the two previous kings and adopts the title Soter used by Menander - another son? His portrait shows a youngish man. Unusually, he adopts three reverse types - a Pallas from Menander (but aggressively advancing forwards), a 'King on Prancing horse' (from Antimachos 'Nikephoros' - and very close to those coins in style) and a new type - 'King standing left' (depicting Alexander or Menander?). On his \AA he has two varieties - one portrays Poseidon (the deity from Antimachos Theos' silver) with anchor and dolphin reverse. The Dolphin had appeared on BN série 25 of Menander. The other \AA have the bust of the king on the obverse and 'King on Prancing horse' reverse as on his scarcest silver. It is amongst this last issue that one finds coins with unusual Greek letter forms that link them to a few rare coins of Antialcidas. This may be a sign of the disturbed times with local die cutters having to be employed who used colloquial writing forms in place of the 'official' script? In hoard 10 we see the coins of Nicias alongside those of Antialcidas and Lysias as the latest in the hoard, with no Philoxenos coins present. Despite the Swat hoard which contained some previously unpublished varieties, the coins of Nicias are very rare.

Lysias c. 130+? - 125 BC

Lysias' and Antialcidas' coins are often found together and in hoards 8 and 9 they were the latest coins in the deposit. They both struck coins using the same monograms, mostly adopted from Menander and Eukratides (6, 7, 8 and 9) but one (5) being restricted to their coins only. They both struck round and square \AA and mules exist with each king's obverse predominating over the other's reverse. The clear conclusion is that they must have been contemporaries if not joint kings. The overstrike of an Antialcidas drachm over a Lysias one (not listed here - see note 32, Bop. coin 11 - possibly doubtful) may suggest that Lysias started his reign first. His Attic tetradrachms have the legend arranged as on the late Eukratides II coins, without the name in the exergue as it appears on Theophilos' some Antialcidas and all subsequent Attic coins. His Attic obverses draw inspiration from Demetrios' Elephant scalp headdress type as well as the heroic spearthrunder types of Eukratides and Menander. His reverse is uniformly the Euthydemid Heracles type and his epithet only appears previously on the Agathocles pedigree coins depicting Demetrios. He obviously saw himself as an heir of Demetrios. On some coins he uses monogram 10 which doesn't appear on either Menander's nor Antialcidas' coins, though on some \AA it can be hard to distinguish it from monogram 9. His \AA show Heracles bust with club on the obverse (similar to one issue of Theophilos) and 'Elephant Standing Right' reverse. The scarce round coins often have blundered legends.

Lysias and Antialcidas were the last rulers to strike Attic silver fractions, Lysias striking a hemidrachm (Bop. & Rahman coin 1069 - note 17) and Antialcidas striking drachms (BN série 4). The two rulers seem inextricably linked but with Lysias being the earlier of the two.

Antialcidas c. 130 - 120 BC

Antialcidas' coins are both plentiful and varied suggesting a long reign. His epithet Nikephoros was used by Antimachos in India and Antialcidas has another link to Antimachos - he is the last king to depict himself wearing a kausia on Attic coins. His enthroned Zeus type on these Attic coins and also on his Indian drachms is reminiscent of that on the Pantaleon coins, but Zeus holds Nike, not Hecate. Prominent on all the coins is an elephant, mostly just the forepart, but on the Indian tetradrachms the elephant takes a much

more dominant role. A few rare \AA also bear 'King's bust right'/'Elephant right' and these may be provincial issues since they have otherwise unlisted monograms and the Greek uses cursive forms not seen elsewhere (see also Bop. & Rahman coin 447 for a drachm with cursive letters, I have a 3.97 gm \AA with the same monogram⁴⁰). The main \AA types, on both round and square coins, are Zeus with thunderbolt on the obverse and the caps of the Dioscuri on the reverse. This latter was a type used only by Eukratides previously (on obols and a few small \AA). As with Lysias there seems to be a determination to demonstrate Antialcidas' strong Euthydemid legitimacy, but with an appeal to the family of Eukratides on his \AA ?

Philoxenos c. 125 - 110 BC

Of all the monarchs to follow Menander, Philoxenos struck coins bearing the largest variety of monograms. On **Table 6** one can see that for monograms 1 - 3 he followed Nicias and that for monograms 6 - 10 he followed Lysias/Antialcidas. He also introduced several new monograms which may have been issued in the places where some of the discontinued ones had been used. His addition of a Sigma to monogram 3 (to become 19) which was then adopted by Diomedes links those two sovereigns but also the Sigma may indicate a troubled time for Philoxenos if it is, as I suspect, a camp mint issue. I would assume that he began his career wherever monograms 2 and 3 were minted and that he was linked to the house of Antimachos (Nikephoros) as is evidenced by his use of the 'King on Prancing Horse' type. His usual \AA show a female deity holding a cornucopia on the obverse and we can see that he is chronologically close to Theophilos (who also had Antimachos links) whose \AA depict a cornucopia on the commonest issue.

We have no overstrikes to guide us but the hoard evidence seems clear - hoards 11 - 13 contain coins of Philoxenos plus the previously listed kings whereas the lower numbered hoards contain coins of those kings but not Philoxenos.

Whereas Lysias and Antialcidas had struck \AA with Elephant reverses, Philoxenos' coins have a Bull, apart from a very scarce issue depicting Helios (Artemis?) and Nike. Since Philoxenos and Lysias share the same epithet the former probably succeeded the latter.

There are five different issues that bear the Sigma (camp) letter either alone or in combination with other monograms and it is possible that it is at this time when these Indo-Greeks south of the Hindu Kush first experience problems with a new Scythian threat, possibly from Maues himself.

Diomedes c. 115 - 105 BC.

There are no monograms used by Diomedes that weren't used by Philoxenos before him, but in some cases the successor of Philoxenos is not Diomedes but Hermaios. In the former cases Diomedes is followed by Hermaios, except monogram 10 and the Sigma camp mint where Strato is so far the successor. That Diomedes, Hermaios and Strato all call themselves Soter poses a problem.

With the hoards we see that there are those containing Philoxenos and his predecessors but not Diomedes and Hermaios but the reverse is rarely the case and so we can assume that one of or both Diomedes and Hermaios survived after Philoxenos' demise. The coins of Diomedes are scarce and their inspiration and types are derived from the coins of Eukratides. It seems fairly certain that he was from the same family line. His \AA adopt the same Bull reverse however that Philoxenos had used. I suspect that Diomedes was the joint king of Philoxenos since there is a division in his coinage - it is only his \AA that exhibit plentifully monograms 6, 19 and 14 shared with Philoxenos while his silver with 17, 18, and 11 are much rarer for Philoxenos (see Mon.31). Only monogram 10 is common to both in silver.

Hermaios (and Calliope) c. 105 - 90 BC

The actual lifetime issues of Hermaios are rare (see CHIS) and more of the coins in his name are 'Posthumous issues' than previously thought. These latter coins indicate that the Scythians in

the West acquired a strong foothold in what had been Indo-Greek territory from about this time. The imitations are associated with the Vonones family of Scythians (who adopted the same monograms as on the earliest series). Further East we have the other Scythian group under Maues and his joint kings and it is Maues' son Artemidoros who overstruck Hermaios (with Calliope) 's coins.

The coinage becomes complicated during this phase of disturbance and it is difficult to determine to which racial group some kings belong. There is no doubt that the reverse 'King enthroned' type of Hermaios is matched almost exactly by the same on the reverse of Maues' issue ISCH 2, down to the detail, particularly of the throne legs. The joint issue coins of Hermaios and Calliope have a 'King on Prancing Horse' reverse and I conclude that these coins represent an alliance with Calliope being a daughter of Philoxenos. The remarkable BN série 6/7 of Hermaios (in his name alone) are surely medallic and struck for propaganda purposes, with the 'King on Prancing Horse' (Philoxenos connection) given the more important obverse. Do these represent an alliance between Philoxenos and Maues through their children - to oppose the other threat from the Vonones group of Scythians pushing from the West?

Stato and Hermaios seem contemporaries but they use the same epithet, which contradicts what seems to have gone before - that no two contemporary kings used the same title. Was it because one or both of them didn't understand the full significance of this and was that why Strato adopted 'and Dikaïos' shortly into his reign?

It is possible that Hermaios was a direct successor of Philoxenos, without the '5' year gap implied above, since he appears to acquire certain monograms (7, 14, 11) with no Diomedes coins intervening. Hermaios' Æ depict an Iranian deity Zeus-Mithras on the obverse and a horse on the reverse. The horse appears thus on coins of Maues (ISCH issue 6, with Bowcase reverse, and ONS 173, p. 16, coin 48 with Heracles reverse). The Maues issue 6 is very close to a copper of a Parthian ruler which I published in ONS 171, p. 13, coin 39 which reads 'Brother of King Arsakes, lover of the Greeks'. This latter epithet had been used c. 138 BC by Mithradates I but only reappeared again towards the end of the reign of Mithradates II (123 - 88 BC) when he settled Scythian nomads in Seistan, previously a Bactrian province. An earlier issue of Mithradates (Sellwood 24.33 - 6) depicts a horse similar to the Maues Æ with Heracles obverse above. Another Parthian issue ISCH 191.1D bears the title King Arsakes Theos. It is uncertain who struck these coins. Though there is a very rare silver issue of Phraates III (70-57 BC, Sellwood 39) that uses it, Theopator is a common epithet on earlier Parthian issues. There seems an inescapable Parthian and Scythian influence on Hermaios' coins.

The Attic coins bearing Hermaios' name are stylistically poor and the monogram on them seems to me to fall into the earliest period of Posthumous issues.

Maues c. 125? - 85 BC

At this point we need to integrate the ostensibly Scythian coinage of Maues into the 'Indo-Greek series. On the strength of overstrike 7 we can place Artemidoros' father as a contemporary of Philoxenos and now we can understand why he too struck square drachms ISCH issue 2aD. Maues doesn't acquire any territory (monograms) from Philoxenos, unless monogram 52 is derived from Philoxenos' extremely rare monogram 36.⁴¹ Maues himself issued joint coins, with Machene (and like the Nicias coins they exhibit an early use of square Greek letter forms) and they are the precedent for the Hermaios with Calliope and subsequent Strato with Agathocleia coins. Machene was probably a daughter of one of the Indo-Greek houses and that would be why Maues struck those coins to advertise the fact. On Table 4 of ISCH Volume I, p. 32 I have shown how Maues' kingdom was divided into three parts and how he used his Æ to appeal to the different subjects sensibilities in each of those parts before trying to introduce a general Æ coinage with Poseidon/Yakshi types. I believe that the subsequent coinages will need to be seen as a 'whole' in future, rather than be divided into Greek and Scythian since there are many aspects of each rulers

coins that point to alliances - multiple reverse types, multiple epithets and non-Greek devices on the Æ - such that it becomes difficult to be certain to which group they belong. Maues' initial coins bear the title 'King' only but he assumes the title 'King of Kings' long before his contemporary Mithradates II of Parthia (123 - 88 BC) assumed it in c. 109 BC. If Maues ruled through joint kings, some of whom were his sons and others due to marriage alliances, he would have been setting a precedent that Azes and certainly Gondophares I later followed. He would have certainly earned the sobriquet 'King of Kings'.

Artemidoros c. 100 - 80 BC

If it wasn't for the Sarai Saleh hoard, the coins of Artemidoros would still be exceedingly rare. The amazing revelation was that there is so much variety in his coinage. In the Sarai Saleh hoard his coins ranged from worn to mint condition. He seems to have had a roving life seeking support from wherever he could find it. His reverses mainly appeal not only to the followers of Maues ('Nike' - and the statement of his parentage on one Æ issue - see page 23) but also the Greeks ('Artemis' and 'King on Prancing Horse' on the silver and 'Caps of the Dioscuri' on Æ - ONS 171, coin 37). His usual Æ reverse is the same Bull seen on Philoxenos and Diomedes coins which just predate his coinage. His commonest monogram seems to be the Sigma 'camp' mint monogram and only one monogram, 43, was adopted by another king - Azilises, Maues' principal successor in Hazara.

The Shinkiari hoard seems to place Artemidoros in this early context, being found with coins of Philoxenos and Menander.

Menander II c. 90 - 80 BC

Finding coins of Menander II⁴² in the Ambala hoard (26) alongside those of Artemidoros indicated that they may be related. They both used the 'King on Prancing Horse' and 'Nike' as reverse types. Menander II also uses a 'King Walking Right' on his Æ (BN série 7) similar to that on the drachms of Agathocleia with Strato, the reverse of which bears a lion resembling Azes issue ISCH 38. His other Æ has a lion reverse too but a 'Standing Pallas' obverse (BN 3) which seems to be the precursor of the similar reverse on the Æ of Amyntas (and Vonones). His rarest silver has an 'Enthroned Zeus Nikephoros' as found on Amyntas' coins, but with an Indian Chakra or wheel as appears on Maues issues 22 and 23 (ISCH). All these points indicate a time frame around or just after the period of Strato I. Many of his monograms (59, 60 and 61) are close to or identical to those used by Amyntas.

Telephos c. 80 - 70 BC

The closest coins to those of Telephos are the issues (ISCH 34) of Azilises which have similar obverses. On the reverse of the drachms is a river deity (note the dolphins under the figure on the Telephos coins) which appears in a similar form on the coins of Hippostratos (ISCH G-30b on p. 230). Despite the Greek name, this is a 'Scythian' coin in bearing no portrait. The fact that this and the issues of Menander II are drachms only may also indicate a subservient status to another king.

Telephos' Æ issue (BN série 3) has a 'Zeus Enthroned' obverse in the style of early Posthumous Hermaios coins and on the reverse a naked Brahman.⁴³ The monograms on Telephos' coins follow directly those of Maues. The overstrike of a copper of Archebios by Telephos determines that he was still regnant during the former kings reign.

Demetrios III c. 65 BC?

We have no overstrike nor hoard evidence for the dating of Demetrios III. His title and the obverse type of his copper show that he is imitating the coins of Demetrios I. In DIG I reported a coin of Demetrios (G-26, p. 229, ISCH) found at Matta, 30 km from Mingora in Swat together with a worn drachm of Heliocles II. If the coins were actually buried together this would confirm the late position of Demetrios and his monogram (28) would be the final form of monogram 11. His reverse type is the 'Facing Zeus' type found both on the coins of Heliocles II and of the Vonones group.

Most unusual is his tetradrachm which is the *only* Indian standard tetradrachm to show the king in a kausia.

I don't exclude the possibility that this king is misplaced.

Strato (and Agathocleia) c. 105 - 85/80 BC

Strato's silver coinage is amongst the most interesting and varied of all the Indo-Greek series. His coins also show a definite ageing of the king from a boy to a man with beard. The Agathocleia coins *all* bear the name of Strato on them and there are no coins of her reigning alone. Only on her drachms does the 'Walking King' type occur and this figure, as previously stated, could represent either Menander or Alexander. Since her name and the Heracles type adopted on her \mathcal{A} imply a Euthydemid connection, perhaps after all it *is* meant to be Alexander since on his Pedigree coins her namesake Agathocles claimed a right to rule that went directly back to Alexander.

The Heracles connection is retained on the \mathcal{A} issued in the name of Strato alone, but the reverse has Nike. Is this, as the Pallas on the silver seems to be, a link to Menander, or is it a Scythian Nike connection as on the Artemidoros coins? On BN série 31 \mathcal{A} E the Apollo/Tripod types are closest to those of Maues rather than Apollodotos I and BN série 32 with its bowcase reverse has definite Scythian connections.

Strato is called 'Soter' on both his earliest coins and also his joint coins with Agathocleia. This title was used by Hermaios and perhaps this suggests that they were in conflict. Strato overstruck Hermaios' predecessor, Diomedes, and perhaps his joint coins were issued as a riposte to the joint coins of Hermaios and Calliope - they both share the same monograms. The only other possibility may be that they were *both* sons of Maues and ruled jointly - the business of clashing titles might not have meant so much to a family more Scythian than Greek in culture. If I am correct that the Hermaios Attic tetradrachms were Scythian issues (post-Hermaios and struck by the western group of Scythians probably under the leadership of Vonones) then this might explain the lack of an Attic tetradrachm for Strato at this time (though this might prove to be a temporary aberration and such a coin be discovered in the future). Strato slowly increases his titles in Greek and Kharosthi and makes a great play of adopting the title Dikaios in *addition* to Soter by adding 'and' between the two titles, though he drops the 'and' later. His \mathcal{A} Apollo/Tripod issues correspond to a silver issue on which he uses Epiphanes in place of Dikaios. The coins bear different monograms to those bearing the Dikaios title and represent a different geographical area. This plays a part in Strato's relationship with Heliocles II since it is Strato who overstrikes Heliocles in this last region (overstrikes 6).

Polyxenos c. 85/80 BC

Polyxenos' coins appear in the same region as Strato's 'Epiphanes' coins, bearing the same monograms, titles and types. His portrait is sufficiently mature that one can dispel the idea that they may be father and son. The reverse of Polyxenos' \mathcal{A} is taken from Maues' ISCH issue 9. The coin that appeared in hoard 20 was so well preserved that it seemed to me that it postdated the Strato coins in the group. Hence I place this rare ruler at the end of Strato's reign and would ponder whether he was a younger brother.

Heliocles II c. 90 - 75 BC

Heliocles adopts as his reverse type the figure of 'Zeus Facing - holding a lowered thunderbolt' - identical to that which had appeared on the coins of Heliocles I. Since some portraits of Heliocles show him as a young man (BN plate 42, 1) it argues against him being the same person who struck the Attic tetradrachms from a much earlier date. However, bearing the same name, title and using the same types we can assume that he was from the same family line and possibly his appearance on the Indian side of the Hindu Kush was due to pressure from the Scythian nomads under Vonones. This Scythian king adopts exactly the same type on his coinage - not for genealogical or dynastic

reasons but because the 'Zeus facing' type was current and popular in the area he had come to control.

This invasion eastwards by necessity might be the explanation why Heliocles, above all other Indo-Greek kings, was so prolific at re-striking coins that he found in circulation. Perhaps the Dikaios added to Strato's coins was a political move on first encountering this usurper who bore that title? He clashed with Hermaios on the 'Soter' and Heliocles with the 'Dikaios'! The fact that Heliocles overstruck the joint \mathcal{A} of Strato with Agathocleia, which appears to date from early in Strato's reign may be a sign that this invasion took place fairly early on in Strato's reign? It would explain more easily the overstrikes on Hermaios' \mathcal{A} . Perhaps Strato was himself forced eastwards (where he then struck his Epiphanes coins). Heliocles issued his very rare Bull - Elephant \mathcal{A} (for local support?) in this area around Taxila (?) and one of the latter is the undertype of overstrike 6a. This indicates that Strato may have stemmed the tide of Heliocles for a while.

Hoard 20 suggests that Heliocles II may have outlived Strato but by itself is inconclusive.

Epander c. 80/75 BC

Epander's coins are rare and so far in silver, only drachms are known - as with Menander II and Telephos. He is closely linked to Strato through their use of monogram 27 (used by no other kings) and hoard 19 places him alongside and possibly just after Strato. The overstrike 13 might suggest the latter. He used the same reverse type on his silver coins as Strato but adopted a different epithet. He could well be a younger brother of Strato and have been his joint king who survived for a short while after him..

Peucolaos c. 75 BC

Peucolaos was probably from the family of Maues since he adopts the same form of 'Zeus left' found on that king's coins (though Zeus doesn't hold the torque which seems to be associated with that deity on most Scythian *regal* coins). His \mathcal{A} also depicts Artemis and an Indian deity. He could well be a son of Artemidoros. We have no hoard evidence to fix his period but his extremely rare tetradrachms are known overstruck by Archebios and in view of their rarity that must have happened when they were freshly current. His titles Dikaios *and* Soter (again, as on Strato's coins with the *and* included) possibly mean that both Heliocles II and Polyxenos who had used them previously were both now deceased.

Amyntas c. 80 BC - 65 BC

Amyntas adopted the epithet Nikatoros (Conquerer), not used by any of the other Indo-Greek kings - and his magnificent Attic Double Decadrachms (the largest silver coins in the ancient Greek world) suggest a king of special talents. His coins have strong parallels with those of Hermaios - the 'Enthroned Zeus' reverse on his silver and 'Zeus Mithras' obverse on his \mathcal{A} . The reverse of these \mathcal{A} (actually quite scarce) is the same Pallas type adopted by Vonones (ISCH 66 and 68).⁴⁴ Splicing Amyntas into the sequence is something of a problem. He overstruck coins of Heliocles II and Epander, which places him alongside Archebios, and his coins also use monograms only found on the coins of Menander II (60, 61, 34 - and possibly 16 - see CHIS p. 29) and yet the two principal monograms 52 and 17, he somehow shared with Archebios. It is at the latter mint that they *both* struck their magnificent Attic coins and, unusually, Amyntas introduced some extremely rare tetradrachms bearing 'Pallas Thundering Left' reverse (see ISCH G-27a, p. 229). Were these latter struck to demonstrate that he was claiming to be heir to Strato?

Archebios c. 75 - 65 BC

The reverse type adopted by Archebios is the 'Facing Zeus - with thunderbolt raised' - which next appears on a very early issue of Azes (ISCH 88) who we know is to follow shortly after. Archebios overstruck the coins of Strato, Heliocles II, Epander and Peucolaos which fairly certainly fixes his position to those monarchs. He adopted the epithets Nikophoros from Epander and Dikaios from

Peucolaos and Heliocles II. His position vis à vis Amyntas is not so sure - hoards 20 and 23 could place either monarch later than the other but equally, they may have been contemporary but ruling in different geographical locations. Some of Archebios' coins are in beautiful style and he seems to have expanded his empire for a while and introduced some new monograms (25, 42) and he struck coins using 25 in large quantity but of rather crude style. This may have been an emergency measure to pay for troops in a contest with Vonones and the latter struck coins that bear a monogram not too dissimilar (ISCH 65.1). Archebios was the last to issue coins bearing monograms 14 and 15

In CHIS I have shown how the throne of Zeus evolved over the period of the Posthumous Hermaios coinage and on Amyntas' coins the depictions mostly fall into the early period of imitation. Some thrones are drawn exactly as on the reverses of the Spalirises \mathcal{A} (ISCH 73) which come immediately before Azes becomes the latter's joint king (ISCH 74). It could be that Amyntas should be dated 5 - 10 years earlier than I have suggested here.

Apollodotos II c. 85 - 65 BC

Apollodotos' principal monogram - 54, shows that he was the principal heir to Maues in its use. His coinage is large and that particular monogram evolves into variant 55 which is then adopted by Hippostratos. There may have been a break in the coinage between these two issues, which could be expected in what were troubled times. Both monogram 52 and 54 had appeared on Maues' commonest silver but 52 passed to Strato. Only on one issue does Apollodotos use this monogram - ISCH G-30b - where it appears *together* with 54. This may have been because Apollodotos *claimed* it or possibly the split was amicable and he was acknowledging the fact. He calls himself Soter on his earliest issues (see ISCH G-30 for tetradrachm and monogram not in BN) but expands that to Philopater - Father lover. I cannot but think that this father must have been some relation of Maues if not Maues himself and coin ISCH G-30g might actually bear the father's name if only it could be deciphered. This coin, or rather medal, is a joint issue bearing the Kharosthi title *Mahatasa* only used by Scythian kings (and Hippostratos) and it also bears the monograms 54 and 52. The reverse resembles an Indo-Scythian type with 'King on Horseback with right arm outstretched (holding a whip?)'. A similar coin found in Taxila, ISCH G-30f seems also to be celebratory or medallion. Apollodotos' coins are found overstruck by Azes (ISCH Vol. II, P. 32, note 1) and one of his coins is thought to be overstruck on a coin of Maues (Overstrike 22). The fullest titles appearing on Apollodotos' coins include Megalos and by this time the Indo-Scythian kings Maues and Vonones, Azilises and later Azes were the only kings to use it on all their coins. It is a further clue that Apollodotos may have been Scythian.

A few new monograms of Apollodotos (ISCH G-30a, 30d and 30c) have surfaced in recent years and a clearer picture is being composed of how his kingdom spread. This isn't relevant to this paper however.

The \mathcal{A} of Apollodotos I was imitated by the Indo-Scythians (CHIS plate XX) in the west while Apollodotos II's \mathcal{A} was imitated in the East. His coins also can be found far to the south in Saurashtra in India where they were countermarked by one of the earliest Kshaharata kings (ISCH 300.5ii).

Hippostratos c. 65 - 55

The coinage of Hippostratos followed that of Apollodotos II and leads straight to that of Azes, who overstruck his \mathcal{A} . The shortest legend coins bear monogram 57 which becomes the principal monogram of Azes in Charsadda/Pushkalavati. These portray a Female Deity holding a cornucopia - almost certainly the same deity that had appeared on some of the Amyntas Double Decadrachms (ISCH G-27). Coins bearing monogram 55 show a helmeted king in Scythian dress riding a horse. One issue has the Kharosthi title *Jayamtasa* - Conqueror, which is later expanded with the addition of *Mahatasa* and its Greek equivalent Megalos.

Other coins with monogram 56 are also of this latter type and this monogram too is appropriated by Azes.

Amongst his scarcer \mathcal{A} issues is an 'Enthroned Zeus/Horse' (ISCH G-30a) type which has Scythian parallels and 'River Deity/City Deity' (ISCH G-30b) where the obverse is taken from the Telephos coins and the reverse is the prototype for Azilises issues ISCH 52 and 56, and Azes 82.

Vonones c. 85 - 65 BC

The Vonones family coins are dealt with in detail in ISCH and the Posthumous Hermaios coins that preceded and parallel them are fully explained in CHIS. They come into the equation mainly to reinforce the dating of the contemporary Indo-Greeks.

The first coin to bear the name of the Indo-Scythian king Vonones are joint issues with Spalahores and one of these is found overstruck on a coin of Strato (105 - 80 BC) - overstrike 23.

The last member of Vonones family to strike coins is Spalirises and he issued coins jointly with Azes (ISCH 74) which may be dated in the period just before Azes becomes sole king (in 58/7 BC probably). Overstrike 24 has a posthumous Hermaios coin (ISCH p. 222 - CHIS 15) as the undertype. This undertype bears a monogram adopted by the coinage of Vonones with Spalagadames (ISCH 67) around 75 BC.

I have already commented upon the types used on some of the Vonones family coins being identical to those of Heliocles II and Amyntas but there are also two Heracles types (ISCH 66 and 69), the former derived from Euthydemid prototypes and the latter taken directly from the coppers of Agathocleia with Strato. The Spalirises reverse of 'Zeus Enthroned' (ISCH 73) is parallel to that of Amyntas.

Posthumous Hermaios beginning c. 90 BC

Two overstrikes are listed, 25 and 26, which confirm the sequence of imitation \mathcal{A} s that accompany the silver, as listed in CHIS plates XX - XXII. These \mathcal{A} imitations begin in the name of Apollodotos I, proceed to imitation round 'tetradrachm types' of Eukratides I and finally end with square imitations of Eukratides' regular \mathcal{A} .

SUMMARY

I consider that this arrangement of the Indo-Greek kings is as near perfect as it is possible to make it with the information to hand. The few possible monarch rearrangements have been discussed and though there may be some slight movement in the dates, any further progress will only be made through a thorough study of the monogram sequences for all denominations as more material surfaces.

Table 4 below, attempts to show the chronology and sequences diagrammatically but it isn't possible to show the geographical regions or possible familial relationships on a table like this and on such a small scale. It looks more complicated than it probably should but every aspect conforms to both the overstrike and hoard evidence and takes into account the known facts about monogram and type acquisition by each monarch.

In real life reigns don't last full years and certainly not multiples of five and if the true picture could be known there would probably be more variety in the duration of each monarch. Euthydemus' reign of around 30 - 40 years isn't that long by most regal standards (and his variety of coinage certainly vouches for such a period of rule), but it is longer than most of his successors, whose coinage is actually rare, certainly in the larger tetradrachm denomination. Only Eukratides (some 30 years) and Menander (c. 30/35 years) compare amongst the Greeks with the Scythian Maues (around 40 years) before we arrive at the King of Kings, the Great Azes, who ruled for some 45 or so years.

The future of this kind of study will be largely dependent upon new overstrikes being identified. These might clarify and confirm the sequences suggested here and, if the monograms on both over and undertype can be identified, suggest whether a monarch's reign was

stable or whether he may have been both losing and gaining provinces.

With many overstrikes it is difficult to determine the undertype but knowing what the *likely* possibilities are makes it so much easier to spot the crucial letters and design. Hopefully, using these identified sequences will enable readers who have such coins to make positive identifications that will assist in this study.

The system of joint kings and sub kings, rajas and satraps, maharajas and mahasatraps continues for another century or more after the Indo-Greeks disappear and what we see is the merging of the Scythian and Greek cultures into something new as the ruling caste intermarry and form alliances to become a new Indian people.



Æ of the Invincible King Artemidoros

Obverse: Artemis facing, holding bow, right arm raised.
 Legend: ΒΑΣΙΛΕΩΣ ΑΝΙΚΗΤΟΥ ΑΡΤΕΜΙΔΩΡΟΥ
 Reverse: Bull right, AN Monogram and Sigma below.
 Legend: *Rajatirajasa Moasaputrasa Artemidorasa*

Weight 8.66 gm
 Illustrated is an unpublished specimen of this remarkable coin from the same dies as the coin published in DIG and struck by Artemidoros to demonstrate his lineage as 'Artemidoros, son of Maues, the King of Kings'.
 The obverse is Greek, the reverse Indian, the king's name Greek but his father a Scythian. The Sigma probably represents the king's travelling camp mint and this coin exemplifies not only the fusion of European and Oriental cultures, the intermarriage of Greek and Scythian aristocracy but also the uncertain times in which these people lived in the first century BC.

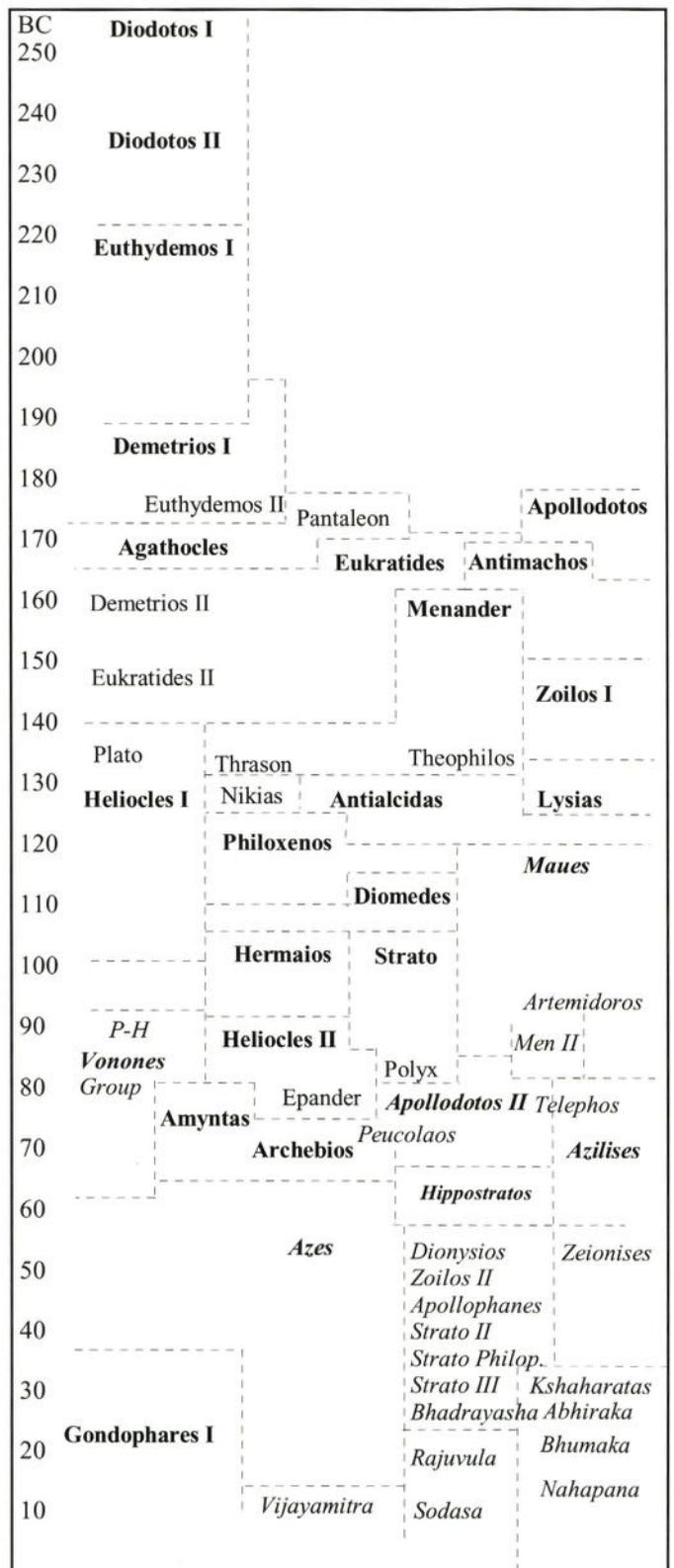


Table 4 Diagram showing the Indo-Greek and Indo-Scythian succession I regard the rulers shown in *italics* to be predominantly Scythian, though this is only a matter of degree since, as indicated in the text, some Scythian ancestry could apply to all rulers from the time of Hermaios.

- 1 Senior R. C. and D. MacDonald "The Decline of the Indo-Greeks. A re-appraisal of the chronology from the time of Menander to that of Azes" Monograph 2 of the Hellenic Numismatic Society, 1998. Hereafter **DIG**
- 2 In Rapson, E. (ed.) "*The Cambridge History of India*", Cambridge, 1922.
- 3 Tarn, W. W. "*The Greeks in Bactria and India*", Cambridge, 1951.
- 4 Torday L. "Mounted Archers", Durham 1997, p. 276.
- 5 Narain A. K. '*The Indo-Greeks*' OUP, 1962, pp. 1-3.
- 6 See Senior R. C. "*Indo-Scythian Coins and History*", Three volumes, London, 2001. Hereafter **ISCH**. See Volume I, pp. 17 - 19 and Vol. I, p. 217).
- 7 See ISCH Volume 1, pp. 7 - 14 for the story of these migrations
- 8 See ISCH Volume I, pp. 25 - 28.
- 9 Three excellent articles dealing with this period are:
 - 1) Wilson, L. M., Oriental Numismatic Society (**ONS**) Newsletter 174 (2003) pp. 17 -24 "King Demetrios of India and Eukratides of Bactria".
 - 2) Wilson, L. M., ONS 174 "Dating King Menander relative to Eukratides I"
 - 3) Wilson, L. M., ONS 178 (2004) "Demetrios of Bactria and the Greek Era"
- 10 Salomon, R. to be published in a special vol. of '*Topoi orient-occident*', O. Bopearachchi, ed., *Acts of the Colloquium "Afghanistan, Meeting Point Between East and West, "The Indo-Greek Era of 186/5 BC in a Buddhist Reliquary Inscription.*"
- 11 Actually his initial silver for the Indian provinces was an Attic hemidrachm and a similar square issue bearing punch-marked symbols on the die (see note 18 below - **BN** série 3) shows that this rare denomination was intended for that province.
- 12 Interestingly, Theophilos also adopted, like Antimachos, an arrogant and bombastic epithet for his Attic coinage - the Autocrat.
- 13 One caveat here is that many years ago I did have a coin of Diodotos that appeared to be made of nickel - otherwise unreported.
- 14 Marshall, Sir J, "*Taxila*" ii, pp. 856-7, CUP 1951
- 15 Hollis, A. "*Laodice Mother of Eukratides of Bactria*" *Zeitschrift für Papyrologie und Epigraphik* 110, 1996, pp.161-4. Adrian Hollis suggests that Laodice may have been a much married Seleucid princess.
- 16 Holt, F. '*The so-called "Pedigree coins" of the Bactrian Greeks*' *Nickle Numismatic Papers*, 1981
- 17 Bopearachchi O. & A. U. Rahman, '*Pre-Kushana Coins in Pakistan*' Karachi, 1995 coin 1057, p. 216
- 18 Bopearachchi, O. "Monnaies Gréco-Bactriennes et Indo-Grecques" in the *Bibliothèque Nationale.*, Paris 1991. Hereafter **BN**. See Diodotos, série 16 - British Museum coin.
- 19 Senior R. C. (**RCS**), ONS 159, 1999, p. 11
- 20 (A) Bernard & Rapin '*Un Parchemin Gréco-Bactrien d'une collection privée*' *Académie des Inscriptions & Belles-Lettres*, 1994, pp. 261 - 294, and,
(B) Rea, Senior & Hollis, '*A Tax Receipt from Hellenistic Bactria*', *Zeitschrift für Papyrologie und Epigraphik*, 1994, pp. 261 - 280
- 21 The legend arrangement can be seen to develop from Apollodotos I to Antimachos then Menander. See Bopearachchi, O and Pieper, W. "*Ancient Indian Coins*" *Turnhout*, 1998, p. 202
- 22 RCS, ONS 161, 1999, p. 15
- 23 I illustrate one, coin G-7c on p. 227, Vol. II, ISCH
- 24 Altheim, F. "*Weltgeschichte Asiens im Griechischen Zeitalter*", Halle 1948, 2 volumes.
- 25 Rapin "*Fouilles d' Ai-Khanoum VIII*" MDAFA, XXXIII, Paris, 1992
- 26 G. R. Sharma "*Reh Inscription of Menander and the Indo-Greek Invasion of the Ganga Valley*", Allahabad, 1980
- 27 The final mention of any Indo-Greek names in a Western source, in the *Periplus of the Erythrean Sea*, is the quotation - 'ancient drachmas were current at Barygaza (Broach) bearing in Greek characters the stamp of kings Apollodotos and Menander'. It should be noted that copper coins of Apollodotos II have also been found there, countermarked by the Kshaharata king Abheraka, forbear of Nahapana (ISCH 300.5i,i). I have also published some coins probably struck by this king which imitate Apollodotos II prototypes (ONS 170, pp. 18 - 19). The silver drachms of Apollodotos II are in fact quite common and I suspect that they may have been his coins seen in Barygaza rather than the square drachms of Apollodotos I.
- 28 Fussman, G. '*L'Indo-Grec Ménandre ou Paul Demiéville revisité*' *Journal Asiatique* CCLXXXI, pp. 61 - 137
- 29 Konow, S. "*Corpus Inscriptionum Indicarum*", Vol. II, Part I, 'Kharosthi Inscriptions', pp. 57 - 63. **CSI**
- 30 Bailey, H. *JRAS* 1982 "*Two Kharosthi Inscriptions*", pp. 149 - 155
- 31 Sadakata, A. "*The Relic casket of Prahodia with the date of Vijayamitra's year 32*", *Eastern Tohogaku*, Tokai University 1996
- 32 **CSI** pp.23 - 29
- 33 *For those who believe that the Takht-i-Bahi inscription cannot refer to anyone else but Gondophares I, I would suggest that this Maues Era is the only possible other explanation for that inscription. We do not know when this Maues Era began but let us pluck two possible dates from the air - 125 BC and 92 BC. If the Maues Era began in 112 then Gondophares of the inscription began his reign c. 48 BC and the later date would give him 15 BC. Both would accommodate my Indo-Scythian chronology, though the latter date would be cutting things a bit fine. This hypothesis would however affect my ISCH chronology in the first century AD, but only marginally.*
- 34 Bopearachchi, O. "*Monnaies Indo-Grecques Surfrappées*" - *Revue Numismatique* 1989, 6me série, XXXI, p. 49 - 79
- 35 That monogram passes directly from Demetrios to Zoilos might suggest an even earlier date for Zoilos.
- 36 Senior, R. C. "*The Coinage of Hermaios and its imitations struck by the Scythians*" (**CHIS**) *Classical Numismatic Group Studies* No. 3, London, 1999. I demonstrate that Zeus' throne is depicted in the same style on the coins of Maues and the lifetime issues of Hermaios.
- 37 **ISCH** Vol. I., p. 28.
- 38 It may also be that since Hermaios used Soter as an epithet, Strato added 'and Dikaios' in order to distinguish himself.
- 39 Sellwood, D. "*The Coinage of Parthia*", London, 1980
- 40 Illustrated as G-13 **ISCH**, p. 228.
- 41 See G-19 and 19a in **ISCH**, p. 228.
- 42 See G-28a **ISCH**, p. 230.
- 43 **OB** ONS 145, p. 8.
- 44 Deities holding a torque, especially Zeus, seem to occur mostly only on Indo-Scythian issues but on these Amyntas Æ Athena holds a torque which possibly demonstrates the increased influence of the Scythians at this time, just before the final demise of these mixed race Indo-Greeks. Either that or Amyntas was a Scythian himself?