

ONS



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Editor: Karan

ONS News

Karan Singh is the new Editor of the journal, taking over from Robert Bracey. We thank Robert for his excellent stewardship of the journal in the past two years. He has worked with Jan Lingen in digitising our past issues, to make these available to a new generation of members. Robert also has our gratitude for taking our standards of numismatic scholarship even higher and for encouraging new authors to contribute to the journal.



JONS Editor
Karan Singh

Karan is a collector of ancient Indian coins and seals. His collection covers the early historic period, tribal coinage, Kushans, Guptas, Hunnic kingdoms, and medieval Hindu rulers. He holds a MA degree in Ancient History from Jawaharlal Nehru University, New Delhi, and worked briefly as a trainee archaeologist in Bangladesh. He has authored several papers and presented numismatic lectures in India and the UK. He has also been a member of the ONS Council since 2016.

Mohit Kapoor is the new Regional Secretary for South Asia, taking over from Mahesh Kalra. We thank Mahesh for his role, particularly the tireless efforts he took to broaden the membership base of the society during his tenure. When he started in April 2014 there were only 30 members in India – this has jumped to 259 now. Mahesh also organised ONS meetings in New Delhi, Bangalore, Kolkata, Mumbai, Pune, Nashik and Ahmedabad.

Mohit is a collector and researcher, recently co-authoring a book on *The Nawabs and Kings of Awadh and their Coinage*. He holds an MA degree in Numismatics from Mumbai University. He is instrumental in running the Centre of Indian Numismatic Studies (COINS), an organization that disseminates numismatic skills and knowledge through organising lectures, workshops and exhibitions. He is also a Director of Imperial Auctions, an auction house in Pune. We wish Mohit all the best



Regional Secretary
Mohit Kapoor

for his appointment and look forward to his initiatives to take our society forward in the subcontinent.

Obituary: Paul Murphy (1949-2017)

Paul Murphy passed away on 4th November 2017 at the age of 68 years. Besides his long list of professional management activities, Paul was a devoted numismatist, particularly in punchmarked coinage of India. In a discussion at the ONS meeting in Leiden in 1995 the idea was born to set up a combined project to study this coinage. Being a project manager by profession, he wrote a proposal and invited several numismatists to collaborate on this project, which became known as the 'Ahata CD-ROM Project on Indian Punchmarked Coinage'.

At successive society meetings Paul would enthusiastically inform the audience about the progress of the Ahata project. With the help of K.K. Maheshwari, founder of the Indian Institute of Research in Numismatic Studies (IIRNS), the first offprint from the Ahata CD-ROM Project was published as *Kosala State Region, c. 600-470 BC: Silver Punchmarked Coinage*, authored by Paul Murphy.

His work was soon followed by the next offprints, viz.: *Saurashtra (c. 450-50 BC) Surasena (c. 500-350 BC) Silver Punchmarked Coinage*, by P. Anne van't Haaff (2004) and in 2007 by Shinji Hirano's *The Ghaghara-Gandak River Region (c. 600-300 BC) Archaic Silver Punchmarked Coinage*.

The project is not yet finished, but Paul's illness and his untimely death may have caused a temporary slowdown in this research activity. Hopefully the other researchers involved in this project will take over the lead so that his dream may be ultimately fulfilled: an ever-expanding digital corpus of all the series in Indian punchmarked coinage.

Jan Lingen

Paul Stevens Wins IAPN Book Prize

Regional Secretary Paul Stevens has been awarded The International Association of Professional Numismatists' 2018 book prize for *The Coins of the English East India Company. Presidency Series: A Catalogue and Pricelist*.

Published by Spink, Paul's book was chosen by the IAPN General Assembly in Prague on May 6th, ahead of 21 other entrants. He will receive a specially commissioned medal and cash award at a ceremony in London on September 27th.



Paul Murphy

ONS meeting in Leiden (21 October 2017)

The ONS Europe Chapter organised a successful annual meeting on the premises of the Leiden University. No less than 36 members, mostly from the host country, but also from Belgium (4), Germany (5), Sweden (2) and India (1), assembled for the usual welcome with tea and coffee at the Grand Café 'Pakhuis' near the University. From about 10.30 am a series of presentations were held in one of the lecture rooms of the university.

Hans van der Valk began with a presentation on *Monetising the Egyptian countryside in the third century BC.*, when the Ptolemais reigned Egypt after Alexander the Great, and introduced coined money in the country.



The ONS meeting in Leiden

Van der Valk showed how a large number of bronze coins of different sizes were struck during the third century BCE. The larger denominations served as soldiers' pay on expedition, who later took these pieces back home. In this way, they promoted the monetising of the Egyptian countryside. The smaller coins were linked to the wages of local workers. Nevertheless, payment in kind continued to be in use as well.



Fig. 1. Æ 24, Alexandria, 265-246 BCE, Ptolemaios II Philadelphos (285-246 BCE)

The next lecture on *The Tibetan Coinage* was presented by Kris van den Cruyce. In a short historical introduction, he showed that Tibet, in around 790 CE, was a large empire covering large parts of Afghanistan, India and China up to the Chinese city of Xian.

Transactions around that time were concluded via barter, using goods like grain, textiles and gold dust. Tibet was indeed a place where gold was plentiful, making it a very rich region. In later centuries, Lhasa developed into a city of merchants and traders. To facilitate trade, coins from many neighbouring countries were used. By the end of the 17th century, nearly all the trading routes from the south passed through Nepal and so it was mainly Nepalese coins that were used for trade. Tibet also used to send silver to Nepal to strike coins. Between 1775 and 1777 more than 1 million coins were struck by demand of the Tibetan government. The Nepalese initially took a margin of 5 percent, but they later became a bit too greedy. The coins they returned contained only 50% silver, the rest was kept as profit. This resulted in a war between both countries in 1790.

Due to these troubles the Dalai Lama decided in 1763 to start striking a first series of coins. They have fantastic names, such as the Vartula and Suchakra Vijaya Tangka. Later, a series of so-called Mangalam coins were struck. Two of the around 10 Mangalam coins which survived are in gold.



Fig. 2. Mangalam gold coin

During the presentation some privately struck coins were shown as well. Around 1791 the Kongpar Tangkas were struck to pay the Chinese troops who helped to fight the Nepalese invaders. Chinese troops remained until around 1911 when they were driven out of Lhasa. In that period a series of so-called Sino-Tibetan coins were struck.

It is only in 1850 when the next series of coins was struck containing only Buddhist symbols. This series is known as Gadan tangkas.



Fig. 3. Gadan tangka

Between 1911 and 1952 a significant number of different coins were struck. Unlike the stamps which were carved out of wood, the coins were machine struck and are fantastic pieces, showing Buddhist symbols and the mystic snow lion. Some pieces were struck as presentation money for ceremonies, though most were meant for circulation. During the lecture most of the common coins were shown, as well as some variations that were the result of the engraver's fantasy or writing error. This gave an excellent numismatic overview of Tibetan coinage, even though several articles on these coins have already been published in the journal.

Fabrice Lefèvre then presented a humorous numismatic talk "My Way". This was followed by Jan Lingen who shared with the audience the celebrations in Mumbai on the occasion of his 75th birthday, where a fine set of medals in copper, silver and gold with his effigy were presented. The medals, inspired by the so-called wine cup mohur of the Mughal emperor Jahangir, shows Jan also holding a glass. For further details, see the note by Mahesh Kalra in JONS 231.

After this fine and informative morning session it was time for lunch in the nearby 'Hortus, Grand Café & Orangerie', where a buffet lunch was arranged.

The afternoon session started with a presentation by Yngve Karlsson from the Gothenburg Numismatic Society in Sweden, who gave a short account about a hoard of Sasanian silver drachms found in Mongolia not long ago. The Mongolian archaeologists had requested his help in identifying the first 200 coins that are now in the National Museum in Ulaanbaatar. A preliminary report was presented at a conference in Changchun, China in the summer of 2017.

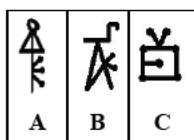
Patrick Pasmans presented a talk on Russian 'Zmeeviki amulets'. These amulets have a Byzantine origin and were spread in Russia from the 11th century. Most of those amulets shows on the obverse a human head, surrounded by snakes (Medusa) and on the reverse Archangel Michael or other saints. He showed a beautiful and rare bronze amulet from his collection, and gave general historical and numismatic information about this subject, with references to English and Russian literature.



Articles

LATE INDO-GREEK ISSUES AND SEQUENCES

Robert C. Senior



The object of this paper is to consider the sequence and placement of certain \mathcal{A} issues of the last Indo-Greek rulers of NW India. Of the above monograms, A and C have been allocated by scholars in the past to 'Jammu', largely on the basis of them being commonly found on coins in hoards from that region, particularly from Akhnoor, an ancient city. The \mathcal{A} issues are found much further south, however, and some have been found as far as Multan. In my *Indo-Scythian Coins and History* Vol. IV (2006) I published the Chakwal hoard and in JONS 217 (2013) I published the Jhang hoard. Both these hoards contained coins bearing examples of all three of the above monograms and particularly notable were those bearing monogram B which had been hardly recorded by any of the 19/20th century writers.

Chakwal is some 180 km or more west, as the crow flies, from Jammu, lying north of the Jhelum river, and Jhang is about the same distance, south of Chakwal, on the Chenab river, not far from its confluence with the Jhelum, which goes on to Multan. This gives us a triangle in which these coins seem to have circulated and, since copper coins travel far less from their place of origin than the more valuable silver, we may consider that a mint or mints may have existed somewhere in this region. Alexander Cunningham might not have been far out when he identified monogram C as being of ancient *Sangala* (Sangla Hill) which he shows on his map of 1871 as being 16 km NW of Shakkot on the eastern side of this triangle. Unfortunately it isn't a region where many scholars or numismatists of the past seem to have explored or collected. On Google Earth, Sangla Hill can be seen to be surrounded by the remnants of ancient meanders of the Jhelum river and this, or somewhere like it could well have been a major city or possibly a crossing point in the ancient past, rivers having changed course considerably in 2,000 years and cities abandoned.

The coinage has to be placed in its historical context and this period was a time of the movement of peoples, of alliances made and of changing fortunes. For an approximation of the events see table a7 on page xl of ISCH Vol IV. The later kings with Greek names were most probably of mixed race themselves, even though they had adopted a veneer of Greek culture and could possibly trace some lineage back to Greek forebears. It seems there were several family lines and they probably had formed alliances against common threats. There was almost certainly intermarriage with the invading Scythians as shown by the \mathcal{A} of Artemidoros which I discovered in 1998 [p. 55, 'Decline of the Indo-Greeks', Monograph 2 of the Hellenic Numismatic Society 1998] and on which he claims the paternity of the Scythian King of Kings, Maues. The Indo-Greek rulers were being squeezed from the North, West and North-East by Scythian invaders and were gradually pushed further south and east, weakening and possibly splitting into factions as they went. These Scythians were united for a while under the rule of the King of Kings, Azes who was probably the most instrumental in reducing the territory and importance of the Indo-Greeks. The Ambala-Kashmir hoards illustrated in ISCH Vol. IV indicate the situation at the start of Azes' reign, c. 60 - 55 BCE, and the Chakwal hoard seems to date towards the end of it, c. 20/15 BCE. By this latter time Azes' own empire was collapsing under the threat from another Scythian group, led by King Gondophares I, coming from the west, plus the rise internally of dynasties of powerful and independent satraps. Two of these latter groups, the Kshaharata Satraps and those led by Satrap Rajuvula survived the demise and disappearance of the Indo-Greeks, post c. 15 BCE, but only by migrating even further south or east, to Gujarat and Mathura.

I have covered most of this ground already in ISCH Vol. IV but the appearance of a few new types, especially the \mathcal{A} of Apollonphanes, gives a more complete picture of these Eastern Punjab issues and they now merit a closer look.

Table A

Monogram	\mathcal{A}			\mathcal{B}			\mathcal{C}			
	AR	O. \mathcal{A}	sq. \mathcal{A}	O. \mathcal{B}	sq. \mathcal{B}	fract.	AR	O. \mathcal{C}	sq. \mathcal{C}	fract.
Apollodotos II	x	x	x	x	x	x				
Dionysios	x			x	x					
Zoilos II	x			x	x	x	x		x	x
Apollonphanes					x		x	x		x
Strato Philopator							x		x	x
Strato + Philopator							x	x	x	x
Strato II							x			
Strato Dikaio							x			x



The above table summarises the coins known at present. There is every likelihood that still more specimens will surface to fill a gap or two in the table, and even more important would be the

identification of any additional over-strikes that have a bearing on the projected sequences. The uncertain order of the kings called Strato is discussed below.

No silver coins are known bearing the monogram B but we can see that for monogram A there are no copper coins known for Dionysios nor Zoilos II, the successors of Apollodotos II. It would seem, as will be shown, that the copper issues bearing monogram A were replaced by those with monogram B during the reign of Apollodotos II (ruled circa 85-55 BCE) and this monogram was continued on the coppers of Dionysios and Zoilos II, serving as lower denominations for the silver coinage bearing monogram A.

I do not want to deal with the silver issues here but I include a table, next, of the types known to me which bear monograms A and C, to show that they fall into four groups; monogram alone, monogram + letters, no monogram but just letters, blank fields. Judging by the widely differing styles found on these types they could represent different workshops or mints. This table is an extension of the one on p. 76 of my paper on 'The last Greek kings in India' from NOMISMATIKA XPONIKA No. 16, 1997 Athens.

Table B

		mon + letters	letters only	plain
Apollodotos II	x	x		
Dionysios	x			
Zoilos II	x	x		
				
Zoilos II	x	x		
Apollophanes	x	x	x	
Strato II	x	x	x	
Strato Philopator	x			
Strato + Philopator	x		x	x
Strato (III) 'young'		x	x	
Strato Dikaios	x			

Only Zoilos II issued silver coins bearing monograms A and also C possibly suggesting that the latter monogram may have replaced the former. Only Zoilos II and Apollophanes seem to have issued Æ bearing monograms B and C. One cannot deduce from this that Apollophanes followed Zoilos II and in fact there may be a closer link between Dionysios and Apollophanes since they are the only two kings to have drachm issues on which the king is shown helmeted [the Dionysios issue with helmet being so far known from a single coin]. Perhaps Apollophanes was an ephemeral usurper who temporarily disrupted the rule of Zoilos – hence the change in monogram use. This is pure speculation, of course, and we shall probably never know. Hoard evidence discussed in my 1997 paper explains why the 'young portrait' Strato coins post-date the 'old head' ones, most, if not all, being posthumous issues. At this point we can now examine the Æ issues and see what they show us.

Monogram A



Fig. 1. Silver drachms bearing Monogram A

As already stated, this monogram was used by three kings but only Apollodotos II struck Æ coins bearing it.

Apollodotos II (c. 85-55 BCE)



Fig. 2. Apollodotos II Æ coin (A1-1)

A1-1 Obverse: Apollo standing to right stringing arrow to bow, monogram A in left field. All within a circular border, within which is the circular legend ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΑΠΟΛΛΟΔΟΤΟΥ. Reverse: Tripod with Kharosthi field letters di ƒ left and ram(?) right as on BN 6D. Around, in circle, the Kharosthi legend: Maharajasa Tratarasa Apaladatasasa. 16.98 g [Jhang 3]



Fig. 3. Apollodotos II Æ coin (A1-1a)

A1-1a As last but struck on a square flan. 15.16 g [Jhang 2]



Fig. 4. Apollodotos II Æ coin (A1-2)

A1-2 Rev. as BN6C, letters: a ƒ and ƒ 16.83 g [Jhang 1]



Fig. 5. Apollodotos II Æ coin (A1-3)

A1-3 As A1-2 but with square flan and legends on three sides [unpublished]. 16.30 g [RCS]

Issues A1-1 and A1-2 are very common and were probably issued over a long period of time, but both A1-1a and A1-3 are so far extremely rare. A1-1a isn't over-struck on an earlier square coin and seems to be possibly intended to be a square issue. A1-3 is definitely meant to be a new, though short-lived, type that is then followed on by issues bearing monogram B. To-date I only know of two examples.

There are other issues bearing the name of Apollodotos with this monogram – see BN14 – but they vary widely in weight and crudity. They have the monogram on the reverse, mostly in the right field, and have a line of pellets inside the legends. In fact they resemble in many ways the Æ coins imitating Apollodotos I issues that

accompanied the imitation posthumous Hermaios coins [see plate XX, A-11 to A-25 of *The coinage of Hermaios and its imitations by the Scythians* (1999). Because they do not fit the pattern of the regular issues and because many of them are so crude, I have omitted them from this study.

Monogram B



All the issues with this monogram, with the exception of B3-4 have the reverse field letters *Ra* and *Ti* as above.



Fig. 6. Apollodotos II Æ coin (B1-1)

B1-1 As A1-3 but on a round flan, no outer border. 14.66 g [Chakwal 16]



Fig. 7. Apollodotos II Æ coin (B1-2)

B1-2 As last but as A1-3. 16.14 g [RCS]



Fig. 6. Apollodotos II Æ coin (B1-3)

B1-3 Apollo/Wreath. 3.79 g [CNG 1376 Triton III] [also 3.57 g CNG321/254 17 mm]

B1-1 and ¼ unit B1-3 are both very rare. Six specimens of B1-2, all with similar wear to the illustrated coin, averaged 16.22 g.

Dionysios (c. 55 - 50 BCE)



Fig. 7. Dionysios Æ coin (B2-1)

B2-1 As B1-1 but obverse legend: ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΔΙΟΝΥΣΙΟΥ, reverse legend: *Maharajasa Tratarasa Diunisiyasa*. 14.31 g [Jhang 7] - two other examples over-struck on Apollodotos II's A1-1.



Fig. 8. Dionysios Æ coin (B2-1) over-struck on A1-1



Fig. 9. Dionysios square Æ coin (B2-2)

B2-2 As B1-2, square flan. 16.15 g [Jhang 9]. An average of six similar wear coins weighed 16.11 g.

Zoilos II (c. 55 - 40 BCE)



Fig. 10. Zoilos II Æ coin (B3-1)

B3-1 As B1-1 but obverse legend: ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΖΩΙΛΑΟΥ, reverse legend: *Maharajasa Tratarasa Jhoilasa* 14.20 g [o/s on Apollodotos II, RCS]



Fig. 11. Zoilos II square Æ coin (B3-2)

B3-2 As B1-2 but legends as last. 15.04 g [Chakwal 76]



Fig. 12. Zoilos II Æ ¼ unit (B3-4)

B3-4 Obverse: Apollo stands within Bead and Reel border, no Greek legend, monogram left. Reverse: Elephant facing right, Kharosthi legend as last [but *tra* in regular form] 4.04 g [RCS]

Apollophanes (c. 40 BCE)

[B4-1 Round flan not known] As B1-1 but obverse legend: ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΑΠΟΛΛΟΦΑΝΟΥ, reverse legend: *Maharajasa Tratarasa Apulapha[nasa]*



Fig. 13. Apollophanes square Æ coin (B4-2)

B4-2 As B1-2 but legends as last. 12.72 g [PT]

Monogram C



Fig. 14. Silver drachms bearing Monogram C

Zoilos II



Fig. 15. Zoilos II square Æ coin (C1-1a)

C1-1a As B3-2 but reverse letters *Ja* and *Kam* and with either regular *Tra* in *Tratarasa* [C1-1, C1-2] or 'W' *Tra* form [C1-3] 17.64 g [RCS]



Fig. 16. Zoilos II square Æ coin (C1-1b)

C1-1b As last but additional *Ji* on obverse and *Ma* and *Dham* (?) on reverse. 17.29 g [CNG 307/151]




Fig. 17. Zoilos II Æ 1/4 unit (C1-2)

C1-2 1/4 unit round Apollo/ Elephant letters obv. *Ji* rev. *Ma Kha* 4.25 g [RCS] Monogram on obverse needs confirming

C1-3 Small square 1/8 unit Apollo/ Elephant series *many* letter combinations (Chakwal 95-99) (Jhang 25 et al) c. 2-4 g. These are

not included nor illustrated in this study - requires separate table and study. BN series 9

All subsequent *unit* coins have the reverse field letters *Pi* and *E*


Apollophanes



Fig. 18. Apollophanes Æ coin (C2-1)

C2-1 Legends as on B4-2 but *circular* round the flan and possibly *Apalaphanasa* plus regular *Tra* form. 13.65 g [RCS]



Fig. 19. Apollophanes Æ coin (C2-2)

C2-2 1/8 unit small square Apollo/ Diadem no field letters. 2.32 g [CNG 90/876] Other examples: 2.38, 2.26, 2.21, 1.98, 1.88, 1.90, 1.74 [Jhang], 2.61, 2.05, 1.69 [Chakwal] - several possibly bear an additional letter on the obverse, lower right. The legend on this issue was first identified by Shailendra Bhandare.

Strato Soter [plus additional epithet]

The following group of kings named Strato are not necessarily in the correct order since the coin weights might suggest a different sequence. Plus, there are several different possible interpretations as to which Strato is which and whether Strato II [alone] is the same as the Strato who issued coins jointly with Philopator Strato. Can the 'Strato Soter alone' silver represent two different kings?

Strato II (c. 40-25 BCE)



Fig. 20. Strato II square Æ coin (C3-1)

C3-1 As A1-3 but obverse legend: ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΣΤΡΑΤΩΝΟΣ, Reverse legend: *Maharajasa Tratarasa Stratasa* with 'W' form of *Tra*. 15.91 g [Chakwal]

Strato with Strato Philopator



Fig. 21. Strato with Strato Philopator Æ coin (C4-1)

C4-1 As B1-1 but Obverse legend on four sides (sl. corrupt): ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΣΤΡΑΤΩΝΟΣ ΚΑΙ ΦΙΛ ΣΤΡΑΤΩΝΟΣ Reverse legend on four sides: *Maharajasa Tratarasa Stratasa putrasa casa Priyapita Stratasa*. 13.20 g [Chakwal 120, 121]



Fig. 22. Strato with Strato Philopator square AE coin (C4-2)

C4-2 As last but square average wt. 14.69 g [Chakwal 124]



Fig. 23. Strato with Strato Philopator AE 1/2 unit (C4-3)

C4-3 1/2 unit as last, some with shortened legends. 8.73 g [Chakwal 135]

Strato Philopator



Fig. 24. Strato Philopator square AE coin (C5-1)

C5-1 As last but legends on four sides - obverse: ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΚΑΙ ΦΙΛΟΠΑΤΟΡΟΣ ΣΤΡΑΤΩΝΟΣ Reverse: *Maharajasa Tratarasa Priyapita Stratasa*. 17.17 g [Chakwal 138]



Fig. 25. Strato Philopator square AE 1/2 unit (C5-2)

C5-2 1/2 unit as last. 6.59 g [RCS]

Strato Dikaios



Fig. 26. Strato Dikaios square AE 1/2 unit (C6-1)

C6-1 1/2 unit as last but with legends ΒΑΣΙΛΕΩΣ ΣΩΤΗΡΟΣ ΔΙΚΑΙΟΥ ΣΤΡΑΤΩΝΟΣ and Reverse: *Maharajasa Tratarasa Dhramikasa Stratasa*. 8.87 g* [Jhang] 6.09 g [RCS]

Comments

The end of Apollodotos II's reign must have coincided with a period of trouble for the Indo-Greeks, probably as a result of the incursions of the King of Kings Azes, who overstruck his AE [see PMC 244]. Apollodotos' plentiful AE coinage bearing monogram A are found overstruck, not only by his successors Dionysios and Zoilos II, but also by the Kshaharata Satrap Higaraka/Higataka [ISCH IV pp. 23/4 and ONS 227 pp. 10/12 H. Falk] and countermarked by Kshaharata Abhiraka [ISCHS II, 300.511, IV p.25]. That these latter rulers are not far removed in time is shown by the appearance of the Higaraka coin, 157 in the Chakwal hoard.

One puzzling question is: Why were the round unit coins struck

alongside the square unit coins for these three monograms? If only overstruck coins were known, one might suppose, since the round variety seem so much rarer, that the same dies for the square coins were used on old round undertypes. But not all the coins seem to be overstrikes. One explanation could be that they were all contemporary and current around the same time that Apollodotos II introduced his rare square A1-3 and changed to his B1-1 coins with a new monogram. In his ONS 227 paper Harry Falk has illustrated an unusual AE coin that purports to be a mule or joint Apollodotos II/Dionysios coin and suggested that their rule overlapped. The coins of Dionysios are generally scarce and his reign was probably of short duration. Zoilos II seems to have come from a different branch of the Indo-Greeks and perhaps his reign also overlaps with Apollodotos II? He is the first to use monogram C on his C1 issues which do not conform in field letter use to all the subsequent C issues.

One can get carried away with wild speculation, but some points seem clear:

- 1) The round coins are not a 'special issue' nor of different value to the square. They must represent a step change in design.
- 2) Dionysios closely follows Apollodotos II or possibly overlaps the end of his reign.
- 3) Apollonophanes followed or was contemporary with Dionysios - both issued the Apollo/Wreath lower denominations and both have helmeted drachms [the only rulers known to do so].

Apollonophanes is even rarer than Dionysios and it may be that they were both supplanted by Zoilos II, who usurped the territory of his late contemporary (?) Apollodotos II. This is where the order of the coins bearing the name Strato Soter, with or without additional titles, comes into question. A confirmed solution might present itself with further coin variety discoveries.

The so far unique C2-1 of Apollonophanes is unusual in that it bears circular legends. We have the Strato Philopator square units that are heavy, followed (?) by the joint issues with Strato Soter which include round issues. To get all the round issues in a near contemporary period, assuming that they were then replaced by solely square issues, we could envisage a scenario as follows:

Table C

A #*			
Apollodotos	#*	A Zoilos	# Strato Phil A
A Dionysios	#*	# Apollonophanes + A	Strato + Phil A
A	#*		#* Strato # A
		Strato Dikaios #	
		Bhadrayasha	
		A Rajuvula	
		A Post-Strato	
		A	

* = round coins
= square coins
A = silver drachms

This would presume that in this period of outside pressure and contraction we have a system either of joint or associate kings operating together or rival families vying for supremacy. The above table can be refined in several ways, especially if a few new types or denominations surface.

These were not the only coins circulating in this region, Akhnoor to Multan, and several others, almost all without monograms, but with field letter links, are worth noticing.

Cunningham noted that there were iron deposits in the neighbourhood of Sangla Hill and maybe this region also supplied the copper used in the manufacture of these coins. So far as I know the ancient copper sources in the Punjab region have not been identified. A remarkable fact is that the majority of the AE issues dealt with in this article are *magnetic*. The ore was adulterated with iron. Some of the later round issues also seem to have become progressively adulterated with lead and, by the period of Rajuvula, lead may be the largest constituent. In damp conditions these later coins oxidize internally and the white lead oxide 'powder' becomes visible in edge cracks or on the surface.

Monogram D



This is a small series linked by the use of the same reverse field letters but one unique variety bears an obverse monogram.

Strato Soter II

Types and legends as C3-1



Fig. 27. Strato Soter II square AE 1/2 unit (D1-1)

D1-1 1/2 unit Monogram in left field on obverse, *Thi* and *Ha* on reverse. 8.13 g [RCS]



Fig. 28. Strato Soter II square AE 1/2 unit (D1-2)

D1-2 As last but without the monogram. 7.87 g [RCS]



Fig. 29. Strato Soter II square AE 1/2 unit (D1-2a)

D1-2a As last but larger flan and regular *Tra*. 9.04 g [Jhang 79]

Monogram-less coins E

Apollodotos II



Fig. 30. Apollodotos II AE unit (E1-1)

E1-1 Unit as A1-1 but regular *Tra* and field letters *di* and *ram*? } as on A1-1, BN6F. 16.24 g, 16.71 g* [RCS]
[E2-1 As last but Dionysios - not yet known]

Zoilos II



Fig. 31. Zoilos II AE coin (E3-1)

E3-1 As last but legends as B3-1, BN4. 15.85 g [RCS]



Fig. 32. Zoilos II AE coin (E3-2)

E3-2 As last but with **elephant** in obverse left field. 15.88 g [Chakwal 68] Sometimes found overstruck on Apollodotos II coins.

Apollodotos II



Fig. 33. Apollodotos II AE coin (E4-1)

E4-1 Unit as E1-1 but legends on three sides and field letters *Ji* and *Mim*. 17.10 g [Jhang 6]

Dionysios



Fig. 34. Dionysios AE coin (E5-1)

E5-1 Ditto but legends as B2-1, BM [MIG 456]

Summary

Putting all these varieties in one publication gives a much clearer picture of the events in eastern Punjab c. 60-15 BCE, at least for the three mints or workshops using the monograms A, B and C. The silver drachms that were issued without monograms must correspond to the similar monogram-less AE coins, and more work needs to be done to classify all those known varieties to see if the letters on silver and AE correspond. In the Journal of the Hellenistic Numismatic Society No. 16 (1997) I showed how 5 hoards of the silver coins helped identify the sequence of Strato Soter coins and showing that the 'young portrait' coins came last.

This has been confirmed by a hoard I have recently had the opportunity to examine. It contains just one worn coin of the joint Strato II with Strato Philopator issue, 34 coins of the 'young portrait' type [fairly good style down to crude style] and 68 Rajuvula coins. See the images below [not to scale].



Fig. 35. Silver drachms in recent hoard

I shall hopefully publish the entire hoard in the near future. That still leaves us with not being 100% certain of the earlier sequences involving Strato Philopator. Possibly the discovery of overstrikes may be the only solution to that problem.

References

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Abbreviations used

BM	British Museum
BN	Osmund Bopearachchi, <i>Bibliothèque Nationale Monnaies Gréco-Bactriennes et Indo-Grecques</i> , 1991, Paris
CNG	Classical Numismatic Group Inc [research coins]
MIG	M. Mitchiner, <i>Indo-Greek and Indo-Scythian Coinage</i> , 1975
PMC	R.B. Whitehead, <i>Punjab Museum Catalogue Lahore</i> , Vol. I, 1914
PT	Pankaj Tandon collection
RCS	Robert Senior collection

GODDESS NANA ON THE BRONZE COINAGE OF KANISHKA I

Heinz Gawlik

Kushan coinage is well known for a wealth of more than 30 deities illustrated on the reverse of gold and AE units. During the reign of Kanishka I and Huvishka the number of divine images on coins increased to a vast diversity. The depiction of deities from Greek, Iranian and Indian culture and mythology might be an expression of religious tolerance in an area which came under different influences by migration, conquest and foreign rule. Another aspect of this diversity arose from the extension and improvements in infrastructure across the Kushan empire, which increased trade connections and intercultural exchange. Much has been written about deities of the Kushan pantheon and the concepts behind their personification on coins, but this paper will deal with one deity only, Nana. The goddess' name appears on coins in Greek and Bactrian as *NANAIA*, *NANA* and *NANAPAO*.

The goddess *NANAIA* with her different names might be in her Kushan form a conflation of Sumero-Babylonian goddess Inanna/Ištar with local divinities (Katariya 2012). Ištar is a counterpart to the earlier attested Sumerian goddess Inanna. She rose to prominence from a local vegetative deity of Sumerian people to the Queen of Heaven in all Mesopotamia. Inanna/Ištar is among the most important deities and by far the most complex goddess of the Mesopotamian pantheon. She displays contradictory and even paradoxical traits with masculine characteristics like warrior aspects, but is attested also for fertility and sexuality in her female aspects. She was never seen as a Mother Goddess in the way other deities were treated. Inanna is always depicted as a young woman and never as a mother or a faithful wife. Often she is shown with a lion, denoting courage, and sometimes riding a lion as a sign of supremacy. In her astral aspect Inanna is deified as the first primordial goddess of the morning and evening star which means the planet Venus. An Ugaritic text specifically equates Inanna with Ištar, who is cognate to the later attested Northwest Semitic Aramean goddess Astarte (Fig. 1).



Fig. 1. Ištar (Eshunna) and Astarte (Louvre, Paris) ⑬

A common symbol of Astarte are horns on her head which look like a crescent moon. Eusebius of Caesarea quoted the description of the Phoenician pantheon by the priest and writer Sanchuniathon (Gifford 1903). "But Astarte called the greatest, ..., reigned over the country by the consent of Cronus: and Astarte put upon her head, as the mark of her sovereignty, a bull's head: and travelling about

the habitable world, she found a star falling through the air, which she took up, and consecrated in the holy island of Tyre: and the Phoenicians say that Astarte is the same as Aphrodite."

The role of the goddess Inanna/Ištar/Astarte in legitimising political power was not restricted to her masculine aspect as the warlike Ištar, but is attested also for the sexual Inanna in her female aspects. Inanna/Ištar/Astarte is identified with the Greek goddesses Athena and Nike, and has been associated with Demeter and Persephone, and in the Kushan pantheon as Nanaia. Cross-cultural borrowing, adoption or syncretion of a deity with one's own deity was considered appropriate at that time. In an earlier age, Alexander the Great had showed syncretistic features in blending Persian, Anatolian and Egyptian elements within a Hellenistic formula. Such syncretism was frequent among Kushan deities.

ARSEILES (late 1st century BCE)

The goddess Nanaia is first attested by name on the coins of Arseiles and Sapadbizes of the Da Yue Chi. Fig. 2 shows a hemi-drachm of Arseiles with obverse: helmeted and draped bust right with Greek name *APCEIAHC* around. Reverse: lion standing right; Λ and crescent above; flanked by *NANAIA* on both sides (Senior A4.1).



Fig. 2. Arseiles AR hemi-drachm Senior A4.1 (15 mm, 1.77 g, 12 h) ⑬

SAPADBIZES (c. 10 BCE)

Fig. 3 shows an almost similar hemi-drachm of Sapadbizes with helmeted and draped bust right with Greek name *CAΠAΔBIZHC* around. Reverse shows a lion standing right; crescent and Λ above; flanked by *NANAIA* on both sides (Senior A6.1)



Fig. 3: Sapadbizes AR hemi-drachm Senior A6.1 (15 mm, 1.84 g, 1 h) ⑬

Obols and AE units are also known for Arseiles and Sapadbizes with a lion, crescent, Λ and the name *NANAIA*.

KANISHKA I (c. 127–151 CE)

The goddess Nana occurs in abundance on the reverse of coins in gold and bronze issued by Kanishka I. The name of the goddess Nana is spelt in Greek as *NANAIA* on coins of the first emission. In the Rabatak inscription (Sims-Williams & Cribb 1996) it is stated that Kanishka replaced the use of Greek by Bactrian language in his first year of reign. Therefore the name of Nana changes on the following series to a Bactrian spelling as *NANA* expressing that the name has two syllables. On later series of gold and bronze coins her name appears as Nanashao written *NANAPAO*. In order to write the Bactrian language in Greek the Kushans added the letter P (sho) to the Greek alphabet to transcribe a sh or š sound. The majority of Kanishka's coins have an almost uniform image of king and deity. Obverse: king standing facing with head to left making an offering at a fire altar. Jongward & Cribb (2015) described the reverse of coins as follows: Nanaia/Nana/Nanashao stands in three-quarter profile to right, head surrounded by a halo, crescent on top; hair held by diadem with two ribbons to left, bun at back; wears a sleeved, ankle-length loosely fitting robe; holds a wand with lion protome in right hand, bowl in left; *tamgha* to right; dotted border and inscription to left *NANAIA/NANA/NANAPAO*. A few coin types in gold and bronze show the king's bust on obverse and on some quarter units in bronze the king is shown enthroned.

In most of the numismatic literature the crescent on the forehead of the deity has not been adequately explained. Some scholars describe it as moon crescent or crescent only. Sometimes as a conclusion Nanaia/Nana is referred as a lunar deity. According to Falk (2016) Nana can be neither a deity of the sun nor the moon. Helios (*ΗΛΙΟΣ*) as MIHIR (*ΜΙΗΡΟ*) and Selene (*ΣΕΛΗΝΗ*) as MAH (*ΜΑΩ*) are the respective solar and lunar deities. The new translation of the Rabatak inscription (Sims-Williams 2008) reveals that Nana is praised as an investiture goddess. She was the foremost among gods to endow the king with royal authority. The inscription underlines that Nana was an integral figure in the emergence of the Kushan Empire through her sanctioning of power and initialising an era (Falk 2016). Nana displays on the coins four characteristics: simple *halo*, shallow bowl, crescent and sceptre with lion protome which confers her royal authority. The crescent on her forehead to symbolize Venus and her royal authority makes more sense than a crescent of moon. Falk (2016) provides also a pictorial explanation how the sceptre of Nana with the forepart of a lion resembles the constellation of Leo. It shouldn't be withheld that there are scholars with different opinions about the assertion that Nana was the principal deity of Kanishka's pantheon. Gnoli (2009) argues that Nana was probably only the deity to whom the Rabatak sanctuary was dedicated.

The classification of illustrated gold and bronze coins takes reference to the classification in the standard work on Kushan coinage by Göbl (1984) and is referred to in the text as Göbl only.

Goddess Nana on gold coinage of Kanishka I

Selected varieties of Kanishka's dinars are illustrated in Figs. 4-12 as introduction and later discussions about Nana on bronze coins. First a dinar of the short lived initial series with Nana spelt in Greek as *NANAIA* is shown in Fig. 2. The obverse bears the legend in Greek spelling: *ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΚΑΝΗΡΚΟΥ*.



Fig 4: Kanishka I dinar Göbl 27 ⑨

As mentioned Kanishka discontinued the use of Greek language according to the Rabatak inscription. The Greek name *NANAIA* was changed to the Bactrian spelling *NANA* with two syllables. Also the legend on obverse was changed to the Bactrian spelling: *ΠΑΟΝΑΝΟΡΑΟ ΚΑΝΗΡΚΙ ΚΟΡΑΝΟ*. Three different dinars with Bactrian spelling *NANA* are illustrated in Fig. 5 - 7. The coins show differences in the headdress worn by the king (details in Fig. 13).



Fig. 5. Kanishka dinar Göbl 35 ⑬



Fig. 6. Kanishka dinar Göbl 35 (17 mm, 7.93 g, 12h) ⑧



Fig. 7. Kanishka dinar Göbl 35 (17 mm, 7.97 g, 12h) ⑬

Fig. 8 shows a quarter dinar with a different design on obverse. The bust of the king emerges from a mountain top with an unchanged design of Nana on reverse.



Fig. 8. Kanishka 1/4 dinar Göbl 43 (13 mm, 1.99 g, 12h) ①

The dinars in Figs. 9 & 10 differ from Göbl type 35. The engraving error in writing *NANA* on both coins is remarkable because the second Nu wasn't cut in mirror writing on the dies. Engraver's errors are rare on the gold coinage of Kanishka. Another significant difference is that Nana wears a sword on the coin shown in Fig. 10 as she does on most of the later coins with the spelling *NANASHAO*. The king wears a headdress of the later type III on both coins (see details in Fig. 13). A minor difference is seen in Nana's diadem with a single ribbon on both coins. These could just be a coincidence or, on the other hand, perhaps we can assume the coins in Figs. 9 & 10 are examples of the transition period from spelling the name of the goddess as *NANA* to spelling her name as *NANASHAO*.



Fig 9: Kanishka dinar variety of Göbl 35 (8.00 g) ⑭



Fig. 10. Kanishka dinar variety of Göbl 35 (21 mm, 8.0 g, 12h) ⑨

Fig. 11 & 12 show a quarter dinar and a dinar with goddess Nana named as *Nanashao*. On most *Nanashao* coins goddess Nana wears a sword on her belt in addition to her other known attributes.



Fig. 11. Kanishka 1/4 dinar Göbl 50 (1.9 g, 12h) ⑦



Fig. 12. Kanishka dinar Göbl 54
(20 mm, 7.94 g, 12h) ⑧

The name of deities is written in classical Greek capitals on almost all dinars of Kanishka. Errors caused by engravers are very rare in the names of deities on his gold coins. Both observations might indicate the special attention paid to the whole process, starting with the preparation of dies and continued in the minting of gold coins. On the other hand, this might be also a characteristic of the exclusiveness of gold coins. Grenet 2015 stated “Gold coinage most probably were reserved for a very limited range of uses (state holding, transfers between various provinces, and donations to individuals?). Few ordinary citizens had the opportunity of handling them. Contrary to them, bronze denominations circulated widely, with exactly same types present in all regions.” The question arises: what would the state authorities in provinces and individuals have done with the dinars other than entering them in circulation?

Göbl (1984) differentiated three forms of headdresses (named crowns by him) worn by the king on gold coinage in his encyclopaedic work on Kushan coinage. Sketches of the three headdresses/crowns identified by Göbl are illustrated in Fig. 13. For a better understanding, examples of matching headdresses appearing on the gold coins illustrated in this paper are added to the respective sketches. Jongeward & Cribb (2015) described an additional modified form with a forward leaning top (crown type IV).

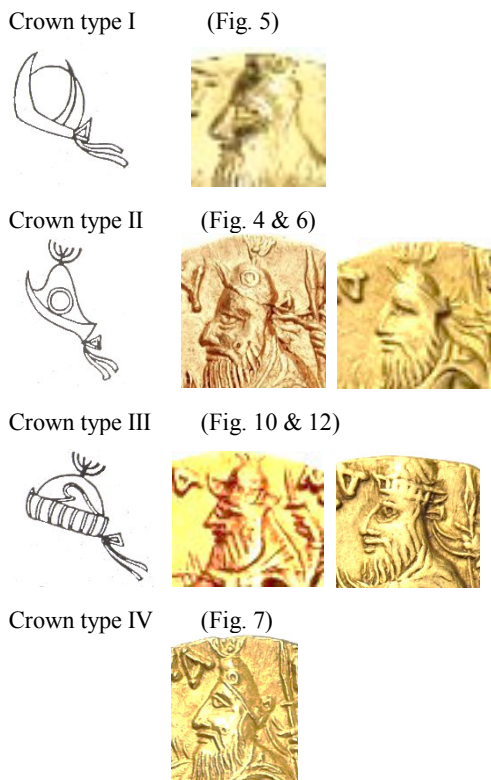


Fig. 13. Crowns of Kanishka I (sketches Göbl 1993)

Headdresses of type I and II were used on his initial gold coinage with Greek language. The two types continued on Bactrian issues and then the forward leaning crown (type IV) was introduced later. Type III appears on later gold coins and it is the common headdress of the king on dinars with the spelling *NANASHAO*.

Goddess Nana on bronze (Æ) coinage of Kanishka I

Wherever the following data/ information is available or can be

measured it has been added to the description of the illustrated coin:

1. control mark (quarter units)
2. type of headdress/crown
3. starting point of legend (quarter units)
4. magnetism
5. dimension
6. weight
7. die position

The magnetism was checked with a sintered NdFeB (neodymium-iron-boron) round bar magnet (15 x 30 mm), grade N45, direction of magnetism 30 mm, adhering force c. 12 kg, and weight c. 45 g. The adhering force was measured with help of a conventional electronic balance connected to the magnet. The magnetic force is classified in five groups: high magnetic (HM), magnetic (M), medium magnetic (MM), low magnetic (LM), and non-magnetic (NM). The condition of coin surface like profile, grade of corrosion and encrustation was not considered in this simple method of measurement. It would be necessary to connect magnetism to the material composition in a further investigation.

Kanishka Æ unit of Göbl type 767

The reverse design of Kanishka's Æ coinage follows the pattern of his gold coinage. Three half units (Göbl type 767) of his initial bronze series are shown in Figs. 14-16. The obverse bears the same long legend *ΒΑΣΙΛΕΥΣ ΒΑΣΙΛΕΩΝ ΚΑΝΗΡΚΟΥ* as it is found on dinars of his initial series (Fig. 4). Also, the spelling of Nana's name *NANAIA* is the same as on his early gold coins and reads from the right side upwards.



Fig. 14. Kanishka Æ ½ unit Göbl 767 crown I
(22 mm, 8.44 g) BM-IOC.285



Fig. 15. Kanishka Æ ½ unit Göbl 767 crown I
(22 mm, 8.14 g) BM-IOC.285



Fig. 16. Kanishka Æ ½ unit Göbl 767 crown IV - ⑪

NANAIA is written in capital letters with a distinct Alpha similar to the Alpha on dinars of the initial series. The illustrations show minor variations, which is expected by a manual engraving of dies. Another remarkable fact is that all 65 coins are without an error in writing *NANAIA*. One is forced to the conclusion that a high level of attention must have been paid to the preparation of dies. The quality of these dies can be compared with those of the gold coins. Another assumption that can be drawn is that dies for Æ coins of the initial series were most probably made by the same skilled engravers and supervisors as the dies for dinars. The actual minting process including material handling, foundry, and preparation of flans as well as stroking and finishing of coins was not necessarily done at the same location as the cutting of dies. Engravers required

a cleaner environment. Most probably they were sitting on the ground with sufficient daylight in an open area or under a shelter against the sun and rain.

Different headdresses worn by the king appear on Æ coinage also. Tandon (2011) studied the headdress/crown on Kanishka's Æ coins with reference to types in Göbl and added the following description for different crowns:

Crown I	“crescent” type
Crown II	“pointed” type
Crown III	“ribbed” type

Tandon identified Type I and II on bronze coins with *NANAIA* in Greek. The three Nanaia coins in Fig. 14-16 confirm type I and later Jongeward & Cribb introduced type IV. With reference to the Rabatak inscription it is understood that coins of the initial series with Greek language were minted during the first year of Kanishka's reign. What could be the purpose of showing the king with two different headdresses in such a short period? Any explanation would be highly speculative. Of course, one explanation could be that the king used different headdresses for different occasions even if the ceremony to worship a specific god was similar. Also changes by the extension and consolidation of political power, military operations, anniversaries etc. could be reasons. Both headdresses are also used on later issues of Æ and gold coins and even the “ribbed” type was added during his reign. Tandon, who checked hundreds of coins, observed that the crescent type (crown I) seems to be the rarest type on bronze coins, following the initial phase with goddess names in Greek language.

With the change from Greek to Bactrian language the new spelling *NANA* was introduced on bronze coinage in parallel to the gold coinage. It is conspicuous that the bronze coinage with the new spelling *NANA* reveals a wealth of varieties in the two letters Alpha and Nu. Mitchener (1978) identified the following varieties of Alpha and Nu on coinage of the Kushans (Fig. 17). The letter Nu is tricky for an engraver because it also reads top down correctly.

Alpha	A Δ A α σ ο
Nu	N H Y H H

Fig. 17. Varieties of Alpha and Nu on coinage of Kanishka I in Mitchiner (1978)

The above illustration of the letters Alpha and Nu in Mitchiner can lead to the impression that some of the cursive letters are smaller and look like minuscule, but minuscules were not introduced at that time. The central Nu might be a misinterpretation by him because in my opinion it is just an engraving error if it is used top down. In addition to the change in *NANA* the legend on the obverse was also changed and shortened to the Bactrian spelling *PAO KANHPKI*.

Kanishka Æ unit of Göbl type 776

Göbl 1984 classified three types of Æ full units with Bactrian legends. A total of 112 Æ full units or tetradrachms from different sources has been analysed in this paper. 43 coins (38.4%) were recorded with Göbl type 776 and will be discussed first.

The goddess Nana stands right with all her attributes on most bronze coins similar to gold dinars. Her name appears to left and reads upwards *NANA* on type 776, similar to Kanishka's dinars. Fig. 18 should make it easily comprehensible how the name of Nana has to be engraved on dies for coins of type 776 correctly.



Fig. 18. Appearance of *NANA* on coins and dies of Göbl type 776

The two variants are written in classical Greek capitals respectively, with altered Alpha in a cursive style. The sketches above are made

for an easier identification of mistakes done by engravers on dies for various coins of type 776.

It is reasonable to say that cursive letters are used to speed up writing in daily use when using ink or pencils, but it is difficult to understand why cursive letters were introduced on coins. The engraving of such letters requires more skill and might take more time compared with straight lines. It could be just a change in fashion or it was caused by the supervisor for die production who provided a pattern in a cursive style and the engraver transferred it in the same form on dies. The result of such change or development is reflected in a number of varieties of two letters only. The number of engraving errors found on Æ coinage might be also a matter of an increased number of mints connected with a high demand on Æ coins. The influence of the empire was extended to new provinces with new locations of mints during the reign of Kanishka. More experienced and qualified engravers were required but the qualified and experienced engravers and supervisors might have worked for the production of gold coins in main mints. Another issue for a large number of varieties has to be seen in the name of Nana itself. Nana consists of two letters Alpha and Nu only and obviously both letters created difficulties to be transferred in a mirror writing on the die. The majority of the workforce was probably illiterate and the Bactrian language written in Greek letters was used as an official script and not the script of the native language spoken by the people in the empire. The local script Karoshthi was written from right to left and this might be another reason to confuse the engravers if they were not illiterate.

Two units or tetradrachms are shown in Figs. 19 & 20 representing Göbl type 776/1-9 with Nana's name reading from the left side upwards. The two coins vary in the form of the letter Alpha. Alpha appears in the classical Greek form in Fig. 19 and it is simplified to a triangle on the coin in Fig. 20.



Fig. 19. Kanishka Æ unit Göbl 776/1-9 crown I (25.8 mm, 17.46 g, 12h) ⑩



Fig. 20. Kanishka Æ unit Göbl 776/1-9 - NM (25.4-26.5 mm, 16.73 g, 12h)

The coin in Fig. 21 shows the Alpha in *NANA* in a transitional form from classical Greek to a more cursive style.



Fig. 21. Kanishka Æ unit Göbl 776/1-9 ⑬

Figs. 22 & 23 show varieties of coin type 776/1-9 where the cursive Alpha replaces the classical Alpha. Examples of variety 1 of type 776 are not illustrated in Göbl 1984, but a nice illustration is available in Pieper (2013) as no. 1195.



Fig. 22. Kanishka Æ unit Göbl 776/1-9 var.1- LM
(23.7-26.1mm, 14.34 g, 12h)



Fig. 27. Kanishka Æ unit Göbl 776/1-9 var.5 - NM
(25.0-26.5 mm, 15.39 g, 12h)



Fig. 23. Kanishka Æ unit Göbl 776/1-9 var.1 crown II - HM
(24.9-26.3 mm, 16.84 g, 12h)

The coin in Fig. 24 is a variety of Göbl type 776 1-9 with both Alphas mirrored on a vertical axis.



Fig. 24. Kanishka Æ unit Göbl 776/1-9 var.2
(24 mm, 16.95 g, 12h) BM-IOCL.2676

Another unpublished variety of type 776/1-9 (Fig. 25) has the Alpha similar to the coin in Fig. 24, but in addition both Alpha are mirrored on a vertical axis. The name of Nana appears retrograde if seen from the left side.



Fig. 25. Kanishka Æ unit Göbl 776/1-9 var.3 crown II- NM
(25.4-25.8 mm, 16.61 g, 1h)

The fourth worn variety of type 776/1-9 shown in Fig. 26 is unpublished. Both Alpha appear as a deformed letter of classical style mirrored on a vertical axis. The Alpha is comparable with the transitional form on the coin in Fig. 21 but is rounded the other way.



Fig. 26. Kanishka Æ unit Göbl 776/1-9 var.4 - NM
(23.9-24.4 mm, 16.37 g, 12h)

The coin illustrated in Fig. 27 is another unpublished variety of type 776/1-9 on which the upper Nu has been engraved reverse or mirrored on a vertical axis. This is obviously an error done by the die cutter. A similar engraving error is observed in the die used for the dinars in Figs. 9 & 10.

Fig. 28 illustrates a variety of type 776/1-9 on which the name of Nana appears retrograde from bottom to top if compared with the coin variety 1 in Fig. 23. The engraver has mirrored each letter on a vertical instead on a horizontal axis.



Fig. 28. Kanishka Æ unit Göbl 776/1-9 var.6 (5)

The unpublished variety of Göbl type 776/1-9 in Fig. 29 reveals two new characteristics. The lower Alpha is in a transition status from a classical to a cursive form and the upper Alpha is a circle only. Both Nu show an alteration towards a cursive form.



Fig. 29. Kanishka Æ unit Göbl 776/1-9 var.7 crown IV
(26 mm, 16.85 g, 12h) BM 1989.0904.4013

The coins in Figs.30 & 31 are examples for Göbl type 776/12 - 13. NANA reads upwards from right side but Alpha is cut wrongly because it is mirrored twice on a vertical and horizontal axis.



Fig. 30. Kanishka Æ unit Göbl 776/12-13
(27 mm, 16.85 g, 11h) (11)

The headgear worn by the king on coin in Fig. 31 looks like a crown of type I, the so-called crescent form according to Tandon, but a reliable classification is difficult. The classification of the headress as crown type II seems to be easier on the coin in Fig. 32.



Fig. 31. Kanishka Æ unit Göbl 776/12-13 crown I
(25 mm, 13.73 g, 11h) ANS 1973.56.990



Fig. 32. Kanishka Æ unit Göbl 776/12-13 crown II
ANS 1894.0506.1441

Fig. 33 shows an unpublished variety of type 776/12-13 with Alpha mirrored on a horizontal axis and a lower Nu which seems to be engraved mirrored on a vertical axis.



Fig. 33. Kanishka Æ unit Göbl 776/12-13 var.1
(25 mm, 16.05 g, 12h) BM-IOLC.2674

The coin in Fig. 34 (ANS collection) is a second variety of Göbl type 776/12&13 and is illustrated in Jongeward & Cribb as no. 545. Both Alpha and both Nu are engraved mirrored on a vertical axis if compared with coins in Figs. 30 & 32 or the letters are mirrored twice if compared with coins in Figs. 22 & 23.



Fig. 34. Kanishka Æ unit Göbl 776/12-13 var.2
(25 mm, 13.73 g, 12) ANS 1997.66.3222

Kanishka Æ units of Göbl type 777

The next group of Æ units, with a total of 58 coins (51.8%), belongs to Göbl type 777. *NANA* starts on this type with Nu on top and reads from left side downwards. Out of the six coins illustrated in Göbl 1984 five coins are with cursive Alpha (777/1, 3-6) and only a single coin (777/2) has the letter Alpha in the classical form.

Figs. 35 & 36 provide examples of type 777/2 with Nana's name written in classical capitals. The coin in Fig. 34 has a minting error on the reverse caused by a double strike, but the first two letters are visible clearly.



Fig. 35. Kanishka Æ unit Göbl 777/2
(16.82 g, 1h) (3)



Fig. 36. Kanishka Æ unit Göbl 777/2
(24 mm, 16.2 g, 12h) BM-IOLC-2671

A much better example for this variety is illustrated in Göbl 1993 as no. 160. It might be assumed that coins with Nana's name written in classical capitals are either earlier issues or they might be from a particular mint compared with coins bearing cursive letters.

The Alphas in Nana's name have rounded edges in Fig. 37. This coin could be seen as a transitional form from the classical (Göbl type 777/2) towards cursive Alpha (Göbl type 777/1, 3-6).



Fig. 37. Kanishka Æ unit Göbl 777/2
(26 mm, 16.86 g) BM IOC.297

The coin illustrated in Fig. 38 could be treated as an example for the transition from the classical Nu to a cursive Nu.



Fig. 38. Kanishka Æ unit Göbl 777/2 crown II - M
(25.6-27.1 mm, 17.2 g, 12h)

Fig. 39 shows a variety of type 777/2 with letter Nu written in an early cursive style. Two more specimens with this cursive Nu are illustrated in ACW as nos. 3088 and 3089, but in addition these coins have the letter Alpha in a more or less cursive form.



Fig. 39. Kanishka Æ unit Göbl 777/2 var.1 - M
(26.0-27.3 mm, 15.71 g, 1h)

The following three coins represent an unpublished variety of type 777 (Figs. 40-42). The die has been engraved such that *NANA* appears retrograde on the coin if seen from the right side, but in my opinion *NANA* reads downwards and is written in classical Greek letters comparable with sub-type 777/2. The letters Alpha are mirrored on a vertical and a horizontal axis so that the coin is to be seen as a variety of type 777.

Three coins from three different reverse dies are illustrated and that leaves the impression that the engravers made a systematic cutting error.



Fig. 40. Kanishka Æ unit Göbl 777/2 var.2 - NM
(24.6 mm, 15.6 g, 12h)



Fig. 41. Kanishka Æ unit Göbl 777/2 var.2 crown II
(24.0 mm, 17.89 g, 12h) ②

The rough engraving of *NANA* in the coin of Fig. 42 leaves the impression that the upper Alpha is mistakenly mirrored on a vertical axis. This variation is considered as minor and therefore the coin is also seen as a variant of Göbl 777/2 similar to coins illustrated in Figs. 40 & 41.



Fig. 42. Kanishka Æ unit Göbl 777/2 var.2
(24.0-25.6 mm, 15.70 g, 12h) ⑫

The coins of Göbl type 777/1, 3-6 are, with a total of 36 coins, the largest group among the Æ units in this paper. It might be an indication that classical Greek letters were used in a short initial period only. Four coins of type 777/1, 3-6 with some variations in the cursive Alpha are illustrated in Fig. 43-47.



Fig. 43. Kanishka Æ unit Göbl 777/1, 3-6 crown II - NM
(24.9-26.0 mm, 17.32 g, 11h)



Fig. 44. Kanishka Æ unit Göbl 777/1, 3-6 - NM
(25.5-26.3 mm, 16.87 g, 12h)



Fig. 45. Kanishka Æ unit Göbl 777/1, 3-6 crown II/IV
(24 mm, 16.8 g, 12h) BM IOLC.2670

The coins in Figs. 46 & 47 have been added to the group of type 777/1, 3-6 because, in comparison with almost similar coins in Figs. 43 & 44, these coins have been made from magnetic material.



Fig. 46. Kanishka Æ unit Göbl 777/1, 3-6 crown II/IV - M
(25.5-27.4 mm, 16.82 g, 12h)



Fig. 47. Kanishka Æ unit Göbl 777/1, 3-6 - HM
(26.0-27.2 mm, 17.64 g, 12h)

The reverse of the next two coins are made from an almost identical die. It is interesting that the letter Nu shows modification and changes on both coins (Figs. 48 & 49) from a classical Nu with straight lines to slightly bended line of a cursive Nu. The coin in Fig. 48 shows a light magnetic reaction.



Fig. 48. Kanishka Æ unit Göbl 777/1, 3-6 crown II/IV - LM
(24.8-26.6 mm, 16.36 g, 1h)



Fig. 49. Kanishka Æ unit Göbl 777/1, 3-6 crown II
(25 mm, 17.06 g, 12h) ①

The coin in Fig. 50 is an unpublished variety of type 777/1, 3-6. *NANA* reads downwards but the Alpha have been engraved wrongly and appear mirrored on a vertical axis.



Fig. 50. Kanishka Æ unit Göbl 777/1, 3-6 var.1 - NM
(24.6-26.8 mm, 16.12 g, 12h)

A second variety of type 777/1, 3-6 is shown in Fig. 51 with Nu mirrored on a vertical axis.



Fig. 51. Kanishka Æ unit Göbl 777 / 1, 3-6 var.2
BM OR.325



Fig. 56. Kanishka Æ unit Göbl 805
(16.97 g)

Kanishka Æ unit of Göbl type 805

Göbl type 805 is mentioned by several authors as a Kashmir issue with a local mint in the Kashmir valley. According to Jongeward & Cribb (2015) the type was issued by a subsidiary mint in Gandhara (probably Peshawar). Coins of type 805 have specific characteristics compared with type 776 & 777: an additional *tamga* on obverse left of the altar, Nana with longer ribbons, and noticeably cursive letters in the legend. Eight coins of type 805, out of 11 (9.8%), are illustrated in Figs. 52-59. If the variation in Nu is neglected then *NANA* is reading upwards on all coins. The letter Alpha appears on all coins in a more or less classical form. The variations in the letter Nu change from an almost classical form to a cursive style.

NANA and also the legend on obverse were engraved in almost classical Greek letters on the die of the coin in Fig. 52.



Fig. 57. Kanishka Æ unit Göbl 805 - NM
(25.7-26.4 mm, 16.54 g, 12h)

Fig. 58 shows an unpublished variety of Göbl type 805 with *NANA* reading upwards.



Fig. 52. Kanishka Æ unit Göbl 805
(27 mm, 16.81 g; 12h) 9



Fig. 58. Kanishka Æ unit Göbl 805 var.1 NM
(24.8-25.7 mm, 15.86 g; 11h)

Fig. 53 shows a coin on which the second Nu looks like an H and the other Nu is mirrored on a vertical axis.

Fig. 59 shows an almost similar variant but all letters are in a more cursive form.



Fig. 53. Kanishka Æ unit Göbl 805 - NM
(25.5-26.0 mm, 16.93, 11h)



Fig. 59. Kanishka Æ unit Göbl 805 var.1
(15.8 g) 3

The coins in Fig. 54-57 show varieties of type 805 with cursive Nu and a characteristic stylish Alpha typical of coins minted in the Kashmir region. Both letters Nu are mirrored on a vertical axis.

Kanishka novel Æ unit (Loescher 2007)

A novel Æ coin of Kanishka I will be referred at this place of full units because it has some unique features and is with 11.8 g of lighter weight than a full unit but it is heavier than a half unit. The goddess Nana stands right and the name *NANA* reads downwards as it is on Goebel type 777/1, 3-6 but the first Alpha is mirrored and this combination of the letter Alpha is not found on any other units.



Fig. 54. Kanishka Æ unit Göbl 805
(26-27mm, 16.01, 12h g) 1



Fig. 60. Kanishka Æ unit (Loescher 2007) NM
(27.0-27.5mm, 11.8 g, 1h)



Fig. 55. Kanishka Æ unit Göbl 805 (16.8 g) 3

Besides the unusually low weight for a full unit of Kanishka I, there are other obvious differences, like the beardless chin of the king and a new type of crown/ headdress. It looks like a fitted cap with decoration on top and long sideburns. There is some decoration (jewellery?) on the forehead and also at the back of the head (see the detailed sketch in Fig. 61).

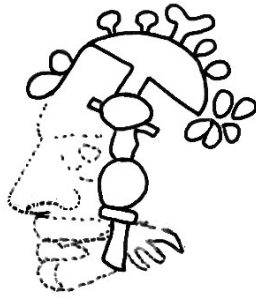


Fig. 61. A new type of crown/ headdress

It is noticeable that the engraver put quite a lot of effort in carving the face and headdress of the king. Even the moustache and the dimple on the chin are visible. Kanishka I is usually shown with a long beard on his gold and bronze coinage. The exceptions are the so-called ‘Kashmir’ coins, where the headdress looks like a cap and the king is shown with a short trimmed beard. Fig. 62 has a close-up of the king’s head seen on a ‘Kashmir’ coin in Fig. 54.



Fig. 62. Head of king on ‘Kashmir’ coin (Figs. 54)

Table 1. Overview of Kanishka’s Æ units discussed in this paper

	Göbl type		no.	%	Fig.
1	776 / 1-9	NANA NANA	13	25.0	19 - 21
2	776 / 1-9 var. 1	NANA NANA	9		22 - 23
3	776 / 1-9 var. 2 - 7	NANA NANA NANA	6		24 - 29
4	776/12-13	NANA NANA	12	13.4	30 - 32
5	776/12-13 var. 1 & 2	NANA NANA	3		33 - 34
6	777/2	NANA NANA	10	16.1	35 - 38
7	777/2 var. 1 & 2	NANA NANA	8		39 - 42
8	777/1, 3-6	NANA NANA NANA	38	35.7	43 - 49
9	777/1, 3-6 var. 1 & 2	NANA NANA	2		50 - 51
10	805	NANA NANA	9	9.8	52 - 58
11	805 var. 1	NANA	2		59

Total number: 112

Table 1 provides an overview of all 112 Æ units discussed in this paper with respect to the classification done by Göbl in types 776, 777, and 805. Of these, 101 coins belong to the types 776 and 777. The ratio between these two types is 43 to 58 (43% to 57%) - slightly in favour of type 777 - but an interpretation would be more meaningful if a die study would support it.

There may exist more varieties of full units with Nana, but the coins studied here provide some interesting observations:

- i) *NANA* reads on Æ units either upwards or downwards to derive the types 776 and 777. *NANA* reads only upwards on units of type 805. *NANAIA*, *NANA* or *NANASHAO* always read upwards on gold coins and early Æ ½ units.
- ii) There are more forms and styles in writing the Greek letters Alpha and Nu on Æ coins than on gold dinars.
- iii) There is a change from classical Greek letters to cursive Greek letters on Æ units. This development might have moved with time and/or by an increased number of mints and/or the minting output. Æ coins with classical Greek letters are comparably less in number and it might be seen as indication of being minted during the first years of Kanishka’s reign or a minting in particular locations.
- iv) There are substantial differences in quality of engraving and minting of Æ and gold coins. Die preparation, supervision, quality control, and perhaps even the minting process of gold and Æ coins were done by different work forces and it can be assumed that the mints for gold and Æ coins were at different locations or at least the premises/processes were separated.
- v) Illustrations show that the headdresses worn by the king on *NANA* bronze units are only partially valid as a characteristic for classification. The headdresses of type II and IV are abundant on coin types 776 and 777 against type I, supporting the results found by Tandon and Jongeward & Cribb. On a number of bronze coins it is difficult or even impossible to distinguish the particular crown type correctly, due to poor engraving quality, the crown being off flan, wear etc. The same reasons have already been mentioned by Tandon. The headdresses on the ten Kashmir issues (type 805) studied all belong to type III.

Kanishka Æ ½ unit of Göbl type 778

Half units in bronze with Bactrian spelling *NANA* are scarce and only one type was classified by Göbl (1984) as type 778. *NANA* is read downwards on the 11 coins studied. I haven’t seen any coin where the name of Nana was read upwards or was engraved retrograde. The design of type 778 matches with the full unit of Göbl type 777/1, 2-6. The number of coins isn’t much, but the conclusion is irresistible that probably all the coins come from a single source, which was a mint with skilled engravers and a good system of quality assurance. Two examples of type 778 are illustrated in Figs. 63 & 64.



Fig. 63. Kanishka Æ ½ unit Göbl 778
(19.9-20.6 mm, 8.32 g, 12h)



Fig. 64. Kanishka Æ ½ unit Göbl 778
(22.0 mm, 8.14 g) ANS 1944.100.63636

The only variety with classical Greek Alphas is observed by a single coin from the collection of the British Museum (Fig. 65). *NANA* reads downwards as it is on others but the second Nu is engraved wrongly and appears mirrored on a vertical axis.



Fig. 65. Kanishka Æ 1/2 unit Göbl 778 (21 mm, 7.57 g) BM 1981.0324.2

Kanishka Æ 1/4 units of Göbl type 806

Quarter units in bronze with the image of Nana are quite common. Beside the known design with Nana standing right there also exist some rare coins with Nana standing left. There might be full units with Nana standing left too, but the two coins I saw looked rather suspiciously like tooled coins. Göbl (1984) classified only one type 806 for quarter units with Nana standing to right, with a sub-type 806A. The type 806/806A follows the design of full and half units. Nana is standing in three-quarter profile right. Her head is surrounded by a halo with a crescent on top of her hair, and she holds a wand with a lion protome in her right hand and a bowl in her left hand, with a *tamga* to right. The legend *PAO KANHPKI* on obverse is the same as on full and half units. Göbl states that *NANA* reads upwards and the engraving of the name is often corrupt. In addition to the classification of full units with *NANA* reading upwards or downwards, there appear some more characteristics in quarter units. A new feature is a control mark in Kharoshthi as χ (cha) or ψ (ji) in front of the king's head on obverse. Another difference is the variation of the starting point of the legend *PAO KANHPKI*. It starts on some coins at 7/8/9 o'clock and on others it starts at 1 o'clock. Magnetism of the metal used is a third observation but it occurs in other units also.

Three examples of Æ 1/4 units representing type 806 with Alpha and Nu in more or less classical Greek form are illustrated in Figs. 66-68. Information about the control mark, the start of the legend, and magnetism is provided in brackets if it is available on the flan and readable.



Fig. 66: Kanishka Æ 1/4 unit Göbl 806 - cha, 1h, M (16.2-17.6 mm, 3.92 g, 11h)



Fig. 67. Kanishka Æ 1/4 unit Göbl 806 - cha, 9h, LM (16.6-17.4 mm, 3.39 g, 12h)

The majority of quarter units of type 806 have magnetic properties, but there are examples made of non-magnetic material. The non-magnetic coin in Fig. 68 has an almost similar form of *NANA* as the magnetic coin in Fig. 66.



Fig. 68. Kanishka Æ 1/4 unit Göbl 806 - cha, 1h, NM (16.3-17.2 mm, 3.75g, 11h)

The next five coins (Fig. 69-73) have a variation of cursive letter Nu comparable with the illustration of Göbl type 806/6&7. The material property varies from magnetic to non-magnetic.



Fig. 69. Kanishka Æ 1/4 unit Göbl 806 - cha, 1h, M (16.4-17.6 mm, 3.83 g, 12h)



Fig. 70. Kanishka Æ 1/4 unit Göbl 806 - cha, 8h, M (15.9-16.7 mm, 3.64 g, 12h)



Fig. 71. Kanishka Æ 1/4 unit Göbl 806 - cha, LM (16.5-17.4 mm, 3.90 g, 11h)



Fig. 72. Kanishka Æ 1/4 unit Göbl 806 - cha, 1h - NM (17.1-18.0 mm, 4.40 g, 12h)



Fig. 73. Kanishka Æ 1/4 unit Göbl 806 - cha, 1h (18 mm, 3.79 g, 12h) ANS 1944.100.63613

The elongation of the upper line is missing in the second Nu of both coins and therefore it looks like a Π (Figs. 74 & 75). Both Alpha in Fig. 74 are engraved as a triangle only.



Fig. 74. Kanishka Æ 1/4 unit Göbl 806 - cha, 1h (6)



Fig. 75. Kanishka Æ 1/4 unit Göbl 806 - cha, MM (15.7-16.4 mm, 4.2 g, 11h)

The Nu in coin Fig. 76 looks like a transition between the classical Greek Nu and the form in the following coins Figs. 77 & 78.



Fig. 76. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 1h, MM
(19.3-18.7 mm, 4.30 g, 11h)

The coins in Fig. 77 & 78 have both cursive Nu which look like an H. The coins are similar to Göbl type 806/1 and probably to 806/8 also.



Fig. 77. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 1h
(17.5 mm, 4.16 g) BM 1989.0904.9015



Fig. 78. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, LM
(17.4-18.4 mm, 3.90 g, 12h)

The next group being illustrated (Figs. 79-85) shows coins with an error in the letter Nu. The engraver has cut the first Nu wrongly. The letter is on the illustrated coins mirrored on a vertical axis. Also some of the Alpha are mirrored on a vertical axis.



Fig. 79. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 9h
(16.6-17.3 mm, 4.33 g, 11h)



Fig. 80. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 1h, M
(17.4-18.1 mm, 4.22 g, 12h)



Fig. 81. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 8h, MM
(17.5-19.1 mm, 4.50 g, 12h)



Fig. 82. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 1h
(18 mm, 4.6 g) BM 1922.0116.22



Fig. 83. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 1h, M
(17.5-16.6 mm, 4.20 g, 11h)



Fig. 84. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 8h
(18 mm, 4.65 g) ANS 1944.100.63618



Fig. 85. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 8h, MM
(17.2-18.4 mm, 3.70 g, 11h)

The coin in Fig. 86 is an example for Göbl type 806/10. The coin is comparable with coins illustrated in Figs. 69-73, but also with coins of Göbl type 806/6&7. Both Nu are mirrored by the engraver on a vertical axis.



Fig. 86. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - cha, 7h, M
(17.0-17.9 mm, 4.06 g, 12h)

The quarter unit in Fig. 87 looks similar to the coin illustrated in as Göbl type 806/3 but here both Nu are mirrored twice on a vertical and horizontal axis. Another difference is the Kharoshthi letter *ji* in front of the king's head. A comparison with quarter units showing other deities like Mao or Oesho gives the impression that the control mark *cha* is more commonly used than *ji* on Nana coins and in particular on coins reading *NANA* upwards.



Fig. 87. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 - ji, 8h, M
(17.1-19.0 mm, 3.22 g, 12h)

Figs. 88 & 89 show coins with a deviation in the second Nu caused by the engraver. The letter Nu is mirrored on a horizontal axis. This variety is not shown in Göbl (1984).



Fig. 88. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 var. 1 - cha, 1h, M
(18.0-19.3 mm, 4.77 g, 12h)



Fig 89: Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 var. 1 - cha, 8h

Another variety of type 806 in the collection of the British Museum is illustrated in Fig. 90. Both Nu are mirrored on a horizontal axis. The difference is easily recognized if the coin is compared with the coins in Figs. 69-73. Also, this variety is not published by Göbl. A coin like this might have led Mitchiner to consider this Nu as an independent form shown as no. 3 in Fig. 17, but it is just an error of the engraver.



Fig 90: Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 var. 2 - cha, 1h
(17 mm, 3.73 g) BM 1989.0507.1829

A third variation of type 806 is shown in Fig. 91. *NANA* is reading upwards but the first Nu is mirrored on a horizontal axis.



Fig. 91. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806 var. 3 - cha, 8h, M
(17.5-18.2 mm, 4.70 g, 11h)

The illustrations of types 806/2 and 806/4 in Göbl (1984) reveal that *NANA* doesn't read upwards on all coins. *NANA* seems to be engraved retrograde on these two coins starting with an Alpha at bottom. The problem here is that the Nu doesn't match to the Alpha for a retrograde engraving. It would match if the writing of the third Nu proposed by Mitchiner (Fig. 17) is accepted. In my opinion we have an engraver's mistake and Nu is mirrored on a horizontal axis. The following examples will show that the letter Alpha is engraved on all coins to be read from the right. There isn't seen any coin with a correct retrograde engraving and also no coin with a correct downwards reading as it is found on Göbl type 777 of full units. This problem has caused some confusion in the classification of quarter units in literature. An example for this dilemma is the description of four quarter units illustrated on plate 45 as figures 201 to 204 in Göbl (1993). There it is written that *NANA* reads downwards and reference is taken to type 806/N. The quarter units in Göbl (1993) are similar to type 806/2 and 806/4 in Göbl (1984). A consequence would have been to classify the quarter units with *NANA* reading downwards as a separate type comparable with full units. Another example to this problem is given in Mitchiner (1978) with the description of three quarter units illustrated as nos. 3182-3184. It is wrongly written "similar ... (reading from below up)". *NANA* isn't reading upwards on all three coins because Alpha is at the bottom. The meaning of similar in this case is that the coins are similar to coins illustrated as nos. 3180-3181 but there is Nu at the bottom. Interesting is also that the modified letters Alpha and Nu are mentioned as a particular characteristic for the two groups. The list of inconsistency in literature can be continued with a coin illustrated as no. 672 in Jongeward & Cribb (2015). The coin in the collection of the American Numismatic Society (Fig. 92) is described as a variant reading *NANA* downwards and reference is taken to Göbl type 809. In this case it is incorrect to take reference to type 809 because this type has on reverse Nana standing left and *NANA* reads downwards on right side as shown in Fig. 104. The cited examples of confusion and inconsistency support the question

how to handle coins of type 806 on which *NANA* doesn't read upwards. A possible solution could be the introduction of a new type or a sub-type.

The following nine illustrations show various examples of $\text{AE } \frac{1}{4}$ units with a retrograde engraving of *NANA* starting with an Alpha at the bottom (Figs. 92-100). As already mentioned the illustrated coins are comparable with coins published in Göbl (1984) as type 806/2 & 4 and also with coins published in Göbl (1993) as nos. 201 to 204. All these coins have Alpha in various classical forms and on some coins it is mirrored on a vertical axis and the letter Nu is mirrored on a horizontal axis. Coins illustrated with *NANA* starting with an Alpha at the bottom will be marked with an X in this paper. It isn't done only for illustration purpose and further discussion but also with the intention to underline the necessity for a separate type/sub-type X806.



Fig. 92. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 8h
(17.0 mm, 2.93 g) ANS 1944.100.63017



Fig. 93. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 8h, M
(16.3-17.0 mm, 3.61 g, 12h)



Fig. 94. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, MM
(17.5-18.5 mm, 3.36 g, 11h)



Fig. 95. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 8h, M
(16.9-18.3 mm, 3.92g, 11h)



Fig. 96. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 8h
(16.4-17.5 mm, 3.50 g, 11h)



Fig. 97. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 8h, M
(16.1-17.1 mm, 4.01 g, 12h)



Fig. 98. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 1h
(17 mm, 3.13 g) BM IOLC.2938



Fig. 99. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 1h
(17 mm, 4.29 g) BM 1956.0409.170



Fig. 100. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 - cha, 1h, HM
(17.0-18.0, 3.96 g, 1h)

The coin shown in Fig. 101 is an unpublished variety of (Göbl) type X806 with an upper Nu mirrored twice on a horizontal and a vertical axis.



Fig. 101. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 var. 1 - ji, 8h, MM
(18.4-20.5 mm, 4.83 g, 10h)

The coins in Fig. 102 & 103 have both Nu mirrored twice on a horizontal and vertical axis. The figure of Nana is designed more abstractly on the second coin (Fig. 103).



Fig. 102. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 var. 2 - ji, 8h, M
(17.5-18.8 mm, 4.44 g, 11h)



Fig. 103. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 var. 2 - cha, 1h, LM
(17.3-17.9 mm, 3.45 g, 11h)

Figs. 104 & 105 is another variety of Göbl type X806 with both Nu in a cursive style like an H, similar to Figs. 77 & 78.



Fig. 104. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 var.3 - cha, 1h (5)



Fig. 105. Kanishka $\text{AE } \frac{1}{4}$ unit (Göbl) X806 var.3 - cha, 1h, MM
(17.1-18.5, 4.16 g, 12h)

Kanishka $\text{AE } \frac{1}{4}$ units of Göbl type 806A

A quarter unit of type 806A is illustrated in Fig. 106. The illustration shows a coin in the ANS collection. *NANA* has been engraved in cursive Nu and at least one circular Alpha. The legend on obverse starts at 9 o'clock. An almost similar $\text{AE } \frac{1}{4}$ unit with two visible circular Alpha is published as type 806A in Göbl (1984).



Fig. 106. Kanishka $\text{AE } \frac{1}{4}$ unit Göbl 806A
(18.0 mm, 3.51 g, 10h) ANS 1973.54.1219

The coins of sub-type 806A (Fig. 106) could be seen as *NANA* reading downwards because the letter Nu reads correctly from the left side and the round Alpha allows any side. It is understood that this conclusion is doubtful and I would consider the round Alpha as an engraving error. All Alpha appear on other quarter units in a classical form with minor variations. Such variations are Alpha mirrored on a vertical axis or engraved as a triangle only. Another observation is that Alpha is engraved on all coins with the base directed to the right side which means *NANA* has to be seen from the right side always. The element of uncertainty with round Alpha in a single coin might be the reason why Göbl introduced a sub-type 806A only.

General remarks to Göbl types 806/X806/806A

39 illustrated coins of type 806/X806/806A reflect a high diversity caused by variations in writing *NANA* and by additional characteristics. The majority of the coins (31) have the Kharoshthi control mark χ (cha) in front of king's head. The starting point of legend varies between 1 h (o'clock) and 7/8/9 h. The control mark χ (ji) was found on three coins only and it is always combined with a starting point of legend at 8 o'clock. Göbl (1993) has illustrated four AE quarter units with *NANA* engraved retrograde as nos. 201 to 204. He identified the control mark on coin nos. 201, 202, and 204 as ji but a check reveals that it is a cha. It has to be considered that engravings of letter cha χ χ χ χ vary and could be read wrongly as ji if a coin is corroded or worn already.

There are a number of attempts to associate the minting of coins mainly gold coins with particular cities in the Kushan realm. Bracey (2012) outlined some of the clues, which might help to attribute coins to particular regions but it requires an understanding of production structure and additional archaeological data with respect to site finds and hoards. There is a quite common understanding in literature that the minting of bronze quarter units is associated with Kashmir.

Some observations and conclusions related to quarter units of Göbl types 806, X806, 806A:

- i) letter Alpha is always engraved in a classical form with a reduction to a triangle on some coins
- ii) letter Nu shows a number of varieties from classical to cursive forms and is affected by engraving errors
- iii) *NANA* reads on all coins of type 806 from right side
- iv) *NANA* with Alpha at bottom is considered as retrograde engraving.
- v) confusion in literature about interpretation of reading *NANA* upwards and downwards supports a review of classification

- vi) characteristics like control mark, starting point of legend, magnetism don't support a recognisable system suitable for definition of types or sub-types
- vii) headdresses worn by king are less significant in quarter units due to size and engraving quality
- viii) ratio between illustrated coins with *NANA* reading downwards and *NANA* engraved retrograde is 25 to 13 (66% : 34%). The ratio might change to 75% : 25% or even to 80% : 20% if all coins are considered.

Kanishka AE $\frac{1}{4}$ units of Göbl types 809

Type 809 was mentioned already in the discussion about the introduction of a type X806. The coin in Fig. 107 shows the goddess Nana in a three-quarter profile walking to left side. The inscription of her name *NANA* is engraved on the right side and reads downwards. The letter Alpha is cut in a classical style but Nu is slightly deformed. The coin is almost similar to the coin 809/3 illustrated in Göbl (1984) but there the Alpha is mirrored on a vertical axis and Nu is executed in a cursive style.



Fig. 107. Kanishka AE $\frac{1}{4}$ unit Göbl 809 - ji, 1h, HM (17.3-18.4 mm, 4.42 g, 11h)

The coin in Fig. 108 is of the same type but the second Alpha is a circle and the second Nu has a very special form which looks like an elongated Greek Eta.



Fig. 108. Kanishka AE $\frac{1}{4}$ unit Göbl 809 - ji, 9h, M (17.4-18.4 mm, 4.67 g, 11h)

Fig. 109 shows an unpublished variety of Göbl type 809. The coin is similar to the coin in Fig. 108 with *NANA* appearing on the right side but letters are engraved retrograde.



Fig. 109. Kanishka AE $\frac{1}{4}$ unit Göbl 809 var. 1 - ji, 9h, M (17.0-18.0 mm, 4.26 g, 11h)

Kanishka AE $\frac{1}{4}$ units of Göbl types 779A

Göbl (1984) classified two types of AE $\frac{1}{4}$ units with Nana reading *NANASHAO* upwards. The British Museum collection has a coin (Fig. 110) described as a quarter unit of Nana, but the name of Nana is much longer compared to other quarter units. It looks more likely to be a corrupt form of *NANASHAO*. The legend on the obverse is not readable and therefore it is assigned with reservation to Kanishka. There are a number of gold coins with *NANASHAO* in Bactrian language, but coins in bronze with *NANASHAO* are rare.



Fig. 110. Kanishka AE $\frac{1}{4}$ unit Göbl 779A/819 (17.0 mm, 3.36 g) *Nanashao?* BM 1948.0324.3

Kanishka AE $\frac{1}{4}$ units of Göbl types 810

A very rare issue of a Nana coin with the spelling *NANASHAO* of Göbl type 810 is illustrated in Fig. 111. Göbl (1984) classified the coin as a hybrid type because the obverse shows the king in a posture found on the coins of his father Vima Kadphises (c. 113-127 CE). The left hand is on his hip or sword and not upraised holding a spear. There isn't any control letter in front of the king's head. The Greek legend reads **Shaonanoshao Kaneshki Koshano** with the bold marked letters visible on the coin. Senior (2004) published a similar coin, but without the legend on the left side and only with traces of the trident in left field. It is assumed that these coins were minted in a provincial mint.



Fig. 111. Kanishka AE $\frac{1}{4}$ unit Göbl 810 -, 6h, LM (15.6-17.2 mm, 4.49 g, 12h)

Göbl (1984) classified three more types of AE coins issued by Kanishka I with goddess Nana on reverse, but there are either no examples in my collection and/or photos are not available from any another database.

1. type 779: bust of king emerges from mountain top, reverse is similar to Göbl 806
2. type 807: king sits facing on throne, reverse is similar to Göbl 806
3. type 808: half unit with similar design to Göbl 806

Kanishka AE $\frac{1}{4}$ units of Göbl type 813A

An unusual quarter unit with the image of Oesho and the Bactrian inscription *NANA* to left is shown in Fig. 112. Reverse: Oesho stands facing, head to left, erect *lingam*, trident in his raised right hand similar as on the type 813. *NANA* reads upwards as it is known for Göbl type 806/6&7 (Figs. 69-70). The coin is not unique because two similar coins are illustrated in Göbl (1993) as nos. 211 and 212 and another with *NANA* off the flan is illustrated in Fig. 113. Each reverse of the four coins comes from a different die, but it seems that the control mark *cha* and starting point of the legend at 1 o'clock are the same on all four coins.



Fig. 112. Kanishka AE $\frac{1}{4}$ unit Göbl 813A ⑬



Fig. 113. Kanishka AE $\frac{1}{4}$ unit Göbl 813A - cha, 1h, M (16.9-17.3 mm, 4.46 g, 11h)

The coin in Fig. 113 with the name of the goddess off flan could be mistaken as a variety of Oesho with Bactrian inscription *OHPO* to left, because there are Oesho coins of type 813 with Bactrian inscription *OHPO* on left side and the *tamga* on right side. Three examples of this scarce variety of type 813 are illustrated in Figs. 114-116. These coins confirm the definite difference to coins with *NANA* shown in Figs. 107 & 108. The difference is the design of Oesho who stands facing with head and hip directed to right side. He holds a trident with his right hand and a water pot with left hand.

OHPO appears on left side and the *tamga* is visible on right. The legend starts at 1 o'clock and it might read *PAO KANHPO*.



Fig. 114. Kanishka AE ¼ unit Göbl 813 var. 1 - cha, 1h ③



Fig. 115. Kanishka AE ¼ unit Göbl 813 var. 1 - cha, 1h, NM (17.8-18.7 mm, 4.48 g, 11h)

The coin in Fig. 116 is heavily corroded, but *OHPO* is engraved on the left side and it reads upwards, similar to the coins above.



Fig. 116. Kanishka AE ¼ unit Göbl 813 var. 1 (17 mm, 3.6 g)

An unpublished variety of type 813 is illustrated in Fig. 117. The name of the deity Oesho reads upwards but the letters have been engraved the wrong way around.



Fig. 117. Kanishka AE ¼ unit Göbl 813 var. 2 - MM (16.9-17.8 mm, 4.43 g, 11h)

The difference of the varieties shown in Figs. 113–117 becomes easily visible in comparison with the standard type 813 in Fig. 118. There is a small particularity in the coin of Fig. 118 because this coin does not have a control mark in front of king's head.



Fig. 118. Kanishka AE ¼ unit Göbl 813 - -, 9h, M (16.9-17.9 mm, 4.26 g, 1h)

The varieties of Göbl type 813/813A with the image of Oesho shows that this group also needs a review in classification to avoid further confusion in identification and discussion.

Final Remarks

The idea of writing this paper began with some unpublished varieties of full units with the image of Nana on Kanishka's bronze coins in my collection. At first glance the variation of the two letters Alpha and Nu in writing *NANA* became obvious. Mitchiner (1978) has identify some varieties of Alpha and Nu, shown in Fig. 17, but the illustrations of coins in this paper has produced many more varieties. An overview of the various Alpha and Nu, along with a reference to the respective illustration, is provided in Fig. 119.

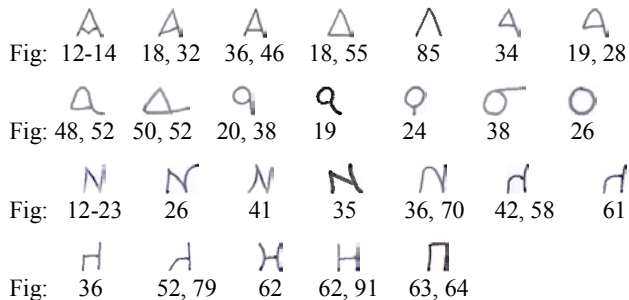


Fig. 119. Varieties of Alpha and Nu on AE coinage of Kanishka I

It was stated for full units already that the high number of varieties in writing *NANA* seems to be an indication for a lack in quality assurance. It is also possible that the word *NANA* might have been a challenge for an engraver in Gandhara who spoke the native language Gandhari Prakrit and wrote in Kharoshthi script. I am not a lingual expert, but if a local engraver was familiar with Kharoshthi script only the handling of the word *NANA* in Greek script might have been tricky for him. Kharoshthi was written from right to left and the word *NANA* would consist of two signs 𑀮 (ña) only. *NANA* reads in Gandhari Prakrit 𑀮𑀮 and the Kharoshthi ña looks like a cursive Greek Nu top down. This is speculative, but it is obvious that engravers might have had problems with *NANA* more than they might have had with the names of other deities on Kanishka's bronze coinage.

Abbreviations

ACW	Mitchiner 1978
AMS	American Numismatic Soc. followed by inventory no.
BM	British Museum, followed by inventory no.
JONS	Journal of the Oriental Numismatic Society
h	hour, starting point of legend with reference to o'clock
HM	high magnetic (adhering force >249 g)
M	magnetic (adhering force >149 – 249 g)
MM	medium magnetic (adhering force >49 – 149 g)
LM	low magnetic (adhering force >0 – 49 g)
NM	non-magnetic (no influence by magnet))

Publication of marked photos has been authorised by:

- ① <http://coinindia.com/galleries-kanishka.html>
- ② Pankaj Tandon, A Hoard of Kushan Coins from Mingora
- ③ Sahil Ash, London
- ④ Australian Numis Comp.
- ⑤ Bob Reis
- ⑥ Copper Pennys Galleries
- ⑦ Gemini Numismatic Auctions
- ⑧ NOMOS AG
- ⑨ Classical Numismatic Group www.cngcoins.com
- ⑩ Marudhar Arts, India
- ⑪ www.ancientground.eu
- ⑫ www.forumancientcoins.com
- ⑬ Public domain
- ⑭ Kuenker (Auction 295, Sept. 2017)

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FIRST SILVER COIN OF GUPTA KING GHATOTKACHAGUPTA

Karan Singh

The coinage of the Gupta Empire is well-documented, so it is not often that one can report an entirely new discovery.¹ Ghatotkachagupta was an ephemeral ruler of the Gupta Empire who is known from two inscriptions and one seal.² He is thought to have been a younger brother of Kumaragupta I,³ and ruled briefly c. 450-455 CE between Kumaragupta I and Skandagupta.⁴

Two Archer type gold dinars carrying the names *Ghato* and *Ghatotkachagupta* respectively have so far been the only coins attributed to this king, though this attribution is seen as tentative.⁵

Now, however, we have a silver coin that clearly bears Ghatotkachagupta's name. This is in my collection and is being published for the first time. I will first illustrate the coin and then discuss this discovery.



Fig. 1. Ghatotkachagupta AR drachm, Karan Singh collection (photo enlarged)

Obverse: King's head right, wearing collar, with traces of Brahmi date 134 to right

Reverse: Fan-tailed peacock in centre with Brahmi legend around ...*(va) yati Ghatot(k)achaguptoyam pi...*⁶

Weight: 2.34 g; size: 14 mm

Attribution

The legend clearly says *Ghatotachagupto*, which we can read as Ghatotkachagupta. There were only two kings in the Gupta dynasty to carry the name Ghatotkacha:

1. Ghatotkacha (ruled prior to 319 CE), the son of founder Sri Gupta. I shall label him Ghatotkacha I to differentiate him from his later namesake. He is not known to have issued any coins.

2. Ghatotkachagupta (450-455 CE), the later ruler outlined above, whom I shall call Ghatotkacha II. The Tumain inscription lists his genealogy from Kumaragupta I and earlier Gupta kings,⁷ from which we can assume he was Kumaragupta I's viceroy in Malwa. The Ramtek inscription confirms that Ghatotkacha II did become king and marry his niece Atibhavati, but that he died soon afterwards, as his widow was brought back to her paternal home by her brother, Vakataka king Pravarasena II.⁸

The first Gupta king to issue coins is thought to be Ghatotkacha I's grandson Samudragupta,⁹ who issued gold coins. Silver did not appear till Samudragupta's son Chandragupta II (375-414 CE), at least 80 years after Ghatotkacha I, so it will be difficult to assign our silver coin so early in the dynastic sequence. When Ghatotkachagupta (Ghatotkacha II) ruled there was already an established silver coinage in the empire, so it would fit rather well in the numismatic sequence.

Both Ghatotkacha II's predecessor Kumaragupta I and his immediate successor Skandagupta issued silver coins of this type, so it would have been natural for Ghatotkacha II to follow in that numismatic tradition. In addition, the apparent date on this coin, GE 134 (453 CE), would date it during Ghatotkacha II's reign.

Given that he ruled for only a few years and given the extreme rarity of his gold coins, it is no wonder that we have only this unique specimen in silver.

Following this discovery, the coinage of the Guptas in gold (G), silver (S), copper (C), and lead (L) can be listed here:

Ruler	Coins issued			
Sri Gupta				
Ghatotkacha (I)				
Chandragupta I	G?			
Samudragupta	G			
Kachagupta (?)	G			
Ramagupta			C	
Chandragupta II	G	S	C	L
Kumaragupta I	G	S	C	L
Ghatotkachagupta (Ghatotkacha II)	G?	S (Only 1 so far)		
Purugupta/ Chandragupta III	G			
Skandagupta	G	S		L
Narasimhagupta I	G			
Samudragupta II (?)	G			
Kumaragupta II	G			
Budhagupta	G	S		

Silver Coinage of the Guptas

Till now it was thought that only four Gupta kings issued silver coins. Now that we have added a fifth ruler to this select list, let us examine the silver coinage of these kings in detail.

For the first century of Gupta rule, and while their territory covered the Gangetic valley, the Gupta kings did not issue silver coins. Their coinage was entirely bimetallic, consisting of gold dinars and scarce copper coins. Even the most successful of the early kings, Samudragupta, issued only gold coins.¹⁰ He expanded the empire to cover almost the whole of northern India, but he nevertheless saw no need to issue in other metals.

His son Chandragupta II continued with this bimetallic coinage. It was only when he defeated the Western Kshatrapas c. 407-415 CE and annexed their territory of Gujarat, Malwa and parts of Maharashtra into his empire,¹¹ that the Guptas encountered a successful local coinage that used other metals. The Kshatrapa kings had issued a trimetallic coinage for over two centuries in silver, potin and lead. This was to cater to the large volume of trade in Gujarat and on the western coast.

When the Guptas annexed this kingdom to their empire, they, as other imperial powers before and after, found it necessary to issue coins that the local population would accept. They therefore started

issuing coins in silver and lead in these western territories, copying the Kshatrapa prototypes with minor changes in symbols and legends.

The first Gupta silver coin issued by Chandragupta II imitates the Kshatrapa style, but with a Garuda on reverse. This Garuda type circulated in the western part of his empire.



Fig. 2. Chandragupta II AR drachm Garuda type, Karan Singh collection

His successor Kumaragupta I continued with this type, but also added his own innovation: a silver coin with a peacock on reverse, issued in the central part of his empire - the *Madhyadesha* (literally 'central country') type.¹²



Fig. 3. Kumaragupta I AR drachm Madhyadesha type, Karan Singh collection

This is perhaps the first time a silver coinage was issued in the Gangetic plain in over 500 years, after the Magadhan punch-marked currency ceased to circulate in the early centuries CE. Within Gupta coinage this *Madhyadesha* type remains more rare than the Garuda type, perhaps reflecting the less monetised nature of the core imperial territories.

Skandagupta and Budhagupta also continued with the *Madhyadesha* type. But with the declining fortunes of the empire by Budhagupta's time, his coins - both silver and gold - are quite rare. He did not issue any Western type coins as the western territories were lost by then.¹³

The Ghatotkacha II silver coin follows the *Madhyadesha* tradition and fits in quite well with the other three kings who issued this type.

Table B: Silver coins issued by Gupta kings		
Ruler	Garuda type	Madhyadesha type
Chandragupta II	x	
Kumaragupta I	x	x
Ghatotkachagupta (Ghatotkacha II)		x (Only 1 so far)
Skandagupta	x	x
Budhagupta		x

Conclusion

The fact that we now have a *Madhyadesha* type silver coin of Ghatotkacha II, but not a Western type, indicates that he may have controlled the central part of his empire during his brief reign, and not the Western territories.

We know that the Gupta empire faced serious challenges at the end of Kumaragupta I's reign, with Skandagupta having to repulse the *mlechchhas* (Huns).¹⁴ It is possible that when Ghatotkacha II ascended the throne his nephew Skandagupta effectively controlled a part of the empire.

Ghatotkacha II died within just a few years - as indicated by the Ramtek inscription¹⁵ - either due to natural causes or he was killed in a power struggle. Since the two gold coins discussed are only tentatively attributed to him, the silver specimen of Ghatotkacha II is the first concrete proof that he actually ruled and issued coins, however briefly.

This silver coin is therefore an important discovery in Gupta coinage, and sheds some light on a ruler of whom very little is known.

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1. I am indebted to Shailendra Bhandare, Ashmolean Museum, for attributing this coin and reading the legend.
2. Pankaj Tandon, 'The Succession after Kumaragupta I', *Journal of the Royal Asiatic Society*, 24, pp. 559-560.
3. Hans Bakker & Harunaga Isaacson, 'The Ramtek Inscriptions II: The Vakataka Inscription in the Kevala-Narasimha Temple', *Bulletin of the School of Oriental and African Studies*, Vol. 56, No. 1, pp. 66.
4. Parmeshwari Lal Gupta, *The Imperial Guptas*, Vol. 1, p. 327; Sanjeev Kumar, *Treasures of the Gupta Empire*, pp. 341-2.
5. The *Ghato* legend dinar is in the Hermitage Museum and the *Ghatotkagupta* legend dinar was published by Ajit Ghose (*JNSI* XXII: 260). Their attribution is based on grainy photographs so it is tentative, and as the two coins are not available for study it is also not verifiable. Tandon (p. 560) believes their heavy weights (8.78 g and 9.15 g) indicate that these coins were minted later in Skandagupta's reign or after his death, so they may not be attributable to Ghatotkachagupta.
6. According to Bhandare, this legend has a first person singular verb ending (private communication).
7. *Epigraphica Indica*, XXVI, p. 115.
8. Bakker & Isaacson, *op. cit.*, pp. 66-67.
9. Kumar (pp. 154-182) attributes gold coins to Chandragupta I that were earlier attributed to Samudragupta and Chandragupta II, but this is not universally accepted.
10. Ghose lists one copper coin (*JNSI* XXXIV) that he attributes to Samudragupta, but the legend is not clear enough to confirm the attribution.
11. Shailendra Bhandare, 'Political Transition in Early 5th century Gujarat', *Numismatic Digest*, Vol. 29-30, pp. 98-100.
12. A.S. Altekar, *The Coinage of the Gupta Empire*, pp. 228-231.
13. *Ibid.*, p. 278.
14. Gupta, *op. cit.*, p. 35.
15. Bakker & Isaacson, *op. cit.*, p. 67.

KABUL VICTORY FIVE SHAHRUKHI OF HUMAYUN

Haroon Tareen

The Mughal dynasty ruled North India from the sixteenth to the nineteenth century. It was founded by Zaheer-ud-Din Muhammad Babar in 1526, after defeating Sultan Ibrahim Lodhi, the Afghan ruler of Delhi. The eldest son of Babar and heir to the throne, Nasir-ud-Din Muhammad Humayun (meaning Blessed/Auspicious), was born on March 17, 1508 (16 Ziaqadh 913 AH) at Kabul and was by the side of his father at the Battle of Panipat in 1526 (April 21, 1526/10, Rajab 932 AH). The outcome of that battle was a turning point in Indian history as it led to the establishment of the Mughal Empire in India.

Humayun ascended the throne in 1530 (December 26, 1530 / 7 Jamadi Alawal 937 AH). Immediately thereafter he had to face two centres of rebellion. The rebellion of Bahâdûr Shah of Gujrat was easily subdued, but that of Sher Shah Sûrî in Bihar caused serious problems for Humayun and ultimately cost him the throne of India. Humayun first suffered a defeat at the Battle of Chausa on June 26, 1539 (10 Safar 946 AH) and then again on May 17, 1540 (11 Muharram, 947 AH) at Kanauj. Humayun had to take flight, first to the Punjab, then to Sindh, the southern province of present-day Pakistan. It was while in exile in Sindh that his son Akbar was born at Umarmot in 1542 (6 Rajab, 949 AH). In 1544 (950 AH), while still on the run, he went to Persia to seek help and to arrange an army with material help from Shah Tahmasp I, which he received. At the head of this army he first captured Qandahar that was held by one of his brothers, then Kabul, which was in the hands of his

brother Kamran Mirza. Humayun occupied Kabul in November 1545 (Ramadan 952 AH). For most of the next decade he consolidated his rule at Kabul.

After their arrival in India in 1526, the Mughals had initially introduced the Central Asian coinage standard for silver coins under the denomination styled as *shahrukhi* (weight 4.70-4.75 g). The *shahrukhi* was issued by both Babar and Humayun. The local denomination of *tankah* (weight 10.8-11.0 g) which was in vogue during the Sultanate period, was also retained at some Indian mints. In 1538 (945 AH), Humayun adopted the slightly heavier *rupee* (11.5-11.6 g) standard of Bengal, and the *tankah* was subsequently abandoned.

A unique silver coin of Humayun has now surfaced in the denomination of five (5) *shahrukhis*.¹ The coin weighs 23.7 g and measures 34 mm x 34 mm. It has a broad but thin flan, corresponding to the *shahrukhi* style of the Central Asian mints. It has the most beautiful calligraphy in Naskh script, styled specifically to fit this broader flan (i.e. intended for a coin of multiple *shahrukhi* denomination). In fact, the dotted border is partially visible at the outer perimeter, which means that the die was capable of impressing a flan even larger than 34 mm diameter. This coin was struck at Kabul and is dated 952 AH. There is a digit one (1) in the obverse cartouche within the last letter *ی* of the title *Ghazi*. That digit one (1) denotes the first year of reign of Humayun as the independent king of Kabul.



Fig. 1. Five *Shahrukhi* coin of Humayun

It would be interesting for the readers to know the fact that while fleeing Sher Shah's onslaught "the four brothers were united in Lahore, but every day they were informed that Sher Shah was getting closer and closer. When he reached Sirhind, Humayun sent an ambassador carrying the message "I have left you the whole of Hindustan (i.e. the lands to the East of Punjab, comprising most of the Ganges Valley). Leave Lahore alone, and let Sirhind be a boundary between you and me." Sher Shah, however, replied "I have left you Kabul. You should go there."²

Kabul was the capital of the empire of Humayun's brother Kamran, who was far from willing to hand over any of his territories to his brother. So perhaps when Humayun finally occupied Kabul in 952 AH he thought of it as the commencement of his rule as King of Kabul, because the re-conquest of India was out of the question at that time. Humayun simply did not have the resources for such an enterprise, and Sher Shah was still alive. The reference to Quran 37 (3) points to the alleviation of Humayun's poverty (by the conquest of Kabul) after a long and testing escape from India.

This coin is obviously a commemorative issue, beautifully designed and nicely struck mostly within the flan, perhaps from a relatively less-used set of dies. On the obverse the coin has a hexagonal floral cartouche with six equal external segments, while on the reverse (*Kalima*) side there is a pentagonal floral central cartouche with five external spaces beyond.

On the obverse (left):		On the reverse (Clockwise):	
(1+2) Top two segments	السلطان الاعظم والخاقان	(1) Top right segment	بصدق ابى بكر
(3) Right segment	المكرم	(2) next segment clockwise	بعدل عمر

(4) Left segment	خلد الله	(3) next segment	بحيائى عثمان
(3) Right segment	تعالى	(4) next segment	بعلم على
(5+6) Lower two segments	ملكه و دانه وسلطانه ضرب	(5) next segment	رضى الله عنهم
(4) Left segment	كابل 52 (9)	Central cartouche	لا اله الا الله محمد رسول الله الله يرزق من يشاء بغير حساب
Central cartouche	محمد بمايون بادشاه غازى 1		

Obverse legend:

السلطان الاعظم والخاقان المكرم محمد بمايون بادشاه غازى 1 خلد الله تعالى ملكه و دانه و سلطانه ضرب كابل 52 (9)

The Greatest Sultan and the revered Khaqan Muhammad Humayun, Emperor, Victor (year one in digit inscribed within the last alphabet), May Allah perpetuate his kingdom and his pearl (wealth) and his power. Struck at Kabul (digit 9 off flan) 52 (AH)

Reverse legend:

لا اله الا الله محمد رسول الله - الله يرزق من يشاء بغير حساب - بصدق ابى بكر، بعدل عمر، بحيائى عثمان، بعلم على رضى الله عنهم

There is no God but Allah, Muhammad is His messenger. Allah gives provision (to) whom He wills without measure. (Quran 37 (3). By the sincerity of Abi Bakr, by the justice of Umar, by the modesty of Usman, by the knowledge of Ali, may Allah be pleased with them

Notes

- When this coin was put up for sale some unauthorised images were made by prospective buyers and posted on the internet, particularly at www.zeno.ru (coin #201357). That was done without the owner's permission.
- Gul-Badan Begam, *Humayun-Nama*, A.S. Beveridge (tr.), London: Royal Asiatic Society, 1902 (reprinted Delhi: Low Price Publications, 1989), p. 144.

READING MANCHU (PART 2)

Dirk de Boek

This is a somewhat belated sequel of a paper that I published in JONS 194 in 2008. It tries to make sense of the Manchu texts on some charms and tokens, as well as some of the uncommon mintmarks and writings that are perhaps regarded as Manchu but which are not.

Coin-like objects



24. *Ding fu bao*, A catalogue of Ancient Chinese coins, including Japan, Annam and Korea E306a

Obverse: 乾隆寶藏 *qian long bao cang* "Qianlong coin for Tibet"
Reverse: 年八十五 *abka weh yehe*, i.e. the year title of the Qianlong emperor 年八十五 Year 58 (1793)



32. H. Grundmann: *Amulette Chinas und seine Nachbar-länder* 837

Obverse: 復元始 *yi fu yuan shi* "Everyone goes back to his origins"
 Reverse: Same text written in Manchu ᠠᠪᠢᠨᠠᠨᠠᠨᠠᠨᠠᠨ *fu yuwan š*



33. Zeno 138213

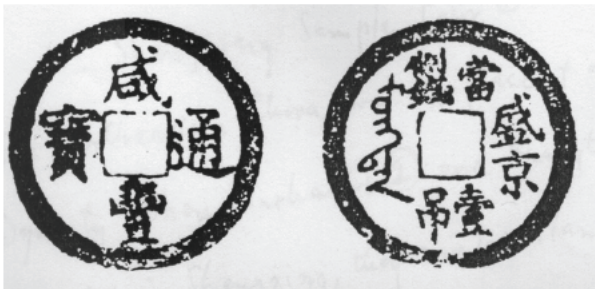
Obverse: 大政殿 *da zheng dian* "Great government hall"
 Reverse: 旅游紀念 盛京宮殿 *qi you ji nian sheng jing gong dian* "Flag tour memorial Shenyang imperial palace"; ᠰᠡᠩᠵᠢᠩᠭᠡᠨᠠᠨᠠᠨᠠᠨᠠᠨ *mukden gung dayan* "Mukdens palace hall" (The last two words are a transcription of 宮殿 *gong dian*)

The Shenyang Imperial Palace is the former palace of the early Qing dynasty in the center of Shenyang, Liaoning province. It was built in 1625 and the first three Qing emperors lived there. It was abandoned in 1644. Since the collapse of imperial rule in China, the palace has been converted into a museum. The old names of Shenyang 瀋陽 include Fengtian 奉天, Shengjing 盛京 and Mukden.



34. Fantasy piece in a private collection (see Colin Bruce II, *Unusual world coins, China Yunnan M480*)

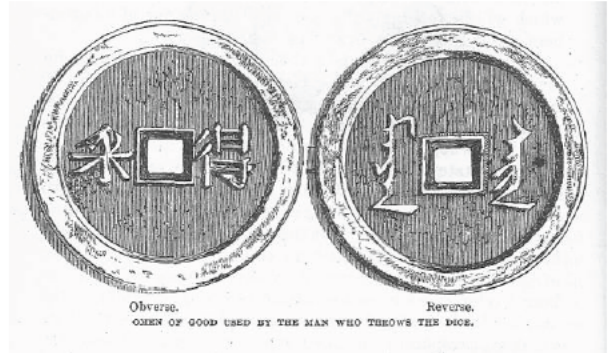
Obverse: 大清銅幣, *da qing tong bi* "Copper coin of the great Qing"
 Reverse: ᠭᠡᠬᠡᠭᠦᠩᠭᠡᠶᠣᠰᠣ *Gehungge Yoso (Xuan Tong)*, ᠪᠣᠣ *yuwan boo* (元寶, *yuan bao*, "First coinage"; ᠪᠣᠣᠶᠡᠨ *boo yun*, the mint mark of Yunnan. The first word of the year title is written as Behungge.



35. Trial piece with city name Mukden

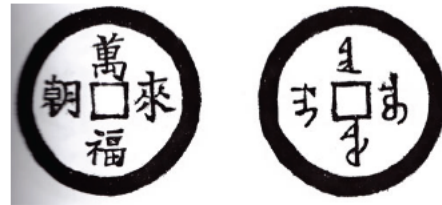
The reverse has a Chinese text and the name ᠮᠤᠬᠤᠲᠠᠨ *mūktan*, i.e. the city of Mukden. (Compare with 33, where a different spelling is used). This would have been the only instance where a mint name

outside Xinjiang was written in full on an official coin, but the design was rejected.
 Obverse: 當錢壹吊 *dang qian yi diao*; "Equal (to) copper coins (to the value of) one diao", 盛京 *sheng jing* "Flourishing capital", one of the names of Mukden. One Diao was equal to 1,000 cash.



36. Gambler's charm (Zeno 120015)

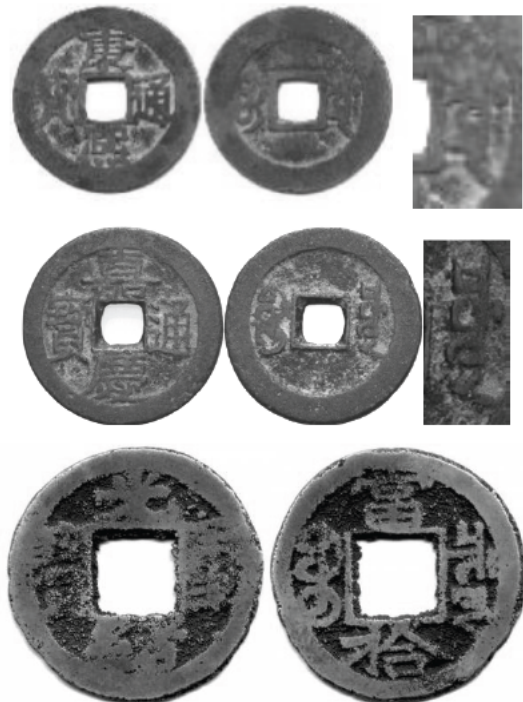
Obverse: 得采 *de cai* "Gambling profits". The second character looks more like *bian* 采 "Distinguish" than *cai* 采 (the difference is in the central vertical stroke), but the latter makes more sense.
 Reverse: ᠮᠠᠶᠠᠨᠰᠠᠨ *mayan sa n* "Good elbow", in the sense of "Good shot" or "Well done"



37. Zheng, Liu et alia *Classic Chinese Charms* 1602

Obverse: 萬福來朝 *wan fu lai chao* "Ten thousand blessings tomorrow"
 Reverse: the same in Manchu, ᠠᠨᠠᠨᠠᠨᠠᠨᠠᠨ *wan fu a coo*

Mintmarks
 Quite a lot has been written about the Manchu mintmarks. There are innumerable lists of them, so let us look only at some oddballs.



101. Zeno 46, <http://munzeo.com/coin/china-jen-tsung-1796-1820-9557303> and Zeno 112

ᠪᠣᠴᠤᠠᠭᠤᠨ Boo C uwan

This mintmark is very rare. The difference between this mark and that of the Board of Revenue (boo c owan) is only the point at right. It is seen above on a Kang Xi, a Jia Qing, and a Guang Xu coin. The first two may be regular coins because their obverses match those from normal coins.

The vowel combination ᠣ was used for the transcription of a certain Chinese sound. And so it is possible that ᠣᠤ was used in the same way. However, in Kang Xi times only the two mintmarks from Beijing had ᠪᠣᠴᠤᠠᠭᠤᠨ boo at left, so the coin must have been made there if made in the Kang Xi era. If made in Beijing you should expect lots of these coins; since it is rare the dot is probably an error.

The Jia Qing coin seems to me a damaged ᠴᠤᠠᠭᠤᠨ cuwan coin, made in Sichuan. The Guang Xu looks as if it is privately minted with primitive writing.

A search for the Manchu word c uwan got one book title on www.worldcat.org: 文廣彙全書 *Tong wen guang hui quan shu* "large comprehensive dictionary"/ᠲᠤᠩᠪᠠᠭᠤᠨᠴᠤᠠᠭᠤᠨᠰᠤ Tung wen guwang e c uwan su. However, this is an error as the book title clearly shows Manchu c owan (the fifth word from the top). I'm not aware of any proof that the mintmark boo c uwan was ever officially used.



102. www.charm.ru/coins/unkn/guangxu-unknown.shtml

ᠪᠣᠴᠤᠠᠭᠤᠨ Boo Fuweng

As the coin is struck rather than cast and made of white-metal it does not seem a normal cash coin. The meaning of the mintmark is unclear. The Chinese equivalent for Manchu fuweng should be something like fueng. But there is no such word in Chinese.

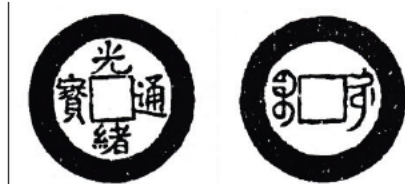
It is possible that two words are meant: fu weng. Then boo fu weng could be a charm, and the coin an amulet, but the words do not mean anything. That leaves the possibility that it is a fantasy.



103. Krause-Mishler, *Standard Catalog of World Coins, 19th century, China, Anhwei* 35.1, 39 and 39.1

ᠪᠣᠴᠤᠠᠭᠤᠨ Boo Hū

The mark is shown only on one 5 and two 10-cash-coins. Manchu hū is equivalent to Chinese hui, so it will be the second character of Anhui 徽. The coins are very scarce; they are presumably patterns.



104. D. Hartill Cast Chinese coins 22.1425

ᠪᠣᠴᠤᠠᠭᠤᠨ Boo Gū

This was the mintmark of the Imperial Naval Yard at Taku in Chihli, which is now Dagu in Hebei. Roth-Li does not mention a Chinese equivalent for gū. As Manchu guwa and gūwa both are equivalent with Chinese gua, just as guwan and gūwan with guan, it is probable

that gū and gu are also equivalent to the same Chinese word, which should be the second character of *dagu* 大沽.



105. D. Hartill Cast Chinese coins 22.1426-8

ᠪᠣᠴᠤᠠᠭᠤᠨ Boo Hū

This mint mark is now seen as different from 104. This may have been the mintmark of the Shanghai Kiangnan Arsenal mint. An alternative name of Shanghai was *Hushang* 滬上 or *Hudu* 沪渎, often shortened to *Hu*, the equivalent of Hū.



106. W. Op den Velde, *Cash coin index, Ch'ing plate* 84

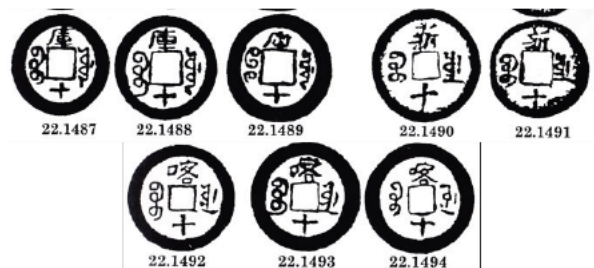
ᠪᠣᠴᠤᠠᠭᠤᠨ Boo Gūng

As u and ū seem interchangeable (see 104 Boo Gū), the Chinese equivalent may be the same as that of gung, which is *gong*. Boo Gung is the mintmark of Gongchang in Gansu.



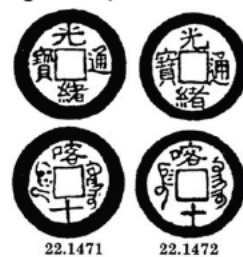
107. Boo Ling ᠪᠣᠯᠢᠩ

This mintmark belongs to Nanjing in Jiangnan. Perhaps it has something to do with the town Jinling 金陵 (Golden Hill) from the Chu period (3rd century BCE), a precursor of Nanjing. The poet Li Tai Po wrote about this city some 10 centuries after its heyday, so in the seventh century CE its memory was still alive. Today there are hotels bearing that name in Nanjing.



108. Hartill Cast Chinese coins 22.1487-94

ᠪᠣᠴᠤᠠᠭᠤᠨ boo yuon, ᠪᠣᠴᠤᠠᠭᠤᠨ boo cuna; ᠪᠣᠴᠤᠠᠭᠤᠨ boo yuna, ᠪᠣᠴᠤᠠᠭᠤᠨ boo juna
These are some of the ways in which the words boo kuce ᠪᠣᠴᠤᠠᠭᠤᠨ was transformed on Guang Xu coins. On some coins it looks more like a misspelling of boo yuwan ᠪᠣᠴᠤᠠᠭᠤᠨ.



109. D. Hartill Cast Chinese coins 22.1471-2

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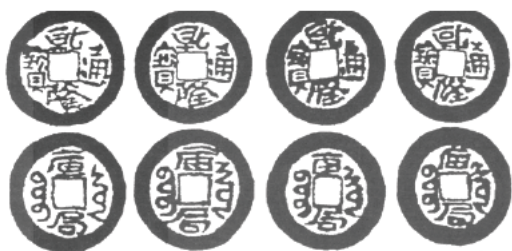
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ཀུ་ཀའོ་ Ku k yo 喀 (Ka for Kashgar) and the value 十 ten
 As the Arabic is كاشغر kashghr, ku k yo has to be an alternative name for Kashgar.



110. Hartill Qing cash, 28.415-8

འོ་སོ་ boo sat or འོ་སོ་ boo šat on Qian Long coins
 The coins are clearly made in Xinjiang, but to which place the mintmark refers to escapes me. The coins have been made for Kuca, because the Chinese on the reverse is 庫局 *ku ju* (Office of Ku).

The weird form of the letter s on the boo s coins makes འོ་སོ་ boo son or འོ་སོ་ boo šon also possible readings. Neither of the words sat, šat, son and šon was used to write Chinese. The coins will have been made by someone not well versed in Manchu. My guess would be that it is one of the many variations of the name Kuce.

No Manchu



201. <http://www.charm.ru/library/gamble.htm>

A gambling token with pseudo Manchu.



202. Zeno 106859

Made in Kalgan. Obverse: དུམ་དུ་འུ་ཤ་འུ་ཤ་ dumda u us js joyos
 “Copper coin from China” 中華銅幣 *Zhong hua tong bi* “Copper money of the splendid China”

Reverse: 民國十三年造 *min guo shi san nian zao* “Made in the 13th year of the Republic of China” (1924)



203. Krause-Mishler, *Standard Catalog of World Coins*, 20th century, China, Kansu Y410

འགྲོ་འགྲོ་ལྷ་མོ་ n gen tögür g “one tugrik” or “one dollar” in Mongolian.
 Chinese text: “province of Gansu”. “One dollar”. On the reverse: *zhong hua min guo 17 nian*: “The 17th year of the Chinese republic” (1928).

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