

A Tale of ‘Four’ Hoards (or unpicking Akki Alur)

By Rebecca R. Day

The Akki Alur hoard is one of the most significant discoveries of Byzantine *solidi* on Indian soil. Unearthed by accident in March 1977 in a field near the village of Akki Alur in Karnataka, the hoard contained forty six gold coins in an earthenware pot. Of these, forty three have been identified as Byzantine *solidi*. Thereafter, however, the mystery of the hoard begins. The analysis here is a reflection of both the importance and the difficulty of synthesising earlier data (published and unpublished) where artefacts are no longer accessible. It also illustrates one of the perennial problems in the broad field of ‘Indo-Roman’ studies: a plethora of published material, which confuses as much as it elucidates.ⁱ Often this literature revisits the same artefacts and texts, since the corpus of finds is now growing at a moderate pace, rather than refining and enhancing interpretation of long-distance trade and contact. It also frequently replicates old errors, or deepens existing confusion. This is a symptom of the different interests of scholars (in particular, ‘pure’ numismatists, and those with a broader interest in economic history), but it is also a product of the very uneven quality of scholarship which the material has received.

Discovery and notification of the hoard

Upon its discovery by two farmers ploughing a field in Hangal Taluk, Dharwar District, the hoard came to the attention of the then Director of Treasuries (Karnataka). As a consequence, it escaped possible black-market sale or being melted for bullion, and was secured by the Directorate of Archaeology and Museums in Mysore. The first official description of this hoard was issued in 1980 by the Director of Archaeology, M. S. Nagaraja Rao. Appearing in volume thirty six of the *Journal of Indian Museums*, this telegraphic, two-page, account describes the discovery of the coins and summarises the hoard content thus:ⁱⁱ

Emperor	Regnal Dates	Number of Coins
Augustus	B.C. 29 – A.D. 14	2 (?)
Antoninus Pius	A.D. 138-161	1
Theodosius II	A.D. 408-450	10
Marcian	A.D. 491-518	15
Justinus I [sic]	A.D. 518-527	1
Unidentified		1
	Total	27

Fig. 1: Summary of hoard provided by Nagaraja Rao (1980).ⁱⁱⁱ

An indication of future problems with the publication and analysis of this hoard may be found in the erroneous total (for which no explanation is given), and the attribution of the regnal dates of Anastasius I to Marcian.^{iv}

Nagaraja Rao then goes on to give a brief account of other related coin finds in south India. He mentions three silver hoards from Karnataka found near Bangalore (1891), in the village of Katryal (Bijapur District, 1922) and during the development of a new runway at HAL Airport (Bangalore, 1965). He also refers to four silver Roman coins ‘recovered at Chandravalli, near Chitradurga, since 1901’.^v Finally, it is worth quoting the close of this account of the hoard in full:

The present hoard from Akki Alur is of great importance, as the majority of the coins belonging [sic] to the Byzantine rulers. The coins have the bust of the king on the obverse, with his name, while the reverse has among other things, the name of the mint. The coins have all been struck at Constantinople, the modern Istanbul.

So far we know only a few coins of the later Roman rulers in South India, all reported from Tirumangalam Taluk, in Madura District, and Pudankaru in Travancore.

Therefore, the present find is important, as it opens up a new area of trade contact with the Roman and Byzantine world, during the 5th and 6th century A.D.^{vi}

These paragraphs highlight several important points about this initial analysis of the hoard, which should be considered in light of its subsequent publication. First, the importance of the hoard for an understanding of Late Roman contact with India had been appreciated (even overstated in the final lines of the article). Nonetheless, it should be remembered that the Karnataka Directorate of Archaeology and Museums had already been in possession of this hoard for three years before this notification was issued. Second, it is clearly implied that the legends on the coins (especially the name of the emperor on the obverse) had been read, which makes the misidentification of several coins (and omission of Anastasius I, Zeno and Leo I) difficult to explain. Finally, it is clear from the assertion that all of these coins were minted in Constantinople, that the hoard had not, at this point, received the attention of anyone with a good understanding of Byzantine numismatics, since almost all Byzantine *solidi* bore the mint mark CONOB, regardless of their minting location, which must be established from other marks or stylistic features.

The first publication (Gupta, 1980):

Clearly, it cannot be expected that the Karnataka Directorate of Archaeology and Museums should employ a specialist in Byzantine numismatics, nor is it necessarily unreasonable that the initial notification of the hoard’s discovery (above) should contain errors resulting from only a cursory survey of the coins. By 1984, however, no more detailed examination of the coins had been forthcoming from the Directorate. In view of the importance of the hoard, this led P. L. Gupta, one of India’s most established and respected numismatists to take action. Prompted by the ‘indifference on the part of the Archaeological Directorate of Karnataka State’, Gupta felt compelled to bring the hoard to further light, based on notes from a private viewing of the coins in 1980.^{vii} Gupta provides descriptions of the coins, including inscriptions, but does not, in contrast to usual numismatic practice, include weights. This suggests that his viewing in 1980 may have been informal or cursory, with no opportunity to

weigh the coins. He does not mention having had chance to view the coins between 1980 and his publication of them in 1984.

In a pattern, which would characterise later analyses of this hoard, Gupta pays very little attention to the three early coins in the hoard, but contributes to the confusion surrounding them by attributing two to Septimius Severus and one to Caracalla, without any description to justify these choices.^{viii} Summarised in table form, Gupta's composition of the hoard is:

Emperor	Regnal Dates	Number of Coins
Septimius Severus	Not given	2
Caracalla	Not given	1
Theodosius II	A.D. 402-450	10
Marcian	A.D. 450-457	4
Leo I	A.D. 457-474	8
Zeno	A.D. 474-491	4
Anastasius I	A.D. 491-518	15 in the individual coin descriptions 14 in the discursive section of the article
Justinus I [sic]	A.D. 518-527	1
Unidentified		1
	Total	46

Fig. 2: Summary of the composition of the Akki Alur hoard as assessed by Gupta 1984, based on a private viewing in 1980.

Gupta, too, attributes all Byzantine coins to the mint of Constantinople (presumably based on the CONOB mint mark, though he is not explicit about this).^{ix} The regnal dates of the emperors are now correct, the hoard analysis includes all forty six coins (albeit only forty-three examined in detail), and, as will be shown later, the emperors represented in the hoard now agree with the existing data, with the inclusion of Leo I, Zeno and Anastasius I. Gupta also identifies different types for several of the emperors, and provides a standardised version of the legend for these types, although his presentation is not as clear as it could be.

Gupta also identifies several coins as possible imitations and refers to the question of their condition and preservation. He identifies at least four coins as imitations owing to blundered legends, including the unidentified example (Gupta 9, 10, 22, 43). Of these, Gupta 9, 10 and 22 are remarked upon as apparent mules. In the case of Gupta 22, in particular, he attributes the obverse to Leo I, and the reverse bears the image of Constantinopolis seated, holding a sceptre with the legend CONCORDI-A AVGGG I, a reverse type not recorded among Leo I's official issues. Gupta also notes the *officinae* in which the coins were produced:^x

Emperor	Officina	Number of Coins
Theodosius II	A	1
	Not given	9
Marcian	A	2
	H	2
Leo I	A	1

	B	2
	H	1
	I	3
	Unclear	1
Zeno	A	2
	H	1
	S	1
Anastasius I	A	1
	B	4
	Γ	2
	Δ	1
	Z	1
	S	1
	I	5
Justin I	B	1
Unidentified	Δ	1
	Total	43

Fig. 3: Table of the officinae listed by emperor for the Byzantine coins, as published by Gupta 1984.

Finally, referring to the condition of the coins, Gupta makes the following observation:

The period covered by the kings represented by these coins is about one and a quarter centuries; yet all the coins look alike and fresh and show no traces of any kind of wear by circulation and use. This raises suspicion that they are not the original coins, but only copies meant for the purpose of jewellery...The jewellery nature of these pieces is also apparent from the fact that 18 out of 43 pieces have two holes at the top.

In his notification, Nagaraja Rao had not referred to the distinctive double-piercings, so typical of Indian coin finds. Though Gupta records 18 pierced coins he does not specify which examples are pierced and which not.

Overall, Gupta's publication, constrained as it was by his frustration at the Karnataka Directorate of Archaeology and Museums, and produced by his own admission on the basis of notes taken four years earlier, represented a major step forward in properly publishing this crucial Late Roman hoard. As will be seen below, however, this article, despite Gupta's only partial access to the material, also seems to have become something of a template for future publication.

The second publication (Nagaraja Rao, 1987)

The second effort to publish the Akki Alur hoard fully did, in fact, come from the Karnataka State Directorate, ten years after its receipt of the hoard. Nagaraja Rao, still superintending the Directorate's collections after his first documentation of the hoard in 1980, undertook a full and systematic publication. It is not explicitly stated that Nagaraja Rao re-examined the coins for this purpose, but since he was at the time in charge of the collection in which they were stored, this must be assumed to have been the case. Nagaraja Rao also produced for the first time with his publication plates of the hoard. Unfortunately, the quality of these plates was sufficiently poor as to render them useless from the perspective of close examination of

the coins. They can, however, contribute something to an understanding of the hoard, as will be shown later.

In his second publication of the hoard (which makes no mention of his 1980 article), Nagaraja Rao again offers a partial and brief summary of Roman coin finds in south India, stressing the uncommonly late date of the Akki Alur exemplars. Focussing more closely on the late coins, he refers to R. A. G Carson's 1980 article on the Byzantine *solidi* now in the British Museum, but found at the Hidda Tope in Afghanistan in the nineteenth century.^{xi} He also makes reference to a coin of Zeno recorded in Thurston's catalogue of the coins in the Madras Government Museum in 1894, the possible deposition of *solidi* from the Katryal hoard in the Museum of the Royal Asiatic Society, Mumbai (for which no reference is provided), and the recent discovery in excavations of two coins of Constantine I and Anastasius I from the site of Kudavelli in Andhra Pradesh.^{xii}

Finally beginning his analysis of the hoard, Nagaraja Rao again summarises the circumstances of its discovery, and for the first time remarks on the significant gap between the three early coins (which he attributes, after Gupta, to Septimius Severus and Caracalla), and the later examples. This he explains:

...from the fact that both the coins of Septimius Severus have two holes at the top and the coin of Caracalla has a loop attached at the top. As such, all the three coins were used as pendants [sic] and formed part of jewellery. In this form they survived in the family of the owner and found buried with the later Byzantine coins.

The use of coins in jewellery and for decorative purposes probably had an impact on the nature of their survival in India. Nevertheless, since Nagaraja Rao concurs with Gupta in stating that 18 of the coins are pierced for suspension, it is not clear why their use in jewellery *per se* should have affected the earlier coins differently than the later ones (which Nagaraja Rao's assessment implies, must have been pierced for use in jewellery, then immediately buried before they became worn).

Nagaraja Rao then lists the 43 Byzantine coins in the hoard. The three earlier coins are included in the plates, but no description is provided. Here, his hoard composition matches Gupta's precisely.

Emperor	Regnal Dates	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao)
Septimius Severus	Not given	2	2
Caracalla	Not given	1	1
Theodosius II	A.D. 402-450	10	10
Marcian	A.D. 450-457	4	4
Leo I	A.D. 457-474	8	8
Zeno	A.D. 474-491	4	4
Anastasius I	A.D. 491-518	15 (though article text lists as 14)	15
Justinus I [sic]	A.D. 518-527	1	1
Unidentified		1	1
	Total	46	46

Fig. 4: Hoard composition as given by Gupta, 1980 and Nagaraja Rao, 1987.

Nagaraja Rao's analysis of the *officinae* is also extremely close to Gupta's, with only four points of difference (see Fig. 5). This should be the outcome of two professional numismatists independently examining the same hoard, with minor differences reflecting the difficulty in some cases of identifying *officina* marks, especially for numismatists not fully familiar with Byzantine coinage. Nonetheless, the incorrect regnal dates for Theodosius II, replicated across both articles may suggest another reason for overlap.

Emperor	<i>Officina</i> (Gupta)	<i>Officina</i> (Nagaraja Rao)	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao)
Theodosius II	A	A	1	
	Not given	Not given	9	8
		O		2
Marcian	A		2	2
	H		2	2
Leo I	A		1	1
	B		2	2
	H		1	1
	I		3	3
	Unclear		1	1
Zeno	A		2	2
	H		1	1
	S		1	1
Anastasius I	A		1	1
	B		4	4
	Γ		2	2
	Δ		1	2
	Z		1	1
	S		1	1
	I		5	3
		H		1
Justin I	B		1	1
Unidentified	Δ		1	1
	Total		43	43

Fig. 5: Coins with officinae listed according to Gupta, 1980 and Nagaraja Rao, 1987.

The striking similarity of Gupta and Nagaraja Rao's articles is further borne out by Nagaraja Rao's analysis of the preservation of the hoard:

Though the period covered by the kings represented by the coins is about one and a quarter centuries, yet all the coins look fresh and show no traces of any kind of wear by circulation and use. This raises suspicion that they are not originals but replicas meant for the purpose of jewellery...The jewellery nature of these pieces is also apparent from the fact that 18 out of 43 coins have two holes at the top.

The remainder of Nagaraja Rao's article consists of an explanation of the Latin abbreviations on the coins for the benefit of readers likely to be unfamiliar with these forms, and a short

account of other evidence for fifth- and sixth-century contact between India and Byzantium. This includes a brief description of rock-cut inscriptions mentioning Yavanas and a Sanskrit drama of the Gupta period (fifth-sixth centuries A.D.) containing the name ‘Irama’, suggested by Moti Chandra to be a Sanskritisation of Hermes.^{xiii} The account in the sixth-century *Christian Topography* of journeying to Male, apparently in Kerala, is also referenced, though no analysis or criticism of these sources is provided.^{xiv}

Though Nagaraja Rao’s debt to Gupta is clear in both his identification of the coins, and much of his text, he differs slightly from Gupta in the numbering of the coins (adding to the confusion of trying to synthesise analyses of this hoard). The two numismatists also disagreed in their precise reading of the unidentified coin (Gupta: OR HYER – SIVS PE AVG, Nagaraja Rao: ORHYER – SIVS PE VG). More worryingly for any consistent evaluation of the Akki Alur hoard from the published data, Nagaraja Rao’s numbering of the coins in his text does not match his numbering of the coins in the accompanying plates.

Gupta	NR - Text	NR - Plates		Gupta	NR - Text	NR - Plates		Gupta	NR - Text	NR - Plates
1	1	1		16	16	16		31	31	26
2	2	2		17	17	17		32	32	
3	3	3		18	18	18		33	33	
4	4	4		19	19	19		34	34	
5	5	5		20	20	20***		35	37	32
6	6	6		21	21	21		36	38	33
7	7	7		22	22	22		37	35	
8	8	8		23	23			38	36	23
9	9	9		24	24			39	39	24
10	10	10 *		25	25			40	40	26
11	11	11		26	26			41	41	25
12	12	14**		27	27			42	42	42
13	13	12		28	28	23		43	43	43
14	14	13		29	29	24				
15	15	15		30	30	25				

Fig. 6: Table showing the relationship between Gupta’s numbers, and Nagaraja Rao’s text and plates, based on linking issuing emperor, type and officina. Numbers in bold highlight points of difference, while bold and italic indicates that these coins could be interchangeable. Numbers 23-27 and 32-34 cannot be correlated since the officinae provided in the text are completely different from those in the plates.

* Although the numbers here are consistent, the coin is attributed in Nagaraja Rao’s text to Theodosius II (as in Gupta), but in the plates is attributed to Marcian.

**As a result of the mix up with number 10, it is impossible to attribute plate number 14 to catalogue number 12 with any certainty, since the text does not contain a coin of Marcian with *officina* I.

***Though these appear to be the same coin, the *officina* is listed as I in the text and (curiously) ‘r’ in the plates.

As this table demonstrates, the synthesis of these two accounts of the hoard has already begun to reveal insoluble complications in the recording and presentation of data. As a result of reviewing the plates, it becomes necessary to add the following to figures 2 and 4:

Emperor	Regnal Dates	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao - text)	Number of Coins (Nagaraja Rao - plates)
Septimius Severus	Not given	2	2	2
Caracalla	Not given	1	2	2
Theodosius II	A.D. 402-450	10	10	9
Marcian	A.D. 450-457	4	4	5
Leo I	A.D. 457-474	8	8	8
Zeno	A.D. 474-491	4	4	4
Anastasius I	A.D. 491-518	15 (though article text lists as 14)	15	15
Justinus I [sic]	A.D. 518-527	1	1	1
Unidentified		1	1	1
	Total	46	46	46

Fig. 7: Hoard composition as given by Gupta, 1980 and Nagaraja Rao, 1987, including inconsistencies between the text and plates in the latter. Bold highlights points of difference.

Emperor	Officina (Gupta)	Officina (Nagaraja Rao - Text)	Officina (Nagaraja Rao - Plates)	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao - text)	Number of Coins (Nagaraja Rao - plates)
Theodosius II	A			1		
	Not given			9	8	7
		O			2	1
			S			1
Marcian	A			2	2	2
	H			2	2	2
			I			1
Leo I	A			1	1	1
	B			2	2	2
	H			1	1	1
	I			3	3	2
	Unclear			1	1	1
			r			1
Zeno	A			2	2	2
	H			1	1	1
	S			1	1	1
Anastasius I	A			1	1	
	B			4	4	4
	Γ			2	2	

	Δ			1	2	1
	Z			1	1	1
	S			1	1	1
	I			5	3	3
		H			1	2
			r			3
Justin I	B			1	1	1
Unidentified	Δ			1	1	1
	Total			43	43	43

Fig. 8: Coins with officinae listed according to Gupta, 1980 and Nagaraja Rao, 1987, including the inconsistencies in the text and plates of the latter. Bold highlights points of difference.

Interpretatively, it is impossible accurately to correlate these two hoard analyses to form a coherent summary of the Akki Alur hoard, and the disagreements between Nagaraja Rao's text and plates suggest that the foundation of this difficulty may have been a misplaced desire to combine an independent re-examination of the hoard, and Gupta's 1980 publication. Finally, it is worth noting that Nagaraja Rao, despite presumably having the coins in his possession when writing this article, and being familiar with numismatic procedure, also fails to provide weights for the coins.

The third publication (Berghaus, 1991)

The Akki Alur hoard was finally re-examined some time before 1991 by Peter Berghaus, who published a summary of it, with two images, in 1991. By far the most cursory of the three accounts of the hoard, Berghaus's treatment of it nevertheless raises some troubling questions. Berghaus thanks the Director of the Mysore Museum for permission to see the hoard, but provides no weights. Again, the question arises of why a meticulous and highly experienced numismatist would omit such a vital category of information without explanation. Second, deepening the confusion surrounding the three early coins still further, Berghaus attributes all three to Septimius Severus, again without explanation, description or images.

In other respects, Berghaus's description of the hoard concurs with Gupta and Nagaraja Rao's general outline: that it contains 43 Byzantine *solidi*, ranging in date from the reign of Theodosius II to Justin I, of which 18 have double piercings. Berghaus asserts that at least three coins are probable Indian imitations (compared to Gupta's minimum calculation of four). The image provided is of a double-pierced *solidus* of Anastasius I (not referenced to either Gupta or Nagaraja Rao's numbers).^{xv}

The plot thickens: a re-evaluation

Efforts by the author to gain access to the Akki Alur hoard in recent years have resulted in a personal communication to the effect that the coins are unavailable owing to a technical

problem with the lock of the museum safe. No information was provided concerning the length of time for which the safe has already been inaccessible and it was suggested that it was unlikely to be opened for at least another one or two years (information provided March 2010). It can only be hoped that this important hoard may one day be available for full examination but the possibility must also be considered on the basis of this record of publication that the hoard has now been lost. The fact that three independent analysts, from both European and Indian numismatic traditions, have failed to give weights, and the fact that no absolute proof currently exists of anybody having seen the hoard since 1980 lend support to this hypothesis.

New information on the hoard has, however, come to light. In April 2011 the author was given permission to view and reproduce Berghaus's original photographs of the Akki Alur hoard, now part of his collected papers, held by the Institut für Numismatik und Geldgeschichte in Vienna. No notes survive to accompany the photographs, they were not produced with a usable scale, and six reverse images are missing. In addition, the three early coins in the hoard are not included. The high-quality black and white pictures nevertheless reveal more detail than either the grainy plates provided with Nagaraja Rao's 1987 analysis, or the descriptions of either Gupta or Nagaraja Rao. It is possible from the pictures to identify coin types, aspects of wear, the die axis of some coins, the legends in all cases, and scratched graffiti in the fields of some examples. It is also possible to identify from the photographs the position of the double piercings and in most cases the direction from which they were made.

Given the likelihood that this most important hoard will remain inaccessible in the foreseeable future, the following description and analysis is presented from Berghaus's photographs. The data has been correlated where possible with the earlier publications, but the impossibility of a full synthesis becomes clear from even a cursory review of the images. All three authors who have dealt with the hoard have noted, for example, that 18 of the 43 Byzantine coins are double pierced. However, when the pictures are examined, there are clearly 22 pierced coins. More striking still is the fact that close examination of the images provided by Nagaraja Rao also reveals 22, not 18, pierced coins. In light of such an inexplicable inconsistency, the matching of the published records to Berghaus's photographs is not carried too far. The numbers provided for the hoard in this analysis are taken from the order of Berghaus's photographs, and subsequently all numbers used (unless otherwise stated) refer to this revised coin list.

Revised	Gupta	NR - Text	NR - Plates		Revised	Gupta	NR - Text	NR - Plates		Revised	Gupta	NR - Text	NR - Plates
2	1	1	1		18	16	16	16			31	31	26
	2	2	2		21	17	17	17			32	32	
	3	3	3		15	18	18	18			33	33	
	4	4	4			19	19	19			34	34	
	5	5	5			20	20	20***		35	35	37	32
	6	6	6		17	21	21	21			36	38	33

	7	7	7	20	22	22	22			37	35	
5	8	8	8		23	23				38	36	23
	9	9	9		24	24				39	39	24
	10	10	10 *		25	25				40	40	26
	11	11	11		26	26				41	41	25
	12	12	14**		27	27			43	42	42	42
	13	13	12		28	28	23		42	43	43	43
13	14	14	13		29	29	24					
19	15	15	15		30	30	25					

Fig. 9: Table showing the revised numbers where these can be matched to Gupta, 1980 and Nagaraja Rao, 1987. The majority of the coins cannot be matched to published records.

Apart from the number of pierced coins (and the fact that these can, for the first time, be associated with particular coins), the following hoard composition and *officinae* can be identified from the photographs:

Emperor	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao - text)	Number of Coins (Nagaraja Rao - plates)	Number of Coins (Revised)
Theodosius II	10	10	9	9
Marcian	4	4	5	5
Leo I	8	8	8	7
Zeno	4	4	4	4
Anastasius I	15 (though article text lists as 14)	15	15	15
Justinus I [sic]	1	1	1	1
Unidentified	1	1	1	2
Total	43	43	43	43

Fig. 10: Revised composition of the hoard based on the author's analysis of Berghaus's photographs. The three earlier coins are not included in the photographs and are henceforth omitted. Points of distinction are marked in bold.

Emperor	<i>Officina</i> (Gupta)	<i>Officina</i> (Nagaraja Rao - Text)	<i>Officina</i> (Nagaraja Rao - Plates)	<i>Officina</i> (Revised)	Number of Coins (Gupta)	Number of Coins (Nagaraja Rao - text)	Number of Coins (Nagaraja Rao - plates)	Number of Coins (Revised)
Theodosius II	A				1			
	Not given				9	8	7	7

		O				2	1	
			S				1	1
				⊖				1
				Unclear				
Marcian	A				2	2	2	1
	H				2	2	2	2
			I				1	
				Γ				1
				Δ				1
Leo I	A				1	1	1	1
	B				2	2	2	2
	H				1	1	1	1
	I				3	3	2	1
	Unclear				1	1	1	1
			r				1	
				Γ				1
Zeno	A				2	2	2	?
	H				1	1	1	?
	S				1	1	1	?
Anastasius I	A				1	1		1
	B				4	4	4	4
	Γ				2	2		3
	Δ				1	2	1	
	Z				1	1	1	
	S				1	1	1	1
	I				5	3	3	3
		H				1	2	3
			r				3	
Justin I	B				1	1	1	?
Unidentified	Δ				1	1	1	?
				I				1
	Total				43	43	43	43

Fig. 11: Table of officinae based on revised analysis of the hoard based on Berghaus's photographs. Six coins (marked '?') do not have reverse images, so the officinae cannot be determined.

In addition to identification of *officinae*, the photographs permit detailed examination of scratch marks, usually found in the obverse field of some of the coins. Nine scratched designs can be seen in the Akki Alur hoard, on ten coins. S6 (see Fig. 12) is the only mark to occur on more than one coin and Coin 21 (Leo I) is the only one to carry two scratch marks, one in each field of the obverse. The following scratches have been identified:

S1		S2		S3		S4	
1		13		14		6	

S5 16		S6 18 32		S7 21		S8 31	
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S9 36		S10 21	
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Fig. 12: Scratch marks found on coins in the Akki Alur hoard. Coin numbers on which these appear are given in bold.



Fig. 13: Close-up of scratch marks on Coin No. 14.

Revised Analysis

What then can be said about the significance of this hoard in its current state of analysis? It contains 43 *solidi* and three earlier coins, dating to some point in the second century A.D. It would be improper with the information at hand to attribute these coins to specific emperors, though at least two of them are likely to be genuine or imitation coins of Septimius Severus. Berghaus, however, describes the early coins as being in poor condition in comparison with Byzantine *solidi*.^{xvi} This heavier pattern of wear, and the double piercings also described by Berghaus, strongly indicate that the later coins were fulfilling a pattern of use already established with regard to earlier coins. Indeed, the wear on the earlier coins would strongly suggest that the older coins continued in use alongside their newer companions until the deposition of the hoard some time in or after the sixth century. One of the early coins (possibly that attributed to Caracalla) has an attached loop for suspension rather than piercings, but displays a similar pattern of heavy wear. The remaining 43 coins bear the legends of emperors reigning from the early fifth to the mid-sixth century.

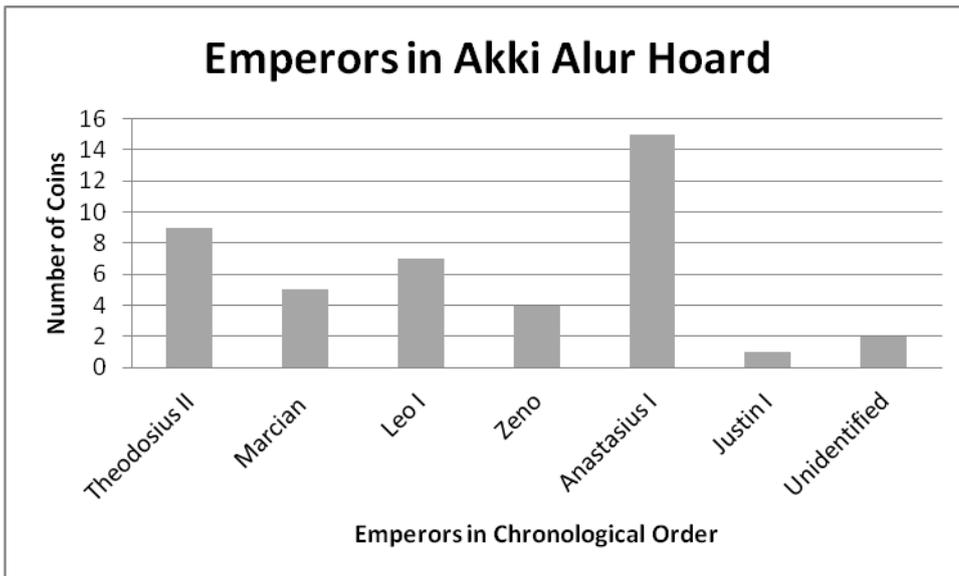


Fig. 14: *The distribution of the Akki Alur hoard by emperor demonstrates certain features atypical of more general trends. The large number of coins of Anastasius I, for example, may suggest that the main body of the hoard was constructed around the early sixth century.*

22 have distinctive double piercings for suspension. Where it is possible to establish the direction of piercing from Bergahus’s photographs, the holes were made from obverse to reverse, and in all cases the piercings are positioned over the obverse imperial portrait, presumably so that this image could be suspended upright, facing outwards. As Fig. 15 (below), demonstrates, coins of earlier emperors are more likely to be pierced than those of later emperors, suggesting that piercings may have been applied after coins had already been in India for some time.

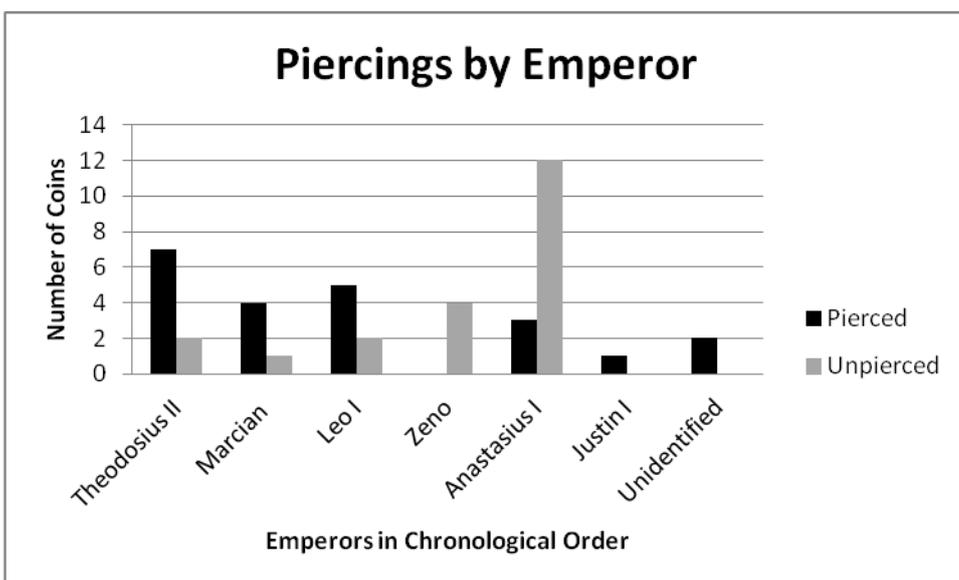


Fig. 15: Pierced coins arranged by emperor. As this simple tabulation demonstrates, it is possible that coins were more likely to be pierced after some time in India, given that later coin types are less likely to be pierced than earlier examples.

As Berghaus notes, and Nagaraja Rao's plates testify, the condition of the *solidi* is excellent, with almost no visible signs of wear.^{xviii} This may support deposition shortly after the arrival of the latest coins in India (i.e. in the mid-sixth century, since the latest examples which can be associated with a named emperor are of Justin I), but it may also suggest that fine quality coins were valued and therefore kept carefully, even for some considerable time, in order to preserve their appearance. The occurrence of red dust on many ancient coins found in India, thought to be *puja* dust (dust used in Hindu worship, traditionally made from saffron or a mixture of turmeric and slaked lime), strongly suggests that the good condition of such coins may in some cases be attributable to display and care in temple settings or private worship at some point in their life in India, rather than simply burial. The fact that the Akki Alur images are in black and white makes this difficult to determine in the present case.

The evidence of piercings, discussed above, may support this hypothesis, and a similar pattern is visible if scratch marks are tabulated: there is a higher tendency for earlier coins to be scratched, suggesting either an earlier practice or, more probably, something that was more likely to be applied to coins the longer they remained in India. In the cases of both piercings and scratch marks, the coins on which they are found are in similarly good condition to non-pierced and unscratched coins, reinforcing the theory that coins were maintained in good condition for social reasons.

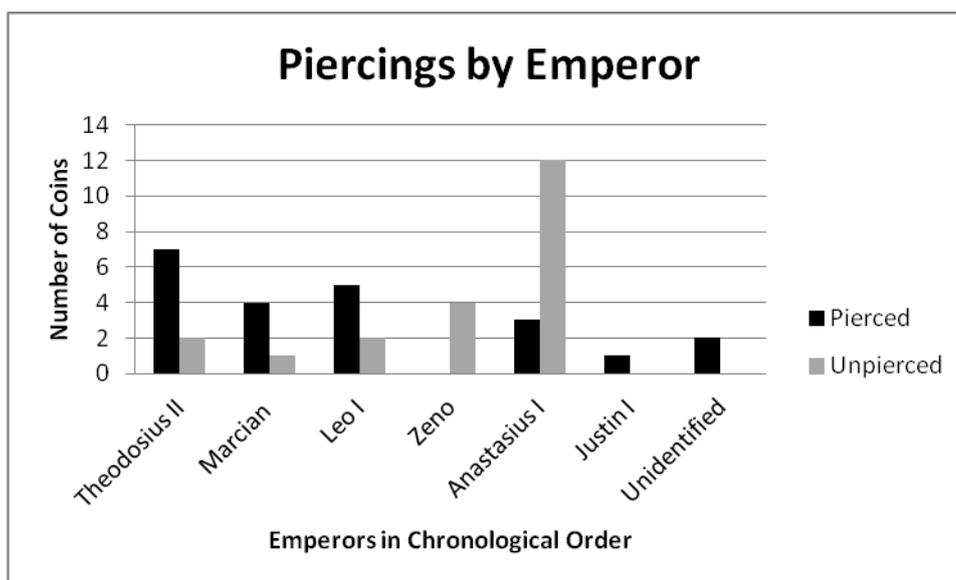


Fig. 16: Tabulation of scratch marks found on coins, arranged by emperor. As in the case of piercings, the comparatively higher incidence of scratch marks on coins attributable to earlier emperors suggests that this was a modification more likely to

be applied to a coin the longer it remained in India. This representation displays the total number of coins with scratch marks, not multiple marks on single coins (of which there is one example, of Leo I).

On 27 coins in the hoard, the *officina* is clearly visible. Various *officinae* are represented, but B, Γ, H and I are particularly common. With such a small sample of coins available, no conclusions can be drawn from this pattern. When dealing with imitations, however, it is worth noting that *officinae* have, in some cases, been reproduced. This indicates the care with which some imitations were produced, since it is doubtful that *officinae* had any local meaning in India. All of the imitations in the Akki Alur hoard are of a good enough standard that it is likely they were produced for economic as well as social reasons. None, for example, are uniface or lack inscription, as is common on other categories of imitation found in India. The coin weights would help to confirm this conclusion, since coins imitated partly for economic circulation tended to adhere closely to the official weight of the *solidus* (4.53 g.). The opportunity to examine the coins minutely would also assist in identifying imitation coins.

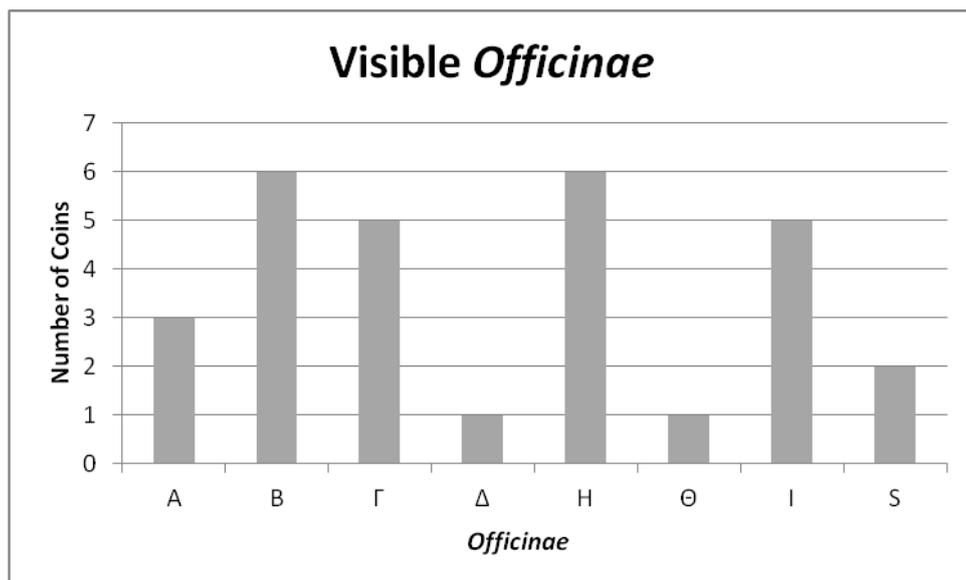


Fig. 17: Chart of visible officinae in the Akki Alur hoard, showing the preponderance of coins with the officinae B, Γ, H and I.

Conclusion

The Akki Alur hoard remains one of the most significant finds of Late Roman coins on Indian soil. It is the largest hoard of Byzantine gold *solidi* on record, and its discovery in Karnataka raises important questions about the distribution of Late Roman coin finds, of which the largest numbers in museum and private collections currently come from Tamil Nadu, but which are most often discovered in excavation contexts in Andhra Pradesh. Ideally,

this hoard will one day be subjected to a full and detailed analysis, including the publication of weights, examination of the fabric and the production of high-quality, scale images of the obverse and reverse of all coins, including the three early pieces. The primary objective of this article is not to fill the place of such a publication.

It is, however, hoped that this article will supplement the information currently available and act as a corrective to some of the errors in reporting the Akki Alur hoard. This is particularly vital as the incorrect representations of the hoard continue to mount. In 1991, for example, R. Gopal, Nagaraja Rao's successor at the Karnataka Directorate of Archaeology also mentioned the Akki Alur hoard (by this time in his possession), when discussing Venetian coins in Karnataka. He described all of the coins in the hoard as being pierced, again suggesting that he had not looked at the hoard personally.^{xviii} When the hoard is cited regularly as evidence of Late Roman contact with India, it is crucial that accurate information at least be available to those who wish to consult it.

The other hope of this article is that it raise one of the biggest problems with the numismatic evidence for (late) Roman trade with south India. It is a subject area, which continues to be beset by the earliest assumptions and interpretations to attach themselves to the field. The plethora of publications, articles and short notices which bring evidence to light piecemeal have also resulted in a mounting confusion of contradictory and sometimes incorrect information (no more so than in the case of the Akki Alur hoard). The Late Roman evidence, in particular, has suffered from a tendency to interpret it as simply a postscript to the Roman trade of the first two centuries A.D. subject to the same (often problematic) assumptions, and frequently inexperienced examination.

For these reasons, it is no longer sufficient or even possible to understand Indo-Roman contact via the collation of available data, as valuable as many publications are. Rather, it seems time to address in detail the theoretical questions underlying interpretations of Roman contact with and impact upon India, and to assess critically the quality as well as the mass of numismatic and other information available. Current work on Late Roman and Byzantine coins found in India, as a body of evidence with a far smaller volume of pre-existing scholarship attached to it, is seeking to present new and published numismatic data alongside a new interpretation, using network theory and the intersections of archaeological, numismatic and literary evidence in order to understand Indian Ocean-Mediterranean contact in the fourth to eighth centuries.^{xix}

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Notes on Revised Coin List:

{X} = suggested reading of an unclear character

[X] = suggested insertion where characters are missing

- = break in legend as part of coin design
Off. = *Officina*

Star = unless otherwise stated, eight-pointed star

Owing to the unusual publication of this hoard, for clarity all coins are marked as either 'pierced' or 'not pierced'.

All coins are (genuine or imitation) AV *solidi*, though weights remain unknown and exact diameters are unclear.

Revised Coin List:

Theodosius II (r. 408-450)

Coin 1: Axis, 180°

Obv. DNTHEODO – [SI]VS PF AVG
¾ bust wearing helmet with plume, and diadem the ties of which show to left, tunic and cuirass. Right hand holds spear behind head. On left shoulder, shield with device of horseman right, spearing fallen foe.

Rev. IMPXXXXII COS – X VII PP
Constantinopolis seated left, *globus cruciger* in right, holding spear upright with left hand, left foot rests on prow of a ship, star in lower left field.
CONOB in exergue.

Notes: Double pierced from obverse to reverse, scratch-mark S1 in obverse right field, worn reverse die. Imitation?

Coin 2: Axis, 180°

Obv. DNTHEODO – [S]IVS PF AVG
See Coin 1.

Rev. VOT XXX – MVLT XXXX
Constantinopolis seated left, *globus cruciger* in right hand, holding spear upright in left hand, left foot rests on prow of a ship, star in lower left field, round shield leans on throne, lower right.
[CO]NO[B] in exergue.

Notes: Double pierced from obverse to reverse.

Coin 3: Axis, 180°

Obv. DNTHEODO[S] – [I]VS PF AVG
See Coin 1.

Rev. [M]PXXXXII COS – VII PP
See Coin 2.
CON[OB] in exergue.

Notes: Double pierced (direction unclear), very worn obverse die. Imitation?

Coin 4: Axis, 180°

Obv. DNTHEODO - SIVS PF AVG
See Coin 1.

Rev. CONCORDI – A AVCC S
Constantinopolis seated facing, head to the right, crowning Victory on right hand, sceptre in left hand, left foot resting on prow of a ship, star in left field.
CON[OB] in exergue. *Off.* S

Notes: Double pierced obverse to reverse.

Coin 5: Axis, 0°

Obv. DNTHEOD[O] - SIVS PF AVG
See Coin 1.

Rev. GLOROVI - TERRAR
Emperor standing left holding banner with horizontal cross motif in left hand, *globus cruciger* in right hand, star in left field.
CONOB in exergue.

Notes: Double pierced from obverse to reverse. Imitation?

Coin 6: Axis, 150°?

Obv. DNTHEODOS - VIS PF AVG

See Coin 1.

Rev. MPXXXXII COS - XX VII PP

See Coin 2.

CONOB in exergue.

Notes: Not pierced, scratch-mark S4 in lower right field. Imitation?

Coin 7: Axis, ?°

Obv. DNTHEODO - SIVS PF AVG

See Coin 1.

Rev. CONCORDI - A AVCCC

See Coin 4.

CONOB in exergue.

Notes: Not pierced, deep crack on obverse die over diadem.

Coin 8: Axis, 180°

Obv. DNTHEODO - SIVS PF AVG

See Coin 1.

Rev. VICTORI - ΛΑΡCCC Θ

Winged Victory advancing left, long staff with cross bar and loop at top in right hand, star in left field.

[C]ON[O]B in exergue, *Off.* Θ

Notes: Double pierced from obverse to reverse.

Coin 9: Axis, 180°

Obv. DNTHEOD[O - [SI]VS PF AVG

See Coin 1.

Rev. VOT XX- MVLT XXX

Winged Victory advancing left, long voided cross in right hand.

[CO]NO[B] in exergue.

Notes: Double pierced (direction unclear). Imitation?

Marcian (r. 450-457)

Coin 10: Axis, 180°

Obv. DNΜΑΡCΙΟ - ΒΟΙΠΡΑΥC

See Coin 1.

Rev. VICTORI - ΛVVCCH H

Winged Victory advancing left, long voided cross in right hand, star in right field.

[C]ONO[B] in exergue. *Off.* H

Notes: Double pierced from obverse to reverse. Imitation?

Coin 11: Axis, 180°

Obv. DNΜΑΡCΙΑ - ΝVΣ ΡFΑΥC

See Coin 1.

Rev. VICTORI - ΛVVCCH H

See Coin 10.

CONOB in exergue. *Off.* H

Notes: Double pierced from obverse to reverse.

Coin 12: Axis, 180°

Obv. ΔΙΜΑΡC [ΙΑ - Ν] VΣ ΛV C

See Coin 1.

Rev. VICTORI - ΛΛVCCC A

See Coin 10.

[CO]NO[B] in exergue. *Off.* A

Notes: Double pierced from obverse to reverse. Imitation?

Coin 13: Axis, ?°

Obv. DNΜΑΡCΙΑ - ΝVΣ ΡΡΑΥC

See Coin 1.

Rev. VICTORI - ΑΑVCCC Γ

See Coin 10.

CONOB in exergue. *Off.* Γ

Notes: Not pierced, scratch-mark S2 deeply in obverse right field.

Coin 14: Axis, 180°

Obv. DN ΜΑΡ[CΙ]Α - [N]VΣ ΡFΑΥC

¾ bust wearing helmet with plume, and diadem with trefoil ornament, the ties of which show to left, tunic and cuirass.

Right hand holds spear behind head. On left shoulder, shield with device of horseman right, spearing fallen foe.

Rev. [VI]CTORI – AAVCCC Δ
See Coin 10.
CON[OB] in exergue. *Off.* Δ

Notes: Double pierced from obverse to reverse (very large holes), scratch-mark S3 in obverse right field. Deep cracks at ten and four o'clock on reverse die.

Leo I (r. 457-474)

Coin 15: Axis, 180°
Obv. DN LEO PE – RPET AVC
See Coin 14.

Rev. [VI]CTORI – AAVCCC H
See Coin 10.
CONOB in exergue. *Off.* H

Notes: Double pierced from obverse to reverse.

Coin 16: Axis, 180°
Obv. DN LEO PE – RPET AVC
See Coin 14.

Rev. [VI]CTORI – AAVCCC I
See Coin 10.
[CO]NO[B] in exergue. *Off.* I

Notes: Double pierced from obverse to reverse, scratch-mark S5 in obverse right field.

Coin 17: Axis, 180°
Obv. DN LEOPE – RPET AVC
See Coin 14.

Rev. [VI]CTORI – AAVCCC
See Coin 10.
CON[OB] in exergue.

Notes: Double pierced from obverse to reverse. Possibly double-struck, mangled reverse die at bottom.

Coin 18: Axis, 180°
Obv. DN LEOPE – RPET AVC
See Coin 14.

Rev. [VI]CTORI – AAVCCC B
See Coin 10.
[C]ONO[B] in exergue. *Off.* B

Notes: Double pierced from obverse to reverse, scratch-mark S6 in obverse right field.

Coin 19: Axis, 180°
Obv. DN LEO PE – [RP]ET AVC
See Coin 14.

Rev. [VI]CTORI – AAVCCC A
See Coin 10.
CON[O]B in exergue. *Off.* A

Notes: Double pierced (direction of piercing unclear).

Coin 21: Axis, ?°
Obv. DN LEOPE – RPET AVC
See Coin 14.

Rev. VICTORI – AAVCCC B
See Coin 10.
CONOB in exergue. *Off.* B

Notes: Not pierced, worn obverse die, scratch-mark S7 in obverse right field, scratch-mark S9 in obverse left field.

Coin 22: Axis, ?
Obv. DN LEOPE – RPET AVC
See Coin 14.

Rev. VICTORI – AAVCCC Γ
Winged Victory advancing left, long cross in right hand, star in right field.
CONOB in exergue. *Off.* Γ

Notes: Not pierced

Anastasius I (r. 497-518)

Coin 23: Axis, ?
Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC B

See Coin 10.

CONOB in exergue. *Off.* B

Notes: Not pierced.

Coin 24: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC H

See Coin 8.

CONOB in exergue. *Off.* H

Notes: Not pierced.

Coin 25: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC H

See Coin 22.

CON[OB] in exergue. *Off.* H

Notes: Not pierced.

Coin 26: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC H

See Coin 10.

CONOB in exergue. *Off.* H

Notes: Not pierced.

Coin 27: Axis, 180°

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC B

See Coin 8.

[C]ONO[B] in exergue. *Off.* B

Notes: Double pierced from obverse to reverse.

Coin 28: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC I

See Coin 22.

CONOB in exergue. *Off.* I

Notes: Not pierced, obverse bust quite worn, worn reverse die.

Coin 29: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC B

Winged Victory advancing left, long staff with cross bar and loop at top in right hand, eight-pointed star in left field, with pellet at centre.

CONOB in exergue. *Off.* B

Notes: Not pierced, very crisp.

Coin 30: Axis,?

Obv. DN ANASTA - SIVSPPAVC

See Coin 14.

Rev. VICTORIAI – AAVCCC I

See Coin 10.

CONOB in exergue. *Off.* I

Notes: Not pierced, very scratched reverse.

Coin 31: Axis, 180°

Obv. DN ANAST[A] – [S]IVSPPAVC

See Coin 14.

Rev. VICTORI – AAVCCC I

Winged Victory advancing left, long voided cross in right hand, six-pointed star in right field.

[C]ON[O]B in exergue. *Off.* I

Notes: Double pierced from obverse to reverse, scratch-mark S8 in obverse right field. Imitation?

Coin 32: Axis, 180°

Obv. DN ANASTA - SIVSPPAVC
See Coin 14.

Rev. VICTORI – AAVCCC A
See Coin 10.
C[O]NO[B] in exergue. *Off.* A

Notes: Double pierced from obverse to reverse, scratch-mark S6 in obverse right field.

Coin 33: Axis,?
Obv. DN ΑΑΑΣΤΑ - SIVSPPAVC
See Coin 14.

Rev. VICTORI – AAVCCC Γ
See Coin 29.
CONOB in exergue. *Off.* Γ

Notes: Not pierced.

Coin 34: Axis,?
Obv. DN ANASTA - SIVSPPAVC
See Coin 14.

Rev. VICTORI – AAVCCC Γ
See Coin 29.
CONOB in exergue. *Off.* Γ

Notes: Not pierced.

Coin 35: Axis,?
Obv. ДИ ANASTA –
S[reversed]IA[inverted]SPPAA[inverted]C
See Coin 14.

Rev. VICTORI – AAVCCC S
See Coin 31.
COИOB in exergue. *Off.* S

Notes: Not pierced, obverse shallow die impression. Imitation.

Coin 36: Axis,?
Obv. DN ANASTA - SIVSPPAVC
See Coin 14.

Rev. VICTORI – AAVCCC I
See Coin 10.
CONOB in exergue. *Off.* I

Notes: Not pierced, scratch-mark S9 in obverse left field.

Coin 37: Axis,?
Obv. DN ANASTA – SIVSPPAVC
See Coin 1.

Rev. VICTORI – AAVCCC B
See Coin 10.
CONOB in exergue. *Off.* B

Notes: Not pierced.

Zeno (r. 474-5, 476-491)

Coin 38: Axis,?
Obv. DN ZENO - PERPAVC
See Coin 14.

Rev. *IMAGE MISSING*

Notes: Not pierced.

Coin 39: Axis,?
Obv. DN ZENO - PERPAVC
See Coin 14.

Rev. *IMAGE MISSING*

Notes: Not pierced, very worn obverse die.

Coin 40: Axis,?
Obv. DN Z[reversed]ENO - PERPAVC
See Coin 14.

Rev. *IMAGE MISSING*

Notes: Not pierced, die crack/ flaw in left field.

Coin 41: Axis,?
Obv. DN ZENO - PERPAVC
See Coin 14.

Rev. *IMAGE MISSING*

Notes: Not pierced.

Justin I (r. 518-527)

Coin 43: Axis,?
Obv. DN IVSTI - NVSPPAVC
See Coin 1.
Rev. *IMAGE MISSING*

Notes: Double pierced (direction unclear), very worn obverse die with deep crack in right field, die flaw over bust, die-wear lines distort inscription.

Unidentified

Coin 20: Axis, 180°
Obv. ΕΟΙΓΕΟΩ - SPETAV
See Coin 14.

Rev. COICOU DI – AAVCC I
Constantinopolis seated right, star in right field, crowning Victory in right hand.
CON[O]B in exergue. *Off.* I

Notes: Double pierced from obverse to reverse. Imitation.

Coin 42: Axis, ?°
Obv. OB[reversed]HVRЯЯ - VSPEAVC
See Coin 14.

Rev. *IMAGE MISSING*

Notes: Double pierced from obverse to reverse. Imitation.

ⁱ Walburg, 2008, 11.

ⁱⁱ Nagaraja Rao, 1980.

ⁱⁱⁱ Unless otherwise stated, all tables have been compiled by the present author.

^{iv} Nagaraja Rao, 1980, 111.

^v Nagaraja Rao, 1980, 111.

^{vi} Nagaraja Rao, 1980, 112.

^{vii} Gupta, 1984, 39.

^{viii} 1984, 39.

^{ix} Gupta, 1984, 39.

^x The physical infrastructure of a Byzantine mint remains unclear owing to a lack of archaeological or textual evidence, but at least administratively, Byzantine mints were divided into a variable number of workshops (or *officinae*), to which a particular coins could be traced. The *officina* in which a coin was produced was normally denoted by a Greek character (despite the fact that the inscriptions on early Byzantine coins were still in Latin, only changing to Greek in the seventh century). For further information see Grierson, 1999.

^{xi} Nagaraja Rao 1987, 441.

^{xii} Carson, 1980; Thurston, 1894, 9; Ghosh & Ismail, 1980.

^{xiii} Motichandra, 1959, 37.

^{xiv} Nagaraja Rao, 1987, 445.

^{xv} Berghaus 1991, 111.

^{xvi} Berghaus, 1991, 111

^{xvii} 1991, 111.

^{xviii} Gopal, 1995, 39.

^{xix} R. R. Day, PhD thesis in progress, to be submitted by September 2013 for examination by the University of Birmingham. This will include detailed images of the Akki Alur photographs.