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A HOARD FROM THE TIME OF THE COLLAPSE OF THE
SASANIAN EMPIRE (AD 638–9) – PART II;
ANALYSIS OF THE MINTING SYSTEM OF ARDASHĪR III

11. Unknown (probably historical Greater Iran), in European trade before 2012

by

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MIDDLE EAST?

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 SASANIAN EMPIRE (AD 638–9) – PART II
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[PLATES 53–72]

11. Unknown (probably historical Greater Iran), in European trade before 2012

Dep. 638/9 or later

176 *AR*

Disp. In European and American trade

Keywords: Sasanian numismatics, Ardashīr III, Yazdgard III, minting system, die alterations, erasures, new mint.

*Overview*¹

A parcel ('parcel 1') of 66 coins was published by the present author in *The Numismatic Chronicle* 2013.² This parcel, from a seemingly much larger hoard, had been recorded in March 2012. A second parcel of 176 coins was brought to the author's attention in September 2013. This contained 169 coins of Ardashīr III (AD 628–30), five of Yazdgard III (AD 632–51) and two, apparently unrelated ones, of Hormizd V (AD 632–3). The latter judgement is based on the different toning of these coins. This parcel was apparently part of the same hoard as parcel 1.³ The closing coin of the second parcel is again from the seventh regnal year of Yazdgard III (AD 638/9), and again from the mint of NAL in Kirmān. This Kirmānī mint now seems much more significant in the make up of the hoard since about 12–13% of the recorded coins from the hoard originate from it.⁴

¹ I am most grateful to Katrin Gutberlet who carefully undertook the photographic documentations.

² S. Heidemann, *CH* 13, *NC* 173 (2013), pp. 414–22.

³ A group from parcel 2 was later sold at Album, (Santa Rosa) Auction 19 (15 May 2014). The sale also includes other, unrelated, coins of Ardashīr.

⁴ The 'Oddly Die-Linked Hoard' from the time of Yazdgard in Kirmān with a closing date of Yazdgard's year 14, and the present hoard ending in year 7, seem to complement each other. The recorded parcel of the 'Oddly Die-Linked Hoard' is 'missing' the Ardashīr component, while the other is lacking the Khusrō II component. Both seem to have an assembling phase in Fārs or Kirmān, the first with an emphasis on the mint of BN, the latter on the mint of NAL. Both seem to have arrived in several parcels in the European and American trade at roughly the same time and both have a significant number of dipinti. Their toning, however, is clearly different: the first has a beige sandy clay on an almost unaged silvery surface, with light green corrosion spots while the latter exhibits a distinct greyish tone with occasional chloride horn silver. The different visual appearances indicate two different hoards. It may be that some Khusrō II coins with a greyish toning were included in Berlin parcel II of the 'Oddly Die-Linked Hoard'. A discussion of this hoard will be found in S. Heidemann, J. Riederer and D. Weber, 'A hoard from the time of Yazdgard III in Kirmān', (forthcoming).

The problems of recording commercial parcels, without a proper archaeological context, were discussed in relation to the first parcel; likewise estimates about the original size of the hoard. The second parcel allows us to make further observations. The entire hoard is of course beyond reconstruction. Nonetheless significant information is yielded by this new parcel. The main reason for recording it is the scarcity of historical and numismatic evidence post the battle of al-Qādisiyya (AD 636). Second, the coins of Ardashīr make up the largest group of his coins ever recorded and studied. The quantity of coins, but particularly the number of dies encountered, allows us to put forward some preliminary hypotheses on relative mint output. Third, alterations of some of these dies and the erasure of mints on the coins themselves give scope for preliminary hypotheses about the mint organisation. Finally, it is recorded to preserve the numismatic context for the phenomenon of ink *dipinti* and *grafitti* in the late Sasanian period. The reading of the dipinti will again be discussed in a different publication by Dieter Weber.⁵

Character of the parcels

The Ardashīr coins of both parcels seem to be a deliberate selection from a, presumably, much larger hoard which should have had a sizable portion of Khusrō II coins. When compared with other hoards buried about the same time and which include coins of Ardashīr, this one – with, at the latest count, 235 coins of Ardashīr – might have contained several thousand coins of Khusrō II coins as well.

In the previous parcel there was a gap of about eight years between the closing date of the parcel, year 7 of Yazdgard (AD 638/9), and the parcel's next most recent coins from the last year of Ardashīr. The present parcel closes the gap a little. There are two coins of Yazdgard's, year 1 (AD 632/3) and one of his year 6 (AD 637/8). Comparing the Ardashīr portions of the two parcels one has the impression that the first parcel was a collector's careful selection of the available Ardashīr coins from the hoard. The coins were mostly in a flawless condition and well struck. Although almost every mint in the hoard was included, the more prolific mints were only represented by a limited number of specimens. The second parcel includes many more unpleasant looking coins struck with overused rusty dies, less carefully minted, and more coins from some mints. It reveals by its larger quantities and less selective attitude a much better impression of the regional distribution and the share of each mint in the overall production.

Relative mint output and regional distribution

A thorough die study has been carried out of the coins from the hoard. The results suggest minting patterns which may have existed during the first two years of the Sasanian wars of succession. The material is still not comprehensive enough for any unambiguous results. For example, the first parcel contained only two coins from the mint NAL (a mint in Kirmān) for year 2 (until then scarce), while the second

⁵The philological treatment of the dipinti of the coins in the first parcel will be included in Heidemann, Riederer and Weber, 'A hoard from the time of Yazdgard III in Kirmān' (forthcoming). The reading of the dipinti of the second parcel will follow in a separate publication.

provides an additional 26 specimens. Rarity can be misleading. A die count revealed 25 obverse and 26 reverse dies for NAL year 2. This seems to be a significant large output, in the light of the few die studies of late Sasanian mints. The prolific Bīshāpūr mint in Khusrō's year 13 registered 11 obverse, and 12 reverse dies for coins with the 'pd' mark, which might account for about a third of the year's production.⁶ While NAL is a mint in Kirmān, the suggested identification with Narmashīr is not yet proven by supporting evidence such as seals.⁷ The number of dies imply that NAL was among the major mints of Ardashīr's reign. The further major mints for year 2 remain, of course, the mint of the capital WH (Vēh-Ardashīr?, Ctesiphon: 33 obverse, 21 reverse dies), and the major mints in greater Fārs such as YZ (Yazd: 25 obverse, 26 reverse dies) and DA (Dārābgerd: 17 obverse, 18 reverse dies). The number of dies for hitherto scarcer mints was surprisingly high: AYL (unknown location, 11 obverse, 10 reverse dies) and AW (Hormizd Ardashīr: 10 obverse, 10 reverse dies) seem to have produced large quantities of dies as well as NAL (Narmashīr?) as already mentioned.

The regional distribution is much more pronounced than could be assumed from the first parcel. The majority of the coins in the combined parcels come from the provinces of Fārs (82), Khuzistān (49), and the Iraqi region (35, mainly Ctesiphon). In addition the mint of NAL in Kirmān (32) emerges as a significant supplier of coins in Ardashīr's reign. It allows us to make the preliminary assumption that there was an enormous production in Ardashīr's second year (AD 629/30), in Central Iraq and in Fārs and also the adjacent provinces of Khūzistān and Kirmān. The die analysis reveals very few die links within a given year and mint, allowing for much higher estimates of actual dies used for these issues. On the other hand this makes a more precise estimate of the original number of dies difficult. Whatever the background of this surge in coin, or more accurately die, production, compared with what we know about die production for the period of Khusrō II⁸ we can assume there was a political and / or military reason relating to the Sasanian wars of succession.⁹ While the first, more selective, parcel contained a number of the scarcer year 1 coins, this parcel does not contain any, though it does have a year 2 coin with the first crown (BN 2, no. 59/6861) and a coin of a mysterious new mint of W/N-S/A-S/A (year 2, no. 144/6974).

⁶ Szaivert, 'Bishapur'. These 'pd'-marked dies are so tightly die linked they must be a parcel from the mint which suggests they are from one period of minting. The Ardashīr III coins here are an accumulation over a period of perhaps years.

⁷ See recently Malek, 'Late Sasanian coinage', p. 480. NAL continues into the series of Arab coins in Sasanian style. The continuation of the mint for the reformed, Arab-Umayyad, coinage is in doubt. Two coins have tentatively been attributed to that mint. Shams Eshragh, *Silver Coinage*, no. 253, suggested the reading of Narmāshir for a coin dated year 80 H in blundered style. A coin even more blundered stylistically but not die-linked was in Morton & Eden, Auction 63, no. 33, with the suggested mint reading (Narm)āshir, but the first part of the mintname would be missing, and it could be a warped bi-l-Jisr as well.

⁸ Further die studies on coins of Khusrō II in the years before his regnal year 12, will be published in the upcoming study of Susan Tyler-Smith on the Shīrāz hoard.

⁹ Pourshariati, *Decline and Fall*, pp. 179–81.

Sasanian mint organisation under Ardashīr III

The re-engraving of dies allows us a glimpse into mint organisation under Ardashīr III. François Gurnet has already discussed a die of Ardashīr which has been re-engraved to carry the ART (Ardashīr Khurra) mint abbreviation. In addition the year was altered from year 1 to year 2.¹⁰ In the time of Khusrō II, at least, it is assumed that there was a regulated central engraving office for the main mints. Whether the dies were sent out to the mints, as in the middle ‘Abbāsid period,¹¹ or the coins themselves were centrally minted and sent then off to the district capitals, remains unclear.¹² Evidence for the first practice would be re-engraved mint abbreviations on dies showing dies had been sent to the wrong provincial authority and were then recut with the correct administrative abbreviation. Evidence for the second would be ‘impossible’ die links, where obverse dies were shared by different mints. Re-engraving of mint abbreviations is known from the time of Hormizd IV.¹³ For Khusrō II, such re-engraving of mint names has not yet(?) been established for any major mint abbreviation.¹⁴ Several instances of re-engraving have been noted for coins of Ardashīr III. The present hoard suggests this was a wider phenomenon than previously assumed. The original abbreviation is not always discernable, but its alteration is clearly visible. In the current hoard there is an example of an abbreviation, probably APL (year 2) which has been recut from an unidentifiable abbreviation (fig. 1).¹⁵

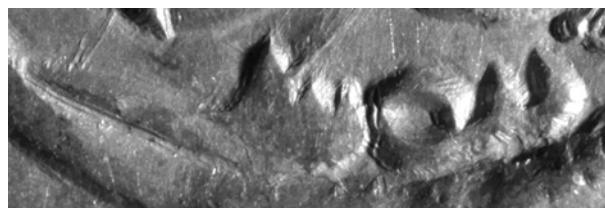


Fig. 1. Ardashīr III, APL year 2. Heidemann, ‘Hoard’, p. 420, no. 5 (detail).

¹⁰ Gurnet, ‘Some considerations’, no. 10.

¹¹ Ilisch, ‘Stempelveränderungen’.

¹² The phenomenon of centralized coin production for different regions or cities is known for other periods and regions in numismatic history, notably for imperial Asia Minor and Roman Britain, but not yet for the Sasanian Empire. For Roman Britain see Sellwood, ‘Roman coins’, pp. 288–91. For a different system of die sharing in Asia Minor, where certain workshops produced civic coinages for a number of cities, see Kraft, *System*, and following him Johnston, ‘New problems’, and Johnston, ‘Die sharing’. A similar phenomenon of ‘impossible’ die sharing between different mints occurred during the early Umayyad period in Syria.

¹³ Photo archive at Universität Hamburg: SB 08209 (Hormizd IV, MY 11, recut from another mint abbreviation); SB 06257 (Hormizd IV, YZ 2; YZ re-engraved from AT or AM), SB 08227 (Hormizd IV, ŠYT [sic] 12, recut from ART?).

¹⁴ Mochiri, ‘Réemploi’, describes a similar phenomenon for some Khusrō II coins. He published five die-identical coins of Khusrō II mentioning an unlocated mint, LY of year 15, which is die-linked with a reverse of an equally unidentified mint, LAN, year 23. The three coins of LAN 23 share two different obverse dies. Because of the rarity of both mint abbreviations, and their undefined location, the coins seem more likely to be contemporary forgeries.

¹⁵ APL 2; dies A-a; mint recut (?), first engraving two teeth or ‘ before L: Heidemann, ‘Hoard’, no. 5.



Fig. 2. Ardashīr III, ART, year 2 engraved over ST(?), year 1. No. 2/6806 (detail).



Fig. 3. Ardashīr III, ART, year 2, re-engraved from ST(?), year 1.
Heidemann, 'Hoard', p. 420, no. 7 (detail).

Three reverse dies with the abbreviation ART are now known, engraved over another abbreviation, which is hard to determine. Gurnet's suggestion that the original is ST is not without problems (fig. 2). Whatever the original abbreviation, it is the same on all three altered dies. The year was changed on all three coins from year 1 to year 2 (fig. 3).¹⁶ Coin no. 6/6805 shows that in the same years an unaltered die of ART, year 2 was used at the mint.



Fig. 4. Ardashīr III, AYL probably re-cut from AH, year 2. No. 46/6848 (detail).

¹⁶The altered reverse die 'a' was first published by Paruck, 'Monnaies sassanides', p. 48, fig. 19. This die was linked with at least four different obverse dies: Paruck, 'Monnaies sassanides', fig. 19 (first crown), dies A, B, and C (all second crown). In detail: ART 2; dies A (second crown)-a; mint recut ST?, year 1: Heidemann, 'Hoard', no. 7. Dies B (second crown)-a; nos 6806, 6809, 6810. Dies C (second crown)-a: no. 6808. Dies D (first crown)-b*: Gurnet, 'Some considerations', fig. 10 (ART 2, obv. first crown: recut ST?, year 1) has an obverse and an altered reverse die not yet linked to the others. Reverse dies E (first crown)-c*: coll. Susan Tyler-Smith (ART, year 2 recut from ST?, year 1; 4.16g; 3h).

More than one die was obviously wrongly sent to Ardashīr Khurra. One die of AYL, year 2, was a recut from, probably, AH or AHM(?), year 2(?) (fig. 4).¹⁷ Also a die of YZ, year 2, was altered perhaps also from AH (fig. 5).¹⁸

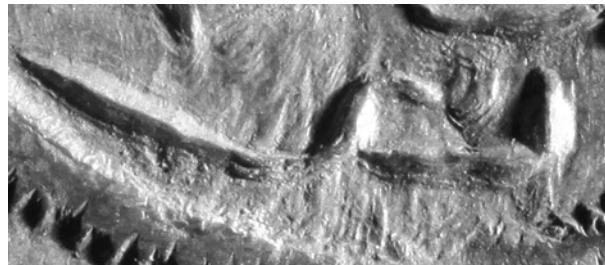


Fig. 5. Ardashīr III, YZ possibly re-cut from AH, year 2. No. 156/6971 (detail).

These wrongly ‘addressed’ dies, together with the large number of dies produced in Ardashīr’s short reign, may be evidence of serious disturbances in the minting system at a time of enormous output. ‘Impossible’ die links of an obverse with reverses with different abbreviations have not yet been found. It seems clear that, in continuation of earlier practices, dies were engraved centrally and then sent out to the mint. This was probably later changed to a system of centralised minting under Yazdgard III. This might either have been an itinerant mint or, more likely, a central mint sending out the coins to the appropriate administrative centres. This phenomenon will be treated in a separate article.¹⁹

Erasing mint names on coins

This phenomenon, which is quite often encountered on late Sasanian coins, may be connected with the minting system. Mints were scratched out too often for this to be a random occurrence, or a doodle by a bored contemporary. On Khusrō II’s coins the erasure of the mint is quite often found, especially on coins of BBA, the court mint, but it has also been observed for other mint abbreviations. In addition the mark of guarantee of value – ‘pd’ – is affected.²⁰ The careful observation of the inscriptions on coins is also seen on drachms of the usurper Vistahm (591–c.597?), where his name and his remarkable loose hair are sometimes carefully scratched out.²¹ Later we often find the *bismillāh* on Arab coins of Sasanian type erased.²² This phenomenon can also be seen on two coins of Ardashīr: coin no. 169/6868 probably struck in Yazd (fig. 6), and coin no. 154/6960 which is definitely from Yazd (fig. 7). That Yazd might twice be the ‘victim’ must be taken as contingent until further information becomes available. Whether this phenomenon is connected with the presumed errors in sending out dies, discussed above, cannot yet be answered.

¹⁷ No. 6848 (dies D-d); no. 6855 (dies K-d).

¹⁸ No. 6959 (dies P-p); no. 6971 (dies X-p).

¹⁹ Heidemann, Riederer, Weber, ‘Hoards’ (forthcoming).

²⁰ All erased mint marks and ‘pds’ on coins Khusrō II, known to the author, are to be found in Heidemann, Riederer, Weber, ‘Hoards’ (forthcoming).

²¹ Schindel, ‘Damnatio’. The coin belongs to the collection of Robert Schaaf.

²² For example Hamburg photo files SB 09604, Khusrō II type, mint BYŠ, year 25 Yazdgard era, *bismillāh* erased on a coin of the type Album-Goodwin, *Pre-Reform Coinage*, no. 110.

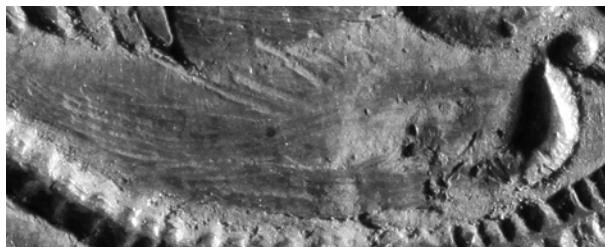


Fig. 6. Ardashīr III, YZ mint erased, year 2. No. 169/6868 (detail).



Fig. 7. Ardashīr III, YZ mint partially erased, year 2. No. 154/6960 (detail).

A rare mint abbreviation W/N-A/S-A/S

As a final note the parcel brought to light an apparently rare mint abbreviation. The letters appear clear and read *W/N*, second letter ' or an *S* and the third letter seems to be also an ' or *S* (figs 8 to 10). Malek mentions a coin of this mint from the Johnson collection, London,²³ but no coin with this clearly discernable mint has been illustrated so far. A third coin is preserved in the collection of S. Tyler-Smith. All three coins are struck from different dies, allowing the assumption of a regular mint. Also, as far as the style is concerned, the coins are apparently part of the official minting system. Currently no suggestion about its location can be made.



Fig. 8. Ardashīr III, W/N-A/S-A/S, year 2. No. 144/6874 (detail).



Fig. 9. Ardashīr III, W/N-A/S-A/S, year 2, 3.02g. Johnson coll. no. 025103.

²³ Malek, 'Late Sasanian coinage', p. 488, fn. 86; here read as NAS.



Fig. 10. Ardashir III, W/N-A/S-A/S, year 2, 4.08g, 3h. S. Tyler-Smith coll.

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CATALOGUE

(All coins are illustrated on pls 53–72, in the order of the Catalogue)

The arrangement of the *Catalogue* is the same as that used in *NC* 2013.

A four-digit photo number has been used to identify each coin for future reference. A running number has also been added.

Die combinations for each mint have been designated by capital letters for the obverse and lower case for the reverse. Die numbers are continued from those used for the first parcel.

The numbers of coins in parcel 1 and 2 are indicated, separated by a slash, for each mint and type at the first occurrence of the mint in the list. Coins from parcel 1 are not re-listed individually.

The mint abbreviations have been identified according to the latest discussion in the forthcoming book by Susan Tyler-Smith, *The Coinage Reform of Khusrū II*.

Over Page.

ARDASHĪR III

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
	AHM (Hamadhān, Media or Jibāl)	2	G. II/1 (winged crown)		3 / 0			
1/6804	AM (Āmul, Tābarīstān)	2	G. II/1	B-b	1 / 1	3.57	9.30	Crystallised margin, partly broken off. Album, Auction 19, lot 59.
	APL (Ādarshahr, Khurāsān)	2	G. II/1		1 / 0			See Mochirī, <i>Étude</i> , figs 72, 73.
	ART (Ardashīr Khurra, Fārs)	1	G. I/1 (wingless crown)		1 / 0			
2/6806	ART	2	G. II/1	B-a	1 / 5	3.92	3	Die re-engraved from possibly ST (?), year 1 (see also fig. 2); see Gurnet, 'Some considerations', fig. 10, and Paruck, 'Monnaies sassanides', p. 48, no. 19). Rev. dipinto.
3/6809	ART	2	G. II/1	B-a		4.14	3	
4/6810	ART	2	G. II/1	B-a		4.12	3	Obv. and rev. dipinto.
5/6808	ART	2	G. II/1	C-a		4.14	3	Reverse double struck.
6/6805	ART	2	G. II/1	D-b		4.25	3	Reverse die b is a perfectly original ART 2 reverse die. Obv. slightly double struck; rev. slight traces of a dipinto.
	AT (Āturbadagān, Azarbajān?)	1	G. I/1		1 / 0			
7/6807	AT	2	G. II/1	B-b	1 / 1	4.10	3	

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/ parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
8/6811	AW (Hormizd Ardashir? later Sūq al-Ahwāz, in Khuzistān)	2	G. II/1	A-a	0 / 10	4.03	4	See Mochiri, <i>Étude</i> , fig. 1268 for type. Rev. traces of dipinto.
9/6812	AW	2	G. II/1	B-b		4.10	4	Rev. dipinto.
10/6813	AW	2	G. II/1	C-c		4.12	3	Rev. traces of dipinto.
11/6814	AW	2	G. II/1	D-d		3.34	3	Rev. traces of dipinto; this coin Album, Auction 19, lot 60.
12/6817	AW	2	G. II/1	E-d		4.12	3	
13/6815	AW	2	G. II/1	F-e		4.17	10	
14/6816	AW	2	G. II/1	G-f		4.02	3	Rev. traces of dipinto.
15/6818	AW	2	G. II/1	H-g		4.12	4	Rev. traces of dipinto.
16/6819	AW	2	G. II/1	I-h		4.12	3.30	
17/6820	AW	2	G. II/1	J-i		4.67	9	
18/6829	AY (Ērān-Xvarrah-Shābuhr, Khuzistān?)	2	G. II/1	I-i	9 / 28	4.16	3	See Mochiri, <i>Étude</i> , figs 436, 1110 for type. This mint was extremely prolific with nine coins in the previous parcel and 28 coins in the new parcel. There were only three die linked coins (6829, 6842 and 6831, all with reverse die i) among these 37 coins and two in the previous parcel (p. 420, nos 14 and 15, both with reverse die e).
19/6842	AY	2	G. II/1	V-i		4.06	9	Rev. traces of dipinto.
20/6831	AY	2	G. II/1	K-i		4.03	3	
21/6830	AY	2	G. II/1	J-j		4.08	3	Rev. traces of dipinto between 10h and 12.30h.
22/6832	AY	2	G. II/1	L-k		4.13	2	Album, Auction 19, lot 61.
23/6833	AY	2	G. II/1	M-l		4.16	3	
24/6834	AY	2	G. II/1	N-m		4.19	8	

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
25/6835	AY		2	G. II/1	O-e	4.10	3	Reverse die more worn than when used to strike nos 14 and 15 of parcel 1.
26/6836	AY		2	G. II/1	P-o	4.14	4	Rev. traces of dipinto.
27/6837	AY		2	G. II/1	Q-p	4.12	4	
28/6838	AY		2	G. II/1	R-q	3.84	3	
29/6839	AY		2	G. II/1	S-r	3.93	3.30	
30/6840	AY		2	G. II/1	T-s	3.94	9	Rev. traces of dipinto.
31/6841	AY		2	G. II/1	U-t	3.94	9.30	Rev. traces of dipinto.
32/6843	AY		2	G. II/1	W-u	4.04	2.30	Rev. traces of dipinto.
33/6844	AY		2	G. II/1	X-v	3.73	2.30	Rev. dipinto.
34/6845	AY		2	G. II/1	Y-w	4.17	9	Obv. graffito at 4.
35/6846	AY		2	G. II/1	Z-x	4.14	3	Rev. graffito. The coin is seemingly from a different hoard context, because of its surface toning.
36/6847	AY		2	G. II/1	AA-n	3.35	2.30	Rev. dipinto.
37/6821	AY		2	G. II/1	AB-y	4.07	9	Rev. at 11h graffito, Pahlavi <i>mīm</i> .
38/6822	AY		2	G. II/1	AC-z	4.01	3	
39/6823	AY		2	G. II/1	AD-aa	4.11	3	Rev. traces of dipinto, slightly hammered edge.
40/6824	AY		2	G. II/1	AE-ab	4.06	3	
41/6825	AY		2	G. II/1	AF-ac	3.82	3	
42/6826	AY		2	G. II/1	AG-ad	3.40	3	

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
43/6827	AY	2	G. II/1	AH-ae		3.77	2	Obv. dipinto similar to no. 6948.
44/6828	AY	2	G. II/1	AI-af		4.14	3	
45/6887	AY	2	G. II/1	AJ-ag		4.22	3.30	Rev. dipinto.
46/6848	AYL (unknown location)	2	G. II/1	D-d	3 / 9	4.14	3	AYL recut from AH?; rev. dipinto (see also fig. 4).
47/6855	AYL	2	G. II/1	K-d		4.08	3	AYL recut from AH?, rev. traces of dipinto.
48/6849	AYL	2	G. II/1	E-e		4.08	3	
49/6850	AYL	2	G. II/1	F-f		4.07	12	
50/6851	AYL	2	G. II/1	G-g		3.85	3	
51/6852	AYL	2	G. II/1	H-h		3.53	3	
52/6853	AYL	2	G. II/1	I-i		4.17	5	This coin Album, Auction 19, lot 62.
53/6854	AYL	2	G. II/1	J-j		3.66	9	Crystallised, parts of the margin broken off.
54/6856	AYL	2	G. II/1	L-k		4.08	3	
55/6858	AYLAN (Ērān-āsān-kar-Kavād, later Hulwān, Media or Jibāl?)	2	G. II/1	B-e	5 / 4	4.12	9	See Mochiri, <i>Étude</i> , fig. 927 for type. Earlier stage of die B than no. 23 of the first parcel
56/6860	AYLAN	2	G. II/1	G-e		4.14	2.30	
57/6857	AYLAN	2	G. II/1	E-d		4.15	2.30	
58/6859	AYLAN	2	G. II/1	F-g		4.18	3	
59/6861	BN (unidentified mint in Kirmān)	2	G. I/1	B-b	1 / 1	3.38	3	This coin Album, Auction 19, lot 63.
60/6862	BYŠ (Bishāpūr, Fārs)	2	G. II/1	B-a	2 / 8	4.18	3	Rev. traces of dipinto.
61/6863	BYŠ	2	G. II/1	C-b		4.17	9	Rev. dipinto.
62/6865	BYŠ	2	G. II/1	C-b		4.14	9	
63/6866	BYŠ	2	G. II/1	C-b		4.14	9	Rev. faint traces of a dipinto.

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
64/6864	BYŞ	2	G. II/1	D-c	4.11	9		
65/6869	BYŞ	2	G. II/1	E-d	4.12	3		
66/6867	BYŞ	2	G. II/1	E-d	4.13	3	Later stage of both dies.	
67/6870	BYŞ	2	G. II/1	F-e	4.07	3.30	Obv. traces of dipinto; mint abbreviation uncertain, probably BYŞ.	
	DA (Dārābgerd, Fārs)	1	G. I/1		1 / 0			
68/6872	DA	2	G. I/1	A-a	0 / 1	4.02	2.30	
69/6874	DA	2	G. II/1	H-b	5 / 17	4.14	3	This coin Album, Auction 19, lot 65; (see also fig. 8).
70/6878	DA	2	G. II/1	D-j	3.61	8.30	Rev. traces of dipinto.	
71/6881	DA	2	G. II/1	D-m	4.18	1.30		
72/6877	DA	2	G. II/1	K-i	4.17	9	Obv. traces of dipinto.	
73/6879	DA	2	G. II/1	K-k	3.44	3		
74/6889	DA	2	G. II/1	K-t	4.08	3		
75/6875	DA	2	G. II/1	I-g	4.14	3	Curls under diadem; rev. faint traces of dipinto.	
76/6876	DA	2	G. II/1	J-h	4.14	3		
77/6884	DA	2	G. II/1	O-p	4.08	9	Curls under diadem.	
78/6871	DA	2	G. II/1	F-e	4.15	3		
79/6873	DA	2	G. II/1	G-f	4.13	9	Rev. dipinto.	
80/6880	DA	2	G. II/1	L-l	4.12	2.30		
81/6882	DA	2	G. II/1	M-n	3.93	9	Rev. pellet behind date.	
82/6883	DA	2	G. II/1	N-o	4.10	1.30		
83/6885	DA	2	G. II/1	P-q	4.18	7.30		
84/6886	DA	2	G. II/1	Q-r	4.14	9	Rev. dipinto.	
85/6888	DA	2	G. II/1	R-s	4.10	9		

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
86/6890	GW (Qumm, Media or Jibāl)	2	G. II/1	B-b	1 / 1	4.16	9.30	See Mochiri, <i>Étude</i> , fig. 1467 for type. Rev. dipinto.
	KL (Sīrajān?, Kirmān)	2	G. II/1		2 / 0			
87/6891	LAM (Rām Hormizd?, Khūzistan)	2	G. II/1	A-a	0 / 2	3.84	3	Rev. traces of a dipinto.
88/6892	LAM	2	G. II/1	B-b		4.09	3	
	ML (Mary, Khurāsān)	2	G. II/1		1 / 0			
	MY (Mēshān?, southern Iraq)	2	G. II/1		1 / 0			
98/6893	NAL (Narmāshīr?, Kirmān)	2	G. II/1	C-c	2 / 26	4.08	3	
90/6894	NAL	2	G. II/1	D-d		4.18	2.30	Obv. dipinto; hammered edge.
91/6895	NAL	2	G. II/1	E-e		4.08	3	
92/6896	NAL	2	G. II/1	F-f		4.12	9	
93/6897	NAL	2	G. II/1	G-g		4.12	3	
94/6898	NAL	2	G. II/1	H-h		4.10	3	Rev. traces of dipinto.
95/6899	NAL	2	G. II/1	E-i		4.04	3	
96/6900	NAL	2	G. II/1	I-j		4.09	9	Rev. traces of dipinto.
97/6901	NAL	2	G. II/1	J-k		4.08	3	
98/6902	NAL	2	G. II/1	H-l		4.11	3	
99/6903	NAL	2	G. II/1	K-m		4.11	3	
100/6904	NAL	2	G. II/1	L-n		4.12	3	Rev. dipinto.
101/6905	NAL	2	G. II/1	N-o		4.02	3.30	Rev. dipinto.
102/6916	NAL	2	G. II/1	N-o		4.00	3	Rev. traces of dipinto.
103/6906	NAL	2	G. II/1	M-p		3.86	3	
104/6907	NAL	2	G. II/1	O-q		4.05	9	Rev. dipinto.
105/6908	NAL	2	G. II/1	P-r		3.82	3	Rev. dipinto.

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
106/6909	NAL	2	G. II/1	Q-s	4.16	3		
107/6910	NAL	2	G. II/1	R-t	3.84	3		
108/6911	NAL	2	G. II/1	S-u	4.03	3		
109/6912	NAL	2	G. II/1	T-v	3.97	9		
110/6913	NAL	2	G. II/1	U-w	3.86	3		
111/6914	NAL	2	G. II/1	V-x	3.96	1.30		
112/6915	NAL	2	G. II/1	W-y	4.08	3		
113/6918	NAL	2	G. II/1	X-z	4.16	3		
114/6919	NAL	2	G. II/1	Y-aa	4.16	3		
115/6920	NY (Nēmāvand / Nēhāvand? Jibāl or Media)	2	G. II/1	A-a	0 / 1	4.14	9	See Gyselen, <i>La géographie</i> , p. 54; rev. dipinto.
PL (Furāt-i Mēshān?) Southern Iraq		2	G. II/1	A-a	1 / 0			
ST (Iṣṭakhr, Fārs)		2	G. I/1		1 / 0			
116/6921	ST	2	G. IV/1	C-c	1 / 1	4.14	3	
117/6923	WH (Vēh-Ardashīr? Central Iraq)	2	G. II/1	G-g	6 / 27	4.11	9	See Mochiri, <i>Étude</i> , fig. 1359 for type. spot of ink.
118/6924	WH	2	G. IV/1	H-h	3.84	3		
119/6937	WH	2	G. II/1	T-h	4.07	3		
120/6925	WH	2	G. IV/1	I-i	3.70	9.30		
121/6926	WH	2	G. II/1	J-j	3.71	3		
122/6927	WH	2	G. II/1	K-k	4.16	9		
123/6928	WH	2	G. II/1	L-l	3.76	3		
124/6929	WH	2	G. II/1	M-m	3.88	3		
125/6931	WH	2	G. II/1	N-n	4.07	3		Rev. slight traces of dipinto.

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
126/6950	WH	2	G. II/1	AG-n	3.59	9		Rev. dipinto.
127/6932	WH	2	G. II/1	O-o	4.06	3		
128/6933	WH	2	G. II/1	P-p	4.02	9		
129/6934	WH	2	G. II/1	Q-q	4.09	3		
130/6935	WH	2	G. II/1	R-r	3.66	3		
131/6936	WH	2	G. II/1	S-s	2.93	3		Hammered edge.
132/6938	WH	2	G. II/1	U-t	3.46	3		
133/6939	WH	2	G. II/1	V-u	4.14	9		Extremely brittle and glued together.
134/6940	WH	2	G. II/1	W-v	3.55	3		
135/6941	WH	2	G. II/1	X-w	3.74	9		
136/6942	WH	2	G. II/1	Y-x	3.96	9		
137/6943	WH	2	G. II/1	Z-y	3.50	3.30		
138/6944	WH	2	G. II/1	AA-z	3.29	9		Extremely brittle and glued together.
139/6945	WH	2	G. II/1	AB-aa	4.02	3		Rev. traces of a dipinto.
140/6946	WH	2	G. II/1	AC-ab	3.72	3		Rev. traces of a dipinto.
141/6947	WH	2	G. II/1	AD-ac	4.12	3		Rev. traces of a dipinto.
142/6948	WH	2	G. II/1	AE-ad	3.59	9		Rev. dipinto similar to 6827.
143/6949	WH	2	G. II/1	AF-ae	3.80	3		Rev. dipinto.
	WLC (unknown)	2	G. II/1		1 / 0			

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
144/6974	W/N A/S S/A (unknown)	2	G. II/1	A-a	0 / 1	4.24	3	This seems to be a new mint abbreviation. Rev. dipinto.
145/6930	WYHC (Vēh-az-Andiyōk-Husru, later Birāmqubādh, Fārs?)	2	G. II/1	E-e	4 / 2	3.20	10	See Mochiri, <i>Étude</i> , fig. 701 for type.
146/6951	WYHC	2	G. II/1	F-f		4.16	9	
	YZ (Yazd, Fārs)	1	G. I/1		1 / 0			
147/6952	YZ	2	G. II/1	I-i	8 / 23	4.09	3	See Mochiri, <i>Étude</i> , fig. 967 for type. Rev. traces of a dipinto.
148/6953	YZ	2	G. II/1	J-j		4.12	4	Double struck, shift of the dies on the reverse by 30 degrees, to a lesser extend on the obverse.
149/6954	YZ	2	G. II/1	K-k		3.38	4.30	
150/6955	YZ	2	G. II/1	L-l		4.10	3.30	Rev. traces of dipinto.
151/6956	YZ	2	G. II/1	M-m		4.04	3	Rev. graffito between 9h and 12h.
152/6957	YZ	2	G. II/1	N-n		4.05	9	
153/6958	YZ	2	G. II/1	O-o		4.09	9	
154/6960	YZ	2	G. II/1	O-q		4.09	3	Scratches across mint abbreviation extending on the left side to the circle and on the right side beyond, (see also fig. 7).
155/6959	YZ	2	G. II/1	P-p		3.52	9	Mint abbreviation recut, perhaps from AH; rev. traces of a dipinto.
156/6971	YZ	2	G. II/1	X-p		4.13	3	Mint abbreviation manipulated or recut on coin, perhaps from AH (see also fig. 5); rev. faint traces of dipinto.
157/6961	YZ	2	G. II/1	Q-r		4.02	9	
158/6970	YZ	2	G. II/1	Q-r		4.10	9	Rev. dipinto.

<i>Cat./photo no.</i>	<i>Mint abbreviation and identification</i>	<i>Regnal year</i>	<i>Type no.</i>	<i>Die nos</i>	<i>Number: parcel 1/parcel 2</i>	<i>Wt (g)</i>	<i>Die axis (h)</i>	<i>Comments</i>
159/6962	YZ	2	G. II/1	R-s	4.11	3		
160/6963	YZ	2	G. II/1	S-t	3.96	3		Obv. dipinto; this Album, Auction 19, lot 72.
161/6964	YZ	2	G. II/1	O-u	4.05	3		
162/6965	YZ	2	G. II/1	T-v	3.82	6		Pellet after date.
163/6966	YZ	2	G. II/1	U-w	3.68	3		
164/6967	YZ	2	G. II/1	L-x	4.14	3		
165/6968	YZ	2	G. II/1	V-y	3.84	9		
166/6969	YZ	2	G. II/1	W-u	4.06	3		
167/6972	YZ	2	G. II/1	Y-z	3.59	3		
168/6973	YZ	2	G. II/1	Z-aa	4.09	3		
169/6868	YZ	2	G. II/1	AA-ab	3.68	3.30		Mint scratched out on coin (see also fig. 6).

HORMIZD V

170/6975	WYHC	2	G. I/1	A-a	0 / 2	4.10	2	
171/6976	WYHC	2	G. I/1	B-b	3.94	3		

YAZDGARD III

172/6801	DA	1	G. I/1	A-a	0 / 2	4.06	2.30	STS type 1/1, p. 158, nos 3-4.
173/6802	DA	1	G. I/1	B-b	4.17	3		Part of the margin broken off.
174/6917	NAL	6		A-a	0 / 1	4.15	3	STS type 2/2, p. 159, no. 20. Rev. dipinto.
175/6803	NAL	7	G. II/2	B-b	1 / 1	4.14	3	STS type 3/3, p. 159, nos 23-25.
176/6922	ST	1	G. I/1	A-a	0 / 1	3.95	3	STS type 1/1, p. 158, nos 7-8.

PLATE 53



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (1)

PLATE 54



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (2)

PLATE 55



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (3)

PLATE 56



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (4)

PLATE 57



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (5)

PLATE 58



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (6)

PLATE 59



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (7)

PLATE 60



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (8)

PLATE 61



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (9)

PLATE 62



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (10)

PLATE 63



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (11)

PLATE 64



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (12)

PLATE 65



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (13)

PLATE 66



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (14)

PLATE 67



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (15)

PLATE 68



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (16)

PLATE 69



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (17)

PLATE 70



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (18)

PLATE 71



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (19)

PLATE 72



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HEIDEMANN, A HOARD FROM THE TIME OF
THE COLLAPSE OF THE SASANIAN EMPIRE (AD 638–9) – PART II (20)

