

Nikolaus Schindel

SYLLOGE NUMMORUM SASANIDARUM
THE SCHAAF COLLECTION



ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
PHILOSOPHISCH-HISTORISCHE KLASSE
DENKSCHRIFTEN, 470. BAND

SYLLOGE NUMMORUM SASANIDARUM

Herausgegeben von
Michael Alram und Rika Gyselen

Verlag der
Österreichischen Akademie
der Wissenschaften



Wien 2014

OAW

ÖSTERREICHISCHE AKADEMIE DER WISSENSCHAFTEN
PHILOSOPHISCH-HISTORISCHE KLASSE
DENKSCHRIFTEN, 470. BAND

VERÖFFENTLICHUNGEN ZUR NUMISMATIK

BAND 58

NIKOLAUS SCHINDEL

Sylloge Nummorum Sasanidarum
The Schaaf Collection

With contributions by Michael Alram, Rika Gyselen,
and Robert Schaaf

Verlag der
Österreichischen Akademie
der Wissenschaften



Wien 2014

OAW

Vorgelegt von w. M. MICHAEL ALRAM in der Sitzung am 29. August 2013

Diese Publikation wurde einem anonymen, internationalen Peer-Review-Verfahren unterzogen.
This publication has undergone the process of anonymous, international peer review.

Die verwendeten Papiersorten sind aus chlorfrei gebleichtem Zellstoff hergestellt,
frei von säurebildenden Bestandteilen und alterungsbeständig.

Alle Rechte vorbehalten.

ISBN 978-3-7001-7696-1

Copyright © 2014 by

Österreichische Akademie der Wissenschaften

Wien

Satz: Werbeagentur Crossdesign GmbH, A-8042 Graz

Druck und Bindung: Prime Rate kft., Budapest

<http://hw.oeaw.ac.at/7696-1>

<http://verlag.oeaw.ac.at>

CONTENTS

EDITORS' FOREWORD	7
1. COMMENTARY	9
Overview	9
Gold coinage	12
Sixth-drachms	15
Left-facing coins	17
Ardashir I – Ohrmazd II (by Michael Alram and Rika Gyselen)	18
Ardashir I	19
Shapur I	20
Ohrmazd I	21
Wahram I	21
Wahram II	22
Narseh	24
Ohrmazd II	24
Shapur II	25
Ardashir II	27
Shapur III	29
Wahram IV	31
Yazdgerd I	32
Wahram V	38
Yazdgerd II	38
Peroz	40
Walkash	41
Kawad I / 1 st reign	42
Zamasp	43
Kawad I / 2 nd reign	43
Khusro I	44
Ohrmazd IV	44
Khusro II / 1 st reign	44
Wahram VI	44
Wistahm	44
Ohrmazd V	45
Khusro II / 2 nd reign	45
Kawad II	45
Ardashir III	45
Buran	45
Khusro III	45
Ohrmazd VI	45
Azarmidukht	46
Yazdgerd III	46
Uncertain ruler	46

2. CATALOGUE	
Typology	47
Legends	93
Additional elements	102
On the arrangement of the catalogue	103
Catalogue	104
3. INIDICES	
3.1. Personal Names	255
3.2. Mint Signatures	256
4. ABBREVIATIONS	259
5. BIBLIOGRAPHY	261

EDITORS' FOREWORD

The collection assembled by Robert W. Schaaf (New Jersey, USA) is without doubt one of the most important collections of Sasanian coins in private hands, the unique product of decades of collecting and great expertise. We thus had no hesitation in taking on the publication of the collection in order to make it accessible as a whole to the scholarly community. It should be mentioned here that Bob Schaaf has always provided access to his collection for scholars and has accompanied our *Sylloge Nummorum Sasanidarum* project from the beginning, giving his support in many different ways. For this, we would like to express our special thanks to him here.

As elaborated in the preface to SNS 1, our aim is to publish not only the main series of the SNS Paris–Berlin–Vienna, but also other important public and private collections in order to provide the broadest possible basis for research into the history of Sasanian finance and economy. In keeping with this aim the SNS Israel was published in 2009, followed by the SNS Usbekistan in 2012, while Rika Gyselen published the collection of Ahmad Saeedi in 2005.

Currently numbering 723 coins, the Schaaf Collection represents a further substantial advance in our endeavors to extend our relevant material knowledge, which still remains far too meager, in order better to understand and reconstruct the structure of Sasanian coinage in the various phases of its development.

Michael Alam
Direktor des Münzkabinetts
Kunsthistorisches Museum
Burgring. 5
1010 Vienna, Austria

Rika Gyselen
CNRS UMR 7528:
Mondes Iranien et Indien
27 rue Paul Bert
94204 Ivry, France

1. COMMENTARY

Overview

The Schaaf collection as presented here contains altogether 723 coins. Let us start with a short overview on kings, denominations, and mints represented. *Tab. 1* also contains modern forgeries.

Tab. 1. Kings

<i>King</i>	<i>No. of specimens</i>
Ardashir I	51
Shapur I	36
Ohrmazd I	11
Wahram I	18
Wahram II	44
Narseh	19
Ohrmazd II	22
Shapur II	85
Ardashir II	21
Shapur III	28
Wahram IV	39
Yazdgerd I	31
Wahram V	33
Yazdgerd II	27
Peroz	44
Walkash	14
Kawad I / 1 st reign	9
Zamasp	8
Kawad I / 2 nd reign	14
Khusro I	24
Ohrmazd IV	26
Khusro II / 1 st reign	7
Wahram VI	7
Wistahm	4
Ohrmazd V	1
Khusro II / 2 nd reign	47
Kawad II	4
Ardashir III	12
Buran	7
Khusro III	1
Ohrmazd VI	7
Azarmidukht	2
Yazdgerd III	19
Uncertain ruler	1

The Schaaf collection contains 17 gold, 600 silver,¹ 7 billon,² 92 copper, and 7 lead coins. More specifically, the following denominations are attested:

Tab. 2. Denominations

<i>Denomination</i>	<i>No. of specimens</i>
Dinar/old	10
Dinar/new	4
Dinar/18 siliquae	1
Sixth dinar	2
Drachm	556
Drachm (AE)	3
Half-drachm	10
Sixth-drachm	34
Tetradrachm	6
AE	87
AE-drachm	3
Pb	7

“Old” dinar refers to the weight standard used from Ardashir to the mid-fifth century; these coins show a peak weight around ca. 7.20 g.³ “New” dinars as well as dinars of 18 siliquae are discussed below. By “Drachm (AE)” is meant contemporary forgeries of drachms which show a copper core beneath a thin layer of silver (no. **335, 509, 553**), whereas “AE-drachms” refers to an isolated group of copper coins of Kawad I’s second reign which in diameter and thickness look exactly like the main silver denomination (no. **550–552**).⁴ Apart from this, the various copper denominations are just listed under the generic heading “AE”.

Let us now look at the mint signatures:

Tab. 3. Mints

<i>Signature</i>	<i>Localization</i>	<i>No. of specimens</i>
AH	Ahmadan, Media	4
AHM	Ahmadan, Media	7
ALM	Armenia (?)	1
AM	Amul, Tabaristan	1
AP	Abarshahr, Khorasan	1
APL	Abarshahr, Khorasan	3
ART	Ardashir-khwarrah, Fars	4
AS	Asuristan	13
AT	Adurbadagan	3
AW	Ohrmazd-Ardashir, Khuzistan	14
AWH	Ohrmazd-Ardashir, Khuzistan	1
AY	Eran-khwarrah-Shapur, Khuzistan	12
AYL	Eran-khwarrah-Shapur, Khuzistan	2
AYLAN	?	6

¹ Including contemporary fourée forgeries of drachms.

² Six tetradrachms, and one Shapur I drachm of typically low metal quality, no. **75**.

³ SNS 3/1, p. 99.

⁴ SNS 3/1, p. 469.

<i>Signature</i>	<i>Localization</i>	<i>No. of specimens</i>
BBA	Mobile mint	9
BHL	Balkh, Khorasan	1
BN	?, Kirman	4
BST	Bust, Sakastan (?)	1
BYŠ	Bishapur, Fars	20
DA	Darabgird, Fars	6
DA for DA	Darabgird, Fars	1
DA for GWDMY	Juwaym, Fars	1
DA for LWDY	Royan, Fars	1
DA for ŠYLAC	Shiraz, Fars	1
DAL for LYW	Rew-Ardashir, Khuzistan	1
DYWAN	?	1
GD	Jay, Media	11
GLM	Garm-Kirman, Kirman	3
GNC LYW	Rew-Ardashir, Khuzistan	1
GW	Gurgan	9
HLM	Kholm (?), Khorasan	1
HLYDY	Herat, Khorasan	8
HWC	Khuzistan	1
KA	Karzi, Fars	3
KALCYDY	Karzi, Fars	1
KL	Kirman	7
KWN BBA	?	1
LAM	Ram-Ohrmazd, Khuzistan	1
LD	Ray, Media	17
LDY	Ray, Media	3
LYW	Rew-Ardashir, Khuzistan	11
MA	Media	2
ML	Marw, Khorasan	6
MLWY	Marw, Khorasan	4
MY	Meshan	10
NAL/WAL	?	3
NY	Nihawand, Khuzistan (?)	4
PL	Forat-Meshan, Meshan	2
SK	Sakastan	16
SKSTN	Sakastan	7
ST	Stakhr, Fars	15
ŠY	Shiraz, Fars	11
WH	Weh-Andiyok-Shapur, Khuzistan	10
WLC	?	2
WYH	Weh-Kawad, Asuristan (?)	1
WYHC	Weh-az-Amid-Kawad, Fars; from Khusro I onwards Weh-az-Andiyok-Khusro, Asuristan	21
YZ	Yazd, Fars (?)	2

In the second column, the first name refers to the city or province, the second to its region; if only one name is given, the reference is to the region alone. This listing contains only regular coins which bear an actual mint signature, every variant of which is provided. Unsigned pieces attributed to mint or style groups are not included as to avoid mixing evidence of varying degrees of reliability. It goes without saying that some of the readings and localizations of individual

signatures are problematic, and as yet uncertain in some cases. Most of them are discussed in some detail in SNS 3, which should be consulted for references as well as for the different arguments in favor of the given equations.⁵ Localizations which I believe to be still too uncertain are marked with a “?”

Gold Coinage

The general role of Sasanian gold coinage has recently been discussed by Andrea Gariboldi and me.⁶ It would be unnecessary to reiterate the various arguments, except that the material basis has changed drastically: Rika Gyselen has published a large private collection which is especially strong in Sasanian gold coins, containing no less than 95 specimens altogether.⁷ With 18 pieces, the Schaaf collection is also unusually rich in Sasanian gold. Since the material basis from which to evaluate Sasanian gold coinage has been largely increased, further comments on the topic might be useful. One basic fact remains: Sasanian gold coinage is in no way common. One easily sees that apart from Shapur II and Peroz, whom we know to have struck a comparatively large quantity of dinars,⁸ a remarkable number of the coins listed by Gyselen can already be found in SNS 1, 2 and 3, indicating that the issue of Sasanian gold coins was very limited. Three points need to be emphasized:

The two kings who struck larger numbers of gold coins, viz. Shapur II and Peroz, were both heavily engaged in the eastern part of the Sasanian realm. In the case of Shapur II, the majority of dinars were struck in eastern mints like Marw and “Kabul”⁹ (which make up 12 out of 18 undoubtedly genuine coins in the Saeedi collection). It should be remembered that Marw struck gold coins not only for the Sasanian Kings of Kings, but also for the Kushano-Sasanian ruler Ohrmazd I,¹⁰ and that Kushano-Sasanian dinars from Balkh¹¹ are more plentiful than all Sasanian gold coins from 224 to the end of the dynasty taken together: In Göbl’s 1984 study – nowadays far from complete – no less than 89 specimens are listed which cover a period of roughly half a century. Thus, in all probability, the eastern Shapur II dinars were not struck for circulation in Iran proper, but rather to pay people accustomed to a gold-based currency after the Kushan model, e.g. Eastern auxiliaries such as those who were with Shapur at Amida in 359.¹² Marw is special insofar as it also issued also a very high number of copper coins,¹³ so its patterns of coin circulation are different from Western Iran. The fact that some of these Eastern coins travelled widely – a Marw dinar was found in a grave in Armenia¹⁴ – does not, in my opinion, prove that this basic assumption is wrong. In the case of Peroz, all issues with three exceptions¹⁵

⁵ SNS 3/1, p. 128–182.

⁶ Gariboldi 2003, p. 24–26; Gariboldi 2006; Gariboldi 2010, p. 49–54; SNS 3/1, p. 99–103; Schindel 2006.

⁷ Gyselen 2004.

⁸ SNS 3/1, p. 219, 400 f.

⁹ SNS 3/1, p. 219.

¹⁰ Göbl 1984, pl. 114, nos. 1026 f.

¹¹ Göbl 1984, p. 79, synchronogramm 23, and Göbl 1993, pl. 38 divides the production of Balkh and Kabul, but I believe that all scyphate KS-dinars and fraction in fact originate from one mint only, i.e. Balkh, as has been already stated by Cribb 2011, p. 99. Included in this count are all scyphate dinars up to Wahram 6, Göbl 1984, type 731.

¹² Ammianus Marcellinus XIX, 1, 7.

¹³ Loginov/Nikitin 1993.

¹⁴ Tsotselia 2003, p. 36 f., fig. 9.

¹⁵ Gyselen 2004, no. 74 f, 82.

bear his third crown, more specifically, type combination IIIb/1c.¹⁶ Since all Peroz dinars which can be safely attributed to specific mints come from Western Iran, and none from Khorasan, it seems unlikely that they were issued for circulation in the East. A plausible guess would be that after his capture, and possibly preparing for his unpopular (and, as it turned out, fatal) second expedition against the Hephthalites, Peroz had to spend a large sum in donatives, in the form of dinars, to the nobility and the army.¹⁷ Presently, we know that scyphate dinars were also issued with the name and crown of Peroz (in the case his second form), presumably struck in Balkh.¹⁸

It goes without saying that – as Gariboldi has claimed¹⁹ – gold and silver stood in a certain relationship to each other. Certainly a gold coin could be used to make payments; however, a piece of silverware, which often had its bullion weight inscribed on it,²⁰ could also be used for the same purpose, but this does not mean that it was an integral part of the currency intended for every day monetary transactions.

Considering how much gold flowed into the royal treasuries (on the basis of the more reliable Greek and Latin sources, leaving aside the oriental tradition),²¹ the number of gold objects is exceedingly low and represents a survival rate much below what one would assume to be the norm. From this point of view, one might claim that the similarly low survival rate of Sasanian dinars has no bearing on our understanding of its role in the Sasanian economy whatsoever. However, since the evidence regarding distribution and survival patterns of silver coins is reasonably normal compared with other oriental states, and even bearing in mind that collectors' interests were, and still are, much different in this area from those in the classical world, this possible argument can be refuted. The high number of die links also shows that we are not dealing merely with a tiny surviving fraction of what was originally a great mass of dinars. Die links among the ubiquitous drachms in fact are quite rare. We still do not know what the Sasanians did with the gold they acquired, but we know what they did not do: They did not turn it into coins.

Let us now turn to metrology. Plotting the metrological data Gyselen has collected for Peroz,²² we arrive at the following graph (*tab. 4*). Despite the fact that *tab. 4* is based only on 15 specimens, one can distinguish two markedly different peaks: one at ca. 3.70 g, the other around 4.15 g. The first corresponds to what I have labeled “dinar of 18 siliquae”,²³ a denomination attested only for Peroz, and typologically not separated from the normal light dinar. One such coin can be found in this catalogue (no. **478**: 3.74 g). The second group represents the usual weight of the reduced dinar, i.e. 4.25 g,²⁴ here with a certain trend towards slightly lighter weights. Looking at *tab. 4*, one also sees that the average weight can in certain circumstances be misleading: According to Gyselen, the average for the Peroz dinars is 3.95 g,²⁵ but apart from one single coin in the Saeedi collection which happens to come close to this value, the two actual peaks are far removed from the average weight. Plotting coins with two different ideal weights, namely about 3.70 g and 4.25 g, certainly results in an average weight exactly in the middle, but it is of no

¹⁶ SNS 3/1, p. 400.

¹⁷ SNS 3/1, p. 401.

¹⁸ Alram 2008, p. 267, nos. 31 f.

¹⁹ Gariboldi 2006, p. 418–420.

²⁰ Frye 1973.

²¹ Altheim/Stiehl 1957, p. 49–53.

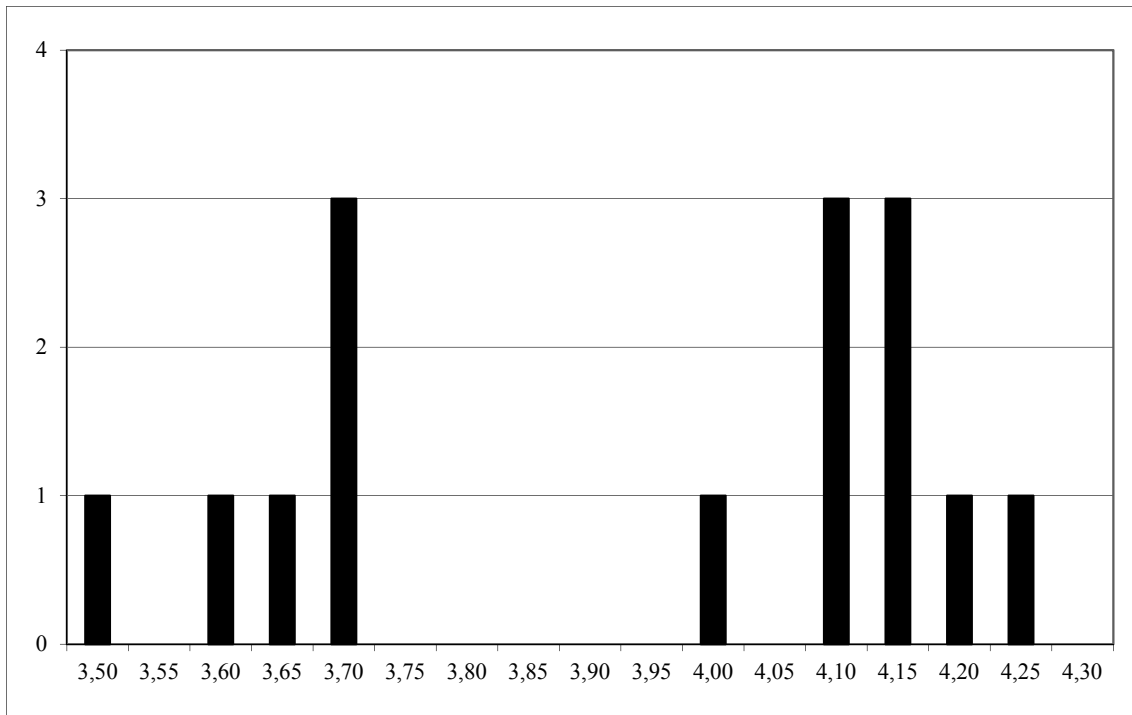
²² Gyselen 2004, p. 71, *tab. 5a*.

²³ SNS 3/1, p. 99 f.

²⁴ SNS 3/1, p. 99 f.

²⁵ Gyselen 2004, p. 71.

Tab. 4. Metrological data of Peroz dinars



help in establishing the actual metrological structure. Mosig-Walburg, due to a lack of familiarity with the actual coins, has cast doubt on whether the 18-silique dinar under Peroz existed at all,²⁶ a statement easily disproved by *tab. 4*. Equally wrong is the statement of Gariboldi that the “*dēnār* of Peroz broke down to 3.70 g”²⁷ since he, for his part, overlooks the fact that normal light dinars continued to be struck in quantities. There is no typological difference between these two different gold denominations, so one cannot say whether they follow each other in chronological order, or whether they were struck simultaneously. Since they share the same type combination (IIIb/1c), they doubtless belong to the same period of Peroz’ reign: the latest.

The other denominations require less comment. The main gold denomination remains stable at an ideal weight of ca. 7.20 g²⁸ until Shapur II introduces the aforementioned new light dinar of 4.25 g. Under this king, all specimens of the lighter variant are clearly marked by the special obverse type II (without regular crown), so the mint authorities were clearly at pains to mark these issues as something distinct from the older, heavier dinars.²⁹ As for the gold fractions, it seems very likely that there existed two different denominations, namely a very rare third dinar, perhaps modeled after the Roman tremissis,³⁰ and the more common sixth dinar.³¹ Attempts to reconstruct a twelfth dinar remain unsuccessful; two coins thus labeled were heavily overweight as such³²

²⁶ Mosig-Walburg 2007, p. 152.

²⁷ Gariboldi 2006, p. 421.

²⁸ SNS 1, p. 166, 267; SNS 3/1, p. 99; SNS 2, p. 337, 418 f.

²⁹ SNS 3/1, p. 219 f.

³⁰ SNS 3/1, p. 101 f.

³¹ SNS 3/1, p. 101.

³² Mosig-Walburg 1997, p. 225. The weights are 0.39 g and 0.42 g which multiplied with 12 results in grotesque dinar weights of 4.68 g and 5.04 g. As 1/12 pieces of the old, heavy dinar, they were grossly overweight.

and thus with all probability represent underweight sixth dinars. No. **253** in the present catalogue, weighing only 0.50 g despite being looped, seems to have been made merely from a piece of gold foil; it remains questionable whether this is really an official issue. The existence of fourth dinars is extremely unlikely since this denomination does not fit in the Sasanian system of reckoning (1/2, 1/3, 1/6).³³

Sixth-drachms

Another denomination should also be discussed in more detail, namely the sixth-drachm, often called “*obol*”. In SNS 3, I claimed that there was only one denomination below the half-drachm (last struck under Ohrmazd II)³⁴, namely the sixth-drachm (last struck in the second reign of Kawad).³⁵ My findings in SNS 3 have been criticized by one (or two) reviewers.³⁶ Admittedly, there was some mix-up in counting for *tab. 47* in SNS 3. Annoying as this may be, the main question remains: what to make of the denominational standard of the small silver fractions? One of the reviewers went so far as to claim that what have been labeled sixth-drachms in SNS 3 (as well as in SNS 1 and 2, by the way)³⁷ in fact are eighth-drachms.³⁸ Leaving aside the methodological weaknesses of his arguments, I know no sure evidence for eighth-drachms in ancient numismatics, whereas sixth-pieces are a common phenomenon, and can be traced back to Persis, where the Sasanian dynasty originated.³⁹ The only authority for the existence of eighth-drachms is Paruck,⁴⁰ whose book, great for its time, is especially weak on metrology. His only evidence is a few coins, the weights of which fall by chance in the range that would represent the eighth part of a drachm. Thus, I believe there is no factual basis for this denomination. Moreover, looking at the question from a broader chronological point of view one sees easily that the weights of the small silver fractions change as time goes by (*tab. 5*).⁴¹

Despite the small material basis, *tab. 5* clearly shows that the weights steadily decline. In the first century of the Sasanian dynasty, the peak lies in the 0.65–0.69 g area; under Shapur II from 0.50 g to 0.54 g; from his immediate successors until the end of small silver coinage under Kawad I, the weights go down again, the peak now lying around 0.45–0.49 g. Without any doubt, the weight of the earliest coins, i.e. those of Ardashir I and Shapur I, is in fact one-sixth of a drachm, since the peak is as close to the ideal weight of 0.71 g (the weight of a drachm of an ideal 4.25 g divided by six) as one can possibly expect. The number of slightly underweight coins is somewhat higher than that of overweight pieces, strengthening this argument. Taken together, this is perfectly in accord with the idea that the smallest silver coin represented a sixth part of the drachm and that no other fractions existed, as is proven by the distribution chart (*tab. 5*). The use of the Sasanian sixth-drachm originated in Ardashir’s home province, Fars, where it indisputably served a function in the monetary system; in this period, it served as a true fractional denomination in daily financial transactions, especially since in Persis no copper coins

³³ Göbl 1984, pl. 134, no. 1252 (1.46 g); SNS 3/1, p. 102.

³⁴ SNS 2, p. 422.

³⁵ SNS 3/1, p. 113–116.

³⁶ Mosig-Walburg 2007, p. 152; Walburg 2009, p. 535.

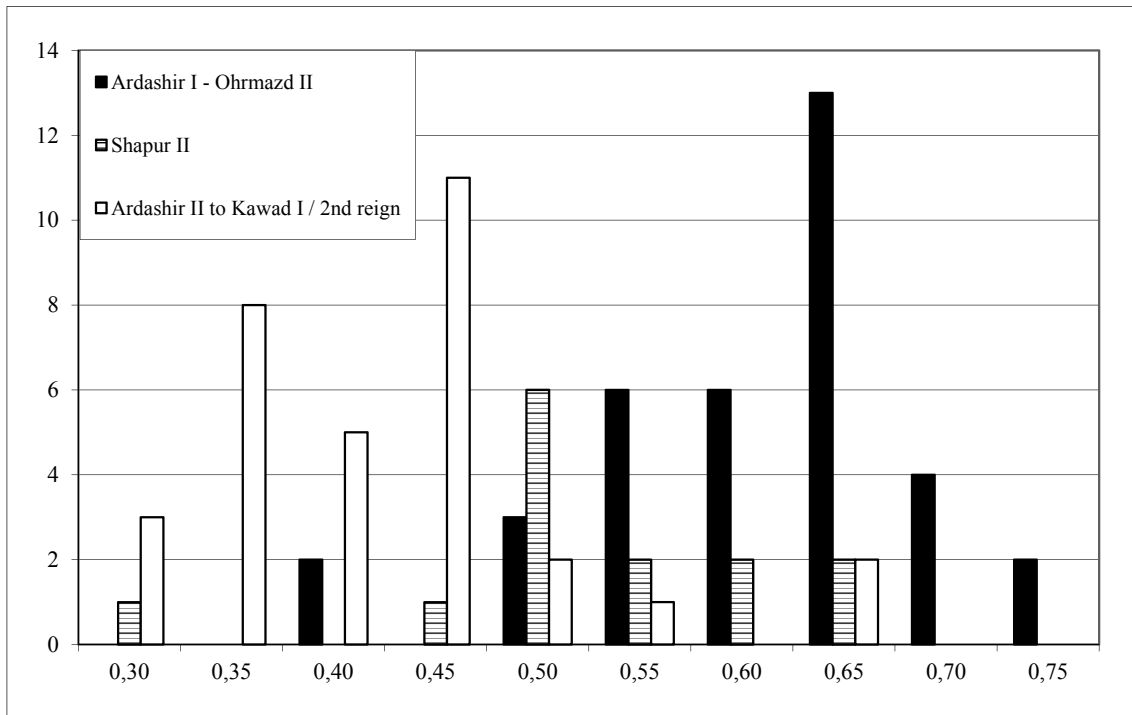
³⁷ SNS 3/1, p. 113–115; SNS 1, p. 167, 267; SNS 2, p. 341, 422.

³⁸ Walburg 2009, p. 535 f.

³⁹ SNS 1, p. 162.

⁴⁰ Paruck 1924, p. 38–42 who actually assumes the existence of four denominations below the half-drachm: *diobol* or third drachm, sixth-drachm, eighth drachm as well as tenth drachm.

⁴¹ Only coins which are not pierced or otherwise damaged have been used for *tab. 3*.

Tab. 5. *Weights of Sasanian small silver fractions*

were struck at all. The distribution chart for this period is similar to that of the drachms, notwithstanding the very low number of specimens. Under Shapur II, things seem already to have changed: The frequency of pierced specimens sharply increases. Eight out of 28 small silver fractions catalogued in SNS 3 are pierced, an increase of almost 30%. This is certainly no conclusive argument, but it shows that the silver fractions did not serve the same monetary function as the drachms any longer. It is unlikely that Shapur II would have changed the weight of the small silver fractions from one-sixth to one-eighth of a drachm; in practice, this difference would have been too small to be noticed without precision scales, whereas the small number of fractions makes it unlikely that any weight manipulations (a very unusual feature in Sasanian Iran anyway) would have had a serious impact on monetary circulation, the state's finances or whatever. After the increase of the drachm weight from its late Parthian standard of ca. 3.70 g to 4.25 g early in the reign of Ardashir I,⁴² its weight remains stable until Peroz, who reduces it by half a siliqua to 4.15 g.⁴³ This weight remains canonical until the end of Arab-Sasanian coinage.

From Shapur III to Yazdgerd I, silver fractions often bear special reverse types and are therefore clearly marked as special issues.⁴⁴ Their weights now become quite erratic; while there is a peak in the 0.45–0.49 g area, weights from 0.35 g to 0.44 g are almost equally common. Shall we then assume that the heavier specimens are eighth drachms, and the lighter ones tenth drachms? I think not. There are no typological clues; even if neither the light dinar nor the dinar of 18 siliquae under Peroz show typological differences, this to me is an exception rather than a rule. Under Peroz, Zamasp and Kawad I, the majority of silver fractions were struck in Fars, a

⁴² SNS 1, p. 165, 167.

⁴³ SNS 3/1, p. 111–113.

⁴⁴ SNS 3/1, p. 113–116.

region not known to have issued thus far an appreciable number of small silver coins (apart from the pre-224 period).⁴⁵ Thus, the reason why Fars small silver coins are so common does not seem to lie in peculiarities of monetary circulation in the province, but rather in the fact that the issue of fractions was connected to dynastic ceremonies, similar to the Late Roman *sparsiones* (the distribution of small silver coins on the occasion of a *processus consularis* or the like).⁴⁶ Our sources are certainly meager, but we are informed that Yazdgerd III was crowned in Stakhr,⁴⁷ and the fact that almost all sixth-drachms of Zamasp bear the mint/date combination Darabgird, regal year one,⁴⁸ could be seen as evidence that this king's coronation also took place there, and that on this occasion these small silver coins were distributed. Here I have to reiterate my comparison with the small Late Roman and Early Byzantine ceremonial silver coins of the fifth and sixth centuries.⁴⁹ These coins are nominally half siliquae with an ideal weight of ca. $325 \text{ g} \div 288 = 1.13 \text{ g}$,⁵⁰ but are almost always quite underweight. Put simply, no great pains were taken to adjust the weights of these ceremonial coins, either in Rome or in Iran.⁵¹ Summing up my arguments: There is no sound evidence that supports the existence of eighth-drachms. *Tab. 5* does not show metrological changes in the sense that new and different weights standards were used, but rather the development of the silver fraction from a coin struck more or less *al pezzo* for circulation purposes to a ceremonial coin struck wildly *al marco*. Thus, both the internal evidence revealed by the analysis of the metrological development of Sasanian small silver fractions and the broader numismatic perspective show that there was only one single silver denomination below the half-drachm, and that this is the sixth-drachm.

Left-facing coins

As a rule, Sasanian imperial coins always show the head of the ruler turned to the right. From Wahram IV onwards, rare special issues – mostly in gold – feature frontal busts.⁵² Coins with heads turned to the left are very rare; the Schaaf collection contains most probably the highest number of such specimens.

In the case of the large copper coins of Ohrmazd II and Shapur II, the direction of the head appears to be intentional.⁵³ In the case of all other issues, the left-facing heads seems to owe their existence to die cutter's errors, as long as one is not ready to claim that these small coins – mostly sixth-drachms as well as a copper coins – were intentionally marked as special issues by reversing the head's direction. Amazingly enough, this phenomenon no longer appears after the third century, at least as regards undoubtedly official coins. In *tab. 6*, all the left facing coins from SNS Schaaf are collected.

⁴⁵ SNS 1, p. 162.

⁴⁶ On the *sparsio* in general Nibley 1945; for a depiction of the actual spreading of coins Bruun 1966, pl. 19, no. 105.

⁴⁷ Tabari transl. Nöldeke p. 397.

⁴⁸ SNS 3/1, p. 453.

⁴⁹ SNS 3/1, p. 114 f.

⁵⁰ Hahn/Metlich 2000, p. 9 f.

⁵¹ SNS 3/1, p. 113–115 with tabs. 47 and 48. The fact that some specimens listed in the catalogue are missing from *tab. 47* does not affect the results.

⁵² SNS 3/1, p. 74; Göbl 1971, p. 10.

⁵³ SNS 2, p. 359; SNS 3/1, p. 74; Schindel 2011/1, p. 85 f.

Tab. 6. *Left-facing Sasanian coins***Ardashir I – Ohrmazd II**

By Michael Alam and Rika Gyselen

For the minting of coins during the period from Ardashir I to Ohrmazd II, several typologies are available, the most frequently used (and the most accomplished at the time) being the one proposed by R. Göbl (1968). Only recently has the need emerged to escape the limitations of a typological classification of coins. An approach to a stylistic classification was initially proposed in the first and second volumes of the primary SNS series devoted to collections in Paris (Cabinet des Médailles, Bibliothèque National de France), Berlin (Münzkabinett, Staatliche Museen zu Berlin) and Vienna (Münzkabinett, Kunsthistorisches Museum). Since this approach is new, the method used by the authors, Michael Alam and Rika Gyselen, will eventually require adjustments. Above all, a fuller corpus is indispensable to establish a better stylistic classification. The SNS 1 and 2 typology will be improved only by taking into consideration coin styles not attested in the samples used for it. In the meantime, SNS 1 and 2 provide the framework for publishing information on new coin collections, as herein.

Why not be satisfied with the traditional typological classification instead of giving so much importance to drawing up a stylistic one? Catalogues tend to present late Sasanian and Arab-Sasanian coins with geographical references to the place of mintage, and only then are the coins set in chronological order. This procedure is hard to follow for coins from Ardashir I to Ohrmazd II, since they never bear a date; nor do they, with very few exceptions, bear the mint's name. Understandably, the overriding objective of any numismatic study of the third century is to make up for this lack of information by crafting a method that manages to identify the mint and attribute a series of coins to it.

The method presented in SNS 1 and 2 is grounded on the hypothesis that the persons who engraved dies were working in the workshops where the coins themselves were minted. In other words, coins were struck using dies engraved in the same workshop. However, as is well known, other procedures were followed during this period; some dies were engraved at one place and then sent elsewhere to strike coins. If we apply the hypothesis of a single place for both engraving and minting, a stylistic typology is needed to identify the location. In effect, several mints probably developed distinct styles, which cannot be confused with each other. Factors in favor of this assumption are the distance between mints and, in some places, the emergence of local traditions. Only the future — and evidence from new coins — will validate this hypothesis and the results it has yielded.

The Schaaf Collection contains approximately two hundred coins from the period running from Ardashir I to Ohrmazd II. Although most of them fit in with the SNS corpus and framework,⁵⁴ several are noteworthy because of what they tell us about third-century numismatics.

Ardashir I (224–240)

From the reign of Ardashir I, the founder of the royal Sasanian dynasty, a total of 48 coins has been recorded, distributed between all four minting phases, as well as two modern forgeries (**50, 51**). Ardashir's first minting phase, which begins in Stakhr (Mint A) with his elevation to king of Fars after 205/206 CE, is evidenced by two drachms (nos. **1, 2**). No. **2** shows on the obverse a new variant legend (*obverse legend 1b*), also found on a copper issue (no. **3**) from the next phase, 2a, which can be dated to circa, or just prior to, 223/24.⁵⁵ These non-ferrous metal coins of Type I/2 were probably also issued in Stakhr. On the reverse they already display the royal fire lit for Ardashir, albeit combined with the old reverse legend from Phase 1 naming Ardashir as the son of King Papag. In this connection special attention should be paid to no. **5**, because the legend on the reverse can be read unequivocally.

Dating to after Ardashir's victory over the Parthian king Artabanus IV in 223/224, Phase 2c already shows him as the 'King of Kings of the Iranians'. There were probably two active mints at this time, which we have tentatively identified as 'Hamadan' (Mint B) and 'Ctesiphon' (Mint C). From the mint at 'Hamadan', no. **6**, already published in Alram 2009, is of special significance. The lateral field of the tiara displays the *frawahr*-symbol⁵⁶ and might well be connected with Ardashir's proclamation as 'King of Kings of the Iranians' following the battle of Hormizdagan. Minting at 'Ctesiphon' (Mint C) does not begin until after the city was captured in 226/227. The mint struck drachms (no. **12**), tetradrachms (nos. **13–15**) and small copper coins (nos. **16, 19, 20**).

⁵⁴ SNS 1; SNS 2; Gyselen 2004.

⁵⁵ On the dating of the individual minting phases see SNS 1, pp. 135–152.

⁵⁶ SNS 3/1, var. 25.

Phase 3 constitutes the main period of Ardashir's issues. The hypothetical chronological horizon has been posited as extending from 228/229 to 238/39. It is not possible to date the types minted during this phase with greater accuracy, but it should be remarked that the design of the altar flames can be evaluated as relative chronological evidence and is thus classified separately in the catalogue. 'Ctesiphon' (Mint C) now takes over the main burden of production. Type IIIa/3a (nos. 21–25) represents the main issue, and is supplemented by two special types (Type IV/3a, no. 26; Type V/3a, nos. 27–30) which were presumably issued to mark special occasions. The reverse of a 1/6 drachm of Type IIIa/3a (no. 24) shows a hitherto undocumented variant legend (*obverse legend 2d*), which can however be attributed to error on the part of the engraver. The tiara on the copper coin (no. 26) assigned to Type IV/3a still has faint traces of crenellations. In 'Hamadan' the main emission (Type IIIa/3b, a, d; nos. 31–38) is also accompanied by two special types (Type V/3a, undocumented here; Type VI/3a, no. 42, 43, of which the beautiful drachm no. 42 deserves special mention). The drachm (no. 38) belonging to the main issue displays the 3d altar form that had until then occurred only on the special type VI (SNS 1, 231). On a 1/6 drachm (no. 39) and a small copper denomination (no. 40) the royal heads have been erroneously cut in lateral inversion on the die, and thus face left rather than right.⁵⁷

In Phase 3 two other mints are active which were possibly established at Marw (Mint D) and Sakastan (Mint E)⁵⁸. The production at Marw was exclusively devoted to small copper denominations. The coin held in the Schaaf Collection (no. 44) displays a hitherto unknown combination of control marks. New control marks are also documented on two large bronze coins from 'Sakastan' (nos. 47, 48).

Phase 4 is only attested at Mint C ('Ctesiphon') and represents a stylistic transition to the issues of Shapur I. From this final minting phase, which we assume hypothetically to have occurred between 238/39 and 239/40, only drachms (cf. here no. 49) and half-drachms have so far been documented. 239/40 is the year in which according to written sources Ardashir conquered Hatra and his son Shapur received the diadem of the king of kings.

Finally, passing mention should be made of two truly bizarre modern forgeries (no. 50, 51); their obverses are based on Sasanian seals, while the reverse follows the regular typology of Ardashir I. While the same reverse die was used for both coins, it is amazing that two different obverses were employed.

Shapur I (240–271/272)

Unlike coinage under Ardashir I, for which styles and types usually coincide, a different pattern prevails under Shapur I. An attentive examination soon detects that a single coin type might have been issued in different styles and that a single style might apply to several types. A style very seldom coincides systematically with a single type as during the reign of Ardashir I.

For the first time in SNS 1, a stylistic typology for coinage under Shapur I has been proposed by adopting an original, rigorous methodology based on clear-cut stylistic criteria. Despite the identification of several styles, the catalogue is still mainly organized along the lines of a typology. The determination to organize it on the basis of styles – and, presumably therefore, by mint – has not yielded the hoped-for results. The future will tell whether this incoherence is to be set down to the methodology used or to the nature of coinage under Shapur I.

⁵⁷ SN, pl. 1, no. 13.

⁵⁸ On the mint at Sakastan see also Alram 2007 and Schindel 2011/1.

The Schaaf Collection furnishes our corpus with 34 coins from the reign of Shapur I (no. **52–87**). It completes a few, not well attested series, for example 1/6drachms of style E (no. **69**).

Ohrmazd I (271/272–273)

The methodology developed in SNS 1 to define different styles has proven satisfactory for Ohrmazd I despite his short reign and, therefore, the limited number of coins issued. As expected, there were gaps in the SNS sample, and certain rare styles were missing. The Schaaf Collection, with eleven coins issued in the name of Ohrmazd I, provides us with a few hitherto unpublished examples.

Till now, no coin proved that Sakastan was a mint under Ohrmazd I, even though coins in the names of his father and predecessor Shapur I and of his successor Wahram I were issued there. The Sakastan style has been defined using a few coins of Wahram I which bear the mint name SKSTN.⁵⁹ These coins share several stylistic features, some of them easy to notice, such as the trousers with broad, horizontal creases on the reverse. Similar stylistic details figure on a few silver and copper coins from the time of Shapur I.⁶⁰ Although Sakastan surely continued issuing coins between the reigns of Shapur I and Wahram I, no concrete proof of this has been brought forward. The Schaaf Collection makes up for this lack of proof thanks to copper coin no. **97** of type Ia/2a. Despite its small diameter, this coin is in good enough shape to make out on its reverse side the trousers with broad, horizontal creases typical of the output from Sakastan. That it is a copper coin should come as no surprise since Sakastan very often issued copper as well as silver coins.⁶¹ The copper coin no. **98**, also of type Ia/2a, with an overstruck reverse that is not very legible, might have to be included among coinage from Sakastan.

The Schaaf Collection adds to certain stylistic series a few unpublished coins. No. **92** is the first half drachm of style C with basic type 1. On its reverse, Anahita is shown to the left of the altar and Ohrmazd I to the right (Ia/1b), a feature not attested till now. No. **93** is the first half drachm where we distinguish three dots on the fire altar, till now attested only on drachms.

The half (no. **95**) and 1/6 (no. **96**) drachms clearly seem to be the work of a single engraver in a style not attested till now. On the obverse, notice the portrayal of the diadem's ribbons as well as the necklace of beads, which has not been attested in the SNS corpus.

Wahram I (273–276)

The Schaaf Collection has eighteen coins with the image of Wahram I, most of them similar to coins in SNS 2. However a few deviate somewhat from the usual pattern, for example no. **99** of style A/a and type I/1aa: from seven to five o'clock on the obverse, the amazingly lightly engraved inscription; and on the reverse, the neck ornament and position of the legend. Likewise, no. **100** presents a few unusual aspects for style A/a and type I/1ab: the portrayal of the eye and mustache on the obverse, and the legend's position on the reverse. On the 1/6 drachm, no. **101** of style A(?), the king is wearing two strands of beads around his neck, this having been attested till now only in style C,⁶² in which the drawing is not on the right line.

⁵⁹ SNS 2, pl. 12, no. A52–A54.

⁶⁰ SNS 2, p. 31, fig. 5.

⁶¹ SNS 2, p. 23–25.

⁶² SNS 2, p. 167, fig. 11

On no. **104** of style A (group c), three dots in a triangle are located above and below the symbol of the *frawahr*, whereas three similar dots appear below the *frawahr* on coins of this type in SNS 2.⁶³ The Schaaf Collection also contains a half drachm (no. **105**) of style A/c, a style only attested for drachms.

The reverse of the drachm of style C (no. **106**) is of an unusual type in relation to the SNS 2 corpus. All coins of style C from the reign of Wahram I have a reverse of type 1ab: to the left of the fire altar, a royal figure, as evinced by the *korymbos* crown and the hair in long braids; and to the right, a figure with a crenellated crown and the hair in a bun (no. **107**, for example). On the reverse of no. **106** however, the person to the right wears a crown with a *korymbos*. This type with two persons each wearing a *korymbos* crown is attested on coins issued under Wahram II (e.g. no. **141**). Should we conclude that this coin marks the transition toward the coinage of style C under Wahram II? Characteristic of Style C under Wahram II is the reverse with the person on the left wearing a winged crown with a *korymbos* but the person on the right wearing a crenellated crown also with a *korymbos*, thus identifying him as a royal (e.g. no. **142**). The obverse of no. **106**, too, stands out from the usual features of style C under Wahram I.

Notice should also be taken of a drachm (no. **108**) with, on the obverse, a style similar to coins said to be of style E,⁶⁴ whereas the reverse is neither of style E nor of type 1 usually attested for this style. On this drachm, the reverse is of type 2B, which has only been attested for Sakastan (style H): two persons, one on each side of the fire altar, the king identifiable owing to his *korymbos* crown and his hair in a bun. However the style of this reverse has nothing in common with Sakastan. For the time being, we are unable to propose a satisfactory interpretation of this coin.

Knowledge about the existence under Wahram I of a mint in Balkh, the capital of Bactria, is of recent date.⁶⁵ The very few available coins struck there – a drachm and two copper coins – are of a type (I/1ab) common in other mints. This type is represented here by a copper coin, no. **113**. A recently presented drachm is obviously of style I (Balkh) but with a new type on the reverse, where two royal persons turn toward the fire altar.⁶⁶ Exactly the same type of reverse figures on two copper coins, no. **114** and **115**, which are of a small diameter similar to the three small copper coins of type I/1ab known from the Balkh mint. The coinage issued in Balkh is represented by drachms and by copper coins of a small diameter; but this might be fortuitous.

Wahram II (276–293)

The Schaaf Collection has 44 coins issued under this king, some of them important for our corpus.

If no. **133** is authentic, it challenges some assumptions about stylistic characteristics. Although the reverse is of style A, many aspects of the obverse deviate from this style: the engraving of the queen's headdress (*kulāf*) tends toward style C,⁶⁷ and the portrayal of the knotted ribbon in the beard has been observed only on a few coins of style A-ter and F.⁶⁸

Coin no. **125** is the first half-drachm of type VIa/2, till now represented only by dinars and drachms.

⁶³ SNS 2, tab. 7, no. 27 f.

⁶⁴ SNS 2, tab. 10, no. A38 f.

⁶⁵ Nikitin 1999.

⁶⁶ SNS 2, tab. 12, no. A58.

⁶⁷ SNS 2, p. 226, fig. 8a.

⁶⁸ SNS 2, p. 225, fig. 7c.

No. **126** featuring type VIIa/5a of style A has a reverse with an unusual fire altar: the three dots on the column have seldom been attested,⁶⁹ but are here present along with two dots on two blocks above and with what might be a crescent above the ribbon around the column. The depiction of the *frawahr* at eleven o'clock has not been attested for style A,⁷⁰ but is usual in style D/a (See for example no. **144**).

Thanks to the quality of the photographs, in particular of no. **134**, we can correct the description of the reverse of coin A15 in SNS 2:⁷¹ only the legend on the right is a pseudo legend, the one on the left can be read as *NWRA ZY*.

Engravings on several coins said to be of style B (e.g. no. **135** and **137**) are disconcerting. At first sight, no. **137** belongs to style B, but several features do not correspond to other drachms of this style: the inscription on the obverse is of very poor quality, and the presence of the *frawahr* at one o'clock is unusual for this style. The obverse presents the busts of the king and of a prince with a headdress of an eagle head (type III). If actually of style B, this coin adds a new obverse type to the coins recognized as style B and thus calls in question the hypothesis that the obverse of type II (a prince with a rounded *kulāf*, for example no. **139**) and the obverse of type III (a prince with an eagle head *kulāf*) were never made in the same mint.⁷²

Till now, evidence of the obverse of type IV(7) in style B came from a coin with an exceptional obverse legend: the usual legend on the first line but a second line with the name and title of the queen of queens.⁷³ No. **140** is evidence of an obverse type IV with the usual legend.

In style C, no. **143** has a few unusual features: The legend on the obverse ends on the second line (at six o'clock), and a ribbon is tied around the neck of the eagle on top of the prince's *kulāf*.

Several coins attributed to style D present unusual traits not found on other coins of this style. They are sometimes of the same sort as the coins classified as indeterminate in SNS 2.⁷⁴ We need more samples to decide whether such coins belong to style D or, on the contrary, to a not yet identified style.

Coin no. **152**, given that it has been well preserved, confirms that there exists in style H (Sakastan) not only an obverse of type VIc, with a prince wearing a *kulāf* with a winged feline's head on top – exclusively found in style H (no. **153**, **154**) – but also an obverse of type VIb, with a queen and a prince wearing a *kulāf* with an animal's head without wings on top. This type was already attested in SNS 2⁷⁵ but had not received recognition because of the coin's poor state of preservation. The two headdresses are topped with a horse head (obverse of type VIb), as found in coinage issued by the mint of style E.⁷⁶ The presence of two obverse types (VIb and VIc) from a single mint is unusual but can no longer be doubted.

Although lead coins were very common during the Sasanian era, few have been passed down to us. We do, fortunately, have one from the reign of Wahram II (no. **159**) with an obverse of type VII. Several stylistic details place it in style H of Sakastan.

⁶⁹ SNS 2, tab. 18, no. 32.

⁷⁰ SNS 2, p. 231, fig. 15.

⁷¹ SNS 2, tab. 15.

⁷² <http://www.humanities.uci.edu/sasanika/pdf/e-sasanika%2015-Gyselen-v2.pdf>

⁷³ SNS 2, Table 19, no. A46.

⁷⁴ SNS 2, pl. 24, nos. 66, A85.

⁷⁵ SNS 2, tab. 23, no. A75.

⁷⁶ SNS 2, tab. 22.

Narseh (293–302/3)

Nineteen coins from the Schaaf Collection can be assigned to Narseh. The typological development of the striking shows that it occurred in three phases for the dating of which, however, there are no firm points of reference. Phase 1 shows the king with a palmetto crown and long, undivided hair, while the altar on the reverse is depicted without a ribbon. Phase 2 also shows the king with palmetto crown but here a hank of hair falls over the right shoulder, and on the reverse the altar is decorated with a ribbon and a triplet. On the coins of Phase 3 the king wears a lamellar crown while his hair is gathered into a ball at the nape.

If one looks for events to which the typological changes in coinage might be related, Phase 2 could be connected to Narseh's victory over the Romans between Callinicum and Carrhae in the spring of 297⁷⁷, while Phase 3 might date to after his defeat by Roman forces under the command of Galerius and the peace treaty of Nisibis concluded in 298. However, there is no firm evidence to support these hypotheses.⁷⁸

Coins issued by Narseh can be divided into nine stylistic groups (A–J) which can probably be interpreted as deriving from individual mints. The present collection has examples of stylistic groups A/1, B, C, F, G/1, H and J (Sakastan). Of particular interest in terms of style is the drachm no. **169** from Style Group F (Phase 2), which shows the straight form of altar ribbon instead of the curved form that is otherwise so characteristic of this phase. In Phase 2 this form is also common to the stylistically related Group E and could provide further evidence that E and F belong together. No. **171** represents another special case. On the strength of its reverse we have assigned it to Style Group G/1, albeit with misgivings. The obverse bears a severely barbarized legend and displays an affinity with SNS 2, no. **A97** from Style Group J. By contrast the reverse die exhibits similarities with SNS 2, no. **A72** from Group G/1; however, this drachm is a hybrid, combining an obverse die from Phase 1 with a reverse die from Phase 2. A striking feature of this coin (no. **171**) is that the figure of the king on the reverse has been erroneously portrayed with a ball of hair at the nape of his neck rather than with straight hair, while the palmettos on the crown have been rendered with rare precision. In the present case no clear attribution is possible for now and thus the attributions made in SNS 2 for Nos. A72 (Style G/1) and A97 (Style J) should also be reconsidered. From Group J (Sakastan) two remarkable drachms have been preserved: No. **174** is one of those rare examples bearing the letter S (for the mint at Sakastan) on the altar column; on the obverse the legend is severely abbreviated (6d), and the style of the royal bust extends the hitherto known spectrum. The second coin (no. **175**) displays a lily scepter in the right-hand field of the obverse, a feature that was hitherto known only from Phase 2 of Group J; the reverse however stands slightly apart in stylistic terms. Finally the small copper coin no. **179** should be mentioned. Connected with SNS 2, A111, it displays on the reverse an altar ribbon terminating in double dots. The poses of the figures' hands can also be made out more clearly and this coin should thus be assigned to the hitherto undocumented Type 6b.

Ohrmazd II (302/3–309/10)

On the evidence of the broad-ribbed diadem ribbons we have assigned no. **183** to Style A/2 (cf. for example also SNS 2, A21). However, in this particular form they are a novelty. The reverse Type 4a had hitherto only been documented in Style A/3, while the control mark on the obverse

⁷⁷ Cf. Weber 2012, pp. 209–210, 259–260 and 279–283.

⁷⁸ Alram 2008, p. 28 and SNS 2, p. 345.

is known from both stylistic groups. The copper coin no. **190**,⁷⁹ which displays the king's likeness facing left, is a rarity on account of its perfect state of preservation. We have assigned it to Style D/1, while Schindel⁸⁰ proposes placing it in Sakastan (Style H). The drachm from Group D/2 (no. **192**) bears a new combination of control letters on the obverse and reverse: between the ball of hair and the diadem ribbons the die is engraved with the letter H followed by an unclear letter, while on the reverse HY can be seen below the altar. Another rare piece is no. **195** from Ray (Style F). Here for the first time the form *'twry* occurs in the reverse legend in this group, a form that had hitherto only been found on one dinar from Style Group A/1.⁸¹ No. **196** from Sakastan bears the Taurus symbol on the altar column, as found later on issues of Shapur II.⁸² Among the incerta are five drachms that cannot be assigned to any of the large stylistic groups. No. **197** (Incerta e) bears a new combination of control marks, and the reverse represents a stylistic innovation. The drachms listed under Incerta h–j are all stylistic hybrids: while the obverse of no. **198** clearly belongs to Style A/1, the reverse corresponds to Style Group C. A similar case is found with drachm no. **199** which combines an obverse from Group A/3 with a reverse from B/1. The control mark on the reverse of no. **200** would assign it to Style A/3, while the obverse tends towards B/1. It is possible that Style A and Style B can be traced to a common mint. The situation is different in the case of Style C, which forms a large independent group and can be followed from Wahram II via Narseh to Ohrmazd II. A possible explanation for this might be that dies were sent out centrally to all mints, or that a particular die-cutter ended up at another mint. However, caution is imperative here, and one can only hope that new material will emerge to shed more light on the matter. No. **201** displays a wholly new stylistic hand. The legends are also unusual, in that on the obverse in some cases it has spaces between individual words, while on the reverse the article ZY on the right-hand side is placed immediately before the name.

Unfortunately there are no points of reference that would allow a more precise dating of the individual coin types of Ohrmazd II. Only the design of the diadem ribbons in Style Group A suggests that the issues with the smooth version (A/1) should be placed at the beginning of production and those with the cord-like ribbing (A/3) at the end.⁸³

Shapur II (309/310–379)

Nikolaus Schindel (contd.)

Coins of this king in all four metals – gold, silver, bronze and lead – are well attested in the Schaaf collection. Some refinements and corrections to SNS 3 are now possible. Let us start with typology. To the two earliest variants Ia1 (left attendant with korymbos, right without) and Ia2 (both attendants with korymbos) should be added another variant, namely 1a3 on which both reverse figures lack the korymbos.⁸⁴ One such coin is attested in the Schaaf collection (no. **229**). Even more interesting is a variant of reverse 1b. What was listed in SNS 3 as type 1b should now be labeled 1b1; the new variant 1b2 shows the left figure with korymbos, but without mural elements, the right one with three strokes above the prominent crown cap, but without korymbos. It is attested only on a drachm from mint IV (no. **230**); one might wonder whether this

⁷⁹ SNS 2, p. 407, fig. 16.

⁸⁰ Schindel 2011.

⁸¹ SNS 2, no. A9.

⁸² SNS 3, p. 216.

⁸³ SNS 2, p. 432 f.

⁸⁴ Thus already Gyselen 2004, no. AV39.

distinct depiction has a deeper meaning – one could think that the right figure is supposed to represent Mithra rather than Ahuramazda – but I believe that it is just a minor variant of the main type 1b1. On no. **229** (reverse 1a3) the crowns of the two attendants look a little bit different, but here, the left one's crown cap is shown more prominently. Among the issues from Sakastan, several new type variants have turned up; the reassessment of Shapur's Sakastan coinage has also lead me to correct some inaccuracies of SNS 3.⁸⁵ First and foremost, reverse 2b must now be divided into two subtypes: 2b1 shows three lower elements and a round altar shaft consisting of a single large element, whereas the shaft of variant 2b2 consists of two conical elements with a circle in the center. This rendering is presently attested also on a copper coin which shows the attendants and a bust in the flames; I have labeled it reverse 3f. Another new variant is reverse 3g: It features the two symbols 25 and 33⁸⁶ characteristic for types 1a1, 1a2 and 1a3 to the left and right of the altar flames. Type 3e has a square altar shaft, shown with three parallel vertical lines. Reverse 3h (typical for style group 3 in Sakastan) lacks the altar ribbons altogether because of the mint name SKSTN written to the left of the shaft. With no space for ribbons on the left, the ribbons on the right were dropped as well for reasons of symmetry. Finally, a truly surprising new variant is attested by the large copper coin no. **239**: While basically featuring depictions similar to the main types 1b1 and 2a1 on both sides of the coin, both obverse and reverse feature double borders of dots, a phenomenon otherwise only attested on small copper coins from mint I/"Ctesiphon".⁸⁷ This variant is catalogued here as Ib2/2a2.

A detailed analysis by my friend Klaus Vondrovec has allayed my fear that what we used to label altered dies from "Kabul" in fact belonged to mint XI.⁸⁸ Vondrovec's study definitely proves that they were truly dies of the "Kabul" style which were altered to strike the earliest Alkhan drachms. Thus, the single most important argument for the localization of Shapur's main mint in the easternmost part of his realm has been vindicated. The location of the mint remains uncertain; however, the Alkhan do not appear to have crossed either to the North of the Hindu Kush, nor to the South-West into Sakastan. Even if there remains a remote possibility that Alkhan raiders captured the "Kabul" mint and its personnel in Iran proper, the circulation patterns of the "Kabul" drachms, and their overall impact on the monetary circulation on the areas to the South of the Hindu Kush are strong arguments to keep Göbl's localization of Shapur's main mint in Kabul, however strange and unlikely it might appear.

Aram has suggested that Göbl's and my mints III and IV might represent the same mint.⁸⁹ While observing different styles in the same mint is not uncommon in Shapur's 70-year reign, these two groups fall into the same short period during which reverse types 1a and 1b were employed, which I believe to have lasted no longer than 20 years at most.⁹⁰ Moreover, various typological as well as stylistic features separate the two groups: In mint III, there are waves rather than pearls attached to the diadem; and the fire altar as well as the attendants show markedly different renderings. In mint III, all elements except the altar table are of equal breadth, while in mint IV, the lowest element of the altar base is broader.

Especially noteworthy is the series of coins from Sakastan, more specifically the scarce bronzes. All style groups of Sakastan are attested, and also several of the new type variants originate from the Schaaf collection, as indicated above.⁹¹

⁸⁵ Schindel 2011/1.

⁸⁶ SNS 3/1, p. 216.

⁸⁷ SNS 3/1, p. 212 f.

⁸⁸ Vondrovec 2005, p. 246, 265.

⁸⁹ SNS 2, p. 426.

⁹⁰ SNS 3/1, p. 216 f.

⁹¹ Schindel 2011/1.

Herat also apparently has two different style groups. The first is represented by coins such as no. **250**. A convincing argument for locating these coins is the signature H (as on this coin), or HLY on some specimens.⁹² Apart from drachms, dinars are also known.⁹³ Less certain is the existence of the second style group, which is represented by drachms such as no. **251**:⁹⁴ While basically coming close to the “Kabul” style – considering their broad diameters, these coins are clearly Eastern –, they show the main peculiarity of Herat persistent until the reign of Wahram V, namely the attendants leaning against the dotted border as if they were drunk. To my eye, the Ardashir II issues which stylistically come closer to the later, signed Herat coins (no. **303**) can be derived from the Shapur II coins, so the existence of a mint in Herat in the late reign of Shapur II seems probable. Since these Herat drachms are derived from “Kabul”, which came into being only in Shapur’s last 10 or 15 years,⁹⁵ the dating of the Herat drachms to his last years seems plausible; Herat thus should be added to mint IX/“Kabul” and XII/“East” when reckoning the minting places still active in his last years.⁹⁶

The picture we have of the mint system under Shapur II is far from complete: The Schaaf collection contains no less than seven drachms which I have to admit I was unable to attribute to any of the existing mints with certainty. Two coins, struck from different dies, show the same style as a coin I have labeled potentially a forgery in SNS 3 (no. **285, 286**).⁹⁷ The new data argues that they are genuine, though. Their style is the same as Ohrmazd II’s no. **201**. From a stylistic point of view, it also seems that no. **271, 272** and **274** belong together, and form another mint.

No. **208**, a dinar from mint I/“Ctesiphon”, is special since it shows heavy clipping which reduced the weight to merely 4.83 g. Clipping is very common for Late Sasanian and Arab-Sasanian drachms, but in their case, it was done after the introduction of the post-reform Umayyad dirham of 2.97 g, so that these originally heavier drachms could continue to circulate. Clipping on dinars is something otherwise unknown to me. Speculating about a possible reason, one might assume that the coin was clipped to bring it at least close to the ideal weight of the light Sasanian dinar of 4.25 g,⁹⁸ if it circulated in Iran, or to the Roman solidus of 4.5 g. This, however, is merely guesswork, and there might have been other reasons as well.

Ardashir II (379–383)

He is amply attested in the Schaaf collection which contains 21 coins as opposed to a total of 16 museum pieces published in SNS 3. The main question – or main problem – regarding this king’s coinage is whether coins like no. **287** and **293** really belong to the same mint, as has been claimed by Göbl⁹⁹ and, following him, by me as well.¹⁰⁰ If the same criteria of style analysis is applied here as elsewhere, one certainly has to separate the “Kabul” material into different style groups. However, the Tepe Maranjan hoard contained coins from only one mint of both Shapur II¹⁰¹ and Shapur III,¹⁰² namely “Kabul”. So it seems plausible that the Ardashir II drachms as well,

⁹² Göbl 1984, pl. 138, nos. 1300–1302.

⁹³ Göbl 1984, pl. 138, nos. 1300–1302.

⁹⁴ Göbl 1984, pl. 138, nos. 1306 f.

⁹⁵ SNS 3/1, p. 236 f.

⁹⁶ SNS 3/1, p. 223.

⁹⁷ SNS 3/2, pl. 21, no. 323.

⁹⁸ SNS 3/1, p. 99.

⁹⁹ Göbl 1984, pl. 154 f.

¹⁰⁰ SNS 3/1, p. 256.

¹⁰¹ SNS 3/1, p. 237.

¹⁰² SNS 3/1, p. 273.