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A New Arrangement for *RRC 53/2*

Summary - Based on the study of a large sample of 1,150 coins, this paper proposes a new classification, in several distinct groups, of the anonymous denarii classed by Crawford as *RRC 53/2*. For each of these groups, a place, date and/or their circumstances of emission will be proposed according to their stylistic differences, die links and metrology, as well as on the basis of archaeological and hoard evidence. Special attention will be drawn to the links between some of these anonymous coins and issues with symbols. Within the overall framework of the Second Punic War it is suggested that these large issues of denarii, of which some important new varieties are identified, were produced in Apulia, perhaps between 209 and 205 BC, rather than in the mint of Rome at an earlier starting date proposed by Crawford.

Keywords - Republican denarius, Second Punic War, hoard, metrology, specific gravity.

Résumé - Fondé sur l'étude d'un large échantillon de 1 150 monnaies, cet article propose un nouveau classement, selon plusieurs groupes distincts, des deniers anonymes regroupés par Crawford sous la référence 53/2. Pour chacun de ces groupes, un lieu, une date et/ou des circonstances d'émission seront proposés en fonction de leurs différences stylistiques, des liaisons de coins, de leur métrologie ainsi que de la documentation archéologique et des trouvailles monétaires. Une attention particulière sera portée aux relations entre certaines de ces monnaies anonymes et plusieurs émissions avec symboles. Replacées dans le contexte des événements et relations numismatiques intervenus au cours de la deuxième guerre punique, ces larges émissions de deniers, dont plusieurs importantes nouvelles variétés ont pu être identifiées, ont été produites en Apulie, peut-être entre 209 et 205 av. J.-C. pour la plupart d'entre elles, une date plus tardive que celle proposée par Crawford qui les pense émises par l'atelier de Rome.

Mots clés - Denier républicain, deuxième guerre punique, trésor, métrologie, gravité spécifique.

1. Introduction

In Michael Crawford's seminal work, the *Roman Republican Coinage (RRC)*,¹ the author presents the two large issues which he believes started the denarius system, *RRC 44* and *RRC 53*, as produced in Rome, possibly by two different

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1. CRAWFORD 1974.



Figure 1 - Replica of *RRC* 53/2, plate X with fresher digital images.

workshops,² and dating to about the same time, i.e. from 211 BC. This paper deals with *RRC* 53/2, which is represented by the group of similar examples that are displayed on nos. 13-20 of plate X of *RRC* (figure 1). The table is reproduced here to provide the reader, at a glance, an idea of the numismatic material discussed in the paper and will be used several times for discussing the proposed arrangement and the contrasts we make with *RRC*. All of the 53/2 coins show the same major type: the obverse has the head of *ROMA* with a peaked visor and the denomination symbol “X” behind; the reverse has

2. CRAWFORD 1969 mentions the two mints of Rome in his introduction and isolates similar anonymous issues in his tables to Rome 1 and Rome 2.

the two Dioscuri Castor and Pollux riding right; and below is “ROMA” in a frame of various shapes. Note that, unlike similar later anonymous types, the A in ROMA is archaic, with a diagonal non-connecting crossbar. All coins are anonymous, without symbol or moneyer’s monogram. Crawford illustrated a selection of representative styles in his plates, choosing sometimes rare sub-varieties of which there are only a handful of known specimens. As an example, plate X-18 depicts a very rare variety with an unusual flag cape design, and distinct obverse style which is known in only five specimens produced by three die pairs. Similarly, X-20 is a rare variant of group E (table 1), which is otherwise not represented in plate X.

Group	Prototype		Fundamental type
A			Trapezoidal frame, Streaming Cape
B			Trapezoidal frame, Flag or B Cape
C			Rectangular frame, Flag or B Cape
D			Rectangular frame, Streaming Cape
E			Rectangular frame, Streaming Cape, larger, separated tufts, Lighter. Based on denarius of 3.8 gm

Table 1 - Major groups of RRC 53/2. a: 53/2 A2: Numismatica Ars Classica, Auction 92, lot 260, 3.97 g.; b: 53/2 B1: Numismatica Ars Classica, Auction 25, lot 247, 4.11 g.; c: 53/2 C2: Numismatica Ars Classica, Auction 61, lot 209, 4.86 g, (ex Ratto 1967-3, lot 134); d: 53/2 D2: Harlan J. Berk Buy or Bid Sale 163, lot 172, 4.30 g.; e: 53/2 E1: Classical Numismatic Group, e-Auction 128, lot 154, 4.34 g.

Nevertheless, most of the stylistic groups of the 53/2 classification are represented well in *RRC*'s plates, which was not the case in Grueber,³ Sydenham⁴ or other works on Roman Republican coins. Since the publication of *RRC*, there has been only limited scholarship on this series. Charles Hersh⁵ contended that the series as a whole was later than the splayed visor anonymous series (*RRC* 44) in opposition to *RRC*'s claim that they were generally contemporary. We agree with this view. In this paper, we present theories for the minting times and places of the different groups in discussion. The series with peaked visors started to appear around 210 BC, some three or four years after the beginning of the denarius system. The earliest groups of *RRC* 53/2 were probably contemporary with other early peaked visor series, including *RRC* 55/1, 77/1, 78/1, 54/1 and 88/2a. The splayed or 3-bar visor series are earlier and are believed to have been minted between 214 and 210 BC.

In this paper we identify five major groups (groups A-E) which represent the major divisions of *RRC* 53/2. Prototypes of these groups are shown in table 1; throughout the paper the term prototype is used to synthetically indicate the typical design and ornamentation of a series. Although *RRC* 53/2 comprises several styles, discussion of the distinctions between the sub varieties has been very limited so far.

Some observations strongly suggest that the major sub varieties are chronologically or geographically distinct. Perhaps the most significant support of this statement is actually the lack of evidence that these groups were produced together. In fact, no die link has been found between the major sub varieties in the large sample we have collected for this work, a corpus of about 1,150 specimens.⁶ Images throughout have been enlarged to show detail. The diameter of the denarius of this period is approximately 20 mm.

2. Historical Context: Hoards, Mints, and Dates

The monetary reform introducing the denarius was a significant historical element of the war following the devastating defeat of the Romans at Cannae in 216 BC and other great battles where Romans suffered serious losses. Those events had rendered the Roman *aerarium* in dire condition, with such losses of men and few victories producing booty to fund the war. The most probable

3. GRUEBER 1970.

4. SYDENHAM 1952.

5. HERSH 1977.

6. It is not the purpose of this paper to document the details of the performed die study. The size of the sample would result in detail beyond the intended scope of this work; however, the paper is completely based on it, and for this reason the summary of the die study results are reported in table 3. The aim of the paper is instead to discuss and give a reasonable framework to all the investigated numismatic material.

source of silver for the very large emissions of RRC 53/2⁷ was booty from a number of significant military successes between 211 and 208 BC, when the war tide turned in favor of Rome.

A recent scientific study⁸ of silver isotopic properties of pre-reform and post-reform Republican silver proved that pre-reform silver was minted from Spanish metal supplied by Carthage as war penalty after the First Punic War. Post-reform silver was found to be isotopically distinct and probably largely a product of the plunder of Syracuse, Capua and Tarentum. More detailed investigations using that technique are currently under way in collaboration with one of the present authors (Debernardi) and will be fully developed within the framework of the European Project SILVER.⁹

Crawford places the production of 53/2 at the Rome mint; however, several observations discussed below suggest an Apulian/Campanian¹⁰ mintage for most of the coins classified under RRC 53. The capture of Tarentum made a major contribution to the recovery of wealth for the Romans at this time, and it might well have been a significant source of metal for this coinage. A relevant event was the end of the war in Sicily in 210 BC. Some coinage production still took place in Sicily after that date, but the change in the focus of the war to Apulia would have likely had consequences on the coinage. We believe that, from that time, all the silver production was moved close to the war theaters in South Italy, where silver coinage was most needed at the time to support the war effort. The Adrano hoards (MANGANARO 1981-1982) should be related to that period (210-209 BC), while Licata, Ucria and S-hoard (table 2, nos. 15, 17, 30) to later events in Sicily, possibly in connection with the preparations by Scipio Africanus for the final war activity in Africa. When Marcellus left Sicily in 210 BC, he moved to Apulia, where he stayed as proconsul for the years 209 and 208, when he was killed. It is possible that not only most of the military apparatus moved with him to Apulia, but also some of the minting infrastructure and personnel, including engravers. There are several clues that suggest this; an important one is the dot series,¹¹ which provides an important chronological marker.

7. Die counts of RRC 44 result in about 750 dies (see DEBERNARDI 2016a) as the sum of the three denominations, which is about the same as the die counts of the RRC 53/2 denarii only; therefore, per silver amount, the RRC 53 series was larger than RRC 44.

8. ALBARÈDE et alii 2016.

9. The ERC Project SILVER has been granted and will start at the beginning of 2018, involving several institutions and research groups, with the aim of tracing the silver flows in antiquity, with a special focus on the Roman Republican and Greek coinages.

10. A detailed arrangement of the whole early denarius coinage of the Second Punic War is in preparation, proposing the possible mints and dates of all the involved series. It is beyond the scope of this paper to fully include all of the details of this study, and only the Apulian attribution is discussed in the paper. The role of the Campanian mint comes into play with the groups with streaming capes and will not be discussed further here.

11. DEBERNARDI 2014, p. 174 and n. 7.

Catt	15	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34	35	36	37	38	39	40	41
Accur.	A	A	A	A	A	A	A	A	A	A	C	A	A	A	B	B	A	A	A	A	B	A-	B	A	A	A	A
Region	Si	Sp	Si	Si	Sp	Sp	?	It	It	Sp	Sp	It	Hr	Sp	Ap	Si	Sp	Sp	Sp	Sp	Sp	Sp	It	Si	It	It	It
Name	Tivissa 1	Tivissa 4	Licata	Ucria	Valera	Tivissa-Noguera	B-hoard	Tarquimia	Orzivecchi	X4	Las Ansias	Piancastelli	Split	Cut-denarius	G-hoard	S-hoard	Cuenca	Armuna	Drieves	D-hoard Total	Jalance	Francoli	K-hoard	Mirabella	M-Hoard	Masera	Montecarotto
Total	8	1	589	3	10	18	106	11	45	82	0	114	26	43	40	141	56	34	15	129	11	21	103	3	766	90	179
RRC	209-206											205-202							post war								
47/1			43		1		4		1			1				3				1							
44/5							3				?												1			8	6
44/5A						1			1	3		3	1	2				2	2	3							4
44/5B							2					1			2					1							
44/5C										2				1	1	1				1			2				1
44/5D										3							3	1									
44/5E	1				1		3		2	2		4	2			9		2		3	2	1				3	
44/5	1				1	1	8		3	10		8	3	3		12	4	5	2	8	2	1	3		8	6	8
44/6			72			2	11		2	1		1				8	1			9							
44/7			156			3	3					6				1				3							
45/1										1																	
45/2			10							1		1				3				1							1
45/3			1																								
46/1							2		2														1				
68/1a											?																
68/1b										1								3	1							1	
68/2a			3													1											
68/2b			14				2									2				3							
68/3			1																								
48/1			2																								
85/1																											
85/2			11	1					1			1						2		2							
86/1			5									1															
93						1	1																				
97/2																					1						
98A/3							1														1						
98B/1																											
102/2a			11				1																				
102/2b							1														1						
102/2d			3																		1						
103/2						2		3	1							1				1							
50/2						1			2	x	1		1	2		2				4							
65/1			2																								
72/3	1													1		1		1				1				2	3
72/4			18								?					1				1							
73/1											x					1											1
73/2																											
74/1						1														1			1	1			
74/2			2																								
75/1						1			1		x	1			1	1							3		1		
75/1c					1		1		2	1										1							
75/2			1																								
76/1					1		2			6	x	3	2		1	2	1	2		2						1	3
52/1										1			1				1										

In fact we think that the dot symbol, among the earliest symbols on the RR coinage, might be connected with the Cornelii Lentuli.¹³

This identification is supported by a fourfold match between coinage and moneyers:

- Lilybaeum, Sicily 214-212 BC, P. Cornelius Lentulus praetor: quadrigatus (RRC 31);
- Bovianum 212, Cn. Cornelius Lentulus quaestor: denarius (RRC 44/5) with/without dot;
- Sardinia 211 BC, L. Cornelius Lentulus praetor: denarius and quinarius with dot (RRC 66);¹⁴
- Apulia 210-209 BC, L. Cornelius Lentulus legatus of Marcellus pro-cos:¹⁵ XX gold asses with dot.

The Apulian connection of this gold will be discussed in depth in a paper in preparation.¹⁶ Here it should suffice to say that the group C of the anonymous Mars-Eagle gold (identified by the three pellets holding the crest, first described by Rizzo,¹⁷ and confirmed by our corpus of 450 aurei) is the anonymous counterpart of the Anchor series (RRC 50/1).

This gold issue can be located in Apulia, as the Anchor denarii appear for the first time as closing series of the Hersh's Taranto quinarius hoard.¹⁸ This gold might be part of the *aurum vicesimarium* (Livy XXVII, 10), 4,000 pounds of gold given to five commanders to finance their war costs, as is also suggested by Crawford in *RRCH*.¹⁹ One of them was Marcellus, and from him the link is readily established to his legatus L. Lentulus.²⁰

et alii forthcoming (we thank Maria Caccamo Caltabiano for kindly providing the images of the fully anonymous series in the hoard); **18.** *RRCH* 95; **19.** *RRCH* 109; **21.** B-hoard: DEBERNARDI, DAVIS forthcoming; **22.** *RRCH* 108 (11 not 12 denarii; the example of RRC 44/5-D is extraneous, being from the Bonazzi collection); **23.** *RRCH* 106, see DEBERNARDI 2014; **24, 32, 35, 36** Spanish hoards; see DEBERNARDI forthcoming; **25.** *RRCH* 104; **26.** DEBERNARDI 2016b; **27.** BONACIC MANDINIC 1989; **28.** MCCABE 2015; **29.** Trade, hoard of 40 early denarii from Apulia; **30.** DEBERNARDI, BRINKMAN 2016; **31.** VILLARONGA 1984; **33.** *RRCH* 107; **34.** Trade (2000s), published in the NC 2016 table for the first time; **37.** WITSCHONKE 2008; **38.** *RRCH* 124; **39.** Trade (1980s); **40** *RRCH* 175; **41** *RRCH* 162.

13. We must acknowledge Mark Passehl for this brilliant association. He suggests that the dot or pellet in question is a *lentil*, in Latin *lens* or *lenticulae*, a punning symbol for the *Lentuli*. This symbol is found not only on the several series described in the above mentioned Orzivecchi paper (quadrigatus, denarius, quinarius, sestertius and XX gold asses), but also on the Sardinian series RRC 66 which comprises not only the quinarius described in RRC, but also a denarius (<http://stevebrinkman.ancients.info/anonymous/#H66-2>).

14. DEBERNARDI 2011.

15. Livy XXVII, 14.4.

16. DEBERNARDI, CAMPANA forthcoming.

17. RIZZO 2007.

18. HERSH 1972.

19. *RRCH*, p. 5.

20. See also figure 16 and related discussion.

These considerations allow us to assign dates for some of the early Roman Republican coinage with the dot symbol, particularly in relation to the gold mentioned above (dot XX as gold and Anchor gold related to it). However, the gold coinage is important also for another reason: RRC 88/1, as it will be explained below, is closely connected with the first group of RRC 53/2 (A1), which suggests 210-209 BC as the time frame for the first issues of the RRC 53 coinage (see figure 11 and related discussion). For sub-group C, the Tivissa Spanish hoards provides 206 BC as a *terminus ante quem*; in fact, in that year the war ended in Spain, and the Tivissa site has so far produced only coins of subgroups A2, B1, C1 and C2. Most importantly for the sequence, Tivissa 1 contained only A2 and B1.

At the time of the publication of RRC, fewer hoards were available. Nowadays many more have become available; furthermore, some of the previously known hoards have been more closely studied, especially as regards the “anonymous denarii”. In this discussion, we have therefore benefitted from a much richer hoard list compared to table LIV of RRC (see table 2, where the RRC hoards are marked in grey).

The most relevant hoards containing RRC 53/2 are included in table 3. Examples of the various group sub-varieties will be discussed later in detail.

	Hoard	Tivissa 1	Tivissa 4	Licata	Ucria	Tivissa excav.	B-hoard	Tarquinia	Orzivecchi	X4	Piancastelli	Split	Cut-denarius	G-hoard	S-hoard	Cuenca	Armuna	D-hoard
	Total	3	1	1	2	3	18	3	10	23	45	4	5	8	24	7	6	16
Date BC	53/2 Gr.	209-206											205-202					
210	A1						1		1	1								
	A2	2					3			3	1	1		2	3	1	2	1
210-209	B1	1					1		2	2	2			3	2	1		2
	B2						1			1		1			2			
209-208	C1					1	5			2	3				2	1	3	
	C2		1	1	1	1	4	3	8	14	21	1	3	2	9	3	1	7
	C3				1	1	3				16	1	1	1	5	1		2
207-206	D1										1				1			1
	D2										1							
	D3												1					2
After 206	E1																	1
	E2																	

Table 3 - Hoard table for the subgroups of RRC 53/2.

Groups A-D are all represented in the above mentioned hoards, but group E occurs only in hoards containing issues known to be later in date. Unrecovered hoards are a more common phenomenon during a time of conflict, and less frequent during peace time. We believe the above listed hoards to have been deposited during the course of the Second Punic War.

The dense minting activity, where *RRC* 53/2 originates, might be linked to the censorship of 210-208 BC;²¹ to the period 210-207 BC, the 53 A-C groups might reasonably fit. The latter Group D, considering that it features the same weight standard, could be assigned just afterwards, while the new weight standard of 84 pieces per pound (about 3.86 g) might have required a new censorship to be put in place.²²

After the war, fewer hoards were lost and the first emergence of group E is from the D-Hoard. Later hoards as the K-, Mirabella, and M-hoards, deposited within one or a few decades after the end of the Second Punic War, show all the *RRC* types up to the PVR series (*RRC* 187/1). The content of these later hoards suggest that their closure occurred at about the same time, with few clues as to their relative sequence.²³

Most of the hoard evidence presented here became available after the publication of *RRC* (table 2). These new hoards have shown that the peaked visor series are later by some years compared to the splayed or 3-bar visor series, the latter being a characteristic Sicilian production (*RRC* 72 to 76). Only the last Sicilian types (*RRC* 77/1 and 78/1) show a peaked visor and they are the first to appear in hoards, as C. Hersh noted when publishing his three-denominational Sicilian hoard. This observation is supported by another portion of the same hoard, published by G. Manganaro,²⁴ which also closes with the same two series. All the following hoards include the peaked visor series, which quickly becomes dominant; among these series, *RRC* 53/2 continues, of course, to have a major role. Table 2 is assembled in the usual way, so that new series are added gradually as the timeline evolves. This provides a relative arrangement of the issues, but for more precise and certain dating, one must rely on various different resources and to relate the coinage to the events of the Second Punic War.

21. See *RRC*, p. 42, which can well be extended to the Second Punic War period. The censors were elected every five years and for an 18 month period; in 210 BC the election resulted in victory for L. Veturius Philo and P. Licinius Crassus Dives, but the death of the former had as a consequence the election of a new pair of censors the following year: M. Cornelius Cethegus and P. Sempronius Tuditanus, who held office from 209 to the middle of 208 BC.

22. In 204 BC: G. Claudius Nero-M. Livius Salinator. It has to be pointed out that any link between coinage and censorships is just an educated guess, which finds a good correspondence with the numismatic material, but does not find direct mention in the ancient sources.

23. Issues later than *RRC* 115/1 have been removed from table 2 as non relevant to the present discussion.

24. HERSH 1976; MANGANARO 1981-1982.

3. Technical data

Statistics of weight and specific gravity (SG) are presented here for the first time, from which a corresponding silver fineness can be inferred.²⁵ The statistical analysis is based on large samples of coins, sorted according to the groups defined in this paper. After its inception, the weight standard of the denarius was gradually reduced from four to three scruples (each scruple being of 1.12 g), until the re-tariffing in the middle of the second century.²⁶ At that time, the denarius was made equal to 16 asses and given a weight of 3.86 g, i.e. 84 pieces to every pound of silver. The number of pieces per pound is perhaps the better way to specify weight standards, because it is directly related to the way the flans were produced. The weights are therefore shown not only in terms of centigrams, but also in pieces per pound (ppp). This is not to be confused with the weight standard, usually given in ppp, but it is meant to show more clearly the deviations of weight also in the ppp scale. This is indicated together with the weight scales in the histograms of figures 2 to 4. The weight frequencies for *RRC* 44 show a higher weight standard, even though far from the nominal value of 72 ppp, never reached by any series.²⁷ The highest frequency is in fact at 78 ppp for *RRC* 44/5; the higher value of 76 ppp is attained by very few series (figure 4) and still quite far from the nominal standard of 72 ppp. In comparing the distributions of weights across 718 coins, figure 2 shows that the highest frequencies for *RRC* 53 peak around 3.80 g, with average values slightly above 4 g. Even if one removes the uniformly lightweight group E, the weight frequencies fall over a broader scale, but with much higher frequencies near the 86 ppp range. This can be better appreciated by looking at figure 3, where it can be seen that all the series stay at or a little above 4 g, with a clear weight decline below that value for the last groups, Eq²⁸ and E. In terms of pieces per pound, it can be said that the earliest groups of 53/2 were produced at

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25. DEBERNARDI et alii 2017. In this paper it has been chosen to provide SG (the measured quantity) instead of the inferred fineness. However, using the calibrated relationship presented in this paper, one can account also for debased silver, according to the following correspondence: SG: 10.10 = fineness: 87%; 10.20 = 90%; 10.30 = 93%; 10.40 = 96%; 10.50 = 99%. It has to be noted that SG is not the ultimate tool for assessing the silver quality of ancient coins, but it is to be regarded as the first approach to spot the debasement trends in different emissions. The easiness and speed of its application allows us to analyze very large samples in museums and private collections, as it has been performed by one of the authors. The cited paper shows one of the lines of research stimulated by his extensive SG campaigns.
26. DEBERNARDI 2008.
27. The measured weight standard might actually be distorted by the Gresham's law (withdrawal of heavier pieces); in fact it has been observed that early hoards have higher weight standards, see e.g. Cut-denarius, Piancastelli and X4 hoards.
28. Although the sample for group Eq is of small size, it comes from different dies and the weight and SG values are relatively uniform.

the standard of 80-82 ppp, while the latest E series went up to 83 (Eq), 84 (E1) and 87 (E2). In summary, a clear difference in weight can be observed between the 44 and 53 series, suggesting later production, especially when considered with the other numismatic details presented so far.

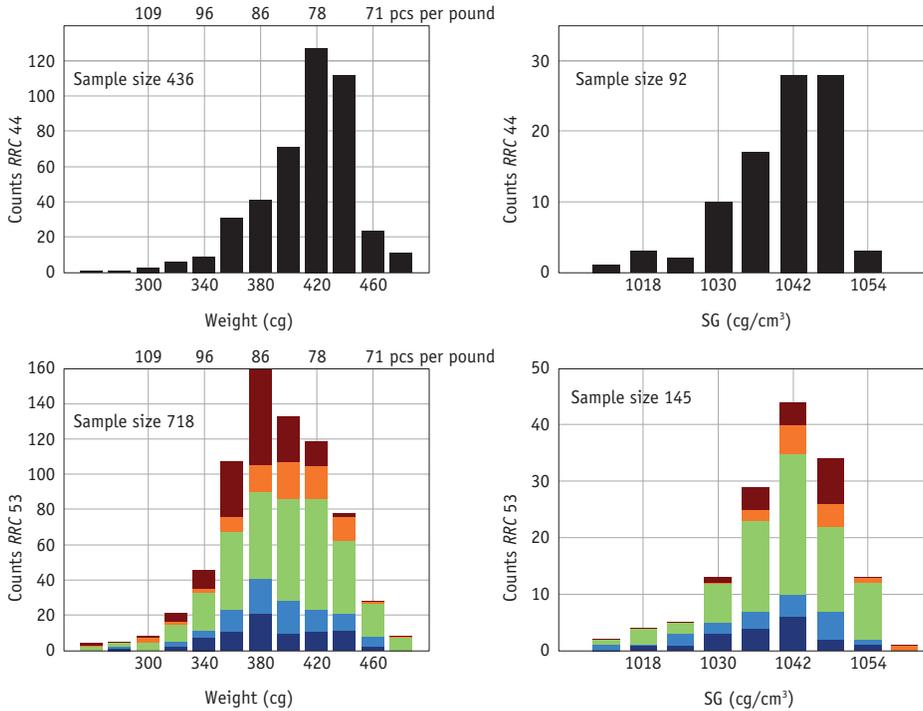


Figure 2 - Weight distributions of RRC 53/2 compared to those of RRC 44/5 (different grey levels in the RRC 53 charts, from bottom to top, refer to different groups, and A, B, C, D, E refers to RRC 53/2).

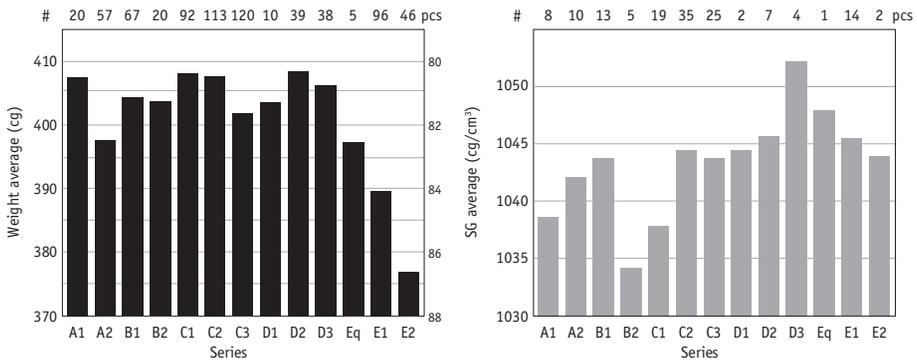


Figure 3 - Weight/ppp (left) and SG (right) averages of RRC 53/2 versus groups.

In addition to weight statistics for the two major anonymous types (figure 2), the corresponding SG histograms are also shown. It can be seen that these series were struck with good silver, although the RRC 44 histogram shows a slightly better silver quality. In figure 3, the SG resolved by sub-group of the RRC 53 series is also provided. The generally better silver quality of the latest series is consistent with what would be expected from better financial times. Because it nicely fits with our dating, it is tempting to assign the SG drop of C1 to the dire *aerarium* conditions in 209 BC, which led to the use of the *aurum vicesimarium*. Figure 4 shows similar histograms to those in figure 3, but includes data for other Second Punic War series in order to relate them to RRC 53.

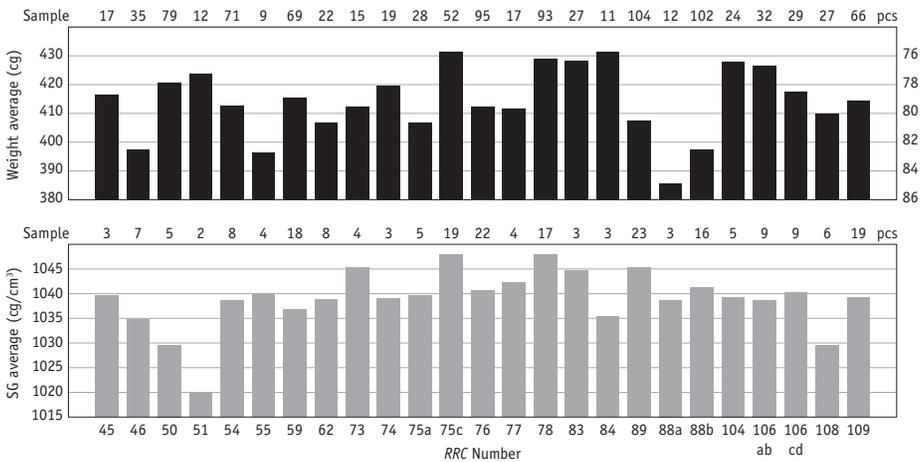


Figure 4 - Weight (left) and SG (right) averages of various early series in RRC order.

4. Numismatic relationships to contemporary series and siblings

The idea of “numismatic siblings” can be very helpful to the analysis of early Roman Republican silver. “Siblings” are coins using dies of the same style, if not the hand of the same engraver, but these are differentiated by the presence of symbols or monograms. Intra-series die links allow us to relate more safely different series. Fully anonymous types are sometimes identical to the counterparts with symbols, but die links of siblings to anonymous coins are rarely encountered.²⁹

29. After the die link between RRC 105/1 and 106/1 reported in RRC, more have been discovered. For obverse die link between RRC 73-74-75/2, RRC 75/1b-c or RRC 108/1-109/1, see DEBERNARDI 2016a. New obverse die links, to be published in future works, have been found in the meanwhile: for victoriati RRC 119-120-121, RRC 122-124-132 and denarii RRC 105/1-106/3b.

Some of the identified groups of *RRC 53/2* have a direct relationship to varieties with symbols. Group A1 is related to *RRC 88/2a*, the rare spearhead variety, group C3 to *RRC 88/2b* “common spear head”, group C2 to *RRC 89/2* “club” and group E1 to *RRC 113/1* “star” and *RRC 114/1* “prow”. To some degree, *RRC 76/1* might be considered as a sibling to group B1 as *RRC 76/1* prototypical reverse style is found on two exceptional B1 dies (see figure 15 and related discussion)). It is interesting to note that these siblings, where the style and ornamentation can be described as nearly identical (except for the symbol), in most cases³⁰ have some elements, usually on the reverse, that are slightly different stylistically from the anonymous types; different enough to recognize without considering the symbol. Although die links are known for other anonymous issues, die links between *RRC 53/2* groups and their siblings have not yet been discovered. This can be explained by the emissions being separate, or by the collected numismatic material being not representative enough. In fact, for all the groups the characteristic index is very low.³¹

5. Style and ornamental differentiations

The most observable divisions between the various groups and varieties are the pattern of styles that maintain consistency over large numbers of examples in the groups and allows us to distinguish them. This pattern of styles allows to investigate the relationship between groups using die link analysis and hoard evidence to separate them. This section describes the major stylistic attributes that are most observable and useful in separation.

A. Griffon Tufts

The head of Roma on the obverse is crested with a griffon whose body and tufts extend along the back of the helmet. This feature can be highly detailed on some examples of the first sub-group A1. As time progresses, the tufts become simple triangles, but their number and closeness together is high. Later, midway into group D, the tufts transition are further apart and shaped less like triangles and more like the barbs on a fish hook. In sub-group A1 there are typically seven or eight tufts. By group E, there are usually only four or sometimes five tufts. Some of the main griffon crest rendering are shown in figure 5.

30. Except for the siblings E1-*RRC 113/1*, where everything is identical, but the symbol.

31. The characteristic index is defined as the ratio between sample size and number of dies. See Table 4.



Figure 5 - Griffon tufts, sub-groups A1, B1, C, E.

B. Cape styles

Cape styles are perhaps the most observable difference in the various series. Unlike RRC 44,³² where obverse and reverse types are die linked, only two die links have been found between different cape styles and obverse types between the RRC 53/2 groups (figures 19, 23) suggesting a separation in location or time.

The three Cape styles observed in 53/2 are shown in figure 6 and can be described as follows:



“Flag”: Characterized by three or four roughly parallel wavy lines of the same length, usually ending with the tips pointing upward. Found in groups B and C.



“Scrolling” or “B-” Cape: The cape appears to be billowing and filled with air. The end of the cape is in the form of a “scrolling” B. This style is found on RRC plate X-15 (our B2 sub-group of RRC 53/2), but it is also found as a variation on other RRC 53/2 varieties that are normally found with a flag cape, such as the RRC plate X-16 anonymous sibling to the “club” series (sub-group C1), as well as on RRC 75/1c, 76/1, 77/1 and 78/1.



“Streaming”: Somewhat characteristic of a banner “streaming” in the wind. Found in groups A, D, and E.

Figure 6 - Cape Styles.

The flag cape and the scrolling cape are related in that the overall style of these pieces, both obverse and reverse, are often very close; therefore the B-cape can be regarded as an elaborated or embellished variation of the flag cape.

32. See DEBERNARDI 2016a, plate 4, p. 36; please note that, due to a typographic mistake, all the ? in the plate have to be intended as ||, meaning die identity.

C. Frame around “ROMA”

The frame around the reverse legend might be regarded as a trivial item, subject to the whim of the engraver, and not an officially controlled part of the design. Yet, the observably consistent patterns show a non-randomness in their execution. The frame is found as a four sided trapezoidal shape (figure 7a) in the early groups A and B, nicely fitted to the bottom line border. Groups C and D have a three (figure 7b, f) or two sided (figure 7c-d) rectangular frame, and sub-group C3, a single exergual line (figure 7e). The order of the frames in figure 7 follows our catalog classification to illustrate the evolution from four to one line of the frame in groups A to C. In the latter groups D and E, the frame is the same (figure 7f), with three sides, normally broken at the bottom-right corner, where it meets the line border.



Figure 7 - Frame shapes.

6. Catalog

The catalog describes five major types and a number of sub-groups that are believed to be separated either by mint or date. A few years ago, the authors assembled an internet guide to the attribution of the early fully anonymous denarius types.³³ The primary purpose of this guide is to aid in the attribution of the RRC classifications. The section on RRC 53/2 describes more or less the same groups identified here, but uses a numeric nomenclature and is primarily based on stylistic considerations. No sequential implications were intended unless noted, although in some cases sequence was specifically implied or described. After this early work was completed, significant research has revealed, primarily through die link and hoard analysis, a sequential pattern

33. <http://stevebrinkman.ancients.info/anonymous>.

that in some cases differs from what might be inferred from the numbering of groups in the anonymous website. A new nomenclature is used in this article and is intended to imply a sequence in the transition of styles, if not separate issues, found in the RRC 53/2 groups.

Dies with a high degree of homogeneity are classified with an alpha. These alpha groups are regarded as the major types, which can be precisely described in terms of the unique ornamentation of each group. No die links are known between the major groups, nor should any be expected because each has distinct stylistic divisions between them.³⁴ Major varieties within the groups are classified with a numeric value. These varieties reflect the modification of some stylistic details, but the overall design and similarity of detail suggest that they are the products of the same mint at slightly different times.

To give a clear picture of the numismatic material that will be presented, table 4 summarizes the main features of each group and sub-group. This table includes two kinds of information: the result of the lengthy die comparisons and counts, and the corresponding statistical data of weight and SG average. At the end of the table, the overall group totals are also provided. The columns represented in Table 4 are: A. Group and sub-group; B. Weight average in cg (centigrams); C. Size of the weight sample; D. SG average in g/cm³; E. Size of the SG sample; F. number of obverse dies; G. number of reverse dies; H. Sample of collected images (the weight and SG sample are always subsets of the image sample); I. Obverse coverage; L. Reverse coverage; M. Characteristic Index for obverse; N. Characteristic Index for reverse; O. Obverse die estimate; P. Reverse die estimate.³⁵ All the groups in table 4 will be discussed in detail in the following; Ev refers to the variant dies of group E.

A. Early trapezoidal frame issues: a general introduction to groups A and B

The types with trapezoidal frames around the reverse legend are believed to be the earliest ones. The fact that the Tivissa 1 hoard (table 2, no. 15) contains only these types, combined with their presence in some of the other earliest hoards, supports their early placement. This sequence is supported by the consideration that group B is stylistically similar to the Sicilian 3-bar visor types, almost certainly earlier than the peaked visor types.

Stylistically, group B shares many characteristics with other early types, with symbols and monograms that are unquestionably from Sicilian mints, although no die links are known (see *infra* the group B section for a more detailed discussion). Fully trapezoidal frames with both sides at 45° are an

34. With the exception of groups D and E, whose reverse styles are largely similar; for these series weight is a major discriminating parameter.

35. For a description of the statistical quantities in this table, see ESTY 2011.

A	B	C	D	E	F	G	H	I	L	M	N	O	P
Type	W	#	SG	#	O. Dies	R. Dies	Sample	C_o	C_r	CI_o	CI_r	Es_o	Es_r
A1	409	21	10,39	8	19	14	28	46	75	1,5	2,0	57	26
A2	398	62	10,21	14	60	54	85	51	62	1,4	1,6	160	102
B1	403	70	10,44	15	62	67	90	53	47	1,5	1,3	156	174
B2	408	17	10,43	2	19	20	24	38	33	1,3	1,2	71	98
C1	407	96	10,38	19	90	93	124	47	41	1,4	1,3	263	260
C2	407	112	10,41	36	132	129	159	33	35	1,2	1,2	555	397
C3	403	122	10,35	28	107	117	169	57	51	1,6	1,4	249	258
C1v	400	11	10,44	4	9	10	14	57	50	1,6	1,4	21	49
C3v	415	5	10,46	2	3	3	5	60	80	1,7	1,7	7	11
D1	404	10	10,45	2	5	5	11	91	82	2,2	2,2	6	16
D2	408	39	10,46	7	39	32	55	51	64	1,4	1,7	103	65
D3	405	40	10,52	4	53	58	65	34	20	1,2	1,1	220	358
Eq1	397	5	10,48	1	2	3	6	100	67	3,0	2,0	2	30
E1	390	96	10,46	14	116	127	233	71	65	2,0	1,8	210	215
E2	381	45	10,44	2	26	32	77	88	78	3,0	2,4	35	54
Ev	402	6	10,24	1	15	15	15	0	0	1,0	1,0		
Total		757		159	757	779	1160			1,5	1,5	2114	2111
Summary per TYPE													
A	401	83	10,28	22	79	68	113	30	40	1,4	1,7	217	128
B	404	87	10,44	17	81	87	114	29	24	1,4	1,3	226	272
C	405	346	10,39	89	341	352	471	47	41	1,4	1,3	1095	974
D	406	89	10,48	13	97	95	131	26	27	1,4	1,4	329	439
E	388	152	10,44	18	159	177	331	52	47	2,1	1,9	246	298

Table 4 - Summary of the die study: die counts and physical parameters of RRC 53/2 in its Group subdivision.

unusual feature in the early denarius system, and can only be found on RRC 53/2 examples described here, on RRC 76/1 (Sicily), on RRC 104/1 (“B” letter) and on some of the RRC 47/1 quinarii (Sicily), all of which have 3-bar visors. These earliest groups are labeled with letters A and B, where Apulian and Sicilian stylistic features can be recognized, as described in the following section.

B. Group A

Group A has a trapezoidal legend frame, variations of a streaming cape, and a noticeably different posture of the horses. The two sub-varieties are linked by a reverse execution that is found on a single known reverse die of sub-group A1 and the characteristic reverse style of sub-group A2 (figure 8).



Figure 8 - Sub-group A1 and A2 examples; the unique A1 reverse is stylistically linked to the common A2 reverse style. a: 53/2 A1: Roma Numismatics, e-Sale 27, lot 323, 4.41 g (ex Inasta 21, lot 150); b: 53/2 A2: Private Collection, ex Palmax, eBay 110638540237, 3.58 g, 4 h, 10.42 sg.

a. Sub-group A1

Sub-Group A1 shown in figure 9 is not illustrated in the plates of RRC. It is rare: only 28 examples are known, produced by 19 obverse and 13 reverse dies. As for the other groups, a low survival rate of this moderate size emission made it lay unnoticed until recently. A1 is distinctly different than any of the other RRC 53/2 varieties. This is one of two varieties, both rare, of RRC 53/2 where Roma has four locks of hair instead of three, and it is distinguishable from the other sub-group D1 not the least by the presence of the trapezoidal frame. The more distinctive feature of this series is that the hair binding is clearly visible above the four locks of hair, as in earlier splayed and three barred visor series. This detail is unique to this sub-group in the RRC 53/2 series.



Figure 9 - Sub-group A1 prototype.

53/2 A1: Numismatica Felsinea 3, lot 1644, 4.63 g, 9 h, 10.51 sg.

The sub-group A1 has several other characteristics. The visor on Roma is rather short from the hinge to the tip, but it widens rapidly to a broad top. The peak itself does not extend far from the forehead. Griffon tufts are always very fine and numerous. Some examples actually show a 3D rendering, as discussed above and shown in figure 11. The horse's body is usually massive.

Its hind legs are bent at the hock, so that the hind hooves are forward in relation to the hock. The rear horse tail is always displayed between the horse's legs and is minute. The capes of this group are unique for denarii, and are a mixture between the streaming and flag styles, always small (figure 10) with a cape rendering close to that found on the 98A/3 quinarii from the Luceria mint in Apulia.



Figure 10 - RRC 98/1 and A1 cape style.
98A/3: Numismatica Ars Classica, Auction 33, lot 213, 2.30 g.

The obverse style of A1 is similar to RRC 88/2a, which is the rare variety in the spear head series.³⁶ We believe this is another important argument for dating RRC 53/2 from 210 BC. The similarities in the engraving of the eagle's wing in the Mars-Eagle gold (figure 11e) with the helmet wings of A1 (figure 11a) and RRC 88/2a is notable.³⁷ The rendering of the wings is distinct, with an incuse three dimensional representation of the center rachis of the feather. In the coinage of the period, other than the gold, this feature is only found in RRC 88/2a and sub-group A1 (figure 11).³⁸ The earrings are identical between the two types, and the RRC 53/2 relationship with RRC 88/2a is strengthened with the same cape patterns seen on RRC 53/2 groups B and C; in fact, among RRC 88/2a, two reverse dies have a flag cape (figure 11d) and five have a B-cape (see figure 11b-c).

These stylistic similarities, found only in the above mentioned series, draw them together and allow us to think of a common engraver and further, a probable time milestone of 209 BC, thanks to the dating of the gold, for which we know that the Tarentum general, Q. Fabius Maximus Verrucosus, received

36. Only 17 specimens of RRC 88/2a are known, produced by 11 and 7 obverse and reverse dies; note the inverted obverse/reverse die ratio (usually reverses are 10-20% more), which is very similar to that of A1: 19/14 vs. 11/7.

37. Also the way of rendering the spear-heads on silver and gold further suggests the same celator for these dies.

38. An exception to this would be RRC 125 and 126, QLC and VAR which also show this rachis in the helmet wings. But the strong style differences preclude any relationship with the series in discussion.

100 pounds more than the others.³⁹ Assuming an Apulian mint location, the stylistic similarities with coins from Luceria suggest that this might be the site for the Group A1 mint.



Figure 11 - A1 (a), RRC 88/2a (b, c, d) and 88/1 (e) and illustrating similar detail rendering. a: 53/2 A1: MA-Shops, BWBank Nov. 2009 no. 2271310222-102, 3.85 g, 10 h, 10.30 sg; b: 88/2a: Classical Numismatic Group, e-Sale 122, lot 240, 3.99 g; c: 88/2a: Bibliothèque nationale de France, REP-2878 (Ailly 2248), 4.27 g, 10.31 sg; d: 88/2a: Trustees of the British Museum, Hersh 2002,0102.382, 4.19 g, 11 h; e: 88/1: Bibliothèque nationale de France, REP-21357 (no. 77), 3.35 g, 4 h.

b. Sub-group A2

An extra “hatched” tail is always present (see figure 13b) with the exception of one die (see figure 20b in section on “Variants”, an engraver’s mistake?). This “hatched” style is unique to this sub-group and does not appear on any other RRC 53/2 variety, although a similar hatching is seen on some dies of RRC 76/1 and 78/1 (Sicily, see figure 13), but rendered in a different way.

39. Livy XXVII, 10: “About four thousand pounds of gold were brought out. Of this five hundred pounds each were given to the consuls and to Marcus Marcellus and Publius Sulpicius, the proconsuls, and to Lucius Veturius, the praetor who had by lot received Gaul as his province. And for Fabius, the consul, there were added a hundred pounds of gold above the rest, to be conveyed to the citadel of Tarentum”.



Figure 12 - Sub-group A2 prototypes. Top: principal obverse engraver: Numismatica Ars Classica, Auction 92, lot 260, 3.97 g; bottom: subsidiary obverse engraver: Muenchen staatliche Münzsammlung 74025, 4.45 g, 10.34 sg.

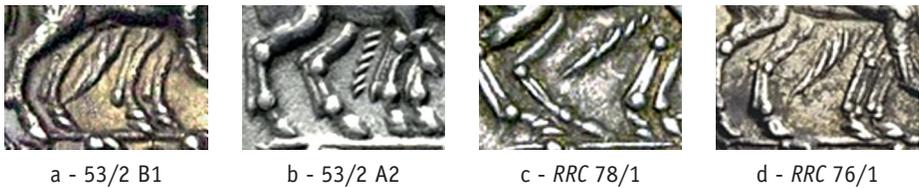


Figure 13 - Comparisons of extra tail rendering.

As discussed above, sub-group A2 is grouped with A1 through the relationship of one A1 reverse die with identical style to many A2 reverse dies (figure 8). Probably a leftover A1 obverse die was used in the later A2 issue, paired with an A2 reverse die; however, this reverse die has not yet been found to be paired with any A2 obverses. 54 obverse dies are known for A2, so being about the same size as sub-group B1 (60 obverse dies). Sub-Groups A2 and B1 are therefore the most frequently seen of all the trapezoidal frame varieties. Unlike A1, A2 has only three locks of hair below the helmet, but the locks are much larger, so as to fill almost all the space to the border. The principal engraver produced 34 obverse dies (figure 12, top image; below, as also in some of the following prototype figures, the second example reports the second or less frequent obverse style). Almost certainly the same engraver produced 15 obverse dies of the following B1 group, establishing a relationship between them. Except for one die, the hair binding is not visible. The griffon tufts are treated very differently and resemble a saw tooth pattern; the lower one forms a continuous line, connecting the neck-guard.

C. Group B

The second group with trapezoidal frame differs from the first by its cape styles. Instead of a streaming cape, it has a flag cape (B1) and B-cape (B2).

a. Sub-group B1

There are several obverse styles in B1 (figure 17), but the prototype is characterized by a long sweeping visor and generally naturalistic features on a relatively narrow head of Roma. Sub-variations in obverse design may have a tall head with a short nose and a short visor, shown in the second example of figure 14. We call this the “vertical profile” engraver, who is the major engraver of A2 (see figures 12 top, 17a and 20a-c). The reverse shows the riders at a further distance, somewhat smaller, but the riders are more proportional in size to the rampant horses. The horses appear to be rearing up, rather than galloping forward, particularly the far horse, with forelegs farther above the exergue than on other varieties. This “distant-rearing horses” characteristic fades out in the transitional dies to group B2; there the flag cape is coupled with larger and nearer horses, which are no longer rearing, as shown in the bottom-right example of figure 15 and in figure 17c.



Figure 14 - B1 prototype.

Bottom: 53/2 B1: Trustees of the British Museum 1934,0522.6, 3.90 g, 1 h.

It is useful to discuss the Sicilian flavour of group B, which is suggested by several details. Some of the obverse dies feature a loop of hair under the visor, which is typical of some Sicilian series (figure 15, left). This feature continues into sub-group C1. The design of the transitional reverse dies, with horses in a steadier action, is a perfect copy of some reverses of the Branch series RRC 76/1

(figure 15, right). These connections can be explained by Sicilian engravers moving with Marcellus to the Apulian war theater, as discussed earlier, and would also explain the switch to the B-capes, which in the Branch series are commonly mixed with the flag-capes.



Figure 15 - Hair loop in different series and reverse stylistic linkage to RRC 76/1. a: 76/1: Classical Numismatic Group Auction 61, lot 1138, 4.27 g; b: 53/2 B1: Varesi Asta 58, lot 1258, 4.50 g.

In addition to the dot-lentil symbol and its appearance on the Anchor Mars-Eagle gold discussed above in the section on mint locations, another detail that links the series in discussion is illustrated in figure 16. Helmet visors with a 3D rendering appear in the Republican coinage for the first time in the series illustrated here. The visor is not seen from the side and rendered by a line, but slightly from below, so that also the back side of it can be seen. To the best of our knowledge, these are the only three series where this detail occurs and they do not reappear until a century later, on RRC 319/1.

It can be argued that the bulk of the Mars-Eagle gold is a Sicilian production, including RRC 72/2 and most of RRC 44/2-4. We believe that RRC 50/1 is later, and of Apulian origin. There are three major styles of the anonymous gold RRC 44/2. The third (which is referred as group C^{16, 17}) is identical to the style of the anchor series, RRC 50/1, and is die-linked to the anchor series through two plated coins. We believe that these issues (RRC 50/1 and RRC 44/2 group C) were produced in 209 BC to mint the *aurum vicesimarium* gold given to the five generals, as reported by Livy.⁴⁰ This gold issue is not Sicilian because the war there had ended in around 210 BC. In fact, no group C of the Mars-Eagle gold (figure 16f) is found among the 36 60-asses of the Agrigento hoard.⁴¹

40. *Supra*, n. 39.

41. CALTABIANO 1990.

RRC 50/1, Anchor, as discussed above, was perhaps minted in 209 BC in a mint of the South-Italy war theater.⁴² All of its obverse dies are characterized by a curved helmet visor, which in most cases have a 3D rendering (figure 16f-g). Identical features are seen on some B1 dies (figure 16d-e). This suggests that the same engraver might well have produced these dies. It is worth mentioning here the third series where the 3D visor appears. It is the very rare *RRC* 55/1 issue, known from just ten examples, produced by nine dies. It is the only known series that mixes the visor types: five dies have a 3-bar visor, four dies have a peaked visor with three lines (compare figure 16a, c). The two kinds of visor are die linked (figure 16a-b).



Figure 16 - 3D visor in *RRC* 55/1 (a, b, c), 53/2 B1 (d, e), 44/2C (f, anonymous Anchor) and 50/1 (g). a: 55/1: Bibliothèque nationale de France, REP-1692 (Ailly), DA 100, 3.85 g, 10.44 sg; b: 55/1: De Nicola, listino Dic 1977, lot 121; c: 55/1 : Bibliothèque nationale de France, REP-1691 (Ailly), DA 99, 4.26 g, 10.27 sg; d: 53/2 B1: Numismatik Lanz, eBay 11 Aug. 2011, 4.21 g; e: 53/2 B1: Tivissa 1 (*RRCH* 94, Tarragona Museum), no. 24, 4.53 g, 9 h; f: 50/1: Bibliothèque nationale de France, REP-21353 (no. 73, Luynes 126), 3.37 g; g: 44/2 C: Union des Banques Suisses (UBS) Auction 56, lot 194, 3.36 g.

In figure 17, some less frequently seen obverse styles are illustrated; obverse 17a is by the “vertical profile” engraver that worked also for group A2 (see also figure 20), while 17b and 17c obverses appear to be by different hands. Both dies show a wing bent at nearly a 90° angle, while the principal engraver uses a more extended wing (see prototype illustration in figure 14, top). In 17c the horses are nearly steady, a feature occurring on a few dies. These details, and the lack of die links, might point to different mints for groups A and B.

42. *Supra*, n. 10.



Figure 17 - B1 different obverse and reverse styles. a: 53/2 B1: Numismatica Ars Classica, Auction 25, lot 247, 4.11 g, 20 mm; b: 53/2 B1: Andrew McCabe Collection (ex. Vecchi Auction 13, lot 631); c: 53/2 B1: Hess Divo Auction 331, lot 75, 4.64 g (ex Gorny Auction 44, lot 525).

b. Sub-group B2

The second sub-group of group B is scarce. It is distinguished primarily by the “B” style cape, but also, with very few exceptions, it has a larger head with rounder helmet. B2 does not feature a hair loop under the visor, while in B1 this detail is found on about half of the dies.



Figure 18 - B2 prototype. 53/2 B2: Asta del Titano M3, lot 97, 4.51 g, 6 h.

The connection between B1 and B2 is not only based on stylistic grounds, but also on an obverse die link (figure 19). The corresponding cape styles have already been discussed in relation to RRC 88/2a, where the two cape renderings also coexist (see figure 11 and related discussion). This was not, however, the origin of the B-cape. It appears first in RRC 75/1b-c. It is featured throughout the 77 and 78 series and is found intermixed with flag capes in RRC 76/1



Figure 19 - Flag to B-cape obverse die link. a: 53/2 B1: Schulten Auction, 1987, lot 308; b: 53/2 B2: Private Collection, 4.24 g, 6 h.

(branch), with plenty of obverse die links between the two kinds of cape. This indicates that the scrolling cape can be regarded as an embellished version of the flag cape. The re-appearance of this feature reinforces the idea that some mint personnel moved to Apulia from Sicily in 210/209 BC. The same phenomenon is found to a larger extent in group C.

D. Rare variants of the trapezoidal frame types

In spite of the previous typological definitions of the RRC 53/2 groups, variations are found that do not fit neatly into the sub-varieties of A and B. Some of these variations are described below.

a. A2 with extended hind legs



Figure 20 - Variant A2 with extended hind legs (a, b), compared to B1 (c). a: 53/2 A2: Inasta 52, lot 12, 4.21 g; b: 53/2 A2: Bibliothèque nationale de France, REP-1642 (Ailly), DA 50, 4.40 g, 10.44 sg; c: 53/2 B1: Bibliothèque nationale de France, REP-1647 (Ailly), DA 55, 3.91 g, 10.29 sg.

In figure 20, the obverses are from the “vertical profile” engraver, who apparently produced obverse dies used in groups A2 and B1. Even though the prototype’s crouching horse legs are not seen on these dies, the definitive reverse detail of the streaming cape places these examples in the sub-group A2; five dies are known that show this variation. The same applies to the reverses: the hands of two distinct engravers are found in B1.

b. B1 with crouching hind legs



Figure 21 - Rare B1 with Crouched hind legs (a), compared to RRC 78/1(b) and prototypical B1 (c). a: 53/2 B1: Heritage Numismatic Auctions, Auction 3020, lot 25482, 3.84 g, 10.24 sg; b: 78/1: Museo comunale di Forlì, Coll. Piancastelli no. 125, 4.15 g, 5 h, 1055 sg; c: 53/2 B1: eBay DE 2008, 4.25 g, 3 h, 10.43 sg.

The crouched horse posture with a flag cape is very rare in B1 and is clearly featured only by the die depicted in figure 21a. It shows the hind legs of the near horse bent in the same fashion as A2, but with a flag cape. This posture is found on *RRC* 78/1 (figure 21b) and is quite different from B1 prototype (figure 21c).

E. Group C

Group C is the largest group of the coins classified under *RRC* 53/2. More examples survive than for any other variety of the anonymous denarii. There are about 350 dies identified so far, and new dies continue to emerge. The eight coins illustrated on the plates of *RRC* include two varieties of group C (X-16 and X-18). Group C is full of major and minor variations, but the distinguishing characteristics are straightforward. It is the only group combining a “flag” cape style (or variant scrolling cape style, see below) with a two or three sided, or fully exergual frame around *ROMA*. The numismatic material can be subdivided into three main subgroups, C1, C2 and C3, as discussed in the following sections.

a. Sub-group C1, B/flag cape and large stars

Perhaps the most notable major design variation in this otherwise well-defined group is the alternative cape design: 39 dies are found with a B-cape (figure 22, top; or very rarely a Loop Cape, described below), the remaining 58 have a flag-cape (figure 22, bottom). This cape design variation is found in the earlier trapezoidal frame type B, which suggests a transition of this feature into group C. The prototypical obverse features a three sided open rectangle around *ROMA*.



Figure 22 - C1 prototypes. Top: 53/2 C1: Asta del Titano 41, lot 78, 4.36 g, 12 h, 10.44 sg; bottom: 53/2 C1: Numismatica Ars Classica, Auction 72, lot 412, 4.30 g.

All C1 specimens have large stars. Nearly half of the known reverse B-cape dies have an extra tail of the far horse visible. The way this tail is rendered is completely different from that found on A2. Instead of a group of fine horizontal dashes, the tail is represented by a simple line contour, without any detail (compare also with figure 13). With the assumption that the scrolling cape is a transition from the trapezoidal sub-group B2, we are placing the scrolling cape in the early stages of sub-group C1. Like the scrolling cape dies, the flag cape dies display the extra tail in some examples. This feature is found on the flag cape variety with less frequency, on only about 20% of the dies. In total, across both cape styles, we have counted 35 dies with the extra tail, out of a total of 93 dies. There is one known obverse die link between the B and flag capes (figure 23), confirming a common mint location for these two varieties and their joint position at the beginning of group C. This is also supported by the slightly lower fineness (figure 3) which fits well with a production just before the Tarentum booty.



Figure 23 - Obverse die link of scrolling and flag cape types. a: 53/2 C1: Kestner-Museum Hannover, Berger 482, 4.60 g, 9 h; b: 53/2 C1: Nomisma, Asta 24, lot 1373.

b. Sub-group C2, small stars /flag cape

The small stars flag cape sub-group is the most common variety of group C. The obverse includes various styles and the appearance of two lines above the visor is much more frequent. Two kinds of obverses are seen (figure 24, top and bottom). They differ in the griffon tufts and in the detail of the neck flap (refer to figure 31 and further discussion).

The capes usually have only three folds. Unlike the varieties of C3, where the near rider typically grasps the spear at the hip and the arm is bent like “<”, on sub-group C2 like “Γ”, being the rider’s upper arm held higher, almost horizontally, in such a way that the rider grasps the spear further back, away from the body. ROMA is typically seen in smaller letters, and the frame is usually longer, sometimes nearly exergual, with a short right vertical line.



Figure 24 - C2 prototypes. Top: principal obverse style, Orzivecchi 14 (Milano Coll. Museo Sforzesco, 198), 4.43 g, 10 h, 10.45 sg; bottom: subsidiary obverse style, Museo comunale di Forlì, coll. Piancastelli no. 90, 3.79 g, 5 h, 10.41 sg.

c. Sub-group C3, “spear head” sibling, exergual frame

The differences between C3 and C2 might to some degree seem subjective,⁴³ but there are a few characteristics that clearly distinguish them. The obverse style of the prototype examples of this variety is obviously from a different hand in most of the cases. It has a charming, almost elfin like face of ROMA, usually in very high style. The reverse has ROMA in very large letters, and the frame is exergual or nearly exergual on about all examples.

This sub-group is referred to as the “spear head” sibling because of the close similarity of obverse style between RRC 88/2b (figure 25a) and this variety of RRC 53/2. The reverse styles are quite different and no obverse die links are known between RRC 53/2 and RRC 88/2b (see below for a more detailed discussion of group C siblings).



Figure 25 - C3, Astarte Auction 19, lot 843.

43. The authors have discussed at length their disagreements on including and excluding certain coins from this varietal group. As with any divisional definitions of ancient numismatics, there are some examples that clearly fall on the boundaries. That there is a separation of this variety from the others is not controversial, and this is borne out by the hoard evidence.



Figure 25a - RRC 88/2b, 53/2 C3: Numismatica Ars Classica 64, lot 938.

d. Rare variations

A few observed variations, known from only a handful of examples are also worth noting.

- **C1 variant:** C-cape and small B-cape. This variation, which can be regarded as sub-group of C1, comprises a C-, or loop cape, because the cape ends with a single loop with a shape of a C. It is known from just four dies and five specimens. Another six dies which may be related with similar obverse styles, but with very small scrolling capes (figure 26). All are characterized by large Roma heads, big griffon tufts, the slightly leaping posture of the horses, and three-sided rectangular frames for the legend.



Figure 26 - Two examples of single loop-end cape (C-cape) and a similar style example (at right) with a small scrolling cape. a: 53/2 C1var: M. Hervera Auction 71, lot 2211, 3.81 g, 6 h, 10.44 sg; b: 53/2 C1var: Montecarotto hoard (RRCH 175) 330-26, 3.75 g, 2 h; c: 53/2 C1var: Bibliothèque nationale de France, REP-1650 (Ailly, DA 58, 4.72 g, 6 h, 10.50 sg.

- **C2 variant:** long feathers, long wavy capes. Figure 27 illustrates the stylistic details which make this small variety distinct in the C group; it is known from four specimens, produced by three obverse and reverse dies. This variant has fewer obverse griffon tufts, and they are farther apart from each other. The reverse frame is almost exergual, with the right line very short and at an acute angle to the top line. Roma's head is small and the wing feathers are quite long, so that they cross the border of dots. The reverse has a cape style completely different from any other RRC 53/2; a similar fashion is just found on some RRC 44/5 A1 dies. The reverse die used for the British Museum example (figure 1, no. 18) is the same as that

from the Cuenca hoard, and features a variation of the scrolling cape with very small loops at the end of the cape (almost invisible). This indicates that this unique cape style is derived from B-capes.



Figure 27 - Long feathers, long wavy cape variation. a: 53/2 C2var: Museo comunale di Forlì, coll. Piancastelli no. 94. 3.71 g, 12 h, 10.43 sg; b: 53/2 C2var: Cuenca hoard, 19, 4.45 g, 2 h.

- **C3 variant:** “spear head” scrolling capes. The scrolling cape variety is relatively common with rectangular frame and large stars. It is very rare with the C3 style and exergual line above ROMA. Six known examples of five obverse and five reverse dies are known, and two are shown in figure 28a-b (from the Cut-denarius hoard).



Figure 28 - Spear head scrolling capes. a. 53/2 C3var: M. Hervera Auction 78, lot 2527, 3.73 g; b. 53/2 C3var: Cut-denarius hoard, no. 8, 4.47 g, 3 h (we thank Andrew McCabe for the image).

- **C4 variant:** streaming cape. The example from the NFA 27 sale (figure 29) clearly has a sub-group C3 obverse (although with a larger helmet), and a reverse with fully exergual frame. Unlike C3, it has large stars, and unlike any other group C coin, it displays a streaming cape instead of a flag or scrolling cape. The coin is unique (see below for a contextualization with RRC 88/2b).



Figure 29 - Sub-group C3 with streaming cape, 53/2 C4var: Numismatic Fine Arts Auction XXVII, lot 261, 4.53 g, 3 h.

e. Group C: numismatic contexts

Examples of group C are found in all but one of the early hoards that lack either group D or E, (and lacking other types with symbols, which can be regarded as later) including Tivissa 4, Licata, Ucria, Tivissa-Noguera, Valera, Split, Tarquinia, X4, Orzivecchi, Cut-Denarius, G-, B-hoards and Cuenca. They are absent only from Tivissa 1, which included just A2 and B1 coins.

The beginnings of the C group are characterized by three-sided rectangular frames. Many dies show an angled top-right corner (see figure 7c), and have large stars, B- or flag capes, and with or without a visible extra tail from the far horse. Later in C3, the three-sided frame becomes a two-sided frame with a top bar and a vertical right bar. Many engravers worked on this series, and changed the frame style gradually over time. Eventually the frame became exergual in some dies, or nearly so, with a long top line and a very short line at right; in some cases, just a small tick at the right end of the top line. As the die production progressed, the stars became very small, to the point that they are in some cases just a dot. Later in the series, in groups C2 and C3, the extra tail completely disappears.

As an Apulian origin is being suggested for groups A and B, an Apulian mintage for group C is also probable, based on the transitional stylistic links to groups A and B, and the consideration that the greatest need for coinage was near to the theater of war.

Because of the lack of die links between the groups in the corpus, it is possible that some sub-groups of group C were manufactured in different workshops. The Apulian theatre of war was large and there might be several minting places. Alternatively the C sub-groups might represent a later development of the mintage and the lack of die links is largely justified by the very low coverages of these groups.

f. Group C stylistic siblings

Of the many styles in group C, the closest stylistic types with symbols are *RRC* 89/2 (with symbol “club”) and *RRC* 88/2b (with symbol “spear head”). The similarities in styles are striking, for C2 and C3 respectively. We believe that the club series is earlier than the spear head series. They appear to be produced in similar quantities. In fact the assembled corpus includes 146 specimens for both types; for *RRC* 89/2 there are 88 obverse and 85 reverse dies, while for *RRC* 88/2b 65 obverse and 58 reverse dies are found. In figure 30, the comparison of weight and SG averages are reported. One can observe that both weight and silver standard are better for the club series, suggesting at least a different time.

One of the largest known hoards of early Roman Republican silver, the M-hoard, contained over a thousand early denarii. It was deposited later, featuring issues as late as *RRC* 182 (griffon) and *RRC* 187 (PVR). This hoard

has nearly equal quantities of the two large group C anonymous siblings of the spear head (*RRC 88/2b*) and club series (*RRC 89/2*). Note also the same fineness and weight for C2 and club series. This detail, together with the two scrolling cape dies found in the *RRC 89/2* club type (see figure 31), suggests an earlier date for the club issue, consistent also with their representation in hoards.⁴⁴

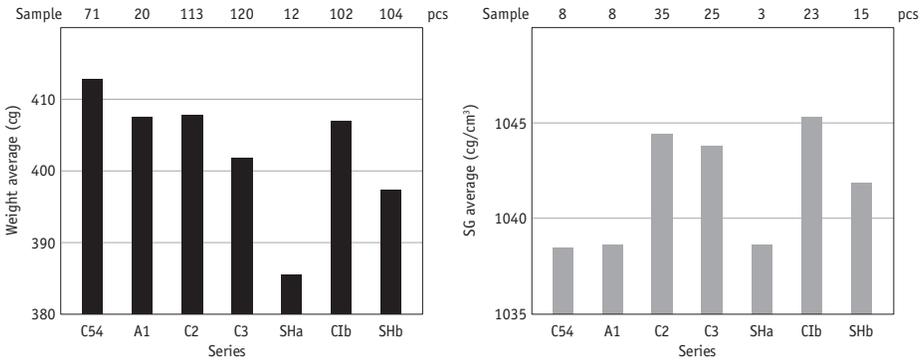


Figure 30 - Weight and SG histograms of some *RRC 53/2* groups and related series.

g. Club, *RRC 89/2*

Many examples of *RRC 89/2* would be indistinguishable from *RRC 53/2* sub-group C2, except for the presence of a club symbol. They are essentially the same type. It is interesting to note that the only two denarii in the large Licata hoard (tables 2, no. 17) are a C3 and a *RRC 89/2* piece. As with the other *RRC 53/2* sibling relationships, there are no known obverse die links with *RRC 89/2*.

In figure 31 we compare the different club (top) and C2 (bottom) styles. The B-cape (a-b), and the two griffon tuft renderings (c-d and e-f) are shown. It is interesting to note that only in C2 and *RRC 89/2* is the latter particular griffon tuft rendering found (figure 31e-f), composed by many and marked triangles, and a disconnected neck-flap.

44. Perhaps the most important group C hoard is Orzivecchi, which contains no varieties believed to be later than group C. It contained eight *RRC 53/2* sub-group C1 and C2 but no sub-group C3 anonymous spear head siblings, and only one *RRC 88/2b* example. None of these nine coins show any substantial wear; this supports the proposal that *RRC 88/2b* and C3 are the latest in group C, and this proposal is also supported by evidence in Spanish hoards.



Figure 31 - RRC 89/2 (a, c, e) and RRC 53/2 (b, d, f). a: 89/2: Numismatica Ars Classica, Auction 83, lot 255, 420 g, 9 h, 10.54 sg; b: 53/2 C1: Museo comunale di Forlì, coll. Piancastelli no. 75, 4.06 g, 8 h, 10.37 sg; c: 89/2: Classical Numismatic Group, Triton XVII, lot 494, 4.33 g; d: 53/2 C2: Museo comunale di Forlì, coll. Piancastelli no. 72, 4.08 g, 5 h, 10.54 sg; e: 89/2: Museo comunale di Forlì, coll. Piancastelli no. 124, 4.61 g, 9 h, 10.54 sg; f: 53/2 C1: Museo comunale di Forlì, coll. Piancastelli no. 46, 4.79 g, 6 h, 10.41 sg.

h. Spear head, RRC 88/2b

As can be observed in figure 32c, the unique cape of RRC 88/2b, ample and extending up to the line border, transitions to a full streaming cape, known on several RRC 88/2b dies (figure 32d). Instead, the sub-group C3 features exclusively a flag cape, with the single known exception of the NFA coin, shown



Figure 32 - Comparing RRC 53/2 C3, RRC 88/2 and RRC 53/2 D2. a: 53/2 C3: Classical Numismatic Group eAuction 393, lot 219, 3.65 g, 1 h; b: 53/2 C3 var.: Numismatic Fine Arts Auction XXVII, lot 261, 4.53 g, 3 h; c: 88/2b: Freeman & Sear Mail Bid Sale 14, lot 339, 4.41 g, 6 h (ex S-Hoard no. 61); d: 88/2b: Aurea Numismatika Auction 55, lot 231; e: 53/2 D2: eBay DE Jan. 2014, no. 121250542748 (ex Künker), 4.18 g, 9 h, 10.48 sg; f: 53/2 D2: Harlan J. Berk Buy or Bid Sale, lot 172, 4.30 g.

again in figure 32b for an easier comparison. The reverse style of this unique specimen with a streaming cape is nearly identical to coin 32d, except for the symbol. The transition to streaming cape on RRC 88/2b suggests a later date, because the streaming cape is used in later groups D and E, and in all the subsequent issues of the second century BC. Moreover, on several dies of RRC 88/2b the visor is more or less curved, especially in combination with a streaming cape (figure 32d). Curved visors coupled with a streaming cape are the two characteristic features of group D2 (figure 32 e-f).

F. Group D

Group D is characterised by a revival of the streaming cape, first adopted in sub-group A2. The reverse type of group D, and subsequently group E, are essentially identical, across both groups, with a streaming cape of the same style, and a consistent, three sided rectangular frame around ROMA, closed at left on the line border. The differences fall on the obverse styles. Hoard evidence tells us that group D is later than C, but earlier – perhaps much earlier – than group E. Of the three major varieties in group D, Crawford chose to depict D2 in plate X-17 and D3 in X-19. Group D1 is very rare, and was not depicted in RRC plates. Known D specimens are heavy, with an average weight of 4.07 g (see figure 3), which is the highest of all the 53 groups. Its SG average is also high. This suggests a later production, when silver had evidently become readily available and the financial crisis had ended, possibly thanks to the booty connected to the Metaurus victory over Asdrubal in 207 BC.⁴⁵

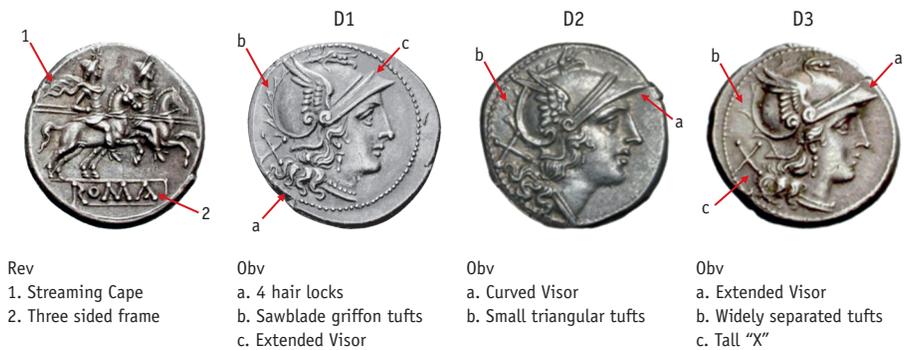


Figure 33 - Group D Reverse and Obverse Prototypes D1: Asta del Titano 14, lot 62; D2: Noble Numismatics Auction 99, lot 3459; D3: Numismatica Ars Classica, Auction P, lot 1631, 4.22 g.

45. Livy XXVII, 49.7.

Group D is quite scarce compared to the other groups, with about 130 known examples, produced by a roughly equal number of about 100 obverse and 100 reverse dies. No die links are known between the three groups, which may be a sequential production of one mint, or nearly contemporary products of different mints; in both cases, the 207-206 BC timeframe is the most probable. The differentiation in three sub-groups is dictated by the different obverse designs, which vary significantly, especially when examined side-by-side (figure 33). Dating group D after group C is supported by hoard evidence, weight and fineness data, and is also strengthened by a single hybrid coin (figure 34) of good silver (10.58 sg), and good weight (4.17 g). Its reverse is a C3, while the obverse is a D3 in all diagnostics (extended visor, separated tufts, large X).



Figure 34 - Group D3 obverse and group C3 reverse hybrid denarius. Münzkabinett Berlin inv. 18225774 (ex Haebelin), 4.17 g, 10.58 sg.

a. Sub-group D1, four hair locks

D1 is one of the rarest varieties of the RRC 53/2 coins, with 11 examples currently known. The hallmark diagnostic of D1 is the four locks of hair below the neck-flap, which is a typical feature of the hair in the Cornucopia series RRC 58/2. Although stylistically D1 is perhaps closest to group E, its engraving looks superior to all other D or E dies. Moreover, its reverse has a small difference to all the other streaming cape D's and E's in the forearm of the near rider, which is more vertical. D1 is placed first in group D because, in spite of its rarity, it is the sole group D example in the S-Hoard, which otherwise contains only groups A, B, and C. Another example is also found in the Piancastelli hoard along with a single D2 example. Average weight of 9 specimens is 4.07 g, which perfectly matches the average for all group D varieties, further separating it from group E.



Figure 35 - Group D1 prototype. Jean Elsen & ses Fils Auction 119, lot 306, 4.33 g, 8 h, 10.45 sg.

b. Sub-group D2, curved visor

Although the majority of the examples of this type are characterized by the curved bottom edge of the visor, a few examples depict a straight visor (figure 36), but overall style is consistent with D2.



Figure 36 - Group D variations with curved and straight visor. a: 53/2 D2: Artemide Asta XLVII, lot 88, 4.21 g; b: 53/2 D2: London Ancient Coins Auction 29, lot 95, 4.09 g, 6 h.

Once the reverse type has been confirmed, the primary diagnostic of D2 is the shape of the tufts, which are close together and triangle shaped, pointing outward from the helmet. This feature is perhaps less noticeable than the visor, but is consistent across all coins. In about half of the obverse dies the hair-binding is visible and is very small; this can be seen in figure 32e, while in 32f the cord is hidden.

c. Sub-group D3, tall “X”

This “extended visor” type is known from the RRC plate X-19, which depicts an example, at the Bibliothèque nationale de France⁴⁶, with the top edge of the visor extending noticeably outward from the helmet. In reality, this exaggerated extension occurs in less than half of the known dies. Examples with the less extended visor can be difficult to distinguish from group E. A more reliable diagnostic feature is the large and elongated “X” mark of value. In addition, both the X mark of value and the reverse “ROMA” is rendered with fine, thin lines, often with tiny “o”. These elements on examples with less extended visor differentiate D3 from group E. While the griffon tufts are similarly sparse and widely separated in the two groups, the obverse style is distinct from group E, clearly rendered by different engravers, but difficult to differentiate descriptively.

46. P. Debernardi heartily thanks Dominique Hollard and Frédérique Duyrat for their kind hospitality and Oliver Legrand for providing some of the images.



Figure 37 - Group D variations with extended and close visor top. a: 53/2 D3: Bibliothèque nationale de France, REP-1676 (Ailly), DA 84, 4.58 g, 6 h, 10.51 sq; b: 53/2 D3: Auctiones 10, lot 87, 4.55 g.

G. Group E

Group E is the second largest group of RRC 53/2, and clearly the latest. It appears for the first time in the K-hoard, where it is the only represented group of RRC 53/2, except for a single example of group C. The K-Hoard is a definitely later hoard, compared to those discussed so far. It contains examples of later issues, including 20 specimens of RRC 167. An additional and stronger argument for a later date is also the much lighter average weight of 3.88 g for group E, compared with weight averages above 4.00 g of the other groups.

Stylistically, this group is very close to both D1 and D3. The primary difference with D1 is that all group E coins have three locks of hair, where D1 has four. It can be differentiated from D3 by the bolder lines in the “X” mark of value and the reverse ROMA. Because of the size and number of variations of group E, there are few features that differentiate this group from sub-group D3. However, the general features are a smaller head of Roma, and especially, a smaller helmet relative to the size of the head for group E. There are a few exceptions in group E with large round heads, but these are unusual. Two major stylistic variations are seen most often: the star/prow sibling E1, and the more angular E2 sub-group, stylistically close to the crescent (RRC 57/2). All the evidence points to a later date of group E, at least after 206 BC, which could also mean a production in the mint of Rome.

a. Sub-group E1



Obv

a. Relatively small helmet

b. Widely separated griffon tufts

c. “X” in heavy lines

Figure 38 - Sub-Group E1 prototype. Numismatik Lanz, Auction 159, lot 237.

The predominant sub-group E1 style is identical to the star series (*RRC 113/1*) or the prow series (*RRC 114/1*). This sub-group is usually seen with griffon tufts pointing rather upward (instead of outward). As with all other *RRC 53/2* varieties, no obverse die links have been discovered so far between the anonymous and the symbolled siblings, but the stylistic similarities are immediately noticeable.

This is illustrated in figure 39, where two examples of the star and rostrum tridens series are placed side by side with an E1 specimen. This is the only case when the concept of siblings applies in full; all *RRC 113* and *114* could not be distinguished stylistically from any E1 specimen if not for the symbol.



Figure 39 - *RRC 53/2* E1 and its sibling *RRC 113/1* (star) and *RRC 114/1* (rostrum tridens). a: 53/2 E1: Private Collection, 4.22 g, 8 h; b: 113/1: Numismatica Ars Classica 78, lot 542, 3.78 g; c: 114/1: Numismatica Ars Classica 92, lot 271, 4.12 g.

One interesting engraving detail of the legend is seen only on the star and E1 series; this is shown in figure 40 and it illustrates a very peculiar way of mixing the letters with the frame (see enlarged images).



Figure 40 - Details of the legend on *RRC 53/2* E1 and its symbolled counterpart *RRC 113/1* (star). Top: 53/2 E1: Classical Numismatic Group, Triton XIV Auction, lot 571, 5 h, 4.21 ; bottom: 113/1: Münzen & Medaillen GmbH Auction 9, lot 372, 3.52 g.

b. Sub-group E2

E2 is smaller than E1 (about 30 die pairs vs. 120 for E1; see table 4), but still the second most numerous style in group E, closest in obverse style to *RRC 57/2*, the first crescent series (figure 41). There are many group E variations

but none that are homogeneous across large numbers of coins and often, just single variant dies (13 altogether, RRC plate X-20 being one of them; see later section on variations).



Figure 41 - Comparison of RRC 57/2 (Crescent) with RRC 53/2 sub-group E2. a: 53/2 E2: Numismatica Ars Classica Auction 61, lot 192, 3.88 g; b: 57/2: Numismatica Ars Classica Auction 61, lot 218, 4.54 g.

This variety is characterized by large eyes, an angular profile, and usually, smaller, more triangular griffon tufts, which tend to point outward rather than upward as on E1 and RRC 57/2. The similarity between E2 and RRC 57/2 is pointed out here as an item of interest but does not have any other numismatic relevance. In fact, RRC 57/2 proves to be earlier than E2, as shown by hoard evidence (table 2) and weight standard (4.03 g over 255 specimens). Moreover, the wing on RRC 57/2 points upward and its style is generally finer than E2. The E2 group is kept separate because the dies of the two groups do not mix, except for a single pair (figure 42), which in any case shows that E2 is a continuation of E1, in consideration of its small weight reduction.



Figure 42 - Sub-group E1 and E2 die link. a: 53/2 E1: Ira & Larry Goldberg Auction 5, lot 3393, 3.88 g (ex Cederlind Auction 121, lot 122); b: 53/2 E2: Numismatica Tintinna Asta 9, lot 1002, 3.87 g, 10.46 sg.

c. Scarce variations of group E

Sorting “extended visor” types between group D and group E is very difficult. There are a number of coins stylistically belonging to group E with an extended visor similar to the sub-group D3 prototype (figure 43). This feature

appears on both the star sibling and the crescent sibling varieties; however the shape of the visor is different, with group E having a longer and more pointed bottom peak.



Figure 43 - Sub-group E1 and E2 with extended visor tops. a: 53/2 E1: Bibliothèque nationale de France, REP-1687 (ex Ailly), DA95, 3.38 g, 10.47 sg; b: 53/2 E2: Roma Numismatics, Auction 5, lot 501, 3.66 g, 6 h.

Contrary to the norm of a generally smaller head on group E, there are a few known coins with noticeably larger heads of Roma (figure 44).



Figure 44 - Rare Large head group E variation. a: 53/2 E1: Nomisma Auction 24, lot 1369; b: 53/2 E1: Numismatica Ars Classica Auction 40, lot 408, 4.34 g.

H. Group E_q, including the RRC 53/2 quinarius

One of the supporting arguments for dating RRC 53/2 later than RRC 44 is that the latter includes quinarii and sestertii, unlike the even larger issues of RRC 53. RRC 53 does not list a quinarius, because the four known anonymous quinarii with peaked visor⁴⁷ emerged after its publication. These quinarii are clearly part of the RRC 53/2 series and were produced with three dies. Their extreme rarity does not change the general picture presented above, i.e. that at the time of production of RRC 53/2 the quinarius was no longer a common denomination. It is not easy to explain such a small production of quinarii, and the same holds true for the other later quinarii of the owl (RRC 135),

47. WITSCHONKE 1998.

prawn (RRC 156) and P. MAE (RRC 138) series, known by only one specimen each. The 53/2 Eq sub-group, stylistically similar to E1 and E2, comprises a few denarii dies as well (figure 45). However there is no mixing of dies with other E members, therefore the different name Eq is adopted for these dies. This breaks the general rule of the simple letter progression because this group was identified last and it deserves a special name because of its unique characteristic of having associated quinarii. So we classify this as E, but add a “q” to imply the quinarius group. The associated denarii are also rare. Only six specimens are known, produced by two obverse and 3 reverse dies.



Figure 45 - Sub-groups Eq1 denarius and Eq2 quinarius examples. a: 53/2 Eq 1: Naville Numismatics, Auction 22, lot 383, 4.07 g, 10.48 sg; b: 53/2 Eq 1: Numismatica Ars Classica AuctionK, lot 1425, 3.79 g, 8 h; c: 53 Eq2: Trustees of the British Museum, Hersh 2002,0102.208, 1.94 g, 2 h; d: 53 Eq2: Private collection, 2.05 g.

I. Other Scarce and Rare Anonymous Types of the Second Punic War Period

a. Group K

Group K is not technically part of RRC 53/2; however the overall style is close to sub-group E1 and these rare coins, when encountered in the trade, would almost certainly be attributed to RRC 53/2. There are three known examples of this extremely rare variety, produced by one obverse and two reverse dies (all shown in figure 46). It is characterized by a slightly different execution of style on both obverse and reverse and has no stars above the Dioscuri. This is unique to all of the early Dioscuri type series and cannot be an engraver’s mistake, because the stars are absent from both of the two reverse dies. The obverse is also distinctive, in that Roma’s hair is unbound, a characteristic unseen in any other RRC 53/2 variety. Of the known examples, two came

from the K-hoard (produced by the same pair of dies), from which the name of the group originates. All known examples use the “modern” A in the ROMA legend. Such an attribute suggests that this series might be much later, and thus a non-consecutive letter K is also appropriate. The extremely high SG of the example measured (figure 46) and the fact that all the coins have 12 h die axis is to be noted.



Figure 46 - Group K dies: a: K: Private collection, 4.29 g, 12 h; b: K: Agora Auctions Sale 65, lot 131, 4.29 g, 12 h, 10.56 sg (ex K-hoard, no. 50).

b. Group 57A

Figure 47 illustrates the last group that emerged from our die study. It is also named differently from the main corpus because most probably it is a small group on its own and not part of the RRC 53 family. It is known in only three specimens (a and b share the same dies) with two different pair of dies (both shown in figure 47). Both reverses show a very “geometrical” arm of the Dioscurus holding the spear.

Their low weight and uneven SG suggest a marginal and later production. It is probably inspired by the RRC 57/2 series, which it resembles closely in its reverse, with its typical small extra tail (always present in RRC 57/2), and squat horses.



Figure 47 - All examples of 57A. a: 57A: Thesaurus Asta 7, lot 100, 3.40 g, 12 h, 10.19 sg; b: 57A: Maserà hoard (RRCH 162) 203, 3.26 g, 12 h; c: 57A: Numismatik Lanz, eBay 11 Dec. 2013, no. 231114284530, 3.40 g, 10.43 sg.

7. Conclusions

The thorough examination of a large group of anonymous coins classified as *RRC 53/2* suggests several recognizably distinct series, which are separated by location and/or time. These different series have clear and distinct stylistic patterns and the absence of any die link in a very large sample of coins confirms they are different emissions, most of which are separated by time and mints. The groups and sub varieties are separated chronologically by hoard evidence, much of which has emerged in the last few decades, and has been studied and documented with images that allow stylistic differentiations to be made that were not possible before. The information presented here supports the claim that groups A, B, and C came first, group D a little later. Due to their fairly homogeneous weight standard at around 4.07 g, they might all have been produced from about 210-209 to 206 BC. Group E is definitely later, not only by weight standard, but also hoard evidence. Because a higher number of unrecovered hoards can be interpreted as a war-time phenomenon, the relatively large number of hoards closing with the early groups suggests these issues were all produced during the apex of the Second Punic War. The complete absence of group E coins in hoards until those closing after the end of the war suggests that group E was a later issue, most probably made at the Rome mint, near the end of the war. In fact we believe that the coinage production moved to Rome as soon as the war need relaxed, which might have begun around 205 BC.

A relation between anonymous coins which show the same style as those with symbols seems very likely, because of the near identical style, their similar numbers, and their production at the same period of time. In the absence of die links identified between coins with and without symbols, the nature of this relationship remains uncertain, and the significance of the symbol (or lack of it) is still open to speculation. However, the arguments presented above suggest close temporal and location relationships.

Some notable stylistic details of groups A, B, and varieties C1 and C2 are found in no other issues except those known to have links with Apulian and Sicilian series, which is discussed in depth in the paper. It is suggested that this can be explained by the movement of Sicilian mint personnel to Apulia, following Claudius Marcellus, which, if correct, would provide the chronological milestone of 210 BC for the beginning of *RRC 53/2*. In fact the first groups (A to C) of *RRC 53/2* not only bring Sicilian stylistic features, but many Apulian features as well. In combination with the need for coinage in close proximity to the theater of war, this suggests a re-thinking of the location of the mint producing these early issues: we suggest here that it was in Apulia/Campania, rather than in Rome.

We argue that the first groups, A1 and B, were produced in Apulia from about 210 BC, possibly in more than one location. Group C may be seen as a continuation of group B and might well have been made from the large booty taken at Tarentum. This might also be supported by its slightly better silver quality and weight, compared to groups A and B. So, we suggest a *terminus post quem* of 210 BC (the end of the war in Sicily) and a *terminus ante quem* of 206 BC (the end of the war in Spain) for groups A, B, C1 and C2, relying on the Tivissa hoard evidence. Group D seems in part related to group C, in view of the hybrid Berlin piece and we believe comes just after it. Group E surely is the last one, produced at a lower weight standard and possibly in the mint of Rome toward the end of the war.

Bibliography

- ALBARÈDE et alii 2016: F. ALBARÈDE, J. Blichert-Toft, M. Rivoal, P. Telouk, A glimpse into the Roman finances of the Second Punic War through silver isotopes, *Geochemical Perspectives Letters*, 2016 (2), pp. 127-137 (doi: 10.7185/geochemlet.1613).
- BONACIC MANDINIC 1989: M. BONACIC MANDINIC, A hoard of Roman Republican denarii in the collection of the archaeological museum in Split, *Num. Vjesti*, 1989, pp.15-19.
- CALTABIANO 1990: M. CALTABIANO, Le prime emissioni dell'oro marziale romano: il tesoretto di Agrigento 1987, *Quad. Ist. Arch. Messina*, 5, 1990, pp. 1-23.
- CRAWFORD 1969 = RRCH: M. H. CRAWFORD, *Roman Republican Coin Hoards*, Oxford, 1969.
- CRAWFORD 1974 = RRC: M. H. CRAWFORD, *Roman Republican Coinage*, Cambridge, 1974.
- DEBERNARDI 2008: P. DEBERNARDI, An investigation about the physical properties in the Roman Republican coinage: Part I – weights, *The Celator*, February 2008, pp. 24-31.
- DEBERNARDI 2011: P. DEBERNARDI, Cr 44 e le origini del denario, *Panorama Numismatico*, 264, pp. 5-37.
- DEBERNARDI 2014: P. DEBERNARDI, The Orzivecchi Hoard and the Beginnings of the Denarius, *NC*, 2014, pp. 75-89.
- DEBERNARDI 2016a: P. DEBERNARDI, Outcomes and challenges in die studies of the Second Punic War Roman silver series, in *Neuere Forschungen zur römisch-republikanischen Numismatik. Akten des Kolloquiums Dresden, 19.-21. Juni 2014*, F. Haymann, W. Hollstein, M. Jehne (eds.), (Nomismata 8), Bonn, 2016, pp. 29-48.
- DEBERNARDI 2016b: P. DEBERNARDI, An early Roman Republican denarius hoard in the Piancastelli Collection?, *AJN*, 62, 2016, pp. 31-46.
- DEBERNARDI et alii 2017: P. DEBERNARDI, J. Corsi, I. Angelini, E. Barzagli, F. Grazzi, A. Lo Giudice, A. Re, A. Scherillo, Average and core silver content of ancient debased coins via neutron diffraction and specific gravity, *Archaeological and Anthropological Sciences*, March 2017 (DOI 10.1007/s12520-017-0464-y).
- DEBERNARDI forthcoming: P. DEBERNARDI, Tivissa 1, Drieves, Valera Armuña de Tajuña e X4 (Cuenca-Ciudad Real): un aggiornamento dei tesoretti romani repubblicani del fronte iberico, forthcoming.
- DEBERNARDI, BRINKMAN 2016: P. DEBERNARDI, S. BRINKMAN, An Early Roman Republican Denarius Hoard, *NC*, 2016, pp. 1-9.

- DEBERNARDI, CAMPANA forthcoming: P. DEBERNARDI, A. CAMPANA, I primi aurei del denarius, forthcoming.
- DEBERNARDI, DAVIS forthcoming: P. DEBERNARDI, P. DAVIS, A Second Punic War Denarius Hoard, NC, 2018, forthcoming.
- ESTY 2011: W. ESTY, The geometric model for estimating the number of dies, in *Quantifying Monetary Supplies in Greco-Roman Times*, F. de Callataj (ed.), Bari, 2011, pp. 43-58.
- GRUEBER 1970: H. A. GRUEBER, *Coins of the Roman Republic in the British Museum*, London, 1970.
- HERSH 1972: C.A. HERSH, A Quinarius Hoard from Southern Italy, NC, 1972, pp. 75-88.
- HERSH 1976: C. A. HERSH, A tri-denominational hoard of early Roman silver coins from Sicily, *ANSMN*, 21, 1976, pp. 59-65.
- HERSH 1977: C. A. HERSH, Notes on the Chronology and Interpretation of the Roman Republican Coinage: Some Comments on Crawford's "Roman Republican Coinage", NC, 1977, pp. 19-36.
- MCCABE 2005: A. MCCABE, A hoard of Cut Roman Republican Cenarii from the Second Punic War, in *Fides. Contributions to Numismatics in Honour of Richard B. Witschonke*, P. van Alfen, G. Bransbourg, M. Amandry (eds.), New York, 2015, pp. 221-238.
- MANGANARO 1981-1982: G. MANGANARO, Un ripostiglio siciliano del 214-211 a.C. e la datazione del denarius, *JNG*, 31/32, 1981-1982, pp. 37-54.
- RIZZO 2007: A. RIZZO, La Sicilia e Roma: una zecca unica per l'oro 'marziale', *Sicilia Antiqua*, 4, 2007, pp. 105-131.
- SALAMONE, CACCAMO CALTABIANO et alii forthcoming: G. SALAMONE, M. CACCAMO CALTABIANO et alii, Il tesoretto di Licata-Finziade 1998 e le emissioni iniziali del denarius tra Numismatica e Archeologia, in *Numismatica e Archeologia. Monete, stratigrafie e contesti. Dati a confronto. Atti del I Workshop Internazionale di Numismatica, Roma 28-30 settembre 2011*, forthcoming.
- SCHAEFER 1998: R. SCHAEFER, More evidence for the early denarius, in *Coins of Macedonia and Rome: Essays in Honour of Charles Hersh*, A. Burnett, U. Wartenberg, R. Witschonke (eds.), London, 1998, p. 135.
- SYDENHAM 1952: E. A. SYDENHAM, *The Coinage of the Roman Republic*, London, 1952.
- TARRADELL 2003-2004: N. TARRADELL-FONT, *Les monedes del Castellet de Banyoles de Tivissa (Ribera d'Ebre, Catalunya). Noves troballes de les excavacions 1998-1999 i revisió de les anteriors*, *Fonaments*, 10-11, 2003-2004, pp. 245-320.
- TARRADELL, NOGUERA 2009: N. TARRADELL-FONT, J. NOGUERA, Avance al estudio de las monedas del Camí del Castellet de Banyoles (Tivissa, Tarragona), in *XIII Congreso Nacional de Numismática. Moneda y arqueología*, A. Arévalo González (ed.), Madrid/Cadix, 2009, pp. 143-162.
- VILLARONGA 1984: L. VILLARONGA, Tresor de la segona guerra punica de la provincia de Cuenca, *NAC*, 13, 1984, pp. 127-137.
- WITSCHONKE 1998: R. WITSCHONKE, Some late 'early' Republican quinarii, in *Coins of Macedonia and Rome: Essays in Honour of Charles Hersh*, A. Burnett, U. Wartenberg, R. Witschonke (eds.), London, 1998, pp. 137-138.
- WITSCHONKE 2008: R. B. WITSCHONKE, The H denarius rehabilitated, NC, 2008, pp. 22-25.

