# The Enna hoard and the silver coinage of the Syracusan democracy 

Autor(en): Burnett, Andrew<br>Objekttyp: Article<br>Zeitschrift: Schweizerische numismatische Rundschau = Revue suisse de numismatique $=$ Rivista svizzera di numismatica

Band (Jahr): 62 (1983)

PDF erstellt am: 24.05.2024
Persistenter Link: https://doi.org/10.5169/seals-174769

## Nutzungsbedingungen

Die ETH-Bibliothek ist Anbieterin der digitalisierten Zeitschriften. Sie besitzt keine Urheberrechte an den Inhalten der Zeitschriften. Die Rechte liegen in der Regel bei den Herausgebern.
Die auf der Plattform e-periodica veröffentlichten Dokumente stehen für nicht-kommerzielle Zwecke in Lehre und Forschung sowie für die private Nutzung frei zur Verfügung. Einzelne Dateien oder Ausdrucke aus diesem Angebot können zusammen mit diesen Nutzungsbedingungen und den korrekten Herkunftsbezeichnungen weitergegeben werden.
Das Veröffentlichen von Bildern in Print- und Online-Publikationen ist nur mit vorheriger Genehmigung der Rechteinhaber erlaubt. Die systematische Speicherung von Teilen des elektronischen Angebots auf anderen Servern bedarf ebenfalls des schriftlichen Einverständnisses der Rechteinhaber.

## Haftungsausschluss

Alle Angaben erfolgen ohne Gewähr für Vollständigkeit oder Richtigkeit. Es wird keine Haftung übernommen für Schäden durch die Verwendung von Informationen aus diesem Online-Angebot oder durch das Fehlen von Informationen. Dies gilt auch für Inhalte Dritter, die über dieses Angebot zugänglich sind.

## ANDREW BURNETT

## THE ENNA HOARD AND THE SILVER COINAGE OF THE SYRACUSAN DEMOCRACY

In the Inventory of Greek Coin Hoards a brief notice appears about a hoard said to have been found near Enna in Sicily in 1966 (IGCH 2232). The exact find spot of the hoard is not known, but it is thought to have been a little north east of Enna, between Assoro and Leonforte. For convenience, however, I shall continue to refer to it as the Enna hoard.

The hoard is important for redating a number of Punic and Sicilian issues, and because it appears to create a problem for the dating of the Roman denarius. This problem is, however, more apparent than real. The hoard also throws some light on the scale of minting in Sicily during the Hannibalic War; it will be seen that the coinages of Acragas, the Sikeliotai and Syracuse are all relatively small. Today we get a false picture of their size due to the sheer number of surviving specimens, but it can be shown that there are in fact very few dies involved, and we may suppose that the coins are common today because so many hoards containing them were deposited in the War and subsequently recovered in modern times. The pattern of dies reveals that the Siculo-Punic coinages are a little, but not very much, bigger, and that all are tiny in comparison to the quantity of Roman coins entering Sicily and being minted there.

I propose to list the hoard with a fairly brief commentary on each group of coins, then discuss the problem of the date of the hoard's deposition, and finally treat more fully the coinage of the Syracusan democracy ${ }^{1}$.

## I. Catalogue of the hoard

## ACRAGAS

| Obv.: <br> Rev.: | Eaureate head of Zeus, right |
| :--- | :--- |
| 1. 3.38 T on reverse <br> 2. T on reverse |  |
| $\left[\begin{array}{ll}\text { As 1-2, but eagle facing right }\end{array}\right.$ |  |
| 3. 3.34 A on reverse ${ }^{2}$ <br> 4. A on reverse <br> 5. 3.56 A on reverse <br> 6. 3.36 B on reverse ${ }^{3}$ |  |

[^0]|  | 7. | $\Gamma$ on reverse ${ }^{4}$ |
| :---: | :---: | :---: |
|  | 8. 3.28 | $\boldsymbol{\Delta}$ on reverse ${ }^{5}$ |
|  | 9. 3.20 | $\Sigma$ on reverse ${ }^{6}$ |
|  | 10. 3.24 | E on reverse ${ }^{7}$ |
|  | 11. | E on reverse |
|  | 12. | E on reverse |
|  | 13. 3.15 | E on reverse |
|  | 14. | E on reverse (obv. die in different state). |

The coins in this hoard account for nearly the whole die sequence of Acragas. The only other varieties I have noted are

| Obv. | Rev. | Example |
| :---: | :---: | :---: |
| - ${ }^{\text {I }}$ | eagle l. T, Ф, I | BMC 84, Cahn 71,139 |
| L ФI | eagle l. T, ФI, I | Cambridge SNG IV. 928 |
| ФI | eagle 1. T | ANS SNG 1136 |
| nd the half pieces |  |  |
| - | eagle 1. Punic letter H | ANS SNG 1137, Copenhagen SNG 108 |
| - | eagle r. A | BMC 85 |

The rarity of these issues may account for their absence from the hoard; the great bulk of the coinage, with the eagle facing right and the first five letters of the Greek alphabet as control marks, is completely represented in the hoard.

The appearance of the Punic letter on the half piece, the same Punic letter that one finds on contemporary Siculo-Punic issues (nos. 132-147, below), together with the weight standard (a half and quarter shekel: compare nos. 116-152), show that the coinage was produced during the Punic occupation of the city in 213-210. Whether the coinage continued throughout that period is uncertain: it may well have, as the head of Zeus is very close stylistically to the Jupiter head of Roman victoriates minted in Sicily ${ }^{8}$, presumably also at Acragas from 210.

## SYRACUSE: Agathocles

Obv.: Helmeted head of Athena, right; behind, trophy (?)
Rev.: Pegasus left; $\Sigma \Upsilon$ PAKO $\Sigma I \Omega N$; below, triskeles
15. 8.53

4 Same dies as Lockett SNG $720=$ Weber 1215, Copenhagen 107.
${ }^{5}$ Same dies as BMC 83, Münzhandlung Basel 4, 426, Baranowsky IV 279, Ars Classica IV 209.
${ }^{6}$ Same dies as Pozzi 395, ANS 1135.
${ }^{7}$ Same dies as BMC 82, Cahn 60, 178, Cambridge (McClean 2051), Oxford 1684.
${ }^{8}$ M.H. Crawford, RRC no. 70 and page 16.

This type was minted during the reign of Agathocles, and Jenkins ${ }^{9}$ has suggested that the group of full weight Agathoclean pegasi belongs at the beginning of the reign (317-ca. 310 B.C).

## SYRACUSE: the reign of Hieron II

Obv.: Veiled head of Philistis, left
Rev.: Nike in quadriga, right; BA $\Sigma \mathrm{I} \Lambda \mathrm{I} \Sigma \Sigma \mathrm{A} \Sigma$ $\Phi \mathrm{I} \Lambda \mathrm{I} \Sigma \mathrm{TI} \triangle \mathrm{O} \Sigma$

|  | Obv. | symbol | Horses | Rev. symbol(s) |
| :---: | :---: | :---: | :---: | :---: |
|  | 16. 13.98 | palm | galloping | below hooves, E |
|  | 17. 14.14 | wreath | walking | before, A |
| [ | 18. | wreath | walking | above $\Phi$ |
|  | 19. | wreath | walking | above $\Phi$ |
|  | 20. | wreath | walking | above $\Phi$ |
|  | 21. | wreath | walking | above $\Phi$ |
|  | 22. | wreath | walking | above Ф |
|  | 23. | wreath | walking | above $\Phi$ |
|  | 24. | wreath | walking | above $\Phi$ |
| - | 25. 13.56 | wreath | walking | above $\Phi$ |
| 」 | 26. 13.60 | wreath | walking | above $\Phi$ |
|  | 27. | wreath | walking | above $\Phi$ |
|  | 28. 13.56 | wreath | walking | above $\Phi$ |
|  | 29. 13.61 | wreath | walking | above $\Phi$ |
|  | 30. | wreath (?) | walking | above, $\boldsymbol{\text { ; }}$; before, K |
|  | 31. | wreath (?) | walking | above, erased; before, K |
| [ | 32. 13.59 | none | galloping | above, crescent; before, A |
| L | 33. | none | galloping | above, crescent; before, A |
| [ | 34. 13.57 | star | walking | above, star; before, K |
|  | 35. 13.53 | star | walking | above, star; before, K |
|  | 36. 13.56 | star | walking | above, star; before, K |
| [ | 37. 13.49 | star | walking | above, star; before, K |
| L | 38. 13.41 | star | walking | above, star; before, K |
|  | 39. | star | walking | above, star; before, K |
|  | 40. | star | walking | above, star; before, K |
|  | 41. | star | galloping | above, crescent; before, KI $\Sigma$; below, grain |
| [ | 42. | grain | galloping | above, KI; below, thunderbolt |
| L | 43. 13.54 | grain | galloping | above, KI; below, grain |
|  | 44. | grain | galloping | above, crescent; before, KI $\Sigma$; below, grain |
| [ | 45. 13.59 | thunderbolt | galloping | below hooves, E |
| L | 46. | thunderbolt | galloping | above, KI; below, grain |

[^1]

Obv.: Diademed head of Gelon, left (52-53, 55-56) or right (54)
Rev.: Nike in a biga, right; $\Sigma$ YPAKO $\Sigma I \odot I ~ Г Е \Lambda \Omega N O \Sigma$
52. 6.74 none walking before, $\Phi$; BA above
53. 6.79 trophy walking before, H ; below hooves, $\Sigma($ ? $)$; BA above
54. 6.72 none galloping below, $\boldsymbol{\Sigma}$ (?)
55. star galloping before, K ; BA above
56. 6.75 bow galloping below, E; BA below horses

Obv.: as 52-55
Rev.: Eagle facing r.; inscription as on $52-56$
57. 3.31 none to r., K (BA on 1.)

Obv.: Head of Artemis, right
Rev.: Owl; $\Sigma$ rPAKOEIOI
58. 1.09 none to. 1., A

The small coins like 58 probably belong to the reign of Hieron rather than the period of the democracy, since they have the same form of the ethnic as is found on the coins of Gelon (the coins of the democracy have the genitive). The control letters which occur (A, E, K and $\Phi$ ) can be found on coins of Hieron's reign, but not on those of the democracy.

The arrangement of the coinage of Hieron, and its chronology, is not certain, and I am grateful to B. Tsakirgis for allowing me to incorporate the initial results of her research into it. The excellent condition of many of the coins suggests that they were minted not long before Hieron's death in 215.

## SYRACUSE: Hieronymus

The coins of Hieronymus' reign (215-4 B.C.) are arranged in accordance with R. Ross Holloway The Thirteen-months Coinage of Hieronymus of Syracuse.

|  | 59. 8.48 | MI |
| :--- | :--- | :--- |$\quad$ Holloway 6


| 66． | Y／KI | 49 |
| :--- | :--- | :--- |
| 67． 4.21 | KI | 51 |
| 68． 8.51 | 王A | 55 |
| 69． 8.36 | 玉A | 59 |
| 70． 8.48 | $\Delta \mathrm{~A}$ | 61 |

SYRACUSE：the democracy（214－212 B．C．）

The arrangement is that proposed in section III（p．18）．
Obv．：Laureate head of Zeus， 1.
Rev．：Nike in walking quadriga，r．；$\Sigma \Upsilon P A K O \Sigma I \Omega N$
71．Aunder neck
$\Sigma \Omega$
D2（see Section III）
Obv．：Helmeted head of Athena， 1.
Rev．：Artemis drawing bow to l．；behind dog；$\Sigma \Upsilon P A K O \Sigma I \Omega N$
or
Thunderbolt；$\Sigma \Upsilon$ PAKO $\Sigma I \Omega N$
（These two types are catalogued together，although they are of different denominations，since they share a number of obverse dies）．

## Rev．



72．Artemis
73．Artemis
74．Artemis
75．Artemis
76．Artemis
77．Artemis
78．Artemis
79．Artemis
80．Artemis
81．Artemis
82．Thunderbolt
83．Thunderbolt
84．Thunderbolt
85．Thunderbolt
86．Thunderbolt
87．Thunderbolt
6.79

88．Artemis
89．Artemis
90．Artemis
10.08

91．Artemis 9.91
92．Artemis
10.18
$[-]$
93．Artemis
94．Thunderbolt
6.80

95．Thunderbolt
6.76

96．Artemis

Rev．letters
$\Delta \mathrm{A} \quad \mathrm{D} 7$
MI
D9
MI D10
MI D11
MI
D 11
MI
D11
MI
D11
MI
D11
A on obv．$\quad \Sigma \Omega$
D13
D13
A on obv．$\Sigma \Omega$ D16
A on obv．$\Sigma \Omega$
D16
A on obv．$\Sigma \Omega$
D16
A on obv．$\Sigma \Omega$
D16
A on obv．$\Sigma \Omega$
D16
A on obv．$\quad \Sigma \Omega$
D17
$\Sigma \Omega \quad \mathrm{D} 18$
$\Sigma \Omega \quad \mathrm{D} 18$
$\Sigma \Omega \quad \mathrm{D} 18$
王A D20
王A D21
王A D24
王A D25
王A D25
YA－$\Sigma \quad$ D26
97. Thunderbolt
rA- $\Sigma$
D28
98. Thunderbolt
rA- $\Sigma \Lambda$
D30
99. Thunderbolt 6.74
¢A- $\Sigma \Lambda$
D30
100. Thunderbolt 6.76
rA- $\Lambda$
D31
101. Artemis
rA- $\Sigma \Lambda$
D32
102. Artemis

「A- $\Sigma \Lambda$
D32
103. Artemis

D32
104. Artemis
$\Lambda \Upsilon$
D35
105. Artemis $\quad 10.14$
$\Lambda \Upsilon$
D35
106. Artemis $\quad 10.22$

XAP
D36

Obv.: Bearded head of Heracles, 1.
Rev.: Nike in galloping biga, r.; $\Sigma \mathrm{Y}^{\circ} \mathrm{PAKO} \mathrm{I} \Omega \mathrm{N}$
107. 5.08 王A D44

Obv.: Laureate head of Apollo, 1.
Rev.: Nike advancing 1. with palm and trophy; $\Sigma$ rPAKO $\Sigma I \Omega \mathrm{~N}$
108. 3.35

XAP ${ }^{10}$ (graffito
MK on obverse)
D49

## SIKELIOTAI (Morgantina?)

Obv.: Veiled head of Kore; behind, leaf
Rev.: Nike in quadriga, r.; $\Sigma \mathrm{IK} \mathrm{K} \Lambda \mathrm{I} \Omega \mathrm{TAN}$; above, H
109. 6.76
110.

Obv.: Head of Kore; behind, poppy head
Rev.: Nike in biga, 1.; $\Sigma$ IKE 1 I $\Omega$ TAN; above, H
111. 3.42
112.
113. 3.21

The coinage of the Sikeliotai has been attributed by E. Sjøquist to a date in the middle of the Hannibalic War and to a mint at Morgantina ${ }^{11}$. The condition of the coins in the Enna hoard proves that his chronology is correct. The coinage was clearly tiny, as the pieces are all rare and struck from only a few closely interlinked dies. For the large denomination I have noted only one obverse and 3 reverse dies:
${ }^{10}$ Overstruck on a coin of Gelon II; see below, part III.
${ }^{11}$ MN 9. (1960), 1 .

| Obverse | Reverse | No. of specimens | Example |
| :---: | :---: | :---: | :---: |
| - ${ }^{\text {A }}$ | a | 5 | BMC $653{ }^{12}$ |
| - A | b | 3 | Enna hoard $109{ }^{13}$ |
| L A | c | 4 | Enna hoard $110{ }^{14}$ |

All the pieces of the smaller denominations seem to come from single obverse dies ${ }^{15}$.

## CARTHAGE

Mint of Carthage (?)
Obv.: Laureate head, 1.
Rev.: Elephant, r.; below, Punic letter A
114. 7.06
115. 6.13
116. 3.55
117.
118. 3.17
119.
120. 3.20
121.
122. 3.38

129.
130. 3.61
131.

This series of shekels and half shekels was tentatively assigned by E.S.G. Robinson to a date ca. 209 BC and a mint in Spain, perhaps Gades ${ }^{16}$. The appearance of all these coins in a Sicilian hoard, together with the other

[^2]previous provenance (in Campania) led Jenkins ${ }^{17}$ and Villaronga ${ }^{18}$ to reattribute them to the period of the Punic expedition to Sicily (213-210 BC). There is, however, some doubt about the mint. The fixed die axis contrasts with contemporary Siculo-Punic coins (nos. 132-152), and is a feature of the mint of Carthage. The other series was probably minted at Acragas (see below), the main Punic stronghold in the island, so an attribution to Carthage seems most likely for these coins with the elephant. The coins were certainly struck for circulation in Sicily, as more unpublished hoards have come to light attesting their circulation there.

A half shekel like 117-132 has been found struck over a denarius, and has been published by Villaronga ${ }^{18}$.

## Mint of Acragas(?)

Obv.: Male head, wearing corn ears, r.
Rev.: Prancing horse, r.; below Punic letter H ; all in wreath


The presence of these half and quarter shekels in the hoard confirms the archaeological evidence from Morgantina ${ }^{19}$ for an attribution to Sicily and

[^3]a date no later than 211 BC. The piece from Morgantina was struck from the same dies as no. 151.
The provenance of these coins and their variable die axis suggest a mint in Sicily. Acragas, traditionally the main Punic stronghold on the island ${ }^{20}$, is an obvious candidate, and there is a direct link with one of the Zeus/eagle coins minted at that city at this time. Both coinages show the same peculiar obverse style, particularly in the treatment of the hair. Moreover, as well as the denomination in the Enna hoard (1-14), rare half pieces are known with the same types; the two control marks known to me are A (known on the larger denomination) and, significantly, the Punic letter H , just as we find on these pieces. This directly links the two coinages, which can then be seen to comprise the same denominations (half and quarter shekels).

MACEDONIA: Antigonus Gonatas (277-239 B.C.)
153. 17.03

Obv.: Head of Pan on Macedonian shield
Rev.: Athena Alkidemos, 1.; BA $\Sigma \mathrm{I} \Lambda \mathrm{E} \Omega \Sigma$ ANTIГONOr; to 1., Macedonian helmet; to r., $\mathfrak{+}$

The type belongs to Gonatas' reign, and belongs to the group attributed to Amphipolis after 271 by R.W. Mathisen ${ }^{21}$. The condition of this piece would suggest a date late in the reign. For coins of Gonatas in a contemporary Sicilian hoard, see IGCH 2230.

EPIRUS: Pyrrhus
154. 16.74

Obv.: Head of Zeus, 1.; behind, fulmen
Rev.: Dione seated left; BA $\Sigma \mathrm{I} \Lambda \mathrm{E} \Omega \Sigma \Pi] \Upsilon \mathrm{PPO}[\Upsilon$; below, A.
This type was minted at Locri during Pyrrhus' expedition to S. Italy in 281-75 B.C.

## THRACE: Lysimachus

155. 16.91

Obv.: Diademed head of Alexander, r.
Rev.: Athena Nikephoros seated left; BA $\Sigma \mathrm{I} \Lambda \mathrm{E} \Omega \Sigma \Lambda \Upsilon \Sigma I M A X O$ (sic); symbols: to 1., thunderbolt and below, fish.

[^4]Two other specimens are known with the same symbols, one in Paris (circulated as a Mionnet cast) and one in the Raby collection. All three have the same obverse die, and different reverse dies. The variety was attributed to Pella by Müller (M.no.328), because of the thunderbolt ${ }^{22}$. The British Museum, however, has a coin of the same style but with a caduceus instead of the thunderbolt, so the fish symbol should be given priority and the issue attributed to Cyzicus. The absence of the issue from the Armenak hoard ${ }^{23}$ suggests that the coin is posthumous, and its condition in this hoard suggests that it must be early posthumous.

## AETOLIAN LEAGUE

156. 16.38

Obv.: Head of Heracles wearing lion skin, r.
Rev.: Aetolia seated right on Gallic and Macedonian arms; AIT $\Omega \Lambda \Omega \mathrm{N}$; to $r$., 雨 and $\Sigma E^{24}$.

The obverse die is one of the few known for the Aetolian tetradrachms, and occurred on at least two coins in the Corinth 1938 hoard (IGCH 187), which Noe dated to 215 B.C. ${ }^{25}$. As Noe observed, the Aetolian tetradrachms should be dated much more tightly than Head's 279-168; the condition of the coin in the Enna hoard (like that of the coins in the Corinth hoard) supports Noe's suggestion that they were minted for the Social War; de Laix ${ }^{26}$ has subsequently refined this dating to 220-218.

PERGAMUM: Attalus I
157. 16.94

Obv.: Diademed head of Philetairos, r.
Rev.: Athena seated left; ФI 1 ETAIPOr; symbols: grapes and A
The Philetairos coins with these symbols have been attributed to the reign of Attalus I (241-197 B.C.) by U. Westermark ${ }^{27}$, and, although she does not record this obverse die, the reverse seems to be that of her plate VII no. LXXVII. This

[^5]worn coin belongs to group IVB of her chronology, which she places at the beginning of Attalus' reign. Pergamene coins occasionally travelled to the West, even to Spain (to Martos: see Coin Hoards VII, forthcoming).

EGYPT: Ptolemy II (285-246 B.C.)
158. 14.11

Obv.: Diademed head of Ptolemy, r.
Rev.: Eagle on thunderbolt $1 . ; \operatorname{BA} \Sigma \mathrm{I} \Lambda \mathrm{E} \Omega \Sigma$ ПTO $\Sigma \mathrm{EMAIO} \mathrm{\Upsilon}$; to $1 .$, shield and $\Sigma$; between legs, E.

Svoronos 567, SNG Copenhagen 107. For Ptolemaic coins in contemporary Sicilian hoards, see IGCH 2217 and 2234.

## ROME

Obv.: Laureate janiform head
Rev.: Jupiter and Victory in quadriga, r.; below, ROMA in incuse letters (159-175, 177) or relief letters on raised tablet (176).
The quadrigati are all listed in accordance with the classification of le Gentil-
homme (RN 1934,1); 159-171 were minted at Rome, 172-177 elsewhere ${ }^{28}$, probably in Sicily.
159. le Gentilhomme A 1 var.
160. 6.56

A *
161. 6.54

A 4
162.

A 4
163. 6.62

A 4
164. 6.56

A 4
165.

A 7
166.

A 8
167.

A 8
168. 6.71

A 11
169.

A 13
170. 6.68

B 1
171. 6.63

B 1
172. 6.23

E1(?)
173. 6.72

E 1
174.
175.
176. 6.89

E 1
E 1
177. 6.78

IV B 2
II A 2
${ }^{28}$ Cf. A. Alföldi RM 78 (1971), 27 ff .

## II. The date of the hoard

The date of the hoard's deposition should be indicated by the terminal dates of the issues it contained. The Syracusan democracy was established in 214 B.C., and lasted until the fall of the city to the Romans in $212^{29}$. The Enna hoard includes coins which account for virtually every issue (and even die) used, so it is hard to avoid the implication of a date of 212 for the hoard. The Punic issues can have reached Sicily no earlier than 213, the date of the Punic expedition to the island, particularly if it is correct to attribute the half and quarter shekels with a horse to Agrigentum, which was only captur-ed by the Carthaginians in that year. The coins of Agrigentum similarly make 212 the earliest possible date for the hoard, with 211 more likely. I conclude that the hoard should probably be dated to 211 .

The Roman coins in the hoard pose a problem for this date, as they were all quadrigati with the incuse form of the legend ${ }^{30}$. So if the hoard were dated to 211 , it would imply that the relief legend quadrigati are of subsequent date, and this causes obvious problems for the dating of the denarius' inception to 211 . But there are good reasons for avoiding this difficulty by regarding the quadrigati as a lot of coins added to the hoard some years before its deposition. First, the hoard contained the two Punic issues which are thought to have been struck over a denarius and a victoriate ${ }^{31}$, so we can hardly imagine that the hoard was buried before the inception of the denarius coinage. Secondly a comparison of the quadrigati in the Enna hoard with those in the Syracuse hoard (dated by the absence of coins of the Syracusan democracy to 214 B.C.) reveals that there are no significant varieties of quadrigati represented in the Enna hoard which were not already present in the Syracuse hoard ${ }^{32}$. Conversely some recent hoards have exactly the same non-Roman coins together with Roman coins of both the quadrigatus (incuse and relief) and denarius coinages ${ }^{33}$. So we can be reasonably sure that the quadrigati in the Enna hoard go no later than 214. This relieves the chronological problem outlined above and enables us to date the Enna hoard to 211 while preserving an acceptable Roman chronology.The hoarder acquired no Roman coins after 214.

## III. The silver coinage of the Syracusan democracy

The coins in the Enna hoard allow one to make a virtually complete reconstruction of the coinage of the Syracusan democracy of 214-212 B.C. The scheme presented here is based on the material in the British Museum, the Bibliothèque Nationale, the Ameri-

[^6]can Numismatic Society, the various major published collections (Copenhagen, Munich, Cambridge, Oxford and Glasgow) and sale catalogues. The record of dies seems almost complete, although no doubt more material might turn up some more varieties or die combinations, particularly of the smaller denominations. In this listing I ignore the small gold coins with the same types as the 12 litrai coins, as these were rightly condemned by Imhoof ${ }^{34}$.

The coinage was struck in denominations of $16,12,10,8,6,4$ and $2 \frac{1}{2}$ litrai, using a litra of average weight $0.84 \mathrm{~g}^{35}$. The great majority of the coins were struck in the 12 and 8 litrai denomination, particularly the former. The following «magistrates» or names ${ }^{36}$ have been recorded so far ${ }^{37}$, and they coined the following denominations (the numbers represent specimens noted by me):

|  | AV | 16 | 12 | 10 | 8 | 6 | 4 | 21/2 litrai |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| $\Delta \mathrm{A}$ |  |  | 9 |  |  |  |  |  |
| MI |  |  | 19 |  |  | 2 |  |  |
| [ $\bar{A} / \Sigma \Omega$ | 1 | 5 | 15 |  | 22 | 1 |  |  |
| L $\boldsymbol{\Sigma} \Omega$ |  |  | 11 |  |  | 1 |  |  |
| - O/王A |  |  | 12 |  |  |  |  |  |
| - 王A |  | 1 | 4 |  | 16 | 7 |  |  |
| [ MA-S |  |  | 8 |  | 18 | 1 |  |  |
| - $\times 1-\Sigma$ - |  | 6 | 14 |  | 19 |  |  |  |
| ФI- $\Delta \mathrm{I}$ |  |  | 1 |  |  |  |  |  |
| $\Lambda \times$ |  |  | 9 |  |  |  |  |  |
| XAP |  |  | 9 | 2 |  | 2 | 4 | 1 |
|  | 1 | 12 | 99 | 2 | 68 | 14 | 4 | 1 |

[^7]
## CATALOGUE ${ }^{38}$

Gold

1. Obv.: Female head, facing left, wearing diadem; behind, $\boldsymbol{A}$

Rev.: Nike in walking quadriga, to right; below, $\Sigma \Upsilon^{\prime} P A K O \Sigma I \Omega N$; above, $\Sigma \Omega$ a. 4.25 g Paris (de Luynes 1390)

Silver
16 litrai
Obv.: Laureate head of Zeus, to right.
Rev.: Nike (sometimes holding whip) in quadriga, to right; $\Sigma \Upsilon$ PAKO $\Sigma I \Omega N$;
2. $\mathcal{A}$ under head on obverse, $\Sigma \Omega$ above quadriga (horses walking, no whip)

a. 13.54 Hess Leu 31, 164
b. 13.57 Enna hoard 71
c. 13.21 Weber = Jameson 890 ( $12.96 »$ )
d. 13.53 Hirsch $14,247=$ Cambridge (McClean 2960)
e. 12.55 Paris 2040
3. 王A. below horses (galloping; Nike holds whip)
a. 13.57 Ars Classica VI, $560=$ Gulbenkian $358=$ Hirsch 32, 397
4. $\Upsilon \mathrm{A}-\Sigma-\Lambda$ in exergue and below horses (galloping; Nike holds whip)

a. 13.48 Hirsch $14,246=$ Jameson 889
b. 12.05 (Very worn) Cambridge (McClean 2959)
c. 13.49 Boston 483
d. 13.63 London BMC 650
e. 13.31 Berlin (Giesecke, Sicilia Numismatica 26.8)
f. 13.64 Munich SNG 1435

12 and 8 litrai
These denominations are listed together as they share a number of obverse dies.
Obv.: Helmeted head of Athena, facing left. The helmet may be decorated with a griffin (dies 1,7 and 10 ) or a coiled snake (dies 2, 3, 8 and 14). A snake, representing the aegis, may sometimes be seen in front of the neck (dies $4,5,9,10$, 11, 12 and 13).
Rev.: (12 litrai) Artemis standing left in front of a hound, and firing a bow; $\Sigma \mathrm{PPAKO} I \Omega \mathrm{~N}$
(8 litrai) Winged thunderbolt; above, $\Sigma \Upsilon$ PAKO $\Sigma I \Omega N$

[^8]Summary of die－linkage
Obv．die

| 5. | $\left[\begin{array}{l}1 \\ 1\end{array}\right.$ |
| :---: | :---: |
| 7. | － 2 |
| 8. | － 2 |
| 9. | L 2 |
| 10. | －3 |
| 11. | L 3 |
| 12. | 4 |
| 13. | ［ 5 （ A ） |
| 14. | － 5 |
| 15. | － 5 |
| 16. | － 5 |
| 17. | L 5 |
| 18. | 6 |
| 19. | 7 |
| 20. | ［ 8 o |
| 21. | － 8 |
| 22. | － 8 |
| 23. | L 8 |
| 24. | －9 |
| 25. | － 9 |
| 26. | L 9 |
| 27. | ［ 10 |
| 28. | $-10$ |
| 29. | － 11 |
| 30. | － 10 |
| 31. | － 10 |
| 32. | L 10 |
| 33. | 12 |
| 34. | － 11 |
| 35. | 13 |
| 36. | ［ 14 |
| 37. | － 14 |

Artemis Thunderbolt
a．$\Delta \mathrm{A}$
b．$\Delta \mathrm{A}$
b．$\Delta \mathrm{A}$
c．$\Delta \mathrm{A}$
d．MI
e．MI
f．MI
g．MI
h．$\Sigma \Omega$
i．$\Sigma \Omega$
j．$\quad \Sigma \Omega$
A．$\Sigma \Omega$
B．$\Sigma \Omega$
k．$\Sigma \Omega$
1．$\Sigma \Omega$
m．王A
n．王A
o．王A
p．王A
q．王A
C．王A
］
r． $\mathrm{YA}-\Sigma$
］D． $\mathrm{YA}-\Sigma$
D．$\Upsilon A-\Sigma$
E．$\Upsilon A-\Sigma-\Lambda$
F．$\Upsilon A-\Sigma-\Lambda$
s．$\Upsilon A-\Sigma-\Lambda$
t． $\mathrm{Y} \mathrm{A}-\Sigma-\Lambda$
u．ФI－$\Delta \mathrm{I}$
v．$\Lambda \Upsilon$
w．XAP
x．XAP

|  | Obverse | Artemis | Thunderbolt |  |
| :---: | :---: | :---: | :---: | :---: |
| 5. | 1 （griffin） | a．$\Delta \mathrm{A}$ | 9.16 | Hirsch 20， 202 |
| 6. | 1 | b．$\Delta \mathrm{A}$ | 10.13 | London（Lloyd 1568） |
|  |  |  | 10.12 | Jameson 891 |
|  |  |  | 10.11 | Carfrae 11 |
| 7. | 2 （snake） | b．$\Delta \mathrm{A}$ |  | Enna hoard 72 |
|  |  |  | 9.84 | Schulman 26．11．1913， 2074 |
| 8. | 2 | c．$\Delta \mathrm{A}$ | 10.24 | London |


|  |  |  |  | 9.71 | Copenhagen 876 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 10.21 | Munich 1432 |
| 9. | 2 | d. MI |  |  | Enna hoard 73 |
| 10. | 3 (snake) | e. MI |  |  | Enna hoard 74 |
|  |  |  |  | 10.14 | Ars Classica V 1247 |
|  |  |  |  | 10.12 | Cambridge SNG 1435 |
| 11. | 3 | f. MI |  | 10.21 | Enna hoard 75 |
|  |  |  |  |  | Enna hoard 76 |
|  |  |  |  |  | Enna hoard 77 |
|  |  |  |  |  | Enna hoard 78 |
|  |  |  |  | 10.14 | Enna hoard 79 |
|  |  |  |  | 9.44 | Copenhagen 877 |
|  |  |  |  | 9.00 | London |
|  |  |  |  | 10.00 | Ars Classica XII 1033 |
|  |  |  |  | 9.84 | Hirsch 21, 743 |
|  |  |  |  | 10.14 | Ward 347 |
|  |  |  |  | 10.16 | Auctiones AG, Basel 6,76 |
| 12. | 4 (aegis) | g. MI |  | 10.12 | Paris 2043 |
|  |  |  |  | 10.25 | Paris (Luynes 1392) |
|  |  |  |  |  | Hall 60 |
| 13. | 5 (aegis, A) | h. $\Sigma \Omega$ |  | 10.22 | Enna hoard 80 |
|  |  |  |  | 10.21 | Enna hoard 81 |
|  |  |  |  | 10.19 | Glasgow 8 |
|  |  |  |  | 9.83 | Pozzi 663 |
|  |  |  |  | 10.01 | Hirsch 20, 201 |
|  |  |  |  | 10.17 | Delbeke 71 |
|  |  |  |  | 10.20 | Ciani 20.11.1935, 84 |
|  |  |  |  |  | Hess 16.4.1957, 129 |
|  |  |  |  | 10.20 | Munich 1433 |
|  |  |  |  | 10.07 | Paris 2046 |
|  |  |  |  |  | London BMC 651 |
| 14. | 5 | i. $\Sigma \Omega$ |  | 9.82 | Hirsch 26, 462 |
|  |  |  |  |  | Glendining 1918, 74 |
| 15. | 5 | j. $\Sigma \Omega$ |  | 10.09 | Ars Classica XII 1031 |
|  |  |  |  | 10.20 | Paris 2045 |
| 16. | 5 |  | A. $\Sigma \Omega$ | 6.80 | Enna hoard 82 |
|  |  |  |  |  | Enna hoard 83 |
|  |  |  |  |  | Enna hoard 84 |
|  |  |  |  |  | Enna hoard 85 |
|  |  |  |  |  | Enna hoard 86 |
|  |  |  |  | 6.06 | Bourgey 15.10.1909, 79 |
|  |  |  |  | 6.43 | Ars Classica V 1250 |
|  |  |  |  | 6.80 | Carfrae 12 |
|  |  |  |  | 6.75 | Hirsch 26, 463 |
|  |  |  |  |  | De Nicola (Dec 1950), 145 |


|  |  |  |  | 6.77 | Cambridge 1438 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 6.85 | Cahn 80, 111 |
|  |  |  |  | 6.73 | London BMC 655 |
|  |  |  |  | 6.79 | Cambridge SNG 1439 |
|  |  |  |  | 6.82 | Oxford 2124 |
|  |  |  |  | 5.88 | ANS |
|  |  |  |  | 6.79 | Paris 2052 |
| 17. | 5 |  | B. $\Sigma \Omega$ | 6.79 | Enna hoard 87 |
|  |  |  |  | 6.77 | Weber 1721 |
|  |  |  |  | 6.80 | Paris (Luynes 1393) |
|  |  |  |  | 6.80 | Ars Classica IV 421 |
|  |  |  |  | 6.50 | Auctiones AG, Basel 11, 71 |
| 18. | 6 (plain) | k. $\Sigma \Omega$ |  |  | Enna hoard 88 |
|  |  |  |  |  | Enna hoard 89 |
|  |  |  |  | 10.08 | Enna hoard 90 |
|  |  |  |  | 10.09 | London (Lloyd 1567) |
|  |  |  |  |  | Egger 10.12.1906, 244 |
|  |  |  |  |  | Egger 26.11.1909, 290 |
|  |  |  |  | 9.88 | Paris 2047 |
|  |  |  |  | 10.08 | Auctiones AG, Basel 5,54 |
| 19. | 7 (griffin) | 1. $\Sigma \Omega$ |  | 9.87 | Lockett SNG 1022 |
|  |  |  |  |  | Egger 40, 448 |
|  |  |  |  | 9.78 | Copenhagen 879 |
| 20. | 8 (snake, o) | m. $\ddagger \mathrm{A}$ |  | 9.91 | Enna hoard 91 |
|  |  |  |  | 10.14 | London |
|  |  |  |  |  | Aréthuse (Suppl. I, 1924) 244 |
| 21. | 8 | n. $\ddagger \mathrm{A}$ |  | 10.18 | Enna hoard 92 |
|  |  |  |  | 10.17 | Hamburger 1929, 160 |
|  |  |  |  | 10.16 | Cambridge (Mc Clean 2957) |
| 22. | 8 | o. $\ddagger \mathrm{A}$ |  |  | Sambon \& Canessa 1907, 442 |
|  |  |  |  | 9.98 | Egger 39, 115 |
|  |  |  |  | 9.94 | Hirsch 15, 1281 |
|  |  |  |  | 9.86 | Paris 2049 |
| 23. | 8 | p. $\ddagger$ A |  | 10.11 | Copenhagen 878 |
|  |  |  |  | 9.42 | Paris (Delepierre 713) |
| 24. | 9 (aegis) | q. $\mathrm{I}^{\mathrm{A}}$ |  |  | Enna hoard 93 |
|  |  |  |  | 10.18 | Pozzi 664 |
|  |  |  |  | 9.48 | ANS |
|  |  |  |  | 10.03 | Cambridge 1436 |
| 25. | 9 |  | C. $\mathrm{I}^{\mathrm{A}}$ | 6.80 | Enna hoard 94 |
|  |  |  |  | 6.26 | Enna hoard 95 |
|  |  |  |  | 6.78 | Ars Classica X 346 |
|  |  |  |  | 7.10 | Ciani 20.11.1935, 85 |
|  |  |  |  | 6.49 | London (Lloyd 1569) |
|  |  |  |  | 6.72 | London |
|  |  |  |  |  | Münzhandlung Basel 10, 145 |


|  |  |  |  |  | Rollin 1910, 225 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 6.80 | Hamburger 11.1909, 352 |
|  |  |  |  | 6.70 | Hirsch 32, 402 |
|  |  |  |  | 6.45 | Jameson 893 |
|  |  |  |  | 6.81 | Oxford SNG 2122 |
|  |  |  |  | 6.60 | London BMC 654 |
|  |  |  |  | 6.80 | Berlin |
|  |  |  |  | 6.78 | ANS |
|  |  |  |  | 6.79 | Paris 2053 |
| 26. | 9 | r. $\mathrm{YA}-\Sigma$ |  |  | Enna hoard 96 |
|  |  |  |  | 10.23 | Cambridge (Mc Clean 2956) |
|  |  |  |  |  | Merzbacher 2.11.1909, 2650 |
|  |  |  |  | 10.10 | ANS |
| 27. | 10 (griffin, aegis) | r. $\mathrm{Y} A-\Sigma$ |  | 10.10 | Hirsch 14, 249 |
|  |  |  |  | 10.08 | Hirsch 32, 399 |
|  |  |  |  |  | Sambon \& Canessa 1907, 443 |
|  |  |  |  | 10.25 | Helbing 31.1.1930, 156 |
| 28. | 10 |  | D. $Y$ A-E | 6.81 | Enna hoard 97 |
|  |  |  |  | 6.58 | Stockholm 626 |
|  |  |  |  | 6.29 | Ars Classica V 1251 |
|  |  |  |  | 6.79 | Lockett SNG 1023 |
|  |  |  |  | 6.78 | Cambridge SNG 1437 |
|  |  |  |  | 6.73 | London BMC 656 |
|  |  |  |  | 6.70 | Hirsch 32, 403 |
|  |  |  |  |  | Egger 26.11.1909, 291 |
|  |  |  |  |  | Egger 46, 94 |
|  |  |  |  | 6.82 | Headlam 176 |
|  |  |  |  | 6.26 | Ars Classica V 1252 |
|  |  |  |  |  | Hess 27.10.1932, 705 |
|  |  |  |  | 6.76 | Paris 2056 |
|  |  |  |  | 6.75 | Copenhagen 880 |
|  |  |  |  | 6.78 | ANS |
|  |  |  |  | 6.81 | Munich 1437 |
| 29. | 11 (aegis) |  | D. $\Upsilon$ A- $\Sigma$ |  | Vienna |
| 30. | 10 |  | E. $\Upsilon \mathrm{A}-\Sigma-\Lambda$ |  | Enna hoard 98 |
|  |  |  |  | 6.74 | Enna hoard 99 |
|  |  |  |  | 6.82 | Cambridge (McClean 2958) |
|  |  |  |  | 6.80 | London |
|  |  |  |  | 6.53 | Hirsch 18, 9 |
|  |  |  |  | 6.75 | Hirsch 31, 234 |
|  |  |  |  |  | Hirsch 8, 1047 |
|  |  |  |  | 6.75 | Locker Lampson 112 |
|  |  |  |  | 6.52 | Hirsch 34, 250 |
|  |  |  |  |  | Martinetti 1907, 783 |
|  |  |  |  | 6.81 | Paris 2054 |


|  |  |  |  | 6.76 | Gulbenkian 359 |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  |  |  | 6.75 | Munich 1436 |
|  |  |  |  | 6.77 | MMAG 61, 72 |
|  |  |  |  | 6.82 | MMAG 52, 100 |
| 31. | 10 |  | F. $\Upsilon$ ¢ $-\Sigma-\Lambda$ |  | Enna hoard 100 |
|  |  |  |  | 6.73 | Hirsch 14, 251 |
|  |  |  |  | 6.38 | Ars Classica XII 1035 |
|  |  |  |  | 6.72 | London BMC 657 |
| 32. | 10 | s. $\Upsilon$ ( $-\Sigma-\Lambda$ |  |  | Enna hoard 101 |
|  |  |  |  |  | Enna hoard 102 |
|  |  |  |  |  | Enna hoard 103 |
|  |  |  |  | 10.16 | Cambridge (Corpus Christi) |
|  |  |  |  |  | SNG 412 |
|  |  |  |  | 10.22 | Ars Classica VI 562 |
|  |  |  |  | 10.22 | Jameson 892 |
|  |  |  |  | 9.82 | Merzbacher 15.11.1910, 282 |
|  |  |  |  | 10.15 | Sandeman 76 |
|  |  |  |  | 10.06 | Schulman 31.5.1938, 106 |
|  |  |  |  | 10.10 | MMAG 61, 71 |
| 33. | 12 (aegis) | t. $\Upsilon$ A- $\Sigma$ - $\Lambda$ |  | 10.16 | London BMC 652 |
|  |  |  |  |  | Sambon \& Canessa 1922, 261 |
|  |  |  |  | 9.80 | Hirsch 32, 398 |
|  |  |  |  | 10.20 | Berlin |
| 34. | 11 | u. ФI- $\Delta \mathrm{I}$ |  |  | Sambon \& Canessa 1907, 444 |
|  |  |  |  |  | $=$ Bourgey 7.6.1909, 172 |
| 35. | 13 (aegis) | v. $\Lambda \Upsilon$ |  |  | Enna hoard 104 |
|  |  |  |  | 10.14 | Enna hoard 105 |
|  |  |  |  | 9.72 | Ars Classica V 1248 |
|  |  |  |  |  | Egger 40, 447 |
|  |  |  |  |  | Collignon 124 |
|  |  |  |  | 10.20 | Hirsch 14, 250 |
|  |  |  |  | 10.08 | A. Hess (Frankfurt) 194, 163 |
|  |  |  |  |  | Glendining Apr. 1955, 225 |
|  |  |  |  | 10.18 | Munich 1434 |
| 36. | 14 (snake) | w. XAP |  | 10.22 | Enna hoard 106 |
|  |  |  |  | 10.17 | Weber 1720 |
|  |  |  |  | 10.25 | Hirsch 16, 324 |
|  |  |  |  | 10.15 | London BMC 653 |
|  |  |  |  | 10.02 | Hamburger 98, 446 |
|  |  |  |  | 10.18 | Ars Classica X 345 |
|  |  |  |  | 10.21 | Paris 2050 |
| 37. | 14 | x. XAP |  | 9.85 | Benson 397 |
|  |  |  |  | 10.04 | ANS |
|  |  |  | 10 litra |  |  |
|  | bv.: Head | Kore, facing le | ft; behind, tor | rch |  |

Rev.: Zeus standing with sceptre; to left, eagle; to right, $\Sigma \Upsilon P A K O \Sigma I \Omega N$
38. XAP
[] a. London BMC 6618.47
b. Paris Luynes 13948.45

## 8 litrai

See above under 12 litrai

## 6 litrai

Obv.: Head of Heracles wearing lion skin, facing left
Rev.: Nike, holding whip, in galloping biga, to right; $\Sigma \Upsilon$ PAKO $\Sigma I \Omega N$
39. MI under horses

7 a. 4.85 Hirsch 14, 254
40. as 59 (same reverse die)

- a. 4.53 Ars Classica XVII $301=$ Hess Leu $1,76=$ Leu 15,137

41. $\bar{A}$ on obverse, $\Sigma \Omega$ below horses
a. 4.75 Cambridge (McClean 2961)
42. $\Sigma \Omega$ in exergue, below ethnic
a. 5.02 Jameson 896 ex Hirsch 14, 253
43. $\mathbf{I} A$ in exergue

Г a. 5.08 Paris 204
44. As 43, but 王 A below horses (same obverse die)

[-]
a. 5.08 Enna hoard 107
b. 5.09 London BMC 659
c. 4.81 Ars Classica VI $564=$ Hirsch $32,404=$ Lloyd 1570
d. 4.93 Munich 1438
45. As 44 , but different dies
a. 5.11 Weber $1722=$ Ars Classica XV 898
b. 5.07 Gulbenkian 361
46. YA $\Sigma$ under horses
a. 4.97 Hess Leu 31, $165=$ Auctiones AG, Basel 3, 133
47. XAP under horses
[]
a. 5.11 Copenhagen 881
b. 5.04 MMAG 61,74

4 litrai
Obv.: Head of Apollo, facing left
Rev.: Nike advancing left, holding palm and trophy; $\Sigma$ YPAKO $\Sigma I \Omega N$
48. XAP to right
a. 3.84 Morgantina hoard 28
49. As 48 , but different dies
[-] $\left.\begin{array}{l}\text { a. 3.35 Enna hoard } 108 \\ \text { b. 3.36 London BMC } 660 \\ \text { c. 3.22 Leu 18, } 87\end{array}\right]$ all struck over Gelon/eagle

Obv.: As 49 (same die)
Rev.: Aesculapius standing right, holding staff with snake; $\Sigma \Upsilon P A K O \Sigma I \Omega N$
50. XAP to right
a. 2.20 MMAG 61,75 .

Some other coins are also attributed to the period of the democracy, but the attribution does not seem certain as they stand apart from the other issues. They have different types and magistrates' names, and use symbols on the obverse (this is not a feature of the other Syracusan democracy coins). There is clearly no room for them before the coinage of the democracy, so they should be regarded either as coming at the very end of the Roman siege or even after the fall of Syracuse to the Romans.

Obv.: Head of Kore, facing left; behind, variable symbol
Rev.: Nike in quadriga; $\Sigma$ rPAKO $\Sigma I \Omega N$
51. Bee on obverse; Nike holds wreath in quadriga which walks to left; in front, AP; above, $\boldsymbol{\Sigma} \boldsymbol{Y}$ and $\boldsymbol{P I}$
a. 6.78 Gulbenkian 360 ex Jameson 895
52. Owl on obverse; Nike holds whip in quadriga galloping right; above, $\mathbb{R}$; below, AI; on double exergual line, $\Lambda \Upsilon$
a. 6.99 London BMC 658
b. 5.95 Jameson 894 ex O'Hagan 257

As 52, but different reverse die
-] a. 5.97 Paris Luynes 1395
b. 6.76 MMAG 61,73
54. Obv.: Same die as 52-53.

Rev.: Winged thunderbolt; $\Sigma$ YPAKOEI $\Omega \mathrm{N}$; below, $\mathrm{ME}^{2}$ and $\notin$
L a. 6.55 Paris Luynes 1396

## Note on the illustrations

The illustrations fall into two groups. Plates 1-7 show coins from the hoard, except those of the Syracusan democracy. A specimen of every die is illustrated, together with its catalogue number from section I. Plates $8-10$ illustrate the coinage of the Syracusan democracy, as listed in section III, and, wherever possible, I have used specimens from the Enna hoard. Thus, for example, the number D 2 (71) means that coin no. 71 of the Enna hoard illustrates no. 2 of the listing of the democracy coins. For the sake of clarity I attach a list of the sources for the illustrations on plates 8-10.

## Plate 8

D 1 Paris Luynes $1390 \quad$ D 4 Jameson 889
D 2 Enna 71
D 5 Hirsch 20, 202
D 3 Ars Classica VI 560
D 6 Jameson 891

D 7 Enna 72
D 12 Hall 60
D 8 BM (1896-7-3-39)
D 13 Enna 80
D 9 Enna 73
D 14 Hirsch 26, 462
D 10 Enna 74
D 15 Ars Classica XII 1031
D 11 Enna 75
D 16 Enna 82
Plate 9
D 17 Enna 87 D 26 Enna 96
D 18 Enna 88
D 27 Hirsch 32, 399
D 19 Lockett 1022
D 28 Enna 97
D 20 Enna 91
D 29 Vienna
D 21 Enna 92
D 30 Enna 98
D 22 Egger 39, 115
D 23 Copenhagen 878
D 31 Enna 100
D 24 Enna 93
D 32 Enna 102
D 25 Enna 95

Plate 10
D 34 Sambon-Canessa 19.12.1907, 444 D 45 Ars Classica VI 564
D 35 Enna 105
D 46 Hess-Leu 31, 165
D 36 Enna 106
D 47 MMAG 61, 74
D 37 ANS
D 48 Morgantina hoard 28
D 38 BMC661
D 49 Enna 108
D 39 Hirsch 14, 254
D 50 MMAG 61, 75
D 40 Ars Classica XVII 301
D 51 Jameson 895
D 41 McClean 2961
D 52 BMC 658
D 42 Jameson 896
D 53 MMAG 61, 73
D 43 Paris 2041
D 54 Paris Luynes 1396
D 44 Enna 107

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy


A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy
.

A. Burnett, The Enna hoard and the silver coinage of the Syracusan democracy


[^0]:    ${ }^{1}$ I am particularly grateful for the help and advice of Mrs. S. Hurter and P. Strauss; in addition, information has been given to me by A. Walker, C.A. Hersh, M.J. Price, H.A. Cahn, G.K.Jenkins, C. Boehringer, P. Kinns and B. Tsakirgis. I should also like to thank M. Amandry (Paris) and Mrs. N.M. Waggoner (New York) for providing casts.
    ${ }^{2}$ Same dies as BMC 31, Copenhagen 105.
    ${ }^{3}$ Same dies as Paris (Luynes 865), Copenhagen 106.

[^1]:    ${ }^{9}$ In (eds.) C.M. Kraay and G.K.Jenkins, Essays in Greek Coinage presented to Stanley Robinson (1968), 151.

[^2]:    ${ }^{12}$ Same dies: Jameson 885, Luynes 1375, BMC 564 and Oxford 2132 (retouched).
    ${ }^{13}$ Same dies: BM ex Lloyd 1578, Lockett SNG $1030=$ Ars Classica XII 1025.
    ${ }^{14}$ Same dies: Berlin (W. Giesecke Sicilia Numismatica Taf. 27.7), MMAG 61, 79 and Gulbenkian 364.
    ${ }^{15}$ The four litrai pieces come from one obverse and two reverse dies (a. Enna 112-114 b MMAG 61, 80). The two litrai coins all appear to be from the same dies: Munich (Giesecke 27.8), Paris (Luynes 1376) and MMAG 61, 81. There are also gold coins : see note 11 and MMAG 61, 78.
    ${ }^{16}$ In (eds.) R.A.G. Carson and C.H.V. Sutherland, Essays in Roman coinage presented to Harold Mattingly (1956), pages 43 and $52-3$, series 8 a and 8 b .

[^3]:    ${ }^{17}$ SNG Copenhagen Vol. 42, nos. 382-3.
    ${ }^{18}$ Gaceta Numismatica 40, Mar. 1976, 15-16, cf. T.V. Buttrey, Quaderni Ticinesi 8, 1979, 156-
    7, who agrees that Villaronga's coin may have come from the Enna hoard.
    ${ }^{19}$ R. Ross Holloway, Atti dell' Istituto Italiano di Numismatica 7-8, 1961, 35-7.

[^4]:     $x \alpha i \beta \alpha \rho \cup \tau \alpha \dot{\tau} \eta \nu \dot{\alpha} \mu \alpha \tau \tilde{\eta} \varsigma \alpha \cup \dot{\tau} \tilde{\omega} \nu$ ह̇ $\pi \alpha \rho \chi i \alpha \varsigma$.
    ${ }^{21}$ MN 26, 1981, 113-4.

[^5]:    22 Die Münzen des Thracischen Königs Lysimachus (1859)
    ${ }_{23}$ IGCH 1423.
    ${ }^{24}$ As A.J. Reinach, JIAN 13, 1911, 177-239: no. 14 (same obverse die), but reverse also has $\Sigma \mathrm{E}$.
    ${ }_{25}$ MN 10, 1962, 9.
    ${ }^{26}$ California Studies in Classical Antiquity 6, 1973, 59-60.
    27 Das Bildnis des Philetairos von Pergamon (1961)

[^6]:    ${ }^{29}$ For the dating of the democracy to spring 214 to autumn 212 (rather than 215-212), see F.W. Walbank, Historical Commentary on Polybius 2, 7-8.
    ${ }^{30}$ Except for one coin (176) with a relief legend on a raised tablet; this variety also occurred in the Syracuse hoard, which otherwise contained only incuse legend coins.
    ${ }^{31}$ For the overstruck denarius, see Villaronga, op. cit. (n. 18); for the allegedly overstruck victoriate, see the dust jacket of P. Marchetti, Histoire économique et monétaire de la deuxième guerre punique; I confess that I cannot make out a victoriate as an undertype.
    ${ }^{32}$ M. Crawford, Roman Republican Coin Hoards (1969), 62.
    ${ }^{33}$ G. Manganaro, in Proceedings of the 9th International Congress of Numismatics (1982), 261 ; another similar, though larger, hoard has recently been found, also at Morgantina.

[^7]:    ${ }^{34}$ Corolla Numismatica, (1906) 160-1; NZ 1915, 100-1. His view was not accepted by E. Seltman, NZ 1912, 157, or W. Giesecke, Sicilia Numismatica (1923), 142-3, but I think Imhoof was right on grounds of type, style, epigraphy, and also weight; the seven specimens known to me average 2.67 g , which ist not a multiple of a litra of 0.84 g , and even Giesecke had to call it (implausibly) a 2.4 nummus coin.
    ${ }^{35}$ I use the traditional weight unit of a litra, although Giesecke argued for the use of a nummus, equal to the Roman scruple of 1.1 g . The problem then is the 10 litra coins. The two specimens I know weigh 8.45 and 8.47 g , perfect fits for a system based on a litra of 0.84 , but not expressible in nummi of 1.1 g . Giesecke was therefore forced to call them Attic didrachms, but this seems special pleading. There is no other evidence for the Attic standard at Syracuse (the «Attic gold drachm" is more easily a gold five litra piece). For an implicit demolition of Giesecke's interpretation of the Hieronymus coinage in terms of Attic drachmae, see Holloway 22-4. terms of Attic drachmae, see Holloway 22-4.
    ${ }^{36}$ There is usually only one name on a coin, but sometimes more, e.g. A $\Gamma$ and $\boldsymbol{\Sigma} \boldsymbol{\Omega}$ appear on different sides of the same coins, as do O and $\boldsymbol{I} \mathrm{A}$. There appears to be a division between $\Phi I$ and $\Delta \mathrm{I}$, and $\Phi \stackrel{\delta \iota}{ } \ldots$. seems an unlikely name. Similarly there seems to be division between YA, $\boldsymbol{\Sigma}$ and (when it occurs) $\Lambda$, suggesting the occurrence of three names. One name, MI, had previously occurred on the coinages of Hiero and Hieronymus, and three others, $\Delta \mathrm{A}, \Sigma \Omega$ and $\mathbf{I} \mathrm{A}$, on the coinage of Hieronymus. As was the case under Hieronymus, there is almost no die-linking between different names (I have found only three cases: $\Delta A$ and MI, $\ddagger \mathrm{A}$ and YA- $\Sigma$ and YA- $\Sigma$ and $\Phi I-\Delta I)$. Consequently it seems most likely, as Holloway concluded, that the names represent people to whom the actual striking of coins was contracted out.
    ${ }^{37}$ Giesecke adds a) AP, which I believe he took from Hirsch 16, 324 where the initial X of XAP is off the flan; and b) $\boldsymbol{\Sigma A}$ which he cites from Hirsch 30: the piece (no. 432) is unillustrated and I suspect a cataloguing mistake.

[^8]:    ${ }^{38}$ Apart from the gold pieces discussed in n. 34, I have encountered only three forgeries (apart from a plated piece in the ANS). They are both 8 litra pieces: a) with $\Xi$ A in Hamburger 96, $68=$ Hamburger 11.6.1930, 6516.08 g ; and b) with YA- $\mathrm{\Sigma}$ - $\Lambda$ Schulman $21 . \mathrm{x} .1912$ no. 30, and another piece from the same dies in the BM forgery trays.

