

# THE ATHENIAN AGORA

RESULTS OF EXCAVATIONS

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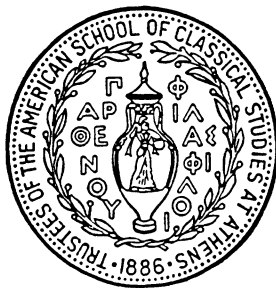
## THE GREEK COINS

BY

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with contributions by

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TO THE MEMORY OF  
MARGARET THOMPSON

## PREFACE

FOLLOWING UPON *The Athenian Agora*, Volumes II and IX, Margaret Thompson's *Coins from the Roman through the Venetian Period* (1954), and George Miles' *The Islamic Coins* (1962), the present volume brings to a conclusion the publication of coins in *The Athenian Agora, Results of Excavations* series. Publication of the Greek coins was initially entrusted to Josephine P. Shear; but after writing three preparatory articles in the 1930's<sup>1</sup> she was unable to make further headway, and the project lapsed for several decades. With the resumption of large-scale excavations in the Agora in 1970, responsibility for the Greek material was reassigned to me, excavation numismatist from 1970 through 1973. I in turn enlisted the assistance of my two successors at the Agora, Fred Kleiner and Alan Walker.

Our first task was to establish a reliable framework for the chronology of Athenian bronze coinage, to which all but 13 percent of the Agora Greek coins belong. My initial papers focused on Athenian bronze coinage of the Roman period and of the 4th and early 3rd centuries B.C. Kleiner, who elected not to participate in the final publication, devoted a series of articles to the bronze coinage of the 2nd and early 1st centuries B.C. Walker specialized in the Athenian imperial bronze coins from the Agora, making them the subject of his 1980 Ph.D. dissertation. For this project he went through the entire inventory of over 3,400 Athenian imperial bronzes to verify or correct the identifications that had been made at the time of discovery, to obtain weights, and to look for "runs" or groups of coins that had been found together but had not been recorded in the list of Agora deposits, which had been compiled primarily for the study of ceramic material. In 1981 I was able to devote eleven months to reexamining the remaining 13,000 Greek coins in the same way. Tedious and time-consuming as this was, it proved highly informative and has been more than justified by the accuracy and control made possible. Instead of working from the old inventory cards that go back to the year of discovery of each coin (as Margaret Thompson was obliged to do in the preparation of *Agora II*), our catalogue has been compiled directly from the coins. In the summer of 1990 we added the several dozen Greek coins unearthed since 1981.

Alan Walker's contributions to this volume are substantial. He wrote the catalogue of Athenian imperial coins in Chapter III and the core of the numismatic and chronological commentary in the introductory part of that chapter. He suggested many helpful improvements in drafts of the other chapters, and he is responsible for identifying many of the difficult non-Athenian coins that earlier Agora numismatists had found intractable; these include nearly all coins catalogued in Chapter IV bearing excavation inventory numbers suffixed with the letter "a".

A number of persons and institutions have generously assisted this project. We wish particularly to thank the former and present Directors of the Agora Excavations, Homer A. Thompson and T. Leslie Shear, Jr., for their encouragement and interest. We have been fortunate in being able to draw on the expertise of many other colleagues and friends at the Agora and elsewhere, among them Virginia R. Grace, G. Roger Edwards, Susan I. Rotroff, John McK. Camp, Rhys F. Townsend, Kevin Clinton, Judith Binder, Ursula Knigge, Christian Habicht, Orestes Zervos, and Theodore Buttrey deserve special acknowledgment. Basil C. Demetriades was always eager to discuss the problems presented by Athenian bronzes and did us the invaluable service of making available his

<sup>1</sup> "The Coins of Athens," *Hesperia* 2, 1933, pp. 231–278; 1936, pp. 123–150; and "Athenian Imperial Coinage," *Hesperia* 5, 1936, pp. 285–332.

electronic scale for weighing. Members of the permanent Agora staff, secretaries Margo Camp and Jan Diamant, conservators Alice Paterakis and Olympia Theophanopoulou, and photographer Craig Mauzy, cheerfully saw to the coordination, production, and photography of the hundreds of casts ordered for illustration. Cathy Collins, Greta Ham, and Tracey Rockett provided still further assistance with the casts and the assembly of the plates. Richard Anderson, architect of the Agora Excavations, prepared the two site plans, of which one is entirely new, that appear on Plates 35 and 36. We would also like to thank our many numismatic colleagues who took time from their visits to the Agora to go through our unidentified material. Finally, the volume owes a great deal to the staff members of the American School Publications Office. Their devoted and thoughtful editing, checking, and production have made this a much better book.

For the resources that enabled me to develop and begin writing up my part of the material, I am indebted to fellowships granted by the National Endowment for the Humanities in 1981, by the American Council of Learned Societies and the Institute for Advanced Study in 1985/1986, and by the University Research Institute of the University of Texas at Austin on both occasions. Over the years the University Research Institute helped defray many lesser expenditures, and the hospitality of the Institute for Advanced Study made it possible in more recent summers to return and work in its pleasant environment in Princeton.

Austin, Texas  
August 20, 1993

# TABLE OF CONTENTS

|   |      |
|---|------|
| PREFACE .....   | vii  |
| LIST OF PLATES .....  | x    |
| SELECTED BIBLIOGRAPHY AND ABBREVIATIONS .....   | xi   |
| CONSPECTUS OF COINS .....   | xvii |
| INTRODUCTION .....  | 1    |
| I. ATHENIAN SILVER COINS .....  | 4    |
| II. ATHENIAN BRONZE COINS, FOURTH THROUGH FIRST CENTURIES B.C. ....   | 24   |
| III. ATHENIAN BRONZE COINS, SECOND AND THIRD CENTURIES AFTER CHRIST .....   | 113  |
| (with Alan Walker)  |      |
| IV. NON-ATHENIAN COINS .....  | 166  |
| APPENDICES  |      |
| A. Three Modern Imitations .....  | 291  |
| B. Unstruck Blanks and the Mints of the Agora .....   | 292  |
| DEPOSITS, INCLUDING HOARDS .....  | 297  |
| TABLES  |      |
| I. Period I Chronology .....  | 320  |
| II. Structure of the Period II Coinage .....  | 322  |
| III. Late Period II and Period III Varieties .....  | 324  |
| IV. Period IV AE 1 Varieties .....  | 326  |
| V. Period IV Fractions .....  | 328  |
| VI. Three Early Period IVA Deposits .....   | 329  |
| VII. Hypothetical Development of the Athenian Bronze Denominational Systems<br>and Comparison with the Roman System ..... | 330  |
| VIII. Athenian Imperial Denominations .....   | 331  |
| IX. Totals of Athenian Imperial Dies .....  | 332  |
| CONCORDANCES  |      |
| Concordance of Catalogued Agora Coins .....   | 335  |
| Concordance to Athenian Bronze Coins Illustrated in Svoronos .....  | 351  |
| INDEXES .....   | 357  |
| PLATES  |      |

## LIST OF PLATES

1. Athenian Silver, 6th and 5th Centuries B.C. (1–12d)
2. Athenian Silver, 5th and 4th Centuries B.C. (12e–18)
3. Athenian Silver, 4th to 2nd Century B.C.; Bronze (19–37)
4. Athenian Bronze, 4th Century B.C. (38d–46c)
5. Athenian Bronze, 4th and 3rd Centuries B.C. (46d–54f)
6. Athenian Bronze, 3rd Century B.C. (55a–67b)
7. Athenian Bronze, 3rd Century B.C. (67c–75f)
8. Athenian Bronze, 2nd Century B.C. (76a–86d)
9. Athenian Bronze, 2nd and Early 1st Centuries B.C. (87a–99e)
10. Athenian Bronze, 2nd and Early 1st Centuries B.C. (99f–114a)
11. Athenian Bronze, 1st Century B.C. (115a–126e)
12. Athenian Bronze, 1st Century B.C. (127a–138g)
13. Athenian Bronze, 1st Century B.C. (139a–148)
14. Athenian Bronze, 1st Century B.C. (149a–156d)
15. Athenian Bronze, 1st Century B.C. and 2nd Century after Christ (157a–167c)
16. Athenian Bronze, 2nd Century after Christ (169a–197e)
17. Athenian Bronze, 2nd Century after Christ (198–247a)
18. Athenian Bronze, 2nd Century after Christ (248a–278a)
19. Athenian Bronze, 2nd and 3rd Centuries after Christ (279a–307a)
20. Athenian Bronze, 3rd Century after Christ (308–361a)
21. Athenian Bronze, 3rd Century after Christ (362–401b)
22. Athenian Bronze, 3rd Century after Christ. Italy, Sicily, Thrace (401c–449)
23. Thrace, Macedonia (452a–504b)
24. Macedonia, Thessaly, Epeiros (505–571a)
25. Epeiros to Phokis, Boiotia, Euboia (572–624)
26. Euboia, Salamis, Megarid (625–657)
27. Aigina, Corinth (658a–717)
28. Peloponnesos (718–812b)
29. Crete, Cyclades, Pontos to Aiolis (817–898)
30. Aiolis, Ionia, Karia (900–966)
31. Lydia to Judea, Persian Empire, Egypt to Numidia (969a–1035)
32. Modern Imitations. Coin Blanks
33. Coin Blanks and Rejects
34. Coins from the Library of Pantainos North Stoa
35. Plan of the Athenian Agora, *ca.* 100 B.C., with Sections of Excavation Indicated
36. Plan of the Athenian Agora, 2nd Century after Christ

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## PERIODICALS

AA = *Archäologischer Anzeiger*

AAA = Αρχαιολογικά Ανάλεκτα εξ Αθηνών

AJA = *American Journal of Archaeology*

AJAH = *American Journal of Ancient History*

AJP = *American Journal of Philology*

*AM* = *Mitteilungen des deutschen archäologischen Instituts, Athenische Abteilung*

*ANSMN* = *American Numismatic Society Museum Notes*

*BCH* = *Bulletin de correspondance hellénique*

*BSA* = *Annual of the British School at Athens*

*CH* = *Coin Hoards*

Δελτ = Αρχαιολογικόν Δελτίον

ΕφΑρχ = Εφημερίς Αρχαιολογική

*GRBS* = *Greek, Roman and Byzantine Studies*

*JHS* = *Journal of Hellenic Studies*

*JIAN* = *Journal international d'archéologie numismatique*

*JNG* = *Jahrbuch für Numismatik und Geldgeschichte*

*JRS* = *Journal of Roman Studies*

*NC* = *Numismatic Chronicle*

*NZ* = *Numismatische Zeitschrift*

*RBN* = *Revue belge de Numismatique et de Sigillographie*

*REG* = *Revue des études grecques*

*RN* = *Revue numismatique*

*SAN* = *Journal of the Society for Ancient Numismatics*

*SNR* = *Schweizerische numismatische Rundschau*

*TAPA* = *Transactions of the American Philological Association*

*ZPE* = *Zeitschrift für Papyrologie und Epigraphik*

The following abbreviations are used in this volume:

AE = bronze

ex. = exergue

AR = silver

l. = left

AV = gold

laur. = laureate

bill. = billon

obv. = obverse

cmk. = countermark

r. = right

cuir. = cuirassed

rad. = radiate

diad. = diademed

rev. = reverse

dr. = draped

stg. = standing

EL = electrum

## CONSPECTUS OF COINS



|   |                                  |           |              |     |    |   |
|---|----------------------------------|-----------|--------------|-----|----|---|
| Coela (1)<br>Sestos (2)                               | 2                                | 3<br>4+   | 3<br>13<br>4 | 1AR | 1  | 1 |
| Imbros (3)<br>Lemnos: Hephaistia (7+)<br>Myrina (54+) | 41+                              | 3<br>4+   | 13<br>4      | 1AR |    |   |
| Samothrace (4)<br>Thasos (3)                          | 3                                |           |              |     |    |   |
| Kings Lysimachos (5)                                  |                                  | 2AR<br>&2 |              |     |    |   |
| Rhoimetakes I (1)                                     |                                  |           |              |     | 1  |   |
| <b>MACEDONIA (304)</b>                                |                                  |           |              |     |    |   |
| Akanthos (1)  | 1                                |           |              |     | 1  | 1 |
| Amphipolis (2)  |                                  |           |              |     |    |   |
| Aphytis (1)   |                                  |           | 1            |     |    |   |
| Bottiaia (1)  |                                  |           | 1            |     |    |   |
| Dion (1)  |                                  |           |              |     | 1  |   |
| Olynthos (1)  | 1                                |           |              |     |    |   |
| Ouranopolis (2)                                       | 2                                |           |              |     |    |   |
| Pella (1)   |                                  |           |              |     |    |   |
| Philippoi (4)   | 1                                |           |              |     | 3  |   |
| Skione (1)  | 1                                |           |              |     |    |   |
| Thessalonike (8)                                      |                                  |           |              |     | 1  | 1 |
| Kings Philip II (6)<br>Alexander III (26)             | 6<br>1AV,<br>9AR&16<br>2AR<br>10 |           |              |     |    | 2 |
| Philip III (2)  |                                  |           |              |     |    |   |
| Anonymous (10)  |                                  |           |              |     |    |   |
| Kassandros (18+)                                      |                                  | 18+       |              |     |    |   |
| Demetrios Poliorketes (23)                            |                                  | 3 AR&20   |              |     |    |   |
| Antigonos Gonatas (184+)                              |                                  | 184+      |              |     |    |   |
| Philip V (4)<br>?Perseus (1)                          |                                  |           | 4            |     | 1? |   |
| Macedonian League (3)                                 |                                  |           |              |     |    | 3 |
| <b>THESSALY (72)</b>                                  |                                  |           |              |     |    |   |
| Aimianes (3)  | 2                                |           |              |     | 1  |   |
| Atrax (1)   |                                  | 1         |              |     |    |   |



## CONSPICUOUS OF COINS (cont.)

|                              | Centuries B.C. |     |     |     |     |     | Centuries after Christ |     |     |     |
|------------------------------|----------------|-----|-----|-----|-----|-----|------------------------|-----|-----|-----|
|                              | 6th            | 5th | 4th | 3rd | 2nd | 1st | 1st                    | 2nd | 3rd | 4th |
| Gomphoi (1)                  |                |     | 1   |     |     |     |                        |     |     |     |
| Gyrton (4)                   |                |     | 4   |     |     |     |                        |     |     |     |
| Halos (1)                    |                |     | 1   |     |     |     |                        |     |     |     |
| Krannon (2)                  |                |     | 2   |     |     |     |                        |     |     |     |
| Lamia (2)                    |                |     | 2   |     |     |     |                        |     |     |     |
| Larissa (5)                  |                |     | 5   |     |     |     |                        |     |     |     |
| Larissa Kremaste (1)         |                |     | 1   |     |     |     |                        |     |     |     |
| Magnetes (7)                 |                |     | 1   |     | 6   |     |                        |     | 1   |     |
| Orthe (1)                    |                |     | 1   |     |     |     |                        |     |     |     |
| Phalanna (4)                 |                |     | 4   |     |     |     |                        |     |     |     |
| Pharsalos (5)                |                |     | 5   |     |     |     |                        |     |     |     |
| Thessalian League (33)       |                |     |     |     | 26  |     | 2                      | 3   | 2   |     |
| Peparethos (2)               |                |     |     |     | 1   |     |                        |     |     |     |
| <b>NORTHWEST GREECE (61)</b> |                |     |     |     |     |     |                        |     |     |     |
| Dyrrhachion (6)              |                |     |     |     | 6   |     |                        |     |     |     |
| Skodra (1)                   |                |     |     |     | 1   |     |                        |     |     |     |
| Nikopolis (11)               |                |     |     |     |     |     |                        |     |     |     |
| Epeirete League (3)          |                |     |     |     | 3   |     |                        |     |     |     |
| Korkyra (16)                 |                |     | 4   | 1   |     | 11  |                        |     | 7   |     |
| Leukas (2)                   |                |     |     |     |     |     |                        |     |     |     |
| Medon (1)                    |                |     | 1   |     | 2   |     |                        |     |     |     |
| Thyreion (1)                 |                |     | 1   |     |     |     |                        |     |     |     |
| Aitolian League (20)         |                |     | 4   | 12  | 4   |     |                        |     |     |     |
| <b>CENTRAL GREECE (475)</b>  |                |     |     |     |     |     |                        |     |     |     |
| Lokrian League (46)          |                |     | 22  | 20  | 4   |     |                        |     |     |     |
| Phokian League (24)          |                |     | 2   | 22  |     |     |                        |     | 3   |     |
| Delphi (3)                   |                |     |     |     |     |     |                        |     |     |     |
| Boiotian League (175)        |                |     | 33+ | 128 | 8+  |     |                        |     |     |     |
| Orchomenos (1)               |                |     |     |     |     | 1   |                        |     |     |     |

|  |                          |                         |               |               |         |                   |   |
|--|--------------------------|-------------------------|---------------|---------------|---------|-------------------|---|
| Tanagra (9)<br>Thebes (9)<br>Thespiai (14)   | 1<br>8<br>10             | 2<br>14AR<br>&26<br>26+ | 7             | 28            | 4       | 3                 |   |
| Euboian League (36)  | 11+                      | 15<br>16AR              | 4             | 6<br>5        |         |                   |   |
| Chalkis (112)<br>Eretria (4)<br>Histiaia (37)<br>Karystos (5)                            | 43AR<br>&1991<br>196 356 | 14AR<br>&1439+          | 2AR<br>&2750+ | 1AR<br>&3989+ |         | 1167              |   |
| ATHENS (14,360+)<br>Athenian (13,749+)   | 99                       | 59                      |               |               |         | 2284              |   |
| Eleusinian (611)   | 160                      | 152                     |               | 13            |         | 5<br>1            | 3 |
| SALAMIS-AIGINA (456)<br>Salamis (99)   |                          |                         |               |               |         |                   |   |
| Megara (333)<br>Pagai (1)  |                          |                         |               |               |         |                   |   |
| Aigina (23)  | 14                       | 3                       |               |               |         | 1                 |   |
| PELOPONNESOS (354)<br>Corinth (137)<br>Phlious (6)<br>Sikyon (75)                        | 1AR<br>6<br>2            | 57<br>16                | 39<br>11      | 19<br>4       | 44<br>2 | 8<br>1            |   |
| Aigion (3)<br>Boura (1)<br>Patrai (11)<br>Pellene (6)<br>Tenca (1)<br>Achaian League (9) | 6                        |                         |               | 2<br>4<br>1   |         | 1?<br>2<br>3<br>1 |   |
| Elis (12)<br>Kranion (2)<br>Same (1)<br>Zakynthos (2)                                    | 1"AR"                    | 2<br>1<br>2             | 5<br>3        |               |         | 3                 |   |
| Messene (7)<br>Kyparissia (1)  | 2<br>2                   | 5                       |               |               |         | 1                 |   |

|  | Centuries B.C. |     |                            |                  |        |     | Centuries after Christ |     |     |                  |   |
|--|----------------|-----|----------------------------|------------------|--------|-----|------------------------|-----|-----|------------------|---|
|  | 6th            | 5th | 4th                        | 3rd              | 2nd    | 1st | 1st                    | 2nd | 3rd | 4th              |   |
| Mothone (1)<br>Thouria (2)<br>Lakedaimon (18)<br>Kythera (1)   |                |     |                            | 1                | 1      | 14  |                        |     | 2   | 1<br>1           |   |
| Argos (13)<br>Epidauros (10)<br>Hermione (6)<br>Kleonai (3)<br>Methana (1)<br>Troizen (2)  |                |     | 5<br>2                     | 3<br>9           | 8<br>1 |     |                        | 1   |     | 2<br>1<br>1<br>1 |   |
| Arkadian League (3)<br>Heraia (2)<br>Kleitor (1)<br>Mantinea (3)<br>Megalopolis (1)<br>Orchomenos (1)<br>Pheneos (2)<br>Tegea (10)                 |                |     | 3<br>2<br>1<br>3<br>1<br>1 |                  |        |     |                        |     |     |                  | 1 |
| <b>CRETE and ISLANDS (67)</b>  |                |     |                            |                  |        | 2   |                        |     |     |                  |   |
| Aptera (1)<br>Arsinoe (1)<br>Knossos (2)<br>Roman province of<br>Crete (1)   |                |     |                            | 1                | 1      |     |                        | 1   |     | 1                |   |
| Andros (11)<br>Delos (17)<br>Keos League (8)<br>Karthaia (4)<br>Koressia (3)<br>Ioulis (3)<br>Kythnos (2)<br>Melos (2)<br>Paros (1)<br>Siphnos (1) |                |     |                            | 11<br>16         |        |     |                        |     |     | 1                |   |
|  | 1 "AR"         |     |                            | 8<br>4<br>3<br>3 | 2<br>1 |     |                        |     | 2   |                  |   |

|                                  | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 | 3 | 4 |
|----------------------------------|---|---|---|---|---|---|---|---|---|---|---|---|
| Syros (3)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| Tenos (7)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| ASIATIC                          |   |   |   |   |   |   |   |   |   |   |   |   |
| BOSPHOROS (3)                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Phanagoria (1)                   |   |   |   |   |   |   |   |   |   |   |   |   |
| King Rhsekouporis VI (2)         |   |   |   |   |   |   |   |   |   |   |   |   |
| ASIA MINOR (186)                 |   |   |   |   |   |   |   |   |   |   |   |   |
| Amisos (3)                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Bithynian League (1)             |   |   |   |   |   |   |   |   |   |   |   |   |
| Nikaia (1)                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Nikomedia (3)                    |   |   |   |   |   |   |   |   |   |   |   |   |
| King Prousius II (2)             |   |   |   |   |   |   |   |   |   |   |   |   |
| Adramyteion (2)                  |   |   |   |   |   |   |   |   |   |   |   |   |
| Atarneus (1)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Kyzikos (2)                      |   |   |   |   |   |   |   |   |   |   |   |   |
| Parion (9)                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Pergamon (8)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Perperene (2)                    |   |   |   |   |   |   |   |   |   |   |   |   |
| Pitane (1)                       |   |   |   |   |   |   |   |   |   |   |   |   |
| Alexandria Troas (5)             |   |   |   |   |   |   |   |   |   |   |   |   |
| Assos (1)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| Ilion (1)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| Neandria (2)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Skepsis (1)                      |   |   |   |   |   |   |   |   |   |   |   |   |
| Tenedos (1)                      |   |   |   |   |   |   |   |   |   |   |   |   |
| Aigai (3)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| Autokane (1)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Elaia (1)                        |   |   |   |   |   |   |   |   |   |   |   |   |
| Kyme (6)                         |   |   |   |   |   |   |   |   |   |   |   |   |
| Methymna (2)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Mytilene (4)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Ephesos (10)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Erythrai (4)                     |   |   |   |   |   |   |   |   |   |   |   |   |
| Klazomenai (3)                   |   |   |   |   |   |   |   |   |   |   |   |   |
| Magnesia on the<br>Maiondros (4) |   |   |   |   |   |   |   |   |   |   |   |   |



|   |     |                |   |                     |        |        |                  |
|---|-----|----------------|---|---------------------|--------|--------|------------------|
| Seleukia on the Kalykadnos (1)<br>Soloï-Pompeiopolis (2)<br>Syedra (1)<br>Tarsos (1)  | 1   | 1              | 1 | 1                   | 1      | 1      | 1                |
| King Amyntas (1)  |     |                |   |                     |        |        |                  |
| SYRIA-PERSIA (18)<br>Kings Seleukos III (1)<br>Antiochos III (1)<br>Seleukos IV (1)<br>Alexander I Balas (1)<br>Antiochos VII (1)<br>Antioch on the Orontes (3)   | 1   | 1              | 1 | 1                   | 1      | 1      | 1 Bill.          |
| Judea (9)   |     |                |   | 1                   | 1      | 1      | 7                |
| Persian Empire (1)  | 1AV |                |   |                     |        |        |                  |
| EGYPT-NUMIDIA (52)<br>Kings Ptolemy II (3+)<br>Ptolemy III (5+)<br>Ptolemy IV (1+)<br>Ptolemy VI & VII (3)<br>Ptolemy VI (2)<br><br>Ptolemy VIII (3)<br>Ptolemy IX (2)<br>Ptolemy XI (4)<br>Ptolemy XII (1)<br>Kleopatra VII (1)<br>Alexandria (11)<br><br>Cyrene (1)<br>Ptolemaic Cyrenaica (1)<br>Roman province of Cyrenaica and Crete (2) |     | 3+<br>5+<br>1+ |   | 3<br>1AR<br>&1<br>3 | 2<br>4 | 1<br>1 | 7<br><br>3 Bill. |
| King Juba I (1)   |     |                |   |                     |        | 2      | 1 AR             |

Continued on next page

SUMMARY

|  | Centuries B.C. |        |           |               |                |                         | Centuries after Christ |              |               |     |
|--|----------------|--------|-----------|---------------|----------------|-------------------------|------------------------|--------------|---------------|-----|
|  | 6th            | 5th    | 4th       | 3rd           | 2nd            | 1st                     | 1st                    | 2nd          | 3rd           | 4th |
| TOTALS:                                  |                |        |           |               |                |                         |                        |              |               |     |
| NON-ATHENIAN<br>GREEK (2197)             | 3<br>1         | 3<br>8 | 3<br>469+ | 269+<br>635+  | 136+<br>170+   | 104+<br>69              | 5<br>85                | 3<br>65      | 4<br>79       | 2   |
| TOTAL GREEK<br>(16557+)                  | 3<br>11        | 67     | 2699+     | 625+<br>2146+ | 97+<br>2923+   | 104+<br>4059+           | 9<br>85                | 3<br>2349    | 4<br>1246     | 2   |
| ROMAN TO<br>A.D. 267 <sup>1</sup> (1137) |                |        |           |               | 1 <sup>2</sup> | 15AR<br>&8 <sup>3</sup> | 22AR<br>&24            | 35AR<br>&245 | 658AR<br>&129 |     |

<sup>1</sup> *Agora II*, nos. 1-550, to which are added the 98 Roman coins to A.D. 267 from the 1950 through 1990 excavations. The Roman coins are overwhelmingly from the mint at Rome, although the totals of the 1st century B.C. include a few pieces from mints in Greece, Asia Minor, Spain, and Lyons, and a small proportion of the coins from the 3rd century after Christ come from such imperial mints as those at Antioch, Milan, Lyons, and Asia Minor.

<sup>2</sup> NN-2014, an extremely worn Janus/Prow as (33 mm., 18.24 g) that was excavated before 1949 but inexplicably omitted from *Agora II*.

<sup>3</sup> To *Agora II*, add a denarius of L. Farsuleius Mensor (E-2432 = *GRC*, fig. 26) and a plated Venus/Aeneas denarius of Julius Caesar (K-1646), both excavated after 1949; two Roman bronzes (both found before 1949) of the 90's or 80's B.C.: OO-527, a heavily worn Janus/Prow as (26 mm., 7.44 g); and OO-27, a Herakles/Prow quadrans (16 mm., 2.24 g); and three further "Fleet Praefect" bronzes of Antony (as *Agora II*, no. 13: Capito, *RPC I*, 1470), for a current Agora total of five (K-1587, OO-1249, IIΘ-879, Σ-6274 = *GRC*, fig. 26, and ΣT-82a).

## INTRODUCTION

CATALOGUED HEREIN are the 16,557+ identifiable Greek coins produced by the Agora excavations between 1931 and 1990. The total includes more than a thousand extremely worn coins that, while not identifiable by actual variety, can nevertheless be attributed to certain large Athenian series; but it excludes well over four thousand other damaged or totally worn pieces that by size and fabric can be identified only as 4th-century or Hellenistic “Greek”, if these pieces happen to be available for reexamination at all, since many had been weeded out from storage and were discarded in the late 1940’s. As can be readily calculated from the catalogue summary presented on pages xvii–xxvi, all but one-tenth of 1 percent of the identifiable coins are bronze. Eighty-seven percent are Athenian.

Because of the dominance of the Athenian bronze, one of our major goals is to present a reliable survey of this coinage insofar as the limitations of excavation specimens allow. The limitations must be stressed, for a conventional study of the coinage would rely far more heavily on museum-quality specimens from outside the excavations than on the coins that we are publishing here. Fortunately, the bronze coinage of Athens has already been well illustrated in the folio plates of J. N. Svoronos’ 1923 *Les monnaies d’Athènes*. Despite its obsolete organization and chronology, this work illustrates with first-rate examples from European collections virtually all the Athenian bronze varieties, and in the case of the Athenian imperial bronze of the 2nd and 3rd centuries after Christ, a very high percentage of the obverse and reverse dies. Since this work was reprinted in 1975 in a new, convenient format and is now widely available, we have not hesitated to refer to it constantly. So fully do Svoronos’ plates complement our text and illustrations that many readers will want to keep an open copy of Svoronos close at hand.

In comparison with museum or hoard specimens, it is in the area of absolute metrology that the Agora specimens are most deficient. Most are worn to some degree; almost all were found in a heavily corroded state; and this wear and corrosion, together with the heavy chemical or electrolytic cleaning used to remove the corrosion for identification, are responsible for an inevitable loss of some original surface metal and weight. As can be calculated from Tables III and IV (pp. 324–327 below), which compare the average weights of Agora and nonexcavation hoard specimens of certain bronze issues, the weight loss of the Agora excavation coins is generally in the area of 8 to 14 percent for larger bronze coins with diameters of *ca.* 18–20 mm., although there are some issues in which there is less or no detectable differential. The differential declines as diameters become smaller. We have nevertheless recorded the weights and weight averages of the better-preserved Agora bronze coins for their value as *relative* indicators, since even approximate weights can be more informative than linear measurements of diameter for comparing individual issues and sometimes for distinguishing denominational relationships. The frequently wide variation in weight between coins of a given issue arises from the fact that the blanks were cast or cut with much less individual attention than was expended on the blanks of precious-metal coinages.<sup>1</sup> But this phenomenon has been observed also in Roman bronze coinage, which is known to have been struck at so many pieces to a given weight of

<sup>1</sup> For the coin blanks of the 1st century B.C. and the 3rd century after Christ excavated from mints in the Agora, see Appendix B with Plates 32 and 33. All these blanks were cut from forged bronze rods, the 1st-century B.C. blanks by chopping, the later ones by sawing. In neither case was much care taken to cut the rods into strictly uniform segments.



metal, so that the average weight of all bronze coins from a given issue or batch should represent the standard to which that batch or issue was struck.<sup>2</sup> In some Athenian bronze coinages, a fixed weight standard was demonstrably adhered to from one issue to the next; other Athenian bronze coinages were minted in issues or batches that become progressively lighter over time to increase profitability.<sup>3</sup>

This volume differs from most previous publications of excavation coins in the attention paid to archaeological contexts and in the more than minimal number of illustrations. A good pictorial record of the Athenian bronzes is obviously necessary if this volume is to serve as a useful reference for that coinage. But in addition, we believe that excavation coins should not be treated differently than other archaeological material: they should be recorded visually as well as described; and if this means the illustration of a large number of mediocre, worn, or damaged specimens, such is the reality of excavation numismatics, which reflects more faithfully than pieces selectively purchased for modern collections the true character of the lower-value currency in actual circulation in antiquity. In this connection, it is salutary to emphasize that the coins chosen for our plates are the very finest specimens that the Agora excavations have to offer. We decided to illustrate plaster casts rather than direct photographs after experiments convinced us that in most cases casts produced more legible and evenly lit images. A good sampling of the finest Agora Greek coins in direct photography will be found in Fred Kleiner's 1975 *Agora Picture Book, Greek and Roman Coins in the Athenian Agora*.

In my study of the Agora Greek coins, I was surprised to discover how few, relatively speaking, come from chronologically significant contexts. A majority of the coins were recovered from late or "mixed" fills, having apparently been redeposited in earth that had been dug up and reused in later building operations.<sup>4</sup> A number of other coins have potentially informative stratigraphical contexts, but at the present time these contexts are too vaguely dated or have been too little studied to deserve mention in our catalogue. This leaves the coins from the Agora deposits: the dumps or accumulations of earth and debris that have been excavated from wells, cisterns, building fills, building destructions, and similar, more or less closed contextual entities. Most of these deposits have been carefully studied, many repeatedly, and several have been as instrumental in the reconstruction of the chronology of Attic bronze coinage as they have been for the chronology of pottery, stamped amphora handles, and other kinds of artifacts. The Agora deposits with important groups of Greek coins are listed at the end of this book (pp. 297–318) and are cited when relevant in our discussions and catalogue. Among the deposits are a few hoards, or groups of coins that were intentionally assembled and secreted together, as opposed to the randomly lost, and perhaps occasionally discarded, coins that found their way into most normal filling deposits. When relevant, the relative wear of a coin in a deposit or hoard group may be indicated on a scale of w(ear)1–6, from unworn (w1) to extremely worn (w6).

<sup>2</sup> Crawford, *RRC*, p. 592: "An issue of coinage was described by the Romans as struck so many to the pound and this terminology presumably reflected mint-practice; certainly no attempt was made to adjust the weight of individual pieces very carefully. Blanks were presumably made roughly the same size in the hope that they would turn out roughly the same weight and the size reduced or increased towards the end of a batch depending on how the metal was lasting; thus the mean weight of a batch of coinage straight from the mint would be the same as its weight standard." About Augustan coinage, Harold Mattingly, *Roman Coins*, 2nd ed., London 1960, p. 122, wrote, "Brass and copper are struck much more carelessly [than gold or silver]—*a marco*, not *a pezzo*—i.e., not on a carefully adjusted weight for each piece, but at so many to the pound."

<sup>3</sup> Compare varieties **88–96** (Table III, p. 324 below), **115–126** and **149–153** (Table IV [pp. 326–327 below] and pp. 82, 88) with varieties **137–140**, **143**, and **144** (Table IV [p. 326 below] and p. 90). For the progressive weight reduction of other Athenian varieties or series, see p. 75, under **99**, and p. 79, under **108**.

<sup>4</sup> But at least a few Greek coins continued to be used as late as Early Byzantine times; see under **142** for a 1st-century B.C. coin in a 6th-century Slavic Invasion hoard.

The format of the catalogue entries should be self-evident. Coins are listed by varieties (numbers in boldface). The variety numbers of silver, gold, electrum, and billon coins are italicized, and the type of metal is specified. All other coins are bronze. (Whenever possible, coins too poorly preserved to be assigned to a single variety are assigned to a group of varieties that are cited together in brackets, for example, [44–47] on page 43.) If a variety is represented by only a single coin, the bold variety number will function also as the individual coin reference. In cases where a variety is represented by many specimens, the total number of coins is followed by the range of diameters in millimeters and by the average weight in grams of the best-preserved specimens (the number of coins weighed given in parentheses); listed below are the specimens chosen for illustration or for some special contextual or other reason.

Each individually catalogued coin is listed with its Agora inventory number; diameter in millimeters; die position, if numismatically relevant; weight in grams; and further bibliographical, contextual, or other annotation, if needed. References to Agora deposits are enclosed in parentheses. Illustrated coins are marked with an asterisk. Die alignments are indicated by arrows, or, for worn coins whose die axes can be identified by angle but not top or bottom orientation, just by |, \, etc. Weights followed by + are of heavily damaged coins that have lost a considerable amount of their original weight.

In addition to the abbreviations given on p. xvi, the following cataloguing conventions should be noted. In the recording of legends and types, brackets enclose restored letters or parts of a design that are no longer visible on the coin. Obliterated variable legends that cannot be restored are recorded as [ - - - - - ]. In legends, a dash (-) indicates a horizontal break between letters, a vertical bar (|) indicates the beginning of a new horizontal line of the text. A horizontal line above two or three letters indicates that they are conjoined in a single ligature.

For the rubrics AE 1, AE 2, etc., employed in Chapter II to distinguish the several modular units of Athenian bronze coinage to the end of the 1st century B.C., see page 38 below. Such rubrics, long used for the sizes of late Roman Imperial bronze denominations, were first applied to Athenian bronze coins by Fred Kleiner, whose system had to be modified to encompass the much greater range of Athenian material catalogued here (see note 117 below, p. 68).

The Agora coins are listed in the excavators' notebooks and are stored in the Stoa of Attalos by inventory numbers, which are prefixed with the Greek letter or letters that designate the excavation section. For readers who might wish to identify the approximate area in which a coin was found, we have been able to include a new plan of the Agora with section boundaries indicated (Plate 35). Coins inventoried under the rubrics KTA or NSR were not recovered in the course of excavation: some were picked up in or near the Agora; others are donations of unspecified provenience. Although they do not properly belong in a publication of excavation finds, we include a few because they have become part of the Agora numismatic collection.

# I

## ATHENIAN SILVER COINS

**B**LESSED with her own natural deposits of silver ore, Athens minted one of the most influential and abundant silver coinages of the ancient world from the middle of the 6th to the middle of the 1st century B.C. At four peak periods of coining (the first two decades of the 5th century, the 450's through 415, the second half of the 4th century, and the first decade of the 1st century B.C.) the output of Athenian silver tetradrachms was prodigious; and to judge from hoards and the widespread imitation of these tetradrachms in all periods, the international demand for this coinage remained strong almost to the very end. This is not of course the place to attempt anything like a comprehensive account of this vast coinage, whose detailed history depends in any case on hoards and the study of specimens in the great public collections that hoards have supplied.<sup>1</sup> But the incomplete sampling of Athenian silver from the Agora excavations at least calls for a selective survey, if only to provide a framework for a fuller analysis of Athenian bronze coinage in Chapter II.

The Agora's 129 Athenian silver pieces and imitations thereof represent less than 1 percent of the nearly 14,000 Athenian coins excavated. Predictably, the overwhelming majority of the silver finds are of the smaller, more easily lost denominations of a drachm or its fractions, and this explains why roughly half of the pieces date from the 5th century, when Athenian currency was exclusively of silver. Thereafter, the finds progressively decline century by century to a mere three silver New Style pieces of the 2nd century B.C. in a trend that reflects the increasing importance of the supplementary bronze currency. Once a bronze coinage was introduced in the 4th century, bronze began to replace the smaller silver denominations in petty transactions and lessened dependency on silver in general. By the end of the 4th century at the latest, Athens no longer bothered to strike any silver coin lower than the triobol; and in the later Hellenistic currency the hemiobol and the obol came themselves to be minted in bronze.<sup>2</sup>

The proportion of unofficial, imitative tetradrachms and drachms is striking. There are five to seven of these counterfeits in silver and twenty-two of silver-plated bronze. At least one tetradrachm in the former category (Appendix A, coin a) is modern, and one or two other silver pieces could also be recent, although even if they should be so, the proportion of ancient false to genuine tetradrachms and drachms remains impressively high for so few total pieces found.

As explained below (pp. 9–10), the thirteen silver-plated tetradrachms *16a–m* are a special case; coming from a single disturbed hoard, they had intentionally been buried together. It is clear, however, that most of and possibly all the remaining subaerate pieces were gotten rid of after they had been detected as false. At least half of them had been tested or defaced with a chisel cut. Of these *9a*, *16o*, and *16p* had been removed from circulation, that is, from mortal use, by being dedicated to a god and deposited in a sanctuary. The unlucky owners of most of the other plated pieces, even those without visible test cuts, had presumably just thrown them away as worthless. It is conceivable that some of the ancient owl imitations of full silver may also have been intentional discards; for

<sup>1</sup> The best surveys of Athenian silver are by Kraay, *Athens* and (in more detail but extending only through the 4th century) *ACGC*, pp. 55–77, pls. 9–12. For a tabular summary of estimated levels of Athenian silver-coin production over time, see the diagram inserted at p. 56 of C. E. Conophagus, *Le Laurium antique*, Athens 1980.

<sup>2</sup> Pp. 38, 48–49, 68, 83–84 below.

if they cannot pass autopsy as bona fide Athenian emissions today, they would doubtless have been suspect in antiquity and, according to Buttrely's persuasive interpretation of the 375/4 B.C. Athenian law on silver coinage, could have been refused by anyone demanding payment in certified legal tender.<sup>3</sup> The high survival rate of imitations is surely an effect of their worthlessness; and as a forceful reminder of how common bad money must have been in the ancient marketplace, the discovery of so many in the soil of the Agora enables us to appreciate better the legislation of 375/4 that spelled out the responsibilities and procedures of the public certifier of currency, the *δοκιμαστής*, in protecting the state coinage against forgeries of all kinds.<sup>4</sup>

### SIXTH AND FIFTH CENTURIES B.C.

Athenian numismatics begins with the anepigraphic Wappenmünzen (Heraldic coins), a uniface coinage with changing obverse types. The Agora has yielded eight pieces: an obol with amphora obverse, a drachm with horse's hindquarters obverse, three drachms and two obols with the common strutted-wheel obverse, and, from near the end of the series, a fine didrachm with bull's head obverse (1–5). The Athenian origin of these and the rest of the Wappenmünzen silver (which altogether involved fourteen obverse types in the didrachm sequence) is no longer doubted, not least, as Hopper has emphasized, because of the importance of the Agora finds in strengthening the record of Attic provenience.<sup>5</sup> Scholarship now connects this coinage with the Peisistratid tyranny, placing it between Peisistratos' return to power in 546 and the adoption of the static Athena head/Owl types, probably in the teens of the 6th century under Hippias.<sup>6</sup> Unfortunately for chronological purposes, only the wheel drachm 3a comes from an Archaic context, and it was found embedded in a floor of the early 5th century. The remaining Agora Wappenmünzen and the excavation's two late 6th-century owl pieces (an obol [6] from the earliest phase of the owl coinage [Seltman Group H] and a tetradrachm [7] from the succeeding phase [Group L]) were recovered either from much later or from mixed contexts.

Missing from the Agora catalogue are any specimens from the huge owl issues of the first two decades of the 5th century<sup>7</sup> and from the following early "wreathed" silver, so called from the olive leaves added to the brow of Athena's helmet, of the 470's and 460's (Starr Periods I–V).<sup>8</sup> The ten

<sup>3</sup> T. V. Buttrey, "The Athenian Currency Law of 375/4 B.C.," in *Essays Thompson*, pp. 33–45; and, especially, *idem* 1981, pp. 71–94. *Editio princeps*, translation, and extended commentary: Stroud 1974, pp. 157–188. Recent discussion and bibliography by T. R. Martin, "Silver Coins and Public Slaves in the Athenian Law of 375/4 B.C.," in *Papers Waggoner*, pp. 21–48.

<sup>4</sup> The problem, of course, was by no means limited to Athens. Commenting on the frequency of Roman plated coins in excavations, Burnett (*CRW*, p. 100) estimates that "approximately one half of all denarii found on a site tend to be plated."

<sup>5</sup> Hopper, p. 25. On the Wappenmünzen, see further Kraay, *ACGC*, pp. 56–60; Kroll 1981b, pp. 1–32.

<sup>6</sup> Kraay, *ACGC*, pp. 58, 61; Kroll 1981b, pp. 20–32; J. H. Kroll and N. Waggoner, "Dating the Earliest Coinage of Athens, Corinth, and Aegina," *AJA* 88, 1984 (pp. 325–340), pp. 326–333. For the earlier chronology espoused by H. A. Cahn, "Dating the Early Coinages of Athens," in *Kleine Schriften zur Münzkunde und Archäologie*, Basel 1975, pp. 81–97 (who begins both the Wappenmünzen and the owl silver in the early 6th century), see Kroll and Waggoner, *op. cit.*, p. 330, note 34. A later chronology (starting the Wappenmünzen under Kleisthenes, the owls after 480) proposed by M. Vickers, "Early Greek Coinage: A Reassessment," *NC* 145, 1985 (pp. 1–44), pp. 22–33, is rebutted by J. H. Kagan ("The Decadrachm Hoard: Chronology and Consequences," in Carradice [pp. 21–28], p. 22) and, especially, M. C. Root ("Evidence from Persepolis for the Dating of Persian and Archaic Greek Coinage," *NC* 148, 1988 [pp. 1–12], pp. 8–12).

<sup>7</sup> M. Price and N. Waggoner, *Archaic Greek Silver Coinage, The "Asyut" Hoard*, Dorchester/London 1975, pp. 56–61, Groups IV–VI (= Seltman Groups M+G, C+F, and E). Cf. Kraay, *ACGC*, pl. 10:181–186.

<sup>8</sup> Starr, pp. 8–63, pls. I–XXI. Cf. Kraay, *ACGC*, pl. 11:187–190.

Agora tetradrachms of 5th-century design are all of the later “standardized” type, with generally hard, mechanical Athena heads; heavy, spread helmet ornaments; large lettering; and owls’ tails simplified into a single prong. Chester Starr placed the inauguration of this style at *ca.* 449 through association with the Athenian “Coinage Decree”, which epigraphists generally dated to this time.<sup>9</sup> But new hoard evidence from Lycia shows that the preceding style (Starr Period V) began in the 460’s, about a decade earlier than Starr had assumed,<sup>10</sup> so that the shift to the conventionalized style and the mass striking that the shift implies will have occurred in the 450’s, probably upon the removal of the Athenian League treasury from Delos to Athens in 454.<sup>11</sup> The archaeological context of the tetradrachm *8b* reinforces such upward compression of Starr’s chronology. The enlarged helmet palmette and reverse lettering put *8b* at a slightly advanced stage of the standardized style that Starr attributed to the time “either before the Peloponnesian War had begun or in its very earliest years.”<sup>12</sup> But the coin was excavated from a fill containing pottery that comes down only to the middle of the 5th century. Accordingly, *8b* should probably date no later than the 440’s, and the stylistically earlier *8a*, with neat, compact palmette and letters, can be dated, with Starr, pl. XXII, nos. 1–3, to the 450’s, within the initial phase of the standardized coinage.

*8c* is a fine example of the typical, more developed standardized tetradrachms, most of which, as Starr remarks,<sup>13</sup> were probably minted before the income from Athens’ allies and the Laurion mines went into decline *ca.* 415–413. *8e*, on the other hand, with coarse profile and large eye slightly opened at the inner corner, shares these features with the emergency gold staters and fractions of 407/6<sup>14</sup> and the plated bronze owls struck in the following year (see below) and so should fall towards the end of the standardized coinage late in the century.<sup>15</sup>

Since the popularity of such 5th-century owls throughout the Eastern Mediterranean resulted in their becoming the most imitated of all ancient coinages,<sup>16</sup> and since copying has again flourished in modern times to supply the insatiable fancy of collectors, it should not come as too great a surprise that several Agora tetradrachms of 5th-century type are not of bona fide Athenian origin. In the 4th

<sup>9</sup> Starr, pp. 64–75. But the date of the decree (R. Meiggs and D. Lewis, *A Selection of Greek Historical Inscriptions to the End of the Fifth Century B.C.*, Oxford 1969, pp. 111–117, no. 45) is still far from settled; see Kraay, *ACGC*, pp. 70–71 and the relevant papers by D. M. Lewis, H. Mattingly, and M. J. Price in Carradice, pp. 43–72.

<sup>10</sup> S. Fried, “The Decadrachm Hoard: An Introduction,” in Carradice, pp. 5–6, for the latest Athenian tetradrachms (Period V.A) in the great 1984 Lycian find. Kagan (note 6 above, p. 5) dates the find 465/462 B.C.

<sup>11</sup> As R. T. Williams (*Phoenix* 26, 1972, pp. 411–412) and H. Nicolet (*Revue de Philologie*, ser. 3, 48, 1974, pp. 132–134) had already anticipated in their reviews of Starr.

<sup>12</sup> Starr, p. 72, with reference to his pl. XXII:4’ and 5’, the latter being a virtual duplicate of our *10b*.

<sup>13</sup> Starr, p. 73.

<sup>14</sup> Sv. 21.1–22. Kraay, *ACGC*, pp. 68–69, pl. 11:202, 203. E. S. G. Robinson, “Some Problems in the Later Fifth Century Coinage of Athens,” *ANSMN* 9, 1960 (pp. 1–15), pp. 9–13, pls. I:9–12, II:1–4. W. E. Thompson, “The Functions of the Emergency Coinages of the Peloponnesian War,” *Mnemosyne*, ser. 4, 19, 1966 (pp. 337–343), pp. 341–343.

<sup>15</sup> In a fundamental paper, “The Tell El-Mashkuta Hoard of Athenian Tetradrachms,” *NC*, ser. 6, 7, 1947 (pp. 115–121), pp. 117–118, E. S. G. Robinson noted another distinction between the earlier and later standardized owls: the die positions of the former are loose, while the die positions of the latter are normally (although not invariably) fixed in a 9 or 8 o’clock alignment. It is unclear when the shift to the fixed position took place, but, as Robinson observed, the 8–9 o’clock alignment occurs on both official and imitative Athenian striking and was continued in the 4th- and 3rd-century owls. The 12 o’clock alignment of the New Style silver begins late in the 3rd century in the drachms with symbols (see below).

<sup>16</sup> To Kraay, *ACGC*, pp. 73–77, pl. 12, and the bibliography on Athenian imitations assembled by Stroud 1974, pp. 169–171, add O. Mørkholm, “A Coin of Artaxerxes III,” *NC*, ser. 7, 14, 1974, pp. 1–8; T. V. Buttrey, “Pharonic Imitations of Athenian Tetradrachms,” in *Proceedings Berne*, pp. 137–140; *idem* 1981, pp. 76–78; *idem*, “Seldom What They Seem—The Case of the Athenian Tetradrachm,” in *Nickle Papers*, pp. 292–294; H. Nicolet-Pierre, “L’oiseau d’Athéna, d’Égypte en Bactriane: Quelques remarques sur l’usage d’un type monétaire à l’époque classique,” in *Iconographie classique et identités régionales* (*BCH* Supplement 14), Paris 1986, pp. 365–376; and M. J. Price, “New Owls for the Pharaoh,” *Minerva* 1, 1990, pp. 39–40; *idem* 1991, pp. 67–68; *idem* 1993, pp. 31–35.

century B.C. vast numbers of imitative older owl tetradrachms were struck, especially in Egypt, many of them with an ungainly, enlarged eye of Athena.<sup>17</sup> *8f* has an enlarged eye and may indeed be Egyptian, although the inner corner of the eye is more closed than one normally finds on the usual Egyptian imitations. That *8f* is non-Athenian in any case is certain from its helmet palmette with only three branches instead of the canonical five. The pinched features and compressed ethnic give *8g* away as a more obvious imitation, if indeed the tetradrachm is ancient at all; the tetradrachm was found with *8a* but in a modern context, and it is conceivable that both could be remnants of a 19th- or early 20th-century collection or tourist shop that stood above the present excavated area. Some such provenience surely accounts for the tetradrachm in Appendix A, coin a (Pl. 32), an indubitable modern forgery. Because of its light weight and the linear, inorganic absence of modeling at the corner of Athena's mouth, *8h* is suspect, as are the drachms *10m* and, possibly, *10j*.

There are finally the silver-plated or formerly silver-plated bronze imitations. These are of course ancient; and the best preserved, the cut tetradrachm *9a*, which had been deposited in a small, open shrine around 420 B.C., can only have been a private forgery, as the comparatively flat relief and deviant style of the reverse independently imply. One presumes that the bronze cores of a plated drachm (*11*) and of two other plated tetradrachms (*9b*, *c*) were similar 5th-century B.C. counterfeits, although each is so disfigured that the possibility cannot be ruled out that one or more could be remnants from the official bronze issue that was struck in 406/5 in the pressing final years of the Peloponnesian War.

Were it not for Aristophanes' references to this emergency bronze of 406/5, one would not hesitate to condemn all subaerate Athenian owls as ancient counterfeits. But in a well-known passage in the *Frogs* (lines 725–726) Aristophanes laments that in 405 the city was using a very recently struck bronze currency (τὰ πονηρὰ χαλκία) in place of its fine old silver and “new” (i.e., 407/6) gold. In the *Ekklesiazousai* (lines 815–822) he recalls the awkward consequences when the bronze was demonetized in favor of the reestablished silver coinage. Since no wholly bronze coins of appropriate 5th-century date are known from Athens, numismatists have generally assumed that the 406/5 bronze was a silver-plated bronze coinage. This solution, first proposed by Barclay Head in 1911,<sup>18</sup> was immeasurably strengthened some years later when Svoronos reported on a hoard discovered in 1902 in the Peiraeus, which contained “thousands” of subaerate tetradrachms and drachms in a style (notably with the opened inner corner of Athena's eye) identical to the style of the 407/6 gold.<sup>19</sup> The very magnitude of this particular plated coinage argues against its being a forger's stock:<sup>20</sup> the mere hundred or so drachms that can be traced back to the Peiraeus hoard show that they were minted from a minimum of five pairs of dies and that these pairs were employed in tandem, since there is no obverse or reverse sharing between them.<sup>21</sup> Two tetradrachms from the hoard<sup>22</sup> document a sixth pair of dies. To date, the Peiraeus 1902 hoard is the only known provenience for this coinage, and in this respect the absence of any sure examples from the Agora is to be regretted. Still, the identification of this plated bronze of correct *fin de siècle* style with the

<sup>17</sup> Sv. 19.1 and most of the large-eye tetradrachms of Sv, pls. 16 and 17 are apparently Egyptian; cf. E. S. G. Robinson, “Coins from Al-Mina (1936),” *NC*, ser. 5, 17, 1937 (pp. 182–196), pl. IX:5–8; and *idem* (note 15 above, p. 6), pl. V:12–14, with Buttrey's observations (works cited in note 16 above, p. 6).

<sup>18</sup> *HN*<sup>2</sup>, p. 373.

<sup>19</sup> Svoronos 1927, pp. 157–158, quoted and discussed in Kroll 1976, pp. 331–333, where it is further explained that the Peiraeus 1902 hoard is the misnamed “Eleusis 1902” hoard of *IGCH* 46.

<sup>20</sup> As Adalberto Giovannini supposed in “Athenian Currency in the Late Fifth and Early Fourth Century B.C.,” *GRBS* 16, 1975 (pp. 185–195), p. 189.

<sup>21</sup> Kroll (1976, p. 333, note 18) lists four pairs of dies for the plated drachms (e.g., Sv. 15.19–26). To these must now be added a fifth pair from a specimen in the unpublished lot of Peiraeus 1902 drachms at the American Numismatic Society.

<sup>22</sup> Sv. 15.12, 13; for their hoard provenience, see M. Oeconomides-Caramessini, “Note on the Piraeus Hoard of 1902 of Athenian Plated Coins,” *CH* 7, 1985, pp. 40–41 (with mention of additional drachm lots).

bronze issue of 406/5 remains compelling, if only because alternative identifications have so little to recommend them (pp. 25–26 below).

#### FOURTH CENTURY B.C.

In surveys of Athenian coinage, it is sometimes alleged that this wartime token money with its highly inflationary potential continued in use for a decade after the defeat of Athens in 404/3 and was not recalled until Konon enriched Athens with Persian subventions in 393.<sup>23</sup> More likely, the bronze was gradually withdrawn and replaced with such old silver as was on hand, if not right after the war then at least with the reestablishment of ordered democratic government in 403/2.<sup>24</sup> When Athens began to *strike* a silver coinage again is a separate question, and here there may very well be a connection with the arrival of Persian money in 393, for a few of the earliest remodeled tetradrachms, on which Athena's new profile eye is especially large, show up in three Sicilian hoards of the 380's.<sup>25</sup> But the level of minting was modest and remained so to the middle of the century. Writing in 355/4, Xenophon complained that the Laurion mines were then being worked at far below their potential and that exploration for new deposits had been only recently, and inadequately, undertaken.<sup>26</sup> The relative paucity of extant Athenian tetradrachms from the first half of the 4th century tends to confirm this testimony.

Others shared Xenophon's interest in developing the Laurion silver industry, and under the financial administration of Euboulos, 355–342, mining activity increased dramatically as the number of mining leases purchased from the state rose from 17 in 367/6 to a record 62+ in 342/1.<sup>27</sup> The effect on the coinage was predictable. In the second half of the 4th century, Athenian silver was again being struck in massive quantities, and again in a monotonously standardized, mechanical style. This has come to be known as the pi style, after the  $\pi$ -shaped configuration of the obverse helmet ornament,<sup>28</sup> and is typified by most of the 4th-century pieces excavated from the Agora. The majority of these, namely, the tetradrachms *15b–g*, the drachm (with irregularly shaped flan) *17*, and at least the triobols *19e–h* and the diobol *20b* (all again with irregular flans), belong to the later, fully mechanical phase of the coinage (Bingen's Pi III–V), which spanned the last three decades of

<sup>23</sup> E.g., Head, *HN*<sup>2</sup>, p. 373; Kraay, *Athens*, p. 7.

<sup>24</sup> Kroll 1976, pp. 338–341.

<sup>25</sup> *IGCH* 2117 (Leontinoi 1957), 2119 (Contessa 1888), and 2121 (Manfria 1948). The obverse style of this earliest profile-eye Athenian silver is quite distinctive; e.g., Sv. 19.2, 5, 13, 14. Despite the number in an Egyptian hoard (Sv. 26.7–9, 13–19), coins of this style are Athenian in origin; cf. the corresponding fractional silver from the small lamp hoard from Agios Ioannis Rentis in Attica, *ΑρχΔελτ* 18 (1963), B' 1 [1965], p. 50, pl. 56 (*IGCH* 89, where the date should be corrected to *ca.* 375–350, the time of the lamp).

<sup>26</sup> *Poroi* 4.28.

<sup>27</sup> R. J. Hopper, "The Attic Silver Mines in the Fourth Century B.C.," *BSA* 48, 1953 (pp. 200–254), p. 216; cf. pp. 250–251. Further evidence of Euboulos' development of the Attic silver industry comes from a fragmentary nomothetic law of 354/3 that deals with both the mines and the Athenian mint (1975 Agora inscription inv. no. 7495, publication in preparation). See also G. Cawkwell, "Eubulus," *JHS* 83, 1963 (pp. 47–67), p. 64; P. Gauthier, *Un commentaire historique des Poroi de Xénophon*, Geneva/Paris 1976, pp. 223–231; J. Ober, *Fortress Attica*, Leiden 1985, p. 29. On the 4th-century mining leases in general, see M. K. Langdon, "Poletai Records," in G. V. Lalonde, M. K. Langdon, and M. B. Walbank, *Inscriptions (The Athenian Agora XIX)*, Princeton 1991, pp. 60–62, 76–137.

<sup>28</sup> Bingen 1973, pp. 11–16, is the standard treatment. *Idem* 1975, pp. 161–170, adds little. The pi style was originally discussed and dubbed the "bracket style" by Margaret Thompson (1957, p. 6). Cf. Mørholm, *EHC*, p. 86.

the century.<sup>29</sup> The more refined tetradrachm *15a* and the subaerate *16a-m* are obviously earlier and appear to belong near the beginning of the formation of the pi style, that is, in the 340's, if Athens' earliest regular bronze coinage, the pi-style Double-bodied owls (**41-43**), began to be struck in the 330's, as proposed below.

The most interesting 4th-century pieces from the Agora excavations are the plated imitations. *16o* and *p*, each heavily gashed with a chisel cut on the reverse, were separately found in front of the Metroon-Old Bouleuterion where they had doubtless been deposited in accordance with the currency law of 375/4. The law specified that if the *dokimastes* determined that any coin of Athenian type had a bronze or lead core or that its silver was debased, it was to be mutilated and removed from circulation by being cut across, dedicated to the Mother of the Gods, and turned over to the Council.<sup>30</sup>

The thirteen nicely preserved subaerate tetradrachms *16a-m* clearly had a different history. All are uncirculated, were struck from the same pair of dies, and were recovered from the same pockets of Classical fill beneath the Temple of Ares close to the center of the Agora square. As Walker has explained, they must be the remnant of a much larger "treasure" of identical pieces that had been intentionally buried in the third quarter of the 4th century, the date of the accompanying context pottery; much later, in the time of Augustus, the deposit was disturbed and largely removed during the laying of foundations for the Temple of Ares.<sup>31</sup> One suspects that the primary burial was a true "forger's hoard": a lot of freshly minted imitations that the forger or his agent had deposited for retrieval or had to abandon to escape detection. It has been argued that the center of the Agora was too exposed for such clandestine activity and that the coins must rather have been buried under official auspices.<sup>32</sup> But although free of buildings, this area was by day thronged with people, including very probably vendors at their booths; in this busy milieu, it ought not to have been too hard to find or dig a pit for a bag or more of "hot" coins without creating undue suspicion.<sup>33</sup>

<sup>29</sup> According to Bingen (1973, p. 18), the pseudo-Athenian satrapal tetradrachms struck in Egypt by Sabakes and Mazakes in 333-332 B.C. (H. Nicolet-Pierre, "Les monnaies des deux derniers satrapes d'Égypte avant la conquête d'Alexandre," in *Essays Thompson*, pp. 221-230, pls. 25 and 26) provide a *terminus ante quem* for the second and perhaps the start of the third phase of the pi-style coinage. M. J. Price (1991, p. 71; 1993, p. 33) notes that the genuine and many Eastern imitations of Athenian tetradrachms in the 1973 Babylon hoard of 323 B.C. (*CH* 1, 1975, no. 38, with *CH* 3, 1977, no. 22) and in the 1989 Syrian hoard, probably of 333 B.C., attain styles as late as Pi V. Careless striking, often on elongated flans (cf. Sv., pl. 30), is typical of the later, massive pi phases.

<sup>30</sup> Stroud 1974, p. 158, lines 10-13: ἐὰν δὲ ὑπ[ό]χαλκον ἢ ὑπομόλυβδον ἢ κ[α]βδηλον, διακοπτέτω πα[. . .<sup>6</sup>. . .]α καὶ ἔστω ἱερὸν τῆς Μητρὸς [τ]ῶν θεῶν καὶ κ[α]ταβαλλ[έ]τω ἐς τὴν βολήν. In his commentary (pp. 171-178) Stroud duly recognized the relevance of *16o* and *p* with their revealing findspots.

<sup>31</sup> Walker 1982, pp. 131-136, pl. 22, with a plan of the findspots within the temple foundations. On the Temple of Ares, *Agora* XIV, pp. 162-165.

<sup>32</sup> Walker 1982, pp. 133-134, where it is further proposed that these plated tetradrachms were struck officially as an emergency measure after Chaironeia in 338 in anticipation of an attack on Athens by Philip and that the Athenians publicly disposed of them in a kind of votive burial in the Agora when the attack failed to materialize. Cf. Mørkholm, *EHC*, p. 86. But neither the light weight nor the die positions of the coins are proof of state manufacture. *Fourrée* coins with bronze cores are usually lighter than prototypes in silver; and in well-made forgeries correct die positions are to be expected. A final weakness is the suggestion that the burial had "the character of a dedication"; but dedicatory burials could be made only in sanctuaries, which the Agora was not. Earlier mentions of these plated tetradrachms are in T. L. Shear, "The Campaign of 1933," *Hesperia* 4, 1935 (pp. 310-339), p. 339, and J. P. Shear 1936, p. 123.

<sup>33</sup> In Sokrates' day, books were sold in the Orchestra, as the center of the Agora was called (*Agora* III, pp. 162-163; *Agora* XIV, p. 171), so it is possible that the coins were concealed in an area that was frequented by vendors (although not by bankers and money-changers, whose τράπεζαι were located further to the northwest near the Stoa of the Herms [Stroud 1974, p. 167]).



Or was the 4th-century fill containing the coins actually brought from elsewhere by the Augustan builders of the Temple of Ares? Although contextually dated to *ca.* 350–325, the burial probably occurred rather early in this quarter century, since the tetradrachms belong to an incipient phase of the pi style.

The pi-style coinage continued down to Athens' capitulation to Demetrios Poliorketes in 294. The notorious staters that the tyrant Lachares struck from Akropolis gold to pay his mercenaries from 296 through Demetrios' siege are typical late pi style;<sup>34</sup> and the large Thorikos hoard of predominantly freshly coined, pi-style tetradrachms surely dates also to the time of the siege, when Demetrios dispatched troops to lay waste the countryside of Attica.<sup>35</sup> This policy of destruction seriously crippled the silver industry of Attica and, coupled with Athens' capture, put an end to minting for about a decade.

### THIRD CENTURY B.C.

The next phase of Athenian silver, Bingen's *style à quadridigité*,<sup>36</sup> is represented in three Agora tetradrachms (of which one is subaerate) and two drachms (22a–24b). The diagnostic helmet ornament consists of four openly spaced branches; Athena heads are generally more finely featured; and the ethnic is decoratively rendered with curved alphas and small thetas. Such quadridigité tetradrachms first appear in early 3rd-century hoards and seem to have begun soon after Athens' expulsion of Demetrios Poliorketes' garrison from the Mouseion in 287 or 286.<sup>37</sup> The impurity of their silver relative to the exceptionally fine Laurion silver of the earlier, pi-style owls tends to confirm that the quadridigité owls were in large part struck from the silver that Athens received to assist her ongoing struggle against Demetrios, 200 talents in 286/5 from Lysimachos, Ptolemy I, and Antipatros, a nephew of Kassandros, and 50 talents in 282 from Ptolemy II.<sup>38</sup> Hoards of the 3rd century imply that this coinage was substantial, although whether production was short-lived and intensive or whether it continued into the 270's or even as late as the ill-fated Chremonidean War, which Athens waged against Antigonos Gonatas from 268 to 261 B.C.,<sup>39</sup> is uncertain.

Attributable to this war in any case is the special coinage of Attic pentobols, whose handsome design (Athena in Corinthian helmet/Owl standing obliquely with wings half raised) and anomalous denomination radically depart from the traditional owl silver. The pentobols were struck in three issues, a major issue with an upright amphora to the right of the owl (Sv. 24.4–8) and two others with a plustre (Sv. 24.1) or another symbol (dagger?, Sv. 24.2) in place of the amphora. The two pentobols from the Agora (28a, b) are heavily worn, as was the specimen reported from the Thebes 1935 hoard of the second half of the 3rd century. The condition of the Thebes specimen points to emission

<sup>34</sup> Sv. 21.1–22. Attribution and date: Svoronos 1927, pp. 159–168; Newell, p. 133, note 4; Nicolet-Pierre and Kroll, p. 2, note 3.

<sup>35</sup> Bingen 1973, pp. 18–21; 1975, p. 167. *IGCH* 134.

<sup>36</sup> Bingen 1973, pp. 14–15. Nicolet-Pierre and Kroll, pp. 3–5, pls. 1–3, nos. 1–28. Mørkholm, *EHC*, pp. 86–87, 148.

<sup>37</sup> Osborne (pp. 181–197) and Habicht (*Untersuchungen*, pp. 45–62) place the revolt against Demetrios one year earlier than does Shear (*Kallias*, pp. 63–73).

<sup>38</sup> Shear, *Kallias*, pp. 26–27, 80–81, with the silver analyses published by Nicolet-Pierre and Kroll, pp. 32–35, tables IV and V.

<sup>39</sup> On the war and its dates: H. Heinen, *Untersuchungen zur hellenistischen Geschichte des 3. Jahrhunderts v. Chr.* (*Historia Einzelschriften* 20), Wiesbaden 1972, pp. 93–203; Habicht, *Untersuchungen*, pp. 95–112; F. W. Walbank in *Cambridge Ancient History*, 2nd ed., VII, i, F. W. Walbank, A. E. Astin, M. W. Fredriksen, and R. M. Ogilvie, eds., Cambridge/London/New York/New Rochelle/Melbourne/Sydney 1984, pp. 236–239.

in the first half of the century.<sup>40</sup> That the pentobols pertain to a joint Athenian-Ptolemaic enterprise follows from their direct metrological relationship to Ptolemaic tetradrachms, which were struck on a standard of 14.25 g,<sup>41</sup> exactly five-sixths of tetradrachms of Attic weight (17 g), and from the novel pose of their owls, whose three-quarters turn and lifted wings are borrowed from the eagles on Ptolemaic coinage (e.g. **1004**, **1005**, **1009**). The pentobols are to be understood as Egyptian-weight drachms and presuppose a historical context involving direct Egyptian participation in Athenian affairs for a period of at least three years. These can only be the opening years of the Chremonidean War, when Ptolemy II sent troops to Attica to defend against a Macedonian blockade. These soldiers brought their own Egyptian money with them, as finds of Ptolemaic coins from three of their Attic forts attest;<sup>42</sup> but the Athenians, too, must have contributed to the war effort and did so, one sees, in this one Attic denomination that was directly compatible with Ptolemaic silver.

Tetrobols with two-owl reverses (29a-c) make up the second exceptional silver coinage of 3rd-century Athens. Like the pentobols, the tetrobols were probably struck for military use; by the early Hellenistic period the tetrobol was proverbially regarded as a soldier's daily wage.<sup>43</sup> As shown by the contrasting early (29a, b = Sv. 23.43-45) and later (29c = Sv. 24.18-24) styles of the Agora pieces, the Athenians minted this tetrobol silver on at least two separate occasions in the 3rd century. But it is not possible to say when or even whether these occasions necessarily belong in times of war, since the troops stationed in the border forts of Attica had to be paid even during peacetime.<sup>44</sup>

A more serious problem in Athenian coinage of the 3rd century is posed by the "heterogeneous" silver, a sizable and stylistically varied group of tetradrachms that occur in hoards of about 260-220 B.C. along with the pi-style and quadridigité tetradrachms on which they are generally modeled.<sup>45</sup> The one Agora specimen (30), with a quadridigité-like Athena but an oddly fashioned owl, is fairly typical, but there are easily more than a half-dozen other different obverse and reverse styles. The eclectic, frequently derivative or uncouth, and highly diverse die cutting leaves little doubt that at least some of the heterogeneous material consists of unofficial imitations. But does it all? In an analysis of the several heterogeneous subgroups, Hélène Nicolet-Pierre and I pointed out the difficulties of defending any one subgroup as being officially Athenian and were inclined to regard the tetradrachms *en bloc* as imitations counterfeited to fill a demand for Athenian silver at a time when Athens was no longer coining.<sup>46</sup> But extensive die linking within the subgroups allows at most for only a few centers of production, which, according to the hoards, ought to have been located in Central or Northern Greece. And since it is impossible to identify any non-Athenian source, there is

<sup>40</sup> Nicolet-Pierre and Kroll, p. 30, no. 19. In his publication of the hoard record (*IGCH* 193), Tony Hackens (1969, pp. 702-707) followed Sv., pl. 24 in attributing the pentobols to the period 255-229 B.C.

<sup>41</sup> See E. S. G. Robinson, "The Coin Standards of Ptolemy I," in M. Rostovtzeff, *The Social and Economic History of the Hellenistic World* III, Oxford 1941, pp. 1635-1639. The 14.25-g ("Phoenician") standard was introduced late in the reign of the first Ptolemy.

<sup>42</sup> The coins (33 AE and 1 AR of Ptolemy I and II from the fort on the Koroni peninsula; 9 AE of Ptolemy II from a fort at Cape Zoster; and 49 AE, 1 AR, and 2 AV of Ptolemy I and II at an encampment at Heliopolis) are listed in J. R. McCredie, *Fortified Military Camps of Attica* (*Hesperia* Supplement 11), Princeton 1966, pp. 9-10, 30, 47. On the chronology of the bronze finds, see J. H. Kroll, "Numismatic Appendix" (to V. R. Grace, "Revisions in Early Hellenistic Chronology"), *AM* 89, 1974 (pp. 194-203), p. 201.

<sup>43</sup> *LSJ*, s.v. τετράβολον; Griffith, pp. 301-302.

<sup>44</sup> Cf. Griffith, pp. 84-86, 240, 290.

<sup>45</sup> Nicolet-Pierre and Kroll, pp. 11-22, pls. 3-6, coins A1-F23. For an earlier sampling of illustrations, Sv. 23.1-11, 13-16.

<sup>46</sup> Nicolet-Pierre and Kroll, pp. 19-21.

still a very good possibility that many of the heterogeneous tetradrachms may be bona fide Athenian emissions. Some pieces introduce new features, like scrolls on the helmet visor of Athena, owls (as on 30) with unfeathered heads and smallish eyes, and diagonally oriented ethnics (cf. also 30), that imply that they were stamped with wide, cylindrical punch dies instead of the smaller, square punches that produced the incuse squares of the older owl coinage. It is not easy to understand why copyists would have indulged in such innovations, much less why these features would have been incorporated in the drachms and tetradrachms with symbols that Athens introduced after 229, if the features had originated in imitations. Stylistic heterogeneity could have been the result of sporadic minting and uncertainty on the part of die engravers about how closely to copy old models. Some heterogeneous dies could be old quadrigitè dies brought out of retirement. The Agora provenience of 30 points to Athenian manufacture but cannot prove it; for the Agora has produced more than its share of imitative 5th- and 4th-century owls (pp. 6–7, 9 above), and there is no way of ascertaining whether 30 is a 3rd-century counterpart or whether it and related heterogeneous tetradrachms are genuine Athenian issues of roughly the third quarter of the century.<sup>47</sup>

Accordingly, it is unclear to what extent Athens may have coined between Antigonos Gonatas' capture of Athens at the end of the Chremonidean War in 261 and the evacuation of the Macedonian garrisons from Attica in 229, although minting must have been light, on any interpretation. The Athenian-Eleusinian varieties 62 and 63 (see pp. 35–36 below) are the only bronze issues that can be attributed to this period. In silver we are left, possibly, with one or two of the later issues of tetrobols and however much of the occasional heterogeneous coinage as may be truly Athenian. In an exhaustive review of the earlier scholarship, Christian Habicht explains that the diminished level of Athenian coin production between 261 and 229 can no longer be attributed to terms imposed on the city by Antigonos Gonatas.<sup>48</sup> The Antigonid Pan-head tetradrachms with an Eleusis-ring symbol, formerly believed to have been minted by Gonatas in Athens, have now been reattributed to his mint in Pella.<sup>49</sup> Although silver and bronze coins of Gonatas commonly circulated in Athens after 261 (see pp. 36, 51–52 below), this was the very time that Macedonian soldiers were occupying the Peiraeus and the other forts of Attica, including until 255 the fortress on the Mouseion; and it would be surprising indeed if their Macedonian money did not pass into more general circulation. Gonatas is said to have returned *eleutheria* to Athens in 255; yet this seems to have had no apparent effect on coin production. Nor is there really any reason to suppose that even between 261 and 255 Athens could not have coined if she wanted and was able. “Nowhere in mainland Greece south of Macedonia,” argues Thomas R. Martin,<sup>50</sup> “does one find a single place whose coinage can reasonably be thought to have come to an end in the fourth century as a result of suppression by a Macedonian king”; and on Martin's showing, this conclusion applies equally to the 3rd century.

<sup>47</sup> Nicolet-Pierre and I (p. 17) assigned 30 to Group F, which happens to be the one group to which the few known heterogeneous drachms (Sv. 23.13–16) and hemidrachms (Sv. 21.51, 52) belong. But the owl's head and the diagonal ethnic relate the coin also to Nicolet-Pierre and Kroll, coin C5, and the coins of Group C are also good candidates for being genuinely Athenian, providing the dates of the Krčedin and Phyattos hoards are lowered into the last third of the 3rd century; *pace* Nicolet-Pierre and Kroll, pp. 20–21, 25, 26. It is doubtful that metallurgical analyses of the heterogeneous silver will be able to settle the question of origin since the Athenians apparently depended on nondomestic silver from the time of the quadrigitè coinage down through the Early Period of the New Style coinage.

<sup>48</sup> Habicht, *Studien*, pp. 40–41.

<sup>49</sup> R. W. Mathisen, “Antigonos Gonatas and the Silver Coinage of Macedonia circa 280–270 B.C.,” *ANSMN* 26, 1981 (pp. 79–124), p. 112, note 12. Cf. Boehringer, p. 100.

<sup>50</sup> T. R. Martin, *Sovereignty and Coinage in Classical Greece*, Princeton 1985, p. 183.

Suspension of minting, he explains, was normally the result of financial hardship and the abundant international supply of Macedonian money that eliminated much of the need for locally struck currency.<sup>51</sup> Both factors are found at Athens after 261, only here it is the degree of the suspension that remains in doubt.

Whatever the truth of the heterogeneous silver, Athens initiated a new series of owl coins after the departure of the Macedonian garrisons in 229. The Agora drachm 31 is a fine example of this new silver “with symbols” (Sv. 23.20–42). Unfortunately, the two most prominent characteristics of this coinage, the helmet ornament in the form of an aplustre of three or four gracefully curving tendrils and the control symbol added to the left of the owl, were mostly struck off flan. But lesser modifications of the traditional Old Style designs are clear enough: a delicate pendent earring has replaced the large disk earring of the Archaic and Classical Athena heads; the visor of Athena’s helmet terminates in a volute; and the head of the owl is now unfringed and has a long, narrow beak conjoined to the outlines of the brow. Fifteen to 17 different issues of this silver with symbols are on record, 10 to 12 issues from drachms and 5 from tetradrachms.<sup>52</sup> There were probably more, for few of these slight emissions are documented by more than one or two specimens. Beginning at some point in the 220’s (on the evidence of the Corinth 1938 hoard of *ca.* 215 B.C. [IGCH 187] with four fresh drachms from three issues), these emissions will have continued into the 2nd century.

## SECOND AND FIRST CENTURIES B.C.

A shorter series of transitional tetradrachms “with monograms” followed and carried the evolution from the Old to the New Style several steps further. Five issues (from eleven coins, all from the 1968 Larissa-Sitichoro hoard of *ca.* 165 B.C.) are known, one identified by a monogram, the other four by a letter or monogram and symbol.<sup>53</sup> But it is the fabric and owls of the coins that bring them to the very threshold of the New Style: flans became progressively thinner and broader until in the two later emissions the spread New Style fabric was achieved, while in every particular, down to the reduction of eyes to small, sunken dots and the exposure of the leading edge of the left wing, the owls of all five emissions have assumed the full-bodied schema of New Style owls. A sixth silver issue introduced the horizontal amphora beneath the owl and the olive-wreath border on the reverse.<sup>54</sup> Although still one step short of the full New Style design with the head of Athena Parthenos on the obverse, this issue inaugurates the New Style coinage, which in antiquity was called after its wreathed reverse *stephanephoric* coinage (e.g., δραχμαὶ τοῦ στεφανηφόρου, τετραῖχμα στεφανηφόρα), to distinguish it from the Old Style *glaukophoric* silver.<sup>55</sup> According to the most recent discussions of the relevant hoards, the addition of the wreath belongs after the conclusion of the Third Macedonian War in 168 or Athens’ acquisition of Delos in 167/6, with the final shift to the New Style Athena Parthenos obverse occurring *ca.* 165 and the first 78 emissions of the coinage following one another in an

<sup>51</sup> *Ibid.*, p. 246.

<sup>52</sup> H. Nicolet-Pierre, “De l’ancien au nouveau style athénien: une continuité?,” in *Studia Paulo Naster Oblata*, S. Scheers, ed., Louvain 1982, I (pp. 105–112), p. 110 and pp. 106–107, pl. XV:2–5. Cf. Mørkholm, *EHC*, pp. 148–149.

<sup>53</sup> Nicolet-Pierre (note 52 above), pp. 107–108, pls. XV, XVI, nos. 6–11. Price 1989, p. 238, pl. LV, nos. 222–237.

<sup>54</sup> *New Style*, pp. 440–441, pl. 150, no. 1350. H. Nicolet-Pierre, *Bulletin de la Société Française de Numismatique* 38, 1983, pp. 293–295. A second specimen has been purchased by the British Museum; Price 1989, p. 238.

<sup>55</sup> L. Robert, *Études de numismatique grecques*, Paris 1951, pp. 105–135.

unbroken annual sequence down to the issue signed by King Mithradates and his Athenian agent Aristion in 87/6.<sup>56</sup>

Although the earlier New Style issues were struck in greater volume than the late Old Style emissions with symbols and monograms that led up to them, large-scale minting did not begin until the 140's (issue nos. 21–27, of 144–137 B.C., were each struck from as many as 14 to 21 known obverse dies), and it is to this mature phase of the coinage that the three Agora specimens 32–34 belong. The coinage reached its apogee in the 90's B.C. (25 to 47 attested obverse dies in some years of that decade). Following the King Mithradates/Aristion issue of 87/6 and Sulla's capture of Athens in the spring of that year, production stopped, started up again, and then plummeted after the piratical devastation of Delos in 69.<sup>57</sup> From that time down to the termination of the coinage in the late 40's the minting of silver was kept alive by small issues frequently involving but a single obverse die.

Thanks to the wealth of administrative data recorded on the reverses of the coins, Margaret Thompson's monumental 1961 corpus of the coinage, and the intense chronological discussion that her work has provoked, Athens' New Style silver is the most fully documented of all ancient Greek coinages. Each of its approximately 112 issues is identified by an emission symbol and is signed with the names or monograms of the two supervising mint officials.<sup>58</sup> Beginning with the 12th issue, the month of minting is recorded by a letter on the reverse amphora. Between 136/5 and 88/7 B.C., the name of a short-term third magistrate, who might serve for as little as a month, is added below that of the two annual magistrates. A final administrative item is a two- or three-letter abbreviation located beneath the amphora and thought to pertain perhaps to sources of bullion.<sup>59</sup>

Recent discussion has emphasized the emergence of the New Style coinage as the dominant international silver coinage of late Hellenistic Greece.<sup>60</sup> In large part this was achieved by default: after the defeat of Macedon in the first half of the 2nd century and the defeat of the Achaian League in 146 B.C., Athens and the Thessalian League were the only Greek states still minting in silver to any considerable degree. But it was also advanced through policy, as seen from the decree passed by the Delphic Amphictiony in or around the 120's B.C. that required "all the Hellenes" to accept the Attic tetradrachm (presumably at the expense of all silver of non-Attic weight still in circulation).<sup>61</sup> Athens

<sup>56</sup> Price, *CRWLR*, pp. 95, 100; *idem* 1989, pp. 238–239; Mattingly 1990; *idem*, "The Ma'aret En-Nu'man Hoard, 1980," in *Essays Carson-Jenkins* (pp. 69–86), pp. 84–95. Cf. P. Grierson in Mørkholm, *EHC*, p. 170. Price and Mattingly dispute the higher chronology argued by Mørkholm (1984, pp. 38–42; and defended by Touratsoglou, *CRWLR*, p. 63) that begins the New Style coinage between *ca.* 185 and 180 and assumes that the first twenty or so issues were struck intermittently over a 35–40-year span until *ca.* 145 B.C., when production finally became annual. Cf. Mørkholm, *EHC*, p. 170. Unfortunately, since Athens' bronze and more conservative silver coinages were produced and designed quite independently of one another, the chronology of the earliest New Style silver and the preceding silver with monograms cannot be decided by an appeal to the bronze of the early 2nd century B.C. The "New Style" type of owl, which first appears in silver in the issues with monograms, occurs in the bronze coinage for the first time already in the 190's in the Owl-on-thunderbolt variety 81 (see p. 50 below). And it so happens that a contemporary dating of the silver with monograms to the 190's would fit with the Mørkholm early New Style chronology quite nicely. But the argument from the bronze coinage is hardly decisive, and in light of the evidence marshaled in the articles cited at the beginning of this note, the silver with monograms is more likely to date as late as the 170's–early 160's.

<sup>57</sup> See pp. 80–81 below.

<sup>58</sup> Full prosopography in Habicht 1991.

<sup>59</sup> *New Style*, pp. 613–622.

<sup>60</sup> Crawford, *CMRR*, p. 127; Price, *CRWLR*, pp. 96–98. The pseudo-Athenian issues minted to finance Sulla's campaign against Mithradates after 86 best demonstrate just how influential the New Style coinage had become; see *New Style*, pp. 425–439.

<sup>61</sup> *FdD* III, ii, no. 139, lines 1–6.

was an influential member of the amphictiony and stood to profit, but the establishment of a uniform currency served wider economic interests, so that the active encouragement of Roman authorities in Greece has been suspected.<sup>62</sup>

There has been speculation also that the coinage was minted almost entirely from older coinages procured through exchange, especially on Delos.<sup>63</sup> Doubtless much recoinage was involved, particularly in Thompson's "Early" and "Late" New Style Periods, the analyzed tetradrachms of which show relatively high levels of copper impurities.<sup>64</sup> But the seriousness of the second Laurion slave revolt, *ca.* 100–98 B.C.,<sup>65</sup> proves that the Attic mining industry had not only been reestablished but must have been operating at a substantial level, while analyses of 39 tetradrachms of the "Middle" Period (135/4–100/99 B.C.) give consistently the same minimal copper percentages that characterized Laurion silver of the 6th through 4th centuries B.C.<sup>66</sup> Although the revolt had no effect on the volume of coins produced, there is a clear correlation between the date of the revolt and a sudden reduction in the fineness of the silver beginning with the Demetrios-Agathippos issue of 99/8 B.C. For several decades to that point, the coinage seems to have been manufactured predominantly from domestic silver. After 99, other silver had to be procured. Apart from the impact of the revolt, the veins at Laurion were giving out, and by the time of Strabo (9.1.23) even the resmelting of old slag had been discontinued.

There will be more to say below (pp. 81–82, 85–87) about the post-Mithradatic phase of the coinage, since this is the one period in which Athens' bronze and silver coinages were routinely administered together. It is, in fact, the fundamental modification of the bronze coinage after the Battle of Philippi in 42/1 B.C. that enables us to place the formal end of the New Style silver in that year. Since 69, minting had been limping along in intermittent emissions of insubstantial and often token size. In the 40's much of this silver was doubtless requisitioned and recoinage to pay Roman armies of the civil war, but the deliberate termination of minting was more likely the result of competitive pressure from the Roman denarius, which was beginning to circulate in quantity in Greece and must have become especially common at Athens when the victorious Marc Antony wintered there with his army after Philippi. Of approximately similar weight, the Attic drachm (4.2 g.) and the Roman denarius (3.86 g.) were almost, if not actually, interchangeable.<sup>67</sup> But the denarius was 9 percent lighter and would have been forcing the drachm out of circulation. Since it had become unrealistic for the Athenians to maintain their traditional silver currency in the face of an ever increasing supply of the lighter Roman coin, the decision was taken to abandon the drachm for the denarius and (as argued further in Chapter II, pp. 89–91) to readjust the local bronze

<sup>62</sup> Price, *CRWLR*, p. 97; I. Carradice and M. J. Price, *Coinage in the Roman World*, London 1988, p. 129: "[T]here is every reason to believe that the Romans adopted [the New Style coinage] as the official coinage of the province of Achaëa."

<sup>63</sup> Price, *CRWLR*, p. 97; Carradice and Price, *loc. cit.* (note 62 above); for the probable recoinage in the 160's of silver deposited on Delos, see Giovannini, pp. 51–62.

<sup>64</sup> *New Style*, pp. 624–625.

<sup>65</sup> See note 108 below, p. 66.

<sup>66</sup> *New Style*, pp. 624–625. Silver of the 6th–4th centuries: C. M. Kraay, *The Composition of Greek Silver Coins, Analysis by Neutron Activation*, Oxford 1962, pp. 16, 34; Nicolet-Pierre and Kroll, pp. 32–34.

<sup>67</sup> Inscriptions of Roman Imperial date from the Greek East commonly refer to denarii as Attic drachmai (cf. L. Robert, "Monnaies dans les inscriptions grecques," *RN*, ser. 6, 4, 1962 [pp. 7–24], pp. 12–13) in a Hellenizing usage that is found as early as Polybios (F. W. Walbank, *A Historical Commentary on Polybios I*, Oxford 1959, p. 176). Hultsch (*s.v.* denarius, *RE* V, col. 209) affirms parity between the denarius and the Attic drachm. But none of this, of course, should be taken as proof of exact equivalence in the third quarter of the 1st century B.C., when both coinages were in circulation together.

coinage accordingly. Thus the year of Philippi marks both the end of Athens' silver coinage and the quasi-Romanization of the city's currency, which for the next 250 years was to be dominated by the denarius.

## CATALOGUE

ca. 550–520 B.C.

|           |                 |                                  |      |   |  |
|-----------|-----------------|----------------------------------|------|---|--|
|           | OBOL            |                                  |      |   |  |
|           |                 | Bulbous amphora.                 |      | Incuse square divided diagonally.   | Seltman, p. 157, pl. IV:x                  |
| <b>*1</b> | Σ-4035          | 0.49 <sup>68</sup>               |      | <i>GRC</i> , fig. 8   |  |
|           | DRACHMS         |                                  |      |   |  |
|           |                 | Horse's hindquarters r.          |      | Similar.  | Seltman, p. 158, pl. IV:ζ, η; Sv. 1.26–28  |
| <b>*2</b> | ΠA-5            | 3.76                             |      | <i>GRC</i> , fig. 8   |  |
|           |                 | Wheel with four strutted spokes. |      | Similar.  | Seltman, p. 158, pl. IV:δ, ε; Sv. 1.58, 59 |
| <b>3</b>  | <b>*a</b>       | Z-2869                           | 3.94 | <i>GRC</i> , fig. 8; (from floor packing of Archaic building southeast of the Tholos; with sherds of late 6th and early 5th centuries B.C.)                 |  |
|           | <b>*b</b>       | Π-903                            | 3.83 |   |  |
|           | <b>*c</b>       | BE-115                           | 3.03 |   |  |
|           | OBOLS           |                                  |      |   |  |
|           |                 | Similar.                         |      | Similar.  | Seltman, p. 158, pl. IV:v; Sv. 1.60, 61    |
| <b>4</b>  | <b>*a</b>       | Λ-265                            | 0.47 |   |  |
|           | <b>*b</b>       | E-545                            | 0.60 |   |  |
|           | DIDRACHM-STATER |                                  |      |   |  |
|           |                 | Bull's head facing.              |      | Similar.  | Seltman, nos. 69–71, 81; Sv. 1.35–37       |
| <b>*5</b> | I-1344          | 7.67                             |      | Hopper, p. 27, no. 3: "Reverse [die] isolated. It could be from the same obverse as S[eltman no.] 81a, but the corroded surface makes judgement difficult." |  |

<sup>68</sup> The weights recorded here for *1*, *3a*, *4a*, and *5* correct the slightly different figures given for these coins in Hopper, p. 25, note 1.

ca. 510's–500 B.C.

## OBOL

|    |  |        |   |   |
|----|--|--------|---|---|
|    | Head of Athena r., wearing Attic helmet. |        | [AΘE] Owl stg. l., facing; behind, olive spray. | Seltman, p. 192, pl. XXII:v (Group H) <sup>69</sup> |
| *6 | NN-934                                   | ↗ 0.47 |   |   |

## TETRADRACHM

|    |          |         |   |   |
|----|----------|---------|---|---|
|    | Similar. |         | AΘE Owl stg. r., facing; behind, olive spray. | Seltman, nos. 328–346 (Group L); Sv. 6.1–17 <sup>70</sup> |
| *7 | Φ-344    | ↘ 16.97 | (3rd-century B.C. context: Cistern L 17:7)    |   |

ca. 450's–404 B.C.

## TETRADRACHMS

|   |  |         |   |                                   |
|---|--|---------|---|-----------------------------------|
|   | Head of Athena r., wearing Attic helmet ornamented with palmette and olive leaves. |         | AΘE Owl stg. r., facing; behind, olive spray and crescent.  | Sv., pls. 11–17.24, <i>passim</i> |
| 8 | *a PP-823  | ✓ 16.50 | (found with 8g in modern fill)  |                                   |
|   | *b Ω-564   | ↓ 16.33 | GRC, fig. 9 (from fill containing pottery of first half to mid-5th century B.C.) <sup>71</sup>  |                                   |
|   | *c H'-3859   | ✓ 16.66 | GRC, fig. 9   |                                   |
|   | *d Σ-4649  | ↘ 14.30 | Like the coin's pitted surface, its light weight is apparently a result of corrosion and cleaning (cf. 33, 34).                                 |                                   |
|   | *e ΣT'-683   | ← 16.08 |   |                                   |
|   | *f Δ-222   | ✓ 16.25 | imitation, Egyptian(?); see pp. 6–7 above   |                                   |
|   | *g PP-824  | ↖ 16.45 | imitation; found with 8a  |                                   |
|   | *h B-508   | ← 15.00 | possibly imitation, as the low weight and the parallel, inorganic lips of Athena suggest; (from well filling of early 3rd century B.C.: F 11:2) |                                   |

## PLATED AE COUNTERFEIT TETRADRACHMS

|   |           |         |   |
|---|-----------|---------|---|
| 9 | *a BΓ-895 | → 11.81 | about half of the silver plating remaining on the bronze core; test cut on obverse; (sanctuary context of 420's B.C.) <sup>72</sup> |
|---|-----------|---------|---|

<sup>69</sup> Since a number of the owls on Group H tetradrachms (Seltman, pl. XIII) stand to the left, Seltman (p. 192) classified all obols with left-facing owls in this group. Whether this classification is correct in every case is impossible to decide from the small scale of the coins (cf. the owl-left obols Sv. 2.54–58, 7.58–60, none of which, at least, can postdate 480). Nevertheless the attribution of our Agora obol to Group H is supported by the owl's stocky proportions and squat posture. The obverse is essentially effaced. For discussions of the Group H chronology, see the works cited at the beginning of note 6 above, p. 5.

<sup>70</sup> P. Bicknell ("The Dates of the Archaic Owls of Athens Belonging to Seltman's Groups H and L," *L'antiquité classique* 38, 1969, pp. 175–180) and Kroll (1981b, pp. 25–30) both date Group L after Hippias' expulsion in 510.

<sup>71</sup> Section Omega pottery lot 479 (from crushed bedrock fill along side wall of Greek house), including a lamp and saltcellar but no stamped ware, which, according to *Agora* XII, p. 22, began "just before the middle of the 5th century." The lot contained also a later lid fragment, probably of the 3rd century B.C.

<sup>72</sup> From layer 11 of the Crossroads Enclosure east of the Royal Stoa (Deposit J 5:2), with pottery of ca. 430–420 B.C. This layer was sealed below the great votive deposit of layer 10, which, on the evidence of ostraka, dates shortly after 417 B.C. (T. L. Shear, Jr., "The Athenian Agora: Excavations of 1972," *Hesperia* 42, 1973 [pp. 359–407], pp. 364–367).



|           |         |   |       |  |
|-----------|---------|---|-------|--|
| <i>*b</i> | NN-1789 | ↖ | 13.00 | bronze core only   |
| <i>*c</i> | O-126   | ↖ | 12.31 | slight traces of silver; badly battered, with two test cuts on reverse |

## DRACHMS

|                     | Similar. |   | Similar, except no crescent behind owl. | Sv. 11.19–17.29, <i>passim</i>  |
|---------------------|----------|---|---|---------------------------------|
| <b>10</b> <i>*a</i> | Θ-624    | ↑ | 4.14                                    |                                 |
| <i>*b</i>           | II-510   | ↘ | 4.11                                    | GRC, fig. 9                     |
| <i>*c</i>           | ΒΓ-238   | ↘ | 4.05                                    |                                 |
| <i>*d</i>           | Ψ-328    | → | 3.85                                    |                                 |
| <i>*e</i>           | E-1703   | ↙ | 4.25                                    | GRC, fig. 9                     |
| <i>*f</i>           | T-1805   | ↖ | 3.89                                    |                                 |
| <i>*g</i>           | ΛΛ-185   | ← | 3.86                                    |                                 |
| <i>*h</i>           | Ω-445    | ← | 3.89                                    |                                 |
| <i>*i</i>           | ΠΠ-531   | ← | 3.94                                    | test cut on obverse and reverse |
| <i>*j</i>           | ΒΓ-230   | ← | 4.05                                    | large eye; ancient imitation?   |
| <i>k</i>            | ΚΚ-461   | ↖ | 3.98                                    | worn                            |
| <i>l</i>            | NN-1445  | ↗ | 3.54                                    | extremely worn                  |
| <i>*m</i>           | Φ-138    | ↖ | 3.57                                    | probable imitation; modern?     |

## PLATED AE COUNTERFEIT DRACHM

|            |         |   |      |  |
|------------|---------|---|------|--|
| <b>*11</b> | NN-2120 | → | 2.23 | broken and heavily blistered but attributable to the 5th century since the reverse lacks the crescent of 4th- and 3rd-century drachms; no silver remains |
|------------|---------|---|------|--|

## TRIOBOLS

|                     | Similar. |   | <sup>A</sup> Ε or <sup>A</sup> Θ E Owl stg., facing; on either side, olive branch with two pairs of leaves. | Sv. 11.27–17.33, <i>passim</i>   |
|---------------------|----------|---|---|--|
| <b>12</b> <i>*a</i> | M-129    | ↘ | 1.94  | Ξ-Θ  |
| <i>*b</i>           | Z-2541   | ↑ | 1.90  | Ξ-Θ  |
| <i>*c</i>           | A-985    | ← | 1.98  | Ξ-Θ  |
| <i>*d</i>           | Π-569    | ↓ | 1.81  | —  |
| <i>*e</i>           | Φ-391    | ↑ | 1.90  | Ξ-Θ GRC, fig. 9  |
| <i>*f</i>           | ΠΘ-654   | ← | 1.85  | Ξ-Θ  |
| <i>*g</i>           | BE-325   | ↗ | 1.71  | — (deposited, with <i>13c</i> , in 420's B.C. in filling of altar); T. L. Shear, Jr., "The Athenian Agora: Excavations of 1980–1982," <i>Hesperia</i> 53 (pp. 1–57), 1984, p. 31, pl. 8:b; some wear |
| <i>*h</i>           | ΣΤ'-625  | ← | 1.61  | Ξ-Θ  |
| <i>*i</i>           | Z-671    | ← | 1.58  | Θ-E  |
| <i>*j</i>           | NN-1074  | ← | 1.74  | Θ-E  |
| <i>k</i>            | P-1661   | ← | 1.87  | Θ-E  |
| <i>l</i>            | K-898    | ← | 1.83  | Ξ-Θ  |
| <i>m</i>            | K-939    | ← | 1.62  | — worn   |

The discovery of this subaerate counterfeit in a sanctuary implies that it was dedicated there as a private offering and/or to remove it from circulation, like the counterfeit coins mentioned in 4th-century Akropolis inventories and the plated imitations like *16o* and *p* that upon detection were cut and deposited in the Metroon; p. 9 above.

DIOBOL OR TRIHEMIOBOL<sup>73</sup>

Similar.

[AΘE] Two owls stg. l. and r., facing; [between them, olive spray of two leaves].

Sv. 10.31–37

**\*12A** T-1498 11 ✓ 1.18

## OBOLS

Similar.

AΘE Owl stg. r., facing; behind, olive spray.

Sv. 11.43–17.41, *passim***13** \*a AA-461 ↗ 0.62

\*b KTA-115 ✓ 0.61

\*c BE-337 ↓ 0.54

\*d NN-1297 ← 0.55

\*e Γ-642 → 0.62

\*f K-1054 → 0.56

\*g AA-23 ↓ 0.57

\*h OA-220 ↓ 0.63

i E-189 ✓ 0.58

j E-562 ↓ broken

k E-2175 ↓ 0.57

l Z-2617 ↗ 0.64

m H'-2627a ↑ broken

n II-592 → 0.60

o NN-2135 ← 0.55

p Σ-1018 ↗ 0.57

q Σ-6253 ↑ 0.51

(same context as 12g); Shear 1984 (under 12g above), p. 31, pl. 8:c

GRC, fig. 9

## HEMIOBOLS

Similar.

Similar.

Sv. 11.50–17.52, *passim***14** \*a E-724 ↓ 0.28

\*b E-1104 ↓ 0.23

\*c MΣ-157 ← 0.27

As with some of the worn, hence unillustrated obols 13i–q, the obverses of these hemiobols are too poorly preserved for certain attribution to the 5th century. One or more could be 4th century in date.

ca. 390–295

## TETRADRACHMS

Similar, but with eye of Athena rendered in full profile.

AΘE Owl stg. r., facing; behind, olive spray and crescent.

Sv. 20.1–33, 35–37

**15** \*a Φ-389 ← 16.73

<sup>73</sup> *BMCAttica*, p. xxv, identifies this variety as a diobol, not unreasonably since the same two-owl reverse was used for the diobols of the 407/6 gold (Sv. 15.7, 8). Nevertheless, the weights of 0.90–1.06 g. of the seven specimens illustrated in Svoronos imply that the denomination was the 1½ obol *trihemiobolon*, which was struck at another time in the second half of the 5th century with the reverse type of owl with spread wings (Sv. 11.35–42: 0.96–1.10 g.).

|           |        |   |       |                     |
|-----------|--------|---|-------|---------------------|
| <i>*b</i> | X-220  | ← | 16.93 | <i>GRC</i> , fig. 9 |
| <i>*c</i> | OO-814 | ✓ | 16.07 |                     |
| <i>*d</i> | ΞΞ-84  | ← | 16.22 |                     |
| <i>*e</i> | Υ-64   | ✓ | 16.83 |                     |
| <i>*f</i> | T-134  | ✓ | 16.66 |                     |
| <i>*g</i> | Σ-3019 | ✓ | 16.53 |                     |

## PLATED AE COUNTERFEIT TETRADRACHMS

|           |           |        |   |       |                             |
|-----------|-----------|--------|---|-------|-----------------------------|
| <b>16</b> | <i>a</i>  | H-1465 | ↖ | 13.22 |                             |
|           | <i>*b</i> | H-1466 | ↖ | 11.17 |                             |
|           | <i>c</i>  | H-1725 | ← | 11.55 |                             |
|           | <i>*d</i> | H-1935 | ← | 13.72 | Walker 1982, pl. 22:2       |
|           | <i>*e</i> | H-1936 | ✓ | 13.96 | Walker 1982, pl. 22:3       |
|           | <i>f</i>  | H-1937 | ✓ | 11.60 |                             |
|           | <i>*g</i> | H-1938 | ↖ | 13.84 | Walker 1982, pl. 22:4       |
|           | <i>*h</i> | H-1962 | ✓ | 13.59 | Walker 1982, pl. 22:5       |
|           | <i>*i</i> | H-2024 | ← | 10.64 | <i>GRC</i> , fig. 11        |
|           | <i>j</i>  | H-2134 | ← | 10.77 |                             |
|           | <i>k</i>  | H-2164 | ← | 14.10 |                             |
|           | <i>*l</i> | H-2165 | ← | 12.17 | Walker 1982, pl. 22:6       |
|           | <i>m</i>  | H-2166 | ← | 9.15  | heavily corroded and broken |

*16a–m* are all from the same pair of dies and come from fill of the third quarter of the 4th century B.C., beneath the Temple of Ares (above, pp. 9–10). The silver plating is well preserved on all specimens but *16m*.

|           |        |   |       |   |
|-----------|--------|---|-------|---|
| <i>*n</i> | B-560  | ← | 11.74 | about half of the silver veneer preserved on the obverse; much less on the reverse; (context of the last quarter of the 4th century B.C.) |
| <i>*o</i> | E-2420 | ✓ | 12.55 | <i>GRC</i> , fig. 11; Stroud 1974, pl. 25:f   |
| <i>*p</i> | E-1365 | ✓ | 13.56 | <i>GRC</i> , fig. 11; Stroud 1974, pl. 25:f   |

*16o* and *p* (bronze only), having identical deep cuts on their reverses and found in front of the Metroon, had been officially mutilated and deposited in the Metroon in keeping with the nomothetic law of 375/4: see p. 9 above.

## DRACHM

|            |         |          |      |          |                        |
|------------|---------|----------|------|----------|------------------------|
|            |         | Similar. |      | Similar. | Sv. 21.27–32,<br>38–42 |
| <b>*17</b> | BB-1203 | ✓        | 3.73 |          |                        |

## PLATED AE COUNTERFEIT DRACHM

|            |         |   |      |  |
|------------|---------|---|------|--|
| <b>*18</b> | OO-1134 | ✓ | 2.90 | a third to half of the silver plating remains; incuse-square punch mark over the ear of Athena on obv. |
|------------|---------|---|------|--|

## TRIOBOLS

|           |           |          |   |  |   |
|-----------|-----------|----------|---|--|---|
|           |           | Similar. |   | A<br>E Θ or variant. Owl stg.,<br>facing; on either side,<br>olive branch with five<br>or more leaves. | Sv. 21.43–50                                  |
| <b>19</b> | <i>*a</i> | OO-1121  | ← | 1.91   | E-Θ   |
|           | <i>*b</i> | X-110    | ✓ | 1.55   | — (N 18:3)                                    |
|           | <i>*c</i> | K-1356   | ↑ | 1.35   | E-Θ Kleiner 1975, pl. 75, no. 165 (H–K 12–14) |
|           | <i>*d</i> | H'-2504  | ✓ | 1.78   | Θ-Ξ   |

|    |         |   |      |     |
|----|---------|---|------|-----|
| *e | Z-2785  | ✓ | 1.92 | E-Θ |
| *f | E-242   | ✓ | 1.43 | —   |
| *g | OO-1149 | ✓ | 1.75 | —   |
| *h | Δ-293   | ✓ | 1.98 | —   |
| i  | ΠΠ-532  | ✓ | 1.53 | —   |

19a and b can be assigned to the first half of the 4th century. The more crudely rendered owls of 19c-h are characteristic of the pi-style triobols of ca. 350–295. Compare the many pi-style triobols in the Peiraeus 1956 hoard (*IGCH* 127); Thompson 1957, pl. 1–3:3–66.

## DIOBOLS

|    |    |          |   |      |   |              |
|----|----|----------|---|------|---|--------------|
|    |    |          |   |      |   |              |
|    |    | Similar. |   |      | A   |              |
|    |    |          |   |      | Θ E or variant. Double-bodied owl, facing; in each upper corner, olive spray. | Sv. 21.54–62 |
| 20 | *a | BE-73    | ✓ | 0.90 | —   |              |
|    | *b | BB-324   | ↖ | 1.21 | Θ-E   |              |
|    | c  | N'-1321  | - | 1.16 | —   |              |

## TRITARTEMORIA

|    |    |          |   |      |   |              |
|----|----|----------|---|------|---|--------------|
|    |    |          |   |      |   |              |
|    |    | Similar. |   |      | A   |              |
|    |    |          |   |      | E Θ or variant. Three crescents, horns inwards, arranged in circle. | Sv. 17.44–48 |
| 21 | *a | H'-3850  | ↗ | 0.40 | Θ-Ξ   |              |
|    | b  | H-1148   | ↑ | 0.49 | E-Θ   |              |

ca. 286–280 B.C. or later

## TETRDRACHMS

|    |    |   |   |       |  |                  |
|----|----|---|---|-------|--|------------------|
|    |    |   |   |       |  |                  |
|    |    | Similar, but with quadridigité type of helmet ornament. |   |       | AΘE Owl stg. r., facing; behind, olive spray and crescent. | Sv. 20.34; 21.26 |
| 22 | *a | Λ-419   | ✓ | 16.28 | Nicolet-Pierre and Kroll, p. 4, pl. 2, no. 20              |                  |
|    | *b | Δ-322   | ✓ | 15.96 |  |                  |

## PLATED AE COUNTERFEIT TETRDRACHM

|     |        |   |       |   |
|-----|--------|---|-------|---|
| *23 | ΠΘ-556 | ✓ | 14.10 | The silver envelope is intact, except for a small patch on the rim and a small area on the reverse. |
|-----|--------|---|-------|---|

## DRACHMS

|    |    |          |   |      |                   |                       |
|----|----|----------|---|------|-------------------|-----------------------|
|    |    |          |   |      |                   |                       |
|    |    | Similar. |   |      | Similar.          | Sv. 21.33, 34, 36, 37 |
| 24 | *a | PP'-413  | ✓ | 3.76 |                   |                       |
|    | b  | Σ-6481   | ✓ | 2.97 | battered and worn |                       |

## UNCLASSIFIED

## TETRDRACHMS OF 4TH- OR EARLY 3RD-CENTURY B.C. TYPE, AS 15 OR 22

|    |   |        |   |       |                            |
|----|---|--------|---|-------|----------------------------|
| 25 | a | Σ-6430 | ✓ | 16.84 | effaced by wear            |
|    | b | K-1730 | ✓ | 14.06 | broken and effaced by wear |

## PLATED AE COUNTERFEIT OF 5TH-3RD-CENTURY B.C. TETRADRACHM, AS 9, 16, OR 23

- \*26** BΔ-437 ↖ 8.43 no silver preserved; disfigured by deep chisel cuts and corrosion. The large size of the owl precludes attribution to any pre-480 owl series.

## PLATED AE COUNTERFEIT OF 5TH-3RD-CENTURY B.C. DRACHM, AS 11, 18, OR 24

- 27** Π-895 - 2.76 AE only; blistered and mostly effaced

268-262 B.C.

## PENTOBOLS

- |           |           |  |   |            |
|-----------|-----------|--|---|------------|
|           |           | Head of Athena r.,<br>wearing Corinthian helmet. | A<br>E Θ or variant. Owl stg.<br>three-quarters r., facing,<br>lifting wings; [at r. amphora<br>or other symbol]. | Sv. 24.1-9 |
| <b>28</b> | <i>*a</i> | OO-246   | ✓ 2.26  |            |
|           | <i>*b</i> | ΠΠΠ-872  | ✓ 2.60  |            |

3rd century B.C. undated

## TETROBOLS

- |           |           |   |   |   |
|-----------|-----------|---|---|---|
|           |           | Head of Athena r.,<br>wearing Attic helmet. | A<br>Θ E Two owls, stg. l. and<br>r., facing. | Sv. 23.43-45;<br>24.18-24   |
| <b>29</b> | <i>*a</i> | E-1206                                      | ↖ 2.47  | issue of first half of the 3rd century (Sv. 23.43-45)                                     |
|           | <i>*b</i> | H'-2337                                     | ← 2.38  | same  |
|           | <i>*c</i> | Z-833                                       | ↑ 2.48  | GRC, fig. 9; later 3rd-century issue; possible illegible symbol below owls, cf. Sv. 24.18 |

ca. 240's-230's B.C.

## TETRADRACHM OF HETEROGENEOUS TYPE. IMITATION?

- |            |  |          |   |   |
|------------|--|----------|---|---|
|            |  | Similar. | AΘE Owl stg. r., facing;<br>behind, olive spray and crescent. | cf. Sv. 23.11                               |
| <b>*30</b> |  | K-1388   | ↑ 15.82   | Nicolet-Pierre and Kroll, p. 17, pl. 6, F23 |

ca. 220's-190's B.C.

## DRACHM

- |            |  |          |  |              |
|------------|--|----------|--|--------------|
|            |  | Similar. | Similar, except illegible symbol<br>below olive spray. | Sv. 23.25-42 |
| <b>*31</b> |  | Φ-358    | ↑ 3.91   |              |

ca. 165–42 B.C.

DRACHM, 134/3 B.C. (Mørkholm 1984)

Head of Athena Parthenos r.,  
wearing elaborately  
ornamented Attic helmet;  
border of dots.

A-ΘE Owl stg. r. on  
amphora, facing; in  
field: TI-MA|NIK|APXE  
and anchor (at l.); on  
amphora, H; all in olive  
wreath.

*New Style*,  
no. 372d (same dies)

\*32 H'-3347      ↑ 3.61      *GRC*, fig. 12

TETRADRACHM, 105/4 B.C. (Mørkholm 1984)

Similar.

Similar, except in field: HPA-  
KAE|ΔΗΣ|EYK|ΛΕΣ|  
[T]ΙΜΑ|[P] and symbol of  
Tyche voting (at r.); letter on  
amphora illegible.

*New Style*,  
nos. 777, 778a,  
779a, b

\*33 Γ-1456      ↑ 12.68      worn and battered

TETRADRACHM, 100/99 B.C. (Mørkholm 1984)

Similar.

Similar, except in field: ΔΩ-Σ|  
ΘΕΟΣ|ΧΑΡ|ΙΑΣ|Σ[O]Λ  
and symbol of Tyche holding  
staff (at r.); on amphora, Θ;  
below, ΣΟ.

*New Style*,  
no. 869a (different  
dies)

\*34 H-421      ↑ 14.02      *GRC*, fig. 12

## II

# ATHENIAN BRONZE COINS

### FOURTH THROUGH FIRST CENTURIES B.C.

**A**ROUND THE middle of the 5th century the poet and rhetor Dionysios, derisively nicknamed Ἄδ Χαλκοῦς, attempted to persuade his fellow Athenians to adopt a bronze currency.<sup>1</sup> While nothing came from this novel proposal, some numismatists have supposed that Athens was using a form of bronze money at least by the 420's. Passages from Eupolis' *Cities* (frag. 233, 423 B.C.) and Aristophanes' *Peace* (lines 1199–1201, 421 B.C.) make reference to a κόλλυβος as a trivial unit of value; and since the lexicographers define the *kollybos* principally as a small coin, Svoronos proposed that such coins must have been circulating in 5th-century Athens and can in fact be identified in an extensive series of diminutive (6–8 mm. diam.), tokenlike bronze pieces from Athens stamped on both sides with a letter of the alphabet or a symbol.<sup>2</sup> Over 600 varieties have been catalogued,<sup>3</sup> and although the letter forms show that most date from the 4th century and later, a few have a three-bar sigma or a nu with slanted sides and could go back to the 400's.

In modifications of Svoronos' theory, E. S. G. Robinson and Martin Price suggested that these "kollyboi" were issued by bankers, money-changers, and other private persons to make up for a lack of official petty currency.<sup>4</sup> But even this improvement overlooks the difficulty that these minuscule and extremely diverse bronzes, while having no ancient monetary parallels, are typologically related to the larger Athenian lead and bronze σύμβολα commonly employed for pay vouchers, seating tokens, and a wide range of other civic purposes.<sup>5</sup> Such *symbola* have a similarly vast array of types, including, very commonly, letters of the alphabet. Consequently, Percy Gardner, Theodore Reinach, and Margaret Crosby did not hesitate to reject a monetary interpretation for the pieces in question. Like all commentators before Svoronos, they affirmed that they are to be recognized as small symbola in bronze.<sup>6</sup> In this I must concur, leaving the dozen small bronze symbola from the Agora excavations to be published elsewhere.<sup>7</sup> The kollybos of 5th-century comic poetry was real enough but, there

<sup>1</sup> Athenaios 15.669 D; O. Crusius, *RE* V, col. 926, no. 97, *s.v.* Dionysios Chalkus.

<sup>2</sup> J. N. Svoronos, «Οι κόλλυβοι, τα πρώτα χαλκὰ νομίσματα των Αθηναίων», *JIAN* 14, 1912, pp. 123–160.

<sup>3</sup> *Ibid.*, pp. 135–154, with A. Postalakas, «Κεράμια συμβολικά», *Εφ'Αρχ* 1884, pp. 1–20, pls. 1 and 2. 179 varieties are illustrated on Sv. pl. 18.

<sup>4</sup> E. S. G. Robinson, "Some Problems in the Later Fifth Century Coinage of Athens," *ANSMN* 9, 1960 (pp. 1–15), pp. 6–8. M. Price, "Early Greek Bronze Coinage," in *Essays Robinson*, (pp. 90–104), p. 100.

<sup>5</sup> See Sv., pls. 100–102; Crosby in *Agora* X, pp. 76–82, pls. 19–31; Rhodes, pp. 711–712, 731; Kroll 1977, pp. 141–146, pl. 40.

<sup>6</sup> P. Gardner, *A History of Ancient Coinage 700–300 B.C.*, Oxford 1918, pp. 296–297; T. Reinach, "Kollybos," *RN*, ser. 4, 31, 1928 (pp. 145–160), p. 158; Crosby in *Agora* X, p. 84, note 32. Also J. H. Kroll, "Kollyboi or Symbola?" (lecture, Toronto 1984), abstract in *AJA* 89, 1985, p. 338.

<sup>7</sup> (Coin) inventory nos. AA-856 (Boukranion/?), BB-71 (Boukranion/Dolphin), BB-701 (Owl/Herm with caduceus), BE-132 (Star/Pileus), E-1083 (retrograde ME ligature/A, as Sv. 18.39), Z-456 (Dove/AT ligature), Z-2035 (Boukranion?/EY ligature), HH-127 (Horse forepart/Triskeles), NN-470 (T with 3 dots/Dolphin), Σ-2853 (Race torch/B), Σ-4553 (?/Plemochoe?). Z-2035 (which could equally be a Roman coin of the 5th century after Christ) is from a dumped fill of the early 4th century B.C. (well Deposit H 12:11) that contained, however, an intrusive coin of the Frankish period. The fill containing BB-701 produced nine coins, all of the 2nd century B.C. The other Agora pieces, although of 4th-century and Hellenistic date, come from Roman contexts.

being no coins that can be associated with it, merely as an abstract value. Therein would seem to lie the point of Eupolis' and Aristophanes' comic allusions. One could no more buy or sell something for a kollybos in 5th-century Athens than one could buy or sell something for a nonexistent U.S. half-cent today.<sup>8</sup>

The earliest reference then to an existing bronze coinage at Athens is Aristophanes' mention at *Frogs* 725–726 of the *πονηρὰ χαλκία* struck in 406/5, although this coinage is almost certainly to be identified in the silver-plated drachms and tetradrachms of the kind found in the Peiraeus 1902 hoard (pp. 7–8 above). To a considerable degree this identification rests on the absence of a more plausible alternative. For instance, the discovery of a bronze coin of Salamis in a Kerameikos grave reported to be of the early 4th century allows that the bronze coins of this Athenian island might go back as early as the end of the 5th century (see under **640–642**). But even if so precocious a chronology were correct, one still could not connect the Salaminian coinage with the bronze of 406/5, since the passage in the *Frogs* and the later joke about the demonitization of the bronze currency in *Ekklesiiazousai* 815–822 both make it clear that the Athenians themselves had voted to strike it.

Early in this century, Earle Fox made a case for associating the highly irregular Athenian pieces of varieties **35** and **36** with the 406/5 bronze.<sup>9</sup> The two varieties represent two denominations: **36**, designed with a single pellet on the reverse and the reverse type of a 5th-century silver trihemion, represents the unit; **35**, with a triobol reverse and two pellets, its double. Apart from a few Wappenmünzen tetradrachms,<sup>10</sup> these happen to be the only Athenian coins that ever bore marks of value. They are also the only Athenian issues until the Roman Imperial era having obverse Athena heads that face to the left and (except on the late 4th/early 3rd-century varieties **50** and **52**) ethnics spelled with an eta. On both denominations the reverse owl stands on a kernel of wheat. Fox argued that all such departures from normal Athenian practice were intended “to distinguish these two coins from any others . . . and everything seems to point to the conclusion that if money of necessity really was issued, it must be recognized in these most exceptional little pieces.” It can be objected that the ΑΘΗ ethnics ought not to date until after 403/2, when the Athenians formally adopted the Ionic alphabet for official use in place of the Attic alphabet; but Ionic spelling is found in a number of pre-403/2 Athenian inscriptions, and so this argument against Fox's attribution is perhaps not decisive of itself.<sup>11</sup>

Noting that six out of the seven Athenian coins recovered in the excavations of Olynthos belong to variety **35**, Robinson and Price more recently equated the Owl-on-wheat-kernel pieces with the coins known to have been minted by the Athenian commander Timotheos during his siege of Olynthos in the late 360's.<sup>12</sup> According to the pseudo-Aristotelian *Oikonomika* 2.23.1, Timotheos ran

<sup>8</sup> Cf. M. N. Tod, “Epigraphical Notes on Greek Coinage I: ΚΟΛΛΥΒΟΣ,” *NC*, ser. 6, 5, 1945 (pp. 108–116), pp. 111–112, comparing the kollybos of Eupolis and Aristophanes to the proverbial English “mite”. The only concrete evidence for the value of a kollybos coin comes from a late Hellenistic inscription from Adania in Messenia, *IG V, i*, 1532, in the improved text of Tod, *BSA* 28, 1927–1928, pp. 153–157, where the kollybos (represented by the symbol Κ) is a fraction of the *chalkous*, almost certainly its half (Tod, “Epigraphical Notes,” pp. 113–114). But the term was presumably applied to other minuscule values at other times and places. Reinach's equation of the kollybos with the Attic  $\frac{1}{8}$  obol ([note 6 above, p. 24], pp. 156–158) rests on the sequence of small weights in Theophrastus, *de Lapidibus* 46, and can be passed over now that D. E. Eichholz (*Theophrastus de Lapidibus*, Oxford 1965, p. 119) brackets the kollybos weight denomination in this passage as a late and unreliable interpolation. See p. 37 below.

<sup>9</sup> H. B. Earle Fox, “Some Athenian Problems,” *NC*, ser. 4, 5, 1905 (pp. 1–9), pp. 2–5.

<sup>10</sup> Kroll 1981b, p. 13, pl. 2:17.

<sup>11</sup> Pre-403/2 use of Ionic letters: L. Threatte, *The Grammar of Attic Inscriptions I*, Berlin/New York 1980, pp. 27–38.

<sup>12</sup> Robinson and Price 1967, pp. 1–6.



out of cash and issued bronze coins, which he promised to redeem later in silver in order to provide his troops with ration money. The irregular nature of his coinage and the fact that it was struck far from Athens admirably account for all anomalies of varieties **35** and **36**. But in developing their provenience-based attribution, Robinson and Price were unaware of the nine Owl-on-wheat-kernel pieces that were found in Athens, eight in the Agora and one from the Pnyx excavations, and of three other specimens that were purchased in Thebes.<sup>13</sup> Might these twelve pieces from Athens and Boiotia outweigh the six excavated at Olynthos and give new substance to Fox's old attribution to 406/5?

They cannot. It is much easier to explain the Agora, Pnyx, and Thebes examples of **35** and **36** as the remnants of a north Aegean military "scrip" that was perhaps never redeemed in full and traveled home with the troops and rowers left holding it than it is to imagine how specimens of the 406/5 bronze could have reached Olynthos in such numbers as to dominate overwhelmingly the finds of lost Athenian coins at the site, especially when the 406/5 bronze was unlikely to have retained any monetary value outside Attica. Second, although **36** borrows its reverse type from 5th-century Athenian silver (trihemiobols were not struck after the 400's), other typological and stylistic details of the Owl-on-wheat-kernel bronze are more at home in the 4th century. This is obviously so for the ΑΘΗ ethnic, but it applies equally to Athena's profile eye on obverses and to the heavy foliage of the olive sprays on either side of the owl of **35**.<sup>14</sup> There is finally the grain of wheat on which the owls are perched. As Robinson and Price plausibly suggest, the symbol refers to the purpose of the coinage as military grain money (σιτηρέσιον).<sup>15</sup> In the 4th century, foot soldiers and rowers normally received two obols per diem for rations,<sup>16</sup> a sum very much in line with the values of these coins, whether they were respectively tarified at  $1\frac{1}{2}$  and 3 obols in accordance with their reverse types or whether, as their marks of value imply, merely at 1 and 2 obols.<sup>17</sup> Inasmuch as Robinson and Price's attribution of the Owl-on-wheat-kernel bronze to Timotheos has so much to recommend it, only one extant bronze coinage remains that can be identified with the πονηρὰ χαλκία of 406/5, namely, the silver-plated bronze represented in the Peiraeus 1902 hoard.

This disguised bronze coinage from the end of the Peloponnesian War and the bronze military strikings of Timotheos (which must have become quite well known at Athens, as the Agora finds attest) were both short-term expediciencies, issued in place of silver at times of financial crisis. Both were relatively high-value fiduciary coinages and could hardly have inspired confidence in the concept of a bronze currency among a populace whose attachment to a coinage of exceptionally pure, local silver was a matter of long-standing national pride. For a while in the 4th century, Athens struck fractions in silver as small as the quarter and eighth of an obol (Sv. 17.53–56, 22.23). But the need for a more convenient petty currency in bronze must nevertheless have been recognized,

<sup>13</sup> As reported in *EABC*, p. 147, note 19, the three pieces from Thebes are in private Athenian collections, and one of the three examples listed in *Pnyx I*, p. 16, no. 12, is verifiable. The number of specimens with Macedonian proveniences has also grown. One piece in one of the same private collections is from Amphipolis, and two others are said to have been found in Macedonia.

<sup>14</sup> The fine British Museum specimen of **35** (Robinson and Price 1967, fig. 1 = Sv. 22.93) has four pairs of leaves and a terminal berry or leaf on each of its olive branches. Fifth-century silver triobols (**12**) were designed with only two pairs of leaves plus a terminal berry, and the gold triobols of 407/6 (Sv. 15.4–6) have two or three pairs and the terminal, whereas olive branches with four or more pairs of leaves are common on triobols of the 4th century (**19**).

<sup>15</sup> Robinson and Price 1967, p. 5, note 2.

<sup>16</sup> Demosthenes 4.28, and, in general, Griffith, pp. 268–272, 296.

<sup>17</sup> Possibly, the discrepancy between the marks of value and the denominational types is to be understood as the difference between values of 1 and 2 obols at time of issue and implied or guaranteed redemption values that were greater by a third. Such inflated "face" values would of course have made the coins more palatable to an army that was very angry, we are told by pseudo-Aristotle (*Oikonomika* 2.23.1), at being forced to accept them.

particularly in the further reaches of Attica; for it was there, with the coinage struck by the Athenian cleruchy on Salamis, that the regular production and use of small-denomination bronze currency in Attica apparently began (see under **640–642**). Before the middle of the 4th century a second Attic bronze coinage appeared, the Eleusinian coinage with Triptolemos/Piglet types and the legend ΕΛΕΥΣΙ (**38**). This was minted in Athens and employed the same modular unit (designated herein as AE 3) as the Salaminian coins; the denomination was in all probability the quarter-obol (pp. 34–36 below). Then, probably in the early to mid-330's, Athens finally issued bronze coins in her own name, at first by merely adding her ΑΘΕ ethnic to the Eleusinian Triptolemos/Piglet coins (**39**) but quickly substituting Athena/Owl types once the citizenry was finally reconciled to an explicitly Athenian bronze coinage. From that point down toward the middle part of the 3rd century, emissions, predominately of the AE 3 denomination, were minted at varied intervals in both the Athenian and the Eleusinian series.<sup>18</sup>

## PERIOD I

(including the Eleusinian coinage)

Mid-4th–Mid-3rd Centuries B.C.

Fundamental to the chronology of the first period of regular bronze coinage in Attica (Table I, pp. 320–321) are the interconnections between the Eleusinian and Athenian series. Both series must be treated together and call for some prefatory remarks about the anomalous Eleusinian material.

The 4th- and 3rd-century bronze inscribed ΕΛΕΥΣΙ has always been one of the more problematic coinages of ancient Greece. Assuming that the legend was an ethnic, Barclay Head conjectured that “Eleusis was the only Attic deme which was allowed by Athens (perhaps on account of its sacred character) to coin bronze money for the requirements of the Eleusinian Festivals.”<sup>19</sup> But other scholars, skeptical that a political subdivision of Athens could have exercised the prerogative of minting coins, have argued either that the coinage was produced by a briefly independent Eleusinian state<sup>20</sup> or that, as an Eleusinian festival coinage, it was actually minted under the central authority of Athens.<sup>21</sup> The first view can be rejected at once. There were never more than two short intervals during which the deme center of Eleusis was divorced from Athens, in 403–401, when Eleusis was established as a semiautonomous polity for dissident Athenian oligarchs, and in 287–285/4, when it was held by a garrison of Demetrios Poliorketes;<sup>22</sup> yet the varied bronze coinage with the Eleusinian legend was struck over more than a century.

<sup>18</sup> Salamis continued to strike in the second half of the 4th century, but the chronology of the Salaminian coinage (**640–642**) is too vague to merit discussion in this chapter.

<sup>19</sup> *HN*<sup>2</sup>, p. 391.

<sup>20</sup> So Cavaignac, pp. 331–332 (= *idem*, *Le trésor sacré d'Éleusis jusqu'en 404*, pp. 79–80); Ferguson, p. 145, note 4; I. N. Svoronos, quoted in *Traité* II.iii, p. 140; Picard, *Antre*, p. 293.

<sup>21</sup> So Babelon (*Traité* II.iii, pp. 138–142) and Thompson (1942, pp. 213–219). See also J. H. Kroll, “Athenian Bronze Coinage and the Propagation of the Eleusinian Mysteries” (lecture, Chicago 1991), abstract in *AJA* 96, 1992, pp. 355–356.

<sup>22</sup> In 287 (according to Habicht, *Untersuchungen*, pp. 45–60, and Osborne, pp. 181–194, against Shear, *Kallias*, pp. 63–73, favoring 286 B.C.) the Athenians won their freedom by expelling Demetrios' troops from the Mouseion but had yet to gain control of the other forts in Attica. For the subsequent recovery of Eleusis in 285/4, see Shear, *Kallias*, pp. 83–86, and P. Gauthier, “La réunification d'Athènes in 281,” *REG* 92, 1979 (pp. 348–399), p. 372.

The interpretation of this as an Athenian festival coinage, on the other hand, is scarcely beyond question, supported as it is by both the iconography and the minting history of the coins. The iconography pertains not to the deme of Eleusis but to the mythology (Triptolemos) and ritual paraphernalia (the initiates' sacrificial piglet and their distinctive staff of bound myrtle boughs) of the Greater Mysteries.<sup>23</sup> In a later Period I issue with an obverse head of Demeter (61), the reverses of the coins depict the Eleusinian offering vessel, the *plemochoe*, after which the last day of the Mysteries, the Plemochoai, is named, and the ring (herein called the "Eleusis ring") that was used to clasp together the boughs of the initiates' mystic staff.<sup>24</sup>

The second argument for the festival hypothesis comes from the recurrence of issues with Eleusinian types through the whole of the Hellenistic bronze coinage. After the adoption of Athena/Owl bronze coins signed AΘE, such special Eleusinian issues were often struck in parallel with them and continued to bear the traditional ΕΛΕΥΣΙ legend. The late 4th-century coin mistakenly struck with an Eleusinian Triptolemos obverse and a Two-owl, AΘE reverse (p. 32 below) proves that these Eleusinian coins were struck in the same central mint as Athens' AΘE bronze. After the middle of the 3rd century, however, the ΕΛΕΥΣΙ legend vanishes, and AΘE is henceforth used on all occasional issues with Eleusinian designs. Such issues are especially prominent in the last quarter of the 3rd century (72–75) and in the later 80's B.C. (116 and 117).<sup>25</sup> Altogether, these recurring Eleusinian issues constitute what must have been a recognized if sporadic tradition within Athenian bronze coinage as a whole, and they are virtually inexplicable unless there was some direct association with the celebration of the Mysteries.

By the 4th century, control of the festival and the sanctuary of Demeter and Kore had long passed into the hands of the Athenian state at large,<sup>26</sup> so that even if no proof existed in the form of the above-mentioned hybrid Triptolemos/Two-owl coin, it would still follow that the ΕΛΕΥΣΙ coinage must have been struck by the polis of Athens. This means, of course, that the ΕΛΕΥΣΙ legend cannot be expanded as an "ethnic" of the demesmen of Eleusis, that is, Ἐλευσι(νίων), but must be understood as referring in one way or another to the festival. Margaret Thompson realized this in her paper espousing the festival interpretation of the coinage, but she thought that the legend named the Eleusinia, the agonistic festival held at Eleusis.<sup>27</sup> But this festival did not begin to rank in importance with the Greater Mysteries; and since the iconography of the coins refers exclusively to the Mysteries, the legend must surely refer to the Mysteries as well. ΕΛΕΥΣΙ apparently served

<sup>23</sup> For Triptolemos, see G. Schwarz, *Triptolemos: Ikonographie einer Agrar- und Mysteriengottheit*, Graz 1987. On the piglet sacrifice to Demeter, see K. Clinton, "Sacrifice at the Eleusinian Mysteries," in *Early Greek Cult Practice*, R. Hägg, N. Marinatos, and G. C. Nordquist, eds., Acta Instituti Atheniensis Regni Sueciae, Stockholm 1988, pp. 69–79; and Burkert, pp. 256–264. In modern scholarship, the mystic staff of myrtle is usually called a *bakchos*, but this is probably not the correct term; see Clinton, *Sacred Officials*, p. 103. C. Bérard ("La lumière et le faisceau: Images du rituel eleusinien," *Recherches et documents du Centre Thomas More* 48, 1985, pp. 17–19, note 1) argues that the ancient name was δράγμα. I owe these last and other references on Eleusinian matters to Professor Clinton, who kindly read an earlier draft of this chapter and suggested a number of improvements.

<sup>24</sup> The *plemochoe* is the vessel that numismatists have often termed a *kernos*. For the correct identification, see F. Brommer, "Plemochoe," *AA* 1989, pp. 544–549. The "Eleusis ring" is the clasp that J. D. Beazley ("Bakchos-rings," *JNC*, ser. 6, 1, 1941, pp. 1–7) provisionally termed a "bakchos-ring", while cautioning that the initiates' staff on which it was used may not have been called a *bakchos*.

<sup>25</sup> See also the 2nd-century varieties 86 and 106 and the other post-86 B.C. varieties 127–129, 146, 150, 154, 155, although it is uncertain how many of these last emissions may have been special festival issues; see p. 84 below.

<sup>26</sup> Clinton, *Sacred Officials*, p. 8.

<sup>27</sup> Thompson 1942. On the festival: K. Clinton, "The Eleusinia and the Eleusinians," *AJP* 100, 1979, pp. 1–12; R. M. Simms, "The Eleusinia in the Sixth to Fourth Centuries B.C.," *GRBS* 16, 1975, pp. 269–279.

as an accompanying label to underscore the force of the images on the coins, to indicate the purpose of the coinage, and, initially, to disassociate the bronze from Athenian money proper. It may be plausibly expanded Ἐλευσι(νιακόν, *scil.* νόμισμα), “Eleusinian (money),” on the model of other adjectival coin legends in the neuter singular, or simply Ἐλευσῖ(νος), “of Eleusis.”<sup>28</sup>

The association of certain Greek coinages with major festivals is well documented in the Roman Imperial era, when coins were frequently struck with types and legends advertising local games.<sup>29</sup> But the association can be traced back as early as the 5th- and 4th-century B.C. silver coinage of Elis, which most commentators have connected in one way or another with the quadrennial Olympic festival.<sup>30</sup> Although such Greek festival coinages will have served as souvenirs and helped to advertise the festivals, one assumes that most were struck to provide money for the festival trade, which in the case of Eleusinian Mysteries must have been considerable. Unlike most Panhellenic festivals, the Mysteries were celebrated annually, and probably no other event in the Athenian calendar attracted a greater number of visitors to Attica. Philostratos’ remark (*Life of Apollonios* 4.17) that the Mysteries were “the most crowded (πολυανθρωπότατα) of Greek festivals” applies to Imperial times. But even in the 4th century B.C. the great international popularity of the festival must have been growing: between *ca.* 368 and 347 a revised code of regulations governing the publicizing and conduct of the Mysteries was promulgated to encourage increased foreign participation.<sup>31</sup>

Each year every new initiate and his or her sponsor lived at Eleusis during the last four days of the festival, purchasing their lodging, food, drink, and amenities from local vendors, innkeepers, and, one imagines, a whole agora of Athenian and itinerant merchants making the festival rounds.<sup>32</sup> Such festival business required money, in particular the small-change kind suitable for daily provisions. And given the tiny fractions of Athenian silver, the bronze pieces of Salamis, and any other miscellaneous petty currencies available in Attica in the second quarter of the 4th century, it is not hard to image why the Athenians turned to supplying this trade with a convenient bronze coinage of their own manufacture.

The coins are only one indication of the commercial importance of the Eleusinian Mysteries. The 2nd-century B.C. decree *IG II<sup>2</sup> 1013*<sup>33</sup> informs that Eleusis was one of the three sites in Attica where the Athenians maintained an official set of standard weights and measures. The two other sets were housed inside the Tholos in the Agora and at the Peiraeus and were, as at Eleusis, in the keeping of a public slave. Notably, the slave in charge of the standards at Eleusis was responsible to officials of the Mysteries: the hierophant and “the men appointed each year for the festival”

<sup>28</sup> For these and other forms of coin legends, see Kraay, *ACGC*, pp. 5–7. In antiquity, as today, “Eleusis” and “Eleusinian” were commonly used with reference to the sanctuary and cult of Demeter and Kore, as distinct from the surrounding deme; cf. the official title of the overseers of the sanctuary, who were simply called the ἐπιστάται Ἐλευσῖνι (*IG I<sup>3</sup> 386*, line 2) or the ἐπιστάται Ἐλευσινόθεν (*IG I<sup>3</sup> 391*, line 15; *II<sup>2</sup> 1544*, line 1; 1672, line 3, etc.). For the adjective Ἐλευσινιακός, omitted from *LSJ*, see, e.g., Strabo 8.6.22; *IG II<sup>2</sup> 1666*, lines B.69, 75, 81, and 1672, lines 53, 54, 309.

<sup>29</sup> See J. P. Callu, *La politique monétaire des empereurs romains de 238 à 311* (Bibliothèque des écoles françaises d’Athènes et de Rome 214), Paris 1969, pp. 26–27; A. Johnston in *Sardis M7*, pp. 12–14; Harl, pp. 19, 28, 63–70.

<sup>30</sup> Summary in Kraay, *ACGC*, pp. 103–105. For a probable bronze festival coinage of Hellenistic Thespiiai, see **606** and **607**.

<sup>31</sup> K. Clinton, “A Law in the City Eleusinion concerning the Mysteries,” *Hesperia* 49, 1980, pp. 258–288, esp. 273–275, 281.

<sup>32</sup> On Greek festivals as “fairs” and the economic significance of the festival market, see L. Ziehen, *RE XVIII*, col. 582, s.v. Panegyris; M. Wörrle, *Stadt und Fest im Kaiserzeitlichen Kleinasien*, Munich 1988, pp. 209–215.

<sup>33</sup> Translation in M. M. Austin, *The Hellenistic World from Alexander to the Roman Conquest*, Cambridge 1981, pp. 191–193, no. 111.

(ἐπὶ τὴν πανήγυριν, lines 48–49). It was clearly appreciated that efficient and well-regulated buying and selling at the festival market contributed to the success of the festival.

The chronology of the Eleusinian and Athenian varieties is best discussed by subgroups, here and in Table I (pp. 320–321 below) indicated by roman numerals.

(i.a) **Variety 38: Triptolemos/Piglet on mystic staff, ΕΛΕΥΣΙ**

The initial Eleusinian series is distinguished by large, heavy flans (15–18 mm., 3–4 g.) and the use of reverse symbols or letters to differentiate its fifteen emissions.<sup>34</sup> These fifteen emissions lead down to the Piglet-on-staff, ΑΘΕ issues (39 and 40), themselves the immediate forerunners of the first Athenian Double-bodied owl bronze (41) probably of the early or mid-330's. Hence, if the fifteen Eleusinian emissions were minted on a more or less annual basis, the series will have begun sometime in the 350's. A connection with the 368–347 B.C. decree and reform program for attracting more foreign visitors to the festival is likely.

The character of the changing symbols and letters sets these issues apart from all other 4th-century Athenian coinage. Being predominately “private” rather than public in character, the symbols (such as ivy branch, grapevine, boukranion, fly, shell, dolphin, and astragal) are evidently the marks of the individuals or boards of officials who oversaw production of the separate issues. The officials may have been among those chosen for the administration of the festival, like the ἐπιστάται Ἐλευσινώθεν; or if the moneyers bore a liturgical expense, clansmen of the Eumolpidai and Kerykes with their close ties to the Mysteries might have participated.<sup>35</sup>

(i.b) **Varieties 39 and 40: Triptolemos/Piglet on mystic staff, ΑΘΕ**

The changed ethnic of these concluding Piglet-on-staff varieties (with reduced diameters and weight of 13–15 mm. and ca. 2.5 g.) is accompanied on the main emission (39: ΑΘΕ above piglet) by a change in the character of the reverse symbol. Unlike the “private” symbols of the ΕΛΕΥΣΙ issues, the symbol here, the plemochoe, is drawn from the “religious-public” repertory of Eleusinian devices. Responsibility for the festival coinage apparently had been transferred to a different administrative authority. If we could be sure that this minor reform in the organization of the coinage belonged with Lykourgos' financial reforms concerning Athenian festivals in the mid-330's,<sup>36</sup> we would gain a valuable fixed point for the early Period I chronology. But an earlier date for the reform is possible.<sup>37</sup> These first regular ΑΘΕ strikings in bronze led quickly to the next step in the development of the coinage, viz., the replacement of Eleusinian types with traditional Athenian owl types, as the Athenians seem to have overcome in stages their hesitancy to place their name and types on a base-metal coinage.

<sup>34</sup> In the exergue: (1) pig's head and ivy leaf (Sv. 103.2, 3), (2) ivy branch (Sv. 103.1), (3) boukranion (Sv. 103.4, 5), (4) scallop shell (Sv. 103.6, 7), (5) Eleusis ring in wreath (Sv. 103.18), (6) fly (or bee?) (Sv. 103.9), (7) astragal (Sv. 103.10), (8) dolphin (Sv. 103.14), (9) ram's head (American Numismatic Society), (10) vine with leaf and grape cluster (*Traité*, pl. 109:17), (11) letter Δ (Cavaignac, nos. 49 and 54). In right field: (12) plemochoe (?) (*Traité*, pl. 193:15) and (13–15) letters Θ (Sv. 103.15), Μ (*BMCAttica*, pl. 20:4) and Ν (Sv. 103.11). The list compiled by Thompson (1942, p. 218, note 18) omits only the astragal. The uniformly large 17–18 mm. flans of emissions 1 and 2 locate them at the beginning of the series. The Μ and Ν emissions have 14–16 mm. diameters and fall at or near the end.

<sup>35</sup> As suggested, *per litteras*, by Kevin Clinton.

<sup>36</sup> F. W. Mitchel, “Lykourgos Athens: 338–322,” *University of Cincinnati Classical Studies II: Lectures in Memory of Louise Taft Semple II*, Norman 1973 (pp. 163–214), pp. 197–198.

<sup>37</sup> The 4th-century date of the present varieties precludes the theory of Thompson (1942, pp. 220–221) that the changed ethnic was caused by the Macedonian occupation of Eleusis in the early 3rd century (p. 27 above).

(ii) *Varieties 41–43: Athena in Attic helmet/Double-bodied owl*

With 979 recorded Agora specimens, this first fully fledged “Athenian” bronze coinage is one of the most prolific from any period. Apart from the rare bronze tritartemoria (37), it is the only Athenian bronze until the late 3rd century modeled on contemporary silver coinage: obverse heads reproduce the pi-style Athena heads of the later 4th-century silver, reverses, the type of 4th-century diobols (in the fringed style characteristic of the owls on later 4th-century silver).<sup>38</sup>

Production began in a relatively slight emission (41) with the double-bodied owl standing on a horizontal Eleusinian staff that is carried over from the Piglet-on-staff emissions. After the second Double-bodied owl variety (42), which lacks a symbol and has reduced diameters of normally 12–14 mm., the coinage entered a final voluminous phase in the variety marked by an Eleusis ring under the feet of the owl (43). In this last phase, diameters shrink even further; hurried striking is evident from many pieces stamped from poorly centered dies (cf. 43g); and towards the end of the series, when diameters frequently reach a minimal 10–11 mm., the die cutters ceased to adhere to the pi-style model and produced Athena heads either in a softer, naturalistic rendering (43e–g, with Sv. 22.42) or with perfunctory crudeness (43h and i). The small owls of these latest pieces generally have stubby, compact bodies, and in two instances the ethnic is freely spelled with an eta (43 l and m).

Since this was a huge coinage, with weights and diameters that underwent a considerable reduction, the Double-bodied owls were clearly struck for a protracted period.<sup>39</sup> The earliest probable date for the inauguration of the pi-style silver, around or soon after 350 (pp. 8–9 above), provides the *terminus post quem*; the inception of the succeeding Two-owl bronze, 44–47, after 322 or 317 provides the *terminus ante*, unless, as the naturalistic Athena heads and different size modules of the two coinages suggest, there was some overlap between the minting of the latest Double-bodied owls and the earliest Two-owl coins (44), which also have the Eleusis ring as a type adjunct. Since in either case a substantial part of the Double-bodied owl bronze can be attributed to the 320’s, the problem is whether it could have begun as late as the mid-330’s under the administration of Lykourgos, or whether a somewhat longer period of minting is called for. At present, a starting date after 338 seems preferable, but further evidence is needed. Although Double-bodied owls first occur in archaeological deposits roughly dated to the last half or last third of the 4th century,<sup>40</sup> this tells us even less about the date than do the above considerations, which locate the bulk of the coinage in the 330’s and 320’s.

The stylistic range of the massive variety of Double-bodied owl over Eleusis ring makes it clear that this could not possibly be an emission of a single year and that the Eleusis ring was therefore a static adjunct part of the reverse type. So, too, must be the mystic staff under the owl on the first variety (41). The display of these Eleusinian devices suggests, of course, that this first Athena/Owl bronze coinage was minted, like the Triptolemos/Piglet coinage it replaced, in conjunction with the celebration of the Eleusinian Mysteries. Adjunct Eleusinian symbols continue to appear on the next two Athena/Owl issues, Two owls over Eleusis ring (44) and Two owls over plemochoe (45),

<sup>38</sup> These stylistic replications should not be taken as evidence that the Double-bodied owl bronze was produced in the same mint as the silver. Despite considerable variation in die alignments, the majority of the Double-bodied owl bronzes have alignments in the 12 or 6 o’clock positions, while very few have the 8 or 9 o’clock alignments typical of all Athenian silver coins from the late 5th through most of the 3rd century B.C. Like most of the later bronze and silver coinages of Athens, the Double-bodied owl bronze and the silver coinage contemporary with it must have been struck independently of one another.

<sup>39</sup> Caley, pp. 45–47, noted the exceptional variability in the bronze alloy of the five Double-bodied owls he analyzed and contended that the series must have been protracted.

<sup>40</sup> See pp. 298–301 below, nos. 2, 3, and 5 and the Agora Deposit S 19:3.

and then disappear (**46**: Two owls, no symbol) about the time that the Eleusinian Triptolemos/Piglet coinage is revived (**48** and **49**). The implication seems to be that before this revival, *all* the Period I bronze coinage may have been issued as Eleusinian festival money.

(iii) *Varieties 44–49: Athena in Attic helmet/Two owls in olive wreath, and Triptolemos/Piglet in wheat wreath, EAEY*

The four varieties of the wreathed Two-owl coinage (**44**: Eleusis-ring symbol, AΘE; **45**: plemochoe symbol, AΘ; **46**: no symbol, AΘ; and the rare **47**: no symbol, AΘH) represent a renovation of the bronze coinage after the crudely minted late Double-bodied owl strikings. Size and weight hark back to the latest Piglet-on-staff bronze (**39** and **40**) in the 13–15 mm., *ca.* 2.5 g. range, which remains standard for the rest of Period I. The types were redesigned and more notably and lastingly were emancipated from stylistic dependency on contemporary silver. As in the latest Double-bodied owls, obverse Athena heads, often in richly ornamented helmets (cf. 44a and Sv. 24.49), are now rendered without a trace of mechanical, pi-style rigidity. The Two-owl reverse type is not entirely new, since two standing owls had been the device of 5th-century silver diobols or quarter-drachms (**12A**) and gold diobols (Sv. 15.7, 8). But the olive wreath encircling the reverse is new, and it remained a fixture of the bronze coinage well into the 3rd century.

The third and largest Two-owl variety (**46**) is the last Athenian issue that was struck before the destruction of the Kerameikos Building Z-3 between *ca.* 320–317 and the start of the Owl-left issue **50** in 307 (see below). **46** appears quite clearly then to belong to the 317–307 oligarchy that Kassandros installed under Demetrios of Phaleron. It is likely that one or both of the two related issues, **44** and **45**, were minted during this same regime or under the 322–317 oligarchy that Antipatros established under Phokion.

A special problem is raised by the two coins listed under variety **47**, which are essentially variants of variety **46** but bolder in design (apart from their large Athena heads, note the full-bodied olive leaves on the better-preserved 46a). As the AΘH spelling of their ethnic is characteristic of the following Owl-left variety, the two coins appear to belong to a limited emission struck just before the change to the Owl-left types.

As noted, the traditional Eleusinian coinage was revived in the course of the Two-owl series about the time that the Two-owl coins ceased to be marked with Eleusinian symbols. The synchronism between the two new Eleusinian varieties with legends in EAEY, **48** and **49**, and the Two-owl AΘ varieties **45** and **46** is implied through (a) the curtailed legends in both groups; (b) coordinate weights and diameters (Table I, pp. 320–321 below); (c) the surrounding wheat wreath of the Eleusinian reverses, which parallels the reverse olive wreath on the owl coins; and (d) the find of twelve Two owls over plemochoe (**45**) and four Wreathed piglets, EAEY above (**48**), corroded together in a lump at the bottom of the Dipylon well in the Kerameikos (Purse A, p. 299 below). For proof we have only to turn to the hybrid coin illustrated by Svoronos (Sv. 103.40, now in the British Museum) with a Wreathed-piglet obverse (Triptolemos *mounting* chariot) and a Two-owls-over-plemochoe (**45**) reverse, a piece we owe to “a workman at the Athens mint, [who] confusing his dies, struck the flan of the intended Eleusinian coin with the punch of a contemporary Athenian issue.”<sup>41</sup>

(iv) *Varieties 50 and 51: Athena in Corinthian helmet/Owl left, HΘ/A, in olive wreath, and heavy Triptolemos/Piglet in wheat wreath, EAEYΣI*

The average weight of the Owl-left pieces is some 50 percent greater than that of the preceding and following Athenian varieties. This jump in weight, however, is not accompanied by a significant

<sup>41</sup> Thompson 1942, p. 214 (cf. p. 224). The variant obverse type of Triptolemos mounting a chariot does not appear until the Wreathed-piglet varieties. On the preceding Piglet-on-mystic-staff obverses, Triptolemos is always seated.

increase in diameter. Since the new design format of Corinthian helmet and a single owl was retained through varieties **52–54**, which returned to the *ca.* 2.5 g. weight of the old Two-owl bronze, it appears that the heaviness of the Owl-left bronze was intended to enhance acceptability and does not signal a change in denomination or value. The Wreathed-piglet coinage issued contemporaneously (**51**) points to the same conclusion.<sup>42</sup> Despite their augmented weight of 3–4 g. (which essentially restored them to the standard of the original Eleusinian emission of variety **38**), these heavy Wreathed piglets employ the same types and fundamental module as all earlier and later Wreathed-piglet varieties and undoubtedly represented the same value as they.

The heaviness of the Owl-left coinage is matched by the exceptional quality of its alloy,<sup>43</sup> die engraving (cf. Sv. 22.85 and 86), and striking, making it altogether one of the most carefully prepared bronze coinages ever minted at Athens. The coinage, furthermore, was of some magnitude. The 24 best-preserved specimens of the 251 found in the Agora were stamped from a minimum of 18 obverse dies, and through them one can trace a progression from the large, ornate Athena heads that must belong at the beginning of the series (50a–c) to the smaller, plainer ones at the end (50h–k).

In Athenian coinage the backwards orientation of the reverse type (owl facing left coupled with retrograde ethnic) is unique. Yet it is repeated on every die of this exceptionally large and well-manufactured series (whose obverse Athena heads do face correctly to the right) and must have been a deliberate and officially sanctioned essential of the design. Unable to suggest a more plausible explanation, I earlier interpreted the reversed owl and ethnic as the political expression of a revisionist oligarchic government symbolizing “a reversed Athens, a traditionally democratic Athens that had been literally ‘turned around’” (*EABC*, p. 146). I accordingly associated the coinage with the two oligarchies in power between 322 and 307 B.C. But two more recent items of evidence indicate that this dating was too early. The first comes from the excavation in 1978 of Kerameikos Building Z-3, destroyed after *ca.* 320–317 B.C.; at the time of its destruction, Owl left was not yet in circulation, although, according to other stratigraphical data from the Kerameikos, the coinage was known to have commenced by 304 (see pp. 298–299 below). The other evidence is the recognition that the succeeding Owl-right, A-ΘΗ, issue (**52**) is closely tied to issue **53** in the 280’s and cannot date to the restored democracy of 307–*ca.* 300, as previously suggested (*EABC*, p. 147). The downdating of **52** has the effect of bringing down the date of Owl left as far as it will go, but the inception of Owl left cannot come down later than 304, so this variety must therefore now be attributed to the democratic government restored to power by Demetrios Poliorketes in 307.<sup>44</sup> On this chronology the reversed owl and ethnic will have to remain unexplained, unless they were precautions to ensure that these larger, heavier coins would not be used or mistaken for cores of plated drachms. But the augmented weight, the modernized spelling of the ethnic, and the novel treatment of the conventional Athenian types (the Corinthian-helmet obverse copies the canonical Athena heads on

<sup>42</sup> Three archaeological contexts confirm that the heavy Athenian and Eleusinian varieties were struck in tandem. See the Kerameikos Building Z destruction deposit (p. 298 below, no. 2), from which both varieties were absent, and the second Dipylon well purse (p. 299 below, no. 4) and the Agora Deposit F 11:2, both of whose latest pieces are Owl-left and heavy Wreathed piglets.

<sup>43</sup> Caley (p. 32) observed that the 12.49 and 12.76 percentages of tin in the alloy of two analyzed Owl-left coins (Caley, table V, nos. 1 and 2) are “higher than . . . in any other series.”

<sup>44</sup> As proposed in Kroll 1982, pp. 241–242; cf. Rotroff 1984, pp. 344–345. Four Owl-left pieces were excavated from the construction fill of the Square Peristyle in the Agora (cf. *EABC*, pp. 146–147, listing the only one from uncontaminated fill), but since this building is now known to date from the early years of the 3rd century, the context no longer has any direct bearing on the chronology of the coins; see Deposit O–R 7–10.



the gold staters of Alexander and hence carries pro-Macedonian connotations) give Owl left the character of a “reform” coinage, in keeping with the radical character of the 307 democracy.

(v) *Varieties 52–55: Athena in Corinthian helmet/Owl right, in wreath, and light Triptolemos/Piglet in wheat wreath, ΕΑΕΥΣΙ*

Normalcy in weight and design returned in the three related varieties, **52**: Owl right, A-ΘH, in olive wreath; **53**: Owl right, A-Θ, in wheat wreath; and **54**: Owl right, A-Θ, in olive wreath. Of these, the second and most plentiful can be associated with a historical occasion. Since the conventional olive-wreath border on the reverse is replaced by a wheat wreath borrowed from the Eleusinian Wreathed-piglet coins, it is likely that the resulting composite Athenian owl encircled by Eleusinian crown was created to symbolize the unification of Eleusis with Athens. The type is most appropriately placed at or soon after 284 B.C., when the Athenians, who in 287 or 286 expelled the Macedonian garrison from the Mouseion, succeeded in liberating Eleusis from Macedonian occupation. The reunification with Eleusis was celebrated in special games that year at Eleusis in honor of Demeter and Kore.<sup>45</sup>

A unique specimen of **53** in Berlin (Sv. 22.80; note the two wheat ears above the head of the owl) has an A-Θ ethnic carried over from variety **52** and implies, as do strong general similarities in obverse and reverse style,<sup>46</sup> that the two varieties were contiguous. **52**, a small emission, probably began therefore soon after the expulsion of the garrison on the Mouseion; with the liberation of Eleusis, it was modified into variety **53**.<sup>47</sup> On the other hand, the last variety of the Owl right in wreath (**54**) must fall in the 270's, if the next type change, back to a reverse of two owls, is rightly located around 270 B.C.

By size, weight, and representation in the Agora hoard Deposit A 18:8 of the 260's, the Eleusinian Wreathed piglets concluded in a variety (**55**) that was contemporary with **53** or **54**, or both. All nineteen Wreathed piglets in the A 18:8 hoard (see 55c and p. 302 below) are of this late, light variety and had been subjected to the same moderate amount of wear (w3–4) as the Owl-right, A-Θ, pieces.

(vi) *Variety 56: Athena in Corinthian helmet/Two owls in olive wreath*

Two finds place this uncommon variety near the beginning of the Chremonidean War (268–261 B.C.). A specimen in uncirculated condition (E. Vanderpool, J. R. McCredie, and A. Steinberg, “Koroni: A Ptolemaic Camp on the East Coast of Attica,” *Hesperia* 31, 1962 [pp. 26–61], pl. 17:56 = *EABC*, pl. 16:1) was excavated from the Koroni fort briefly occupied by Ptolemaic troops early in the war.<sup>48</sup> The other find is the Agora A 18:8 hoard, which was closed probably around the end of the war and which has as one of its least-worn pieces an example of the present variety (56d).

(vii) *Varieties 57–60: Athena in Corinthian helmet/Owl right, Θ<sup>A</sup> E with symbol*

The critical A 18:8 hoard (p. 302 below) concludes with three pieces of this series: [57–60]a, whose symbol cannot be read, and 57b and c, both from the issue with the symbol of a small wreath. On this slight hoard evidence, the wreath-symbol issue may, despite its light weight, belong earlier

<sup>45</sup> *IG II<sup>2</sup>* 657, lines 43–44, with Shear, *Kallias*, pp. 84–86.

<sup>46</sup> Obverses continue the relatively plain type of Athena heads of the later, smaller Owl-left dies (e.g., 50h–k), but the owls of all three Owl-right varieties are more erect and more conventionally proportioned than the distinctively large-headed, “birdlike” owls of the Owl-left emission.

<sup>47</sup> The bronze thus more or less parallels the silver coinage, which ceased also to be struck during Demetrios Poliorketes' military occupation of Athens from 294 to 287 or 286. See p. 10 above.

<sup>48</sup> See p. 11 above.

in the series than the issues with wheat-ear symbol (58), cornucopia symbol (59), and Eleusis-ring symbol (60).

Since these issues stand apart from the preceding coinage with respect to their unwreathed reverses, three-letter, triangular ethnic, and use of emission symbols, I once thought (*EABC*, pp. 144, 149) that the series began after a considerable hiatus in minting; I dated the series (and hence the burial of the A 18:8 hoard) after 255 B.C., when Antigonos Gonatas, having captured Athens in 261, relaxed his control through a formal grant of *eleutheria*.<sup>49</sup> But more substantive considerations now argue for a dating before 261. For one, the variant three-letter ethnic of 56g can be regarded as a transitional step towards the changed reverses of the Owl-right-with-symbol coinage and suggests that the latter probably followed variety 56 without interruption. There is secondly the strong probability that the A 18:8 hoard was closed around the end of the Chremonidean War. The hoard contained no regal striking later than those of Demetrios Poliorketes (502b, 505) and Lysimachos (462), while included with its 104 coins were four lead tokens respectively depicting a bow, a shield, a cuirass, and possibly a helmet.<sup>50</sup> The absence of any bronze of Antigonos Gonatas, which began to circulate in quantity at Athens after the 260's, is notable. And the lead armor tokens, apparently issued to civilians for the drawing of weapons and armor from public stores, imply that the owner of the hoard was involved with the military defense of Athens.<sup>51</sup> If, like many hoards, A 18:8 owed its concealment to a pending catastrophe, one is hard put to suggest a more suitable emergency than Athens' capitulation to Antigonos Gonatas in 261. Third and more concretely, a specimen of the wreath-symbol issue (57g) was excavated from the top of the lower fill of the south chamber of the "Cave" cistern on the Kolonos Agoraios (Deposit H 6:9), a fill that on evidence of pottery was dumped in the 260's upon completion of the adjacent Hellenistic "Arsenal".<sup>52</sup> Although the high position of the coin in the fill leaves open the possibility that the coin could be intrusive, a pre-261 B.C. chronology for the series of Owl right with symbol is nevertheless to be preferred in the absence of real evidence to the contrary.

(viii) *Varieties 62 and 63: Two piglets left/Upright mystic staff A-E, in olive wreath, and Piglet right, AΘE?/Upright mystic staff, EΛE-YΣI*

Absent from the A 18:8 hoard, these varieties with changed Eleusinian types comprise a post-261 B.C. coinage that was issued with joint Athenian and Eleusinian legends. Starting with the Period II varieties 72–75 of the last quarter of the 3rd century, all coins with Eleusinian types were routinely signed AΘE, so that it is clear that the present Upright-mystic-staff bronze is to be dated either very early in Period II or before 229, when Period II begins.

The chief variety, 62, has besides the A-E initials of Athens and Eleusis<sup>53</sup> a composite reverse of Athenian olive branch encircling the Eleusinian staff. Two variant pieces underscore the unusual character of this coinage, the one in Paris (*Traité*, pl. 193:28) having a normal upright staff, A-E, reverse, but an obverse of a single piglet right over EΛEY[, probably struck (in error?) from a left-over

<sup>49</sup> Eusebius, ed. A. Schöne, Berlin 1866–1875, II, p. 120.

<sup>50</sup> *Agora X*, nos. L 27b (two tokens), L 168, and L 227; with Kroll 1977, p. 144.

<sup>51</sup> The defensive nature of the armor pictured on the tokens is underscored by the token that pictures a bow, the basic weapon for defending from city walls. The alpha blazon on the shield token leaves no doubt that the equipment was Athenian and publicly issued; Kroll 1977, pp. 142–143.

<sup>52</sup> Rotroff 1983, pp. 258–276, 283–294, arguing from the similarity between the latest pottery in the fill with that from the Chremonidean War fort at Koroni; R. L. Pounder, "A Hellenistic Arsenal in Athens," *Hesperia* 52, 1983, pp. 233–256, esp. 244 and 255.

<sup>53</sup> As Babelon (*Traité*, II.iii, p. 138) correctly interpreted the letters.

Wreathed-piglet reverse die.<sup>54</sup> The other is the variant of Two piglets left/Upright staff in the Numismatic Collection of Athens (Sv. 103.41 = *Traité*, pl. 193:26), which bears the ethnic ΑΘΕ above the two piglets on the obverse but no visible letters on the reverse.

At 1.49 and 1.75 g. and 12 mm., the two extant single-piglet coins of variety **63** are smaller than the two-piglet pieces of **62** (2–2.5 g., 13–14 mm.) and fall under the AE 4 modular rubric, as opposed to the AE 3 classification of the doubled piglets. Hence the single-piglet pieces should represent the single denominational unit to the two-piglets' double.<sup>55</sup> Although this might connect both varieties more closely with Period II than with the pre-261 bronze, which, except for the Double-bodied owl bronze, was limited to the AE 3 double-unit (see below), the Wreathed-piglet obverse of the unique coin in Paris with Upright mystic staff suggests chronological proximity to the pre-261 bronze all the same and encourages dating of this entire group of Athenian-Eleusinian pieces with the upright staff to before rather than after the start of Period II. Thus, between 261 and 229 B.C., monetary production in Athens was apparently limited to these few striking in bronze that perpetuated the old and very tenacious tradition of Eleusinian festival money and to however much of the heterogeneous silver (pp. 11–13 above) as happened to be of genuine Athenian mintage.

#### *Antigonid Bronze*

At this time most of the new currency in Athens was Macedonian. The occasional dedications of *tetrachma Antigoneia* in the sanctuary of Asklepios from 256/5 to 249/8 B.C. and again in 215 B.C.<sup>56</sup> hint at the influx of Macedonian silver from the garrisons that Antigonos Gonatas maintained after 261 in and around Athens, but the king's bronze was at least as influential. From the 160 pieces of Gonatas with Pan erecting trophy recovered in the Agora (**507**) and the sizable issue of Athenian coins (**69**) struck over this regal bronze, it is clear that this bronze circulated in the city in tremendous quantity. Much of it had probably been consigned to Antigonos' garrisons before passing into general circulation, but its sheer bulk is reminiscent of the great quantity of Antigonid bronze that had found its way to Boiotia and was subsequently overstruck with local types there (see under **509** and **595**). Citing the 1,000 talents of bronze coin promised to the Rhodians by Ptolemy III in 224 B.C. (Polybios 5.89.1) and the 200 talents of coined bronze given by Ptolemy V to the Achaian League in 185 (Polybios 22.9.3, 24.6.3), Svoronos proposed that the Macedonian bronze in Boiotia arrived in the form of a royal benefaction.<sup>57</sup> It is possible that a benefaction lay behind the mass circulation of Antigonid bronze in Athens as well. Such a gift, for example, could very well have accompanied Gonatas' grant of freedom to the Athenians in 255.

But ultimately the circumstance of the arrival of the coins is less important than their impact. Weighing 5–6 g. and measuring 19–21 mm. in diameter, they gave the Athenians a new and larger bronze denomination, whose usefulness must have been recognized immediately. These coins lessened the Athenians' dependence on their own smaller-denomination bronzes and reduced any need for replenishing the supply of pre-261 bronze in circulation. More lastingly, once the new denomination began to be struck with Athenian types in the 220's, it served as the dominant unit of Athens' bronze currency until 86 B.C. It is one of the ironies of Athenian monetary conservatism

<sup>54</sup> Evidently the anvil and punch dies used for the Eleusinian bronze of the 4th and earlier 3rd centuries were identical in shape and size and easily confused. See also the coin published by Fox 1890, pl. 3, no. 16 (now in the British Museum), with the reverse type of Wreathed pig, ΕΑΕΥ above (cf. **48**), on both faces.

<sup>55</sup> Thompson (1942, p. 222) rightly assumed a "unit"/"half-unit" relationship.

<sup>56</sup> Habicht, *Studien*, pp. 35–36, note 105, p. 41.

<sup>57</sup> Svoronos 1908, pp. 230–232.

that it took the coinage of an occupying foreign power to introduce and popularize this influential AE 2 denomination.

### *Denominational Values*

In a preliminary discussion based on the Agora A 18:8 hoard, I assumed that all Athenian Period I bronze was struck in a single denominational unit and that this unit was the one-eighth obol chalkous, inasmuch as inscribed Athenian accounts of 329/8 and 328/7 record sums of money down to the last chalkous and imply that an Athenian one-chalkous coin was in circulation at that time.<sup>58</sup> The fuller coverage of the Period I bronze in the present study, however, reveals that the coinage breaks down into two modular groupings, which in keeping with the more extensive modular system of the later Athenian bronze can be labeled AE 3 (coins normally of 13–15 mm. in diameter and 2–4 g. in weight) and AE 4 (*ca.* 10–13 mm. and 1–2 g.).

In Period I the smaller module is represented only in the extremely rare Piglet/Upright mystic staff **63** (12 mm., 1.50–1.75 g.) and the Double-bodied owls, which may begin at a borderline 13–15 mm. and 2.14 g. level (**41**) but quickly decline to become the diminutive pieces of the copious final variety **43** (10–14 mm. and 1.85 g.). As the smallest bronze coins circulating at the time of the inscriptions, such Double-bodied owls make very plausible candidates for the one-chalkous fractions of the inscriptions, even though the reverse type of the Double-bodied owl suggests that the coins ought to represent a double unit. But perhaps they do; for if the chalkous was divided into two kollyboi, the coins may have been known as dikollyboi.<sup>59</sup> Or perhaps the Double-bodied owls were originally designed as dichalkia, but their excessive reduction made it impossible for them to retain their original value. Whatever the circumstances, one has only to glance at Plate 4 to appreciate the conspicuous smallness of most of the Double-bodied owls and how readily they must have passed as fractions of the Period I coins minted before and after them.

Except for Piglet/Upright mystic staff **63**, all these other Period I coins are indeed heavier and, despite some decline and fluctuation in standard, appear to represent a single monetary unit. The earlier Piglet-on-staff issues (**38**) introduce this AE 3 unit with relatively large flans of 15–18 mm. and 3–4 g. But late in the course of the Eleusinian coinage, flans were reduced and by the end, in the Piglet-on-staff, AΘE variety **39**, had fallen to 13–15 mm. and an average weight of about 2.5 g. This remained the standard through the wreathed Two-owl/early Wreathed-pig coinage (**44–49**), and, allowing for some gradual slippage in weight, for the rest of Period I generally. Exceptions, it is true, are to be found in Owl left (**50**) and the accompanying heavy Wreathed piglets (**51**), whose weights were elevated to 3.5–4 g. and whose diameters sometimes reach 16 or 17 mm. But here we evidently have to do with a short-lived reform or full restoration of standard rather than a change of value. For the change in diameter is marginal, the heavy Eleusinian pieces bear the same types as the lighter Wreathed piglets that preceded and followed them, and the format of Corinthian helmet/Owl in wreath introduced in the Owl-left coinage was retained in subsequent emissions, the

<sup>58</sup> *EABC*, p. 143, note 7. The inscriptions are *IG II<sup>2</sup>* 1672 and 1673. The chalkous notation also occurs in the undatable 4th-century abacus *IG II<sup>2</sup>* 2777. The earliest mention of the chalkous, Demosthenes 21.91 (349/8 B.C.), informs only that Demosthenes' audience was familiar with the term and the slight value of the chalkous. It hardly requires us to believe that the Attic bronze coins of the time, namely the AE 3 Eleusinian and Salaminian pieces of varieties **38** and **640**, were chalkia rather than dichalkia.

<sup>59</sup> For the equation of 2 kollyboi = 1 chalkous, see note 8 above, p. 25. The value-term δικόλυβος is attested, but the context (Aristophanes, *Aiolosikon*, frag. 3 [Koch]) belongs too early in the 4th century to be relevant to any coins of Period I.

sizes and weights of which had nevertheless returned to the normal *ca.* 13–15 mm., *ca.* 2.30–2.50 g. range (52–54).

The doubled device of some of these AE 3 varieties strongly connotes that this was a double unit. One phase of AE 3 strikings (44–47) employed a two-owl reverse, later revived in variety 56. And in the late Athenian-Eleusinian variety 62 we meet with an obverse of two piglets, an odd and inexplicable type unless we are to understand that the piglet was doubled for denominational emphasis, to distinguish these coins especially from the smaller, lighter one-piglet coins (63) minted with them. Nor was the two-owl reverse discontinued with the Period I coinage. When the AE 3 unit resumed *ca.* 229 B.C. at the start of Period II, a reverse of two standing owls was again adopted (65), as it was for the huge Period III AE 3 coinage that was struck over much of the second half of the 2nd century (99). Hence the AE 3 unit may be plausibly equated with the dichalkon, or, as the denomination was alternatively known with reference to its value as the quarter of the obol, the tetartemorion.

It is reassuring to see how logically these two Period I identifications fit the expanded denominational structure of Athens' later Hellenistic bronze. From the later 3rd through the mid-1st century B.C. (Periods II–IVA), the coinage involved five modular units (cf. Table VI, p. 329 below):

|       |                      |            |
|-------|----------------------|------------|
| AE 1: | <i>ca.</i> 20–22 mm. | 8–10 g.    |
| AE 2: | <i>ca.</i> 16–20 mm. | 5–7 g.     |
| AE 3: | <i>ca.</i> 13–15 mm. | 2–4 g.     |
| AE 4: | <i>ca.</i> 10–13 mm. | 1–2 g.     |
| AE 5: | <i>ca.</i> 7–10 mm.  | under 1 g. |

Of these, the AE 4 unit was minted in the greatest quantity throughout, precisely as one would expect if it were the basic chalkous. It was followed in popularity by its AE 3 double (as suggested by its commonly doubled reverse owls) and by the new AE 2, which from its position one step up the denominational ladder can be readily equated with the *tetrachalkon*, or hemiobol.<sup>60</sup> The minimal AE 5 unit played a far more limited role, as it did not appear until the last third of the 2nd century and did not outlast the end of Period III in 86 B.C. (p. 68 below). The scale of values identifies this as the half-chalkous or kollybos, the smallest Greek monetary unit for which there happens to be any epigraphical documentation.<sup>61</sup> Coins of exceptionally large and heavy AE 1 size made a brief appearance after 229 (64, 66, 68; see pp. 48–49 below) but were soon devalued and not struck again until after 86 B.C., when they replaced the AE 2 hemiobols as Athens' standard large bronze unit in the revamped coinage of Period IV.

The identification of these denominations can thus be inferred from internal, mutually supporting Athenian evidence. But the resulting modular-value system of an eighth-obol chalkous of 1–2 g. (10–13 mm.), its 2–4 g. (13–15 mm.) double, and its 5–7 g. (16–20 mm.) quadruple has been independently deduced or proposed also for a number of non-Athenian bronze coinages,<sup>62</sup>

<sup>60</sup> Pace Kroll 1981a, p. 273, where the AE 2 unit was erroneously equated with the obol.

<sup>61</sup> Note 8 above, p. 25.

<sup>62</sup> J. G. Milne, *Kolophon and Its Coinage*, *NNM* 96, New York 1941, pp. 55–73. Warren 1983, pp. 33, 36, 51; *idem* 1984, p. 22; *idem* 1985, pp. 46–47. W. Weiser, “Ein Schatzfund pamphylich-pisidischer Bronzemünzen,” *SNR* 61, 1982, pp. 31–34; *idem*, “Ein Fund von rhodischem Kleingeld aus hellenistischer Zeit,” *ZPE* 66, 1986, pp. 212–213. Picard, *Antre*, pp. 281–301. O. Picard, “L'administration de l'atelier monétaire à Thasos au IV<sup>e</sup> siècle,” *RN*, ser. 6, 29, 1987 (pp. 7–14), p. 8, pl. I. J. D. Mac Isaac, “Phliasian Bronze Coinage,” *ANSMN* 33, 1988 (pp. 45–54), p. 52. Grandjean, pp. 28–55. Price (1967, p. 367) classifies the bronze coins from the South Stoa wells at Corinth into three modular sizes, A–C (= our AE 2–4); in Price's unpublished 1967 Cambridge University dissertation, *Greek Bronze Coinage c. 450–150 B.C., Its Introduction, Circulation, and Value*, and now in *BMC Alexander*, pp. 39–40, the three modules are identified with

which suggests that the system was a conventional one that was recognized and widely adopted throughout much of 4th-century and Hellenistic Greece.

## CATALOGUE

363–359 B.C. (*Region of Olynthos*)

|           |         | Head of Athena l.,<br>wearing Attic helmet. |          |     | <sup>A</sup><br>Θ H Owl facing, stg. on<br>kernel of wheat; on either side,<br>pellet and olive branch. | Sv. 22.93–96 |
|-----------|---------|---|----------|-----|---|--------------|
| <b>35</b> | 7 coins | 10–12                                       | Av. 1.27 | (7) |   |              |
|           | *a      | Θ-737                                       | 10       | ↑   | 1.22  |              |
|           | *b      | NN-1006                                     | 12       | -   | 1.44  |              |
|           | *c      | EE-4  | 11       | -   | 0.90  |              |
|           | d       | NN-1625                                     | 11       | ↘   | 1.31  |              |
|           | e       | Θ-218                                       | 11       | -   | 1.44  |              |
|           | f       | AA-294a                                     | 10       | -   | 1.07  |              |
|           | g       | ΠΘ-649                                      | 11       | -   | 1.12  |              |

See Robinson and Price 1967, pp. 1–6.

|           |         | Similar: |   |      | <sup>A</sup><br>Θ H Owl facing, wings spread,<br>stg. on kernel of wheat; above<br>at l., [a pellet]. | Sv. 22.97, 98 |
|-----------|---------|----------|---|------|---|---------------|
| <b>36</b> | NN-2061 | 8        | - | 0.19 |   |               |

4th century B.C., undated

|            |       | Head of Athena r.,<br>wearing Attic helmet. |   |      | <sup>A</sup><br>Θ E within three crescents,<br>horns inwards, arranged in circle. | Sv. 22.50, 51 |
|------------|-------|---|---|------|---|---------------|
| <b>*37</b> | Γ-137 | 11  | ↖ | 1.38 |   |               |

Rare and imitative of Athenian silver, this is the most perplexing of all early Athenian bronze varieties. Reverses bear the distinctive type of silver three-quarter obols (tritartemoria, **2I**); and although the reverse dies were specially engraved for these larger-diameter versions in bronze, the two specimens illustrated in Svoronos (Sv. 22.50 and 51, Athens and Berlin, both with 12 mm. diameters) were stamped from tiny obverse dies that appear to have been taken over from the production of silver fractions of the obol. The larger obverse dies of other examples, such as the one (9 mm.) illustrated in the Credit Bank catalogue<sup>63</sup> and one of the two unpublished pieces in the British Museum (both 10 mm.), were probably engraved exclusively for the bronze. The variety was struck from at least three or four obverse dies.

It is conceivable that these pieces were actually bronze tritartemoria, issued in state payments in lieu of silver during a momentary fiscal crisis. Or perhaps they were distributed as voucher tokens, to be later exchanged

the hemiobol, the tetartemorion/dichalkon, and the chalkous, as they are by the other scholars cited in this note. See also A. E. Jackson, "The Bronze Coinage of Gortyn," *NC*, ser. 7, 11, 1971 (pp. 37–51), pp. 50–51, with similar but more provisional identifications. At Klazomenai, a chalkous (of AE 4 size: 1.3 g., 11 mm.) is so identified by the letter X on the reverse: F. Imhoof-Blumer, "Griechische Münzen," *NC*, ser. 3, 15, 1895 (pp. 269–289), p. 283, pl. 10:21.

<sup>63</sup> A. Walker, *The Credit Bank Numismatic Collection*, Athens 1978, no. 358.

for silver tritartemoria.<sup>64</sup> One of the British Museum obverses stylistically approximates the Athena heads on some of the later Double-bodied owl bronzes (431, m), which suggests a date as late as the 320's. But one stylistic comparison is a slender reed and leaves open the possibility that the variety may date from some other time in the century. The barely legible Agora example was found with a Double-bodied owl bronze (Γ-138: variety 41) in a fill below a Roman floor.

### PERIOD I

ca. 350's–early or mid-330's B.C.

|           |  |       |               |  |   |              |
|-----------|--|-------|---------------|--|---|--------------|
|           |  |       |               | Triptolemos, holding wheat ears in r. hand, seated l. in winged chariot drawn by two snakes. | ΕΛΕΥΣΙ above. Piglet stg. r. on mystic staff; symbol or letter below or in field r. | Sv. 103.1–15 |
| <b>38</b> | 77 coins   | 15–18 | Av. 3.20 (43) |  |   |              |
|           | Pig's head and ivy leaf, below (Sv. 103.2, 3)      |       |               |  |   |              |
|           | a ΠΑ-144   | 18    | -             | 2.85   |   |              |
|           | b Π-877  | 17    | -             | broken   |   |              |
|           | c ΔΔ-50  | 18    | -             | blistered  | (L 19:2)  |              |
|           | Ivy branch with leaves, below (Sv. 103.1)          |       |               |  |   |              |
|           | *d E-1463  | 17    | ↓             | 3.01   |   |              |
|           | e Λ-1  | 16    | -             | 3.50   |   |              |
|           | f Λ-9  | 17    | -             | 3.29   |   |              |
|           | g NN-2004  | 18    | -             | 3.43   |   |              |
|           | Boukranion, below (Sv. 103.4, 5)                   |       |               |  |   |              |
|           | *h Σ-3100  | 18    | -             | 3.12   | Thompson 1942, pl. I:l  |              |
|           | *i ΠΘ-146  | 16    | -             | broken   |   |              |
|           | j OO-461   | 15    | →             | 3.42   |   |              |
|           | k ΣΑ-250   | 18    | ↘             | 3.49   | Kleiner 1975, p. 317, no. 251 (P–R 6–12)  |              |
|           | Scallop shell, below (Sv. 103.6, 7)                |       |               |  |   |              |
|           | l II-28  | 16    | -             | 2.78   |   |              |
|           | Ram's head r., below (American Numismatic Society) |       |               |  |   |              |
|           | m H'-3181  | 17    | →             | 3.77   |   |              |
|           | Dolphin, below (Sv. 103.14)                        |       |               |  |   |              |
|           | *n Σ-6448  | 17    | ↘             | 3.87   |   |              |
|           | Astragal, below (Sv. 103.10)                       |       |               |  |   |              |
|           | o H'-3273  | 16    | -             | 2.97   |   |              |
|           | p AA-973   | -     | -             | broken   |   |              |
|           | Δ, below (Cavaignac, nos. 49 and 54)               |       |               |  |   |              |
|           | *q H'-2901   | 16    | ←             | 3.14   |   |              |
|           | Θ, in field r. (Sv. 103.15)                        |       |               |  |   |              |
|           | *r Ω-515   | 14    | ↓             | 2.43   |   |              |
|           | s ΒΔ-207   | 15    | ↖             | 2.91   |   |              |

Among the fifty-eight remaining specimens with illegible symbol or letter, four have Triptolemos seated r. (as Sv. 103.16) and one has piglet l. (as Sv. 103.14).

<sup>64</sup> Cf. the bronze symbolon with a three-obol mark (σύμβολον χαλκοῦν μετὰ τοῦ γ': Aristotle, *Athenaion Politeia* 68.2). No such tokens are extant, but for a series of lead dikastic tokens that are stamped with the triobol device and that may have been substituted for bronze triobol tokens after the *Athenaion Politeia* was written, see Rhodes, p. 731, with the lead tokens illustrated in J. E. Sandys, *Aristotle's Constitution of Athens*, London 1893 and 1912, frontispiece, and Fox 1890, pl. III:15.

ca. *early-mid 330's* B.C.

|           |           |          |               |   |               |
|-----------|-----------|----------|---------------|---|---------------|
|           |           | Similar. |               | AΘE above. Piglet stg. r. on<br>mystic staff; below, plemochoe. | Sv. 103.33-37 |
| <b>39</b> | 24 coins  | 13-15    | Av. 2.51 (16) |   |               |
|           | *a BB-226 | 14 ←     | 2.58          |   |               |
|           | *b I-969  | 15 ↓     | 2.62          |   |               |
|           | *c Z-275  | 15 ←     | 2.19          |   |               |
|           | *d Π-10   | 14 ↑     | 3.30          |   |               |
|           | *e Δ-208  | 13 ↖     | 2.74          |   |               |

|            |        |            |        |   |             |
|------------|--------|------------|--------|---|-------------|
|            |        | [Similar.] |        | AΘ[E] below. Piglet stg. r.<br>on mystic staff. | unpublished |
| <b>*40</b> | T-1402 | 15 -       | broken |   |             |

An unpublished but better-preserved example from the Dipylon Road excavations in the Kerameikos gives the full ethnic and shows that the reverse is unwreathed.

[38-40] 35 coins of uncertain Eleusinian or Athenian Piglet-on-mystic-staff variety.

ca. *early or mid-330's-322/317* B.C.

|           |           |   |          |   |           |
|-----------|-----------|---|----------|---|-----------|
|           |           | Head of Athena r., wearing<br>Attic helmet. |          | A<br>Θ Ξ or variant. Double-bodied<br>owl stg. on mystic staff; in each<br>upper corner, olive spray. | Sv. 22.43 |
| <b>41</b> | 16 coins  | 13-15                                       | Av. 2.14 |   |           |
|           | *a B'-830 | 13 ✓  | 1.93     | —   |           |
|           | *b Δ-267  | 15 -  | 2.75     | —   |           |
|           | *c PP-821 | 13 ←  | 2.81     | Θ-Ξ   |           |

The arrangement of the ethnic is legible only on 41c.

|           |            |          |               |   |   |
|-----------|------------|----------|---------------|---|---|
|           |            | Similar. |               | Similar, except no symbol<br>below the owl. | Sv. 22.44-46                                      |
| <b>42</b> | 73 coins   | 11-15    | Av. 1.75 (37) |   |   |
|           | *a Σ-3088  | 14 ↑     | 1.35          | Θ-Ξ   |   |
|           | *b ΒΓ'-875 | 13 ↑     | 1.41          | Θ-E   |   |
|           | *c Π-507   | 15 ↑     | 1.85          | Θ-Ξ   |   |
|           | *d ΣΤ-233  | 12 ↖     | 1.12          | —   |   |
|           | *e Λ-214   | 13 ↑     | 1.73          | Θ-Ξ   |   |
|           | *f Φ-183   | 12 ↖     | 1.62          | —   | reverse type struck on both sides (cf. Sv. 22.52) |

|           |           |          |               |  |              |
|-----------|-----------|----------|---------------|--|--------------|
|           |           | Similar. |               | Similar, except Eleusis ring<br>below the owl. | Sv. 22.35-42 |
| <b>43</b> | 169 coins | 10-14    | Av. 1.85 (65) |  |              |
|           | *a Δ-207  | 12 ↗     | 1.77          | E-Θ  |              |
|           | *b NN-328 | 11 ↑     | 1.71          | E-Θ  |              |
|           | *c ΣΤ-97  | 13 →     | 2.20          | E-Θ  |              |
|           | *d K-401  | 10 ↖     | 2.21          | —  |              |



|    |         |      |      |   |
|----|---------|------|------|---|
| *e | Σ-6016  | 14 ← | 1.90 | —   |
| *f | K-1428  | 11 ← | 0.81 | —   |
| *g | OO-1032 | 12 ↓ | 1.17 | Θ-E <i>GRC</i> , fig. 13                            |
| *h | ΠΘ-12   | 10 ↓ | 1.26 | —   |
| *i | EA-223  | 12 ↖ | 1.62 | — same obverse die as 43h                           |
| *j | ΛΛ-295  | 10 → | 0.89 | —   |
| *k | Ω-6     | 12 ↗ | 1.92 | Θ-E trimmed flan                                    |
| *l | Z-394   | 10 ↑ | 1.21 | Θ-H   |
| *m | MΣ-35   | 10 ↗ | 1.44 | Θ-H Kleiner 1975, p. 304, pl. 75, no. 8 (H–K 12–14) |

Similar.

Similar, except presence of mystic staff or Eleusis ring below owl uncertain.

[41–43] 721 coins of uncertain Double-bodied-owl variety.

|    |         |      |      |   |
|----|---------|------|------|---|
| *a | Ω-262   | 12 ← | 1.85 |   |
| *b | Δ-270   | 11 ↑ | 1.96 |   |
| *c | NN-2122 | 13 ↑ | 1.56 |   |
| *d | HH-27   | 11 - | 2.26 |   |
| *e | AA-991  | 14 ↑ | 1.63 | trimmed flan                                    |
| *f | ΠΘ-124  | 13 - | 1.09 | same  |
| *g | Σ-3732  | 12 ↖ | 1.85 | same  |
| h  | Θ-274   | 12 ↖ | 2.02 | Kleiner 1975, p. 304, pl. 75, no. 1 (H–K 12–14) |

[41–43]a–c are illustrated for their good pi-style obverses, e–g since their flans had been clipped down, presumably before striking; d is nearly typeless. Most of these coins belong to variety 43.

ca. 322/317–307 B.C.

|    |          |   |               |  |              |
|----|----------|---|---------------|--|--------------|
|    |          | Head of Athena r.,<br>wearing Attic helmet. |               | AΘE below. Two owls stg. l.<br>and r., facing; between them,<br>Eleusis ring; all in olive wreath. | Sv. 24.42–50 |
| 44 | 49 coins | 13–15                                       | Av. 2.70 (13) |  |              |
| *a | Θ-150    | 14 →  | 2.86          |  |              |
| *b | Θ-787    | 13 ↓  | 2.71          |  |              |
| *c | H'-2245  | 13 ↖  | 3.19          |  |              |
| *d | K-772    | 14 ↑  | 2.00          |  |              |
| *e | T-920    | 14 ←  | 2.45          |  |              |
| *f | Λ-417    | 13 ←  | 2.73          | Kleiner 1975, p. 304, pl. 75, no. 13 (H–K 12–14)   |              |
| g  | ΓΓ-37    | 14 ↘  | 3.31          | <i>GRC</i> , fig. 13   |              |

Similar.

AΘ between. Two owls stg. l.  
and r., facing; plemochoe below;  
all in olive wreath.

|    |          |       |               |                      |
|----|----------|-------|---------------|----------------------|
| 45 | 34 coins | 13–15 | Av. 2.50 (16) |                      |
| *a | Θ-206    | 14 ↘  | 1.60          |                      |
| *b | OE-43    | 13 ↑  | 3.15          | <i>GRC</i> , fig. 13 |
| *c | ΣA-373   | 14 →  | 3.44          |                      |
| *d | Θ-396    | 14 ←  | 3.71          |                      |
| *e | ΣT'-586  | 13 ←  | 2.71          |                      |
| *f | ΣT-209   | 14 ↑  | 2.83          |                      |

|           |           | Similar. | AΘ between. Two owls stg. l. and r., facing; all in olive wreath. |   | Sv. 24.51–57 |
|-----------|-----------|----------|---|---|--------------|
| <b>46</b> | 274 coins | 13–15    | Av. 2.34 (62)   |   |              |
| *a        | Θ-269     | 14 ↓     | 2.48  | Kleiner 1975, p. 304, pl. 75, no. 22 (H–K 12–14)                                |              |
| *b        | Δ-31      | 13 ↖     | 1.99  |   |              |
| *c        | Γ-1208    | 14 ↘     | 2.89  |   |              |
| *d        | NN-2071   | 14 ↑     | 2.29  |   |              |
| *e        | ΠΙΙ-358   | 14 →     | 2.30  |   |              |
| *f        | K-1301    | 14 ↓     | 2.75  | Kleiner 1975, p. 309, pl. 75, no. 158 (H–K 12–14)                               |              |
| *g        | ΣΤ'-511   | 14 ↙     | broken  | A<br>Θ  |              |
| *h        | T-1604    | 13 ↑     | 1.96  | A<br>Θ Kleiner 1975, p. 321, pl. 75, no. 298 (misclassified) (M–N 15:1)         |              |
| *i        | ΠΙΙ-89    | 13 ↑     | 2.78  | A<br>Θ  |              |
| *j        | T-1015    | 14 ↑     | 3.25  | AΘ  |              |
| *k        | E-473     | 13 ↓     | 2.28  | ΘA  |              |
| l–p       |           |          |   | 5 ΞΞ specimens from the A 18:8 hoard illustrated in <i>EABC</i> , pl. 17:2, 6–9 |              |

The small Athena heads and chunkier fabric of 46h–k set them apart from the normal examples of variety **46**. One or more might be Attic-helmet variants of the 3rd-century variety **56** (Corinthian helmet/Two owls, A over Θ), although, as we see from the otherwise normal 46g, the vertical arrangement of the ethnic is not necessarily indicative of later issue.

|   |          | Similar.   | AΘH below. Two owls stg. l. and r., facing; all in olive wreath.      |          | unpublished    |
|---|----------|--|---|----------|----------------|
| <b>47</b>   | 2 coins  |  |   |          |                |
| *a  | Σ-5061   | 14 ↑   | 3.06  |          |                |
| *b  | ΠΙΙ-1000 | 15 →   | 2.57  | (A 17:3) |                |
|   |          | Similar.   | Two owls in olive wreath; details illegible.                          |          |                |
| [44–47] 368 coins of uncertain Attic helmet/Two-owls variety. |          |  |   |          |                |
|   |          | Triptolemos l., holding wheat ears in r. hand, seated in or mounting winged chariot drawn by two snakes. | EAEY above. Piglet stg. r. on slim mystic staff; all in wheat wreath. |          | Sv. 103.22, 25 |
| <b>48</b>   | 28 coins | 13–15  | Av. 2.55 (16)   |          |                |
| Triptolemos seated  |          |  |   |          |                |
| *a  | Ω-183    | 14 →   | 2.36  |          |                |
| *b  | K-1770   | 15 ↑   | 2.50  |          |                |
| *c  | BB-892   | 14 →   | 2.53  |          |                |
| *d  | MM-83    | 14 →   | 2.52  |          |                |
| *e  | E-2406   | 13 ←   | 2.80  |          |                |
| Triptolemos mounting  |          |  |   |          |                |
| *f  | AP-84    | 13 ↖   | 2.87  |          |                |
| *g  | ΜΣ-186   | 14 ↘   | 3.28  |          |                |

Of the unillustrated specimens with legible obverses, eight have Triptolemos seated, nine Triptolemos mounting.

|           |                      | Similar. |               | Similar, except EAEY below. | Sv. 103.26, 28 |
|-----------|----------------------|----------|---------------|-----------------------------|----------------|
| <b>49</b> | 17 coins             | 13-15    | Av. 2.40 (15) |                             |                |
|           | Triptolemos mounting |          |               |                             |                |
|           | *a PP-81             | 15       | ↑ 2.35        |                             |                |
|           | *b MΣ-176            | 15       | ↑ 2.32        |                             |                |
|           | *c K-290             | 15       | ↖ 2.22        |                             |                |

Of the unillustrated specimens with legible obverses, two have Triptolemos seated, eight Triptolemos mounting.

307-ca. 300 B.C.

|           |            | Head of Athena r., wearing<br>Corinthian helmet with three<br>crests and, on visor, snake<br>ornament. |               | HΘ <sup>A</sup> Owl stg. l., facing; all in<br>olive wreath.                       | Sv. 22.85-88 |
|-----------|------------|--|---------------|--|--------------|
| <b>50</b> | 251 coins  | 14-16  | Av. 3.52 (86) |  |              |
|           | *a K-1616  | 14   | ↓ 4.02        |  |              |
|           | *b B'-1024 | 15   | ↓ 3.83        |  |              |
|           | *c ΠΘ-690  | 14   | ↓ 3.46        | (B 13:1)   |              |
|           | *d K-1702  | 15   | ↓ 3.05        |  |              |
|           | *e Γ-149   | 15   | ↓ 4.01        |  |              |
|           | *f MΣ-238  | 14   | ← 4.71        | Kleiner 1975, p. 305, pl. 75, no. 49 (H-K 12-14)                                   |              |
|           | *g Λ-410   | 15   | ↙ 3.79        | Kleiner 1975, no. 43 (H-K 12-14); GRC, fig. 13                                     |              |
|           | *h NN-2040 | 15   | ← 3.36        |  |              |
|           | *i ΠΠ-825  | 14   | ↑ 4.31        |  |              |
|           | *j Z-2995  | 14   | ↓ 4.12        |  |              |
|           | *k H'-2247 | 15   | ↗ 3.43        |  |              |
|           | l, m       |  |               | 2 ΞΞ specimens from the A 18:8 hoard illustrated in <i>EABC</i> ,<br>pl. 17:10, 11 |              |

|           |           | Triptolemos seated l. in<br>chariot, as on <b>38</b> and <b>39</b> . |               | EAEYΣI below. Piglet stg. r.<br>on slim mystic staff; all<br>in wheat wreath. | Sv. 103.17-21 |
|-----------|-----------|--|---------------|---|---------------|
| <b>51</b> | 39 coins  | 15-17  | Av. 3.73 (33) | <i>Heavy variety</i>  |               |
|           | *a Ω-249  | 15   | ↑ 4.24        | Thompson 1942, pl. I:3; GRC, fig. 17  |               |
|           | *b Θ-94   | 17   | ↑ 4.22        |   |               |
|           | *c ΠΘ-85  | 15   | ↑ 4.04        |   |               |
|           | *d ΣA-171 | 15   | ↗ 3.65        |   |               |
|           | *e B-374  | 15   | ↖ 3.26        | (F 11:2)  |               |
|           | *f MΣ-249 | 15   | ↙ 5.68        | Kleiner 1975, p. 308, pl. 76, no. 134   |               |
|           | *g BB-286 | 15   | ↗ 4.03        |   |               |

287-284 B.C.

|           |           | Head of Athena r., wearing<br>Corinthian helmet. |               | A-Θ<br>H Owl stg. r., facing; all in olive<br>wreath. | Sv. 22.81-83 |
|-----------|-----------|--|---------------|---|--------------|
| <b>52</b> | 37 coins  | 13-15  | Av. 2.40 (18) |   |              |
|           | *a KTA-57 | 15   | ↑ 2.23        |   |              |
|           | *b KK-134 | 15   | → 2.51        |   |              |
|           | *c MΣ-366 | 14   | ↓ 2.80        | Kleiner 1975, p. 305, pl. 75, no. 54 (H-K 12-14)      |              |

|    |        |    |   |      |
|----|--------|----|---|------|
| *d | ΓΓ-97  | 14 | ↑ | 2.24 |
| *e | AA-507 | 13 | ↘ | 1.94 |

f-h

3  $\Xi\Xi$  specimens in the A 18:8 hoard illustrated in *EABC*, pl. 17:13–15

284–270's B.C.

|           |               | Similar. |               | A-Θ Owl stg. r., facing; all in wheat wreath. | Sv. 22.64–70  |
|-----------|---------------|----------|---------------|---|---|
| <b>53</b> | 201 coins     | 12–15    | Av. 2.37 (87) |   |   |
| *a        | Ψ-193         | 14       | ↓             | 2.78  |   |
| *b        | N-850         | 14       | ↘             | 1.84  |   |
| *c        | MΣ-20         | 13       | ↑             | 2.75  | Kleiner 1975, p. 305, pl. 75, no. 57 (H–K 12–14)  |
| *d        | Δ-244         | 12       | ↑             | 2.42  |   |
| *e        | Θ-403         | 12       | ↓             | 2.73  |   |
| *f        | Γ-381         | 12       | ↓             | 2.75  |   |
| g         | $\Xi\Xi$ -70a | 12       | ↑             | 2.12  | <i>EABC</i> , p. 150, pl. 17:16 (1 of 15 specimens from the A 18:8 hoard); see also <i>EABC</i> , pl. 17:21, 22, 25, 27, 30 |
| *h        | Λ-400         | 15       | →             | 2.66  | Θ-A (as Sv. 22.64); <i>GRC</i> , fig. 13  |

Aberrant die cutting accounts for the retrograde ethnics of 53h and the unillustrated ΓΓ-420 and MΣ-327.

|           |                   | Similar. |               | A-Θ (or Θ-A) Owl stg. r. (or l.), facing; all in olive wreath. | Sv. 22.71, 72, 84  |
|-----------|-------------------|----------|---------------|--|--|
| <b>54</b> | 38 coins          | 12–14    | Av. 2.34 (17) |  |  |
|           | Owl r. (36 coins) |          |               |  |  |
| *a        | NN-2099           | 13       | ↓             | 2.22   | A-Θ  |
| *b        | $\Xi\Xi$ -44d     | 13       | ↑             | 2.10   | A-Θ <i>EABC</i> , p. 151, pl. 17:33 (1 of 6 specimens from the A 18:8 hoard); see also <i>EABC</i> , pl. 17:31, 32 |
| *c        | ΔΔ-55             | 13       | ↓             | 2.43   | A-Θ  |
| *d        | NN-1845           | 13       | ↑             | 2.55   | Θ-A; Kleiner 1976, p. 17, no. 86 (misclassified) (A–B 19–20:1)   |
| *e        | Φ-349             | 13       | ↖             | 3.21   | Θ-A  |
|           | Owl l. (2 coins)  |          |               |  |  |
| *f        | NN-1719           | 14       | ↓             | 2.88   | A-Θ  |
| g         | OO-332            | 14       | ↓             | 1.97   | A-Θ  |

Triptolemos I., seated in or mounting chariot, as on **48** and **49**.

ΕΛΕΥΣΙ below. Piglet in wheat wreath, as on **51**.

Sv. 103.23, 27

|           |                      |       |               |                      |   |
|-----------|----------------------|-------|---------------|----------------------|---|
| <b>55</b> | 59 coins             | 11–14 | Av. 2.26 (46) | <i>Light variety</i> |   |
|           | Triptolemos seated   |       |               |                      |   |
| *a        | Σ-6467               | 14    | ↑             | 2.37                 |   |
| *b        | OO-510               | 13    | ↘             | 2.62                 |   |
| *c        | $\Xi\Xi$ -45b        | 12    | ↑             | 2.42                 | <i>EABC</i> , p. 151, pl. 17:47 (1 of 19 specimens from the A 18:8 hoard); see also <i>EABC</i> , pl. 17:46, 48, 51 |
|           | Triptolemos mounting |       |               |                      |   |
| *d        | MΣ-169               | 14    | ↑             | 2.06                 |   |
| *e        | E-1917               | 13    | ↖             | 2.47                 |   |

|    |        |    |   |      |
|----|--------|----|---|------|
| *f | Z-2986 | 14 | ↑ | 1.73 |
| *g | Σ-2930 | 11 | ↓ | 2.01 |

Of the unillustrated specimens with legible obverses, 22 have Triptolemos seated, 32 Triptolemos mounting.

*UNCLASSIFIED*

Similar.

Piglet stg. r. in wheat wreath;  
legend illegible.

[48, 49, 51, 55] 356 coins of uncertain Wreathed-piglet type.

ca. 270 B.C.

|           |          |       |              |  |  |               |
|-----------|----------|-------|--------------|--|--|---------------|
|           |          |       |              | Head of Athena r., wearing<br>Corinthian helmet. | A<br>Θ between. Two owls stg. l.<br>and r., facing; all in olive<br>wreath.              | Sv. 24.58, 59 |
| <b>56</b> | 10 coins | 13–15 | Av. 2.35 (8) |  |  |               |
| *a        | Θ-785    | 13    | ↑            | 2.07   |  |               |
| *b        | ΔΔ-11    | 13    | ↑            | 2.81   |  |               |
| *c        | NN-1072  | 14    | ↑            | 3.27   |  |               |
| *d        | ΞΞ-26    | 13    | ↑            | 2.51   | <i>EABC</i> , p. 151, pl. 17:37 (A 18:8)   |               |
| *e        | NN-788   | 14    | ↑            | 3.27   | Θ only between owls. The alpha was probably positioned above and<br>between their heads. |               |
| *f        | ΛΛ-271   | 14    | ↑            | 1.81   | Θ only between owls, as 56e  |               |
| *g        | MΣ-270   | 13    | ✓            | 2.31   | A<br>Θ E Kleiner 1975, p. 305, no. 83 (misclassified) (H–K 12–14)                        |               |

ca. 270–261 B.C.

|           |          |       |               |          |   |               |
|-----------|----------|-------|---------------|----------|---|---------------|
|           |          |       |               | Similar. | A<br>Θ E Owl stg. r., facing;<br>in field r., wreath. | Sv. 22.76, 77 |
| <b>57</b> | 24 coins | 13–15 | Av. 2.13 (14) |          |   |               |
| *a        | NN-781   | 13    | ↑             | 2.39     | <i>GRC</i> , fig. 13; Kleiner, <i>MN</i> 20, pl. I:7  |               |
| *b        | ΞΞ-27    | 14    | ↑             | 2.17     | <i>EABC</i> , p. 151, pl. 17:38 (A 18:8)              |               |
| *c        | ΞΞ-28a   | 14    | ↑             | 2.56     | <i>EABC</i> , p. 151, pl. 17:39 (A 18:8)              |               |
| *d        | ΠA-8     | 14    | ↑             | 2.15     |   |               |
| *e        | Γ-325    | 13    | ↑             | 2.37     |   |               |
| *f        | Γ-981    | 14    | ↑             | 2.41     |   |               |
| g         | A-998    | 13    | ↖             | 1.56     | Rotroff 1983, p. 291, pl. 57, no. 68 (H 6:9)          |               |

Similar.

Similar, except in field r., ear  
of wheat.

Sv. 22.78, 79

|           |          |       |               |      |
|-----------|----------|-------|---------------|------|
| <b>58</b> | 25 coins | 13–15 | Av. 2.27 (16) |      |
| *a        | Ω-375    | 13    | ↖             | 2.44 |
| *b        | ΠΠ-322   | 13    | ↘             | 2.85 |
| *c        | Γ-654    | 14    | ↑             | 1.97 |
| *d        | NN-1979  | 15    | →             | 3.14 |
| *e        | H-2186   | 13    | ↑             | 2.79 |

|           |           |          |               |   |               |
|-----------|-----------|----------|---------------|---|---------------|
|           |           | Similar. |               | Similar, except in field r.,<br>cornucopia. | Sv. 22.73, 74 |
| <b>59</b> | 19 coins  | 12-14    | Av. 2.35 (11) |   |               |
|           | *a BΔ-56  | 13       | ↑ 2.46        |   |               |
|           | *b OO-815 | 13       | → 2.55        | GRC, fig. 13; Kleiner, <i>MN</i> 20, pl I:6 |               |
|           | *c A-686  | 14       | → 2.22        |   |               |
|           | *d II-629 | 13       | ← 3.02        |   |               |
|           | *e OE-42  | 13       | ↑ 2.04        |   |               |

|  |  |          |  |   |           |
|--|--|----------|--|---|-----------|
|  |  | Similar. |  | Similar, except in field r.,<br>Eleusis ring. | Sv. 22.75 |
|--|--|----------|--|---|-----------|

\*60 ΠΘ-698 16 ↘ 2.90

|  |  |          |  |  |  |
|--|--|----------|--|--|--|
|  |  | Similar. |  | Similar, except symbol at r.<br>illegible. |  |
|--|--|----------|--|--|--|

[57-60] 146 coins of uncertain owl-r.-with-symbol variety.

|  |          |    |     |  |  |
|--|----------|----|-----|--|--|
|  | a ΞΞ-28b | 14 | ↖ - | <i>EABC</i> , p. 151, pl. 17:40 (A 18:8) |  |
|  | *b ΛΛ-50 | 14 | - - | worn and cut to triangular shape         |  |

*UNCLASSIFIED*

|  |  |          |  |                            |  |
|--|--|----------|--|----------------------------|--|
|  |  | Similar. |  | Owl r.; details illegible. |  |
|--|--|----------|--|----------------------------|--|

[52-54, 57-60] 580+ coins of uncertain 3rd-century Corinthian helmet/Owl-r. variety.

The total excludes an estimated several hundred coins that in the 1930's were identified and entered in the field notebooks as "3rd century B.C. Owl r." but which were subsequently discarded as being insufficiently legible.

*3rd century B.C., undated*

|           |       |  |        |   |               |
|-----------|-------|--|--------|---|---------------|
|           |       | Head of Demeter r., wearing<br>wheat wreath. |        | [EΛEYΣI] above. Plemochoe<br>resting on Eleusis ring; all in<br>wheat wreath. | Sv. 103.29-32 |
| <b>61</b> | T-206 | 15   | ↑ 3.22 | too worn for illustration   |               |

Evidently an isolated emission of limited mintage. Published specimens have diameters of 13-15 mm.; Cavaignac gives two weights: 3.12 g and 3.34 g. By diameter and weight, the issue might seem to fall between the heavy and light Wreathed-piglet, EΛEYΣI varieties 51 and 55, to which it is related through its five-letter ethnic and wreathed reverse. Alternatively, since the emission could (like 51) have been struck with "reformed" diameter and weight, a position after the light Wreathed piglets is also possible and would better suit the changed Eleusinian types.

*261-229 B.C.*

|           |            |                                     |               |  |               |
|-----------|------------|-------------------------------------|---------------|--|---------------|
|           |            | Two superimposed piglets<br>stg. 1. |               | A-E on either side of upright<br>mystic staff; all in olive wreath.            | Sv. 103.42-46 |
| <b>62</b> | 21 coins   | 13-14                               | Av. 2.21 (12) |  |               |
|           | *a Ω-101   | 14                                  | ↓ 2.19        |  |               |
|           | *b ΣΑ-10   | 14                                  | ✓ 2.15        | Thompson 1942, pl. I:4; Kleiner 1975, p. 316, pl. 75, no. 233<br>(Q-R 10-11:1) |               |
|           | *c Π-240   | 14                                  | ↑ 2.37        |  |               |
|           | *d NN-2035 | 13                                  | ↑ 2.50        |  |               |

|   |        |            |  |
|---|--------|------------|--|
| e | MΣ-67  | 13 - 2.47  | Kleiner 1975, p. 306, no. 95 (H–K 12–14) |
| f | A-1452 | 14 → 1.65+ | (G 6:2)                                  |

AΘE? (above). Piglet stg. r.  
on ground line.

EAE (downwards at r.)-ΥΣΙ  
(upwards at l.) on either side  
of thick, upright mystic staff.

Thompson 1942,  
p. 222, pl. I:5

\*63 X-115 12 ↘ 1.49 (N 18:3)

When publishing this very worn coin, Margaret Thompson read AΘE on the obverse and EAE on the reverse. While the suggestions of obverse letters could result from random pittings in the surface, the suggestions, especially of the theta, are undeniable (see Thompson's pl. I:5). The obverse AΘE is paralleled on Sv. 103.41, a variant of **62** in the Numismatic Collection of Athens. A second specimen of the present variety (at the American Numismatic Society, Inv. 1944.100.26047, 12 mm., 1.75 g.), being even more worn, confirms only the reading of the downwards EAE on the reverse. Both specimens are overstrikes, as seen from the broken relief of their upright mystic staffs.

## PERIOD II

229–ca. 183 B.C.

When the Macedonian monarchy was suddenly weakened by the death of King Demetrios II in 229 B.C., the Athenians entered into negotiations with the Macedonian commander of the Peiraeus for the evacuation of his garrisons from the forts of Attica. Raising the agreed-upon price of 150 talents, the city purchased its freedom later in the year<sup>65</sup> and slowly began to recover a measure of her past brilliance as one of the more influential and prosperous states of old Greece. As in many other areas of Athenian public life, the liberation of 229 had a profound impact on the coinage. The traditional owl silver was soon refurbished in a new series of drachms and tetradrachms with emission symbols and gradually shed its old-fashioned appearance to evolve in the 2nd century into the ornate, wide-flan New Style coinage. Yet the modernization of the bronze coinage was, if anything, swifter, more dramatic, and more expressive of the forward-looking spirit of the new age, as the bronze began to serve as a medium for a more varied nationalistic iconography and was for the first time issued in several complementary denominations.

The established AE 3 unit of Period I, although continued in three modest Period II emissions (**65**, **67**, and **77**; see Table II, pp. 322–323 below), was joined and eclipsed by more substantial and frequent strikings in the larger AE 2 and smaller AE 4 modules, the former taken over from the Pan-erecting-trophy bronzes of Antigonos Gonatas (**507**). As explained (p. 38 above), the three basic denominations are to be recognized as the chalkous (AE 4), the dichalkon/tetartemorion (AE 3), and the hemiobol (AE 2).

A fourth modular unit was employed only in the earlier phase of Period II. This is the much larger (20–22 mm.) and heavier (8–10 g.) AE 1, which would logically represent the bronze obol were it not that the unit was introduced in variety **64** with the traditional types of the Athenian silver triobol: Athena head in Attic helmet/Upright facing owl between two pendent olive branches. Ordinarily one might be skeptical whether these triobol types were intended to retain their denominational meaning when transferred to a bronze coin, but in the present instance the case for transferred denominational significance is unusually strong.

<sup>65</sup> Plutarch, *Aratus* 34; Pausanias 2.8.6.

In all Athenian coinage no reverse type was more closely associated with a common monetary value than the erect, frontal owl framed by olive sprays and a triangularly arranged ethnic. The type was created for Athens' first triobols in the second half of the 5th century (12). Through the pi-style silver of the later 4th century, the triobol with its characteristic reverse was one of the more heavily minted denominations below the tetradrachm. And although we do not know if any triobols were struck with the quadrigité drachms and tetradrachms in the early 3rd century, Svoronos illustrates two silver triobols with the unmistakable obverse style of certain heterogeneous drachms and tetradrachms from later in the century.<sup>66</sup> The heterogeneous triobols were probably struck by Athens; but whether they were or not, they bring the association of reverse type and value into the 240's or 230's, after which triobols vanish from the pre-New Style silver, their types having been transferred to the heavy new AE 1 bronze. There is consequently every good reason to infer that the AE 1 bronzes with triobol types were intended to replace triobols in silver.<sup>67</sup> In this connection it must be significant that the types were employed on bronze coins only when the AE 1 module was introduced. Once the value of the AE 1 pieces had become familiar, denominational types were discontinued in favor of more contemporary designs depicting a head of Zeus or Artemis on obverses and the statue of Athena Polias on reverses (66, 68). Significance, too, must be attached to the circumstance that all these AE 1 coins were eventually counterstamped with the device of a plemochoe on both sides, doubtless to devalue them to the level of the Demeter/Plemochoe AE 2 pieces (72–74) in a tacit recognition that the highly overvalued bronze triobols had outlived their usefulness as a substitute for silver. The striking of triobols in silver returned in the 2nd century with the advent of the stephanephoric coinage.

Close stylistic similarities between the silver drachms with symbols (p. 13 above), the first AE 1 triobol variety 64, and the contemporary AE 3 Two-owl variety 65 (note especially what seems to be an aplustre helmet ornament on 65a) affirm that the two bronze varieties date within the last three decades of the 3rd century. But because the AE 1 triobols were almost certainly issued to replace silver triobols already in circulation, their inception may reasonably be attributed to 229 and related to the 150 talents of silver that the Athenians then raised to purchase their freedom from the Macedonian garrisons in the Peiraeus and the other forts of Attica. Aratos and the Achaian League gave Athens 20 talents toward this end,<sup>68</sup> and it is usually assumed that another substantial gift was solicited from Ptolemy Euergetes. Athens obtained loans of perhaps as much as 20 talents from the cities of Boiotia and relied heavily on contributions from her wealthier citizens and friends.<sup>69</sup> It now appears that another source was tapped by withdrawing a quantity of silver from circulation, all triobols certainly but possibly some silver in larger denominations as well, through an exchange with the bronze triobols, more or less as Athens had done with the plated bronze drachms and tetradrachms of 406/5 B.C. (pp. 7–8 above).

Period II thus begins with the AE 1 triobols in 229. The end of the period is archaeologically fixed by the great construction fill of the Middle Stoa in the Agora (Deposit H–K 12–14). The 189

<sup>66</sup> Sv. 21.51, 52 (see note 47 above, p. 12). Sv. 24.28 = *BMCAttica*, pl. V:15, is another 3rd-century B.C. silver triobol but with an Athena head that has its closest parallels in the tetrobols 29a, b. The tremendous scale of triobol striking in the later 4th century can be appreciated from the 64 triobols in the 89-piece Peiraeus 1956 hoard, *IGCH* 127 (Thompson 1957).

<sup>67</sup> The inscribed bronze ΤΡΙΩΒΟΛΟ struck by Samothrace (*Hunter* I, p. 388, no. 1, pl. 26:7: 10.4 g., 24 mm.) is of AE 1 size but belongs probably to the 1st century B.C., to judge from the broken-bar alpha of the ethnic.

<sup>68</sup> Plutarch, *Aratus* 34.

<sup>69</sup> Habicht, *Studien*, pp. 79–81, for full documentation and discussion.



identifiable coins excavated from the fill give a nearly complete run of Athenian bronze from the middle of the 4th century down to the closing of the fill *ca.* 183 B.C.<sup>70</sup> and include specimens from all but three of the Period II coinages.<sup>71</sup> Observing in his publication of the coins in the Middle Stoa fill that later bronze varieties do not show up in Agora deposits until after the middle of the 2nd century, Kleiner deduced that the minting of bronze was suspended between *ca.* 183 and *ca.* 140 B.C.<sup>72</sup> There can be no doubt that minting was interrupted at the end of Period II, presumably because continued production was judged unnecessary; but since the Period III strikings probably began in the 160's (pp. 67–68 below), the lacuna will have lasted for only about two decades.

The Period II bronze is unusually rich in features that tie particular emissions to episodes in the political history of Athens during the late 3rd and early 2nd centuries B.C. The chronology presented in Table II (pp. 322–323 below) has been reconstructed from the following interlocking considerations:

1. As in the owls of the late 3rd–early 2nd-century B.C. silver, there was an abrupt modification in the form of the owls on the Period II bronze. Except in the AE 4 variety **81**, Owl on thunderbolt, all the Period II owls have heads designed like those on the drachms and tetradrachms with symbols (p. 13 above): heads have little or no feathering, beaks are long and frequently joined to the brow, eyes are relatively large. The exceptional owl heads of the Owl-on-thunderbolt pieces, with small, dot-shaped eyes sunken deeply below an enlarged, bulbous forehead, are, on the other hand, identical to the owl heads of the New Style silver and the final, spread-flan Old Style tetradrachms with monograms (p. 13 above). The Owl-on-thunderbolt AE 4 should thus belong relatively late in Period II, surely to the early 2nd century rather than to the late 3rd, as should the AE 2 Standing Zeus issues (**78–80**) with which the pieces depicting an owl on Zeus's thunderbolt were presumably minted.

2. That the AE 2 Standing Zeus coinage belongs after the turn of the century follows from a previously unremarked detail of its earliest obverse dies. Throughout most of the coinage, the Athena on the obverse wears a Corinthian helmet. The first issue, however, began with an Athena in an Attic helmet ornamented with a wing (see 78a, b and Sv. 80.1–3), which at once brings to mind the winged helmet worn by the goddess Roma on the early denarius coinage of Rome.<sup>73</sup> Certain Archaic electrum of Kyzikos and Priene and later bronze or silver issues of Kamarina, Velia, and Metapontion also depict Athena in a winged helmet.<sup>74</sup> But the very rarity and remoteness

<sup>70</sup> The date is derived from the abundant wine-jar handles in the deposit; see Grace 1985, pp. 1–54, with Grace and M. Savvatiou-Petropoulakou, “Les timbres amphoriques grecs,” *Délôs XXVII*, pp. 289–291, 317–319. Over 1,200 (84 percent) of the Middle Stoa stamped handles belong to the well-dated Rhodian and Knidian series, whose chronologies in the early 2nd century are anchored to 188 B.C. through the hypothesis that the introduction of secondary stamps on the Rhodian handles and the simultaneous appearance of named *phourarchoi* on the Knidian follow upon Rhodes' takeover of the Carian coast in that year. In light of the ancillary chronological evidence assembled by Grace, the hypothesis seems inescapable. The latest stamped handles in the Middle Stoa fill come down to about five years after the start of the Rhodian secondary stamps and the Knidian *phourarchoi* and so date the closing of the deposit to around 183 (Grace 1985, pp. 8–9, 14–15; Grace and Savvatiou-Petropoulakou, *op. cit.*, p. 291, stating “183 or 182 B.C.”).

<sup>71</sup> Kleiner 1975, pp. 304–307: deposits I and II. The three Period II coinages that are missing from the deposit are the AE 1 triobol variety **64**, the AE 2 Zeus/Amphora variety **76**, and the rare AE 3 Owl left with amphora **77**.

<sup>72</sup> Kleiner 1975, pp. 329–330; 1976, p. 36.

<sup>73</sup> Crawford, *RRC*, nos. 44/5, 45/1, 46/1, etc.

<sup>74</sup> *LIMC* II, *s.v.* Athéna Ailée, p. 964 and pl. 711, nos. 64 (Kyzikos) and 65 (?Priene). U. Westermark and K. Jenkins, *The Coinage of Kamarina*, London 1980, pp. 220–224, pls. 35, 36, nos. 198–205 (AE, 420–405 B.C.); *SNGCop, Italy* 1560, 1561, 1575–1577, 1583, 1584 (Velia silver, 4th–3rd centuries B.C.); and 1241 (Metapontion silver, “Hannibalic Period, c. 212–07 B.C.”). The last coin probably owes its winged helmet to the denarius. The winged helmet on the denarius and its relation to the winged helmet of Perseus on the coinage of King Philip V of Macedon is discussed by Boehringer,

of such comparanda make it highly probable that the helmet wing on the Athenian bronze is a borrowing from the denarii, which, first struck in 212 or 211 B.C., must have been reaching Athens, if only in sample numbers, during the Second Macedonian War (200–197 B.C.). Not only did Athens ally herself with Rome, Pergamon, and Rhodes in the spring of 200 at the beginning of the war, but for its duration a detachment of Roman soldiers was stationed in Athens to defend against Macedonian attack, while the Peiraeus served as the base of operations for the Roman fleet.<sup>75</sup> In these circumstances, the borrowing of the helmet wing will date after the spring of 200 and should, indeed, be understood as a complimentary reference to Rome, the new champion of Athenian independence.

3. A winged helmet (on which the wing is more pointed and closer to the Roman prototype) is worn also by Athena of the AE 3 variety **77**, Owl left with amphora, and places this rare variety, too, after the spring of 200. The variety must fall between that date and the start of the Owl-on-thunderbolt AE 4 (and the Standing Zeus AE 2 of **78–80**); for, as seen from the better-preserved examples of the Owl-left emission in Svoronos (Sv. 22.89–92), the owls have heads of Old Style design with large eyes. This Owl-left AE 3 is linked to the AE 2 variety **76**, Zeus/Amphora, through the olive-wreath border on the reverses of both issues, a feature that occurs nowhere else in the Period II bronze. Since the reverse type of a large Panathenaic amphora on the AE 2 coins suggests that they were probably struck in conjunction with a celebration of the Greater Panathenaia, the accompanying Owl-left AE 3 with its winged helmet and adjunct Panathenaic amphora may be dated to 198 B.C., when the festival was held for the first time after the alliance with Rome.

4. Following after a short interval, the Athena in winged helmet/Standing Zeus AE 2 (and the start of the Owl-on-thunderbolt AE 4) can plausibly be associated with Flamininus' victory over Philip V in 197 at the conclusion of the Second Macedonian War and his policy, announced a year later at the Isthmian Games, of guaranteeing freedom for all Greeks. The policy, it is true, brought no special benefits to the Athenians, who were already free, but enthusiasm for Flamininus must have run high, if only for his defeat of the hated Philip. The acclamations he received elsewhere as Savior and Liberator replicated the cult titles of Zeus Soter-Eleutherios at Athens and Plataia and point to an association of Flamininus with this cult, as Walbank noticed.<sup>76</sup> Given the Roma helmet on its first obverses and the very limited time in the early 2nd century available for this issue, it is reasonable to suppose that the Standing Zeus on the reverse of the coins actually depicts the Athenian statue of Zeus Soter-Eleutherios, as discussed below.

This in turn leaves the final type change of the AE 2 unit to the Fulminating Zeus reverse in variety **82** to fall around 190 B.C., that is, about midway between 196 and *ca.* 183.

5. Athens' long and important series of AE 2 issues began with the overstriking of the Pan-erecting-trophy AE 2 of Antigonos Gonatas (**507**) by variety **69**, whose reverse of Owl three-quarters right, wings raised, with amphora, was copied from the pentobol silver struck during the Chremonidean War (**28**, see pp. 10–11 above). Intended to remove the Macedonian bronze from circulation, the overstriking was, as Habicht pointed out, unlikely to have been enacted before Athens

pp. 116–124. But Mørkholm (*EHC*, p. 136) cautions that speculation on this matter is futile until the relevant coinage of Philip is more securely dated. Even so, it is unthinkable that the Athenians would have borrowed the winged helmet from the coinage of Philip.

<sup>75</sup> For documentation, mostly in Livy, and a vivid narrative of the Roman presence at Athens during the Second Macedonian War, see Ferguson, pp. 270–279, esp. 278–279.

<sup>76</sup> F. W. Walbank, *A Historical Commentary on Polybius II*, Oxford 1967, pp. 613–614, concluding that “Flamininus thus appropriated the identification with Zeus favored by Philip V.”

broke free of Macedonian control in 229 B.C.<sup>77</sup> The overstriking apparently belongs in fact a number of years after 229. Working back from the AE 2 issues of the early 2nd century, the AE 2 issues **73–75** with the Eleusinian Demeter/Plemochoe types take their place roughly in the last one or two decades of the 3rd century, leaving the two Owl three-quarters right issues **69** and **70** and the overstriking over Gonatas to date in the 210's or later 220's. Because of the historical associations of the reverse of the Owl three-quarters right with amphora with the Chremonidean War pentobols, which were struck to pass as Ptolemaic drachms and may have actually been called δράχμαι Πτολεμαϊκαί, it follows that the type was revived for the overstriking more for its pro-Egyptian than for its anti-Macedonian implications. Accordingly, the overstriking should date to or just after 224/3 B.C., the year in which the Athenians reestablished close political and cultural ties to the Egyptian court and honored Ptolemy Euergetes as the eponymous hero of a new Athenian tribe.<sup>78</sup>

6. Each of the later AE 2 coinages of Period II was accompanied by its own small-denomination variety: the Fulminating Zeus AE 2 by the Cicada/Amphora AE 4 (see under **85**), the Standing Zeus AE 2 by the Owl-on-thunderbolt AE 4 (p. 50 above), the Zeus/Amphora AE 2 by the Owl-left-with-amphora AE 3 (p. 51 above), and the Demeter/Plemochoe AE 2 by the Plemochoe/Eleusis-ring AE 4. It follows that the earliest AE 2 coinage, Owl three-quarters right, was probably accompanied by the earliest AE 4 variety, Owl on rudder (**71**). An issue of the drachms with symbols (Sv. 23.41, 42; see p. 13 above) also has its owl perched on a rudder, which doubled on the drachms as an emission symbol. But we should probably interpret the rudder of both coinages as the metaphorical rudder of government (κυβέρνησις), the owl as the helmsman (κυβερνήτης), and the whole device as an eloquent, if modest, emblem of Athenian autonomy.

7. Mention has already been made of the relatively short-lived AE 1 triobols that were inaugurated in 229 B.C. with triobol types (**64**). The series passed through two type changes (**66**: Zeus head/Athena Polias, and **68**: Artemis head/Athena Polias) before all the AE 1 pieces were counterstamped on both sides with a plemochoe device to devalue them to equivalence with the Demeter/Plemochoe AE 2 hemiobols. Dating with the latter, the Plemochoe/Plemochoe counterstamping occurred between *ca.* 220 and *ca.* 200, so that the bronze triobols must have circulated for at least a decade before devaluation. This is understandable enough in view of what must have been a serious shortage of silver in Athens after 229 and the continuing obligation of the city to repay the sizable debts it contracted in that year. Not that this highly overvalued bronze would have necessarily retained its face value for a decade or more; over time its value in relation to silver may very well have declined. Even if the coins were ultimately passing as bronze obols, their continuation would probably have been justified. The Athena Polias AE 1 with the Artemis obverse was produced for a long enough time for its reverses to pass from a phase of fine die engraving and a dotted border to a stylistically cursory phase without the border (cf. Sv. 25.10).<sup>79</sup> The variety, for all one can tell, may have been issued after the AE 2 overstriking on Gonatas. On the other

<sup>77</sup> Habicht, *Studien*, pp. 42, 148, note 137, correcting my earlier suggestion (*EABC*, p. 144, note 9) that the overstriking might have been precipitated by Antigonos' death in 239. Stressing Athens' strict policy of neutrality towards Macedon between 229 and Philip V's invasion of Attica in the fall of 201, Habicht (*Studien*, pp. 146–150) proposed to connect the overstriking with the *damnatio memoriae* that the Athenians passed against King Philip and all his ancestors in 201 or a year or two later. But so late a date for the overstriking would compress the first seven AE 2 issues of Period II within an impossibly short space of only four or five years and cannot be accepted.

<sup>78</sup> The honors and the evidence for the 224/3 date are reviewed by Habicht, *Studien*, pp. 105–112, and, in connection with the sudden vogue in Athens for moldmade bowls imitating Alexandrine prototypes, by Rotroff, *Agora* XXII, pp. 11–13.

<sup>79</sup> J. H. Kroll, "The Ancient Image of Athena Polias," in *Studies in Athenian Architecture, Sculpture, and Topography Presented to Homer A. Thompson* (*Hesperia* Supplement 20), Princeton 1982 (pp. 65–76), p. 71, note 27, with pl. 11.

hand, the Zeus/Athena Polias variety **66** (fine style, dotted reverse border) was accompanied by the AE 3 variety **67** (also with a dotted border on the reverse) and presumably antedates the Owl three-quarters right AE 2 and Owl-on-rudder AE 4.

### *Iconographical Symbolism*

Conspicuous in this review of types is the fresh and sometimes politically charged iconography that sets the Period II bronze apart from the monotony of all preceding Athenian coinage. Even otherwise conventional owl or Athena-head types were given an original, topical twist, as when the Chremonidean War owl with lifted wings and amphora was revived for the overstriking of the Macedonian bronze of Antigonos Gonatas (**69**), the owl of the first AE 4 reverse was made to grasp the rudder of state (**71**), or Athena's helmet was embellished with a wing alluding to the goddess Roma, as it was during and just after the Second Macedonian War (**77, 78**).

A more explicit expression of Athenian independence and nationalism is found on the AE 1 obverses picturing the statue of the chief tutelary deity of the city, Athena Polias or, as the goddess was also known, Athena Archegetis (Founder).<sup>80</sup> The coins of varieties **66** and **68** afford the only extant visual documentation in any medium for this statue, but the identification with the ancient olive-wood xoanon that was housed in the Erechtheion and dressed each Panathenaia in a newly woven peplos seems certain from the inscribed inventories of the gold ornaments of the image, which included a phiale in one of the goddess' hands and a gold owl supported at shoulder level, precisely as the coins show.<sup>81</sup> The image on the coins, too, wears a Corinthian helmet, presumably the removable "sacred helmet" on the Akropolis mentioned by Aristophanes.<sup>82</sup> One suspects that the venerable Polias image was conceived on the coins as a kind of response to the archaistic statue of Athena brandishing a thunderbolt that Antigonos Gonatas placed on the reverses of his drachms and tetradrachms. This Athena is identified as the statue of Athena Alkis, or Alkidamos, that stood in the Macedonian capital of Pella.<sup>83</sup> The reverse of a fighting archaistic Athena had earlier appeared on satrapal tetradrachms of Ptolemy I and on staters of Demetrios Poliorketes and so had a long association with Macedonian royalty.<sup>84</sup> It was very probably this association that inspired the Athenians to place the image of their own national Athena cult on the reverses of their coins soon after the Macedonian occupation of Attica ended in 229.

Two Athenian emblems, the Panathenaic amphora and the cicada, make their earliest appearances as coin types in the Period II bronze. The cicada first occurs on the Cicada/Amphora AE 4

<sup>80</sup> *Ibid.*, p. 69.

<sup>81</sup> *Ibid.*, pp. 65–72. Implicitly rejecting the epigraphical testimonia, Ira S. Mark ("The Ancient Image and Naiskos of Athena Polias: The Ritual Setting on a Late Fifth-Century Acropolis Relief" [lecture, San Antonio 1986], abstract in *AJA* 91, 1987, pp. 287–288) alternatively identified the Polias with the xoanon depicted on the relief, O. Walter, *Beschreibung der Reliefs im Kleinen Akropolismuseum in Athen*, Vienna 1923, no. 76. But even if we could be sure that the xoanon on the relief held a phiale and an owl, the owl would be positioned at the goddess' waist, not her shoulder as the inscriptions require. Nor does the xoanon wear the golden gorgoneion that was part of the Polias ensemble since before 480 B.C. (Plutarch, *Themistokles* 10, with the inscribed inventories), although a gorgoneion is to be found on the breast of the Athena who sits below the xoanon on the relief. The very presence of this Athena implies that the xoanon was an image of another deity altogether, as Walter says.

<sup>82</sup> J. H. Kroll, "'The Sacred Helmet' of *Lysistrata* 748–55 and the Image of Athena Polias" (lecture, Cincinnati 1983), abstract in *AJA* 88, 1984, p. 250.

<sup>83</sup> Brett 1950, pp. 55–72, pl. XII:14, 15. Lacroix, pp. 119–121, pl. VIII:8–10; Boehringer, p. 99, pls. 25, 26:18–26; *LIMC* II, s.v. Athéna Promachos, p. 973, pls. 722, 723, no. 164. On the circulation of Gonatas' silver at Athens after 261, see pp. 12, 36 above.

<sup>84</sup> Brett 1950, pl. XI. Lacroix, pp. 116–121, pl. VII:5, 6; *LIMC* II, s.v. Athéna Promachos, p. 973, pls. 722, 723, nos. 158, 159, 162.

(85) around 190 B.C. and goes on to become one of the more popular designs of the bronze coinage in the later 2nd and earlier 1st centuries B.C. (cf. **100**, **108**, **113**, **131**). From Thucydides (1.6.3) and Aristophanes (*Knights*, line 1331) we know that the Athenians of old used to fasten their hair with gold brooches in the form of a cicada, and the scholia on the *Knights* explain why: born, like the Athenians, from the earth, cicadas symbolized Athenian autochthony.<sup>85</sup> The Hellenistic revival of this ancient symbol and the elevation of the cicada to a quasi-official status within the repertory of Athenian state emblems are a prime expression of what has been called in the context of other antiquarian revivals of 2nd-century B.C. Athens “the outbreak of sentimental nationalism which accompanied the Roman conquest of Greece.”<sup>86</sup> The use of the Panathenaic amphora as a reverse type in the Zeus/Amphora AE 2 (**76**) seems to have been suggested by the Eleusinian vessel on the reverses of the preceding Demeter/Plemochoe emissions (**72–74**).

In contrast to these new Athenian types, the Demeter/Plemochoe AE 2 and Plemochoe/Eleusis-ring-in-wheat-wreath AE 4 (**72–75**) draw on the established designs and symbols of the earlier Eleusinian coinage. But in Period II the bronze with Eleusinian types, no longer bearing the ΕΛΕΥΣΙ legend, is fully incorporated into the mainstream of the regular bronze coinage and (as shown by the AE 2 overstriking) interrupts the sequence of issues with Athenian devices, instead of being struck in tandem, as earlier. The abrupt shift from Athenian to Eleusinian types in the last quarter of the 3rd century is awkward to explain, unless it arose from an expansion in the importance and size of the Eleusinian festivals about a decade or so after 229.<sup>87</sup>

The major innovation of the Period II iconography is the recognition extended to deities other than Athena and Demeter. By priority and frequency Zeus is the principal newcomer. Portrayed soon after 229 on the obverse of the first of the two AE 1 varieties with the Athena Polias reverse (**66**), the Zeus probably represents, as the historical context suggests, Zeus Soter-Eleutherios.<sup>88</sup> The Artemis whose head is substituted for the head of Zeus on the next, and last, AE 1 variety (**68**) may accordingly be recognized as Artemis Soteira or, if the reference is to the liberation of Mounychia from the Macedonian garrison, Artemis Mounychia.<sup>89</sup> After this single appearance, Artemis disappears from the coinage until after Athens gained control of Delos in 167/6. When she is met again in variety **104** (Period III), the reference is doubtless to her Delian cult.

Zeus, on the other hand, becomes ever more entrenched as Period II progresses. Reintroduced on the AE 2 Zeus head/Amphora variety **76**, the god was transferred to the reverses of issues **78–80**, there depicted in the form of an Early Classical statue of a nude standing Zeus holding a lowered

<sup>85</sup> D. M. Jones and N. G. Wilson in *Scholia in Aristophanem*, I, ii, *Equites*, W. J. W. Koster, ed., Groningen/Amsterdam 1969, p. 268.

<sup>86</sup> J. K. Davies, *Athenian Propertied Families, 600–300 B.C.*, Oxford 1971, p. 11.

<sup>87</sup> Compare the program for increasing international participation at the Mysteries in the second quarter of the 4th century (pp. 29, 30 above), when the Eleusinian coinage originated. An Athenian decree of the late 3rd century (B. Helly, *Gonnoi* II, Amsterdam 1973, pp. 120–127, no. 109) deals with the international announcements of the three major Athenian festivals (the Eleusinia, the Panathenaia, and the Mysteries) showing that Athens was at this time passing legislation to restore her festivals to their former brilliance. The seriousness with which the Mysteries were being conducted at this time is underscored by the execution in 201 of two young Akarnanians who viewed the rites without being initiated, executions that led to Philip V’s invasion of Attica shortly thereafter (Livy 31.14.6; Polybios 16.35.5).

A third “Eleusinian” issue, so rare that no specimen has turned up in the Agora, should probably also belong to Period II rather than III, the only chronological alternative. This is the AE 4 (11 mm.) Sv. 103.47–49: Triptolemos seated left in winged chariot ΑΘΕ in a triangular arrangement around a plemochoe, wheat ear at right.

<sup>88</sup> See below. For the Athenian cult of Zeus Soter-Eleutherios, see *Agora* III, nos. 24–36, pp. 25–28.

<sup>89</sup> The shrine of Artemis Soteira was located just outside the Dipylon; see *IG* II<sup>2</sup> 1343, 4631, 4695, and B. D. Meritt, “Greek Inscriptions,” *Hesperia* 10, 1941 (pp. 31–64), pp. 62–63, no. 28, with W. S. Ferguson’s discussion in “Researches in Athenian and Delian Documents I,” *Klio* 7, 1907 (pp. 213–240), pp. 213–214, and J. H. Oliver’s in “Greek and Latin Inscriptions,” *Hesperia* 10, 1941 (pp. 237–261), p. 243, no. 42. For Artemis Mounychia, see K. Wernicke, *RE* II, cols. 1393–1394; W. Judeich, *Topographie von Athen*, 2nd ed., Munich 1931, p. 452.

thunderbolt at his right side, his left arm extending straight out from the shoulder in a gesture of authority.<sup>90</sup> This statue was then replaced on the remaining AE 2 reverses (82–84) by another, which represents the god in the more conventional Late Archaic–Early Classical schema of a striding Zeus brandishing the thunderbolt in his upraised right hand; an eagle is added at his feet.

Both statue types recur in the later bronze coinage. The final Period II AE 2 format of Athena wearing Corinthian helmet/Fulminating Zeus was revived in the second half of the 2nd century B.C. for the last eight AE 2 issues of Period III (90–97); and the striding, Fulminating Zeus reverse (although here with the eagle on the wrist of the god's extended left arm) was again revived at the start of the AE 1 series that began after the Battle of Philippi in 42/1 B.C. (137). Historically, however, the Standing Zeus was the more important statue. Chosen first for representation on the Period II reverses, it reappears as a reverse type shortly after the Battle of Actium (148) and, a full three hundred years later, on a single reverse die of the huge Period VI Athenian imperial coinage of the 260's after Christ.<sup>91</sup>

A third statue of Zeus on Athenian coins is not strictly relevant to our understanding of these two statues but has nevertheless led scholars to identify one or the other of them as Zeus Polieus. This third statue is known from one reverse die in the Period VB imperial coinage of Hadrianic or Antonine date (175) and from one reverse die in the Period VI imperial coinage a little more than a century later (357). It is of a Zeus standing before a low, gabled altar ornamented with a boukranion, his left hand extended down over the altar in the ritual act of sprinkling,<sup>92</sup> his right hand (like that of the Standing Zeus on the Period II and IV reverses) hanging at his side, holding a thunderbolt at a 45-degree tilt.<sup>93</sup> Portrayed on the Hadrianic-Antonine reverse at a relatively large scale and with what must be a considerable fidelity to the style of the original, the Sacrificing Zeus is a handsome figure and since the middle of the 19th century has been customarily associated with one of the two statues that Pausanias (1.24.2) saw in the sanctuary of Zeus Polieus on the Akropolis: “the one by

<sup>90</sup> That the statue is Early Classical is clear from its similarity to the Early Classical Apollo from the west pediment of the Temple of Zeus at Olympia, who also lifts one arm straight out in a commanding gesture while carrying his attribute and weapon down at his side in his other hand; see Boardman, *Greek Sculpture*, figs. 19, 21:3. Although both arms are broken below the shoulders, the copy of an Early Classical Zeus assigned to the Nymphaeum of Herodes Atticus at Olympia (Bol, pp. 187–190, pls. 59–61, no. 48; R. Bol and P. Herz, “Zum Kultbild des Zeus Panhellenios. Möglichkeiten der Identifikation und Rezeption,” in *Greek Renaissance* [pp. 89–95, pl. 28], p. 89) seems to have been posed more or less like the West Pediment Apollo. Closer to the Athenian Standing Zeus with perpendicular left arm is the statue of a nude Zeus at Olympia depicted on Elian coins from the time of Hadrian (Liegle, pp. 110–111, pl. 4:6), but the left leg of this statue is more bent, and there is an eagle perched on the god's left wrist.

<sup>91</sup> The die is known from two unpublished coins, one at the American Numismatic Society, the other in the Evelpidēs Collection, Athens.

<sup>92</sup> Publications describe, and sometimes illustrate with a restored drawing, the Zeus as holding a phiale; cf. *BMCAttica*, p. 104, no. 755, and the drawings and citations collected in Cook, *Zeus*, pp. 572–573, figs. 399, 400. But as Cook's own excellent drawing (*Zeus*, fig. 402) of the British Museum specimen (*BMCAttica*, pl. xviii:5; Sv. 92.6) shows, the god's hand is empty and is turned palm down with the thumb below the fingers. All examples of this imperial Period VB reverse are from the same die, and an unpublished, relatively unworn specimen at the American Numismatic Society confirms the details of the down-turned hand and the presence of a boukranion on the altar. When this reverse type was copied on a die of the Period VI coinage (357 = Sv. 92.7 = Cook, *Zeus*, p. 573, fig. 403), an eagle was added on Zeus's left wrist. Like a number of Period VI variations of Period V dies, the eagle must be attributed to the whim of the Period VI copyist, who apparently misunderstood the gesture of the god's left hand.

<sup>93</sup> Because the pose of the Standing Zeus with perpendicular arm is similar to that of the Sacrificing Zeus in all general respects except for the elevation and action of the left arm, it was once suggested that the two reverse types represent the original and a modified version of the same cult statue, whose left arm was readjusted or replaced in a putative renovation or copy of the image between ca. 30 B.C. and the 2nd century after Christ. See J. H. Kroll, “The Standing Zeus on Athenian Coins and the Cult of Zeus Eleutherios in the Athenian Agora” (lecture, Boston 1989), abstract in *AJA* 94, 1990, p. 336. But this suggestion, unlikely enough in its own right, is disproven by the reappearance of the Standing Zeus with straight arm and without altar on the Period VI reverse (note 92 above).

Leochares and the one called Polieus.” As the former is the only Athenian statue of the god for which we have the name of a sculptor, commentators equated it with the Sacrificing Zeus of the imperial coinage, while leaving the Fulminating Zeus (or the Standing Zeus with perpendicular arm) to be identified with the presumably older cult image of Zeus Polieus.<sup>94</sup> Since the Polieus cult is known almost exclusively for its curious and primitive rite of bull sacrifice, the Bouphonia, a source of much learned interest in antiquity as today,<sup>95</sup> it has been suggested that the altar in front of the Zeus on the imperial coins may be the very altar at which this ritual took place<sup>96</sup> and that the same altar is depicted by itself on another imperial Period V reverse (203).<sup>97</sup> Like the altar on the Sacrificing Zeus coins, the last altar is depicted with an ornamental boukranion, although its top is flat, not gabled, and it supports a second boukranion and two flanking sacrificial vessels. Since there is an olive tree at either side, the altar was located on the Akropolis.

If the altar before the Sacrificing Zeus and this Akropolis altar are the same, the Sacrificing Zeus would have to be one of the statues connected with Zeus Polieus. So the reasoning goes. But it all may be fantasy. Georg Lippold rightly disputed the simplistic connection with the 4th-century B.C. sculptor Leochares on the grounds that the Sacrificing Zeus on the coins is not consonant with the characteristics of Leochares’ art.<sup>98</sup> The Severe or Early Classical pose of the Sacrificing Zeus, with shoulders back, both feet flat on the ground,<sup>99</sup> implies that the image antedated Leochares by more than a century. The altar between olive trees should be the great altar of Athena on the Akropolis, not an altar of Zeus. Apart from the Athena symbolism of the olive trees, Greek altars were commonly ornamented with the sculptured skulls of sacrificed victims, regardless of the divinity worshipped.<sup>100</sup> Although the Sacrificing Zeus must have been located next to an altar, the depiction of the altar need not imply a specific cultic tradition like the Bouphonia. Thus, while an equation of Sacrificing Zeus with a statue in the shrine of Zeus Polieus is not impossible, neither is there any compelling reason to recommend it.

There is therefore even less reason to extend the Polieus equation to the Standing or Fulminating Zeus statues on the coins of the 1st and 2nd centuries B.C. To judge from the silence of literary and epigraphical sources, the cult of Zeus Polieus seems never to have been incorporated into the political ideology of the Athenian state; and, for this reason alone, the god would be strangely out of place on the Hellenistic coinage. A much stronger case can be made for identifying one of the Zeuses on the Hellenistic coins with the image of the Athenian political cult of Zeus *par excellence*, the cult of Zeus Soter-Eleutherios. As has long been appreciated, this image, which stood on a pedestal in front of the Stoa of Zeus in the Agora, must have been an Early Classical statue.<sup>101</sup> In Roman times

<sup>94</sup> The major discussions are by O. Jahn, “Giove Polieo in Atene,” *Nuove Memorie dell’Istituto di Corrispondenza Archaeologica* 2, 1865, pp. 1–24, pl. 1; J. Overbeck, *Griechische Kunstmythologie*, Leipzig 1871–1889, pp. 19 and 54; Cook, *Zeus*, *loc. cit.* (note 92 above, p. 55). Imhoof-Blumer and Gardner (*NCP*, pp. 137–138) summarize Jahn and Overbeck. Full bibliography in Lacroix, p. 75, note 2.

<sup>95</sup> Testimonia (esp. Pausanias 1.24.4 and Porphyry, *de Abstinentia* 2.10, 29–31) and bibliography to 1940 on the Polieus cult in Cook, *Zeus*, pp. 574–605. Recent discussions of the Bouphonia: Burkert, pp. 136–142; E. Simon, *Festivals of Attica*, Madison 1983, pp. 8–12. Topography of the sanctuary: G. P. Stevens, *The Setting of the Periclean Parthenon* (*Hesperia* Supplement 3), Princeton 1940, pp. 79–86; *idem*, “The Northeast Corner of the Parthenon,” *Hesperia* 15, 1946 (pp. 1–26), pp. 12–15.

<sup>96</sup> Overbeck, *loc. cit.* (note 94 above); *BMCAttica*, p. 104.

<sup>97</sup> Sv., pl. 87, caption to nos. 42, 43: “autel de Zeus.” *BMCAttica*, p. 111, no. 816, just calls it an altar.

<sup>98</sup> *RE* XII, col. 1996, *s.v.* Leochares.

<sup>99</sup> Compare the Choiseul-Gouffier Apollo and the Riace Bronze Warrior (A): Boardman, *Greek Sculpture*, figs. 38, 67.

<sup>100</sup> P. M. Fraser (*Rhodian Funerary Monuments*, Oxford 1977, pls. 42, 43, 64–91) illustrates dozens of square and round altars sculptured with boukrania. For a large rectangular one to Dionysos, see Cook, *Zeus*, p. 579, fig. 404.

<sup>101</sup> Thus since H. A. Thompson’s epochal “Buildings on the West Side of the Agora” (*Hesperia* 6, 1937 [pp. 1–226], p. 54, fig. 34 = Camp, p. 106, fig. 79), the statue on the round pedestal before the Stoa of Zeus has been hypothetically restored

the cult of Zeus Eleutherios took on a new political-religious significance as a medium for expressing Athens' devotion to Rome: in the early Julio-Claudian era an annex for an imperial cult was added at the rear of the Stoa of Zeus, and there is evidence that the emperors Domitian, Trajan, Hadrian, and Antoninus Pius were all formally identified or very closely associated with Zeus Eleutherios, a record apparently unmatched by any other Athenian deity.<sup>102</sup>

The argument for identifying the Standing Zeus with the cult image of Zeus Eleutherios comes from the date of the AE 2 issue **78**, on which the statue type was introduced. The issue was struck soon after 198 B.C. but six issues before *ca.* 183 B.C. (pp. 50–51 above). The limits point to the 190's and a close association with the defeat of Philip in 197 and Flamininus' liberation declaration of 196, associations reinforced by the winged helmet of Roma worn by Athena on the earliest obverses of the issue. In 196 the Thessalians memorialized their liberation from Macedon by establishing at Larissa a cult of Zeus Eleutherios and a quadrennial festival, the Eleutheria.<sup>103</sup> At the Macedonian cities of Abdera, Ainos, Maroneia, Petres, and Thessalonike, cults of Zeus Eleutherios were founded conjointly with cults of Roma after the final defeat of Perseus in 168.<sup>104</sup> The evidence is circumstantial but consistent: at Athens no Zeus was more appropriate to the historical context of issue **78** than Zeus Eleutherios.

If, then, the Standing Zeus is Soter-Eleutherios, how are we to understand the Fulminating Zeus that replaces the Standing Zeus in variety **82**? The change to the conventional fulminating image need not have had any significance beyond a decision to represent Zeus in a guise that was more universal, easily recognizable, and suitable for a standardized coin type. Accordingly, the Standing Zeus would indeed reproduce the actual cult statue in the Agora, while the fulminating image (with added eagle, which is unlikely to have been part of a Late Archaic–Early Classical statue but which makes for a more satisfactory coin design) gives a generic Zeus who nevertheless symbolized the same political ideals. Or could it be that the Standing Zeus was later thought to be too closely associated with Flamininus and Rome? Livy (35.31 and 50) reports the growth of strong anti-Roman sentiment at Athens in 192, about the time that the change from the Standing to the Fulminating Zeus took place. In either case, Zeus figures on the bronze of Hellenistic Athens in one dominant aspect, as the tutelary deity of national freedom and sovereignty. Even the small-denomination reverses that picture an owl perched on a thunderbolt (varieties **67** and **81** of Period II and **99** and **100** of Period III) are to be recognized as little metaphors for an Athens resting on the liberating might of Zeus.

In this vein it is probably correct to interpret the routine pairing of Athena and Zeus on the opposite sides of the main AE 2 bronze of Periods II and III as the pairing of two functionally complementary deities, one the religious embodiment of the polis, the other essentially a personification

as an Early Classical Zeus of the striding, fulminating type; cf. *Agora XIV*, p. 101. Whether the cult of Zeus Soter-Eleutherios was founded to commemorate deliverance from the Persians, as several ancient commentators believed (*Agora III*, pp. 26–27, nos. 26–28), or whether, as implied by the Archaic structure below the Stoa of Zeus (H. A. Thompson, *op. cit.*, figs. 72, 126; *Agora XIV*, p. 96), it goes back in some form to pre-Persian times, a cult image dating after 480 B.C. is called for; any earlier statue would have been carried off or destroyed in 480.

<sup>102</sup> H. A. Thompson, "The Annex to the Stoa of Zeus in the Athenian Agora," *Hesperia* 35, 1966, pp. 171–187; *Agora XIV*, pp. 102–103. Identifications of Domitian: *IG II<sup>2</sup>* 1996; Trajan: A. E. Raubitschek, "Hadrian as the Son of Zeus Eleutherios," *AJA* 49, 1945, pp. 128–133; and Antoninus Pius: *IG II<sup>2</sup>* 3396. Hadrian's association with the cult is indicated by the statue of him that was dedicated next to the statue of Zeus Eleutherios in the Agora (Pausanias 1.3.2). Athens' valued status as a free city under the Empire explains why Zeus Eleutherios came to play so large a role in imperial cult.

<sup>103</sup> See O. Kern, *IG IX.ii*, p. xx, and the epigraphical citations listed by F. Stählin, *RE XII*, i, cols. 856–857, 864, *s.v.* Larisa; Fehrlé in *Ausführliches Lexicon der Griechischen und Römischen Mythologie VI*, W. H. Roscher, ed., Leipzig/Berlin, 1924–1937, col. 621, *s.v.* Zeus (Beinamen); J. and L. Robert, "Bulletin épigraphique," *REG* 77, 1964, pp. 176–182, no. 227.

<sup>104</sup> R. Mellor, ΘΕΑ ΡΩΜΑ, *The Worship of the Goddess Roma in the Greek World (Hypomnemata 42)*, Göttingen 1975, pp. 107–108.



of freedom. Although the pairing went back to the Zeus/Athena Polias emission **66**, shortly after Athens' deliverance from Macedon in 229, enthusiasm for Rome's guarantee of *eleutheria* after the Second Macedonian War regularized the pairing of Athena and Zeus on the coinage, until the disastrous outcome of Athens' involvement in the Mithradatic revolt against Rome in 88–86 B.C. Zeus then disappeared from the coinage for more than a generation. In 42/1 B.C. Athens revived the Fulminating Zeus reverse for a single AE 1 emission (**137**), although partially, it seems, to signal the devaluation of the AE 1 to the equivalent of the AE 2 of Periods II and III (pp. 85–86, 90 below). Before Actium, Athens struck two issues (**144** and **145**) with Ptolemaic Zeus-head obverses in honor of Kleopatra. But the themes of salvation and *eleutheria* returned in the reappearance of the Standing Zeus on an issue (**148**, *q.v.*) minted soon after Actium, to commemorate Octavian's "liberation" of Athens.

Neither the standing nor the fulminating statue appears among the many famous Athenian statues depicted on the city's Hadrianic-Antonine coinage, which represented instead the Sacrificing Zeus (**175**, p. 55 above) and the enthroned statue of Zeus Olympios that Hadrian commissioned for the Olympeion (**263**). In Athens' final coinage of the mid-3rd century after Christ, the Sacrificing Zeus and enthroned Zeus reverses are repeated (**357** and **356**, with note 66 below, p. 124). They are joined by a third Zeus type, the Standing Zeus with perpendicularly extended left arm (note 92 above, p. 55), which returns to the first statue of the god depicted on Athenian coins, probably the statue still prominently displayed in front of the Stoa of Zeus.

## CATALOGUE

229–ca. 224/3 B.C.

### AE 1

|           |          | Head of Athena r.,<br>wearing Attic helmet. |              | A<br>Θ E Owl stg., facing; on<br>either side, olive branch.   |  | Sv. 24.25–27,<br>104.5–7 |  |
|-----------|----------|---|--------------|---|--|--------------------------|--|
| <b>64</b> | 10 coins | 21–23                                       | Av. 9.16 (7) | All counterstamped with plemochoe in relief on obverse and plemochoe in incuse circle on reverse, as Sv. 104.5–7. |  |                          |  |
| *a        | K-1647   | 22  | ↓ 9.26       |   |  |                          |  |
| *b        | Θ-375    | 22  | ↑ 10.07      |   |  |                          |  |
| *c        | II-489   | 21  | ↑ 9.26       |   |  |                          |  |
| *d        | T-1844   | 21  | ↑ 8.84       |   |  |                          |  |
| *e        | Δ-356    | 21  | - 9.82       |   |  |                          |  |
| f         | A-1466   | 23  | - 8.76       | broken (G 6:2)  |  |                          |  |
| g         | ΔΔ-80    | 23  | - 9.10       | (M 21:1)  |  |                          |  |
| h         | ΣA-296   | 22  | - 5.13+      | Kleiner 1975, p. 316, no. 230 (P–R 6–12)  |  |                          |  |

### AE 3

|           |         | Similar. |              | A<br>Θ E Two owls stg. upright,<br>facing. |  | Sv. 24.29–31 |  |
|-----------|---------|----------|--------------|--|--|--------------|--|
| <b>65</b> | 7 coins | 12–14    | Av. 2.32 (4) |  |  |              |  |
| *a        | NN-1586 | 14       | ↓ 2.87       | GRC, fig. 13                               |  |              |  |
| *b        | Z-2856  | 13       | ← 2.22       | Kleiner 1976, p. 13, no. 50 (H 12:1)       |  |              |  |
| *c        | Σ-5380  | 14       | ↑ 2.19       |  |  |              |  |

|    |         |    |   |        |  |
|----|---------|----|---|--------|--|
| *d | N-298   | 14 | ↑ | broken |  |
| *e | B'-1018 | 12 | ↓ | 1.99   |  |
| f  | Θ-314   | 13 | - | broken | Kleiner 1975, p. 305, no. 84 (H-K 12-14) |
| g  | T-1867  | -  | - | broken |  |

The variety is associated with 64 through the distinctive style of their reverse owls.

**AE 1**

Head of Zeus r., laur. A  
Θ-E Statue of Athena Polias Sv. 25.1-4  
stg r., holding an owl in l.  
hand and phiale in r.; border  
of dots.

|           |          |       |               |  |
|-----------|----------|-------|---------------|--|
| <b>66</b> | 15 coins | 19-22 | Av. 9.43 (14) |  |
| *a        | T-1651   | 20    | ✓             | 10.00 Kleiner 1975, p. 324, pl. 75, no. 344 (M-N 15:1) |
| *b        | ΠΘ-516   | 20    | ↖             | 9.16   |
| *c        | NN-1788  | 21    | ↘             | 10.28  |
| *d        | BB-15    | 20    | ↘             | 10.68 counterstamped with a plemochoe on both sides    |
| e         | ΜΣ-216   | 22    | -             | 9.72 Kleiner 1975, p. 306, no. 88 (H-K 12-14)          |
| f         | ΜΣ-337   | 21    | -             | 9.71 counterstamped, as 66d                            |

Owing to their poor preservation, it is uncertain how many of the other unillustrated specimens may have been restruck with the Plemochoe/Plemochoe counterstamps.

**AE 3**

Head of Athena r., wearing Corinthian helmet. A  
Θ E or A-Θ Owl stg r., facing,  
on thunderbolt.

|           |                                 |       |               |   |
|-----------|---------------------------------|-------|---------------|---|
| <b>67</b> | 20 coins                        | 12-15 | Av. 2.39 (20) |   |
| A         | Θ E, plain reverse.             |       |               | Sv. 23.46   |
| *a        | Γ-391                           | 13    | ↗             | 2.36 obv. die A   |
| *b        | K-269                           | 15    | ↑             | 3.13 obv. die A   |
| *c        | Ω-433                           | 13    | ↓             | 2.65 obv. die B   |
| *d        | T-1774                          | 15    | ↓             | 2.98 obv. die B; Kleiner 1975, p. 321, pl. 75, no. 296 (misclassified) (M-N 15:1) |
| *e        | Θ-534                           | 13    | ↑             | 2.28  |
| f         | T-1863                          | 14    | -             | 2.41  |
| g         | T-1196                          | 13    | ↑             | 2.14 Kleiner 1975, p. 321, no. 309 (M-N 15:1)                                     |
| h         | ΜΣ-315                          | 12    | ↑             | 2.14 Kleiner 1975, p. 306, no. 96 (H-K 12-14)                                     |
| A         | Θ E, border of dots on reverse. |       |               | Sv. —   |
| *i        | ΠΠ-191                          | 12    | ↗             | 2.32 obv. die B; Kleiner, <i>MN</i> 20, p. 1, pl. I:1                             |
| *j        | Z-2750                          | 13    | ↑             | 1.96 obv. die B; Kleiner 1976, p. 14, no. 64 (H 12:1)                             |
| *k        | ΣA-115                          | 14    | ↑             | 2.17  |
| *l        | ΠΠ-835                          | 13    | ↑             | 2.25  |
| A-Θ       | border of dots on reverse.      |       |               | Sv. —   |
| *m        | Z-1398                          | 13    | ↑             | 1.63 obv. die B; Kleiner, <i>MN</i> 20, p. 1, pl. I:2                             |
| *n        | HH-222                          | 12    | ↑             | 1.74 obv. die C; Kleiner, <i>MN</i> 20, p. 1, pl. I:3                             |
| *o        | Σ-4433                          | 13    | ↑             | 2.17 obv. die C   |
| *p        | ΠΠ-242                          | 13    | ↑             | 2.54 obv. die D   |
| q         | NN-1243                         | 14    | ↑             | 2.75 obv. die D; Kleiner 1976, p. 17, no. 105 (A-B 19-20:1)                       |
| r         | Z-2812                          | 14    | ↑             | 1.63 obv. die D; Kleiner 1976, p. 14, no. 65 (H 12:1)                             |

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|   |        |    |   |      |
|---|--------|----|---|------|
| s | EE-37  | 12 | ↑ | 2.42 |
| t | ΣT-198 | 15 | ↑ | 2.47 |

Despite the changing reverse format, this was not a protracted coinage. Specimens were minted from only a few obverse dies and are rare; a piece in Berlin (Sv. 23.46) is the only published one not from the Agora excavations. In first calling attention to this coinage, Kleiner (*MN* 20, pp. 1–5) recognized that it belonged to the later 3rd century and that the dotted border of its later reverses related it to the AE 1 varieties **66** and **68**. In fact, Zeus's thunderbolt below the owl restricts the relationship to the earlier of these AE 1 coinages. Inexplicably, an exceptionally high proportion of the Agora pieces are well enough preserved for illustration. The Middle Stoa construction deposit gives the earliest recorded context (for 67h).

### AE 1

|           |          | Head of Artemis r., with quiver at shoulder; border of dots. | A<br>Θ-E Statue of Athena Polias r., as on <b>66</b> . | Sv. 25.5–10, 104.3, 4  |
|-----------|----------|--|--|--|
| <b>68</b> | 20 coins | 20–22  | Av. 8.59 (13)  |  |
| *a        | Ω-562    | 20   | ↓  | 10.40  |
| *b        | Υ-177    | 20   | ↖  | 7.10   |
| *c        | Z-2403   | 21   | →  | 9.05   |
| *d        | Θ-637    | 22   | ↗  | 7.37   |
| *e        | T-1509   | 20   | →  | 7.68   |
| f         | II-615   | 22   | -  | 8.46   |
|           |          |  |  | counterstamped with a plemochoe on both sides, as Sv. 104.3, 4   |
| g         | B-556    | 22   | -  | 9.61   |
| h         | ΔΔ-63    | 21   | -  | 10.31  |
|           |          |  |  | overstruck, probably on Zeus/Athena Polias ( <b>66</b> )<br>Kleiner 1975, p. 306, pl. 75, no. 89 (H–K 12–14) |
|           |          |  |  | overstruck on Zeus/Athena Polias ( <b>66</b> )<br>(L 19:2, lower cistern fill)                               |

There is an especially good but unpublished example of an overstrike over variety **66** in the Numismatic Collection of Athens (Inv. 1905/6 NB' 3). Some of the Artemis/Athena Polias coins, including Sv. 25.10, can be identified as probable overstrikes by their thin, wide fabric. But the majority of the Agora specimens are too badly preserved to permit any judgment whether they are overstrikes or whether they underwent the Plemochoe/Plemochoe counterstamping, as 68f. 68h has the earliest context, shortly after 200 B.C.

[Head of Zeus or Artemis r.]      Similar.

[**66** or **68**] 2 coins of uncertain Athena Polias variety.

|  |        | Plemochoe in relief. | Plemochoe in incuse circle. | Sv. 104.1, 2 |
|--|--------|----------------------|-----------------------------|--------------|
| [ <b>64</b> , <b>66</b> , or <b>68</b> ] | Γ-1222 | 21                   | -                           | 10.58        |

The plemochoe counterstamping has completely obliterated the original types.

ca. 224/3–198 B.C.

### AE 2

|           |           | Head of Athena r., wearing Attic helmet. | A<br>Θ E Owl stg. three-quarters r., facing, wings lifted; at r., amphora. | Sv. 24.10–17  |
|-----------|-----------|--|--|---|
| <b>69</b> | 113 coins | 18–22                                    | Av. 5.28 (56)  |   |
| *a        | MM-430    | 20                                       | ↓  | 5.54  |
| b         | Θ-296     | 21                                       | ↓  | 4.77  |
| *c        | Z-2711    | 21                                       | ↑  | 5.99  |
| *d        | H'-3648   | 20                                       | ↓  | 5.43  |
| *e        | Δ-416     | 19                                       | ↖  | 5.80  |
|           |           |  |  | overstruck on Antigonos Gonatas ( <b>507</b> )<br>similar; BA of undertype visible on reverse |
|           |           |  |  | overstrike  |
|           |           |  |  | overstrike  |
|           |           |  |  | overstrike  |

|    |        |    |   |      |   |
|----|--------|----|---|------|---|
| *f | ΠΘ-312 | 22 | ↑ | 6.30 | GRC, fig. 13  |
| *g | MM-378 | 20 | ↗ | 5.03 |   |
| *h | Δ-347  | 19 | ↘ | 5.80 |   |
| i  | T-1157 | 18 | ↓ | 3.45 |   |
| j  | K-1294 | 19 | ↑ | 6.23 | Kleiner 1975, p. 310, pl. 75, no. 171 (H-K 12-14)                                 |
| k  | MΣ-261 | 21 | ↑ | 4.90 | overstruck on Antigonos Gonatas; Kleiner 1975, p. 306, pl. 75, no. 86 (H-K 12-14) |

Most and possibly all specimens of this coinage are overstruck on Athena-head/Pan-erecting-trophy AE 2 of Antigonos Gonatas (507). Even when identifiable traces of the undertype are lacking, the coins frequently have the telltale thinness and slightly concave fabric of overstrikes. 69j and k and 70c are three of six pieces of Owl three-quarters r. from the Middle Stoa construction fill of ca. 183 B.C., the earliest dependably dated deposit for this coinage.

|    |         |       |              |      |  |           |
|----|---------|-------|--------------|------|--|-----------|
|    |         |       | Similar.     |      | Similar, but at r., plemochoe.           | Sv. 24.33 |
| 70 | 4 coins | 17-20 | Av. 5.39 (4) |      |  |           |
| *a | Σ-8     | 19    | ↖            | 5.95 |  |           |
| *b | B-511   | 19    | ↗            | 5.39 | double-struck                            |           |
| *c | MΣ-58   | 17    | →            | 5.34 | Kleiner 1975, p. 306, no. 87 (H-K 12-14) |           |
| d  | NN-1259 | 20    | -            | 4.87 |  |           |

|          |          |  |          |  |                                     |  |
|----------|----------|--|----------|--|-------------------------------------|--|
|          |          |  | Similar. |  | Similar, but uncertain vessel at r. |  |
| [69, 70] | 17 coins |  |          |  |                                     |  |
|          |          |  |          |  |                                     |  |

[69, 70] 17 coins of uncertain owl-three-quarters-r. variety.

## AE 4

|    |          |       |   |          |  |              |
|----|----------|-------|---|----------|--|--------------|
|    |          |       | Head of Athena r., wearing Corinthian helmet. |          | A<br>Θ-E Owl stg. r., facing, on rudder.             | Sv. 23.50-52 |
| 71 | 88 coins | 10-13 | Av. 1.94 (32)                                 |          |  |              |
| *a | NN-1658  | 12    | ↓   | 1.94     | Kleiner 1976, p. 6, pl. 3, no. 56                    |              |
| *b | T-51     | 12    | ↑   | 1.62     | Kleiner 1976, p. 6, pl. 3, no. 55; GRC, fig. 13      |              |
| *c | E-1610   | 13    | ↗   | 2.12     |  |              |
| *d | T-89     | 12    | ↑   | 1.44     | Kleiner 1976, p. 6, pl. 3, no. 54                    |              |
| *e | OO-1152  | 12    | ✓   | 2.16     |  |              |
| *f | K-1322   | 10    | ↓   | 1.53     |  |              |
| *g | O-86     | 10    | ↓   | 1.42     |  |              |
| h  | K-1610   | 11    | ↗   | 1.43     | Kleiner 1975, p. 312, pl. 75, no. 199 (H-K 12-14)    |              |
| i  | T-1375   | 11    | ↗   | 1.73     | Kleiner 1975, p. 321, pl. 75, no. 311 (M-N 15:1)     |              |
| j  | ΣA-270   | 11    | ↗   | fragment | Kleiner 1975, p. 316, no. 234 (corrected) (P-R 6-12) |              |

71h is one of two specimens from the Middle Stoa fill. For the position of the variety in the Period II sequence, see p. 52 above (*pace* Kleiner 1975, p. 325; 1976, p. 6).

## AE 2

|    |         |    |   |      |  |              |
|----|---------|----|---|------|--|--------------|
|    |         |    | Head of Demeter r., wearing wheat wreath; border of dots. |      | A-Θ<br>E Plemochoe with wheat ear passed through each handle; at r., Eleusis ring. | Sv. 104.8, 9 |
| 72 | PP'-174 | 22 | -   | 8.27 | overstruck on ?  |              |

|           |          | Similar. |              | Similar, but at r., aplustre.                    | Sv. 104.14–19 |
|-----------|----------|----------|--------------|--|---------------|
| <b>73</b> | 12 coins | 18–23    | Av. 5.36 (8) |  |               |
| *a        | ΣA-103   | 20       | ↘ 5.34       | Kleiner 1975, p. 316, pl. 75, no. 231 (P–R 6–12) |               |
| *b        | Π-667    | 20       | ✓ 5.79       |  |               |
| *c        | Θ-231    | 22       | ↓ 3.80       |  |               |
| *d        | Z-1506   | 23       | ↓ 4.07       |  |               |
| e         | T-1668   | 21       | ↖ 4.55       | Kleiner 1975, p. 321, pl. 75, no. 302 (M–N 15:1) |               |

All or most overstruck on Owl three-quarters r. (**69** or **70**). The helmet of the undertype is especially clear on 73a and b.

|           |         | Similar. |          | Similar, but at r., owl.                                      | Sv. 104.10–13 |
|-----------|---------|----------|----------|---|---------------|
| <b>74</b> | 2 coins |          |          |   |               |
| *a        | NN-1746 | 20       | ↓ 4.97   | overstruck on Owl three-quarters r. ( <b>69</b> , <b>70</b> ) |               |
| *b        | ΔΔ-81   | 20       | ↑ broken | overstruck on ? (M 21:1)                                      |               |

|                |  | Similar. |  | Similar, but symbol at r. illegible. |
|----------------|--|----------|--|--------------------------------------|
| <b>[72–74]</b> | 32 coins of uncertain Demeter/Plemochoe variety. |          |  |                                      |

Eight of these coins come from 2nd-century B.C. deposits: Kleiner 1975, p. 306, nos. 90, 91 (H–K 12–14), p. 321, nos. 303–305, and p. 324, no. 345 (M–N 15:1); and Kleiner 1976, p. 13, nos. 54, 55 (H 12:1). The true sequence of the three issues (Eleusis-ring symbol, aplustre symbol, and owl symbol) is not recoverable.

#### AE 4

|           |          | Plemochoe with wheat ear passed through each handle. |               | ⊖<br>A E Eleusis ring; all in wheat wreath.       | Sv. 104.21–23 |
|-----------|----------|--|---------------|---|---------------|
| <b>75</b> | 72 coins | 10–13  | Av. 1.70 (31) |   |               |
| *a        | ΛΛ-328   | 13   | ↑ 1.66        |   |               |
| *b        | ΣT'-451  | 12   | ↑ 2.00        |   |               |
| *c        | T-1069   | 12   | ↑ 1.65        |   |               |
| *d        | H-2099   | 12   | ↑ 1.89        |   |               |
| *e        | Λ-414    | 12   | ✓ 2.04        | Kleiner 1975, p. 306, pl. 75, no. 93 (H–K 12–14)  |               |
| *f        | I-855    | 12   | ↑ 1.84        |   |               |
| g         | K-1298   | 12   | - 1.35        | Kleiner 1975, p. 310, pl. 75, no. 174 (H–K 12–14) |               |

198 B.C.

#### AE 2

|           |          | Head of Zeus r., bound with fillet. |              | A-Θ<br>E Amphora; at lower l., owl; all in olive wreath.                               | Sv. 25.15–21 |
|-----------|----------|-------------------------------------|--------------|--|--------------|
| <b>76</b> | 16 coins | 19–22                               | Av. 5.49 (7) |  |              |
| *a        | Θ-384    | 20                                  | ↑ 7.58       | overstruck on Demeter/Plemochoe ( <b>72–74</b> )                                       |              |
| *b        | Γ-354    | 20                                  | ↓ 6.85       | overstruck on Antigonos Gonatas ( <b>507</b> )   |              |
| *c        | Γ-670    | 21                                  | ↑ 3.53       | overstruck on ?  |              |
| *d        | ΣA-486   | 20                                  | - 5.65       | overstruck on Demeter/Plemochoe ( <b>72–74</b> )                                       |              |
| *e        | Δ-9      | 20                                  | ↓ broken     | overstruck on Demeter/Plemochoe ( <b>72–74</b> )                                       |              |
| f         | ΠΠ-594   | -                                   | → broken     | overstruck on Owl three-quarters r. ( <b>69</b> , <b>70</b> )                          |              |
| g         | Z-2769   | -                                   | - broken     | overstruck on Demeter/Plemochoe ( <b>72–74</b> ); Kleiner 1976, p. 14, no. 63 (H 12:1) |              |

All other unillustrated specimens are similar overstrikes.

**AE 3**

|           |         |  |              |  |  |
|-----------|---------|--|--------------|--|--|
|           |         | Head of Athena r., wearing Attic helmet with wing. |              | A<br>Θ E Owl stg. l., facing; at l., amphora; all in olive wreath. | Sv. 22.89–92                                     |
| <b>77</b> | 2 coins | 13–14  | Av. 2.75 (2) |  |  |
|           | *a      | OO-1089  | 14 ↑         | 2.39   |  |
|           | *b      | T-1227   | 13 ↑         | 3.06   | Kleiner 1975, p. 321, pl. 75, no. 300 (M–N 15:1) |

For the dating of this rare issue and the foregoing AE 2 variety it accompanies, see p. 51 above.

ca. 196–190 B.C.

**AE 2**

|           |         |   |              |   |                                      |
|-----------|---------|---|--------------|---|--------------------------------------|
|           |         | Head of Athena r., wearing Attic helmet with wing or Corinthian helmet. |              | A-Θ<br>E Zeus, nude, stg. r., holding thunderbolt in lowered r. hand, extending l. arm; at r., owl. | Sv. 81.1–6;<br>Kleiner 1976, pl. 1:1 |
| <b>78</b> | 7 coins | 17–20   | Av. 5.56 (4) |   |                                      |
|           |         | Attic helmet with wing (3)  |              |   |                                      |
|           | *a      | T-1508  | 20 ↑         | 4.92  | overstruck on ?                      |
|           | b       | Ω-359   | 20 ↗         | 5.31  | (N 20:6)                             |
|           |         | Corinthian helmet; obverse border of dots (4)                           |              |   |                                      |
|           | *c      | Z-2781  | 19 ✓         | 6.26  | overstruck on ?                      |

|           |          |   |               |                           |  |
|-----------|----------|---|---------------|---------------------------|--|
|           |          | Head of Athena r., wearing Corinthian helmet. |               | Similar, but at r., prow. | Sv. 81.9–16;<br>Kleiner 1976,<br>pl. 1:2, 3      |
| <b>79</b> | 58 coins | 16–20   | Av. 5.00 (27) |                           |  |
|           | *a       | Γ-1284  | 19 ↓          | 4.79                      | overstruck on ?                                  |
|           | *b       | Θ-240   | 19 ↓          | 4.95                      | Kleiner 1975, p. 306, pl. 75, no. 99 (H–K 12–14) |
|           | *c       | HH-217  | 18 ↑          | 5.23                      |  |
|           | *d       | T-636   | 19 ↓          | 5.08                      |  |
|           | *e       | B'-861  | 20 ↑          | 5.29                      | overstruck on ?                                  |
|           | *f       | Σ-861   | 20 -          | -                         | halved   |
|           | g        | Υ-186   | 17 ↑          | 4.40                      | (K 18:2)   |
|           | h        | X-101   | 20 ↑          | 4.35                      | overstruck on ? (N 18:3)                         |

|           |         |          |              |                                |             |
|-----------|---------|----------|--------------|--------------------------------|-------------|
|           |         | Similar. |              | Similar, but at r., wheat ear. | Sv. 81.7, 8 |
| <b>80</b> | 3 coins | 17–18    | Av. 4.66 (2) |                                |             |
|           | *a      | ΠΙΙ-876  | 18 ↓         | 5.37                           |             |

Similar. Similar, but symbol at r. illegible.

[78–80] 30 coins of uncertain Standing Zeus variety.

|  |   |        |      |      |   |
|--|---|--------|------|------|---|
|  | a | K-1327 | 17 - | 5.10 | Kleiner 1975, p. 310, pl. 75, no. 176 (H–K 12–14) |
|--|---|--------|------|------|---|

## AE 4

|           |           | Head of Athena r., wearing Attic helmet. |               | A-Θ<br>E Owl stg. r., facing, on thunderbolt.    |  | Sv. 23.47–49;<br>Kleiner 1976,<br>pl. 3:52, 53 ( <i>Type 7</i> ) |  |
|-----------|-----------|--|---------------|--|--|--|--|
| <b>81</b> | 134 coins | 10–14                                    | Av. 1.63 (55) |  |  |  |  |
| *a        | NN-922    | 13                                       | ↑ 1.40        | Kleiner 1976, p. 6, pl. 3, no. 52                |  |  |  |
| *b        | BB-475    | 12                                       | ↑ 1.39        | Kleiner 1976, no. 51                             |  |  |  |
| *c        | K-1549    | 14                                       | ↓ 1.90        |  |  |  |  |
| *d        | OO-528    | 11                                       | ↓ 1.42        |  |  |  |  |
| *e        | ΔΔ-39     | 10                                       | ↑ 2.01        | Kleiner 1976, no. 53                             |  |  |  |
| *f        | ΓΓ-8      | 11                                       | ↓ 2.03        |  |  |  |  |
| *g        | ΠΘ-327    | 14                                       | ↓ 1.98        | flan clipped before striking                     |  |  |  |
| h         | K-1466    | 12                                       | ↑ 1.45        | Kleiner 1975, p. 312, pl. 75, no. 198 (H–I 14:1) |  |  |  |

On the absolute chronology of the Standing Zeus AE 2 and the Owl-on-thunderbolt AE 4 struck with it, see pp. 50–51, 57 above. Three Standing Zeus pieces (78b, 79g, and 79h) are the latest coins in cistern fills of just after 200 B.C. Two of these fills (N 20:6 and K 18:2) are so dated by their latest stamped Rhodian amphora handles.

ca. 190–183 B.C.

## AE 2

|           |          | Head of Athena r., wearing Corinthian helmet; border of dots. |               | A<br>Θ<br>E Zeus, nude, striding r., hurling thunderbolt in raised r. hand, extending l. arm; at r., star and eagle. |  | Sv. 81.17, 18;<br>Kleiner 1976,<br>pl. 1:4–5 ( <i>Type 2a</i> ) |  |
|-----------|----------|---|---------------|--|--|---|--|
| <b>82</b> | 41 coins | 17–20   | Av. 6.19 (37) |  |  |   |  |
| *a        | Ξ-803    | 19  | ↑ 6.83        |  |  |   |  |
| *b        | Θ-237    | 18  | ↑ 7.00        |  |  |   |  |
| *c        | NN-1372  | 18  | ↑ 5.97        |  |  |   |  |
| *d        | NN-50    | 19  | ↑ 7.58        |  |  |   |  |
| *e        | KK-67    | 19  | ↑ 8.81        |  |  |   |  |
| f         | ΜΣ-230   | 17  | ↗ 5.79        | Kleiner 1975, p. 306, pl. 76, no. 103 (H–K 12–14)  |  |   |  |
| g         | ΣA-212   | 19  | ↑ 6.33        | Kleiner 1975, p. 317, pl. 76, no. 254 (Square Peristyle floor hoard; see under O–R 7–10)                             |  |   |  |
| h         | ΣA-214   | 19  | ↑ 4.97        | Kleiner 1975, p. 317, pl. 76, no. 256 (same hoard)   |  |   |  |
| i         | T-1195   | 19  | ↑ 4.78        | Kleiner 1975, p. 319, pl. 76, no. 261 (M–N 15:1)   |  |   |  |

|           |          | Similar. |               | Θ<br>A-E Zeus hurling thunderbolt r., at l., wheat ear; at r., eagle. |  | Sv. 81.28, 29;<br>Kleiner 1976,<br>pl. 1:6–8 ( <i>Type 2b</i> ) |  |
|-----------|----------|----------|---------------|---|--|---|--|
| <b>83</b> | 68 coins | 17–21    | Av. 6.10 (37) |   |  |   |  |
| *a        | T-1664   | 18       | ↑ 5.73        |   |  |   |  |
| *b        | ΠΠΠ-888  | 20       | ↑ 6.60        |   |  |   |  |
| *c        | Σ-118    | 20       | ↑ 5.87        |   |  |   |  |
| *d        | P-1203   | 20       | ↑ 5.86        | overstruck on ?   |  |   |  |
| *e        | Ψ-73     | 20       | ↑ 7.92        |   |  |   |  |
| *f        | EA-189   | 19       | ↑ 6.77        |   |  |   |  |
| g         | ΜΣ-316   | 19       | ↑ 6.56        | Kleiner 1975, p. 306, pl. 76, no. 105 (H–K 12–14)                     |  |   |  |

|   |        |      |      |  |
|---|--------|------|------|--|
| h | ΣΑ-209 | 19 ↗ | 6.69 | Kleiner 1975, p. 317, pl. 76, no. 257 (Square Peristyle floor hoard; see under O-R 7-10) |
| i | ΣΑ-211 | 19 ↑ | 5.52 | Kleiner 1975, p. 317, pl. 76, no. 259 (same hoard)                                       |

Similar.  $\Theta^{-A}$   
 $\Theta^{-E}$  Zeus hurling thunderbolt Sv. —; Kleiner  
 r.; at r., cornucopia and eagle. 1976, pl. 1:9-11  
 (Type 2c)

|           |          |       |               |   |
|-----------|----------|-------|---------------|---|
| <b>84</b> | 42 coins | 16-20 | Av. 5.96 (23) |   |
| *a        | ΩΔ-13    | 18 ↑  | 4.57          |   |
| *b        | ΚΤΑ-105  | 18 ↑  | 6.33          |   |
| *c        | Ι-312    | 19 ↗  | 7.59          |   |
| *d        | ΣΑ-65    | 18 ↑  | 5.58          |   |
| *e        | ΛΑ-276   | 18 ↑  | 6.81          |   |
| f         | Θ-148    | 19 ↑  | 6.53          | Kleiner 1975, p. 307, pl. 76, no. 106 (H-K 12-14) |
| g         | ΜΣ-14    | 19 ↑  | 5.76          | Kleiner 1975, p. 307, pl. 76, no. 109 (H-K 12-14) |
| h         | ΣΑ-15    | 18 ↑  | 5.91          | Kleiner 1975, p. 316, pl. 76, no. 241 (P-R 6-12)  |
| i         | T-1645   | 18 ↗  | 7.68          | Kleiner 1975, p. 324, pl. 76, no. 347 (M-N 15:1)  |

The present dating of *ca.* 190-183 B.C. of the Fulminating Zeus issues **82-84** (p. 51 above) replaces Kleiner's broader *ca.* 200/196-180 B.C. (Kleiner 1975, pp. 327-328; 1976, pp. 36, 38). The three are the latest AE 2 varieties in the Middle Stoa construction fill (H-K 12-14) of *ca.* 183 B.C. (Kleiner 1975, pp. 312-313, table I).

**AE 4**

Cicada.  $A^{-\Theta}$   
 $E^{-}$  Amphora with transverse Sv. 107.55-58;  
 palm branch. Kleiner 1976,  
 pl. 3:59-61  
 (Type 9)

|           |           |       |                |   |
|-----------|-----------|-------|----------------|---|
| <b>85</b> | 672 coins | 10-13 | Av. 1.59 (107) |   |
| *a        | NN-1284   | 12 ↓  | 2.14           | star below A at l.                                |
| *b        | Ξ-598     | 13 ↓  | 1.86           |   |
| *c        | Z-2644bis | 13 ↓  | 1.93           | Kleiner 1976, p. 6, pl. 3, no. 60                 |
| *d        | Θ-792bis  | 14 ↓  | 1.98           | Kleiner 1976, no. 61                              |
| *e        | NN-1952   | 13 ↓  | 1.77           |   |
| *f        | T-1760    | 12 ↑  | 1.30           | Kleiner 1975, p. 322, pl. 76, no. 323 (M-N 15:1)  |
| *g        | ΜΣ-131    | 12 ↑  | 1.16           |   |
| h         | NN-1401   | 11 ↗  | 1.70           | Kleiner 1976, p. 6, pl. 3, no. 59                 |
| i         | Θ-714     | 11 ↑  | 2.01           | Kleiner 1975, p. 307, pl. 76, no. 110 (H-K 12-14) |
| j         | ΣΑ-269    | 11 ↗  | broken         | Kleiner 1975, p. 316, pl. 76, no. 247 (P-R 6-12)  |

The star symbol of the heavy (i.e., early) 85a duplicates the emission symbol of the initial Fulminating Zeus AE 2 variety **82** and confirms that the Cicada/Amphora AE 4, the most prolific of all Athenian AE 4 bronze, was struck in tandem with the Fulminating Zeus issues **82-84**, as Kleiner (1975, p. 328; 1976, pp. 34, 38) had independently deduced from the Middle Stoa construction fill. What Kleiner did not recognize is that after a long interruption the Cicada/Amphora AE 4 was revived towards the end of the 2nd century in Period III. The later Cicada/Amphora coins employ a different  $A^{-\Theta}$  form of the ethnic and are generally struck on smaller, lighter flans, with diameters of 9-11 mm. and weights that frequently fall below 1.0 g.<sup>105</sup> Fifty-eight such pieces, either with the later ethnic or with 9 mm. diameters and therefore of

<sup>105</sup> When legible, the ethnics on specimens in Agora deposits down to *ca.* 130 B.C. are regularly  $A^{-\Theta}$  (Deposits H-K 12-14, P-R 6-12, M-N 15:1 [Kleiner 1975, pp. 304-324], H 12:1, and A-B 19-20:1 [Kleiner 1976, pp. 12-19]). But at



unmistakable Period III date, are catalogued below under variety **108**. All other Cicada/Amphora specimens, including more than 300 on which no ethnic is preserved, are counted here, even though perhaps over half of those with illegible ethnics may have actually been struck in Period III. All, or nearly all, the 107 coins selected here for weighing, however, do belong to the early 2nd-century phase of the coinage.

### PERIOD III

ca. 160's–87/6 B.C.

Period III effectively coincides with the prosperous era framed by Athens' acquisition of Delos in 167/6 and her disastrous participation in the rebellion of Mithradates VI against Rome eighty years later. The bronze coinage is very much a continuation of that of Period II but is best treated separately, as the chronology relies on entirely different categories of evidence, and most of the smaller-denomination varieties can no longer be associated with particular issues of the main, AE 2 unit (see Table III below, pp. 324–325).

Two of the later AE 2 issues are absolutely datable: the Fulminating Zeus emission with the symbol of the two pilei of the Dioskouroi (**94**) must be contemporaneous with the two-pilei stephanephoric silver issue of 99/8 B.C., while the concluding Fulminating Zeus issue with the symbol of the Pontic star between crescents (**97**) belongs, with the New Style star-between-crescents silver and gold, to 87/6. In that fateful year, Athens, irrevocably committed to Mithradates' cause, was besieged and taken by Sulla.

Over a dozen hoards of the late 2nd and early 1st centuries B.C. fix the relative chronology of most of the AE 2 issues and some of the smaller varieties. The hoards are staggered in four groups:

1. The Tambouria (Peiraeus) 1938 hoard<sup>106</sup> was buried soon after its last AE 2 issue of Fulminating Zeus with eagle and pileus (**90**), probably early in the last third or last quarter of the 2nd century.

2. The Attica 1949 and the Athens 1955 hoards<sup>107</sup> were both interred shortly after 99/8 B.C., the date of their latest Fulminating Zeus variety, **94** (two pilei). There is a very good chance that the burial of one or both of these hoards was connected with the second revolt of the Laurion slaves, apparently still unsuppressed in 98/7.<sup>108</sup>

least a quarter of the sixty-four Cicada/Amphoras in Deposit B 20:9 of the first decade of the 1st century have the later form of the ethnic, although this is not noted in Kleiner 1976, p. 21, nos. 17–80. That the light Cicada/Amphoras began to circulate after ca. 130 is seen too from the Tambouria hoard of ca. 130 B.C., with four pieces that give an average weight of 1.87 g, and from the 87 B.C. Attica 1951 hoard, which produced nineteen pieces with an average of only 1.15 g (Kleiner 1976, A46–E20 [ethnics not analyzed], p. 27). All eight of the Cicada/Amphora pieces in the small Delos hoard *IGCH* 324 published by E. Foster and T. Hackens, "Decco Metal Detector Survey on Delos," *Archaeometry* 11, 1969, p. 170, pl. III, have the Period III arrangement of the ethnic and, except for one coin at 1.40 g, weigh between 0.70 and 0.85 g. The six remaining bronzes (av. 0.55 g) in this small deposit are of the late Period III AE 5 variety **110**: Apollo/Owl on Amphora.

<sup>106</sup> *IGCH* 249. Kleiner 1976, pp. 22–27, 32: Hoard A.

<sup>107</sup> *IGCH* 269 and 276. Kleiner 1976, pp. 22–27, 32: Hoards B and C.

<sup>108</sup> Association with the slave uprising was suggested for the first hoard by Price (1964, p. 35) and recognized as possible by Kleiner (1976, p. 38, note 63), who pointed out, however, that the provenience of the hoard is unknown. In fact we do not have a sure location for the discovery of either hoard. The revolt customarily has been placed in 104–102 B.C., but Stephen Tracy ("Athens in 100 B.C.," *Harvard Studies in Classical Philology* 83, 1979 [pp. 213–235], pp. 232–234) plausibly argues for 100–98. In the procession to Delphi for the festival of the Pythais in 98/7, the Athenian cavalry was represented by a token five horsemen (as compared with the 122 cavalrymen in the preceding Pythais of 106/5). Tracy

3. The earlier phase of Sulla's operations in Attica is responsible for eight hoards that end with the antepenultimate and penultimate Fulminating Zeus emissions, those with the symbols of mystic staff and thyrsos (**95** and **96**).<sup>109</sup> Two of the hoards, Porto Raphti 1967<sup>110</sup> and Keratea 1954, come from Eastern Attica and were presumably secreted when Sulla's forces arrived during the summer of 87. One assumes that all or most of the other hoards come likewise from the Attic countryside. None have a precise provenience, except perhaps for Plaka *ca.* 1942, but it may have been purchased rather than found in the Plaka district of Athens.

4. The final three hoards, all concluding with the Mithradatic star-between-crescents Fulminating Zeus issue (**97**), belong to the Sullan sack in the spring of 86. Two of these<sup>111</sup> were found in the Peiraeus, which Sulla captured and put to the torch after the fall of Athens in early March. Possible indications of burning on the coins of the third hoard<sup>112</sup> suggest that it too is from the Peiraeus rather than from Athens, which was spared from fire.<sup>113</sup>

Several Agora deposits, dated primarily by their stamped Rhodian and Knidian amphora handles, supplement the hoards. The most useful are M–N 15:1, consisting of three fills connected with the construction of the South Stoa II around 140 B.C., and the later drain deposits H 12:1 and A–B 19–20:1. The coins from nearly all these hoard and deposit contexts are tabulated and analyzed in Kleiner's fundamental *Hesperia* article of 1976, "The Agora Excavations and Athenian Bronze Coinage, 200–86 B.C." Even after a number of his observations are emended, the overall chronology of the coinage in this period remains essentially as Kleiner established.

The AE 2 series begins with two issues of exceptional design: Demeter/Piglet (**86**), presumably an Eleusinian festival issue, and the unusually light and handsome Apollo/Owl with lyre (**87**), which was accompanied by the equally fine Apollo/Amphora AE 4 (**101**) and, probably, Apollo/Lyre AE 3 (Sv. 106.8–11, unrepresented in the Agora). Kleiner assigned both AE 2 varieties to the 140's on the grounds that neither was represented in the material connected with the construction of the Stoa of Attalos, *ca.* 150 B.C.<sup>114</sup> But this negative evidence is not decisive. No example of the Demeter or Apollo AE 2 appeared in the South Stoa II construction deposits of *ca.* 140 B.C. either, although both issues were surely in circulation by that time and in fact could very well go back to the 160's. The acquisition of Delos provides a *terminus post quem* of 166 B.C. for the Apollonian striking; and it is doubtful that

explains that the main body of the cavalry was probably needed at home to protect the countryside against marauding slaves. The slave revolt was serious and of some duration; Poseidonios (*apud* Athenaios 4.272 E–F) recounts that the slaves seized the fortress at Sounion and ravaged Attica "for a long time."

<sup>109</sup> Keratea 1954 (*IGCH* 277; Kleiner 1976, pp. 22–28, 32: Hoard D) and the following, all of which are reviewed and summarized in Kleiner 1976, pp. 30–32: Attica 1906 (*IGCH* 280), Attica 1927 (*IGCH* 281), Pnyx (not the original place of burial) 1937 (*IGCH* 274), Attica 1937 (*IGCH* 282), Plaka *ca.* 1942 (*IGCH* 275), Porto Raphti 1967 (*IGCH* 279), and Athens 1969 (M. Caramessini-Oeconomides and F. S. Kleiner, "A New Hoard of Athenian Bronze Coins," *AAA* 7, 1974, pp. 149–156 = *CH* 1, 1975, no. 95). The Attica *ca.* 1951 hoard (*IGCH* 283), published in Kleiner 1976, pp. 23–27 as Hoard E, consists only of smaller denominations and may be pre-Sullan, although not any earlier than the last quarter of the 2nd century. Another useful tabulation and discussion of several of these hoards will be found in Price 1964, pp. 27–30.

<sup>110</sup> The penultimate Fulminating Zeus variety with thyrsos symbol is not present in the Porto Raphti find, but the 15-coin total is so small that there is no reason to doubt that the hoard belongs with the others of 87 B.C.

<sup>111</sup> Peiraeus 1926 (*IGCH* 316; Kleiner 1973; Kleiner 1976, pp. 31–32) and Peiraeus 1973 (Oeconomides–Caramessini 1976, pp. 220–223 = *CH* 3, 1977, no. 73). The coins of the latter were excavated from the floor of a large Hellenistic building in a layer of burning and debris.

<sup>112</sup> Walker 1978, pp. 44–45, the Cigar Box Hoard (= *CH* 3, 1977, no. 75): "The coins . . . seem to have been burnt and are quite similar to the coins in the 1973 hoard from the Piraeus."

<sup>113</sup> Appian, *Mithradates* 41; Plutarch, *Sulla* 13.

<sup>114</sup> Kleiner 1976, pp. 36–38. See Deposit P–R 6–12 (p. 316 below).

Demeter/Piglet could be appreciably earlier, as the seven specimens in the great Peiraeus 1926 hoard appeared less worn (w4–6) than the ten specimens of Apollo/Owl with lyre (all w6).<sup>115</sup>

Around the middle of the century there is a return to AE 2 issues signed with emission symbols and to the Period II pairing of Athena and Zeus, at first in two issues (**88** and **89**) with the traditional representational roles of the two gods reversed: obverses bear the head of Zeus, reverses an archaistic statue of Athena hurling the thunderbolt. The Athena is the same Macedonian Athena Alkidamos that Antigonos Gonatas and Philip V had placed on the reverses of their silver coins.<sup>116</sup> Her depiction on these Athenian reverses ought to be some kind of reference to the defeat and dissolution of the kingdom of Macedon in 168 at the conclusion of the Third Macedonian War or perhaps the defeat of Andriskos and creation of the Roman province of Macedonia in 148–146. After *ca.* 140 the familiar Athena in Corinthian helmet/Fulminating Zeus format was revived and persisted through the long series of eight AE 2 emissions (**90–97**) that culminated in the Mithradatic star-between-crescents striking of 87/6.

Below the AE 2 unit, which we take to be the hemiobol (see p. 38 above), were minted the AE 3 dichalkon/quarter-obol, now struck in the prolific variety **99**, Two owls on thunderbolt, on a scale unequalled since Period I; the basic AE 4 chalkous (**101–109**); and, making its first and only appearance at Athens in Period III, the small AE 5 module of coins that weigh well under a gram (**110–114**). This last fraction should represent the half-chalkous or sixteenth of an obol (p. 38 above). Denominationally, only variety **100**, Cicada/Owl on thunderbolt, presents a problem. According to Kleiner, these coins, which were minted with AE 3 diameters but with generally heavier weights than other Period III AE 3 pieces (cf. Table III, pp. 324–325 below), represent a unit in between the Two-owls-on-thunderbolt AE 3 (**99**) and the large AE 2 module.<sup>117</sup> If so, the Cicada/Owl pieces would probably have to be identified as trichalkia. It is arguable, however, that the coins are late AE 3 dichalkia of restored weight.

The notable iconographical variety of the Period III AE 4 and 5 coinage is due in the first instance to the addition of Delian Apollo (and Artemis) to the chief national cults of Athens. From the middle of the 2nd to the middle of the 1st century B.C., Apollo dominates the obverses of the smaller denominations, and his attributes of lyre, tripod, and quiver expand the repertory of available reverse types. Variety results, too, from the frequency of type changes in these denominations and the convention, begun in Period II, of honoring a pair of deities on a single coin. Thus on various Period III fractions, a head of Apollo is paired with a reverse owl (**110**), Panathenaic amphora (**101, 105**), and Eleusinian plemochoe (**103**), as well as with his own attributes (**111**: lyre; **112**: tripod). Zeus is paired with a plemochoe (**102**), and so forth. The only types that depart from these now routine gods and symbols are the heads, evidently, of Kore in variety **106** and of Nike in variety **107**.

Svoronos attributed a majority of the Period III and IV AE 3–5 varieties to the Athenian cleruchs on Delos, since many of these smaller bronzes were recovered in the French excavations on the island in the early 1900's (see Table III, pp. 324–325 below) and as often as not had types that

<sup>115</sup> Kleiner 1973, p. 171.

<sup>116</sup> See note 83 above, p. 53. For the Philip V coins, Brett 1950, pl. 12:17; Boehringer, p. 104, pl. 7:6–9.

<sup>117</sup> Kleiner 1973, pp. 180–181; 1976, pp. 9–10, 34–35. Kleiner's modular nomenclature compared to that used in the present work is

Kleiner AE 1 = here AE 2

Kleiner AE 2 = here AE 3 Cicada/Owl on thunderbolt (**100**)

Kleiner AE 3 = here other AE 3 and all AE 4 varieties

Kleiner AE 4 = here AE 5.

he considered more “Delian” than Attic.<sup>118</sup> But the Athenian proveniences that emerged from the Agora excavations have discredited such attribution,<sup>119</sup> at least for all but a few exceptional issues. One of the exceptions is the Artemis/Plemochoe AE 4 (**104**), which, although probably minted at Athens, seems to have been consigned for circulation on Delos.<sup>120</sup> For genuine Athenian cleruchy emissions, however, we must turn to the AE 2 and AE 3 coinage struck on Delos by the Roman legate Gaius Valerius Triarius in 69 B.C. (see under **830**) and to the bronzes struck by or for the Athenian cleruchs on Salamis (**640–642**) and the northern Aegean islands of Lemnos, Imbros, and Skyros (**159–161, 454–456**).

The concluding star-between-crescents Fulminating Zeus AE 2 of the First Mithradatic War (**97**) is historically the most intriguing emission of Period III. The bulk of the issue must have been minted early in the archon year 87/6, before the Roman siege began in earnest and Sulla effectively cut Athens and the Peiraeus off from one another.<sup>121</sup> The coins circulated in the Peiraeus as well as in Athens, and there is no reason to think that a subsidiary mint was set up in the Peiraeus once the two cities were isolated. As is clear from the 201 Agora specimens and the correspondingly large numbers from the hoards of 86 B.C.,<sup>122</sup> the issue was minted in profusion. Its hurried production is evident from the many examples that were carelessly struck or seemingly struck from worn dies.<sup>123</sup> Or were the latter really stamped with insufficient force to drive the metal into the deepest recesses of the dies? Such weak striking is probably responsible in part for the numerous star-between-crescents pieces from the hoards of 86 B.C. that look “worn”, even though they were removed from circulation

<sup>118</sup> Sv., pls. 106, 107; and, earlier, «Νομίσματα των εν Δήλῳ Αθηναίων κληρούχων», *JIAN* 3, 1900, pp. 50–54; cf. *idem* 1907, p. 194; and *idem* 1911, pp. 58, 76, 78, 83; whence Roussel, pp. 47–48. The attribution of coins to the Athenians on Delos was originally proposed by U. Koehler, “Die Münze der Kleruchen auf Delos,” *AM* 6, 1881, pp. 238–243.

<sup>119</sup> *Délos XXVII*, p. 390, note 1. Kleiner 1976, pp. 6–7. M. Thompson, “Some Athenian ‘Cleruchy’ Money,” *Hesperia* 10, 1941, pp. 199–236, corrected Svoronos’ more fanciful attributions of Athenian bronze to cleruchs on Skiathos, Peparethos, etc. (Sv., pl. 25).

<sup>120</sup> There are five AE 5 varieties attested from Delos (*Délos XXVII*, table, p. 409) but not from the Agora: (1) Sv. 106.38–41—Apollo/Quiver (25 from Delos); (2) Sv. 106.45, 46—Plemochoe/Quiver (4 from Delos); (3) Sv. 106.82, 83—Artemis/Plemochoe (3 from Delos); (4) Sv. 107.24, 25—Apollo/Wheat ear (1 from Delos); and (5) *Délos XXVII*, F58, 59—Athena/Lyre (2 from Delos).

The first (to judge from the quantity on Delos) and third (to judge from the similarity to **104**) may be further exceptional issues consigned to Delos, but the find evidence from the two excavations is too insubstantial for a final decision. Compared with the Delos excavations (see Table III), the Agora has produced relatively few identifiable AE 5 pieces overall, perhaps because of less favorable soil conditions or the continuous occupation of the site rather than because of any actual pattern of AE 5 circulation. It is interesting, however, that finds of the larger AE 2 and 3 coins on Delos are minimal, suggesting that these larger-module bronzes did not comprise an important part of the currency of Athenian Delos. For all the silver hoards that were buried on Delos at the time of the Mithradatic uprising in 88 B.C. (T. Hackens, “Trésor hellénistique trouvé à Délos en 1964,” *BCH* 89, 1965 [pp. 503–534], pp. 515–516), there is not a single hoard of contemporary AE 2 and 3 bronze to match the several from 87/6 B.C. Attica.

Three Athenian varieties in Svoronos’ Delos plates are unrepresented both among the Agora and the Delos excavation finds: Sv. 106.8–11 (Apollo/Lyre AE 3), 106.31, 32 (Athena/Lyre AE 3), and 107.46–49 (= *BMCAttica*, p. 89, no. 632, Kore or Apollo/Owl-with-palm-branch-on-thunderbolt AE 1, of Period IV fabric).

<sup>121</sup> See Appian, *Mithradates* 30–38 and Plutarch, *Sulla* 13 for this and other details of the siege. The star-between-crescents silver (*New Style*, nos. 1143–1146) was struck in months 1 (June–July), 2, and 6 (November–December) of 87/6, i.e., both near the beginning of the siege and when it was fairly well advanced.

<sup>122</sup> 235 pieces (or one-third of the Fulminating Zeus coins) in the Peiraeus 1926 hoard; 152 pieces (or 95 percent of Fulminating Zeus coins) in the Peiraeus 1973 hoard. See note 111 above, p. 67.

<sup>123</sup> Kleiner 1973, p. 180, note 26. See also the double-struck 97e below, and Kleiner 1976, pl. 2:33, from the Peiraeus 1926 hoard.

less than a year after minting.<sup>124</sup> Their softer, leaded alloy may also account for some actual wear from brief circulation.<sup>125</sup> Unlike earlier Fulminating Zeus bronzes, whose alloy contained about 1 percent or less of lead, the star-between-crescents coins were minted from a heavily leaded bronze with a lead content of 12–13 percent and thus are about 1–1.5 grams or 15–20 percent heavier than coins of the earlier issues (see Table III, pp. 324–325 below). There seems to have been no shortage of available bronze; otherwise, the amount of this metal would have been reduced in each batch of alloy as the extra lead was added. But, by weight, the actual bronze content was kept as before, apparently so that no one could accuse the coins of being debased.

It has been suggested that the purpose of the added lead and weight was to raise the value of the coins in response to the inflationary pressures of the Roman blockade.<sup>126</sup> But this is unlikely if the coins were mostly struck before the siege had become critical. Moreover, such a putative revaluation without an accompanying change of type or diameter to reflect it would have unfairly discriminated against the earlier, lighter Fulminating Zeus bronzes already in circulation. A more plausible explanation is that the leading was intended to make the bronze softer so that the coins could be stamped out more quickly, that is, with fewer blows of the hammer, and to prolong the lives of the dies.<sup>127</sup> In addition, the extra weight would have encouraged acceptance of the coins, which was a matter of some urgency in view of their politically charged Pontic symbol and their importance in financing the resistance against Sulla.<sup>128</sup>

The relatively good condition of most of the star-between-crescents specimens found in the Agora is another idiosyncrasy. As a group these are the least-worn Hellenistic Athenian bronzes from the excavations (the several examples selected for illustration on Plate 9 are in this regard fairly typical). Very few could have circulated after 86. It appears that in making terms with Sulla, the Athenians placed the names of Mithradates and his Athenian agent, the tyrant Aristion, under a *damnatio memoriae*.<sup>129</sup> To judge from the paucity of extant specimens, the star-between-crescents silver signed by King Mithradates and Aristion was probably recalled.<sup>130</sup> One assumes that the associated bronze coins had to be turned in as well, probably to be exchanged for newly minted bronze of different design (p. 82 below).

But whether or not the Mithradatic bronze could have been exchanged during a limited period, it was evidently demonitized by means of a statute forbidding sellers of goods and services from accepting it. 97h and possibly 153e (undertype), for example, were cut with an X to void them as legal tender, and the numerous, unworn specimens from the Agora had surely been thrown away as so much trash. Some of the coins were eventually picked up and reintroduced into circulation but not until later in the century or in the Imperial period, when the intense emotional climate of the First Mithradatic War had long subsided. On the other hand, it is clear that Fulminating Zeus coins from the pre-Mithradatic issues continued to circulate without interruption. A number, like 94f and possibly 95a, were countermarked with a cicada stamp, clearly after Sulla's capture of Athens, inasmuch as such countermarked coins do not appear in

<sup>124</sup> On the worn appearance of many specimens in the Peiraeus 1926 hoard, Kleiner 1973, p. 180.

<sup>125</sup> So Oeconomides-Caramessini 1976, p. 223; Walker 1978, p. 44.

<sup>126</sup> Kleiner 1973, pp. 181–182.

<sup>127</sup> For the technical advantages of striking from a leaded alloy, see Caley, pp. 138–139.

<sup>128</sup> Price (1964, p. 35) emphasizes the value of these bronze coins as a propaganda medium.

<sup>129</sup> Habicht 1976, pp. 127–135, accepted in principle by Ernst Badian (“Rome, Athens, and Mithradates,” *AJAH* 1, 1976 [pp. 105–128], p. 125, note 41).

<sup>130</sup> Mattingly 1979, p. 164; Mørkholm 1984, p. 33.

the Sullan hoards.<sup>131</sup> Some AE 2 pieces dating before 86 B.C. were overstruck in the second half of the 1st century B.C. (see 143f, with 137e and 138h), while others still circulating in the late 1st century B.C. or in the 1st century after Christ were occasionally chopped in half to make up for a scarcity of half-unit coins (see 79f, 89d, 94g, [82–84, 90–94]a, b and pp. 92–93 below).

CATALOGUE

Die alignments in Period III (and IV) are fixed at 12 o'clock and are not recorded. Occasional deviations are aligned just off the vertical at 11 or 1 o'clock.

ca. 160's–150's B.C.

AE 2

|           |          |   |              |                           |                                      |  |
|-----------|----------|---|--------------|---------------------------|--------------------------------------|--|
|           |          | Head of Demeter r., wearing wheat wreath. |              | AΘE above. Piglet stg. r. |                                      | Sv. 103.50–56; Kleiner 1976, pl. 2:40–42 ( <i>Type 4</i> ) |
| <b>86</b> | 18 coins | 17–19                                     | Av. 6.15 (5) |                           |                                      |  |
| *a        | ΣA-173   | 19  | 5.27         |                           |                                      |  |
| *b        | Φ-132    | 18  | 5.48         |                           | Kleiner 1976, p. 5, pl. 2, no. 40    |  |
| *c        | K-39     | 19  | 6.41         |                           |                                      |  |
| *d        | K-981    | 18  | 6.15         |                           |                                      |  |
| e         | Z-2738   | 17  | blistered    |                           | Kleiner 1976, p. 14, no. 84 (H 21:1) |  |

|           |           |                          |               |                                    |                                   |  |
|-----------|-----------|--------------------------|---------------|------------------------------------|-----------------------------------|--|
|           |           | Head of Apollo r., laur. |               | A-E<br>Θ Owl stg. r.; at r., lyre. |                                   | Sv. 106.1–7; Kleiner 1976, pl. 2:43–45 ( <i>Type 5</i> ) |
| <b>87</b> | 24 coins  | 17–19                    | Av. 4.54 (11) |                                    |                                   |  |
| *a        | AA-845bis | 18                       | 4.53          |                                    | Kleiner 1976, p. 5, pl. 2, no. 43 |  |
| *b        | N-583     | 18                       | 4.41          |                                    |                                   |  |
| *c        | Ω-157     | 19                       | 5.07          |                                    |                                   |  |
| *d        | BB-1280   | 18                       | 4.83          |                                    |                                   |  |

ca. 140's B.C.<sup>132</sup>

|           |          |   |              |   |  |   |
|-----------|----------|---|--------------|---|--|---|
|           |          | Head of Zeus r., bound with taenia; border of dots. |              | A-E<br>Θ Archaistic Athena striding r., hurling thunderbolt in raised r. hand, holding shield on extended l. arm; at l., helmet; at r., horse's head. |  | Sv. 22.53, 54; Kleiner 1976, 2.38, 39 ( <i>Type 3</i> ) |
| <b>88</b> | 10 coins | 17–21   | Av. 6.53 (6) |   |  |   |
| *a        | T-661    | 21  | 7.75         |   |  |   |

<sup>131</sup> On the cicada countermark, attested on Fulminating Zeus coins of the two-pilei, mystic-staff, and thyrsos issues (94–96), see the fifteen coins collected and discussed in Kleiner 1973, pp. 182–183, and Kleiner 1976, p. 10. The countermark is not found on star-between-crescents pieces.

<sup>132</sup> Kleiner 1976, p. 38, table IV.

|    |        |    |      |  |
|----|--------|----|------|--|
| *b | Ξ-278  | 19 | 7.25 |  |
| *c | T-1194 | 19 | 7.58 | Kleiner 1975, p. 319, pl. 76, no. 266 (M–N 15:1) |

Similar. A-Θ  
Similar, except Ε and at l., Sv. 22.55; Kleiner  
wheat ear; at r., snake. 1976, pl. 2:34–37  
(*Type 3*)

|           |          |       |              |        |
|-----------|----------|-------|--------------|--------|
| <b>89</b> | 23 coins | 17–20 | Av. 5.36 (5) |        |
| *a        | Θ-174    | 17    | 4.66         |        |
| *b        | Λ-94     | 20    | 6.96         |        |
| *c        | Π-289    | 17    | 3.71         |        |
| d         | ΠΠ-650   | 19    | -            | halved |

Similar. Similar, except details illegible.

[88, 89] 68 coins of uncertain Zeus/Fulminating Athena variety.

|   |        |  |  |  |
|---|--------|--|--|--|
| a | K-1458 | Kleiner 1975, p. 312, no. 200 (H–I 14:1) |  |  |
| b | Σ-3535 | obv. cmk.: star in incuse circle         |  |  |

The above arrangement of the two Zeus/Fulminating Athena issues is based on weights. The discovery of 88c in the South Stoa II construction fill places it before *ca.* 140 B.C. [88, 89]a comes also from a deposit dated *ca.* 140 B.C.

The star-in-circle countermark of [88, 89]b appears on Sv. 22.55 and seven out of twelve Fulminating Athena pieces in the Attica 1906 hoard (Price 1964, pp. 28–29; Kleiner 1976, pp. 10, 20). Occurring on no other Athenian variety, the countermark was added before the change back to the Fulminating Zeus types in variety 90, but its purpose is unclear.

*ca.* 130's B.C.<sup>133</sup>

|   |   |  |  |
|---|---|--|--|
| Head of Athena r., wearing<br>Corinthian helmet; border of<br>dots. | Θ | A-E Zeus, nude, striding r.,<br>hurling thunderbolt; at l., pileus;<br>at r., eagle. | Sv. 81.30, 31;<br>Kleiner 1976,<br>pl. 1:12, 13 ( <i>Type 2d</i> ) |
|---|---|--|--|

|           |         |       |              |  |
|-----------|---------|-------|--------------|--|
| <b>90</b> | 4 coins | 17–18 | Av. 5.13 (4) |  |
| *a        | B'-1009 | 18    | 6.10         |  |
| *b        | NN-1304 | 18    | 5.03         |  |

*ca.* 130–100 B.C.<sup>134</sup>

|          |     |  |  |
|----------|-----|--|--|
| Similar. | A-E | Similar, except Θ and at l.,<br>plemochoe; at r., cornucopia<br>and eagle. | Sv. 81.19, 22–24;<br>Kleiner 1976,<br>pl. 1:14–17 ( <i>Type 2e</i> ) |
|----------|-----|--|--|

|           |          |       |               |                                   |
|-----------|----------|-------|---------------|-----------------------------------|
| <b>91</b> | 25 coins | 16–19 | Av. 5.12 (22) |                                   |
| *a        | ΣT-143   | 18    | 5.70          |                                   |
| *b        | ΠΘ-149   | 18    | 5.09          |                                   |
| *c        | Ω-257    | 17    | 5.80          |                                   |
| *d        | BB-285   | 18    | 5.39          |                                   |
| e         | EE-40    | 17    | 5.84          | Kleiner 1976, p. 4, pl. 1, no. 16 |

<sup>133</sup> Kleiner 1976, pp. 33, 37–38.

<sup>134</sup> *Ibid.*

|          |   |  |
|----------|---|--|
| Similar. | Similar, except at l., amphora;<br>at r., cornucopia and eagle. | Sv. 81.20, 21;<br>Kleiner 1976, p. 4<br>( <i>Type 2f</i> ) |
|----------|---|--|

**\*92**    Δ-287    18    3.72

Closely related to **91**, variety **92** was the first Fulminating Zeus issue struck after the burial of the Tambouria 1938 hoard (Kleiner 1976, pp. 22, 25, 32–33). The issue was slight, as meager representation in the Sullan hoards confirms (Kleiner 1976, p. 25).

|          |   |
|----------|---|
| Similar. | Similar, except uncertain vessel<br>at l. |
|----------|---|

[**91**, **92**] 11 coins of uncertain Fulminating Zeus with cornucopia-and-vessel variety.

|          |  |  |
|----------|--|--|
| Similar. | Similar, except A-E and at l.,<br>amphora; at r., eagle. | Sv. 81.25–27;<br>Kleiner 1976,<br>pl. 1:18-20 ( <i>Type 2g</i> ) |
|----------|--|--|

**93**    18 coins    17–19    Av. 5.20 (13)

**\*a**    ΩΔ-59    18    5.13    Kleiner 1976, p. 4, pl. 1, no. 18

**\*b**    HH-60    18    5.37

**\*c**    ΠΘ-30    17    5.68

99/8 B.C.

|          |   |  |
|----------|---|--|
| Similar. | Similar, except A-ΘE and<br>at l. and r., two pilei of the<br>Dioskouroi. | Sv. 81.32–39;<br>Kleiner 1976,<br>pl. 1:21–23 ( <i>Type 2h</i> ) |
|----------|---|--|

**94**    69 coins    16–19    Av. 5.55 (26)

**\*a**    Γ-242    16    4.92

**\*b**    ΠΘ-314    17    6.08

**\*c**    Γ-522    16    5.48

**\*d**    K-1264    19    5.40

**\*e**    ΣΤ'-699    17    5.32

**\*f**    T-167    17    5.20    obv. cmk.: cicada in incuse rectangle

**g**    ΣΤ-163    20    -    halved

The date of the issue (the next fixed point in the AE 2 chronology after the Agora deposits dated *ca.* 140 B.C. for varieties **88** and **89**) is that of the Demetrios-Agathippos New Style silver, which also employs the two caps of the Dioskouroi for its issue symbol.<sup>135</sup> Since the place of the two-pilei bronzes in the Sullan hoards suggests that the issue fell within a decade or so of 100 B.C., the exceptional association of the bronze with the silver follows naturally (Price 1964, p. 35; Kleiner 1976, pp. 37–38). In Period III the only other instance of a shared symbol is in the star-between-crescents gold, silver, and bronze of 87/6. But the design of the two-pilei bronze is itself exceptional: to accommodate both caps on the reverse, the designer dispensed with the eagle that had regularly stood before Zeus and adopted a linear arrangement of the ethnic, the canonical A-ΘE of the New Style silver. It is hard to see why the traditional Fulminating Zeus reverse would have been so altered, unless the intent was to assimilate the bronze to the silver. Another feature common to the issues in both metals is their remarkable volume. As Kleiner notes from the forty-seven obverse dies of the silver and the number of bronze pieces in hoards of the early 1st century B.C. (Kleiner 1976, p. 33, note 45; p. 37, note 60), the two-pilei emissions were manufactured in greater quantity than any other New Style silver or (excepting the star between crescents) Fulminating Zeus bronze series.

<sup>135</sup> *New Style*, nos. 879–928, as dated in Boehringer, p. 202; Mattingly 1979, p. 162; and Mørkholm 1984, p. 32.



mid-90's–early 80's B.C.

|           |          |          |              |                                  |                     |  |
|-----------|----------|----------|--------------|----------------------------------|---------------------|--|
|           |          | Similar. |              | Similar, except<br>mystic staff. | A-Θ<br>E and at l., | Sv. 81.49–52;<br>Kleiner 1976,<br>pl. 2:24–26 ( <i>Type 2i</i> ) |
| <b>95</b> | 10 coins | 16–18    | Av. 5.80 (8) |                                  |                     |  |
| *a        | I-846    | 17       | 6.76         | obv. cmk.: cicada(?)             |                     |  |
| *b        | NN-322   | 17       | 3.95         |                                  |                     |  |
| *c        | MM-485   | 17       | 6.04         |                                  |                     |  |
|           |          | Similar. |              | Similar, except at l.,           | thyrsos.            | Sv. 81.40–44;<br>Kleiner 1976,<br>pl. 2:27–29 ( <i>Type 2j</i> ) |
| <b>96</b> | 9 coins  | 16–20    | Av. 6.18 (6) |                                  |                     |  |
| *a        | ΠΘ-33    | 20       | 6.71         |                                  |                     |  |
| *b        | P-7      | 19       | 7.36         |                                  |                     |  |

For the hoards that fix the position of varieties **95** and **96**, see p. 67 above.

87/6 B.C.

|           |           |          |               |  |                     |  |
|-----------|-----------|----------|---------------|--|---------------------|--|
|           |           | Similar. |               | Similar, except<br>star between crescents. | A-E<br>Θ and at r., | Sv. 81.45–48;<br>Kleiner 1976,<br>pl. 2:30–33 ( <i>Type 2k</i> ) |
| <b>97</b> | 201 coins | 17–21    | Av. 7.27 (62) |  |                     |  |
| *a        | ΓΓ-151    | 18       | 6.24          | Kleiner 1976, p. 4, pl. 2, no. 30          |                     |  |
| *b        | M-107     | 19       | 7.16          | GRC, fig. 14                               |                     |  |
| *c        | X-42      | 18       | 8.55          |  |                     |  |
| *d        | E-2450    | 18       | 7.33          |  |                     |  |
| *e        | H-17      | 18       | 9.31          | double-struck                              |                     |  |
| *f        | K-1317    | 18       | 7.95          |  |                     |  |
| *g        | AA-191    | 17       | 7.49          |  |                     |  |
| *h        | T-420     | 17       | 8.46          | X chisel marked on obv.                    |                     |  |
| i         | NN-20     | 19       | 8.22          | Kleiner 1976, p. 4, pl. 2, no. 32          |                     |  |
| j         | PP'-1006  | 20       | broken        | (U 13:2a) Plate 34:3                       |                     |  |

Although this is the bronze counterpart of the 87/6 B.C. silver (*New Style*, nos. 1143–1146) and gold (Sv. 71.1–4) issues signed by King Mithradates and Aristion, its date is independently confirmed by the contextual evidence of the Sullan bronze hoards and by the circumstances that the earliest Agora deposits in which specimens appear contained debris from the Sullan destruction of 86 (Price 1964, pp. 32–34). Since the star-between-crescents bronzes became worthless after Sulla's conquest and were discarded, it is not surprising that a remarkable total of thirteen was found in the cistern Deposit N 20:4 of the mid- to late 80's. For a possible specimen that may have been demonitized like 97h but with an XI on *both* sides, see 153e (overstruck ca. 20 B.C.).

#### UNCLASSIFIED

[82–84, 90–97] 420 coins of uncertain Fulminating Zeus variety. Of these, 3 were halved, most likely in the 1st century after Christ (pp. 92–93 below).

|    |          |    |   |                       |
|----|----------|----|---|-----------------------|
| *a | NN-957   | 17 | - | halved                |
| *b | K-1622   | 18 | - | halved (as also Λ-20) |
| c  | PP'-1004 | 17 | - | (U 13:2a) Plate 34:1  |
| d  | PP'-1005 | 17 | - | (U 13:2a) Plate 34:2  |

## AE 3

ca. 130's B.C.<sup>136</sup>

|           |          |   |               |  |   |
|-----------|----------|---|---------------|--|---|
|           |          | Head of Athena r., wearing<br>Corinthian helmet; border<br>of dots. |               | A<br>Θ-E Amphora with transverse<br>palm branch. | Sv. 107.75–79;<br>Kleiner 1976,<br>pl. 4:84–86 ( <i>Type 15</i> ) |
| <b>98</b> | 28 coins | 12–15   | Av. 2.61 (12) |  |   |
|           | *a       | ΒΓ-465  | 13            | 2.58   | flan cut down before striking                                     |
|           | *b       | Ω-357   | 14            | 3.22   | same  |
|           | *c       | Γ-1611a   | 12            | 2.65   |   |

Coins of this variety are occasionally present in hoards of the early 1st century B.C. (Kleiner 1976, p. 32, table III) but in much smaller numbers and in a more worn condition than pieces from the clearly later varieties **99** and **100**.

ca. 130–90 B.C.<sup>137</sup>

|           |           |   |                |  |  |
|-----------|-----------|---|----------------|--|--|
|           |           | Head of Athena r., wearing<br>Attic helmet; border of dots. |                | AΘE below. Two owls stg. r.<br>and l., facing, on thunderbolt;<br>all within olive wreath. | Sv. 24.60–68;<br>Kleiner 1976,<br>pl. 4:87–92 ( <i>Type 16</i> ) |
| <b>99</b> | 635 coins | 12–18   | Av. 2.84 (147) |  |  |
|           | *a        | K-1262a   | 17             | 5.35   |  |
|           | *b        | Σ-4073  | 17             | 4.96   |  |
|           | *c        | E-474   | 16             | 3.46   |  |
|           | *d        | OA-259  | 15             | 3.75   |  |
|           | *e        | Γ-140   | 15             | 3.65   |  |
|           | *f        | Π-998   | 14             | 2.58   | trimmed flan   |
|           | *g        | OO-1069   | 14             | 2.74   |  |
|           | *h        | ΠΘ-491  | 14             | 2.58   |  |
|           | *i        | Θ-991   | 14             | 4.08   |  |
|           | *j        | ΠΘ-424  | 13             | 2.62   | Kleiner 1976, p. 8, pl. 4, no. 89; <i>GRC</i> , fig. 14          |
|           | *k        | NN-1220   | 13             | 2.64   |  |
|           | *l        | BB-494  | 12             | 2.33   |  |
|           | *m        | ZZ-34   | 12             | 2.72   |  |
|           | *n        | Γ-1630  | 12             | 1.94   |  |
|           | *o        | Π-420   | 12             | 1.85   | overstruck on Owl-on-thunderbolt AE 4 ( <b>81</b> )              |
|           | *p        | II-616  | 12             |  | broken or halved   |

In the long course of production, coins of this variety underwent a substantial diminution that is reflected not only in the wide range of flan weights and sizes but also by the progressive reduction of the diameter of the dies. Ultimately, the mint was overstriking the variety on AE 4 chalkoi of the early 2nd century (see 99o). To make them commensurate with the later coins, flans of the earlier, larger 99f and Kleiner 1976, pl. 4:87, were cut down, apparently in these cases after striking, since the trimming respects the reverse type.

Kleiner's dating of ca. 130–90 B.C. follows from the abundance and condition (w2–6) of specimens in hoards of the early 1st century B.C. and the presence of three examples in the Agora drain Deposit A–B 19–20:1 of the third quarter of the 2nd century (Kleiner 1976, p. 18, nos. 115–117; pp. 27, 32, 35–38; Kleiner 1973, pp. 176–177). As proposed below, however, the coinage may have ended by the 90's B.C. with the change to variety **100**.

<sup>136</sup> Kleiner 1976, pp. 37–38.

<sup>137</sup> *Ibid.*

|            |              |       |               |  |  |
|------------|--------------|-------|---------------|--|--|
|            |              |       |               | A<br>Θ-E Owl stg. r., facing,<br>on thunderbolt. | Sv. 107.50–54;<br>Kleiner 1976,<br>pl. 3:46–50 ( <i>Type 6</i> ) |
|            | Cicada.      |       |               |  |  |
| <b>100</b> | 73 coins     | 12–16 | Av. 2.85 (18) |  |  |
|            | *a Z-2198bis | 14    | 2.00          |  |  |
|            | *b T-517     | 12    | 2.35          |  |  |
|            | *c AP-31     | 12    | 3.66          |  |  |
|            | *d E-548     | 12    | 2.65          |  |  |
|            | *e Θ-114     | 12    | 2.75          |  |  |
|            | *f ΠΠΠ-624   | 13    | 2.39          |  |  |

The 182 hoard specimens weighed by Kleiner (1973, p. 181, table I) gave an average of 3.48 g. and suggested to him that these Cicada/Owl-on-thunderbolt coins represent a larger denominational unit than the Two-owls-on-thunderbolt **99**, even though both varieties have diameters of the same size (Kleiner 1973, p. 180; Kleiner 1976, p. 10). The average of 2.85 g. taken from the 18 best Agora specimens, however, agrees with the average weight of the Two-owl coinage (2.69 g. from hoard pieces, 2.84 g. from Agora pieces; see Table III [pp. 324–325 below]). It is noteworthy, too, that in the Athens 1955 and the Keratea 1954 hoards the Cicada/Owl pieces were somewhat less worn than the accompanying Two-owl strikings (Kleiner 1976, p. 27). We deduce that the two varieties may very well represent an earlier and later version of the same AE 3 unit. If so, the later Cicada/Owl coins will have been struck, around or shortly after 100 B.C., with full restored AE 3 weight. Two pieces occur in the drain Deposit B 20:9 (early 1st century but no coins later than 87 B.C.; Kleiner 1976, pp. 19–21, nos. 107, 108).

#### AE 4

166–150's B.C.

|            |                          |       |               |  |   |
|------------|--------------------------|-------|---------------|--|---|
|            | Head of Apollo r., laur. |       |               | A-Θ<br>E Amphora with transverse<br>palm branch. | Sv. 106.12–16;<br>Kleiner 1976,<br>pl. 4:97–100 |
| <b>101</b> | 19 coins                 | 12–14 | Av. 1.64 (15) |  |   |
|            | *a Z-610bis              | 13    | 1.44          |  |   |
|            | *b Σ-5469                | 13    | 2.02          |  |   |
|            | *c Δ-169                 | 12    | 2.10          | Kleiner 1976, p. 34, note 50, pl. 4, no. 99      |   |
|            | *d Γ-208                 | 14    | 1.72          |  |   |
|            | *e T-1377                | 12    | 2.07          | Kleiner 1975, p. 322, pl. 75, no. 324 (M–N 15:1) |   |

The later variety **105** has similar types but a different arrangement of the ethnic and omits the palm branch behind the amphora; the coins tend to be smaller and are much cruder in style. The fine obverses of the present variety relate it to the AE 2 Apollo/Owl with lyre (**87**) and perhaps to the rare AE 3 Apollo/Lyre (Sv. 106.8–10), which has yet to show up in the Agora or Delos excavations. 101e (previously misclassified with variety **105**) comes from the ca. 140 B.C. destruction deposit of South Stoa I.

ca. 140's B.C.<sup>138</sup>

|            |                                     |       |              |   |  |
|------------|-------------------------------------|-------|--------------|---|--|
|            | Head of Zeus r.; border of<br>dots. |       |              | A-Θ<br>E Plemochoe.                                     | Sv. 107.9–11;<br>Kleiner 1976,<br>pl. 4:80–83 ( <i>Type 14</i> ) |
| <b>102</b> | 8 coins                             | 10–13 | Av. 1.63 (8) |   |  |
|            | *a O-177                            | 11    | 1.27         | Kleiner 1976, p. 7, pl. 4, no. 80; <i>GRC</i> , fig. 14 |  |
|            | *b K-1284                           | 13    | 2.16         |   |  |
|            | *c OO-468                           | 12    | 2.23         |   |  |
|            | *d K-520                            | 13    | 1.55         |   |  |

<sup>138</sup> Kleiner 1976, pp. 34, 38.

|    |         |    |      |                                      |
|----|---------|----|------|--------------------------------------|
| *e | III-274 | 12 | 1.98 |                                      |
| *f | K-360   | 10 | 1.51 |                                      |
| g  | Z-2743  | 11 | 1.31 | Kleiner 1976, p. 14, no. 91 (H 12:1) |

The context of 102g gives a *terminus ante quem* of ca. 140 B.C. This, the only AE 3–5 variety in the pre-86 B.C. coinage with an obverse head of Zeus, was likely minted with the Zeus/Fulminating Athena AE 2 (88, 89) of the 140's.

|            |          |       |   |   |   |
|------------|----------|-------|---|---|---|
|            |          |       |   | ⊖   |   |
|            |          |       | Head of Apollo r., laur;<br>border of dots. | A-E Plemochoe; all within<br>wheat wreath.  | Sv. 106.48–51;<br>Kleiner 1976,<br>pl. 3:77–79 ( <i>Type 13</i> ) |
| <b>103</b> | 21 coins | 10–13 | Av. 1.58 (10)                               |   |   |
| *a         | NN-1656  | 12    | 1.89  |   |   |
| *b         | NN-1120  | 11    | 1.54  | Kleiner 1976, p. 7, pl. 3, no. 77 = p. 18, no. 114 (A–B 19–20:1);<br>GRC, fig. 14 |   |
| *c         | Δ-422    | 11    | 1.67  |   |   |
| *d         | K-1759   | 10    | 1.66  |   |   |
| e          | Z-2723   | 12    | broken                                      | Kleiner 1976, p. 14, no. 90 (H 12:1)  |   |
| *f         | NN-1556  | 12    | 1.62  | A-⊖E  |   |
| *g         | OO-1222  | 12    | 1.69  | cavity punched in obv.  |   |

Dating is from the contexts of 103e (ca. 140 B.C.) and 103b (also of the third quarter of the 2nd century). The archaizing Apollo head with falling twists of hair is distinctive, as is the crowded, wreathed reverse. 103g, found with three imperial (Period VB) fractions, circulated as late as the 2nd or 3rd centuries after Christ, when the punched cavity was added; see p. 94 below.

ca. 140–90 B.C.

|            |          |    |  |   |  |
|------------|----------|----|--|---|--|
|            |          |    | Head of Artemis r., quiver at<br>shoulder; border of dots. | A-⊖<br>E Plemochoe; all within<br>wreath. | Sv. 106.76–81;<br>Kleiner 1976,<br>pl. 4:101–104 |
| <b>104</b> | 2 coins  |    |  |   |  |
| *a         | II⊖-290a | 12 | 1.50   |   |  |
| *b         | III-939  | 10 | 1.25   |   |  |

In contrast to these two Agora pieces, the variety has been found in quantity on Delos; see Table III, pp. 324–325 below. Sv. 106.78–81 and the four specimens illustrated by Kleiner (1976, pl. 4) are all from the Delos excavations, which recovered sixty of these Artemis/Plemochoe coins from the House of the Comedians alone (*Délos XXVII*, p. 321, pl. 65, F178–F237). There can be little doubt that the variety was minted for use on the island. Weights show that the variety is later than the Apollo/Plemochoe, of which only one specimen has been recorded from Delos (Numismatic Collection of Athens 1906/7 κζ' 225).

|   |  |  |                               |   |  |
|---|--|--|-------------------------------|---|--|
|   |  |  | Head of Apollo or Artemis, r. | Plemochoe in wreath; ethnic<br>illegible. |  |
| [103, 104] 52 coins of uncertain Apollo/Plemochoe or Artemis/Plemochoe variety. |  |  |                               |   |  |

|            |          |       |                   |                                   |   |
|------------|----------|-------|-------------------|-----------------------------------|---|
|            |          |       | Head of Apollo r. | A-⊖<br>E Amphora.                 | Sv. 107.36–41;<br>Kleiner 1976,<br>pl. 3:62–66 ( <i>Type 10</i> ) |
| <b>105</b> | 31 coins | 10–12 | Av. 1.72 (20)     |                                   |   |
| *a         | T-240    | 12    | 1.56              | trimmed flan                      |   |
| *b         | II⊖-287  | 12    | 1.76              | Kleiner 1976, p. 6, pl. 3, no. 62 |   |

|    |          |    |      |                      |
|----|----------|----|------|----------------------|
| *c | NN-683   | 12 | 2.13 |                      |
| *d | I-1458   | 11 | 1.60 |                      |
| *e | E-729    | 11 | 1.32 |                      |
| *f | A-159bis | 12 | 1.85 | Kleiner 1976, no. 63 |
| g  | NSR-76   | 12 | 1.86 | Kleiner 1976, no. 64 |

[101 or 105] 12 coins of uncertain Apollo/Amphora variety.

|            |          | Head of Kore(?) r. |               | AΘE above. Piglet stg. r.                  | Sv. 103.57–64;<br>Kleiner 1976,<br>pl. 3:67–72 ( <i>Type 11</i> ) |
|------------|----------|--------------------|---------------|--|---|
| <b>106</b> | 81 coins | 9–12               | Av. 1.45 (42) |  |   |
| *a         | N-166    | 12                 | 1.35          |  |   |
| *b         | ΠΘ-815   | 11                 | 1.38          |  |   |
| *c         | Γ-1605   | 11                 | 1.60          | Kleiner 1976, p. 6, pl. 3, no. 69          |   |
| *d         | K-1198   | 11                 | 1.45          |  |   |
| *e         | Z-2205   | 11                 | 1.66          |  |   |
| *f         | Γ-110    | 10                 | 1.38          | Kleiner 1976, no. 68; <i>GRC</i> , fig. 14 |   |
| *g         | K-1255   | 9                  | 1.20          |  |   |

Although the relatively crude obverse heads of this and the foregoing **105** are virtually identical (Kleiner 1976, p. 7), it is not certain whether the heads are all of a laureate Apollo or whether, as more reasonably, the heads of **106** with the piglet reverse represent Kore wearing a crown of wheat. Influenced by the piglet, Kleiner (1976) mistook the heads of both varieties as heads of “Demeter?” and connected **106** with the Demeter/Piglet AE 2 of the second quarter of the 2nd century (**86**). But both AE 4 varieties must belong further along in the century when the size and weight of the chalkous had declined, and the head on the present variety looks too youthful for Demeter. For Kore on a later issue, see **117**.

With the shrinkage of the AE 4 flans there was a corresponding reduction in the sizes of the dies; compare the Apollo heads of variety **101** with the smaller heads of **105** and the still smaller Kore(?)/Piglet coins. Any firm contextual evidence that could fix the position of these and the other light AE 4 varieties **107–109** in the half century before 87 B.C. is lacking.<sup>139</sup>

|            |          | Head of Nike r., wing at<br>shoulder. |               | A <sup>⊖</sup><br>E Quiver and bow. | Sv. 106.33–35 |
|------------|----------|---------------------------------------|---------------|-------------------------------------|---------------|
| <b>107</b> | 33 coins | 9–12                                  | Av. 1.34 (21) |                                     |               |
| *a         | N-899    | 11                                    | 1.20          |                                     |               |
| *b         | Υ-242    | 11                                    | 1.90          | same obv. die as 107a               |               |
| *c         | NN-474   | 11                                    | 2.37          | same obv. die as 107a               |               |
| *d         | Π-702    | 12                                    | 1.45          |                                     |               |
| *e         | K-1211   | 11                                    | 0.95          |                                     |               |
| *f         | NN-1732  | 10                                    | 1.63          |                                     |               |

The identification of the head as a head of Nike (under *BMC*, nos. 610, 611) is probably correct. The alternative is Eros, suggested perhaps by the unbound hair of the die of 107a–c, the pudgy face on the die of Sv. 106.34, 35, and the reverse quiver and bow. The reverse attributes, however, ought to belong to Apollo and Artemis; and Eros is not at home in the traditional state iconography of Athens, whereas Nike was closely associated with Athena.

<sup>139</sup> A Kore(?)/Pig coin (Kleiner 1976, pl. 3:72) belongs to the seven-piece Numismatic Collection of Athens lot IIK.127 published by Kleiner (1976, p. 28) as part of a possible hoard, even though one of the coins (F7) dates after 86 B.C. (variety **127**) and would have to have been an intrusion. If the remaining six coins do happen to come from a hoard, however, they suggest that Kore(?)/Pig dates closer to **102** (Zeus/Plemochoe) and **103** (Apollo/Plemochoe) than, say, very late in the 2nd century.

|            |                   |         |               |  |               |
|------------|-------------------|---------|---------------|--|---------------|
|            |                   | Cicada. |               | A- $\Theta$<br>$\Theta$ -E Amphora with transverse<br>palm branch. | Sv. 107.60–69 |
| <b>108</b> | 59 coins          | 9–11    | Av. 1.13 (20) |  |               |
|            | *a A-321          | 10      | 0.70          |  |               |
|            | *b B $\Delta$ -78 | 9       | 1.00          |  |               |
|            | *c BB-706         | 9       | 1.23          |  |               |
|            | *d NN-200         | 9       | 0.75          |  |               |
|            | *e K-1028         | 9       | 0.97          |  |               |
|            | *f AA-266         | 9       | 0.66          | Kleiner 1976, p. 6, pl. 3, no. 58                                  |               |

This is a revival of the Period II Cicada/Amphora AE 4 (85) but with reduced size and weight, an altered form of the ethnic, and a generally clumsier style. The total of 672 Cicada/Amphora pieces listed under 85 doubtless include many pieces that belong to this late 2nd-century issue; see pp. 65–66 above.

|            |               |         |        |                                  |               |
|------------|---------------|---------|--------|----------------------------------|---------------|
|            |               | Cicada. |        | A- $\Theta$<br>E Quiver and bow. | Sv. 107.70–73 |
| <b>109</b> | 3 coins       |         |        |                                  |               |
|            | *a B-602bis   | 10      | 1.17   |                                  |               |
|            | *b $\Xi$ -134 | 11      | 0.80   |                                  |               |
|            | *c NN-2053    | 11      | broken |                                  |               |

The variety is, in effect, a conflation of **107** and **108**.

### AE 5

ca. 130–90 B.C.

|            |               |                          |               |  |   |
|------------|---------------|--------------------------|---------------|--|---|
|            |               | Head of Apollo r., laur. |               | A- $\Theta$<br>E Owl stg. r. on horizontal<br>amphora. | Sv. 106.52–64;<br>Kleiner 1976, pl.<br>3:73–76 ( <i>Type 12</i> ) |
| <b>110</b> | 53 coins      | 7–10                     | Av. 0.88 (11) |  |   |
|            | *a $\Pi$ -972 | 10                       | 1.23          |  |   |
|            | *b NN-1299    | 10                       | 0.76          |  |   |
|            | *c OA-275     | 7                        | 0.46          |  |   |
|            | *d B'-729bis  | 8                        | 0.47          |  |   |

Kleiner's dating of ca. 150–140 B.C. (Kleiner 1976, pp. 36, 38) was based on the misattribution of Z-2852, an 11 mm. illegible coin from Deposit H 12:1, to this variety (Kleiner 1976, p. 15, no. 92). It is clear from the small Delos hoard *IGCH* 324 (note 105 above, p. 66) that the variety belongs to the middle or later phase of Period III. On the other hand, no specimens of the following **111–114** have been recovered from a chronologically useful context.

|            |                   |                                       |              |                        |               |
|------------|-------------------|---------------------------------------|--------------|------------------------|---------------|
|            |                   | Head of Apollo r.; border of<br>dots. |              | A<br>$\Theta$ -E Lyre. | Sv. 106.23–26 |
| <b>111</b> | 6 coins           | 7–10                                  | Av. 0.43 (6) |                        |               |
|            | *a X-33           | 10                                    | 0.49         | (N 19:1)               |               |
|            | *b $\Sigma$ -2114 | 8                                     | 0.58         |                        |               |
|            | *c OO-263         | 7                                     | 0.59         |                        |               |
|            | *d $\Gamma$ -326  | 9                                     | 0.26         | broken?                |               |

|            |                  |  |              |  |  |                |
|------------|------------------|--|--------------|--|--|----------------|
|            |                  | Similar.   |              | $A-\overset{\ominus}{E}$ Tripod.   |  | Sv. 106.21, 22 |
| <b>112</b> | 5 coins          | 6–10   | Av. 0.59 (5) |  |  |                |
| *a         | II-453           | 7  | 0.41         |  |  |                |
| *b         | E-1053           | 7  | 0.63         |  |  |                |
| *c         | $\Sigma T'$ -590 | 6  | 0.11         |  |  |                |
| d          | T-1189           | 9  | 1.24         |  |  |                |
|            |                  |  |              |  |  |                |
|            |                  | Similar.   |              | $A-\overset{\ominus}{E}$ Cicada.   |  | Sv. 107.42–45  |
| <b>113</b> | 4 coins          | 8–9  | Av. 0.56 (3) |  |  |                |
| *a         | E-1299           | 8  | 0.39         |  |  |                |
| *b         | KK-419bis        | 8  | 0.58         |  |  |                |
|            |                  |  |              |  |  |                |
|            |                  | Head of Athena r., wearing<br>Corinthian helmet. |              | $A-\overset{\ominus}{E}$ or $A-\overset{\ominus}{E}$<br>$\overset{\ominus}{E}$ Tripod. |  | Sv. 106.44     |
| <b>114</b> | 2 coins          |  |              |  |  |                |
| *a         | Z-1716bis        | 8  | 0.27         | $A-E$<br>$\overset{\ominus}{E}$  |  |                |
| b          | Z-1528           | 8  | 0.41         | -  |  |                |

## PERIOD IV

86–10's B.C.

In the wake of Sulla's capture of Athens in the spring of 86, the character of the bronze coinage was abruptly transformed. Abandoning the Fulminating Zeus AE 2 of the defeated government, Athens began to mint a larger and heavier AE 1 coin that was destined to serve as the city's principal bronze unit until the advent of Athens' Greek imperial coinage in the 2nd century after Christ.

The new AE 1 coinage was struck in five series (Table IV, pp. 326–327 below). In the first (Period IVA) the bronze is closely tied to the post-Mithradatic New Style silver: the AE 1 issues bear the same types as the silver drachms and tetradrachms, Head of Athena Parthenos/Owl standing on amphora in surrounding olive wreath, and frequently employ the same emission symbols. Like the New Style silver, this bronze was probably called "stephanephoric" money; and when the minting of the silver was discontinued in the late 40's these stephanephoric, or heavy Owl-on-amphora bronzes, were discontinued with it. From that point down to the end of the Athens' Hellenistic coinage in the Augustan era, Athens struck in bronze alone. In the second series (Period IVB), which is connected with Marc Antony's control of Greece after the Battle of Philippi, the eponymous olive wreath disappears from the reverses of the coins, a variety of changing reverse types replace the static Owl-on-amphora device, and the size and weight of the AE 1 unit were allowed to fall. The three remaining series (Period IVC–E) are early Augustan. Reverses are again wreathed but changing types persist except in the last two last issues, **157** and **158**, the light Owl-on-amphora issues of Period IVE, which nostalgically revive the old AE 1 reverse with which the post-Mithradatic bronze began.

The basic study of this post-Mithradatic bronze will be found in my publication of two sizable Augustan hoards, the 483-piece Chaïdari hoard of *ca.* 1929 and the 230-piece 1932 Agia Varvara

hoard,<sup>140</sup> each of which contained a nearly complete run of the AE 1 issues from the mid-80's B.C. through the final Augustan strikings. Three smaller bronze hoards<sup>141</sup> and a few Agora deposits provide supplementary find information; but by and large, the Period IV absolute chronology depends on the association of exceptional coin types with events in the historical record and, for a few of the initial Period IVA heavy Owl-on-amphora issues, on synchronisms with the contemporary silver.

*Period IVA: 86–42 B.C.*

The chronology of the post-Mithradatic tetradrachm and drachm coinage, to which the first or heavy Owl-on-amphora AE 1 emissions are tied, is still very much under discussion. The sequence of the first eleven or twelve silver issues is relatively secure,<sup>142</sup> and on the absolute chronology endorsed by Mørkholm, the first eight of these issues would have been struck in a more or less annual sequence beginning in 86/5 immediately after Sulla's conquest and continuing into the early 70's.<sup>143</sup> The seventh or eighth emission, Sotades-Themistokles, is, however, the last issue in two hoards discovered on Delos, and after the next emission, Eumelos-Theoxenides, there is an immediate, drastic falling off in the volume of coins minted.<sup>144</sup> For the remaining twenty-five known issues, output was normally limited to just one or two obverse tetradrachm or drachm dies a year. Since the piratical devastation of Delos in 69 provides a sound historical explanation both for the burial of the two Delos hoards and for the sudden and permanent loss of Athens' ability to maintain minting

<sup>140</sup> Kroll 1972: *IGCH* 341 and 342. Contrary to the notes in *IGCH*, it is clear that the Chaidari and Agia Varvara hoards are separate finds (Kroll 1972, pp. 86–88), although both do come from the same region of Attica (near the Sacred Way between Athens and Daphni) and were almost certainly buried at the same time. The date has to be estimated from the moderate to slight wear of the latest coins (of Periods IVD and E) and should lie within the last decade B.C. or, less probably, the first decade of our era. A connection with the obscure revolt of Athens in ca. A.D. 13 (for which, see Bowersock, *Augustus*, pp. 105–108) cannot be ruled out, but the wear of the coins implies an earlier emergency. A raid of brigands? Crawford (*CMRR*, p. 251) makes prominent mention of both hoards but following *IGCH* misdates them to 42 B.C.

<sup>141</sup> Kroll 1972, pp. 87–88, table I: Delos 1910 (*IGCH* 322), 16 coins, buried possibly in 69 B.C. (Table VI, p. 329 below); Akropolis North Slope 1936 (*IGCH* 340), 40 coins, buried ca. 30 B.C.; and Attica 1927 (*IGCH* 343), 44 coins, buried, like the Chaidari and Agia Varvara finds, around the end of the 1st century B.C. Attica 1927 may be a parcel from the Chaidari find.

<sup>142</sup> Now see Mattingly 1979, pp. 161–165, table B, placing Eumelos-Theoxenides after Sotades-Themistokles and (like Mørkholm 1984, pp. 32–33) following Boehringer, pp. 24–27, 202–203, in inserting the strange Kointos-Charmostra issue as the first issue after Mithradates-Aristion. Only the inclusion of Kointos-Charmostra is open to serious doubt; despite its Sullan date, Margaret Thompson's arguments for excluding it from the Athenian sequence should not be minimized (*New Style*, pp. 464–467, nos. 1427 and 1428).

<sup>143</sup> Mørkholm 1984, pp. 33, 42, citing Habicht 1976, pp. 137–142, who connects the symbol of Harmodios and Aristogeiton of Mentor-Moschion, the third (or, subtracting Kointos-Charmostra, second) issue after Mithradates-Aristion, with the honors lavished on Sulla upon his return to Athens in 84. But in the absence of supporting hoard evidence, the association can only be conjectural. The overstriking of a Demeas-Kallikratides tetradrachm (approximately the twelfth issue after Mithradates-Aristion) by the Roman quaestor Aesillas no longer presents any difficulties for New Style chronology in any period. In a paper presented in London at the 10th International Numismatic Congress in 1986, Robert Bauslaugh was able to confirm the suspicions of Christoph Boehringer ("Hellenistischer Münzschatz aus Trapezunt 1970," *SNR* 1975 [pp. 37–64], p. 62) and Mørkholm (1984, pp. 35–38) that minting of Aesillas tetradrachms continued into the 60's. Until Bauslaugh's forthcoming corpus of Aesillas is in print, see his "Two Unpublished Overstrikes: New Style Athens and Aesillas the Quaestor," *ANSMN* 32, 1987, pp. 11–21.

<sup>144</sup> The hoards are Delos  $\Xi\Theta$  and A (*IGCH* 297 and 347): *New Style*, pp. 513–515, 533–537, pls. 197–201. For contraction in output, see *New Style*, pp. 653–654; Mattingly 1979, p. 165, table B.



at anything approaching preceding levels,<sup>145</sup> a very strong case exists for pulling down the date of all eight or nine of the earlier post-Mithradatic issues into the 70's B.C. This leaves a gap of about five years between the Mithradates-Aristion issue of 87/6 and the recommencement of the silver coinage around 80 B.C. Mattingly had already postulated a gap of two years by allowing the silver to begin with Sulla's resettlement of Athenian affairs in 84/3,<sup>146</sup> but two years should probably be regarded as a minimum.

However long the interval, an interruption in the striking of the silver is only to be expected after the exhausting siege, pillaging, and confiscations of 86 and the temporary loss of Delos for the two years thereafter. It is within this interval that the earliest Owl-on-amphora bronze (**115**: no symbol) surely belongs. Introduced at a time of crisis and economic reconstruction, its silver types and heavy AE 1 module suggest that, like the AE 1 hemidrachms of 229 (**64**), it was originally intended as a partial replacement for silver. Once the striking of silver was resumed, additional Owl-on-amphora AE 1 emissions, now bearing emission symbols, were minted from time to time along with it.

Nine issues have symbols. Two date with the pre-69 silver: **118** (poppy and wheat-ears symbol) and **119** (mystic staff) share symbols respectively with the Lysandros-Oinophilos and the Sotades-Themistokles silver of the 70's. Two or three issues (**124**: caduceus; **125**: thyrsos; and probably **121**: tripod) parallel emissions in the later silver of the 60's–40's B.C. The rest (**120**: plemochoe; **122**: two wheat ears; **123**: flower; and **126**: two pilei) stand alone and probably belong to years from which no silver drachms or tetradrachms are extant, if any were struck at all. From the wear of the Chaïdari and Agia Varvara hoard specimens, it is clear that **126** was the last issue in the series and that **124** and **125** are late. But we lack any further physical criteria that can be brought to bear on the internal chronology: too few of the coins are well enough preserved for stylistic comparison, and throughout the series the AE 1 weights were uniformly maintained at an average of about 10–11 g. (see Table IV [pp. 326–327 below], column of hoard specimens).

In addition to these regular emissions, the AE 1 unit was struck in two exceptional issues with Eleusinian types, **116**: Veiled Demeter head/Triptolemos in chariot, and **117**: Kore head/Iakchos. Both were struck early in Period IVA and imply an exceptional lavishness in the celebration of the Eleusinian Mysteries at this time. Plutarch, *Sulla* 26, has usually been understood to indicate that Sulla was initiated at the Mysteries upon his return to Athens in 84 B.C. Although difficulties with this interpretation have been recently pointed out,<sup>147</sup> the traditional view of a Sullan initiation has the advantage of providing an explanation for at least one of these issues.

The Period IVA fractional units (Table V, p. 328 below) continue the AE 2, AE 3, and AE 4 modules of the pre-Mithradatic coinage but are readily distinguished by their thick, chunky fabric; leaded alloy (giving them a black color when cleaned); and, except in some earlier varieties, ethnics inscribed in one line: A-ΘE. These characteristics are typical of the AE 1 coinage as well, but they have a special relevance for the four fractional varieties **129–132** and the Period IVB fraction **145**, all of which had been previously misattributed to the pre-Mithradatic coinage, although none occur

<sup>145</sup> As David M. Lewis ("The Chronology of the Athenian New Style Coinage," *NC*, ser. 7, 2, 1962 [pp. 275–300], pp. 282–283) points out for the burial of the Delos hoards and Crawford (*CMRR*, p. 196) urges for the collapse in the volume of minting. For the abandonment of Delos as a center of commerce following the sack of 69, see Hoff 1989, p. 7. A third hoard that may date from 69 is the small Delos 1910 hoard of bronze coins (note 141 above, p. 81) analyzed in Table VI, p. 329 below.

<sup>146</sup> Mattingly 1969, p. 328; *idem*, "Some Third Magistrates in the Athenian New Style Coinage," *JHS* 91, 1971 (pp. 85–93), p. 82.

<sup>147</sup> Clinton 1989a, p. 1503.

in hoards of the late 2nd and early 1st centuries B.C. that give a good representation of the Period III AE 2–4 varieties.<sup>148</sup>

The three contexts tabulated in Table VI (p. 329 below) are essential for isolating the earlier Period IVA fractional issues of the mid-80's to mid-70's: Demeter-head/Triptolemos-in-chariot AE 2 (**127** and **128**), Apollo-head/Cicada AE 3 (**131**), Apollo- (or Athena-) head/Wheat-ears AE 4 (**132–136**). The poppy symbol on some Demeter/Triptolemos AE 2 pieces (**128**) links them to the AE 1 variety **118** and the Lysandros-Oinophilos drachms and tetradrachms, which employ the device of the poppy between wheat ears as their emission symbol in the early 70's, and suggests that the earlier, heavier Demeter/Triptolemos AE 2 without symbol (**127**) probably belongs near the start of the IVA bronze in the mid-80's. The AE 4 varieties **133** and **134** with a reverse type of a poppy and wheat ears are possibly also to be dated with the Lysandros-Oinophilos silver and large bronze. But the device, although new in the post-Mithradatic coinage, was, like the two wheat ears of the other AE 4 varieties (**132**, **135**, and **136**), a conventional Eleusinian one (see **150**) and need not as a coin type be a magistrate's badge writ large, especially since virtually all the old, speculative associations of exceptional Period IV reverse types with symbols on the New Style silver have proved to be mistaken.<sup>149</sup>

The retention of the AE 2, AE 3, and AE 4 modules suggests some level of continuity between the pre-Mithradatic and the Period IVA bronze. The chalkous, quarter-obol, and half-obol values that we have assigned to the pre-Mithradatic AE 4, AE 3, and AE 2 modules are likely to apply to these same modules in Period IVA, with the result that the new Period IVA AE 1 denomination would be valued as an obol.

One might thus expect that the large AE 1 coins of post-Mithradatic Athens were known as obols. Martin Price, however, has made the useful conjecture that they may actually have been known as drachms,<sup>150</sup> and there are two reasons for thinking that this conjecture is correct. The first, of course, is the denominational connotations of the stephanephoric silver drachm (and tetradrachm) types: their transfer to the AE 1 unit would be most meaningful if this bronze unit was itself intended to represent a drachm. The second argument derives from the Hadrianic or early Antonine property-tax inscription *IG II<sup>2</sup> 2776*,<sup>151</sup> which records sums in the denarius and four local, obviously bronze, subdivisions of the denarius (the drachm, the hemidrachm, obol, and hemiobol) and shows that by the second quarter of the 2nd century after Christ the four denominations had been retariffed to one-sixth of their original values in silver to become  $\frac{1}{6}$ ,  $\frac{1}{12}$ ,  $\frac{1}{36}$ , and  $\frac{1}{72}$  of the denarius respectively.

<sup>148</sup> Varieties **131** (Apollo/Cicada), **130** (Athena/Artemis), and **145** (Zeus/Eagle) were thus misdated by Kleiner 1976, pp. 34–35, 38 (table I); varieties **129** (Dolphin on trident/Plemochoe) and **132** (Apollo/Two wheat ears in wreath) by Kroll (1972, p. 87, note to table I).

<sup>149</sup> For such now discredited associations in Svoronos' plates, see Sv., pls. 56 (Apollo Delios reverse of **143** with the Apollo Delios symbol of the pre-86 silver of Sokrates-Dionysodo), 66 (gorgoneion obverse of **139** with the symbol of the pre-86 silver of Niketes-Dionysios), 72 (sphinx reverse of **153** with the symbol of the pre-69 silver of Diophantos-Aischines), 77 (dolphin-on-trident obverse of **129** with the symbol of the pre-86 silver of Xenokles-Harmoxenos), and 78 (Nike reverse of **147** with the symbol of the pre-42 silver of Philokrates-Kalliphon). Thus, even though it is at least chronologically possible, the connection suggested on Sv., pl. 73 between the reverse of the AE 2 **130** (Artemis running right, with torch) and the symbol of the post-69 Leukios-Antikrates tetradrachms (*New Style*, no. 1227) (Artemis [or Kore?] running left and Demeter holding a torch right) is not likely to be any more substantial than any of these other former type-symbol associations, quite apart from the question of whether the devices really match.

<sup>150</sup> Price, *CRWLR*, p. 97.

<sup>151</sup> See S. G. Miller, "A Roman Monument in the Athenian Agora," *Hesperia* 41, 1972, pp. 50–95, with addendum, pp. 475–476. The inscription is dated between ca. A.D. 130 and 140 or slightly later (*ibid.*, pp. 66, 86–87), although a date as early as A.D. 110–116 has also been proposed (cf. *ibid.*, pp. 475–476). See pp. 118–119 below.

Since the denarius was by weight the effective equivalent of an Attic silver drachm, it is apparent that the Roman-era bronze hemidrachm and drachm, called a “light” drachm, λεπτοῦ δραχμῆ), in *IG II*<sup>2</sup> 1368, another inscription of the 2nd century after Christ, represented the traditional silver values of the hemiobol and obol and that at some point the bronze coins that would have ordinarily represented the hemiobol and obol were renamed hemidrachm and drachm. When did this renaming occur? Presumably after the Period III coinage, which ended in the Sullan siege, but before the start of Athens’ imperial bronze coinage in the 2nd century of our era, inasmuch as the latter coinage was structured around the reduced AE 1 denomination inherited from the Period IV bronze. There being no other occasion within this span to which the renaming can be plausibly attributed, one concludes that the renaming probably took place with the creation of the stephanephoric AE 1 coinage after the capture and plundering of Athens in 86.

Silver would have been in short supply, and it is not hard to imagine why the Athenians would have resorted to the issue of highly overvalued bronze drachms as an emergency measure. Conceivably, these initial AE 1 drachms were originally tarified at face value to be the equivalents of silver drachms; but such excessive overvaluation could not have been sustained for long. One suspects that the value of the AE 1 drachms declined until they were finally stabilized at the level of an obol by the time the Athenians recommenced the striking of a silver coinage. In this way they would have become obols in all but name. It follows that the AE 2 unit would have been termed a hemidrachm. This is independently suggested by the Eleusinian types with which it was normally struck, through the Augustan phase of Period IV; for in the New Style silver the hemidrachm, whose reverse owl stands within a wheat wreath on a mystic staff, was the one denomination designed with an Eleusinian emphasis.<sup>152</sup> Whether or not the reverse of the AE 3 Apollo head/Cicada variety (**131**) was taken over from the pre-Mithradatic AE 3 Cicada/Owl-on-thunderbolt (**100**), arguably a quarter-obol, it follows that in Period IV the AE 3 unit was probably known as a quarter-drachm. The AE 4 eighth, the smallest fraction of Period IV, could have still been called the chalkous, as it had been for centuries.

In addition to these IVA issues, bronzes of pre-86 mintage probably continued in use to provide a substantial part of the fractional currency after 86. Although their value remained unaltered, we assume that they, too, would have had to have been renamed, the familiar old AE 2 Fulminating Zeus hemiobols, for example, becoming officially recognized as bronze hemidrachms.

No survey of the Period IVA bronze would be complete without mention of the bronze coinage minted at Delos in the name of Athens by Gaius Valerius Triarius, the Roman legate who restored the island city after the piratical attack in 69 B.C. (see **830** and Sv. 106.66–76). Triarius struck in two modules, AE 2 and AE 3, and the similarity of these in size and weight to the common AE 2 and AE 3 issues of Athens’ pre-86 B.C. bronze underscores once again that whatever changes may have occurred in denominational nomenclature, the old module-value system of the pre-86 bronze coinage appears to have survived the First Mithradatic War intact.

#### *Period IVB: 42/1–32 B.C.*

The six AE 1 issues of the next, or unwreathed, phase of the post-Mithradatic coinage have a historical interest that few other Athenian bronze series can rival. Their relative chronology, as seen in Table IV (pp. 326–327 below), is fixed primarily by the descending weights and the increasing amount of lead in the alloys of the issues. The Dionysos types of the fourth and sixth issues (**140**:

<sup>152</sup> The distinctiveness of the New Style hemidrachm reverses proves that the Period IVA heavy Owl-on-amphora AE 1 pieces cannot be identified as bronze hemidrachms, as Kroll 1981a, p. 273 once proposed.

Young Dionysos/Athena advancing, and **144**: Zeus/Bearded Dionysos head) place these two issues after the summer of 39, when Marc Antony, arriving from Italy with his new wife Octavia, declared that he was to be addressed as “The New Dionysos” and took up residence in Athens through the winters of 39/8 and 38/7. Together with the associated fractional varieties **141** (Young Dionysos head/Kantharos) and **142** (Bearded Dionysos/Bust of Athena), these are the first and, until the time of Hadrian, the only Athenian coins with types depicting Dionysos. In view of the extravagant lengths to which the Athenians went in honoring Antony as Dionysos,<sup>153</sup> including a ritual marriage between Antony-Dionysos and Athena and the celebration of a new festival, the Panathenaic Antoneia of Ἀντωνίου Θεοῦ Νέου Διόνυσος,<sup>154</sup> the initial Dionysos issues can be attributed to 39/8 or 38/7 B.C. with a high degree of probability. Accordingly, the first unwreathed AE 1 issue (**137**: Athena Parthenos/Fulminating Zeus) will have been struck no later than 42/1 or 41/0.

On the other hand, this first unwreathed issue assuredly falls after the end-date of the New Style silver, since the new features of the bronze (the substitution of changing reverse types for the familiar Owl-on-amphora device, rapidly falling weights, and, above all, the omission of the *stephanos* from the reverses) signal that the era of Athens’ stephanephoric currency had passed. Prosopographically, we know that silver tetradrachms and drachms were being struck as late as the mid-40’s,<sup>155</sup> so that the pivotal change from the wreathed silver and bronze to the exclusive production of unwreathed bronze is to be placed sometime between *ca.* 45 and 41 B.C. In historical terms, the change occurred either when Greece was under the control of Brutus, from late 44 to the Battle of Philippi (October 42), or shortly after the battle, when Antony led a large army into Greece and made Athens his winter headquarters.<sup>156</sup>

A case for Brutus can be developed from the assumption that the Fulminating Zeus reverse of the first unwreathed issue was chosen to symbolize the freedom espoused by the Republican cause after the murder of Julius Caesar. Revived from the Period II and III AE 2 coinage, the type acknowledged Zeus as protector and symbol of *eleutheria* (pp. 57–58 above) and would have been an appropriate choice after Brutus arrived in Athens in August of 44 and was effusively honored as Liberator with bronze statues of himself and Cassius erected next to the Tyrannicides in the Agora.<sup>157</sup> During a stay of several months he began to organize the Republican resistance against the Caesareans<sup>158</sup> and soon received the allegiance of the other cities of Greece, which expected that he would free them from Roman rule.<sup>159</sup> The theme of Freedom dominated the gold and silver coinage struck by Brutus and Cassius in 43 and 42, and among their types was the tripod of Apollo, patron of *libertas*.<sup>160</sup> The Pythian tripod also happens to be the reverse type of the second unwreathed Athenian AE 1

<sup>153</sup> On Antony-Dionysos at Athens, see Dio 47.39.2; Seneca, *Suasoriae* 1.6–7; Sokrates of Rhodes, *apud* Athenaios 4.148 B–C; Zonaras, 10.23; Raubitschek 1946, pp. 146–150; Cerfaux and Tondriau, pp. 300–301.

<sup>154</sup> *IG* II<sup>2</sup> 1034, lines 22–23. The alternate restoration of the name of the festival as the Antonian Panathenaia (by Raubitschek 1946, p. 148) has not met with approval: Cerfaux and Tondriau, p. 301 and C. Pélékidis, *Histoire de l'éphébie attique*, Paris 1962, p. 255.

<sup>155</sup> The evidence comes from the three issues signed by Diokles of Kephisia and the subsequent issue of Diokles of Melite (*New Style*, nos. 1249, 1250, 1259–1262, 1269–1271), all of which postdate 51/0, when the Kephisian Diokles held the priesthood of Asklepios and Hygeia. See Mattingly 1969, p. 328; Kroll 1972, pp. 93–94; Mørkholm 1984, pp. 35, 42.

<sup>156</sup> Plutarch, *Antony* 23.2.

<sup>157</sup> Plutarch, *Brutus* 24; Dio 47.19.4; A. E. Raubitschek, “The Brutus Statue in Athens,” *Atti del terzo congresso internazionale di epigrafia greca e latina*, Rome 1959, pp. 15–21.

<sup>158</sup> A. E. Raubitschek, “Brutus in Athens,” *Phoenix* 11, 1957, pp. 1–11.

<sup>159</sup> Dio 47.21.1.

<sup>160</sup> Crawford, *RRC*, nos. 498–500, with p. 741.

issue (138), and so it can be argued that the first two Period IVB issues date from the two archon years preceding Philippi, 44/3 and 43/2.

Nevertheless, the case for Antony is much stronger, in the first instance because it allows the full IVB series to belong uninterruptedly to a single regime. There is, moreover, no difficulty in associating the second, unwreathed tripod issue with Antony. Plutarch (*Antony* 23.3) mentions that before Antony left Athens for Asia Minor in the spring of 41 “he made measurements of the Temple of Pythian Apollo with the intention of completing it; for he had promised this to the Senate (σύγκλητον).” Although this was the temple at Delphi (it had been burned by marauding Thracians in 85/4),<sup>161</sup> the Pythian tripod of the second IVB emission could still be an allusion to Antony’s project. If Antony upon arrival in Athens in 42 confirmed the city’s status as a “free and allied city” (as he must have, to judge from his unexpectedly conciliatory treatment of Athens), the Fulminating Zeus reverse of the first unwreathed issue would have been just as timely an emblem of *eleutheria* in that year as before Philippi,<sup>162</sup> if indeed the type was exclusively topical. But we will see (pp. 90–91) that the type may have been chosen also for its denominational significance: to denote devaluation of the AE 1 unit to equivalence with the pre-Mithradatic Fulminating Zeus AE 2.

The situation after Philippi presents, finally, the more plausible historical and monetary context for the Athenian decision to abandon the minting of silver. The explicit change in the appearance of the bronze coinage demonstrates that however slight and erratic the minting of the stephanephoric silver may have been since the 60’s, its termination was a deliberate legislative act. The silver did not just die out from a lack of resources. Competition from the lighter and now overwhelmingly plentiful Roman denarius left the Athenians little choice but to forsake thought of further production. From hoards, Michael Crawford remarks that “it is the period after the death of Julius Caesar which sees the spread for the first time over most all of the whole of the Greek east of issues of the mainstream coinage of Rome.”<sup>163</sup> The spread was greatly augmented by the denarius issues of Brutus and Cassius in 43–42 B.C.,<sup>164</sup> up to that time the most extensive denarius coinage minted in the East, and after Philippi by the almost continuous stream of denarii issued by Antony in Asia Minor and probably at some bases in Greece.<sup>165</sup>

The termination of the New Style silver was thus a response to the tidal wave of Roman military silver that flooded Greece during the Second Roman Civil War. The response clearly cannot be attributed to Brutus’ residence in Athens in 44, before he had begun to assemble an army or to strike a coinage, nor within the next year and a half when the early civil war denarii were only beginning to circulate. After Philippi, however, this silver was circulating more widely; and Antony stationed his army for several months at Athens, seeming to have already decided upon making Athens his long-term headquarters and consequently one of the chief centers of Roman administrative, military, and naval power in the East.<sup>166</sup> The presence of Antony and his forces in the winter of 42/1 must

<sup>161</sup> C. B. R. Pelling, *Plutarch, Life of Antony*, Cambridge 1988, p. 176, correcting R. Flacelière and E. Chambry, *Plutarque Vies XIII: Démétrios-Antoine* (Budé), Paris 1977, p. 216, who argued in favor of the temple of Pythian Apollo at Athens.

<sup>162</sup> Compare the head of Eleutheria on coins of Pella and Thessalonike commemorating the free status awarded to these cities by Antony and Octavian after Philippi (*RPC* I, 1545 and 1551, with pp. 296, 297).

<sup>163</sup> Crawford, *CMRR*, p. 252. So, too, Price, *CRWLR*, p. 99: “It is only with M. Antonius that [the denarius] appears to have enjoyed widespread use.”

<sup>164</sup> Crawford, *RRC*, nos. 498–508.

<sup>165</sup> *Ibid.*, nos. 516, 517, 520–522, 527–529, etc. Minting of Antonian denarii in Greece, see *RPC* I, p. 245. For the bronze coinage struck for Antony in Greece, see note 180 below, p. 89.

<sup>166</sup> Antony’s other center was Ephesos, but he seems to have favored Athens. In the fall of 40, Antony returned to Athens to meet with his wife Fulvia and other adherents before continuing on to Brundisium (Appian, *Bella Civilia* 5.76). Returning a year later with Octavia, he remained for two winters while preparing war against the Parthians. After a

have injected denarii into the Athenian economy as never before and caused the Athenians to bring the era of their stephanephoric coinage to a formal close.<sup>167</sup>

The terms of the resulting legislation are beyond recovery. However much they might have accorded a preferred, *de jure* status to the denarius, the latter by this time was probably becoming the basic silver coin in Athens regardless, as the heavier silver of true Attic weight was being driven into savings or the melting pot. The legislation would surely have addressed the character of the new unwreathed bronze, which now, necessarily valued in relation to the denarius, was retariffed downwards. The evidence and nature of this devaluation will be discussed presently, but it can be noted here that the progressively falling weights of the Period IVB AE 1 emissions are responsible for the reduced weights of the fractional varieties of the period (Table V, p. 328): the reduced AE 2 **141** (Dionysos/Kantharos), the reduced AE 4 **142** (Bearded Dionysos/Athena bust), the last emission of the Hellenistic coinage struck in this familiar small module, and the reduced AE 2 **145** (Zeus/Eagle on thunderbolt).

The Ptolemaic types of this last variety date it and with it the related Zeus/Bearded Dionysos AE 1 variety **144** to the time of Antony's liaison with Kleopatra and thus almost certainly to their stay of several months in Athens in the summer of 32.

#### *The Augustan Issues of Periods IVC–E: 31–10's B.C.*

Athens' Hellenistic coinage concludes in the early Augustan era in three distinct series of reduced AE 1 emissions. Except for the last, they continue the Period IVB convention of changing reverse types, but reverses are now again enclosed in a wreath. Unlike Period IVB issues **137**, **138**, and **143**, whose Athena heads scrupulously replicated the obverse heads of the discontinued stephanephoric silver and bronze, the Augustan emissions were normally designed with Athena heads that were either very free or very crude adaptations of the New Style prototype.

The first re-wreathed AE 1 series (Period IVC) consists of three small issues of aberrant appearance and considerably restored weight of 8–9 g. Reverses all suggest a connection with Octavian: the Demeter or Kore reverse of **146** with his initiation at Eleusis within weeks after Actium (early September of 31), the Nike reverse of **147** with Actium itself, and the Standing Zeus (Eleutherios) reverse of **148** with Octavian's role as "Liberator". The three issues may be dated accordingly to late 31 B.C. and the years soon following.<sup>168</sup>

After an interval, minting resumed on an unprecedented scale in the second Augustan coinage of four homogeneous issues (Period IVD). Obverses are typified by a helmet with flattened crown and a single, bushy tail of the central crest falling behind (as opposed to the two linear tails that trail behind

few years, when Octavia came with troops from Italy for continuing the war, she brought them to Athens (Plutarch, *Antony* 53.1–3). In the summer of 32, when assembling his forces to defeat Octavian, Antony again took up residence at Athens, this time in the company of Kleopatra (*Antony* 57.1–2).

<sup>167</sup> Antony may or may not have had a hand in the decision, but if he did it need not have been coercive. Writing about Antony's first residence in Athens in 42/1, Plutarch (*Antony* 23.2) tells how he "particularly liked to be addressed as *Philathenaios* and gave to the city very many gifts," which, according to Appian (*Bella Civilia* 5.7) included the islands of Aigina, Ikos, Skiathos, and Peparethos. Antony naturally replaced the democratic government that had supported Brutus and Cassius with an oligarchy (see J. Kirchner's commentary to *IG II<sup>2</sup>* 1043, and P. Graindor, *Athènes sous Auguste*, Cairo 1927, p. 95); but the logical time for this change in government was 42/1, not Antony's return from Italy three years later.

<sup>168</sup> Correcting the chronology in Kroll 1972, p. 99, where I assumed an unbroken chain of annual AE 1 strikings from the start of the unwreathed AE 1 in 41 B.C. and, not recognizing the proper sequence of the IVE coinage, placed both the Period IVC and the Period IVE series before Actium.

on regular New Style obverses) and reverses by a new, triangular disposition of the ethnic. Alphas are normally formed with broken bars, although bowed bars are sometimes found in the first emission (**149**, Athena advancing, owl) and straight crossbars in the later ones (**151**: Athena advancing, snake; **152**: Owl on prow, wheat ear; and **153**: Sphinx). As an Athenian coin type, the concluding sphinx device is inexplicable unless understood as the sphinx of Augustus' signet.<sup>169</sup> Augustan cistophoroi, which Sutherland assigns to 27–26 B.C.,<sup>170</sup> and aurei later minted at Pergamon in 19–18 B.C.<sup>171</sup> also employed the sphinx as a reverse type. Since Augustus replaced the sphinx with a signet portraying Alexander the Great (Pliny, *Natural History* 37.10), the final appearance of the sphinx on Roman coins of 19–18 B.C. gives a *terminus ante* or *ad quem* for the sphinx issue at Athens and an approximate dating in the mid-20's to early teens for the four issues of Period IVD overall. The second reference to Augustus in this series is the prow, presumably the prow of Actium, that supports the owl of Athens on variety **152**.

The four IVD issues were struck with a carefully maintained average weight of around 7.5 g., and in tremendous numbers. The total of 1,409 Agora specimens makes these, if not the most massive issues in Athenian bronze coinage, then certainly the most prolific in a large module. With them were struck half-unit emissions (**150**, **154–156**), mostly with Eleusinian types, and, at the beginning of Period IVD, three bronze cleruchy emissions for the Athenian islands of Lemnos (**159A**), Skyros (**160**), and Imbros (**161**). Intended for overseas use by these cleruchies, the coins were minted in Athens and verify that in the post-Actian settlement of Greece, Athens was confirmed in possession of her traditional Northern Aegean cleruchy islands.

The concluding reduced AE 1 series (Period IVE) revives the old stephanephoric types of Parthenos head/Owl on amphora for two issues (**157**: snake symbol, and **158**: cicada symbol) but at low average weights of 6.4 and 6.2 g. and generally in a bizarre, third-rate style that on many obverse and reverse dies borders on the grotesque. Although less so than in the preceding series, striking was again heavy, producing from both emissions a total of 475 Agora pieces. The break between the second and third Augustan series could not have lasted more than a few years, as there is no detectable difference in wear of coins from both series in the Chaïdari and Agia Varvara hoards. Thus if the second series ends around 19 B.C., the two light Owl-on-amphora issues belong somewhere in the later teens. Thereafter, Athens struck no new coinage for more than a century.

A notable aspect of these Augustan issues is their thoroughly "autonomous" character. In an exhaustive survey of civic coinages minted under Augustus, Andrew Burnett has deduced that the custom of placing the emperor's portrait on obverses began to spread rapidly throughout the Empire very early in the principate and that it was most likely promoted as a matter of Roman governmental policy.<sup>172</sup> Yet Athens coined without the portrait; and while this was certainly exceptional, so, too, did a few other cities under Augustus: Chios, Rhodes, Tyre, and (allowing for one special portrait issue, **776**) Sparta. Since all these cities were, like Athens, "free cities" under the Empire, their ability to continue to mint with local, civic obverses is probably to be understood as a privilege of their favored political status.<sup>173</sup>

Athena had always belonged on the obverse of Athenian money, but without changing the traditional character of the coinage, honors to Augustus could be displayed on reverses, and were:

<sup>169</sup> Suetonius, *Augustus* 50; Pliny, *Natural History* 37.4. H. U. Instinsky, *Die Siegel des Kaisers Augustus*, Baden-Baden 1962.

<sup>170</sup> Sutherland, Olcay, and Merrington, pp. 85–99, 104, pls. 17–19; *RPC* I, 2204, 2207, 2210.

<sup>171</sup> C. H. V. Sutherland, "Augustan Aurei and Denarii Attributable to the Mint of Pergamon," *RN*, ser. 6, 15, 1973 (pp. 129–151), pp. 131–132, pl. 14, nos. 1–11.

<sup>172</sup> *RPC* I, pp. 39–42.

<sup>173</sup> *Ibid.*

the Nike of **147** and the prow beneath the owl of **152** both allude to Actium, the statue of Zeus on **148** refers to Octavian's "liberation" of Athens, and the sphinx of **153** is Augustus' own signature. Falling at the end of the Period IVD coinage, the sphinx issue might have been struck as a gesture of reconciliation after 22/1, when on a journey to the East Augustus became angered with the Athenians, slighted them by wintering on Aigina, and deprived them of the territories of Aigina and Eretria and the business of selling Athenian citizenship.<sup>174</sup> But cordial relations were soon reached, and in the fall of 19 Augustus visited Athens on his way back to Rome and participated in the Eleusinian Mysteries for a second time.<sup>175</sup> Probably the sphinx issue is to be dated to or in anticipation of this last visit. It is interesting in any event that after this one explicitly Augustan issue, a reaction set in, and for the following light Owl-on-amphora issues the Athenians adopted traditionalist types that looked backward to the coinage and political order of a vanished era.

### *Denominational Change*

As the civil wars of the third quarter of the 1st century B.C. bound the cities of Greece ever more tightly to Rome,<sup>176</sup> the traditional monetary systems of many Greek states began to succumb to Roman influence. An underlying factor, mainly attributable to the presence of successive Roman armies in Greece, was the emergence of the denarius as the standard silver coin of Hellas. With the triumph of the denarius there appeared in several places bronze coinages that were modeled on the uniquely Roman monetary system of 16 asses (bronze units usually of roughly AE 1 size) to the denarius. Among the earliest such Roman coinages of Greece are the duoviral asses, semises, quadrantes, and sextantes begun by Corinth upon its foundation as a Roman colony in 44 or 43 B.C. (**670–704**) and the related asses and semises struck by the Latin colony of Dyme in 40 B.C.<sup>177</sup> In the early 30's, Roman officials of the joint province of Crete and Cyrene introduced a bronze coinage of sestertii, asses, semises, and quadrantes for use in their territory.<sup>178</sup> And in the 30's, recognizably Roman denominations, including the sestertius, make their first appearance in the coinage of Sparta,<sup>179</sup> perhaps under the influence of Antony's so-called Fleet Prefect bronze, much of which was issued from two of Antony's bases in Greece, possibly Corinth and the Peiraeus, in 38–37 and 36/5 B.C.<sup>180</sup>

At Athens the decision to suspend the minting of stephanephoric silver is a contemporary and related phenomenon. The decision dates to or right after the winter of 42/1 B.C. and must have formalized the replacement of the drachm by the denarius in the economic life of the city. But there are several indications that the shift in the basic silver unit at Athens was accompanied by a more

<sup>174</sup> Dio 54.7, and Plutarch, *Moralia* 207 E–F, with G. W. Bowersock, "Augustus on Aegina," *Classical Quarterly*, n.s. 14, 1964, pp. 120–121; *idem*, *Augustus*, p. 106. M. C. Hoff, "Civil Disobedience and Unrest in Augustan Athens," *Hesperia* 58, 1989 (pp. 267–276), pp. 267–269; *idem* 1989, pp. 4–5.

<sup>175</sup> R. Bernhardt, "Athen, Augustus und die eleusinische Mysterien," *AM* 90, 1975, pp. 233–237; Clinton 1989a, pp. 1507–1509. See also the discussions by Bowersock and Hoff cited in the preceding note.

<sup>176</sup> E. J. Owens, "Increasing Roman Domination of Greece in the Years 48–27 B.C.," *Latomus* 35, 1976, pp. 718–729.

<sup>177</sup> M. Amandry, "Le monnayage de Dymé (Colonia Dumaeorum) en Achaïe. Corpus," *RN* 23, 1981, pp. 45–67, especially 56–57, pls. 13–16; *RPC* I, 1283, 1284.

<sup>178</sup> *RPC* I, pp. 217–221, 226–227.

<sup>179</sup> Grunauer, Groups XVIII–XXII, pp. 50–51, with pp. 75, 80; *RPC* I, pp. 246, 247, 248; and J. H. Kroll, review of *RPC* I, *American Journal of Numismatics*, ser. 2, 5, 1993, forthcoming.

<sup>180</sup> M. Amandry, "Le monnayage en bronze de Bibulus, Atratinus et Capito. Une tentative de romanisation en Orient," parts I–III, *SNR* 65, 1986, pp. 73–85, pls. 10–17; 66, 1987, pp. 101–112, pls. 15–25; 69, 1990, pp. 65–96. Dating and Amandry's mint attributions to Corinth (Atratinus) and the Peiraeus (Capito) are discussed in part III, pp. 78–83. Summary in *RPC* I, pp. 284–286. For the five Capito specimens from the Agora excavations, see note 3 above, p. xxvi.



fundamental reform in the structure of the bronze currency. The indications and what seems at present to be their most plausible interpretation are as follows (see Table VII, p. 330 below):

1. According to the discussion on pages 83–84, the AE 1 unit, the chief bronze denomination of Period IV, was instituted in 86 B.C. as a bronze drachm, although after a sharp fall in value it was tarified at only one-sixth of a drachm of silver for nearly all of Period IVA and thus served as the equivalent of the traditional obol. It was accompanied by an AE 2 half-piece, an AE 3 quarter, and an AE 4 eighth.

2. Among indications of change after Period IVA, the most tantalizing are two reverse types that could have been revived for their denominational significance: the Fulminating Zeus reverse of the first unwreathed AE 1 issue (**137**) of 42/1 B.C. and the Two-owls-on-thunderbolt reverse of variety **156**, apparently the half-unit of the Augustan Period IVD reduced AE 1. Both reverses hark back to the two most commonplace coinages of Period III, the Fulminating Zeus AE 2 hemiobol and the Two-owls-on-thunderbolt AE 3 quarter-obol (**99**). Together they suggest that with the discontinuance of the stephanephoric silver and bronze in 42/1, the AE 1 module, formerly a bronze drachm (= old obol), was halved in value and was intended to circulate as the equivalent of the pre-86 B.C. Fulminating Zeus pieces. The Period IVA half-unit, or hemidrachm (= old hemiobol), was accordingly reduced to a quarter.

3. A substantial AE 1 devaluation in 42/1 B.C. is also implied by the gradual reduction in the size and weight of the AE 1 unit over the course of Period IVB (see Table IV, pp. 326–327 below). Beginning (in variety **137**) with an average weight of about 9 g. and diameters of about 19–20 mm. (about 1–2 g. and 1 mm. less than the preceding Owl-on-amphora bronzes), the unwreathed IVB flans were allowed to shrink until in the lightest issue (**143**, with an average weight of just under 6 g. and diameters measuring normally 17–20 mm.) they approximated the weight and size of the pre-86 AE 2 Fulminating Zeus coins and were in some cases actually overstruck on them (cf. 143f with 137e and 138h). In subsequent series, the reduced AE 1 unit was partially restored at *ca.* 8–9 g. (Period IVC), then stabilized around 7.5 g. (Period IVD), before plummeting to 6.0–6.5 g. in the concluding Augustan issues (Period IVE).

4. Two further suggestions of the cheapened value of the bronze coinage after 41 are (a) the more intensive striking of the (reduced) AE 1 unit throughout Periods IVB, D, and E and (b) the neglect of the minimal AE 4 unit, which was last struck in a single emission (**142**) of Period IVB.

5. Consideration of the Greek imperial coinage of Hadrianic Athens (Period V) suggests quite independently that the value of the AE 1 module was indeed halved at some point in its history. In essence a continuation of the 1st-century B.C. Period IV coinage, which had remained in use, the Hadrianic bronze was minted in four modular units: a new, large unit (**169–185**), which we may here call “AE 0”; the familiar reduced AE 1 unit (**186–197**), clearly inherited from the Period IV coinage; and two smaller units (**198–212**, **162–168** + **213–247**). On the natural assumption that these four modular units correspond to the four denominations employed in *IG II<sup>2</sup> 2776*, the 2nd-century *obligatio praediorum* inscription referred to above (p. 83 above), the large AE 0 unit will be the bronze drachm (worth  $\frac{1}{6}$  denarius), the old reduced AE 1 unit the bronze hemidrachm ( $\frac{1}{12}$  denarius), and the two smaller imperial modules the obol and hemiobol ( $\frac{1}{36}$  and  $\frac{1}{72}$  denarius). The intriguing equation is of course the second, for it greatly strengthens the deduction in item 2 above that in 42/1 the AE 1 bronze drachm (= old obol) was probably retarified and renamed to become the bronze hemidrachm (= old hemiobol).

6. If this information has been interpreted correctly, the effect of the devaluation was to bring the highly overvalued bronze AE 1 drachm more into line with the Roman monetary practice at the time when the Athenians formally forsook their stephanephoric silver for the denarius. Nominally

worth one-sixth of a drachm (or denarius) of silver, the AE 1 unit was reduced to a more modest coin of which there were 12 to the denarius. It is possible that over the four decades of Period IVA the value of the original AE 1 drachm could have continued to decline to, say, 7, 8, or more per silver drachm, so that the devaluation of 42/1 B.C. may not have been quite so drastic as a full 50-percent reduction of name value.<sup>181</sup> But whatever the actual circumstances, the shift to a bronze system of 12 AE 1 units per denarius seems unmistakably to have been intended to bring the Athenian bronze system into a closer approximation of the Roman silver:bronze ratio. In this connection it should be pointed out that, with the exception of the very lightest issues, the reduced Athenian AE 1 unit of Periods IVB–D had a size and weight range that is remarkably similar to that of the contemporary duoviral asses of Corinth.<sup>182</sup> Yet while the Athenians allowed their bronze coinage to be adjusted in the direction of Roman usage, they stopped short of adopting the Roman system *in toto*. In Period IVB the AE 1 drachms were renamed *hemidrachmai*, not *assaria*, and were tarified not 16 to the denarius but, in keeping with the Greek obol-drachm divisions, at a more favorable 12 AE 1 units to the denarius. The AE 1 devaluation here envisaged would thus have been a kind of compromise between the Roman and the Greek systems.<sup>183</sup>

### *Period IV Aftermath*

Like the other chronological periods, “Period IV” defines the temporal limits of the manufacture of the coins; but if one were to apply it to the time span of their primary circulation and use, the period would have to be extended to cover entirely the Julio-Claudian and Flavian eras. For the vast numbers of the Period IV AE 1 and reduced AE 1 pieces that were minted between 86 and the teens B.C. remained the essential bronze currency of Athens until the 2nd century after Christ, when Athens supplemented them with her earlier imperial issues (Period V).

The prolonged circulation of the Period IV coins, worn frequently to near illegibility, is documented in a number of Agora deposits of the 1st and early 2nd centuries after Christ<sup>184</sup> but nowhere so abundantly nor with such chronological precision as in the floor packing of a room in the northern outer stoa of the Library of Pantainos at the southeast corner of the Agora square

<sup>181</sup> In the accounts of a 2nd-century B.C. Theban hipparch, *IG VII 2426* (especially lines 17–18), sums in silver and bronze are tallied separately and involved an exchange differential of 25 percent between money in the two metals, with the result that it took  $7\frac{1}{2}$  obols in bronze to equal a drachm of silver. The phenomenon must have been common, although the exchange factor presumably fluctuated over time and from place to place. For all one can tell, the AE 1 drachm of Athens may already in 86 B.C. have been tarified at more than 6 per silver drachm. Could it then, when halved to a hemidrachm, have been tarified at 16 to the denarius and have served as the exact equivalent of a Roman as? Were it not for the Hadrianic bronze values mentioned under item 5 above, it would be worth exploring this possibility. But the Hadrianic evidence supports a ratio of 12 AE 1 pieces to the denarius, not 16, and it is doubtful that any putative retariffing of Athens’ bronze would have allowed its value to rise from 16 to the extremely favorable 12.

<sup>182</sup> The Corinthian asses commenced in 44 or 43 B.C. with an average weight of 9.2 g. and diameters of 22 mm.; these declined until stabilized under Augustus at an average of around 7 g. and 20 mm. (Amandry, pp. 82–83, table 12). *RPC I*, p. 246, notes the similarity of Athens’ reduced AE 1 module not only to the light asses of Corinth but to the presumed light asses of a number of other Greek cities during the Julio-Claudian period.

<sup>183</sup> Since the hemiobol was the Greek denomination that most closely approximated the silver value of an as/assaron, it is likely that the inscribed HMIOBEAIN bronzes of Aigion (see 731 and under 731–733) were also created to pass as equivalents or near equivalents of assaria. They are roughly the same size as the duoviral asses of Corinth and reduced AE 1 pieces of Athens. For good discussions of the varied bronze denominational systems of Roman Greece, see Howgego, pp. 52–60 and *RPC I*, pp. 31–35.

<sup>184</sup> Deposits D 11:1; D 4:1, layer II; F 11:1; K 9–10:1; O 17:1; P 6:2 and Q 6:2. These are summarized as deposits 1–6 in Kroll 1973, pp. 324–326.

(Deposit U 13:2a). Dating with the stoa and library between A.D. 98 and 102 and yielding 51 coins, the earth packing gives a reliable sampling of the petty currency of early Trajanic Athens.<sup>185</sup> A selection of the *latest* coins from the packing is illustrated on Plate 34: apart from the worn denarius of Titus (A.D. 79, Pl. 34:34), all are extremely worn pieces of Period IV or earlier mintage.

The 1st century of our era thus stands as a low point in the numismatic history of classical Athens. Yet the prolonged use of old, wretchedly worn bronze coins is only one of several signs of the economic malaise that beset the city between the reigns of Augustus and Hadrian. From the stagnation of the Athenian terracotta-lamp industry to the minimal level of public building activity, which was restricted to the repair and remodeling of existing monuments, there can be no mistaking what Shear has termed “the stark reality of Athenian decline.”<sup>186</sup> Insofar as the striking of coin in the cities of Greece had come to depend on the initiative and largess of members of the local elite, who undertook the responsibility of minting as a public benefaction,<sup>187</sup> the absence of any new bronze coinage in Julio-Claudian and Flavian Athens may be regarded as a symptom of decline in individual wealth and enterprise. Other factors, of course, could have contributed. Since the issuing of civic coinages under the Empire was apparently subject to imperial permission,<sup>188</sup> it is conceivable, for instance, that Athens might have encountered resistance had she insisted on resuming an autonomous coinage or wanted to strike while retaining her existing bronze system with its exceptionally favorable bronze:denarius ratio. The relevance of such external control, however, is very dubious in the case of Athens in view of her privileged status as a legally “free and allied city.” As mentioned above (p. 88), free cities seem to have been exempted from the constraints that ordinary subject cities experienced in the production of coinage, as in many other matters of self-government. Moreover, the long suspension of civic minting at this time is widely paralleled at many other places in Greece and elsewhere.<sup>189</sup> At Athens, as doubtless at other cities, economic stagnation and public apathy were probably cause enough.

Another monetary phenomenon of the 1st century after Christ was a marked increase in the practice of cutting coins in two to compensate for a shortage of half-unit fractions. The practice of halving was certainly not new: the half of a large, late 5th-century bronze coin of Akragas (421) is the earliest attestation at Athens; two worn, halved Athenian imperial coins of the 2nd century after Christ (248f and [248–283]a) show that it continued as late as the 3rd century of our era. But most of the evidence for halving comes from AE 1 pieces in circulation during the long suspension of minting between Augustus and Hadrian. In the Period IV catalogue it will be seen that almost every AE 1

<sup>185</sup> In the description of the floor packing of the room (room 7) in the 1973–1974 excavation report, *Hesperia* 44, 1975, pp. 343–345, note 23, two lots of coins are distinguished: 35 coins from the earth fill and 16 more that “were found in the same area of the room but imbedded in the top of the next lower layer.” Since both lots appear to belong to a single deposition, they are listed together under U 13:2a in the list of deposits at the end of this volume (pp. 317–318). For the architecture and date of the library: T. L. Shear, Jr., “Athens: From City-State to Provincial Town,” *Hesperia* 50, 1981 (pp. 356–377), pp. 370–371; Camp, pp. 187–191.

<sup>186</sup> Shear (note 185 above), p. 368, concluding a valuable survey of Athenian public works in the 1st century after Christ. Judith Perlzweig (*Agora* VII, pp. 13–14) discusses the slump in Early Imperial Athenian lamp production as one of numerous manifestations of general economic depression.

<sup>187</sup> Howgego, pp. 85–87, 90–91; Harl, pp. 25–32; *RPC* I, pp. 3–4, 16.

<sup>188</sup> *RPC* I, pp. 2–3, 19, 21, superseding all earlier discussions on this fundamental question.

<sup>189</sup> The only mints in Greece that produced anything more than the most minor coinages during the first century after Christ were Corinth, Patrai, the Thessalian Koinon at Larissa, and Thessalonike. Among other mints, Sparta had a considerable Augustan coinage, a smaller one under Claudius, and then nothing until the 2nd century; Nikopolis struck under Augustus and in a very small Neronian emission and then breaks until Hadrian. Cf. *RPC* I, p. 21.

issue is represented by one or more halved pieces. But the aggregate is modest, consisting of only 64 (just under 2 percent) out of a total of 3,590 classified and unclassified Period IV AE 1 coins, and so it is clear that the halving was done unofficially.<sup>190</sup> A few halved AE 2 coins of Periods II and III<sup>191</sup> were also cut in Imperial times when they must have been circulating as equivalents of reduced AE 1 pieces; any earlier than this, the abundance of fractional issues would have made halving unnecessary.

Distributed over the Period IV coinage in proportion to the relative size of each issue, the AE 1 halving apparently began about the time that the Period IV minting was completed (a specimen of **158** [Period IVE] from Deposit E 15:3 had been halved already by late Augustan times) and, as we learn from six halved non-Athenian coins from the Agora with the portrait of Nero, was certainly being practiced around A.D. 68. The halving of these Neronian pieces, five duoviral asses of Corinth (691c, 694c–f), and an as of Sikyon (729),<sup>192</sup> all but one from the last years of Nero's life, ought to be some kind of response to the *damnatio memoriae* of the dead emperor.<sup>193</sup> The response was uniquely Athenian. None of the Neronian duoviral asses found at Corinth, or anywhere else outside the Athenian Agora, are halved. But these (and the related Neronian as of Sikyon) were, apparently because they were so similar in size and weight to reduced AE 1 coins of Athens that they would have ordinarily passed at Athens as equivalents of the Athenian coins and could be halved in keeping with Athenian practice. The purpose of the halving, therefore, was not, it seems, solely to obliterate the *memory* of Nero, whose image was only rarely defaced on coins at this time anyway.<sup>194</sup> At various places in the empire, coins with Nero's effigy were countermarked in 68/9 to ensure that they would retain their value despite his condemnation.<sup>195</sup> Some owners of Neronian coins at Athens, fearing that the coins would no longer be accepted and having no recourse to official countermarking, could have chosen to render them less conspicuous and harder to recognize by cutting.

The fundamental continuity between the Period IV reduced AE 1 coinage and the new imperial issues that Athens finally did strike in the 2nd century after Christ has been mentioned above. The first imperial coinage (Period VA) was restricted to a fractional denomination, which filled the need earlier supplied by halving and was clearly intended to circulate with the worn AE 1 currency. The

<sup>190</sup> For the technique of halving, see [149, 151]a, an extremely worn coin that was cut across with a chisel in preparation for being bent and snapped in two. The infrequency of halving at Athens contrasts with the huge quantities of cut coins produced when halving was performed in the West following certain drastic reductions of the Roman bronze standard; see R. R. Holloway, "Numismatic Notes from Morgantina II: Half Coins of Hieron II in the Monetary System of Roman Sicily," *ANSMN* 9, 1960, pp. 53–73; T. V. Buttrey, "Halved Coins, the Augustan Reform, and Horace, *Odes* I.3," *AJA* 76, 1972, pp. 31–48; *idem*, in *Sardis* M7, p. 128; *Morgantina* II, pp. 147–148, 152, 153. To the bibliography on halving referenced in the foregoing, add M. Thompson, "A Ptolemaic Bronze Hoard from Corinth," *Hesperia* 20, 1951 (pp. 355–367), p. 355 and pl. 101, no. 32 (half of a large Egyptian bronze of the 2nd century B.C.).

<sup>191</sup> 79f, 89d, 94g, and the unclassified [82–84, 90–97]a, b.

<sup>192</sup> Apart from these and the other halved Agora bronzes mentioned above, the excavations have yielded the six illegible halved coins listed under **1038** and at least two (there are probably others) halved Roman coins not noted in *Agora* II: OO-1490, half of an almost totally worn Augustan sestertius, and Σ-6484, half of a sestertius of M. Aurelius.

<sup>193</sup> Out of the 48 duoviral asses of Corinth from the Agora (**670–700**), 22 are Neronian, but only these 5 were halved. So although datable to or just after 68/9, even the cutting of coins with Nero's *imago* at Athens was of limited application.

<sup>194</sup> On 694c Nero's image and name are intact, but this coin was not cut through the middle. On *damnatio* and the erasure of coins, see Harl (pp. 150–151, note 36), who points out that some alleged instances of intentional defacement of Neronian coins are the result of wear; Howgego (pp. 5–6, 210), who notes that at Thessalonike the erasure of Nero's face and name is limited to a single extant coin; and *RPC* I (p. 21), which lists two effaced Neronian coins of Patrai (1263, 1278).

<sup>195</sup> D. W. MacDowall, "Countermarks of Early Imperial Corinth," *NC*, ser. 7, 2, 1962 (pp. 113–123), pp. 121–122; Howgego, p. 6, with nos. 537, 543, 555–557, 619.

advent of the full-blown imperial coinage (Period VB) introduced the large imperial unit, the “AE 0” drachm, but retained the old reduced AE 1 module as the second unit on the denominational scale. For a while this fresh coinage could at most have only supplemented the vast quantity of worn AE 1 money still in circulation. Whether, then, the bulk of the worn coinage was systematically withdrawn and melted down for restriking or whether all of it was allowed to remain in circulation indefinitely is unclear. But a fair quantity was still in use as late as the middle of the 3rd century, to judge from one extremely worn Period IV piece hoarded at the time of the Herulian invasion in A.D. 267<sup>196</sup> and from fifteen others that were punched on one side with a shallow cavity to give them the appearance of worn 2nd-century Athenian imperials.<sup>197</sup>

## CATALOGUE

Die positions, as in Period III, are vertically aligned, with occasional deviations at 1 or 11 o'clock.

### PERIOD IVA

#### AE 1

*86–late 80's B.C.*

|            |          | Head of Athena Parthenos r.,<br>wearing ornamented Attic<br>helmet; border of dots. | A-ΘE Owl stg. r., facing, on<br>horizontal amphora; all in<br>olive wreath. | Sv. 79.2–7; Kroll<br>1972, pl. 34:3–7 |
|------------|----------|---|---|---------------------------------------|
| <b>115</b> | 60 coins | 19–23   | Av. 10.46 (31)  |                                       |
| *a         | ΛΛ-299   | 20  | 10.79   | (D 4:1)                               |
| *b         | O-94     | 21  | 13.11   |                                       |
| *c         | Σ-1090   | 20  | 9.94  |                                       |
| *d         | O-102    | 22  | 12.50   |                                       |
| *e         | K-1630   | 19  | 10.40   |                                       |
| *f         | A-223    | 22  | 9.09  |                                       |
| *g         | OO-1486  | 20  | -   | halved                                |

The position of this variety without symbol at the beginning of the heavy Owl-on-amphora series is implied by the contexts of Table VI (p. 329 below), the overstriking of a specimen in the 70's (119e), and the circumstance that the issue has no parallel in the silver coinage and so should belong before any post-Mithradatic silver was struck (Kroll 1972, pp. 87, 93).

<sup>196</sup> Deposit B 17:1. Many of the 46 totally worn AE 1-sized pieces from the great Eleusis hoard of A.D. 267 (Svoronos 1904, p. 139, no. 267; Kroll 1973, p. 333) probably dated from Period IV, but they are no longer available for examination.

<sup>197</sup> See 103g, 127f, 137h, 144e, 149, 153h, two coins noted under the unclassified heavy Owl-on-amphora AE 1 (p. 98 below) and five under the unclassified Period IVA–E AE 1 (p. 110, below). On the punched flans of the Period V imperials, see pp. 113–114 below.

(?) 84 B.C.

|            |         |   |    |  |  |
|------------|---------|---|----|--|--|
|            |         | Head of Demeter r., wearing wheat wreath and veil; border of dots.    |    | A-Θ Triptolemos l., holding wheat ears in r. hand, scepter in l., mounting winged chariot drawn by two snakes; all in olive wreath.  | Sv. 104.24–28  |
| <b>116</b> | B'-693  | 19  | -  | nearly illegible condition   |  |
|            |         | Head of Kore <sup>198</sup> r., wearing wheat wreath; border of dots. |    | <sup>A</sup><br>AΘ-E or Θ-E Iakchos stg. r., holding a torch tied with fillet; <sup>199</sup> at r., plemochoc; all in wheat wreath. | Sv. 25.11, 12  |
| <b>117</b> | 2 coins |   |    |  |  |
|            | *a      | Γ-1084  | 21 | 9.07   | <sup>A</sup><br>Θ-E (E 14:3; see Table VI, p. 329 below) |
|            | b       | ΛΛ-254  | 23 | 9.53   | [?]-E heavily blistered                                  |

Both rare varieties belong early in Period IVA. **116** revives the venerable 4th- and early 3rd-century Eleusinian type of Triptolemos l. in chariot and goes with the early AE 2 variety **127**, which has the same types. The discovery of 117a in Deposit E 14:3 implies that the Kore/Iakchos issue must be more or less contemporary. Being the first emissions with exclusively Eleusinian iconography since the middle of the 2nd century (see **86** and **106**), they seem to mark a revival of the old tradition of an Eleusinian festival coinage. Association with the probable initiation of Sulla in September of 84 is likely for at least one of the emissions. As one sees from 117a and Sv. 25.11, 12, **117** was struck from a minimum of three pairs of dies.

early 70's B.C.

|            |          |  |     |  |  |
|------------|----------|--|-----|--|--|
|            |          | Head of Athena Parthenos r.; border of dots. |     | A-Θ Owl stg. r., facing, on horizontal amphora; at r., poppy head between two wheat ears; all in olive wreath. | Sv. 79.15–17; Kroll 1972, pl. 34:10–14 |
| <b>118</b> | 18 coins | 19–23  | Av. | 9.72 (13)  |  |
|            | *a       | ΩΔ-10  | 23  | 13.11  | GRC, fig. 15                           |
|            | *b       | Ψ-32   | 21  | 8.20   |  |
|            | *c       | ΠΠ-175                                       | 20  | 10.32  |  |
|            | *d       | Γ-1043                                       | 20  | 11.95  | (E 14:3)                               |
|            | *e       | N-340  | 20  | 9.35   | A-Θ<br>E                               |

The poppy-and-wheat-ears symbol is shared with the Lysandros-Oinophilos silver, the fourth or fifth issue after Mithradates-Aristion (*New Style*, nos. 1179–1186; Boehringer, p. 302; Mattingly 1979, p. 165; cf. Mørkholm 1984, p. 32).

<sup>198</sup> As indicated by the absence of a veil. Except for Sv. 104.24 (variety **116** but from a variant obverse die), Demeter is consistently represented on the Period IV bronze with a covered head.

<sup>199</sup> On the iconography (boots, short garment, and torch) of Iakchos, the youthful personification of the great procession to Eleusis, see *LIMC* V, pp. 612–614, pl. 419; Mylonas, pp. 207, 211, 212, 238, 252–254, with pls. 81, 84, 85, 88; K. Clinton, “Eleusinian Iconography and Cult: Iakchos and Eubouleus” (lecture, Baltimore 1989), abstract in *AJA* 93, 1989, pp. 279–280. For an Eleusinian torch tied with a fillet, see A. D. Trendall, “Medea at Eleusis on a Volute Krater by the Darius Painter,” *Record of the Art Museum, Princeton University* 43, 1984, figs. 2, 9:b. On coins Iakchos is found also as the symbol of the 2nd-century Phanokles-Apollonios silver (*New Style*, nos. 697, 709, and 685, where the figure is misidentified as Artemis) and on the Athenian imperial variety **188**.

*late 70's B.C.*

|            |          | Similar. |                | Similar, except at r., mystic staff. | Sv. 79.18–21; Kroll 1972, pl. 34:15–19 |
|------------|----------|----------|----------------|--------------------------------------|--|
| <b>119</b> | 33 coins | 18–23    | Av. 10.11 (16) |                                      |  |
| *a         | OO-1127  | 20       | 9.61           |                                      |  |
| *b         | I-799    | 20       | 11.28          |                                      |  |
| *c         | NN-1165  | 20       | 11.80          |                                      |  |
| *d         | B'-1011  | 18       | 10.10          |                                      |  |
| *e         | Σ-2033   | 22       | 7.05           | overstruck on variety <b>115</b>     |  |
| f          | AA-520   | 20       | -              | halved and extremely worn            |  |

The mystic-staff symbol connects the variety to the Sotades-Themistokles tetradrachms (*New Style*, nos. 1222–1226X), the seventh or eighth issue in the post-Mithradates silver sequence as revised by Mattingly (1979, pp. 164–165).

*ca. 80's–42 B.C.*

|             |       | Similar. |       | Similar, except at r., plemochoe. | Sv. 79.35; Kroll 1972, pl. 34:8, 9 |
|-------------|-------|----------|-------|-----------------------------------|------------------------------------|
| <b>*120</b> | KK-59 | 20       | 11.32 |                                   |                                    |

A plemochoe symbol occurs also on the silver of Mnaseas-Nestor, which Thompson (*New Style*, pp. 369–370, nos. 1147–1157) placed immediately after Mithradates-Aristion but which is now dated before the First Mithradatic War in 91/0 B.C. (Boehringer, pp. 24–25, 202; followed by Mørholm 1984, p. 32, and, especially, Mattingly 1979, pp. 161–162). The bronze therefore cannot be associated with the silver. With only two specimens in the 483-piece Chaidari hoard, this was one of the smaller AE 1 emissions.

|            |         | Similar. |              | Similar, except at r., tripod. | Sv. 72.17; 79.32, 33; Kroll 1972, pl. 35:6–10 |
|------------|---------|----------|--------------|--------------------------------|---|
| <b>121</b> | 8 coins | 18–22    | Av. 8.64 (5) |                                |   |
| *a         | ΣT-32   | 20       | 8.60         |                                |   |

There is no post-Mithradatic silver issue with a simple tripod symbol, but the tripod here may be an abbreviation of the complex symbol on the Epigenes-Xenon tetradrachms: Apollo Lykeios leaning against a column surmounted by a tripod (*New Style*, nos. 1237–1240). Approximately the fifteenth or sixteenth issue after Mithradates-Aristion, Epigenes-Xenon should belong in the mid- to late 60's. Mattingly (1979, pp. 166–167) argues for 64/3.

|            |          | Similar. |            | Similar, except at r., two wheat ears. | Sv. 79.22–24; Kroll 1972, pl. 35:1–5 |
|------------|----------|----------|------------|--|--------------------------------------|
| <b>122</b> | 31 coins | 20–22    | 10.28 (12) |  |                                      |
| *a         | M-353    | 19       | 10.41      |  |                                      |
| *b         | NN-565   | 20       | 11.97      |  |                                      |
| *c         | BB-980   | 21       | 9.21       |  |                                      |
| *d         | K-1687   | 22       | 12.28      |  |                                      |
| e          | BB-63    | 20       | -          | halved                                 |                                      |

Two wheat ears is also the symbol of the highly problematic Kointos-Charmostra silver, which, despite Thompson's rejection from the Athenian sequence, some scholars have dated to 86/5 as the first Athenian silver issue after Mithradates-Aristion (see note 142 above, p. 81). However this may be, it is doubtful whether the silver and bronze could have anything to do with each other. On the silver the two ears of wheat are detached, vertical, and parallel; on the bronze they are joined and usually rise in the form of V or Y (Kroll 1972, p. 91). Moreover, a date for the bronze as early as the 80's is ruled out by the facts that the issue was one of the largest in

the heavy Owl-on-amphora series and yet is missing from the early contexts of our Table VI (p. 329 below). Either the issue has no parallel in the post-Sullan silver or its two wheat ears could be an abbreviation for the Isis symbol of Demeas-Kallikrates, the Demeter symbol of Menedemos-Timokrates, or the Triptolemos symbol of Kallimachos-Epikrates, since each of these divinities is depicted on the silver holding two ears of wheat (*New Style*, nos. 1232, 1233, 1241–1244, 1253, and 1254).

|             |       |          |       |                                |                      |
|-------------|-------|----------|-------|--------------------------------|----------------------|
|             |       | Similar. |       | Similar, except at r., flower. | Sv. 70.20; 79.30, 31 |
| <b>*123</b> | ΩΔ-76 | 19       | 11.50 |                                |                      |

Sv. pl. 70, associates this with the third or fourth silver issue after Mithradates-Aristion, Architimos-Demetri, whose symbol is Isis holding a lotus (*New Style*, nos. 1173–1178). But the association is not really convincing, since the leafy flower or plant on the bronze (see especially Sv. 70.20) does not resemble Isis' lotus. It is more likely that the bronze lacks a counterpart in silver. The issue is rare; not one specimen is in the great Chaïdari and Agia Varvara hoards.

|            |          |          |               |   |  |
|------------|----------|----------|---------------|---|--|
|            |          | Similar. |               | Similar, except at r., winged caduceus. | Sv. 79.25–28; Kroll 1972, pl. 35:11–15 |
| <b>124</b> | 23 coins | 18–23    | Av. 9.61 (12) |   |  |
| <b>*a</b>  | ΠΘ-172   | 20       | 11.89         |   |  |
| <b>*b</b>  | M-282    | 20       | 8.86          |   |  |
| <b>*c</b>  | Λ-73     | 21       | 10.11         |   |  |
| <b>*d</b>  | NN-1205  | 18       | 10.51         |   |  |

A winged caduceus is the symbol of the late Dionysios-Demostratos silver issue, known from a single drachm (*New Style*, no. 1246).

|             |       |          |      |  |                                      |
|-------------|-------|----------|------|--|--------------------------------------|
|             |       | Similar. |      | Similar, except at r., thyrsos tied with fillet. | Sv. 70.25; Kroll 1972, pl. 35:16, 17 |
| <b>*125</b> | Γ-498 | 20       | 9.72 |  |                                      |

The symbol is shared with the Architimos-Pammenes tetradrachms (*New Style*, nos. 1255–1258), one of the later New Style emissions present in the Hierapytna hoard (*IGCH* 352) and so probably datable to the 50's (see Mattingly 1969, p. 328).

|            |          |          |               |   |                                     |
|------------|----------|----------|---------------|---|-------------------------------------|
|            |          | Similar. |               | Similar, except at r., two pilei of the Dioskouroi. | Sv. 79.8–14; Kroll 1972, pl. 36:1–5 |
| <b>126</b> | 25 coins | 19–22    | Av. 9.40 (14) |   |                                     |
| <b>*a</b>  | B'-996   | 20       | 8.14          |   |                                     |
| <b>*b</b>  | KK-14    | 20       | 9.56          |   |                                     |
| <b>*c</b>  | Ω-138    | 19       | 8.71          |   |                                     |
| <b>*d</b>  | ΔE-10    | 19       | 10.01         |   |                                     |
| <b>*e</b>  | ΠΘ-139   | 19       | -             | halved (as also Σ-4569)                             |                                     |

Apparently, this is the last issue in the heavy Owl-on-amphora bronze, as shown by the wear of specimens in the Chaïdari and Agia Varvara hoards. The issue is without a parallel in the extant post-Mithradatic silver.

UNCLASSIFIED

|                       |  |                                    |
|-----------------------|--|------------------------------------|
|                       | Similar.   | Similar, except details illegible. |
| <b>[115, 118–126]</b> | 205 coins of uncertain heavy Owl-on-amphora variety. |                                    |



Nearly all these are extremely worn from circulation continuing as late as the 2nd and 3rd centuries after Christ. Six (Z-27, Z-1182, I-320, ΠΘ-177, Σ-4144, and T-990) are halved. And the obverses of two (Θ-426 and K-1518) were punched with a shallow cavity, for which see p. 94 above.

## AE 2

(?) 84 B.C.

|            |         | Head of Demeter r., wearing veil; border of dots. | A-Θ<br>E Triptolemos l., holding wheat ears in r. hand and scepter in l., seated in winged chariot drawn by two snakes. | Sv. 104.29, 30                                    |
|------------|---------|---|---|---|
| <b>127</b> | 7 coins | 16–18   | Av. 5.76 (7)  |   |
| *a         | BΔ-107  | 18  | 7.92  |   |
| *b         | ΩΔ-41   | 17  | 5.11  |   |
| *c         | T-727   | 18  | 6.59  |   |
| *d         | Γ-1045  | 17  | 6.45  | (E 14:3)  |
| e          | Γ-1056  | 16  | 3.58  | (E 14:3)  |
| *f         | ΠΠ-132  | 16  | 5.11  | heavily worn; cavity punched in center of obverse |
| g          | Σ-3018  | 16  | 5.58  |   |

early 70's B.C.

|                               |         | Similar. | Similar, except poppy head behind or in front of Triptolemos. | Sv. 104.31–35 |
|-------------------------------|---------|----------|---|---------------|
| <b>128</b>                    | 7 coins | 15–17    | Av. 4.35 (7)  |               |
| Poppy head behind Triptolemos |         |          |   |               |
| *a                            | Π-602   | 16       | 4.64  |               |
| *b                            | NN-1323 | 15       | 4.81  |               |
| *c                            | ΠΠ-289  | 17       | 4.42  |               |
| d                             | ΣT'-727 | 16       | 3.37  |               |
| Poppy head before Triptolemos |         |          |   |               |
| *e                            | B'-928  | 15       | 3.65  |               |
| *f                            | KK-282  | 16       | 5.51  |               |
| *g                            | ΣT'-531 | 16       | 4.08  |               |

[127, 128] 30 coins of uncertain AE 2 Demeter/Triptolemos type.

a Ω-164 16 blistered (N 20:4)

Of these two, clearly AE 2 emissions, the first (without symbol) occurs in the Delos 1910 hoard (Table VI, p. 329 below) and appears to go with the Demeter/Triptolemos AE 1 variety **116**. The second (poppy symbol) emission was presumably minted with the heavy Owl-on-amphora variety **118**.

70's–40's B.C.

|            |           | Dolphin on trident; border of dots. | A-ΘE Plemochoe with wheat ear in each handle; all in wheat wreath. | Sv. 107.1–8 |
|------------|-----------|-------------------------------------|--|-------------|
| <b>129</b> | 26 coins  | 14–17                               | Av. 4.09 (15)  |             |
| *a         | Σ-3486bis | 17                                  | 4.21   |             |

|    |         |    |      |          |
|----|---------|----|------|----------|
| *b | H'-3600 | 17 | 5.05 |          |
| *c | B-262   | 17 | 4.22 | (F 11:1) |
| *d | ΓΓ-94   | 16 | 3.15 |          |
| *e | P-1395  | 15 | 3.95 |          |

The trident and dolphin represent Poseidon, whose head probably would have been placed on the obverse were it not too easily confused with the head of Zeus. This is the only pre-imperial Athenian coin type that refers to Poseidon. The plemochoe on the reverse fits the routine Period IV practice of designing the AE 2 half-unit with Eleusinian types. Poseidon might have been chosen for the obverse because of his connections with Eleusis; he was the ancestor of the Eumolpidae and had a temple just outside the sanctuary of Demeter and Kore.<sup>200</sup> If, on the other hand, the exceptional recognition of Poseidon is compared with the equally unprecedented appearance of Dionysos on varieties **140–142** and **144**, which were struck to flatter Marc Antony during his residence in Athens in the 30's, it is possible that the present issue belongs to 62 B.C., when Pompey the Great visited Athens on his triumphant return to Rome.<sup>201</sup> His visit could have coincided with the celebration of the Mysteries in late September.

|            |                      |   |              |   |                                       |
|------------|----------------------|---|--------------|---|---------------------------------------|
|            |                      | Head of Athena r., wearing Corinthian helmet; border of dots. |              | A-ΘE Artemis, quiver at shoulder, running r., carrying flaming torch. | Sv. 81.53–56; Kleiner 1976, pl. 4:110 |
| <b>130</b> | 6 coins              | 15–17   | Av. 3.85 (6) |   |                                       |
|            | *a                   | K-1190  | 16           | 5.80  |                                       |
|            | *b                   | B'-948  | 16           | 3.63  |                                       |
|            | See pp. 82–83 above. |   |              |   |                                       |

**AE 3**

*mid-80's–70's B.C.*

|            |                  |   |               |                                  |  |
|------------|------------------|---|---------------|----------------------------------|--|
|            |                  | Head of Apollo r., laur.; border of dots. |               | A <sup>Θ</sup> E or A-ΘE Cicada. | Sv. 107.28–35; Kleiner 1976, pl. 4:93-96 |
| <b>131</b> | 68 coins         | 14–16                                     | Av. 3.89 (35) |                                  |  |
|            | A <sup>Θ</sup> E |   |               |                                  |  |
|            | a                | ΠΘ-447                                    | 14            | 3.33                             | Kleiner 1976, p. 35, pl. 4:93            |
|            | *b               | KK-9bis                                   | 16            | 4.08                             |  |
|            | *c               | ΠΠΠ-173                                   | 15            | 4.15                             |  |
|            | *d               | K-587                                     | 16            | 3.46                             | flan cut down before striking            |

<sup>200</sup> Mylonas, pp. 167–168.

<sup>201</sup> Pompey was posthumously apotheosized as Neptune by his son Sextus, who called himself the son of Neptune and in 44–43 B.C. struck the remarkable denarii with the portrait of Pompey-Neptune accompanied by the symbols of dolphin and trident (Crawford, *RRC*, nos. 483:1, 2, with p. 739, note 5). Granted that this was so much propaganda cultivated by Sextus to enhance his position as *praefectus classis et orae maritimae*, the equation of Pompey with Poseidon is less likely to have originated with Sextus in the 40's than in the Greek East, where such ruler-god identifications had long been a fixture of political life. Historically, the equation rested on Pompey's naval success over the pirates some twenty years earlier, and it would be surprising if so obvious an association could have gone unnoticed during Pompey's tour of Greece in 62, especially by the poets who competed at Mytilene in glorifying Pompey's exploits (Plutarch, *Pompey* 42.2). For the divine honors offered to Pompey by the Greek cities, including Athens in 67 B.C., see Plutarch, *Pompey* 27.5–6 and Cerfaux and Tondiau, pp. 284–285. A major part of the 50 talents Pompey contributed for the restoration of Athens went to the rebuilding of the Peiraeus (Plutarch, *Pompey* 42.11, with *IG* II<sup>2</sup>, 1035, line 47, and J. Day, *An Economic History of Athens under Roman Domination*, New York 1942, pp. 145–149).

## A-ΘE

|    |        |    |      |          |
|----|--------|----|------|----------|
| *e | Φ-360  | 14 | 5.40 |          |
| *f | T-843  | 15 | 4.38 |          |
| *g | Γ-1068 | 15 | 4.79 | (E 14:3) |

The first, and more common, form of the ethnic and the occurrence of three somewhat worn specimens in Deposit E 14:3 (Table VI, p. 329 below) show that the variety belongs early in Period IVA.

## AE 4

*mid-80's–70's B.C.*

|  |                               |   |               |   |  |
|--|-------------------------------|---|---------------|---|--|
|  |                               | [Head of Apollo r., laur., hair rolled; border of dots.]                    |               | A<br>Θ-[E] Two wheat ears; all in wheat wreath. | Sv. 107.12–14; <i>Délos</i> XXVII, pl. 66, F240–246  |
| <b>132</b>   | ΓΓ-301                        | 12  | 1.93          |   |  |
|  |                               | Head of Apollo r., laur., hair falling in archaizing curls; border of dots. |               | A-Θ<br>E Poppy between two wheat ears.          | <i>Délos</i> XXVII, pl. 66, F270–277                 |
| <b>133</b>   | 8 coins                       | 10–11   | Av. 1.87 (8)  |   |  |
|  | *a Γ-1064                     | 11  | 1.64          | (E 14:3)  |  |
|  | *b Z-680                      | 10  | 1.71          |   |  |
|  | *c ZZ-35                      | 10  | 1.79          |   |  |
|  |                               | Athena r., wearing Corinthian helmet; border of dots.                       |               | Similar.  | Sv. 107.16, 17                                       |
| <b>134</b>   | 3 coins                       | 10–12   | Av. 1.69 (3)  |   |  |
|  | *a BB-416                     | 12  | 1.63          |   |  |
|  | *b PP-803                     | 11  | 2.27          |   |  |
| [133, 134] 5 coins of uncertain AE 4 Poppy-between-wheat-ears variety. |                               |   |               |   |  |
|  | *a OX-9                       | 11  | 2.03          | flan trimmed before striking                    |  |
|  |                               | Head of Apollo r., laur., hair falling in archaizing curls; border of dots. |               | A-ΘE Two wheat ears; border of dots.            | Sv. 107.18–21; <i>Délos</i> XXVII, pl. 66, F 279–290 |
| <b>135</b>   | 33 coins                      | 10–11   | Av. 1.70 (22) |   |  |
|  | *a B-358bis                   | 11  | 1.33          |   |  |
|  | *b BΔ-197                     | 11  | 1.91          |   |  |
|  | *c OO-956                     | 10  | 1.48          |   |  |
|  | *d Λ-72bis                    | 11  | 1.79          |   |  |
|  | *e PP-647                     | 10  | 1.10          |   |  |
|  | *f KK-29bis                   | 11  | 2.06          |   |  |
|  | *g Γ-1059                     | 10  | 1.93          | (E 14:3)  |  |
|  | h-k Γ-1054a and b, 1064, 1080 |   |               | (E 14:3)  |  |

|            |                            | Head of Athena r., wearing Attic helmet. | Similar.     |  |
|------------|----------------------------|--|--------------|--|
| <b>136</b> | 3 coins                    | 10                                       | Av. 1.54 (3) | Sv. 107.22, 23; <i>Délos</i> XXVII, pl. 66, F301 |
|            | *a K-1592                  | 10                                       | 1.62         |  |
|            | *b NN-987                  | 10                                       | 1.55         |  |
|            | *c H <sup>1</sup> -3296bis | 10                                       | 1.46         |  |

[132, 135, 136] 24 coins of uncertain Two-wheat-ears variety.

The dating of the AE 4 varieties is based on the contexts of Table VI (p. 329 below) and the possible association of 133 and 134 with 118 and 128.

### PERIOD IVB

42/1–39 B.C.

#### Reduced AE 1

|            |           | Head of Athena Parthenos r.; border of dots. | A-Θ<br>E Zeus striding r., hurling thunderbolt, eagle perched on his extended l. arm; at l., wheat ear. |  |
|------------|-----------|--|---|--|
| <b>137</b> | 45 coins  | 18–22  | Av. 7.65 (21)   | Sv. 80.25–28; Kroll 1972, pl. 36:6–10                                    |
|            | *a ΠΘ-350 | 21   | 8.21  |  |
|            | *b P-290  | 20   | 7.93  |  |
|            | *c KK-359 | 19   | 8.68  | <i>GRC</i> , fig. 15   |
|            | *d ΒΔ-363 | 19   | 7.05  |  |
|            | *e Γ-170  | 19   | 4.80  | overstruck on AE 2 coin of pure, yellowish alloy                         |
|            | *f N-440  | 19   | 5.45  | flan trimmed hexagonally before striking                                 |
|            | *g BB-602 | 18   | -   | halved (as also NN-1285)   |
|            | h PP-132  | 20   | 4.85  | extremely worn and punched on obv. with a shallow cavity (as also ΩΔ-84) |

Following upon Antony's arrival in Athens after Philippi, this reform issue will have been struck at the end of 42 or during 41 B.C. The arrangement of the ethnic and particularly the omission of the eagle before Zeus's feet suggest that the revived type was copied from the early 1st-century Fulminating Zeus variety 95 (mystic-staff symbol) or 96 (thyrsos symbol). The only modifications are the change in emission symbol and the eagle added upon Zeus's outstretched left wrist.

|            |           | Similar. | A-ΘE Tripod; at l., poppy; at r., thunderbolt. |   |
|------------|-----------|----------|--|---|
| <b>138</b> | 139 coins | 17–22    | Av. 7.47 (47)                                  | Sv. 80.1–7; Kroll 1972, pl. 36:11–15                  |
|            | *a ΠΘ-142 | 20       | 7.26   | <i>GRC</i> , fig. 15                                  |
|            | *b Π-473  | 20       | 7.64   |   |
|            | *c KK-149 | 19       | 8.44   |   |
|            | *d N-663  | 20       | 10.26  | overstruck on heavy Owl-on-amphora AE 1               |
|            | *e Δ-67   | 18       | 8.56   |   |
|            | *f AA-81  | 17       | 5.92   |   |
|            | *g K-584  | 19       | -  | halved (as also Z-2594, N-813, NN-1309, and NN-1546a) |
|            | h Ω-313   | 17       | 3.46   | overstruck on unleaded AE 2 coin (as also X-49)       |

As suggested above (p. 86), the Pythian tripod on the reverse of these coins can be explained as an allusion to Antony's proposed completion of the temple of Pythian Apollo. The poppy and thunderbolt symbols fill out the design and the range of religious references; Athena, Apollo, Demeter, and Zeus, the four principle deities in the numismatic iconography of Hellenistic Athens, are here uniquely represented on a single coin. The poppy and thunderbolt, however, may also be serving as magistrates' signatures.

|            |          |             |               |   |   |
|------------|----------|-------------|---------------|---|---|
|            |          | Gorgoneion. |               | A-ΘE Athena advancing r.,<br>holding lowered spear in r.<br>hand; aegis draped over<br>extended l. arm. | Sv. 25.22–28; Kroll<br>1972, pl. 36:16–20 |
| <b>139</b> | 79 coins | 17–21       | Av. 7.88 (30) |   |   |
| *a         | T-113    | 20          | 9.17          |   |   |
| *b         | Φ-346    | 20          | 8.06          |   |   |
| *c         | ΠΠ-46    | 20          | 5.76          |   |   |
| *d         | ΛΛ-247   | 20          | 7.75          |   |   |
| *e         | NN-524   | 19          | 7.34          |   |   |
| *e         | ΠΘ-321   | 19          | 6.91          | flan cut down before striking   |   |
| *f         | ΛΛ-488   | 21          | 9.93          | same  |   |
| *g         | Σ-3721   | 21          | -             | halved  |   |

The heavy weight of 139f even after part of the flan had been crudely removed suggests that it was overstruck on a heavy Owl-on-amphora coin. Three other Agora pieces are definitely overstrikes, although the undertypes are unclear.

Sv., pl. 25, connects this issue with the island of Skiathos, which Antony gave to Athens in 41. Some 4th- or 3rd-century B.C. bronze coins of Skiathos did employ the gorgoneion as an obverse type (*BMCThessaly*, pl. 11:19), but so did a large and important series of 6th-century B.C. Athenian tetradrachms, didrachms, and obols,<sup>202</sup> and it is more likely that these were the source of the present gorgoneion obverse (Kroll 1972, p. 98). The learned revival of historic coin designs occurs again in the Athenian coinage of the 2nd century after Christ (pp. 113–114 below). The reverse type is continued in the next issue.

## 39–37 B.C.

|            |          |   |               |          |   |
|------------|----------|---|---------------|----------|---|
|            |          | Head of youthful Dionysos r.,<br>wearing ivy wreath; border<br>of dots. |               | Similar. | Sv. 25.29–32; Kroll<br>1972, pl. 37:1–5 |
| <b>140</b> | 29 coins | 17–21   | Av. 5.68 (16) |          |   |
| *a         | PP-628   | 19  | 5.49          |          |   |
| *b         | Z-1895   | 18  | 6.09          |          |   |
| *c         | OO-453   | 17  | 7.25          |          |   |
| *d         | X-99     | 17  | 5.42          |          |   |
| *e         | K-1036   | 17  | 5.95          |          |   |
| f          | PP'-1047 | 18  | -             | halved   |   |

## Reduced AE 2

|            |          |          |                              |   |              |
|------------|----------|----------|------------------------------|---|--------------|
|            |          | Similar. |                              | A- <sup>Θ</sup> <sub>E</sub> Kantharos. | Sv. 25.33–35 |
| <b>141</b> | 21 coins | 12–15    | Av. 2.60 (16) <sup>203</sup> |   |              |
| *a         | ΠΠ-385   | 15       | 3.23                         |   |              |
| *b         | ΓΓ-14    | 13       | 2.92                         |   |              |

<sup>202</sup> Sv. 1.62–75; Seltman, Groups D and K; Kroll 1981b, pp. 10–15; H. Nicolet-Pierre, "Monnaies archaïques d'Athènes sous Pisistrate et les Pisistratides I: Les tetradrachmes à la gorgone," *RN*, ser. 6, 25, 1983, pp. 15–33, pls. 2–5.

<sup>203</sup> The average is close to half of the average of the weighed Agora specimens of the contemporary AE 1 issue **140**. Cf. note 211 below, p. 107.

|    |        |    |                     |
|----|--------|----|---------------------|
| *c | K-1487 | 13 | 2.96                |
| *d | ΜΣ-64  | 12 | 1.46 ( <i>sic</i> ) |

**AE 4**

|            |          |  |               |  |              |
|------------|----------|--|---------------|--|--------------|
|            |          | Head of bearded Dionysos r,<br>wearing ivy wreath. |               | Α-Θ<br>E Bust of Athena r, wearing<br>Corinthian helmet. | Sv. 25.43–50 |
| <b>142</b> | 52 coins | 10–12  | Av. 1.39 (19) |  |              |
| *a         | E-318    | 11   | 1.65          |  |              |
| *b         | Δ-163    | 11   | 1.85          |  |              |
| *c         | NN-679   | 11   | 1.91          | GRC, fig. 15   |              |
| *d         | ΓΓ-101   | 12   | 1.85          | flan cut down before striking                            |              |
| *e         | K-1254   | 11   | 1.31          | same   |              |

Two other specimens were also struck on reused flans that had been trimmed before striking. A more notable feature is the broken-bar alpha, making its first appearance in this issue. One specimen (ΒΓ-559) had been picked up and was being hoarded as a one-nummus coin in the 6th century of our era; see J. H. Kroll, G. C. Miles, and S. G. Miller, "An Early Byzantine and a Late Turkish Hoard from the Athenian Agora," *Hesperia* 42, 1973 (pp. 301–311), pp. 303, 308, no. 93.

The Dionysos heads on this and the two preceding varieties honor Marc Antony, who declared himself the *Neos Dionysos* upon arrival in Athens in the summer or fall of 39. The symbolism is paralleled in two emissions of cistophoric tetradrachms struck at Ephesus in the same year; these depict Octavia, Antony wearing the ivy wreath of Dionysos, and, on the reverse of one emission, a standing image of Dionysos.<sup>204</sup> The precipitous drop in the weight of the Athenian AE 1 emission (Table IV, pp. 326–327 below) may reflect the Athenians' difficulties in raising the exorbitant dowry that Antony demanded for his wedding to Athena. Dio (48.39) and Zonaras (10.23) give the amount as one million drachms, Seneca (*Suasoriae* 1.6) a thousand talents (six million drachms). The AE 4 issue, which pairs the head of Dionysos and the bust of Athena, may have been designed to commemorate the marriage of Antony to Athena, like the "wedding" aurei, with the head of Anthony on the obverse and the bust of Octavia on the reverse, struck in 39 and 38 to celebrate Antony's marriage to Octavia (Crawford, *RRC*, nos. 527 and 533/3a). Indeed, if Raubitschek (1946) is right in supposing that the Athenians honored Octavia as Athena Polias, the references may extend to Octavia-Athena as well as to Antony-Dionysos. However this may be, the three Dionysos varieties **140–142** should date to Antony's stay in Athens from 39 to 37 B.C.

ca. 36–33 B.C.

**Reduced AE 1**

|            |          |  |               |   |  |
|------------|----------|--|---------------|---|--|
|            |          | Head of Athena Parthenos r,<br>border of dots. |               | A-Θ<br>E Archaic image of Apollo<br>Delios, holding the three<br>Graces in his r. hand and a<br>bow in his l.; at l., cicada. | Sv. 80.8–14; Kroll<br>1972, pl. 37:11–15 |
| <b>143</b> | 81 coins | 16–20  | Av. 5.33 (36) |   |  |
| *a         | N-1112   | 19   | 4.38          |   |  |
| *b         | K-201    | 18   | 5.94          |   |  |
| *c         | Σ-278    | 17   | 4.98          |   |  |
| *d         | B-100    | 17   | 5.85          |   |  |
| *e         | HH-26    | 18   | 5.84          |   |  |
| *f         | OO-1116  | 20   | 4.85          | overstruck on pre-87 B.C. Fulminating Zeus AE 2   |  |
| *g         | ΛΛ-285   | 18   | -             | halved (as are AA-171 and Z-1108)   |  |

By weight this should be the last of the six Period IVB AE 1 issues, but other considerations suggest that **144** was actually the last, since it can hardly date before 32 B.C. and was the issue to which belong, apparently, the

<sup>204</sup> *BMCR* II, pp. 502–503, nos. 133–137; III, pl. cxiv:1–4; Sutherland, Olcay, and Merrington, pp. 86–88; *RPC* I, 2201, 2202.

chopped coin blanks that were abandoned on the floor of the mint in the southeast corner of the Agora square. Thus, although the present issue with its nontopical types theoretically could be squeezed into the anxious months between variety **144** and the Battle of Actium, it fits more comfortably in the ample span between the Dionysos issues of 37–39 (**140–142**) and the Zeus/Dionysos and Zeus/Eagle issues of 32 (**144** and **145**). Confirmation of this arrangement must await metallurgical analyses of several specimens to allow comparison of their lead content with that of **144**.

The Archaic statue of Apollo Delios (*LIMC* II, p. 234, no. 390) was earlier used as the symbol of the 2nd-century New Style silver emission of Sokrates-Dionysodo (*New Style*, nos. 611–628); Sokrates had served as *epimeletes* of Delos in 117/6 (Habicht 1991, p. 9). But whether such a personal connection lay behind the Apollo Delios type of the present coins is debatable. None of the other changing types of the IVB bronze appear to have private associations; and the present reverse has the subsidiary symbol of a cicada, which one would ordinarily take for an emission symbol, even though such administrative symbols would be redundant in a coinage with regularly changing types. The reverse is in any case the last allusion to Delos in Athenian coinage. By the 30's the island had lost its commercial importance and most of its former population, although a settlement remained on the island and the Athenians continued to manage it and the cult of Apollo as before; see Roussel, pp. 336–340.

32 B.C.

|            |           | Head of Zeus, r., laur.; border<br>of dots. | A-Θ<br>E Head of bearded Dionysos r.,<br>wearing ivy wreath. | Sv. 25.36–42; Kroll<br>1972, pl. 37:6–10  |
|------------|-----------|---|--|---|
| <b>144</b> | 152 coins | 15–20                                       | Av. 5.47 (61)  |   |
| *a         | MM-505    | 17  | 5.71   |   |
| *b         | Σ-3957    | 17  | 5.86   |   |
| *c         | OO-1586   | 17  | 6.98   | <i>GRC</i> , fig. 15  |
| *d         | H-1718    | 17  | 4.46   |   |
| *e         | AA-555    | 17  | 5.17   | shallow cavity punched in center of reverse   |
| *f         | E-24      | 15  | 4.07   |   |
| *g         | ΠΘ-238    | 17  | -  | halved  |
| *h         | Σ-4136    | 18  | -  | reused, presumably for some industrial purpose; obv. obliterated by filed notches in a rosette pattern, as also ΘΘ-25 (Period IV Unclassified, p. 110 below). |

Among the unillustrated examples, Ξ-292 is halved and ΒΔ-414, a totally worn coin, is countermarked on the obverse with an owl in incuse circle (7 mm. diameter). The condition of the latter coin precludes illustration. The issue is notable for the extremely high lead content of its analyzed specimen, at 22.73 percent the highest known from any pre-imperial Athenian coin (Table IV, pp. 326–327 below). The percentage is largely responsible for the association of the issue with the chopped blanks excavated from the floor of the mint in the southeast corner of the Agora (25.5 percent lead; see Appendix B) and is approximated in the contemporary Zeus/Eagle-on-thunderbolt fraction **145** (20.21 percent<sup>205</sup>).

On this fourth Antonian emission the head of Dionysos is displaced from the obverse in favor of a head of Zeus. But an explanation is immediately forthcoming from variety **145** with its standard Ptolemaic Zeus/Eagle types. The Zeus obverse of the present issue is to be similarly understood as a reference to Egypt and so dates with **145** after Antony had thrown in his lot with Kleopatra. According to Plutarch (*Antony* 57.1–2), the Athenians had a great affection for Octavia and did not vote honors to Kleopatra until she and Antony arrived in Athens in late spring of 32 and she bribed them with gifts. These circumstances make it doubtful that the Athenian issues could have been struck before late spring or summer of 32 and suggest why they refer to the kingdom of Egypt rather than to Kleopatra, the New Isis, directly.

<sup>205</sup> Caley, pp. 52–53, table IX, no. 11.

## Reduced AE 2

|            |           |                                     |               |  |  |   |
|------------|-----------|-------------------------------------|---------------|--|--|---|
|            |           | Head of Zeus r.; border<br>of dots. |               | A-ΘE Eagle, wings spread,<br>stg. three-quarters r. on<br>thunderbolt. |  | Sv. 22.59–61;<br>Kleiner 1976,<br>pl. 4:105–109 |
| <b>145</b> | 14 coins  | 13–15                               | Av. 3.24 (13) |  |  |   |
|            | *a Φ-98   | 14                                  | 2.33          |  |  |   |
|            | *b AA-665 | 14                                  | 3.93          |  |  |   |
|            | *c ΩΔ-42  | 13                                  | 4.01          |  |  |   |

For the standard Ptolemaic bronze pairing of Zeus head and eagle on thunderbolt, see **1005, 1006, 1009, 1010, 1013–1017**; for the eagle reverse of Kleopatra's own bronze, **1019**. **145** is the only Athenian emission in any period with the device of an eagle. Citing the Antony head/Eagle bronze of Zakynthos (*RPC* I, 1290), I. Touratsoglou (in *CRWLR*, pp. 57, 67, note 33; pl. 8:13) attributes a Zeus/Eagle issue of Thessalonike to Antony and Kleopatra. Another attribution (Aigion: Dionysos/Eagle) is proposed under **733** (p. 233 below).

## PERIOD IVC

31–early 20's B.C.

## Reduced AE 1

|            |           |   |              |   |  |  |
|------------|-----------|---|--------------|---|--|--|
|            |           | Head of Athena r., wearing<br>Corinthian helmet; border<br>of dots. |              | AΘE upwards at l. Demeter<br>or Kore stg. r., carrying lit<br>torch; at r., plemochoe; all in<br>(?)wheat wreath. |  | Sv. 25.13, 14; Kroll<br>1972, pl. 38:2–4 |
| <b>146</b> | 5 coins   | 19–20   | Av. 7.82 (5) |   |  |  |
|            | *a N-339  | 19  | 7.70         |   |  |  |
|            | *b Σ-4129 | 19  | 7.79         |   |  |  |

This, the last variety in the Akropolis North Slope 1936 hoard (note 141 above, p. 81) and hence the first after the unwreathed Period IVB coinage, was irregularly designed (cf. Athena's Corinthian helmet and the position of the ethnic), poorly struck, and meager; known examples (including a mere three from the great Chaidari hoard) were struck from one or possibly two obverse dies. It would seem to have been little more than a token emission, which, with the Eleusinian reverse, suggests attribution to September of 31, when within a week or so after Actium, Octavian sailed to Athens to distribute grain to the Greek cities and to be initiated at Eleusis (Plutarch, *Antony* 68; Dio 51.4.1).

|            |           |   |               |  |  |   |
|------------|-----------|---|---------------|--|--|---|
|            |           | Head of Athena Parthenos r.;<br>border of dots. |               | AΘE downwards at r., Nike<br>advancing r., holding fillet in<br>outstretched hands; all in olive<br>wreath with berries. |  | Sv. 78.10, 80.15–17;<br>Kroll 1972,<br>pl. 37:16–20 |
| <b>147</b> | 43 coins  | 18–21   | Av. 8.08 (17) |  |  |   |
|            | *a ΓΓ-18  | 20  | 8.13          |  |  |   |
|            | *b Γ-963  | 20  | 8.94          |  |  |   |
|            | *c Σ-4437 | 19  | 8.01          |  |  |   |
|            | *d OO-618 | 19  | 8.24          |  |  |   |
|            | *e Δ-137  | 18  | 5.90          |  |  |   |

Stylistically and technically these are the crudest coins ever minted in ancient Athens. As in variety **146**, they are weakly and often incompletely stamped; and, although Athena is at least given an appropriate New Style Attic helmet, the rude, inept die cutting is without parallel. The issue was evidently hurried. As Octavian probably



visited Athens for a second time while crossing from Asia to Italy in 29,<sup>206</sup> the issue may have been rushed into production for this occasion. The Nike in any case probably refers to Actium; and since she is posed as though crowning the legend on the coins, the conceit implies that Actium was also a victory for the Athenians.

|             |                |  |                                    |
|-------------|----------------|--|------------------------------------|
|             | Similar.       | A-ΘE Zeus stg. r., holding thunderbolt in lowered r. hand, l. arm extended; all in olive wreath. | Sv. 80.22–24; Kroll 1972, pl. 38:1 |
| <b>*148</b> | NN-676 20 8.16 |  |                                    |

Exceptionally rare (but a single example in the Chaïdari hoard), the issue nevertheless employed two or three obverse dies (compare Kroll 1972, pl. 38:1 with Sv. 80.22–24). Style and technique are noticeably better than in the preceding Demeter and Nike varieties, and the Parthenos head and linear ethnic conform to standard New Style precedent.

The important Standing Zeus statue, which appeared for the first time on Athenian coins in the early 190's, evidently with reference to Flamininus, can be identified with some probability as the statue of Zeus Eleutherios (see 78–80 and pp. 56–57 above). Accordingly, the present reverse ought to refer to a “liberation” by Octavian in the sense that he would have confirmed the rights of Athens as a *civitas foederata et libera*. Augustus was honored in Lakonia as Σωτήρ καὶ Ἐλευθέριος for just such a confirmation of freedom.<sup>207</sup> *Eleutherios* or *Zeus Eleutherios* are found among his titles elsewhere.<sup>208</sup> And at Athens an annex was added to the Stoa of Zeus Soter-Eleutherios to house an imperial cult, surely including Augustus.<sup>209</sup>

#### PERIOD IVD

mid-20's–19 B.C.

#### Reduced AE 1

|            |  |   |  |
|------------|--|---|--|
|            | Head of Athena Parthenos r.; border of dots. | ⊖ <sup>Λ</sup> E at upper l. Athena advancing r., carrying lowered spear in r. hand, aegis draped over extended l. arm; at lower r. owl; all in olive wreath. | Sv. 80.29–32; Kroll 1972, pl. 38:15–19 |
| <b>149</b> | 345 coins 17–21 Av. 6.88 (101)               |   |  |
| *a         | Π-8 19 8.46                                  |   | GRC, fig. 15                           |
| *b         | ΠΘ-143 20 7.62                               |   |  |
| *c         | N-722 20 7.41                                |   |  |

<sup>206</sup> Bowersock, *Augustus*, pp. 120–121, with Dio 51.21.1.

<sup>207</sup> V. Ehrenberg and A. H. M. Jones, *Documents Illustrating the Reigns of Augustus and Tiberius*, Oxford 1955, no. 122b, with the comments of J. A. O. Larsen, in *An Economic Survey of Ancient Rome*, T. Frank, ed., IV, Baltimore 1938, p. 447. The same inscription informs that Flamininus, the original liberator of the Free Lakonians, was still receiving honors at the festival that celebrated the re-liberation of Augustus. For a survey of coins that possibly commemorate Augustan grants of freedom to other communities, see M. Grant, *From Imperium to Auctoritas*, Cambridge 1946, pp. 338–347.

<sup>208</sup> *Eleutherios* at Mytilene: R. Cagnat *et al.*, *Inscriptiones graecae ad res romanas pertinentes*, Paris 1927, no. 62. *Zeus Eleutherios* at Carian Mys: *BCH* 11, 1887, p. 306, no. 1. In Egypt: S. Weinstock, *Divus Julius*, Oxford 1971, p. 144, note 1.

<sup>209</sup> H. A. Thompson (note 102 above, p. 57), pp. 182–186, with a survey of associations of Augustus and later emperors with Zeus Eleutherios. On the associations further, see below under 728 and 729 and B. Levy, “Nero’s Liberation of Achaëa: Some Numismatic Evidence from Patrae,” in *Nickle Papers*, pp. 167–185; *RPC* I, p. 47.

|    |          |    |      |   |
|----|----------|----|------|---|
| *d | K-1603   | 18 | 4.95 |   |
| *e | Σ-5621   | 19 | 6.46 |   |
| *f | A-1109   | 19 | 6.82 |   |
| *g | Ψ-104    | 20 | -    | halved (as are six others) <sup>210</sup> |
| *h | Σ-3392   | 19 | 5.65 | cut down; heavily worn                    |
| *i | PP-827   | 18 | 5.99 | heavily worn; cavity punched on obv.      |
| j  | PP'-1032 | 20 | 6.40 | (U 13:2a) Plate 34:4                      |

In this Period IVD inaugural issue the lettering is neat and compact, the Athena heads are relatively small and attractively rendered, and the striking is superb. The undertypes of several overstruck pieces cannot be identified.

### Reduced AE 2

|            |          |       |                              |   |  |               |
|------------|----------|-------|------------------------------|---|--|---------------|
|            |          |       |                              | Veiled head of Demeter r.;<br>border of dots. | $\Lambda$ - $\Theta$<br>E Poppy between two crossed<br>wheat ears. | Sv. 104.38-45 |
| <b>150</b> | 40 coins | 13-16 | Av. 3.26 (26) <sup>211</sup> |   |  |               |
| *a         | B-77     | 16    | 3.25                         |   |  |               |
| *b         | NN-816   | 15    | 4.73                         |   | GRC, fig. 15   |               |
| *c         | N-824    | 14    | 2.48                         |   |  |               |
| *d         | NN-368   | 14    | 3.08                         |   |  |               |
| *e         | ΠΠ-990   | 13    | 3.28                         |   |  |               |
| *f         | NN-1370  | 13    | 3.22                         |   |  |               |
| g          | Γ-1204   | 14    | 3.34                         |   | (E 15:3)   |               |

The broken-bar alpha, the style of the Demeter head, and the superior technique connect the variety with the AE 1 **149**.

### Reduced AE 1

|            |           |       |               |   |  |  |
|------------|-----------|-------|---------------|---|--|--|
|            |           |       |               | Head of Athena Parthenos r.;<br>border of dots. | $\Lambda$<br>$\Theta$ E Athena advancing r.,<br>as <b>149</b> , except at r., coiled<br>snake. | Sv. 80.33, 34; Kroll<br>1972, pl. 39:1-5 |
| <b>151</b> | 135 coins | 18-21 | Av. 6.83 (49) |   |  |  |
| *a         | A-1582    | 19    | 8.62          |   |  |  |
| *b         | A-1145    | 20    | 6.06          |   |  |  |
| *c         | ΠΘ-796    | 20    | 7.76          |   |  |  |
| *d         | K-125     | 19    | 8.71          |   |  |  |
| *e         | KTA-15    | 20    | 8.36          |   |  |  |
| *f         | E-2249    | 19    | 6.65          |   |  |  |
| g          | Θ-768     | 20    | -             |   | halved (as also Σ-3992)  |  |

With this emission, style and technique drop off abruptly. The Athena heads are coarse, squared, and (like the lettering) enlarged, to remain so through the succeeding **152** and **153**. In addition to the preceding Athena advancing, owl, and the present Athena advancing, snake, there is a rare variant (Kroll 1972, no. 568, pl. 39:6) with Athena advancing, wheat ear, that provides a link between the present variety and the following Owl-on-prow emission, which has a wheat-ear symbol also at the right.<sup>212</sup>

<sup>210</sup> BB-1015, Γ-1157, A-190, NN-224, Π-265, P-452.

<sup>211</sup> The average is about half of the weight average of Agora specimens of the accompanying AE 1 variety **149**. Cf. note 203 above, p. 102.

<sup>212</sup> A more curious variant is the Athena advancing, snake, piece published as Sv. 80.35. The obverse was struck from a makeshift die engraved with nothing more than an AΘE ligature, evidently at a time when production had outrun the supply of serviceable Athena-head dies.

Similar.

Similar, except symbol illegible.

[149, 151] 151 coins of uncertain Parthenos/Athena advancing variety. Nearly all are worn flat. Twelve are halved.<sup>213</sup>  
 Illustrated is

\*a ΣΤ'-584 19 5.93 scored across by a chisel in preparation for halving

Similar.

⊖<sup>Λ</sup> E Owl stg. r. on prow;  
 at r., wheat ear; all in olive  
 wreath.

Sv. 80.37-43; Kroll  
 1972, pl. 39:7-11

152 501 coins 16-22 Av. 6.84 (140)

\*a OO-1248 20 5.77

\*b E-260 19 4.14

overstruck on Sikyon variety 727

\*c MM-193 20 7.52

\*d ΓΓ-181 20 8.30

\*e ZZ-129 19 3.64

overstruck on Sikyon, as 152b

\*f KK-231 19 5.89

\*g Z-2231 20 -

halved (as are seven other specimens)<sup>214</sup>

h PP'-1031 19 5.20

(U 13:2a) Plate 34:6

At least two other coins (HH-77 and T-56) were overstruck on the same 1st-century B.C. Sikyon variety (Apollo/Dove flying l., ΑΙΝΕΑΣ), as are *BMCAttica*, p. 92, nos. 669 and 670, and Sv. 80.41; see Warren 1984, p. 20. Although the Athena heads are indistinguishable from those of 151 and 153, the fact that some coins of the present variety alone were overstruck on Sikyon proves that the three Athenian varieties were struck *seriatim*.

Similar.

⊖<sup>Λ</sup>  
 -E Sphinx wearing modius,  
 seated r., all in olive wreath.

Sv. 80.18-21; Kroll  
 1972, pl. 39:12-16

153 277 coins 17-21 Av. 6.73 (92)

\*a NN-881 19 8.44

GRC, fig. 15

\*b H'-2357 18 6.41

\*c NN-1066 20 6.67

\*d OO-1480 20 8.99

\*e B'-1104 19 6.98

overstruck on a coin that had been chisel marked on both sides with XI; possibly from the Fulminating Zeus star-and-crescents variety; cf. 97h

\*f KK-65 19 9.07

overstruck

\*g BB-52 19 -

halved (as are eight others)<sup>215</sup>

h ΛΛ-540 18 6.48

shallow cavity punched on one side (as also on IIII-117)

A few of the coins are overstrikes with unidentifiable undertypes. For the significance of the sphinx reverse, see p. 88 above.

### Reduced AE 2

Triptolemos l. holding scepter  
 in l. hand, r. arm extended,  
 mounting winged chariot drawn  
 by two snakes; border of dots.

⊖<sup>Λ</sup> E Crossed mystic staff  
 and wheat ear; all in olive  
 wreath.

Sv. 104.46-50

154 32 coins 14-16 3.46 (17)

\*a I-1664 15 3.00

\*b B-165 15 3.55

\*c E-2494 15 3.21

<sup>213</sup> A-1230, BB-605, ΓΓ-285, K-366, K-476, K-1415, N-833, OO-1105, OO-1215, ΠΘ-167, Σ-736, ΣΤ'-417.

<sup>214</sup> Γ-432, Γ-484, ΓΓ-181, E-2499, I-1537, Λ-164, Ξ-465.

<sup>215</sup> A-99, ΒΓ'-111, Z-904, Z-1538, Z-2884, Θ-672, ΛΛ-404, OO-1230.

|    |        |    |      |                                       |
|----|--------|----|------|---------------------------------------|
| *d | ΠΘ-59  | 15 | 3.84 |                                       |
| *e | OO-551 | 15 | 3.16 |                                       |
| f  | Γ-1038 | 14 | 3.70 | (intrusive in E 14:3 <sup>216</sup> ) |

Alphas frequently (as on 154a-c) but not invariably (cf. Sv. 104.46, 47) have curved or broken crossbars.

A-Θ

Π Triptolemos mounting chariot, as on 154; border of dots. Nike advancing r., holding fillet in extended r. hand and lowered stylis(?) in l.; all in olive wreath. Sv. 104.51-53

|            |         |       |              |
|------------|---------|-------|--------------|
| <b>155</b> | 8 coins | 13-14 | Av. 3.14 (6) |
| *a         | Σ-5688  | 14    | 3.80         |
| *b         | Z-917   | 13    | 3.30         |

Since obverse and reverse are identifiable by their respectively dotted and wreathed borders, we have in 155 the one Athenian variety whose ethnic is on the obverse (as opposed to the joint Athens-Eleusis 63 and its relations with legends on both faces). Unique, too, is the arrangement of the letters. Lettering, character of reverse wreath, but particularly the linear rendering of the figures relate both this variety and 154 to the AE 1 variety 151, Athena advancing, snake.

Head of Athena Parthenos r.; border of dots. <sup>A</sup>Θ E Two owls, l. and r., stg., facing, on thunderbolt; all in olive wreath. Sv. 80.45-47; Kroll 1972, pl. 40:2-6

|            |          |       |              |
|------------|----------|-------|--------------|
| <b>156</b> | 24 coins | 14-20 | Av. 2.97 (9) |
| *a         | I-1483   | 20    | 3.74         |
| *b         | ΠΘ-323   | 16    | 2.37         |
| *c         | Γ-153    | 15    | 4.33         |
| *d         | ΠΘ-229   | 15    | 2.06         |

The unmistakable obverse style links this variety to the AE 1 issues 151-153. Except for the arrangement of the ethnic, the reverse type was adopted from the common 2nd-century AE 3 variety 99, doubtless with denominational implications (p. 90 above). The six examples from the Chaïdari and Agia Varvara hoards gave an average weight of 4.25 g. (Kroll 1972, p. 119).

**Period IVE**

ca. 15-10 B.C.

**Reduced AE 1**

Similar. A-ΘE Owl stg. r., facing, on horizontal amphora; at r. coiled snake; all in olive wreath. Sv. 79.36, 37; Kroll 1972, pl. 38:5-9

|            |           |       |               |
|------------|-----------|-------|---------------|
| <b>157</b> | 116 coins | 16-20 | Av. 5.55 (38) |
| *a         | NN-1318   | 17    | 5.53          |
| *b         | Z-1113    | 16    | 3.79          |
| *c         | Π-347     | 17    | 5.41          |
| *d         | MM-346    | 18    | 4.68          |

flan trimmed before striking

<sup>216</sup> Not only is 154f more worn than the other (early Period IVA) coins from this deposit, but the much later date of the variety is certified by the figural style, the wreathed border, and the occasionally bent crossbars of the alphas of the reverse. With the exception of 129, reverses of the Period IVA intermediate fractions (127-131) are unwreathed. Bent crossbars do not appear until late Period IVB (142).

|    |         |    |      |
|----|---------|----|------|
| *e | NN-1633 | 17 | 6.11 |
| *f | Σ-1205  | 18 | 4.22 |

Similar.

Similar, except at r., cicada.

Sv. 79.38–42; Kroll  
1972, pl. 38:10–14

|            |           |       |               |  |
|------------|-----------|-------|---------------|--|
| <b>158</b> | 199 coins | 16–20 | Av. 5.53 (57) |  |
| *a         | ΠΠ-862    | 19    | 6.63          |  |
| *b         | ΣΤ'-562   | 19    | 6.27          |  |
| *c         | Ω-460     | 18    | 6.02          |  |
| *d         | AA-15     | 17    | 4.88          |  |
| *e         | A-1241    | 17    | 5.14          |  |
| *f         | H-83      | 18    | -             | halved (as are Γ-1150b [E 15:3], H-1887, and II-247) |
| g          | PP'-1007  | 18    | 3.24          | (U 13:2a) Plate 34:6                                 |

[157, 158] 160 coins of uncertain light Owl-on-amphora variety. One (Z-1196) bears an illegible countermark; three (BB-161, H-1439, and KK-12) are halved.

|   |          |    |      |                      |
|---|----------|----|------|----------------------|
| a | PP'-1008 | 17 | 5.22 | (U 13:2a) Plate 34:7 |
|---|----------|----|------|----------------------|

The revival of traditional New Style design in these two final Augustan emissions extends even to the obverses of the coins, which have the conventional two tails of the crest behind the helmet. But the style is atrocious. Except for the fine initial die pair or pairs of the issue with snake symbol (157a: Kroll 1972, pl. 38:7; Sv. 79.37, obv. die only), Athena heads are coarse, and the owls, economically rendered in heavy lines and punches, have a spooky appearance. Letters are serified with dots, and many alphas have dots in place of crossbars.

### PERIOD IVA–E UNCLASSIFIED

#### [115–126, 137–140, 143, 144, 146–149, 151–153, 157, 158]

849+ coins of Period IV AE 1 size and fabric worn completely illegible.<sup>217</sup> Three (ΓΓ-258, Z-767, and Z-1077) are halved. Five others (BB-177, E-441, ΛΛ-54, Π-741, and T-1064) received a punched cavity on one side, proof of circulation as late as the 3rd century after Christ (p. 94 above). ΘΘ-25 was reused for some industrial purpose; both sides were filed with notches in a rosette pattern, like the obv. of 144h. In addition, two of the totally worn pieces were countermarked:

|    |        |    |      |                                 |
|----|--------|----|------|---------------------------------|
| *a | ΛΛ-263 | 19 | 5.14 | cmk.: A at l. of amphora (D4:1) |
| *b | AA-788 | 19 | 6.73 | cmk.: AΘE in incuse oval        |

For illustrations of 26 specimens (PP'-1009–1022, 1033–1037, 1073–1079) of Deposit U 13:2a of ca. A.D. 100, see Plate 34:8–33.

### PERIOD IV CLERUCHY ISSUES

#### ATHENS–LEMNOS

Bust of Artemis r., quiver at  
shoulder; border of dots.

A-ΘE  
[Λ]H-MNI Stag stg. r.

Sv. 75.24 =  
*BMCAttica*, p. 88,  
no. 628

#### 159

|    |        |    |      |                                     |
|----|--------|----|------|-------------------------------------|
| *a | PP-692 | 14 | 2.16 | letters of legend as recorded above |
| *b | ΠΠ-384 | 20 | 2.86 | possible traces of letters only     |

<sup>217</sup> The 849 total does not include an estimated one to several hundred illegibly worn Period IV pieces that were discarded in the late 1940's as being too uninformative to merit storage. Most of the discarded pieces are identified in the field notebooks as "Greek" or "New Style".

The second line of the legend is not visible on the heavily worn British Museum specimen and is not recorded in the line drawing of the only other published specimen, E. Beulé, *Les monnaies d'Athènes*, Paris 1858, p. 345. But on an exceptionally thick and heavy specimen at the American Numismatic Society (1944.100.25998 [Newell], 13 mm., 5.43 g.), there are traces of the eta at the left of the stag and mu nu at the right. The chunky fabric clearly identifies this as a Period IV issue, although whether it belongs early in the period or dates with the following three varieties to early Period IVD there is at present no way of knowing. The types pertain to the cult of Artemis at Myrina, which minted coins with its own name and the head of the goddess and reverse bow and quiver (J. Friedländer and A. von Sallet, *Königliche Museen zu Berlin, Beschreibung der antiken Münzen I*, Berlin 1888, p. 283, nos. 12, 13; *NC*, ser. 1, 4, 1841, p. 8, fig. 3). Bow and quiver are used on other Myrina reverses with AΘE (456) and AΘE|MY (see note 218 below).

ca. mid-20's B.C.

|              |         |    |      |                             |               |
|--------------|---------|----|------|-----------------------------|---------------|
|              |         |    |      | [A-ΘE]                      |               |
|              |         |    |      | [ΛH-MNI] Head of Hephaistos | Kroll 1972,   |
|              |         |    |      | r.; behind, tongs.          | nos. 705-709, |
|              |         |    |      |                             | pl. 40:7-11   |
| <b>*159A</b> | OO-1147 | 17 | 4.76 |                             |               |

ATHENS-SKYROS

|            |         |       |              |                            |                      |
|------------|---------|-------|--------------|----------------------------|----------------------|
|            |         |       |              | [A-ΘE]                     |                      |
|            |         |       |              | [C-KY] Female deity seated | Kroll 1972, no. 711, |
|            |         |       |              | l. on throne; olive-wreath | pl. 40:13            |
|            |         |       |              | border.                    |                      |
| <b>160</b> | 5 coins | 15-18 | Av. 5.15 (5) |                            |                      |
| <b>*a</b>  | ΛΛ-278  | 18    | 7.91         |                            |                      |
| <b>*b</b>  | ΛΛ-365  | 17    | 5.52         |                            |                      |
| <b>*c</b>  | NN-569  | 17    | 5.23         |                            |                      |
| <b>*d</b>  | K-1692  | 15    | 5.53         |                            |                      |

ATHENS-LEMBROS

|            |          |       |               |                            |                     |
|------------|----------|-------|---------------|----------------------------|---------------------|
|            |          |       |               | A-Θ-E                      |                     |
|            |          |       |               | INBPI Two pilei, wreathed, | Kroll 1972, no. 11, |
|            |          |       |               | of the Kabeiroi.           | pl. 40:12           |
| <b>161</b> | 16 coins | 16-19 | Av. 5.13 (11) |                            |                     |
| <b>*a</b>  | O-589    | 17    | 3.72          |                            |                     |
| <b>*b</b>  | ΠΘ-156   | 17    | 5.04          |                            |                     |
| <b>*c</b>  | ΛΛ-73    | 16    | 5.02          |                            |                     |
| <b>*d</b>  | PP'-730  | 19    | 4.03          |                            |                     |

The Agora specimens of **159A-161** have nothing to add to the discussion of these three cleruchy emissions in Kroll 1972, pp. 101-104. The Chaïdari and Agia Varvara hoards produced seven slightly worn specimens (Kroll 1972, pp. 119-120; av. weight 6.19 g.), of which two Athens-Lemnos pieces were countermarked on the obverse with a small owl r. in incuse circle.

The single, bushy tail of the helmet crest and the refined engraving of all obverses, which appear to have been cut by the same die sinker, date the varieties with the first emission of Period IVD (**149**: Athena advancing, owl).<sup>218</sup> Struck in Athens, therefore, not long after Augustus presumably confirmed Athens' continued possession

<sup>218</sup> Further support for this dating (and the minting of these issues at Athens) comes from the curious Athens-Lemnian Myrina overstrike, Sv. 80.44 = Kroll 1972, pp. 102-104, pl. 40:14, now in the British Museum: obv.: Owl r. (identical in style to the Owl-on-prow owls of **152**), rev.: A-ΘE above M-Y, bow and quiver; overstruck on Sikyon, Apollo head/Dove, ΑΙΝΕΑΣ, as are occasional regular examples of **152**, *q.v.* Kroll (1972) suggested that this late Period IVD overstrike was improvised to appease the citizens of Myrina after the early IVD minting of **159A**, whose Hephaistos-head reverse may have associated the issue too closely with Hephaistia, Myrina's rival city on Lemnos. But if **159** with its Artemis

of Skyros, Lemnos, and Imbros, the coins were surely intended for circulation on these islands. Kroll (1972, p. 103) interpreted the legends as coordinate double ethnics, curtailments of, for example, Ἀθηναίων καὶ Λημνίων, etc.; but the legends would be more meaningful if they designated the demoi of the Athenian cleruchies without an understood conjunction. The correct expansions should probably translate “of the Athenian Lemnians,” and the like.

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types of Myrina happened to have been struck as a coordinate fractional issue of **159A**, the circumstances behind the overstrike would be more complicated.

### III

## ATHENIAN BRONZE COINS

### SECOND AND THIRD CENTURIES AFTER CHRIST

THE MONEY of Early Roman Imperial Athens remained unchanged from the time of Marc Antony and Augustus: the silver currency was supplied by the Roman denarius, while for more than a century the Athenians continued to make do with their old, increasingly worn Period IV bronze.<sup>1</sup> Minting of a fresh bronze coinage did not resume until the revival of the city's fortunes in the first half of the 2nd century after Christ. Begun under Hadrian (A.D. 117–138), this new 2nd-century bronze (Period V) evolved through several phases and extended into the third quarter of the century under the Antonines. Then, after another century-long hiatus in minting, Athenian coinage came to an end in a brief but massive striking (Period VI), which dates just before the city was overrun by the Herulian Goths in A.D. 267.<sup>2</sup>

These 2nd- and 3rd-century coinages of Roman Athens perpetuate the old Athenian tradition of placing the head of the city goddess on obverses. This is certainly unexceptional from the standpoint of historical Athenian coin design, but it is a dramatic departure from the practice, which had become well established throughout the Roman world by this time, of reserving the obverses of civic coins for the effigy and inscription of the reigning emperor. The coinages of Athens, Chios, and Termessos in Pisidia are, in fact, the only three Greek coinages of the Imperial era that consistently resisted this innovation. Yet if the Athenian imperials are notably conservative in this one respect, they share with contemporary bronze coinages from other Greek cities a propensity for rich, iconographical variety that is entirely alien to the character of Greek coinages of the past. As the obverse heads of Athena came to be rendered in a wide range of differing styles, helmet types, and subsidiary ornament, the numerous reverse types provide a virtual picture book of much of the city's famous cult and mythological statuary in addition to monuments and traditional Athenian devices of other kinds.

#### CHRONOLOGY

It is curious, however, that the coinage did not begin this way. The earliest issues (Period VA) are restricted to a small fractional denomination, normally 14–15 mm. in diameter, designed with Athena/Owl types that copy the types of Athenian Old Style silver. The die cutters normally spelled the ethnic ΑΘΗ (163), although a few of the earliest reverse dies give the correct ΑΘΕ (162). Fidelity to the prototypes is maintained in the severe head of Athena, her Attic helmet with tendril and leaf ornaments, the stocky owl facing right with olive sprig, and the vertical legend. The coins are struck on blanks that had been cast and then punched on one side with a shallow cavity, apparently for

<sup>1</sup> See pp. 91–92 above, with Plate 34.

<sup>2</sup> Svoronos (1904, p. 110), placed the chronology of the Athenian imperials on a secure footing by identifying for the first time the separate 2nd- and 3rd-century phases of the coinage. In subsequent studies, Kroll (1973) and Walker (1980) worked out the refinements that result in the more detailed chronology presented below.



anchoring a rotary planing device that, when turned, smoothed and trimmed the cast planchet.<sup>3</sup> The use of cast, punched blanks continued through the successive Period VB and VC coinages.

After the large initial issue (**162** and **163**), the Athena/Owl fractions gradually evolved away from the Classical model. Even as some of the original obverse dies were in use, new reverse dies introduced different arrangements of the ethnic, dropped the olive twig, and sometimes turned the owl to the left (**164** and **165**). Then, at the end of the series (**166** and **167**), these developments are joined by freer and more varied obverse dies that favored busts of Athena wearing a Corinthian helmet in styles that are indistinguishable from the obverse heads of the Period VB fractions. The VA owls give the impression of being struck continuously and leading without a break into Period VB. Since most of the coins and dies belong to the initial, classicizing phase of Period VA, the coinage would seem to have been relatively compact, lasting surely for less than a decade.

Historical probability virtually demands that the elaborate, succeeding Period VB coinage begin under Hadrian, possibly in connection with his first imperial visit to Athens in 124/5 or, better, his second and longest visit in 127/8–128/9. In either case the start of the VA owls should probably fall in the earlier 120's, a time that is reinforced in general terms by the fact that VA owls first appear in reliable archaeological contexts of the earlier 2nd century.<sup>4</sup> But it would probably be mistaken to assume that Hadrian himself was directly responsible for the coinage. The financing and organization of Greek civic coinages was normally a local concern, initiated and maintained by wealthy citizens as a public benefaction, so that Athens is more likely to have owed her Period VA and B (and even C?) coinage to her other great benefactor in the 2nd century, the millionaire intellectual Herodes Atticus of Marathon, whose distinguished public career began at Athens with the office of *agoranomos* in the early 120's, followed by his archonship in 126/7.<sup>5</sup> These dates independently suggest the 120's for the beginning (VA) and initial elaboration (early VB) of the coinage.

The learned archaism of the VA owls is in keeping with the antiquarian tastes of Hadrian, Herodes, and their contemporaries. But one has to wonder why this coinage was nonetheless so tentative and limited. Restricted to a small denomination, it could at best have only supplemented the heavily worn Period IV pieces that were serving as the dominant bronze currency. Perhaps the large initial striking (**162** and **163**) was produced for a festival donative. Or was it the Athenians' reluctance to strike a normal imperial coinage with the emperor's effigy that was responsible for the unassuming character of these pieces?<sup>6</sup> Whatever the explanation, the VA owls set the precedent for a revived Athenian coinage in the old Athena-head manner, while the very inadequacy of the coinage will have given rise to the expansion of the coinage that followed.

Period VB inaugurates the developed imperial coinage with its many reverse types and four denominations, including a large new unit of 24–26 mm. that quickly became the major denomination.

<sup>3</sup> For reconstruction of the instrument and technique, see D. Sellwood, "Minting," in *Roman Crafts*, D. Strong and D. Brown, eds., New York 1976 (pp. 66–73), pp. 66–67. For additional bibliography and a survey of the use of the technique in Imperial Greece, although omitting Athens, see Amandry, pp. 81–82.

<sup>4</sup> See 166a and Deposits D 4:1 and, especially, U 13:2a and b. Kroll (1973, p. 327) proposed to date the VA owls to the late 1st century after Christ on the evidence of Deposit E 14:2, Level II, which was ceramically dated to this time; but as explained in the list of deposits below (pp. 305–306), the date of this level should probably be extended into the 2nd century. Walker (1980, pp. 257–258) placed the start of the VA owls more plausibly in A.D. 111/2, the date of Hadrian's Athenian archonship, but even this is too early.

<sup>5</sup> P. Graindor, *Un milliardaire antique, Hérode Atticus et sa famille*, Cairo 1930, pp. 55–57; W. Ameling, *Herodes Atticus II*, Hildesheim/Zurich/New York 1983, p. 1.

<sup>6</sup> That is, there might be a parallel here with the smallest units of Roman Imperial bronze, the obverses of which were normally designed with the head of Athena or some other deity or symbol rather than the head of the emperor. See *RPC I*, p. 41, noting the omission of the imperial portrait on the small denominations of certain other Greek cities.

The VB coinage is notable for the exceptional quality and elaborateness of much of the die cutting, which resulted in some of the most magnificent coins ever struck at Athens (see Sv. 89.3 and 94.2–6). Reverse legends are ΑΘΗ, ΑΘΗΝΑΙΩΝ, or an abbreviated variant. The wide range of styles and types of busts of Athena on the obverses indicates that the dies were cut by several artists or groups of artists working over an extended period.

The end of the VB coinage is marked by a slight reduction in the diameters of the coins and a simplification of the obverse dies, which are linked to reverses that sometimes have the typical VB legend ΑΘΗΝΑΙΩΝ, and others that spell the ethnic with a bowed omega, ΑΘΗΝΑΙΩΝ.<sup>7</sup> These “transitional” obverse dies tend to dispense with the ornate VB aegis and drapery and replace the full bust by a helmeted head with slight drapery around the neck (cf. 175a and 182b).

The succeeding Period VC coinage has ethnics regularly in ΑΘΗΝΑΙΩΝ, and the types become simpler and more uniform still: there is usually just a plain helmeted head of Athena, rather blocky or square in shape, and a simple reverse of one figure. The later VC coins are the most commonly found of all Period V issues, both in the Agora and in hoards discovered in Attica, and their numerous, nearly indistinguishable obverse dies and extensive die linking imply a sudden burst of minting activity at the end of Period V. Period VB and C coins continued to be minted from cast flans with central cavities. Sawn flans without the cavities, however, were introduced for late VB or VC fractions and seem to have been experimentally used for a few of the largest pieces at the end of VC,<sup>8</sup> apparently to speed up flan production for intensive coining at that time.

It is clear from several hoards buried or lost at the time of the Herulian invasion of Attica in A.D. 267 that the Period VC imperials had come to an end by the close of the 2nd century, if not already by the reign of Commodus (A.D. 177–192): the Severan sestertii and many sestertii of Commodus in these deposits are less worn than the accompanying Athenian VB and VC pieces. The heavy wear of the Athenian pieces is comparable to the sestertii struck from Trajan through Marcus Aurelius (A.D. 161–180). As stated, the start of the Period VB coinage should coincide with the start of the Hadrianic renaissance of Athens in the 120's.<sup>9</sup>

The stylistic heterogeneity of the VB obverses suggests a coinage of some duration, struck very likely in several disjointed emissions, although it is doubtful that there were any lengthy gaps. The existence at the end of VB of a substantial transitional coinage employing “new” obverse dies with occasional “old” ΑΘΗΝΑΙΩΝ reverses implies an overall continuity in minting at least to around the middle of the 2nd century, where the transitional pieces seem to belong. A rough indication of date here comes from an Athenian lead token published in 1900.<sup>10</sup> It is an official token of the Athenian Boule signed by an otherwise unknown Pammenes. On the obverse is a bust of Antoninus Pius (A.D. 138–161) with somewhat elderly looking features, and on the reverse is a

<sup>7</sup> Characteristic examples of obverse dies used with both types of reverse legend are 171a (= Sv. 82.29) and 175a (= Sv. 92.5, 6) paired with the VC reverse 264a (= Sv. 92.17, 18). This obverse links with other VC obverses, which are also transitional, through other reverses, as Sv. 98.22 and 21 (280).

<sup>8</sup> Sawing striations are visible on large VC pieces in the Eastern Attica Hoard (note 17 below, p. 117) and the collection of the American Numismatic Society.

<sup>9</sup> On Hadrian and Athens, see D. J. Geagan, “Roman Athens: Some Aspects of Life and Culture, I, 86 B.C.–A.D. 267,” *ANRW* II.7.1, 1979 (pp. 371–437), pp. 389–399, 426–430 (bibliography); to which now add A. J. Spawforth and S. Walker, “The World of the Panhellenion I: Athens and Eleusis,” *JRS* 75, 1985, pp. 78–104; D. Willers, *Hadrians panhellenisches Programm, Archäologische Beiträge zur Neugestaltung Athens durch Hadrian (Antike Kunst Beiheft 16)*, 1990, pp. 7–12, 93–103; and the papers cited in notes 11, 60, and 61 below, pp. 116 and 124.

<sup>10</sup> Svoronos 1900, p. 334, no. 180, pl. 19:22: Obv.: Bust of Antoninus Pius draped and cuirassed r.; at l., ΒΟΥ. Rev.: Draped bust of Athena r.; at l., ΠΑΜ-Μ. This Pammenes is a descendant of the well-known family of the 1st century B.C. *New Style*, p. 578; Habicht 1991, p. 15.

transitional-style bust of Athena similar to 182b (VB transitional) and 280a (VC). To judge from the token, the transitional late VB/early VC phase of the coinage had probably been completed already by the end of Pius' reign in 161, which suggests in turn that the VB coinage lasted beyond the end of Hadrian's rule in 138 into the 140's or 150's, leaving the mainstream VC issues to continue apparently into the reign of Marcus Aurelius. The exceptional scale and intensity of the concluding VC minting may suggest (on the model of the Period VI coinage, discussed below) emergency preparations for defense against the invading Kostoboks in 170, if not coinage also for the repair of the damage at Eleusis they left behind.<sup>11</sup> There is obviously much room here for future chronological refinement. For the present, the approximate chronology of Period V appears as follows:

|           |  |
|-----------|--|
| Period VA | earlier 120's                          |
| Period VB | mid/late 120's to ca. 140's (or 150's) |
| Period VC | ca. (140's or) 150's to ca. 175        |

The *Life of Severus* (3.7) in the *Historia Augusta* reports that Septimius Severus (A.D. 193–211) harbored a grudge against the people of Athens and upon becoming emperor revoked certain of their *privilegia*. This notice has been cited to explain an assumed cessation of minting at the start of his rule.<sup>12</sup> But since it now appears that the Period V coinage had run its course even before the joint reign of Marcus Aurelius and Commodus in 177–180, Septimus' punishment of Athens, if it had anything to do with coinage at all, at most could have deterred the resumption of minting. The Athenians, in any case, again became accustomed to using old and ultimately extremely worn bronze coins, this time until after the middle of the 3rd century when the immense Period VI coinage was put into production.

The Period VI coinage was conceived fundamentally as a revival of the Hadrianic-Antonine coinage: some new obverse and reverse types and type variants were created, but most types are the same. Many reverse dies appear to have been copied, with various degrees of accuracy, directly from VB and VC coins, some of which may have been worn and unclear in detail.<sup>13</sup> The reverse legend continues to read ΑΘΗΝΑΙΩΝ or, on fractions, ΑΘΗ. Most obverse and reverse dies have a prominent border of dots surrounding the type (as opposed to Period V borders that were wreathed, dotted, or omitted). The main, large-denomination coin is slightly smaller, again, than its VC counterparts and is accompanied by only two smaller denominations, both of which are uncommon and may have been struck largely to legitimize the continuing circulation of worn Period V coins of like value.

Finally, instead of being cast, the Period VI blanks were sawn from long, roughly cylindrical bars.<sup>14</sup> Rapid sawing produced a number of coins of abnormal thickness or thinness and markedly divergent weights, even among coins struck from the same pair of dies. The blanks were heated before striking, and blobs of semimolten metal occasionally adhered to a die to be transferred to the surface of the next coin struck (e.g., 284b, 299b, 318a, 343a, 350a). Striking faults are far more

<sup>11</sup> On the Kostobok raid and damage at Eleusis, now see Clinton 1989b, pp. 64–65; R. F. Townsend, "Roman Rebuilding of Philon's Porch and the Telesterion at Eleusis," *Boreas* 10, 1987, pp. 97–106; cf. *idem*, "Greek Construction and Roman Rebuilding at Eleusis" (lecture, Cincinnati 1983), abstract in *AJA* 88, 1984, pp. 262–263.

<sup>12</sup> Kroll 1973, p. 323; Walker 1980, pp. 251–252, 262–264. Cf. Harl, p. 24.

<sup>13</sup> P. 126 below.

<sup>14</sup> Saw marks are visible on 284g, 376a, Sv. 84.30, 85.41, and on many of the faulty, unused blanks from the Period VI mint at the southwest corner of the Agora; see Appendix B:IV and Plate 33.

common than in Period V, as are mistakes of die cutters, who turned out a few reverse dies with retrograde types (Sv. 89.33, 34, 98.38–43) or with legends that are either retrograde or abbreviated in some way due to miscalculation of space (see especially **378**). Rapid striking was facilitated by the soft, cheapened bronze alloy, which contained an exceptionally high admixture of lead.<sup>15</sup>

Evidently a hurried coinage, it was also of immense size and surprisingly compact. More than 800 obverse and reverse dies were used, as compared to slightly more than 700 for Periods VA, VB, and VC combined (Table IX, p. 332 below). While there were surely many die engravers, they all seem to have been working within a single tradition, without the often extreme differences of style seen in Period VB. There is, accordingly, no evidence of stylistic development or of discrete stylistic subgroups within the coinage. Nor is it possible to point to any type or variety as being either early or later in the coinage as a whole. Instead, the entire coinage is closely bound together by a complex matrix of die linkages, certain obverse dies being paired with as many as 15 to 20 reverse dies, while a reverse die may be linked with up to 7 or 8 obverse dies. This scrambled die-box effect points to a single, compressed space of minting that, despite the volume of dies and output, need not have lasted for more than a few years.

That these are the years immediately preceding the catastrophic Herulian invasion of 267 is seen from the fresh condition of the many Period VI coins in hoards and other accumulations buried or lost at the time of the invasion. In addition to the two recorded Herulian-invasion finds from outside Athens, the 2,000-piece Eleusis 1902 hoard<sup>16</sup> and the 197-piece Eastern Attica 1975 hoard,<sup>17</sup> a dozen hoards, dropped purses, and destruction deposits connected with the disaster of 267 have been recovered by excavators in the Agora.<sup>18</sup> While no two accumulations are identical in composition, they collectively give a relatively complete picture of the money in circulation and savings at this time: mid-3rd-century “silver” antoniniani, mostly recent issues of Gallienus’ sole reign (A.D. 260–268); some Roman sestertii of the 2nd century and first half of the 3rd century; but primarily Athenian imperial bronzes of Periods VB (extremely worn), VC (heavily worn), and VI (unworn and most plentiful). The representation of virtually every Period VI type in one or more of these recorded deposits confirms that the striking of the coinage had been completed by the time of the barbarian attack, which happened to be responsible also for the destruction of the building in the southwest corner of the Agora where the Period VI coinage had been struck (see Appendix B:IV). That the striking probably did not commence before Gallienus became sole emperor in 260 is suggested by the comparable condition of the Period VI bronzes and the antoniniani of Gallienus in the deposits of 267 and by the haste and intensity of the manufacture of the Athenian coins.

Some of the Period VI pieces in the Herulian deposits have been damaged by corrosion and cleaning, especially by the redepositing of particles of copper on the surfaces of the coins. The slightly dulled obverse relief on other hoard and deposit coins,<sup>19</sup> however, must be due to the wear of the obverse dies; for the accompanying reverses, having been stamped from dies that were changed more

<sup>15</sup> Analyses of four Period VI pieces (Caley, pp. 26–27, table IV, nos. 8–11) determined that lead made up 26.8 to 32.5 percent of their alloy. In contrast, the lead content of one Period VB specimen (*ibid.*, p. 43, table VII, no. 1) came to only 10.35 percent, and of a single VC piece (*ibid.*, pp. 26–27, table IV, no. 7) to 23.0 percent.

<sup>16</sup> Svoronos 1904; Kroll 1973, pp. 312–321, 329–333; Walker 1980, pp. 146–147; Noe, no. 380.

<sup>17</sup> A. Walker, “A Hoard of Athenian Imperial Bronzes of the Third Century A.D. from Eastern Attica,” *CH* 3, 1977, no. 95, pp. 40–48; Walker 1980, p. 147. Thirty-three coins in this hoard are fresh antoniniani from the sole reign of Gallienus.

<sup>18</sup> For a full list, see Walker 1980, pp. 46–47, 125–130. The most important of these deposits are those listed below under B 17:1 and Q 19:3, pp. 303–304, 316.

<sup>19</sup> Kroll 1973, pp. 315, 318.

frequently, are usually quite sharp. If allowance is made for the soft alloy and rapidity of striking, the Herulian deposit specimens seem not to have experienced any wear from circulation. Their condition is closely paralleled by specimens from the similarly large and hastily struck Fulminating Zeus issue of 87/6 B.C. (97) found in hoards and debris from the Sullan sack of 86 B.C.<sup>20</sup> As with the latter issue, we surely have to do here, too, with a crisis coinage struck to help finance the resistance of the city against imminent attack.

In the 260's the new money was needed particularly for the rebuilding, repair, and garrisoning of Athens' walls. A remark of Zosimos (1.29.2-3) indicates that the refortification started at the urging of Valerian as early as 254, after a serious Germanic attempt on Thessalonike.<sup>21</sup> But the work must have continued as long as time and money allowed. The walls of Eleusis were also strengthened, and the maintenance and provisioning of the garrison at Eleusis is now recognized to be the subject of a fragmentary imperial letter from Gallienus, dated to 265.<sup>22</sup> The emperor's personal interest in the military defense of Attica was surely a major reason for his visit to the city for a month in the fall of 264. Since the magnitude of the Period VI coinage requires a period of production of a few years before its end in or just before 267, it follows that striking probably began in connection with this imperial visit.<sup>23</sup> Not that the emperor himself need have been personally involved with the organization of a civic coinage. The first citizen of Athens at this time and the leading figure in the city's resistance against the Herulii was the antiquarian and writer of history P. Herennius Dexippus.<sup>24</sup> If the Period VI coinage is to be attributed to the initiative of any one individual, there is no better candidate than this patriotic Athenian worthy.

A few moderately worn Period VI coins from post-267 Agora contexts attest that these pieces continued in circulation for a short time after the Herulian sack, until the increasing inflation of the 3rd century drove them out of use.<sup>25</sup>

### DENOMINATIONAL VALUES

Unlike the bronze coins of Hellenistic Athens, whose types and size both played a part in the identification of denominations, the denominations of Athens' imperial coins were distinguished by size alone. One denomination was struck in Period VA, four in VB, and three each in VC and VI, although in these last two phases the two smaller modules were minted in relatively slight quantities. The distribution, average weight, and normal range of diameters of the denominations are presented in Table VIII (p. 331 below), where each of the modules is identified with one of the four bronze denominations attested in the Hadrianic or early Antonine property-tax inscription *IG II<sup>2</sup> 2776*.<sup>26</sup> This crucial text records sums in denarii and four local Athenian subdivisions of the denarius: the drachm ( $\frac{1}{6}$  of the denarius), the hemidrachm ( $\frac{1}{12}$ ), the obol ( $\frac{1}{36}$ ), and the hemiobol ( $\frac{1}{72}$ ). The ready correspondence between the four units of value of this system and the four modules of the contemporary bronze coinage is, in the absence of any more plausible interpretation, reason enough for identifying the Period V modules with the drachm/obol units of the inscription.

<sup>20</sup> Pp. 69-70 above.

<sup>21</sup> On the literary and archaeological documentation for Athens' Valerian Wall, see *Agora XXIV*, pp. 1, 11; J.J. Wilkes, "Civil Defence in Third-Century Achaia," in *Greek Renaissance*, pp. 187-192.

<sup>22</sup> D. Armstrong, "Gallienus in Athens, 264," *ZPE* 70, 1987 (pp. 235-258), pp. 246-251.

<sup>23</sup> *Ibid.*, p. 251, following Walker 1980, pp. 248-251.

<sup>24</sup> For whom, see Millar 1969, pp. 12-29.

<sup>25</sup> Walker 1980, pp. 130-131, 133.

<sup>26</sup> Pp. 83-84 above.

A second Athenian inscription, *IG II<sup>2</sup> 1368*, of A.D. 175/6<sup>27</sup> refers to the bronze drachms as “light” drachms, λεπτοῦ δραχμαί, to avoid, apparently, any confusion with silver drachms. Within the 2nd-century context of the inscription, silver drachms would have been denarii, which were commonly known as Ἀττικά δραχμαί throughout the Roman East.<sup>28</sup> But if bronze drachms were first introduced into the Athenian monetary system in the 80’s B.C., as proposed in the preceding chapter, the term λεπτοῦ δραχμή probably goes back to that time as well, before the denarius had ousted the drachm as the standard silver coin of Athens.<sup>29</sup> Indeed, the entire system evidenced by *IG II<sup>2</sup> 2776* seems to have been created in stages during the 1st century B.C., remained intact throughout the 1st century of our era, and was simply taken over by the Period V imperials.

The key denomination here is the second imperial unit, the bronze hemidrachm of 18–22 mm. and 5.40 g, which was the same size as the basic late Period IV reduced AE 1 unit that still dominated the circulating bronze coinage at the time when the Period VB imperials began. With the creation of the larger VB bronze drachm, the importance of the old AE 1 hemidrachm faded, however, and before the end of Period VB, minting of this denomination was discontinued. Hemidrachms from Periods IV and VB remained in circulation as late as the mid-3rd century, as one sees from Deposits B 17:1A and Q 19:3 and from a number of worn Period IV pieces that were punched with cavities on one side to make them appear like worn imperials;<sup>30</sup> and it is possible that some of the heavier hemidrachms eventually passed as drachms after the diameter of the latter had been reduced in Period VI. At any rate there can be no mistaking that the new drachm quickly became the main denomination of the Athenian imperial bronze already in Period VB and that it underwent a progressive size and weight reduction with each new phase of minting. Another, more abrupt reduction had occurred earlier in the Athena/Owl hemiobols after the larger imperial denominations began to be struck in Period VB; for the type continuity between the larger Athena/Owl pieces of VA (162–167) and the smaller ones of VB and C (226–231) makes it extremely doubtful that the reduction in module could have involved an accompanying change in denominational value.

Athens’ idiosyncratic 2nd-century denominational system is not easily compatible with the conventional Roman system, in which the denarius is divided into 16 bronze asses. It has been observed that at certain times and places in the eastern part of the empire, local bronze assaria seem to have been tariffed at 18 to the denarius and that, if the bronze drachms, hemidrachms, obols, and hemiobols of Athens had to be readily convertible into assaria, an assarion tariffed at  $\frac{1}{18}$  of a denarius would give them direct equivalencies of 3,  $1\frac{1}{2}$ ,  $\frac{1}{2}$ , and  $\frac{1}{4}$  assaria respectively.<sup>31</sup> This neat although conjectural reconciliation of the Athenian and the Roman systems has not met with general acceptance, however; and it is more likely that the Athenian and the Roman bronze systems functioned separately: at Athens the denarius was divided into 6 bronze drachms, while Roman bronze coins would have been accepted at their own rate of exchange. It follows in any case that, within Athens, the Athenian imperials were highly overvalued in terms of the as/assarion,<sup>32</sup> which probably explains why they are so seldom found outside Attica.<sup>33</sup>

<sup>27</sup> J. A. Notopoulos, “Studies in the Chronology of Athens under the Empire,” *Hesperia* 18, 1949 (pp. 1–57), pp. 29, 51.

<sup>28</sup> See note 67 above, p. 15.

<sup>29</sup> See pp. 83–84, 90–91 above.

<sup>30</sup> See note 197 above, p. 94.

<sup>31</sup> Walker 1980, pp. 166–168; A. S. Walker, “16 or 18 Assaria, Drachmai and Denarii in Mid Second Century A.D. Athens,” *Israel Numismatic Journal* 6–7, 1982–1983, pp. 142–174.

<sup>32</sup> Cf. p. 91 above.

<sup>33</sup> Walker (1980, p. 149) mentions the few specimens from Boiotia, Corinth, Kenchreai, Isthmia, Olympia, Knossos, and Poitiers, but he notes (p. 170) that all but one or two are from Period VI, as one might have predicted from the size of this final coinage, which may have been the largest single issue of coinage ever struck in Roman Imperial Greece.

Although the drachm/obol nomenclature of the 2nd-century imperials was presumably retained in Period VI, the same probably did not apply to the value of the coins in Roman silver, which by the mid-3rd century had become extremely debased. The Period VI drachms are comparable in size to a number of contemporary Gallienan bronze issues from other mints in Greece; at Sparta and Nikopolis and for the Thessalian League such coins were produced with denominational marks, most commonly Δ for 4 assaria,<sup>34</sup> showing that they were valued at a quarter of a denarius. One suspects that the value of the Period VI drachms had risen to a similar level of about 4 to the denarius, instead of 6 as earlier.

## ICONOGRAPHY

Numismatically, the most unusual aspect of the Athenian imperials is the omission of the portrait and inscription of the current emperor. Such omission is not altogether without parallel on contemporary civic coinages, for other cities did strike issues on which one finds the head of some figure (Roma, the Senate, the Boule, Demos, or a local god or hero) other than the emperor. But these issues, conventionally known as pseudo-autonomous issues, normally made up only a small part of the coinage of any city, which consisted for the most part of imperial portrait coins; and they are usually restricted to the smaller denominations.<sup>35</sup> Although they prove that it was not legally obligatory for a coin to bear the emperor's image, they remain minor exceptions in a world that had come to accept and prefer (presumably with strong encouragement from the Roman authorities<sup>36</sup>) the image as an expression of respect and authority on coinage in general. Even some of the *civitates liberae*, which originally struck without the portrait in early Julio-Claudian times (p. 88 above), adopted it sooner or later: Rhodes for the first time under Nero, Sparta regularly beginning with Claudius, Tyre under Septimius Severus. Only Athens, Chios, and Pisidian Termessos (which may have struck one small Julio-Claudian issue, *RPC* I, 3514) held out to the end. All three cities were free, and this may be explanation enough for the exceptional coinages of Chios and Termessos. But at Athens it is possible to go further and identify the attitudes that would have resisted any change in the autonomous character of the city coinage: a proud historical consciousness and a nostalgic conservatism that ran more deeply here than anywhere else in the Greek world.

The initial Athena/Owl hemiobols of Period VA, which imitate Athens' 5th-century B.C. owl silver, reveal just how sentimental the Athenians had become about the cherished traditions of their ancient coinage. As the intellectual center of the Greek world, the city had become, in fact, a hotbed of learned archaizing conceits. Under the subtitle "Athens and the Re-creation of Antiquity," E. L. Bowie has written several amusing pages on the antiquarian dreamworld inhabited by the wealthy intellectuals of 2nd-century Athens and their obsessive infatuation with the past glories of Hellas.<sup>37</sup> Therein would seem to be the main impetus for continuing the head of Athena on the

<sup>34</sup> Sparta (4, 6, and 8 assaria): Grunauer, pp. 94–96 (Valerian and Gallienus); Nikopolis (4 [see 563 below] and 8 assaria): Oikonomidou, pp. 33 and 188 (Gallienus, sole reign); Thessalian League (3 and 4 assaria): Rogers, pp. 53–57 (Valerian through Gallienus and Salonina). On the increase in the value of bronze and the mid-3rd-century monetary crisis in general, see Howgego, pp. 65–73; Harl, pp. 19–20; Burnett, *CRW*, pp. 111–114.

<sup>35</sup> See A. Johnson, "The So-called 'Pseudo-Autonomous' Greek Imperials," *ANSMN* 30, 1985, pp. 89–112; Burnett, *CRW*, pp. 83–84; G. Forni, "ΙΕΡΑ e ΘΕΟC CΥΝΚΑΗΤΟC, *Un capitolo dimenticato nella storia del Senato Romano*," *Memorie della R. Accademia Nazionale dei Lincei* VIII.v, 1953, pp. 49–168; and, especially, *RPC* I, pp. 15, 33, 41–42.

<sup>36</sup> *RPC* I, pp. 37, 53.

<sup>37</sup> E. L. Bowie, "Greeks and Their Past in the Second Sophistic," *Past and Present* 46, 1970 (pp. 3–41; reprinted in *Studies in Ancient Society*, M. I. Finley, ed., London 1974 [pp. 166–209]), pp. 28–35. The name of Herodes Atticus recurs throughout Bowie's essay like a leitmotif.

imperial coinage, even as the coinage was otherwise modernized through contemporary trends in style and type variation. On a symbolic level, the traditional Athena heads served as an affirmation of Athens' unique cultural and historical preeminence among all cities of antiquity and her claim, widely accepted by all educated Greeks and Romans, to have been the cradle of civilization.<sup>38</sup> Given this recognition, there is something almost inevitable about the revival and maintenance of an ancient tradition of coinage in which Rome historically had no place.<sup>39</sup> As men of culture, Hadrian, the Antonine emperors, and Gallienus would have appreciated this as much as any Greek.

The obverse Athenas of Periods VB–VI wear either an Attic or, more commonly, a Corinthian helmet. Pick argued that these two general types respectively represented Athena Parthenos and Athena Promachos,<sup>40</sup> but apart from the fact that the kind of helmet worn by the Promachos statue is unknown, the great number of variations in helmet and bust/head designs imply that the die engravers borrowed from many sources, including the minor arts, often eclectically.<sup>41</sup>

Until a die study of the complex Period V coinage is completed, only a few generalities about its varied obverse types and styles can be offered here. Beginning in VA, the head of Athena wears a simple Attic helmet in the fashion of 5th-century Athenian coins (Pl. 15:162a–164a). In VB the representation changes to a bust, usually with a Corinthian helmet and a small head so that considerable areas of the shoulder and chest, normally wearing an aegis, can be shown. On smaller denominations one can distinguish between a phase of finely designed busts (Pls. 16:186a–190, 17:198–201) and a phase of more coarsely cut ones (Pls. 16:191a–197e, 17:202a–208a). On drachms the busts tend to be quite tall and elaborate (Pl. 16:169a, 170, 174a, 181a, 182a, 183a–185a), but there is one contemporary bust with a larger head wearing a Corinthian helmet with very slight drapery at the neck or shoulder line (Pl. 16:172a; Sv. 82.1, 2). Later, or “transitional”, VB drachm obverses, although simplified, continue the latter design with large (Pl. 16:171a, 175a, 178a, 179a, 182c) or smaller heads (Pl. 16:182b). These simplified busts with their negligible drapery become in turn the primary obverse types of VC. While full busts continue in VC (Pl. 18:248a, 253, 257a, 261a, 269a), they usually were avoided, as they were in Period VI, because of the greater demands in execution. Plate 19:280b–283d illustrates a run of typical mainstream VC obverses at their most monotonous.<sup>42</sup>

Like the obverses, the many reverses of the developed coinage emphasize ancient Athenian traditions. The types are mostly of deities and heroes as they were depicted in celebrated Athenian statues of the 5th and 4th centuries B.C. The roster of types created for the first developed coinage, early Period VB, is of interest for its size alone:

<sup>38</sup> See C. Habicht, *Hellenistic Athens and Her Philosophers* (David Magie Lecture 1988), Princeton 1989, pp. 20–21, quoting an Amphictionic decree of ca. 120 B.C. (*FdD* III, ii, no. 69); Cicero (*pro Flacco* 62); Plutarch (*Moralia* 345 F), Pliny the Younger (*Letters* 8.14.2); Athenaios (15.691 D); and St. Augustine (*City of God* 18.9).

<sup>39</sup> Millar (1969, p. 21) notes another proof of Athenian pride: “The rise of provincial and local families into the Roman aristocracy is of course one of the great themes of Imperial history. Athens provides examples of a different phenomenon, the maintenance over generations, sometimes over centuries, of a prominent position in the intellectual and political life of the city by families whose members could easily have sought Roman office, but who did not choose to do so. There was a real sense in which Athens remained a capital, not a provincial city.”

<sup>40</sup> Pick 1931, pp. 59–74.

<sup>41</sup> Lacroix, pp. 285–286; see note 64 below, p. 124. The helmet of Athena Polias was, however, Corinthian; see p. 53 above.

<sup>42</sup> Obverse types other than a head or bust of Athena occur on certain VB and C hemiobols: a bust of Theseus with a club over his shoulder (232–241); a bust of Asklepios (paired only with the Telesphoros reverse: 242); a bust of Demeter or Kore (243, 244); a young male bust wearing a wreath (245, 246); and a boukranion (247).



- Athena Parthenos (169–171)<sup>43</sup>  
 Velletri Athena holding Nike (172)<sup>44</sup>  
 Athena running, pointing (Sv. 85.4, cf. 310 [VI])  
 Athena facing olive tree (173)  
 Contest of Athena and Poseidon, olive tree between them (174)<sup>45</sup>  
 Triptolemos in chariot (198)  
 Triptolemos in chariot between Demeter and Kore (177)  
 Demeter enthroned (186)  
 Kore holding two torches downwards (187)  
 Iakchos holding torch (188)<sup>46</sup>  
 Dionysos Eleuthereus enthroned before thymiaterion on a table (176)<sup>47</sup>  
 Apollo Patroos (191)<sup>48</sup>  
 Herakles herm holding cornucopia (Sv. 95.6, 7)<sup>49</sup>  
 Theseus leading the Marathonian bull to King Aigeus (Sv. 95.23, 24)  
 Theseus driving the Marathonian bull (180)  
 Theseus raising rock at Troizen (181)<sup>50</sup>  
 Theseus and Minotaur “boxing” (Sv. 96.30–36)  
 Theseus striking at Minotaur (189, 200, 201)  
 Theseus (or Herakles) holding phiale (199)  
 Themistokles carrying trophy on ship (182, 183)<sup>51</sup>

<sup>43</sup> Lacroix, pp. 266–281, especially pp. 277–278, pls. 23, 24, has the best discussion of the numismatic evidence for this statue (*LIMC* II, p. 1031, pls. 729–730:220, 221). The Parthenos continued as the most common type in Periods VC (248–250) and, frequently with variant details introduced by the die engravers, VI (284–294).

<sup>44</sup> For the statue type, *LIMC* II, p. 1033, pl. 733:247.

<sup>45</sup> *NCP*, pp. 130–131, pl. Z (related representations and brief discussion).

<sup>46</sup> The hemidrachm reverses, 186, 187, and 188, employed with shared obverse dies, were designed together as an Eleusinian set. Collectively, they may represent Praxiteles’ group of Demeter, Kore, and Iakchos that was seen by Pausanias (1.2.4) near the Pompeion in the Kerameikos (*NCP*, p. 140, no. 5b). See I. N. Svoronos, «Πραξιτέλους: Δημήτηρ, Κόρη και Ιακχος εν Αθήναις», *ΑρχΕφ* 1911, pp. 39–52. The common Triptolemos-in-chariot type is of course a throwback to the Eleusinian bronze coinage of the 4th and 3rd centuries B.C. (38–40, 48, 49, 51, 55).

<sup>47</sup> It has been universally assumed that this is the chryselephantine statue of Dionysos sculptured, according to Pausanias (1.20.3), by the 5th-century sculptor Alkamenes. The temple that housed the image, however, was not erected before the middle of the 4th century (J. Travlos, *Pictorial Dictionary of Ancient Athens*, New York/Washington 1971, p. 537). The statue is pictured without the table and incense burner on the New Style silver of Diokles-Diodoros (*New Style*, p. 390, pl. 142, nos. 1269, 1270).

<sup>48</sup> The statue by Euphranor: *LIMC* II, p. 145, pls. 184, 185:39; *Agora* XIV, pp. 136–139, pl. 69.

<sup>49</sup> For this statue type in stone, see *LIMC* IV, p. 783, pl. 524:1163–1166.

<sup>50</sup> 180 and 181 ought to depict statue groups that Pausanias saw on the Akropolis (1.27.8–10), although for the bull dedication, see H. A. Shapiro, “The Marathonian Bull on the Athenian Akropolis,” *AJA* 92, 1988, pp. 373–382. A third Akropolis group, Theseus fighting the Minotaur (Pausanias 1.24.1), must be represented by one of the several different reverse types depicting this event.

<sup>51</sup> Pausanias (1.36.1) mentions a trophy of Themistokles’ victory on Salamis and goes on to say that a snake appeared among the ships during the battle. In *NCP* (p. 153) it is implied that this Salamis trophy might be the Themistokles monument of the coins, since some VB dies show a snake on the ram of the ship. But the monument is much too elaborate for a battle trophy and would have required a long, rectangular base, whereas the probable remains of the trophy on Salamis show that it rested on a ca. 1.80-meter-square base (P. W. Wallace, “Psyttaleia and the Trophies of Salamis,” *AJA* 73, 1969 [pp. 293–303], pp. 301–303). The coins probably depict another monument to Themistokles, not necessarily one of those recorded in extant literature and listed by G. M. A. Richter, *The Portraits of the Greeks*, 1st ed., London 1965, pp. 97–98. On the other hand, the trophy on Salamis may be represented in the trophy-on-prow symbol of the silver issue of Themisto-Theopompos (*New Style*, pp. 221–225, pls. 62, 63, nos. 596–610, 117/6 B.C. [Mørkholm 1984]). For the 5th-century B.C. statue of Themistokles at Magnesia, see 926.

Miltiades with captive Persian and trophy (**190**)<sup>52</sup>  
 Agonistic table with prizes (**184, 192–194**)<sup>53</sup>  
 Owl in olive tree, with or without amphora (**195, 196, 211**)  
 Owl on amphora (**197**)  
 Round altar on base next to olive tree (**202**)<sup>54</sup>  
 Rectangular altar between olive trees (**203**)<sup>55</sup>  
 Akropolis viewed from the north and west (Sv. 98.19–20, cf. **280** [VC])<sup>56</sup>  
 Boukranion (**185**).

Five further types were introduced later in the transitional phase of Period VB:

Zeus sacrificing at altar (**175**)<sup>57</sup>  
 Demeter and Kore standing (**178**)  
 Herakles Farnese (**179**)<sup>58</sup>  
 Goddess (Demeter?) seated on rock (**204**)<sup>59</sup>  
 Nike (**207**).

Very few of these VB types are known from more than one or two reverse dies. The concentration of early VB types concerning the Eleusinian deities and Theseus is notable and should possibly be

<sup>52</sup> Two Athenian monuments of Miltiades are known. One was the monument at Marathon mentioned by Pausanias (1.32.4) as being separate from but near the famous Marathon trophy of white marble (for which, see E. Vanderpool, "A Monument to the Battle of Marathon," *Hesperia* 35, 1966, 93–106). The other was a statue group of Miltiades and a Persian in the Theater of Dionysos; scholia to Ailius Aristides (W. Dindorf, *Aristides* III, Leipzig 1829, pp. 535–536) explain that the statues of Themistokles and Miltiades in the theater were each paired with a Persian prisoner. Since it is unlikely that the coins would give a conflation of two widely separated monuments, the monument on the coins must be the more important one at Marathon, as the trophy indicates. The statue in the theater was probably a copy of it. Since the armed general with Persian is positioned at the left of most reverses but in mirror image at the right on a variant die (Sv. 97.32), Richter ([note 51 above, p. 122], pp. 96, 98) naively thought that the coins show two statue groups, therefore the groups of Miltiades and Themistokles in the theater.

<sup>53</sup> The prize table was a popular reverse type in the coinages of other Greek cities during the 2nd and 3rd centuries after Christ; L. Anson, *Numismata graeca* I, London 1911, nos. 328–330, 690–740, 750–773, 779, 781, 943–947 gives a useful compendium. The standard Athenian VB type (**184**) is continued in Period VC (**281, 282** = Sv. 58–61) and Period VI (**386–400** = Sv. 91.1–45), when, however, the dies of some tables are inscribed with the name of an Attic festival: ΑΔΡΙΑΝΕΙΑ (**396**), ΕΛΕΥΣΙΝΕΙΑ (**397, 398**), ΟΛΥΜΠΙΑ (**399**), ΠΑΝΑΘΗΝΕΑ (**400**), and ΠΑΝΕΛΛΗΝΙΑ (Sv. 91.43, 44). On all these Period V and VI tables, the standard three prizes are wreath, model owl, and model bust of Athena in Corinthian helmet. On the VB hemiobols **192** = Sv. 91.46, 47, the Athena bust is replaced by a standing Athena with shield at her side, apparently a model Parthenos, like the *ca.* 1-meter-tall marble Varvaktion Athena (*LIMC* II, pl. 729:220).

<sup>54</sup> The caption to Sv. 87.38–40 identifies this scene as the "fountain" and olive tree of the Erechtheion (Pausanias 1.26.5 and 27.2). The cylindrical drum certainly looks like a wellhead since it rests on a wide base, and the juxtaposition with the olive tree is suggestive, but can the three tongues rising from the cylinder on Sv. 87.40 be interpreted as sprays or jets of water? It is highly doubtful, as such tongues were commonly employed on coins to represent flames on an altar (e.g., the cylindrical flaming altar before Athena on **337** and before the temple of Divine Julius on Crawford, *RRC*, no. 540). The base of the round altar here possibly was enlarged to give a clear orientation to the coin type.

<sup>55</sup> See p. 56 above.

<sup>56</sup> Showing the steps of the Panathenaic Way; the Cave of Pan, occasionally with what seems to be a statue of the god within it (P. J. Riss, "A Colossal Athenian Pan," *Acta Archaeologica* 45, 1974 [pp. 124–133], pp. 130–131); the gabled façade of the Propylaia; the statue of Athena Promachos (note 64 below, p. 124), usually on a base; and the nonperipteral Erechtheion with east porch. On the earliest dies (Sv. 98.19, 20) the east end of the Akropolis is surmounted by an owl. Compare **280** = Sv. 98.21–29 (VC) and the less dependable Period VI reverse dies (**375**, Sv. 98.30–36), including one that was cut retrograde (Sv. 98.37–43). Discussion and bibliography: *NCP*, pp. 128–129; Pick 1931, pp. 63–70; Lacroix, pp. 281–286; Price and Trell, pp. 75–78.

<sup>57</sup> See pp. 55–56 above.

<sup>58</sup> For the prototype: *LIMC* IV, pp. 762–764, pl. 493, nos. 681–726.

<sup>59</sup> *NCP*, p. 152, for the total uncertainty surrounding the identification of this type.

understood in light of Hadrian's initiation and patronage at Eleusis<sup>60</sup> and his massive building program at Athens that made him a second founder of Athens and a New Theseus.<sup>61</sup> Beyond documenting monuments to these heroes, the reverses depicting Miltiades and Themistokles underscore the importance of Marathon and Salamis in the civic consciousness of Roman Athens. The theatrical character of both monument groups suggests that the sculptural prototypes may have been Hellenistic or even Roman in date.

In Period VC, the repertory of major reverse types<sup>62</sup> was enriched with the introduction of additional designs:

Athena fighting (253)

Athena of the Parthenon East Pediment (254–256)<sup>63</sup>

Athena standing, shield on left arm and holding spear in right hand (257)<sup>64</sup>

Athena in chariot (210, 260)

Athena and Marsyas (262)<sup>65</sup>

Zeus Olympios (263)<sup>66</sup>

<sup>60</sup> Hadrian and Eleusis: Clinton 1989a, pp. 1516–1525, 1537–1538; and Clinton 1989b.

<sup>61</sup> See A. Adams, "The Arch of Hadrian at Athens," in *Greek Renaissance* (pp. 10–16), pp. 10–11.

<sup>62</sup> Several minor obol and hemiobol types have not been included, since it is uncertain whether they are VB or VC.

<sup>63</sup> This Athena rushing to the right is similar to the Athena on the Madrid Puteal (*LIMC* II, pl. 749:373), which is widely believed to represent the missing figures on the Parthenon East Pediment. *NCP*, pp. 129–130 notes a general similarity as well to the Athena of the West Pediment, insofar as she is known from the Carrey drawing (*LIMC* II, pl. 731:234). But the West Pediment Athena moves to the left, and there is no reason why a Period V die cutter, having chosen a model, would have reversed its orientation.

<sup>64</sup> The identity of this figure has occasioned much debate, chiefly because it is one of the most common of all Athenian imperial reverse types (although it does not appear until after Period VB) and thus might be thought to represent an important monument. It has been considered Pheidias' colossal Athena Promachos and equated with the Athena Medici (*NCP*, p. 128; caption to Sv., pl. 86; and in other works cited by Lacroix, p. 284, note 2). But whether its relation to the Athena Medici is maintained (P. Chamoux, "Le type de la Minerve Ingres," *BCH* 58–59, 1944–1945, pp. 227–229) or rejected (E. B. Harrison, "Lemnia and Lemnos: Sidelights on a Pheidian Athena," *Antike Kunst Beiheft* 15, 1988, pp. 101–107), the identification with the Promachos is impossible. On the reverses depicting the Akropolis (280: see note 56 above, p. 123), the colossal statue facing west towards the Propylaia is shown with right arm extended, holding a Nike, and, on the earlier and best die or dies (Sv. 98.19, 20), with the left arm holding a spear and shield that rest on the ground. Colossal size, position between the Erechtheion and Propylaia, and orientation make it clear that, despite the close similarities in schema, this is not the Parthenos. As Lacroix (pp. 283–286, with pls. 24, 25) correctly concluded in a judicious and fully documented discussion, the Promachos and Parthenos were apparently very similar in general form, and the miniature renderings of the former on the Akropolis reverses do not give enough detail to establish how the two images may have differed. It is by no means certain, for example, that the Promachos wore a Corinthian helmet, as Pick (1931) proposed. In light of the Period V coins showing the Akropolis, one is obliged to reject all other reverse Athenas that have been claimed as the Promachos, such as 172, 298–300, the Velletri Athena (note 44 above, p. 122); the Period VI 297 = Sv. 83.24–28 (Pick); and the Period VI 301 = Sv. 84.1–7 (Price and Trell, p. 76, fig. 132). The very similarity of the Parthenos and the Promachos may explain why the latter seems not to appear independently on the coinage.

<sup>65</sup> The statue group by Myron on the Akropolis; see Lacroix, pp. 252–254; H. A. Weis, "The 'Marsyas' of Myron: Old Problems and New Evidence," *AJA* 83, 1979, pp. 214–219, where it is not appreciated that the reversed position of Athena and Marsyas on a Period VI reverse is an engraver's error.

<sup>66</sup> As Pheidias' statue at Olympia, but this should be the chryselephantine statue in Hadrian's completed Olympieion that would have been copied from it (Lacroix, p. 266). It is uncertain whether the Seated Zeus reverse in Period VI (one die: 356) was intended to replicate the VC reverse, for it is not a serious copy at all: Zeus is seated to the right on a stool rather than on a throne and holds an eagle instead of a Nike. Svoronos thought that this was the Zeus on the Parthenon East Pediment («Φώς επί του Παρθενώνος», *JIAN* 14, 1912 (pp. 193–339), p. 273), but as the Madrid Puteal suggests (note 63 above), the Parthenon Zeus held a thunderbolt at his side. The Period VI Zeus appears in fact to

- Demeter standing (266)<sup>67</sup>
- Eirene holding Ploutos (267)<sup>68</sup>
- Early Classical nude Apollo holding branch and bow (269)<sup>69</sup>
- Nude Apollo sighting along arrow (270)<sup>70</sup>
- Young Herakles sacrificing (272)
- Theseus subduing fallen Minotaur (276)
- Asklepios (277).

Kephisodotos' statue of Eirene and Ploutos may have been introduced because of its topical relevance to the peace and prosperity of the Antonine regime. In this connection it could be significant that the Eirene and Ploutos was one of the three Period VC types not repeated in the Period VI coinage.<sup>71</sup> Might it have been judged too inappropriate for the troubled 260's?

Designed to achieve the greatest possible richness in iconographical variety, the Period VI coinage involved more than a dozen different kinds of obverse Athena heads and busts, including one wearing a Roman masked cavalry helmet (401a) and a left-facing bust with a shield and spear at the shoulder (314a, 322a), and at least forty-seven different basic reverse types, of which twenty-one are entirely new:

- Fifteen entirely new Athena types (296, 297, 301–304,<sup>72</sup> 305, 306, 308, 309, 311, 316, 317, 334–338, 348, 349, Sv. 85.41, 42 [running left], Sv. 87.6, 7 [dropping ballot in urn])
- Zeus standing with perpendicular left arm (unpublished)<sup>73</sup>
- Hermes (358, 359)
- Apollo Lykeios (363, 364)<sup>74</sup>
- Artemis with torches (370)
- Theater of Dionysos (376)
- Owl, olive tree, amphora, and palm (377–385).

have been copied from a silver coin of Alexander the Great, which might have been thought by the Period VI die cutter to show the Zeus of Olympia and thus of the Olympieion.

<sup>67</sup> The caption to Sv. 92.22, 23 identifies the divinity as Hera, but the image is clearly the same Demeter shown next to Kore on 178.

<sup>68</sup> The statue by Kephisodotos; see Lacroix, pp. 295–297.

<sup>69</sup> Assumed by some to be the statue of Apollo Alexikakos by Kalamis (Pausanias 1.3.4); *LIMC* II, p. 217, pl. 206, no. 281.

<sup>70</sup> The Vienna specimen (although not the illustration of it in Sv. [Sv. 95.10]) shows the shaft that the deity holds up for inspection in his left hand; and from the Berlin specimen (although this again is not clear from the photograph published by Svoronos, Sv. 95.12) one sees that the god's right hand hanging at his side holds a doubly curved bow in a nearly vertical position. Accordingly, on the tickets in the Vienna and Berlin trays the figure is correctly classified as Apollo (rather than Theseus [so *BMC*, p. 105, no. 759] or Hermes [so *NCP*, p. 149, whence Sv., pl. 95]). For an identically posed figure without preserved attributes, see the statue in Early Classical style known as "Stephanos' Athlete" and the similar nude male in the so-called Orestes and Elektra Group (B. S. Ridgway, *The Severe Style in Greek Sculpture*, Princeton 1970, pp. 135–137, figs. 174, 175). On the evidence of the coins, the Stephanos figure should probably be identified as Apollo.

<sup>71</sup> The others were the standing Demeter (266) and Apollo (270). A few of the more complicated Period VB types also do not reappear in Period VI: 177, 178, 190, and Sv. 95.23, 24.

<sup>72</sup> N. Eschbach (*Statuen auf panathenäischen Preisamphoren des 4. Jhs. v. Chr.*, Mainz am Rhein 1986, p. 124) compares a statue known from a Panathenaic amphora of 336/5 (*ibid.*, pp. 109–110, 113, pl. 28:1, no. 63) with 301 = Sv. 84.1–7, although on the latter, Athena wears an Attic, not a Corinthian, helmet and holds a spear rather than a stylis in her left hand.

<sup>73</sup> See note 91 above, p. 55, and pp. 56–58, where the image is identified as the cult statue of Zeus Soter-Eleutherios. On the Period VI die, there is no altar before the image; cf. earlier representations of the statue on coins (78–80 and 148).

<sup>74</sup> *LIMC* II, p. 217, pl. 206, no. 281. The statue is also depicted on the New Style silver of Epigenes-Xenon (*New Style*, p. 383, pl. 139, nos. 1237–1240; see under 121 above, p. 96).

Besides these new types, the Period VI penchant for diversity led to the creation of a great number of type variants, such as the otherwise identical agonistic-table reverses that are separately inscribed with the names of Athens' five major athletic festivals (note 53 above, p. 123), and seemingly endless versions of Athena Parthenos, including one holding an owl instead of a Nike (293) and another with an owl rather than a snake at her feet (292). On a Period VI die (357) an eagle was gratuitously added to the wrist of the sacrificing left arm of the Standing Zeus, although, as confirmed by the representation on the VB die (175), the wrist of the statue must have been bare. What all this means of course is that the Period VI die engravers were not above "improving" on the statue types they reproduced, sometimes because they were copying from other coins and did not know the prototypes at first hand, at other times because variety or speed in execution could be more important to them than representational accuracy. Fidelity to sculptural prototypes can regularly be expected only in the more deliberate and conscientious die cutting of Periods VB and C.

In the following catalogue, the varieties are arranged within each period and denomination by reverse subjects, beginning with Athena, followed by other gods and goddesses, heroes and historical figures, and finally miscellaneous types. Reverses are presented whenever possible with the most common variety first, followed by all variants represented in the Agora collection. No attempt has been made to give a variety number to every known variant or to legend variants that are unique to single dies. Owing to the heavily worn condition of most Period VB and C drachms from the excavations and the contrastingly fine condition of the many Period VI drachms that were hoarded or lost during the Herulian invasion of 267, the 2nd-century varieties could not be illustrated so fully as the 3rd-century ones. Die positions are loose in all phases of the coinage and are not recorded.

## CATALOGUE

### PERIOD VA

*earlier 120's after Christ*

#### HEMIOBOLS

|            |           |  |   |               |
|------------|-----------|--|---|---------------|
|            |           | Head of Athena r., wearing Attic helmet; helmet bowl ornamented with two or three upright olive leaves and, usually, a curved tendril ending in a blossom; border of dots. | AΘE Owl stg. r.; to l., olive twig with two leaves and berry; border of dots. | Sv. 88.24, 25 |
| <b>162</b> | 11 coins  | 13–16  | Av. 2.38 (10)   |               |
|            | *a A-268  | 14   | 2.02  |               |
|            | *b MM-500 | 14   | 2.50  |               |

|            |           |   |               |  |  |                   |
|------------|-----------|---|---------------|--|--|-------------------|
|            |           | Similar.  |               | Similar, except AΘH.   |  | Sv. 88.23, 26     |
| <b>163</b> | 200 coins | 13–16   | Av. 2.25 (78) |  |  |                   |
| *a         | BB-18     | 15  | 2.33          |  |  |                   |
| *b         | E-2122    | 15  | 1.89          |  |  |                   |
| *c         | KTA-51    | 14  | 2.01          |  |  |                   |
| *d         | ΛΛ-256    | 15  | 2.43          |  |  |                   |
| *e         | Σ-5021    | 14  | 2.83          |  |  |                   |
| *f         | OA-125    | 14  | 2.57          |  |  |                   |
|            |           | Similar.  |               | Similar, except A-Θ H and no olive twig.   |  | Sv. 88.27         |
| <b>164</b> | 6 coins   | 13–16   | Av. 2.50 (6)  |  |  |                   |
| *a         | I-1607    | 13  | 2.60          |  |  |                   |
|            |           | Similar.  |               | Similar, except A Θ-H and Owl stg. l.  |  | Sv. 88.28         |
| <b>165</b> | I-50      | 14  | 2.33          |  |  |                   |
|            |           | Similar head of Athena or bust of Athena wearing Corinthian helmet and aegis; border of dots. |               | AΘ-H, A Θ-H, or A-ΘH Owl stg. l.; border of dots.  |  | Sv. 88.29, 30, 46 |
| <b>166</b> | 12 coins  | 14–16   | Av. 3.22 (11) |  |  |                   |
| *a         | ΒΓ'-281   | 16  | 2.99          | rev. at l. inscribed downwards, ΠΑ, ΙΤΑ or ΤΤΑ (?); found with 5 illegible pre-imperial coins in a floor layer of the earlier 2nd century after Christ |  |                   |
| *b         | OO-270    | 15  | 1.75          |  |  |                   |
|            |           | Similar head or bust of Athena r.   |               | A-Θ H or A Θ-H Owl stg. r.   |  | Sv. 88.31–34      |
| <b>167</b> | 16 coins  | 14–17   | Av. 3.01 (15) |  |  |                   |
| *a         | Θ-499     | 15  | 2.78          |  |  |                   |
| *b         | ΛΛ-178    | 14  | 3.22          |  |  |                   |
| *c         | NN-1334   | 15  | 3.08          |  |  |                   |
|            |           | Bust of Athena r., wearing helmet and aegis.  |               | A Θ-H or A-Θ H Triptolemos seated l., in winged chariot drawn by two serpents; border of dots.   |  | Sv. 94.7–12       |
| <b>168</b> | 4 coins   | 14–16   | Av. 2.27 (3)  | linked through a common obverse die to <b>166</b> and <b>167</b>   |  |                   |

## PERIOD VB

ca. 120's–140's or later after Christ

## DRACHMS

|                            |         |  |              |  |                                   |
|----------------------------|---------|--|--------------|--|-----------------------------------|
|                            |         | Bust of Athena r., wearing Corinthian helmet; some ("elaborate") busts fully draped and armored with aegis, other ("transitional") busts with little or no drapery at the shoulder line; either wreathed or no border. |              | AΘH-NA-IΩN Athena Parthenos stg. l., holding Nike in outstretched r. hand and resting l. hand on shield to r.; between Athena and shield, coiled snake and spear; at l., boukranion; border of dots. | Sv. 82.1–4                        |
| <b>169</b>                 | 6 coins | 24–26  | Av. 7.66 (4) |  |                                   |
| <b>*a</b>                  | Υ-18    | 25   | 10.32        |  |                                   |
|                            |         | Similar.   |              | AΘH-N-AIΩN Similar, but lacking boukranion.  | Sv. —                             |
| <b>*170</b>                | O-635   | 25   | 9.46         |  |                                   |
|                            |         | Similar, but transitional bust with slight drapery; border of dots.  |              | AΘH-NA-IΩN Athena Parthenos stg. l., as last; to l., coiled snake; border of dots.   | Sv. 82.29–31                      |
| <b>171</b>                 | 3 coins | 24–25  | Av. 6.72 (3) |  |                                   |
| <b>*a</b>                  | H'-2817 | 24   | 5.46         |  |                                   |
|                            |         | Similar.   |              | Similar, but details illegible.  |                                   |
| <b>[169–171]</b> 11 coins. |         |  |              |  |                                   |
|                            |         | Bust of Athena r., of elaborate or transitional type; wreathed or dotted border.   |              | AΘH-NAI-ΩN or AΘHNAI-ΩN Athena, wearing Corinthian helmet, aegis, and long dress, stg. r.; holding spear with point downwards in upraised r. hand and Nike in outstretched l.; border of dots.       | Sv. 83.29–32; <i>NCP</i> , Z:xxii |
| <b>172</b>                 | 8 coins | 24–25  | Av. 8.39 (6) |  |                                   |
| <b>*a</b>                  | OO-1506 | 25   | 8.78         |  |                                   |
|                            |         | Elaborate bust of Athena r.; wreathed or dotted border.  |              | AΘH-NAIΩN Athena stg. l., holding transverse spear with r. hand and resting l. on hip; at r., oval shield and snake; at l., snake and olive tree with owl perching in branches; border of dots.      | Sv. 87.15–17                      |
| <b>173</b>                 | P-185   | 25   | 9.54         |  |                                   |

|            |         |   |              |  |  |
|------------|---------|---|--------------|--|--|
|            |         | Similar, but wreathed border.   |              | A Θ H or A Θ-H or AΘHN-AI<br>At center, olive tree, with owl in branches and snake entwined around trunk; at l., Poseidon, half nude, striding r., brandishing trident in upraised r. hand; at r., Athena moving l., extending r. hand toward tree and holding spear and shield with l.; border of dots. | Sv. 89.6–10; <i>NCP</i> , Z:xi, xii, xiv   |
| <b>174</b> | 2 coins | 24–25   | 7.90 (1)     |  |  |
| <b>*a</b>  | III-575 | 24  | 7.90         |  |  |
|            |         | Transitional bust of Athena r.; border of dots.   |              | AΘHNAI-Ω-N Zeus stg., nude, to r., holding thunderbolt at side with r. hand and sacrificing with l. hand turned downwards over low altar at r.; border of dots.  | Sv. 92.5, 6; <i>NCP</i> , BB:iii           |
| <b>175</b> | 2 coins | 23–24   | 4.85 (1)     |  |  |
| <b>*a</b>  | II-243  | 24  | 4.85         |  |  |
|            |         | Elaborate bust of Athena r.; wreathed border.   |              | AΘHNA or AΘHNAI-ΩN Bearded Dionysos, wearing crown of ivy leaves and elaborate robes, seated r. on high-backed throne; resting r. hand on knee and holding long thyrsos with l.; at r., low table bearing burning thymiaterion; border of dots.  | Sv. 92.8–11, 14, 15; <i>NCP</i> , CC:ii–iv |
| <b>176</b> | 3 coins | 22–25   | Av. 4.80 (2) |  |  |
| <b>*a</b>  | Γ-404   | 25  | 5.19         |  |  |
|            |         | Elaborate bust of Athena r., wearing Attic helmet, necklace of pendants, and cuirass with aegis; no border. |              | AΘHNAIΩN At center, Triptolemos stg. l., holding long torch, in chariot drawn by two snakes to l.; at l., Demeter stg. r., holding long torch with l. hand and wheat ears with r.; at r., Kore stg. l., holding torch with r. hand; border of dots.  | Sv. 94.2–6, <i>NCP</i> , BB:xxiv           |
| <b>177</b> | 2 coins | 24–25   | Av. 8.57 (2) |  |  |
|            |         | Transitional head of Athena r.; border of dots.   |              | AΘ-H-NAI At r., Demeter stg. l., holding scepter and wheat ears; at l., Kore stg. r., holding long torch; border of dots.  | Sv. 94.16, 17                              |
| <b>178</b> | 2 coins | 24  | 8.70 (1)     |  |  |
| <b>*a</b>  | III-473 | 24  | 8.70         | (B 17:1b)  |  |



|                             |          |  |               |  |   |
|-----------------------------|----------|--|---------------|--|---|
|                             |          | Similar.   |               | <b>AΘHNAI-ΩN</b> Herakles, nude and bearded, stg. r., holding r. hand at side and leaning l. on club propped on rock; lion skin draped around l. arm; border of dots.  | Sv. 95.1, 2                             |
| <b>179</b>                  | 5 coins  | 23–24  | Av. 6.32 (4)  |  |   |
| <b>*a</b>                   | K-1398   | 23   | 5.94          |  |   |
|                             |          | Elaborate bust of Athena r.; wreathed border.                                |               | <b>AΘH</b> Theseus driving Marathonian bull to r.; border of dots.   | Sv. 95.16–20; <i>NCP</i> , DD.vii, viii |
| <b>180</b>                  | II-966   | 24   | 10.46         |  |   |
|                             |          | Similar.   |               | <b>AΘH</b> Theseus stg. r., raising the rock at Troizen; border of dots.   | Sv. 95.25, 28; <i>NCP</i> , DD:ii       |
| <b>181</b>                  | 8 coins  | 22–24  | Av. 5.88 (5)  |  |   |
| <b>*a</b>                   | OO-826   | 22   | 8.34          | <i>GRC</i> , fig. 20   |   |
|                             |          | Elaborate or transitional bust of Athena r.; wreathed, dotted, or no border. |               | <b>A-ΘH</b> , <b>Θ H-A</b> , <b>A H-Θ</b> , <b>A Θ-H</b> , or <b>AΘHN-AIΩN</b> Themistokles, in military dress and holding trophy with l. hand and wreath with upraised r., stg. l. on galley sailing l.; on prow, owl stg. l.; on ram, snake to l.; border of dots. | Sv. 97.1–14; <i>NCP</i> , EE.xxi, xxii  |
| <b>182</b>                  | 17 coins | 22–25  | Av. 8.17 (14) |  |   |
| <b>*a</b>                   | T-545    | 23   | 8.99          |  |   |
| <b>*b</b>                   | Z-2716   | 23   | 7.63          |  |   |
| <b>*c</b>                   | OO-35    | 25   | 8.35          | <i>GRC</i> , fig. 20   |   |
|                             |          | Elaborate bust of Athena r.; wreathed or no border.                          |               | <b>AΘH</b> , <b>A Θ-H</b> , or <b>AΘ-H</b> Similar, but types to r., Themistokles holding trophy over shoulder and, on one die, owl replaced by head of Athena; border of dots.  | Sv. 97.20–25                            |
| <b>183</b>                  | 5 coins  | 24–26  | Av. 7.48 (3)  |  |   |
| <b>*a</b>                   | Z-526    | 25   | 6.98          |  |   |
|                             |          | Elaborate or transitional bust r.  |               | Similar, but details illegible.  |   |
| <b>[182, 183]</b> 15 coins. |          |  |               |  |   |
|                             |          | Elaborate or transitional bust of Athena r.; wreathed or dotted border.      |               | <b>AΘHNAI-ΩN</b> Four-legged table with amphora below; at r., palm branch; on table from l. to r., wreath, helmeted head of Athena r., and owl stg. l.; border of dots.  | Sv. 88.55–57                            |
| <b>184</b>                  | 4 coins  | 23–25  | Av. 6.78 (3)  |  |   |
| <b>*a</b>                   | Z-2416   | 24   | 7.19          |  |   |

|            |           |   |              |   |            |
|------------|-----------|---|--------------|---|------------|
|            |           | Elaborate bust of Athena r.; wreathed or no border. |              | AΘH-NAI-ΩN Boukranion with fillet hanging from each horn; border of dots. | Sv. 99.1–3 |
| <b>185</b> | 8 coins   | 23–26   | Av. 7.40 (4) |   |            |
|            | *a Σ-3612 | 25  | 8.03         |   |            |

## UNCLASSIFIED

|                                |             |   |               |   |                                     |
|--------------------------------|-------------|---|---------------|---|-------------------------------------|
|                                |             | Elaborate or transitional bust of Athena r.                             |               | Illegible reverse type.   |                                     |
| [169–185] 97 coins.            |             |   |               |   |                                     |
| HEMIDRACHMS                    |             |   |               |   |                                     |
| (a) <i>Fine-style obverses</i> |             |   |               |   |                                     |
|                                |             | Bust of Athena r., wearing Corinthian helmet and aegis; border of dots. |               | AΘH-NAIΩN, A-ΘHN-AIΩN, AΘHN-AIΩN, or AΘHNAI-ΩN Demeter seated l., holding wheat ears in extended r. hand and long scepter with l.; at l., usually, snake to l.; border of dots. | Sv. 93.36–42; <i>NCP</i> , BB:xxii  |
| <b>186</b>                     | 43 coins    | 18–22   | Av. 5.45 (17) |   |                                     |
|                                | *a Δ-257    | 19  | 6.80          |   |                                     |
|                                | *b ΩΔ-105   | 19  | 4.11          |   |                                     |
|                                | *c Υ-52     | 20  | 7.31          |   |                                     |
|                                |             | Similar busts of Athena r., some with Attic helmets; border of dots.    |               | AΘH-NAI-ΩN or AΘHNAI-ΩN Kore stg. r., holding two torches downward to r.; border of dots.   | Sv. 93.43–47; <i>NCP</i> , BB:xviii |
| <b>187</b>                     | 24 coins    | 19–21   | Av. 5.05 (13) |   |                                     |
|                                | *a A-666    | 19  | 6.52          |   |                                     |
|                                | *b T-285    | 20  | 4.79          |   |                                     |
|                                |             | Similar.  |               | AΘHNAI-ΩN Iakchos, wearing short tunic and boots and holding long torch, stg. r.; border of dots.   | Sv. 93.32–35; <i>NCP</i> , BB:xv    |
| <b>188</b>                     | 13 coins    | 18–21   | 5.32 (7)      |   |                                     |
|                                | *a ΓΓ-87    | 19  | 4.16          |   |                                     |
|                                | *b Σ-4635   | 18  | 5.39          |   |                                     |
|                                |             | Bust of Athena r., wearing Attic helmet and aegis; border of dots.      |               | A-ΘH Theseus, nude and with club in his upraised r. hand, striding l.; before him at l., Minotaur falling l.; border of dots.   | Sv. 96.17; <i>NCP</i> , DD:iv       |
| <b>189</b>                     | 2 coins     | 19–20   | 5.43 (1)      |   |                                     |
|                                | *a ΠΙΙΙ-359 | 19  | 5.43          |   |                                     |

|                                  |         |       |              |  |   |   |
|----------------------------------|---------|-------|--------------|--|---|---|
|                                  |         |       |              | Bust of Athena r., wearing Corinthian helmet and aegis; wreathed border. | A Θ-H Miltiades, in military dress, stg. r.; holding with both hands Persian captive stg. r. with hands bound behind back; at r., trophy; border of dots. | Sv. 97.32–35, <i>NCP</i> , EE:vii, viii |
| <b>*190</b>                      | T-405   | 22    | 8.82         |  |   |   |
| <i>(b) Coarse-style obverses</i> |         |       |              |  |   |   |
|                                  |         |       |              | Bust of Athena r., wearing Corinthian helmet and aegis; border of dots.  | A H-Θ Apollo Patroos stg. l., wearing long robe, holding lyre with l. hand and phiale in extended r.; border of dots.                                     | Sv. 93.4                                |
| <b>191</b>                       | 2 coins | 18–19 | Av. 6.49 (2) |  |   |   |
| <b>*a</b>                        | Σ-92    | 18    | 6.70         |  |   |   |
|                                  |         |       |              | Similar.   | A-H Θ Four-legged table with amphora below; on table at l., owl stg. l., and at r., statue of Athena Parthenos facing; border of dots.                    | Sv. 91.46, 47                           |
| <b>192</b>                       | 3 coins | 18–19 | Av. 6.51 (3) |  |   |   |
|                                  |         |       |              | Similar.   | Similar, but both owl and statue of Athena stg. l.; border of dots.   | Sv. —                                   |
| <b>193</b>                       | ΩΔ-53   | 20    | 2.79         |  | heavily corroded  |   |
|                                  |         |       |              | Similar.   | A Θ-H Four-legged table with amphora below; on table, owl stg. r. and wreath; at l., palm branch; border of dots.   | Sv. 91.48                               |
| <b>194</b>                       | 2 coins | 20    | Av. 8.85 (2) |  |   |   |
| <b>*a</b>                        | ΓΓ-38   | 20    | 8.82         |  |   |   |
|                                  |         |       |              | Similar.   | Similar, but details illegible.   |   |
| [192–194] 1 coin.                |         |       |              |  |   |   |
|                                  |         |       |              | Similar.   | A Θ-H Olive tree with owl perching l. in branches; at r., large amphora; border of dots.  | Sv. 90.33                               |
| <b>195</b>                       | 6 coins | 18–19 | 5.00 (6)     |  |   |   |
| <b>*a</b>                        | Θ-949   | 19    | 6.06         |  |   |   |
|                                  |         |       |              | Similar.   | AΘ-H Similar, but owl perching r.; border of dots.  | Sv. 90.34                               |
| <b>196</b>                       | 9 coins | 18–19 | 4.19 (8)     |  |   |   |
| <b>*a</b>                        | Υ-216   | 19    | 3.82         |  |   |   |

[195, 196] 3 coins.

Similar.

Similar, but details illegible.

Similar.

A-Θ|H, A|Θ-H, or A|H-Θ  
Owl stg. r. on large amphora;  
border of dots.

Sv. 90.35–38, 40

|            |          |       |               |
|------------|----------|-------|---------------|
| <b>197</b> | 44 coins | 18–20 | Av. 5.60 (18) |
| *a         | A-200    | 20    | 7.63          |
| *b         | NN-2015  | 20    | 4.81          |
| *c         | OO-1376  | 20    | 7.23          |
| *d         | ΣT-186   | 19    | 5.10          |
| *e         | Ω-434    | 18    | 5.18          |

**PERIODS VB and C**

**OBOLS**

(a) *Earlier issues: VB*

Helmeted bust of Athena l.,  
with shoulders bare; border  
of dots.

AΘHNA-ΙΩΝ Triptolemos,  
holding long staff, stg. in  
chariot drawn by two snakes  
l.; border of dots.

Sv. —

|             |       |    |      |
|-------------|-------|----|------|
| <b>*198</b> | Υ-103 | 19 | 4.45 |
|-------------|-------|----|------|

Similar.

AΘHN-AI-ΩΝ Theseus or  
Herakles stg. l., holding  
phiale in r. hand and club  
with l.; border of dots.

Sv. 95.13–15;  
*NCP*, DD:i

|            |         |       |              |
|------------|---------|-------|--------------|
| <b>199</b> | 5 coins | 16–18 | Av. 5.14 (5) |
| *a         | B-171   | 16    | 6.27         |
| *b         | Z-1973  | 18    | 4.20         |

Similar.

AΘHNAI-ΩΝ Theseus striding l.,  
nude but for cloak wrapped  
around l. arm, and holding club  
in upraised r. hand; border of dots.

Sv. 96.28

|             |         |    |      |
|-------------|---------|----|------|
| <b>*200</b> | ΙΙΙ-663 | 16 | 2.70 |
|-------------|---------|----|------|

Head of Athena r., wearing  
Corinthian helmet; border  
of dots.

AΘHNA-ΙΩΝ Theseus striding l.,  
as last; at l., Minotaur falling l.;  
border of dots.

Sv. 96.19

|             |         |    |      |
|-------------|---------|----|------|
| <b>*201</b> | ΙΙΘ-470 | 16 | 5.87 |
|-------------|---------|----|------|

Bust of Athena r. or l.,  
wearing Corinthian helmet  
and aegis; border of dots.

A-Θ-H Flaming cylindrical  
altar on wide base; at r., olive  
tree; border of dots.

Sv. 87.39 (cf. 38, 40,  
41)

|            |         |       |              |
|------------|---------|-------|--------------|
| <b>202</b> | 6 coins | 15–16 | Av. 4.09 (4) |
| *a         | ΙΙΙ-273 | 15    | 4.13         |

|                                  |           |   |               |  |   |
|----------------------------------|-----------|---|---------------|--|---|
|                                  |           | Similar, bust r.  |               | No legend. Rectangular altar topped by boukranion between two situlae; at l. and r., olive tree. Altar face ornamented by wreath enclosing boukranion; border of dots. | Sv. 87.42, 43                           |
| <b>203</b>                       | 4 coins   | 14–15   | Av. 3.37 (4)  |  |   |
|                                  | *a OO-269 | 16  | 3.59          |  |   |
| <i>(b) Later Issues: VB or C</i> |           |   |               |  |   |
|                                  |           | Head or bust of Athena r., wearing Corinthian helmet and sometimes aegis; border of dots. |               | A ΘH NAI ΩN Demeter (?) seated r., on rock, leaning l. arm on low column and resting r. in lap; border of dots.  | Sv. 89.35–40; <i>NCP</i> , EE:xvi, xvii |
| <b>204</b>                       | 25 coins  | 16–18   | Av. 3.12 (15) |  |   |
|                                  | *a Φ-75   | 16  | 4.59          |  |   |
|                                  | *b Ω-418  | 16  | 3.79          |  |   |
|                                  |           | Similar.  |               | A ΘH NAI ΩN Similar to last.   | Sv. —                                   |
| <b>205</b>                       | 3 coins   | 17–18   | 2.99 (2)      |  |   |
|                                  | *a Γ-421  | 18  | 3.43          |  |   |
|                                  |           | Similar.  |               | A-Θ-H-NAI, A-ΘHN-AI, or AΘHN-AI Triptolemos stg. 1. in chariot drawn by two snakes to l.; border of dots.  | Sv. 94.22, 38, 40, 41, 43               |
| <b>206</b>                       | 50 coins  | 16–18   | Av. 3.04 (15) |  |   |
|                                  | *a B'-929 | 18  | 5.03          |  |   |
|                                  | *b T-286  | 17  | 3.18          |  |   |
|                                  |           | Similar.  |               | AΘH-NAI or AΘHN-AI Nike stg. 1., holding wreath in upraised r. hand; border of dots.   | Sv. 96.44                               |
| <b>207</b>                       | 2 coins   | 17–18   | Av. 2.85 (2)  |  |   |
|                                  | *a T-926  | 18  | 3.48          |  |   |
|                                  |           | Similar.  |               | AΘHN-AI Theseus striding l., drapery over l. arm and shoulder, club in upraised r. hand; border of dots.   | Sv. 96.26, 27                           |
| <b>208</b>                       | 7 coins   | 15–18   | Av. 3.18 (7)  |  |   |
|                                  | *a ΔE-14  | 15  | 2.30          |  |   |
|                                  |           | Similar.  |               | AΘHN-AIΩN or AΘHNA-IΩN Theseus striding l., as last; border of dots.   | Sv. 96.20, 21                           |
| <b>209</b>                       | 2 coins   | 17–18   | Av. 3.66 (2)  |  |   |
|                                  | *a Z-1975 | 18  | 4.83          |  |   |

|            |            |  |               |   |  |
|------------|------------|--|---------------|---|--|
|            |            | Similar.   |               | AΘH-NAI-ΩN or AΘH-NAIΩ-N<br>Athena, wearing armor and<br>hurling spear, stg. r. in biga<br>galloping r.; border of dots.                                      | Sv. 88.10–13                           |
| <b>210</b> | 13 coins   | 16–18  | Av. 3.40 (7)  |   |  |
|            | *a OO-1228 | 18   | 5.20          |   |  |
|            |            | Similar.   |               | AΘHN-AIΩN, AΘH-N-AI,<br>AΘH-NAI, AΘ-H-NA-I,<br>AΘH-N-A, or A-ΘH Olive tree<br>with owl perching l. in<br>branches; border of dots.                            | Sv. 89.19                              |
| <b>211</b> | 24 coins   | 16–19  | Av. 3.15 (24) |   |  |
|            | *a AA-1140 | 17   | 4.13          |   |  |
|            | *b E-2024  | 16   | 4.12          |   |  |
|            | *c ΠA-412  | 16   | 3.90          |   |  |
|            | *d Σ-3976  | 17   | 3.00          |   |  |
|            | *e Σ-4879  | 19   | 3.69          |   |  |
|            |            | Similar.   |               | AΘH-N-AI or AΘH-NA-I Large<br>amphora with long scepter at r.<br>and palm branch at l.; wreathed<br>or dotted border.   | Sv. 90.41,43                           |
| <b>212</b> | 7 coins    | 16–18  | Av. 3.41 (6)  |   |  |
|            | *a T-1018  | 17   | 4.14          |   |  |
|            |            | <b>HEMIOBOLS</b>   |               |   |  |
|            |            | Bust of Athena r., wearing<br>Corinthian helmet and aegis;<br>wreathed or dotted border. |               | AΘHNA-IΩN Kore walking r.,<br>holding two torches; border<br>of dots.   | Sv. 94.47, 48;<br><i>NCP</i> , BB:viii |
| <b>213</b> | 2 coins    | 11–12  | Av. 2.08 (2)  |   |  |
|            |            | Similar; border of dots.   |               | AΘHN-AIΩN or AΘHNA-IΩN<br>Nike stg. l., holding wreath in<br>upraised r. hand; border of dots.  | Sv. 96.47                              |
| <b>214</b> | 9 coins    | 12–14  | Av. 2.20 (8)  |   |  |
|            | *a T-866   | 12   | 2.19          |   |  |
|            |            | Similar.   |               | AΘH or A-Θ H Nike as last,<br>sometimes to r.; border of dots.  | Sv. 96.46, 48, 49                      |
| <b>215</b> | 16 coins   | 11–13  | Av. 2.12 (7)  |   |  |
|            | *a Π-289   | 11   | 1.21          |   |  |
|            |            | Bust of Athena r., wearing<br>Attic helmet; border of dots.                              |               | AΘ-HNAI Asklepios stg. l.,<br>draped with r. shoulder bare,<br>holding l. hand at waist, resting<br>r. on short staff entwined with<br>snake; border of dots. | Sv. 98.11, 12;<br><i>NCP</i> , EE:iv   |
| <b>216</b> | 6 coins    | 11–12  | Av. 1.40 (6)  |   |  |
|            | *a P-1050  | 12   | 1.68          |   |  |

|            |            |       |  |  |                     |
|------------|------------|-------|--|--|---------------------|
|            |            |       | Bust of Athena r. or l., wearing Corinthian helmet; border of dots.            | A-Θ H Similar figure of Asklepios stg. l.; border of dots.   | Sv. 98.13, 14       |
| <b>217</b> | 31 coins   | 11-12 | Av. 1.36 (24)  |  |                     |
|            | *a B-533   | 11    | 1.39   |  |                     |
|            | *b K-367   | 11    | 1.52   |  |                     |
|            |            |       | Similar, bust r.   | A-Θ H Draped figure of Telesphoros stg., facing, wearing conical hat; border of dots.              | Sv. 98.15           |
| <b>218</b> | AA-755     | 12    | -  |  |                     |
|            |            |       | Similar.   | A-ΘH Snake coiled l.; border of dots.  | Sv. 98.17           |
| <b>219</b> | 9 coins    | 11-12 | Av. 1.53 (9)   |  |                     |
|            | *a NN-210  | 12    | 2.13   |  |                     |
|            |            |       | Similar bust l. or r., sometimes with Attic helmet; wreathed or dotted border. | AΘH, AΘ H, A ΘH, or A-Θ H Prow of galley r., or l., often with owl stg. r. on ram; border of dots. | Sv. 97.37-39, 41-44 |
| <b>220</b> | 52 coins   | 11-13 | Av. 1.32 (33)  |  |                     |
|            | *a N'-1342 | 12    | 1.32   |  |                     |
|            | *b Σ-3615  | 13    | 1.41   |  |                     |
|            | *c Σ-4154  | 11    | 1.61   |  |                     |
|            |            |       | Bust of Athena r., wearing Corinthian helmet; border of dots.                  | A-Θ H Snake emerging l., from basket with upraised lid; border of dots.                            | Sv. 94.32-35        |
| <b>221</b> | 28 coins   | 11-13 | Av. 1.74 (26)  |  |                     |
|            | *a OO-1013 | 12    | 2.00   |  |                     |
|            | *b Z-1687  | 13    | -  |  |                     |
|            |            |       | Similar.   | AΘHN-AIΩN Tripod; border of dots.  | Sv. 93.21, 22       |
| <b>222</b> | 7 coins    | 11-12 | Av. 2.42 (7)   |  |                     |
|            | *a ΛΛ-387  | 12    | 2.44   |  |                     |
|            |            |       | Similar, but bust sometimes l.   | A-Θ H or AΘ-H Tripod; border of dots.  | Sv. 93.23, 29, 30   |
| <b>223</b> | 31 coins   | 11-12 | Av. 1.25 (18)  |  |                     |
|            | *a Z-1147  | 12    | 1.36   |  |                     |
|            | *b Z-2759  | 12    | 1.15   |  |                     |
|            |            |       | Similar bust l. or r.; border of dots.   | A Θ-H or A-Θ H Olive tree; trunk entwined by snake and owl perched r. in branches; border of dots. | Sv. 89.24           |
| <b>224</b> | 6 coins    | 11-12 | Av. 1.30 (4)   |  |                     |
|            | *a A-1469  | 11    | 0.95   |  |                     |
|            | *b OO-1203 | 11    | 1.41   |  |                     |

|            |                      |   |               |  |                   |
|------------|----------------------|---|---------------|--|-------------------|
|            |                      | Similar.                                      |               | A Θ-H or AΘH-N Olive tree as last, but owl l.                  | Sv. 89.22, 23     |
| <b>225</b> | 9 coins              | 11-13   | Av. 1.49 (8)  |  |                   |
|            |                      | Similar.                                      |               | Similar, but details illegible.                                |                   |
|            | [224, 225] 32 coins. |   |               |  |                   |
|            |                      | Similar bust r. or l.; border of dots.        |               | A Θ-H or A-Θ H Owl stg. r.; border of dots.                    | Sv. 88.35, 39, 40 |
| <b>226</b> | 78 coins             | 11-13   | Av. 1.54 (72) |  |                   |
|            | *a AA-489            | 12  | 1.46          |  |                   |
|            | *b Γ-302             | 12  | 1.10          |  |                   |
|            | *c ΔΔ-4              | 12  | 1.63          |  |                   |
|            | *d E-2334            | 13  | 1.66          |  |                   |
|            | *e Z-699             | 11  | 1.38          |  |                   |
|            | *f Ξ-289             | 11  | 1.38          |  |                   |
|            | *g BE-483            | 12  | -             |  |                   |
|            |                      | Similar.                                      |               | A Θ H or A-Θ Owl stg. r.; to r., olive branch; border of dots. | Sv. 88.36, 37     |
| <b>227</b> | 17 coins             | 11-13   | Av. 1.79 (16) |  |                   |
|            | *a M-208             | 12  | 1.44          |  |                   |
|            | *b Ξ-681             | 11  | 1.48          |  |                   |
|            |                      | Similar.                                      |               | A-Θ H Owl as last; wreathed border.                            | Sv. 88.41         |
| <b>228</b> | 3 coins              | 11-12   | Av. 1.36 (2)  |  |                   |
|            | *a Σ-6096            | 11  | 1.17          | chisel marks on obv.:   - (?)                                  |                   |
|            |                      | Bust of Athena r.; wreathed or dotted border. |               | A-Θ H, AΘ-H, or A Θ-H Owl stg. l.; border of dots.             | Sv. 88.47-51, 53  |
| <b>229</b> | 76 coins             | 10-13   | Av. 1.45 (71) |  |                   |
|            | *a M-36              | 11  | 1.29          |  |                   |
|            | *b NN-217            | 13  | 1.40          |  |                   |
|            | *c Σ-4051            | 12  | 1.81          |  |                   |
|            | d II-644             | 13  | 2.25          | GRC, fig. 21   |                   |
|            |                      | Similar; wreathed border.                     |               | A Θ H or A-Θ H Owl stg. l., on olive branch; border of dots.   | Sv. 88.52         |
| <b>230</b> | 16 coins             | 10-12   | Av. 1.49 (15) |  |                   |
|            | *a ΠΠ-282            | 10  | 1.34          |  |                   |
|            |                      | Similar; border of dots.                      |               | AΘ-H Owl stg., facing, with spread wings; border of dots.      | Sv. 88.43, 44     |
| <b>231</b> | 6 coins              | 11-13   | Av. 1.25 (5)  |  |                   |
|            | *a ΠΘ-426            | 13  | 1.04          |  |                   |



|            |          |       |              |  |  |               |
|------------|----------|-------|--------------|--|--|---------------|
|            |          |       |              | Bust of Theseus r., head bare, with club over l. shoulder; border of dots. | AΘH Piglet walking r.; wreathed or dotted border.  | Sv. 94.15     |
| <b>232</b> | 10 coins | 10–12 | Av. 1.56 (7) |  |  |               |
| <b>*a</b>  | ΣΤ'-704  | 10    | 1.39         |  |  |               |
|            |          |       |              | Similar.   | A-ΘH Grape cluster; border of dots.  | Sv. 92.24–26  |
| <b>233</b> | 5 coins  | 10–12 | Av. 1.24 (4) |  |  |               |
| <b>*a</b>  | Ψ-214    | 11    | 1.35         |  |  |               |
|            |          |       |              | Similar.   | AΘH Amphora on conical foot; at r., palm branch; border of dots.                                 | Sv. 90.45–47  |
| <b>234</b> | 12 coins | 10–12 | Av. 1.45 (5) |  |  |               |
| <b>*a</b>  | ΓΓ-99    | 12    | 1.38         |  |  |               |
| <b>*b</b>  | Z-1965   | 11    | 1.87         |  |  |               |
| <b>*c</b>  | H-416    | 10    | 1.66         |  | GRC, fig. 21   |               |
|            |          |       |              | Similar.   | A-Θ H or AΘ-H Three wheat ears emerging from rounded, handleless vase or basket; border of dots. | Sv. 94.36     |
| <b>235</b> | 9 coins  | 10–11 | Av. 0.96 (9) |  |  |               |
|            |          |       |              | Similar.   | A-Θ-H Tripod; border of dots.  | Sv. —         |
| <b>236</b> | ΠΘ-493   | 11    | 1.63         |  |  |               |
|            |          |       |              | Similar, but bust sometimes l.   | A-Θ H, A-Θ, or A Θ-H Club with handle upwards; border of dots.                                   | Sv. 96.37–40  |
| <b>237</b> | 17 coins | 9–11  | Av. 0.97 (7) |  |  |               |
| <b>*a</b>  | KK-114   | 9     | 1.16         |  |  |               |
| <b>*b</b>  | ΠΠ-152   | 10    | 0.75         |  |  |               |
| <b>*c</b>  | Σ-3801   | 10    | 1.03         |  |  |               |
|            |          |       |              | Similar, bust r.   | A-Θ H, A Θ-H, or A Θ H Two torches; border of dots.  | Sv. 94.50–52  |
| <b>238</b> | 9 coins  | 10–11 | Av. 1.48 (9) |  |  |               |
| <b>*a</b>  | BB-499   | 11    | 1.86         |  |  |               |
|            |          |       |              | Similar.   | A-ΘH Five ears of wheat; border of dots.   | Sv. 94.53, 54 |
| <b>239</b> | 3 coins  | 10–12 | Av. 1.74 (3) |  |  |               |

|            |            |  |               |  |               |
|------------|------------|--|---------------|--|---------------|
|            |            | Similar.   |               | A Θ-H Boukranion; border of dots.                        | Sv. 99.39–42  |
| <b>240</b> | 39 coins   | 9–13   | Av. 1.37 (25) |  |               |
|            | *a Z-438   | 12   | 1.91          |  |               |
|            | *b H'-3379 | 10   | 1.42          |  |               |
|            | *c ΠΠ-118  | 11   | 1.24          |  |               |
|            |            | Similar.   |               | A-ΘH or A-Θ H Winged caduceus; border of dots.           | Sv. 92.33, 34 |
| <b>241</b> | 14 coins   | 10–12  | Av. 1.14 (9)  |  |               |
|            | *a Z-733   | 11   | 0.88          |  |               |
|            |            | Draped bust of Asklepios l., snake emerging l. from drapery; border of dots. |               | A-Θ H or A Θ-H Telesphoros stg., facing; border of dots. | Sv. 98.16, 18 |
| <b>242</b> | 6 coins    | 10–11  | Av. 1.42 (3)  |  |               |
|            |            | Draped bust of Demeter or Kore r., wearing necklace; border of dots.         |               | AΘH Piglet stg. r.; border of dots.                      | Sv. 94.14     |
| <b>243</b> | EA-203     | 11   | 1.44          |  |               |
|            |            | Similar.   |               | A Θ-H Two torches; border of dots.                       | Sv. 94.49     |
| <b>244</b> | 2 coins    | 11–13  | 1.97 (2)      |  |               |
|            | *a ΠΘ-161  | 11   | 1.63          |  |               |
|            | b MM-36    | 13   | 2.30          | GRC, fig. 21   |               |
|            |            | Male bust r., wearing wreath with leaves above forehead; border of dots.     |               | AΘ-H Caduceus; border of dots.                           | Sv. 92.32     |
| <b>245</b> | N-723      | 10   | 1.04          |  |               |
|            |            | Similar.   |               | A Θ-H Boukranion; border of dots.                        | Sv. 99.43, 44 |
| <b>246</b> | 3 coins    | 9–10   | Av. 0.90 (3)  |  |               |
|            | *a Z-2221  | 10   | 1.11          |  |               |
|            |            | Boukranion.  |               | No legend. Three wheat ears.                             | Sv. 99.45–47  |
| <b>247</b> | 2 coins    | 9  | 1.20 (1)      |  |               |
|            | *a KK-435  | 9  | 1.20          |  |               |

## UNCLASSIFIED

Bust of Athena or other deity. Details uncertain or illegible.

[213–246] 277 coins.

## PERIOD VC

*(140's or) 150's—ca. 175 after Christ*

## DRACHMS

|                            |          |   |               |  |              |
|----------------------------|----------|---|---------------|--|--------------|
|                            |          | Head or simple bust of Athena r., wearing Corinthian helmet or, rarely, Attic helmet; border of dots. |               | AΘH-N-AIΩN or, very rarely, AΘ-HN-AIΩN Athena Parthenos stg. 1., as <b>171</b> ; border of dots.   | Sv. 82.32–35 |
| <b>248</b>                 | 77 coins | 21–25   | Av. 6.75 (70) |  |              |
| *a                         | I-1043   | 22  | 8.38          |  |              |
| *b                         | MM-446   | 24  | 6.86          |  |              |
| *c                         | NN-208   | 23  | 8.29          |  |              |
| *d                         | ΠΘ-245   | 23  | 8.48          | <i>GRC</i> , fig. 20   |              |
| *e                         | ΠΠ-716   | 23  | 7.11          |  |              |
| *f                         | Σ-3750   | 23  | -             | halved   |              |
|                            |          | Head of Athena r., wearing Corinthian helmet; border of dots.   |               | AΘHN-AIΩN Athena Parthenos as last, but with boukranion replacing snake at l.; border of dots.   | Sv. —        |
| <b>249</b>                 | A-833    | 22  | 6.15          |  |              |
|                            |          | Similar.  |               | AΘH-NA-IΩN, AΘH-N-AIΩN, or AΘ-HN-AIΩN Athena Parthenos stg. 1., as <b>248</b> , but with phiale in place of Nike; border of dots.                            | Sv. 87.13    |
| <b>250</b>                 | 13 coins | 22–23   | Av. 6.83 (13) |  |              |
|                            |          | Similar.  |               | Similar, but details illegible.  |              |
| <b>[248–250]</b> 59 coins. |          |   |               |  |              |
|                            |          | Bust of Athena r., wearing Corinthian helmet; border of dots.   |               | AΘH-N-AIΩN Athena stg. 1., holding Nike in r. hand and leaning l. on upright spear held aslant; as <b>172</b> , but type reversed; border of dots.           | Sv. 83.37    |
| <b>251</b>                 | K-1821   | 23  | 6.46          |  |              |
|                            |          | Similar.  |               | Legend illegible. Athena as last, but with spear held vertically; at r., upright shield leaning on base of spear; at l., snake coiled to l.; border of dots. | Sv. —        |
| <b>252</b>                 | 4 coins  | 22–23   | Av. 6.77 (4)  |  |              |

|             |           |   |               |  |   |                                    |
|-------------|-----------|---|---------------|--|---|------------------------------------|
|             |           | Similar.  |               |  | AΘHNA-ΙΩΝ Athena striding r., preparing to strike with spear held in upraised r. hand, and holding round shield with l.; at r., owl stg. r.; at l., olive tree entwined with snake; border of dots. | Sv. 84.36; <i>NCP</i> , AA:xvi     |
| <b>*253</b> | ΠΘ-63     | 23  | 8.64          |  |   |                                    |
|             |           | Similar head or bust of Athena to r.; border of dots. |               |  | AΘHN-AI-Ω-N Athena striding r., looking l.; l. arm slipped through strap of round shield, l. hand holding spear; r. arm extended to l.; at r., snake to r.; at l., owl stg. r.; border of dots.     | Sv. 85.8–10                        |
| <b>254</b>  | 6 coins   | 21–23   | Av. 6.50 (6)  |  |   |                                    |
| <b>*a</b>   | B-370     | 23  | 8.20          |  |   |                                    |
|             |           | Similar.  |               |  | AΘH-NAI-ΩΝ Similar to <b>254</b> , but at r., owl stg. r. and, at l., olive tree entwined by snake; border of dots.   | Sv. 85.32–35; <i>NCP</i> , Z:viii  |
| <b>255</b>  | 14 coins  | 21–24   | Av. 6.56 (14) |  |   |                                    |
| <b>*a</b>   | Γ-1452    | 23  | 10.55         |  |   |                                    |
|             |           | Similar.  |               |  | AΘHN-A-ΙΩΝ, AΘH-N-A-ΙΩΝ, AΘH-N-AIΩΝ, AΘH-NA-ΙΩΝ, AΘHNA-I-ΩΝ, or AΘHN-AI-ΩΝ Similar to <b>255</b> , but with only snake at r.; border of dots.   | Sv. 85.12–18                       |
| <b>256</b>  | 34 coins  | 21–24   | Av. 6.40 (32) |  |   |                                    |
| <b>*a</b>   | ΠΘ-47     | 22  | 7.02          |  |   |                                    |
|             |           | Similar.  |               |  | AΘHN-A-ΙΩΝ, AΘH-N-AIΩΝ, AΘH-N-A-ΙΩΝ, AΘH-NA-I-ΩΝ, AΘHN-A-I-ΩΝ, or AΘHN-AI-ΩΝ Athena stg. l., holding spear with r. hand and round shield with l.; border of dots.                                   | Sv. 86.1–4                         |
| <b>257</b>  | 125 coins | 21–24   | Av. 6.63 (44) |  |   |                                    |
| <b>*a</b>   | MM-139    | 23  | 4.36          |  |   |                                    |
|             |           | Similar.  |               |  | AΘHN-AIΩΝ or AΘHNA-ΙΩΝ Athena stg. l., with olive tree, as <b>173</b> ; border of dots.   | Sv. 87.18–20; <i>NCP</i> , Z:xviii |
| <b>258</b>  | 17 coins  | 21–23   | Av. 6.16 (14) |  |   |                                    |
| <b>*a</b>   | Ω-19      | 23  | 7.98          |  |   |                                    |
|             |           | Similar.  |               |  | AΘH-NAIΩΝ Similar, but with snake entwined around tree; border of dots.   | Sv. 87.21                          |
| <b>259</b>  | I-650     | 22  | 6.64          |  |   |                                    |

|             |          |          |               |                      |  |                                      |
|-------------|----------|----------|---------------|----------------------|--|--------------------------------------|
|             |          | Similar. |               |                      | <b>AΘH-NAIΩ-N</b> Athena, holding shield and hurling spear with r. hand, in biga galloping r.; below horses at r., giant emerging from earth preparing to throw boulder with both hands; border of dots. | Sv. 88.8, 9                          |
| <b>260</b>  | 13 coins | 22–25    | Av. 7.50 (10) |                      |  |                                      |
| <b>*a</b>   | Σ-3396   | 23       | 7.52          |                      |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHNA-I-ΩN</b> Contest of Athena and Poseidon, as <b>174</b> ; border of dots.  | Sv. 89.11–15;<br><i>NCP</i> , Z:xvi  |
| <b>261</b>  | 4 coins  | 22–24    | Av. 8.27 (2)  |                      |  |                                      |
| <b>*a</b>   | NN-66    | 24       | 8.67          |                      |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHNAI ΩN</b> or <b>AΘHNA-I-ΩN</b> Athena stg., facing, arms at sides and looking r.; at r., Marsyas, nude, advancing toward Athena with r. arm raised; border of dots.                               | Sv. 89.26–32;<br><i>NCP</i> , Z:xx   |
| <b>262</b>  | 4 coins  | 22–24    | Av. 7.13 (3)  |                      |  |                                      |
| <b>*a</b>   | ΠΠΠ-277  | 23       | 5.87          |                      |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHN-AIΩN</b> Zeus seated on throne to l., holding Nike in r. hand, long scepter in l.; border of dots.   | Sv. 92.1, 2;<br><i>NCP</i> , BB:iv   |
| <b>263</b>  | 3 coins  | 22–23    | Av. 7.24 (3)  |                      |  |                                      |
| <b>*a</b>   | Λ-56     | 23       | 6.76          | <i>GRC</i> , fig. 20 |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHNA-IΩN</b> Bearded Dionysos seated r., behind low table. As <b>176</b> ; border of dots.   | Sv. 92.17, 18;<br><i>NCP</i> , CC:ii |
| <b>264</b>  | 2 coins  | 23       | Av. 7.42 (2)  |                      |  |                                      |
| <b>*a</b>   | ΠΠΠ-510  | 23       | 7.80          | (B 17:1b)            |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHNA-I-ΩN</b> As <b>264</b> , but no table; border of dots.  | Sv. 92.19                            |
| <b>265</b>  | 3 coins  | 23       | Av. 6.79 (3)  |                      |  |                                      |
| <b>*a</b>   | I-1262   | 23       | 10.13         |                      |  |                                      |
|             |          | Similar. |               |                      | <b>AΘHN-AIΩN</b> Demeter stg., facing, head turned to r., holding long scepter in upraised l. hand and wheat ears in lowered r.; border of dots.   | Sv. 92.22, 23                        |
| <b>*266</b> | Ω-58     | 23       | 7.55          |                      |  |                                      |

|             |          |          |               |   |   |
|-------------|----------|----------|---------------|---|---|
|             |          | Similar. |               | <b>AΘHN-AIΩN</b> Eirene, draped, stg., facing, holding long scepter in r. hand and turning head to look at infant Ploutos held on l. arm; Ploutos raises r. hand towards Eirene's face and holds cornucopia in l.; border of dots.  | Sv. 92.38–44; <i>NCP</i> , DD:ix, x       |
| <b>267</b>  | 8 coins  | 22–24    | Av. 6.32 (8)  |   |   |
| <b>*a</b>   | III-871  | 24       | 6.49          |   |   |
|             |          | Similar. |               | <b>AΘH-NA-IΩN</b> Apollo Patroos, wearing long chiton, stg. l., holding lyre with l. hand and phiale in outstretched r.; border of dots.  | Sv. 93.2, 3; <i>NCP</i> , CC:xxi          |
| <b>268</b>  | 7 coins  | 22–25    | Av. 6.74 (6)  |   |   |
| <b>*a</b>   | Z-1581   | 24       | 9.38          |   |   |
|             |          | Similar. |               | <b>AΘHNA-I-ΩN</b> Apollo, nude, stg. r., holding bow in l. hand and branch in r.; border of dots.   | Sv. 93.8, 9                               |
| <b>269</b>  | 11 coins | 23–24    | Av. 7.18 (10) |   |   |
| <b>*a</b>   | OO-619   | 24       | 7.37          |   |   |
|             |          | Similar. |               | <b>AΘHNAI-ΩN</b> Apollo, nude, stg. frontally, with head turned to r., sighting down arrow which is held up in l. hand; r. arm at side holding bow; border of dots.   | Sv. 95.10–12; <i>NCP</i> , DD:xxii, xxiii |
| <b>*270</b> | III-229  | 23       | 4.30          |   |   |
|             |          | Similar. |               | <b>A-ΘH-NA-IΩN</b> , <b>AΘH-NA-IΩN</b> , <b>AΘH-NAIΩN</b> , <b>A-ΘH-N-AIΩN</b> , <b>AΘ-HNA-IΩN</b> , or <b>AΘHN-A-I-ΩN</b> Triptolemos, holding torch and wheat ears, stg. l. in chariot drawn by two snakes to l.; border of dots. | Sv. 94.20, 21, 23, 24                     |
| <b>271</b>  | 26 coins | 21–24    | Av. 6.71 (19) |   |   |
| <b>*a</b>   | Σ-4313   | 23       | 7.68          |   |   |
|             |          | Similar. |               | <b>AΘH-N-AIΩN</b> Herakles, nude, stg. l., holding phiale in outstretched r. hand and club, resting on ground, in l.; border of dots.   | Sv. 95.8; <i>NCP</i> , DD:xiii            |
| <b>272</b>  | 2 coins  | 24       | Av. 7.84 (2)  |   |   |
| <b>*a</b>   | Γ-1482   | 24       | 6.49          |   |   |

|            |          |          |               |  |                   |
|------------|----------|----------|---------------|--|-------------------|
|            |          | Similar. |               | <b>AΘH-NAI ΩN</b> Theseus driving Marathonian bull, as <b>180</b> ; border of dots.  | Sv. 95.21, 22     |
| <b>273</b> | 2 coins  | 23       | Av. 7.92 (2)  |  |                   |
| <b>*a</b>  | AA-605   | 23       | 7.19          |  |                   |
|            |          | Similar. |               | <b>AΘHN-AIΩN</b> Theseus raising rock at Troizen, as <b>181</b> ; border of dots.  | Sv. 95.26, 27, 29 |
| <b>274</b> | 2 coins  | 23       | 5.53 (1)      |  |                   |
|            |          | Similar. |               | <b>AΘ-HNA-I-Ω N</b> Theseus attacking falling Minotaur, as <b>189</b> ; border of dots.  | Sv. 96.15, 16     |
| <b>275</b> | 3 coins  | 23-24    | Av. 7.06 (2)  |  |                   |
| <b>*a</b>  | Ω-329    | 24       | 8.29          |  |                   |
|            |          | Similar. |               | <b>AΘHNA-ΙΩN</b> or <b>AΘHNAI-ΩN</b> Theseus leaning r., holding club with r. hand and, with l. hand, clutching horn of Minotaur, who falls to r.; border of dots. | Sv. 96.1-7        |
| <b>276</b> | 11 coins | 22-24    | Av. 6.22 (10) |  |                   |
| <b>*a</b>  | KK-300   | 24       | 7.49          |  |                   |
|            |          | Similar. |               | <b>AΘHN-AIΩN</b> Asklepios stg., facing, head to l., wearing himation, with l. hand at waist and leaning r. on staff entwined with snake; border of dots.          | Sv. 98.1, 2       |
| <b>277</b> | 4 coins  | 23-24    | Av. 5.46 (3)  |  |                   |
| <b>*a</b>  | ΠA-77    | 23       | 5.85          |  |                   |
|            |          | Similar. |               | <b>AΘHNA-ΙΩN</b> or <b>AΘHN-AIΩ-N</b> Themistokles on galley to r., as <b>183</b> , but owl stg. l. on prow and no snake on ram; border of dots.                   | Sv. 97.15, 19     |
| <b>278</b> | 7 coins  | 22-23    | Av. 6.20 (6)  |  |                   |
| <b>*a</b>  | Σ-1171   | 22       | 5.45          |  |                   |
|            |          | Similar. |               | <b>AΘHNA-ΙΩN</b> As <b>278</b> , but owl stg. r.; border of dots.  | Sv. 97.16-18      |
| <b>279</b> | 17 coins | 21-24    | Av. 6.44 (17) |  |                   |
| <b>*a</b>  | A-1589   | 24       | 8.28          |  |                   |
|            |          | Similar. |               | Similar, but details illegible.  |                   |

[278, 279] 11 coins.

Similar. **AΘHN-AIΩN** or **AΘH-NAIΩN** Sv. 98.21–29;  
View of Akropolis seen from *NCP*, Z:iii–vi  
north and west. On r., steps of  
Panathenaic way lead up to  
Propylaia; at center, colossal statue  
of Athena Promachos stg. r. and  
holding Nike in outstretched  
r. hand, sometimes with owl stg. r.  
below; to l., Erechtheion. Halfway  
up Akropolis rock, to l. of stairs,  
niche with curved lintel representing  
Cave of Pan; within niche,  
minuscule statue of Pan; border  
of dots.

|            |          |       |              |           |
|------------|----------|-------|--------------|-----------|
| <b>280</b> | 11 coins | 21–24 | Av. 5.93 (9) |           |
| *a         | KTA-117  | 22    | 8.76         |           |
| *b         | ΠΠ-485   | 21    | 5.79         | (B 17:1b) |
| *c         | Σ-5367   | 22    | 6.13         |           |

Similar. **AΘHNA-I-Ω-N**, **AΘHNAI-ΩN**, Sv. 88.58–60  
or **AΘHNAIΩN** Agonistic table as  
**184**; border of dots.

|            |          |       |               |
|------------|----------|-------|---------------|
| <b>281</b> | 19 coins | 21–24 | Av. 6.96 (17) |
| *a         | N'-1290  | 24    | 6.81          |
| *b         | T-1013   | 23    | 8.05          |

Similar. **AΘ-HNAIΩN** Similar to **281**, Sv. 88.61  
but on table, owl stg. l.,  
bust of Athena r. and  
wreath; border of dots.

|            |         |       |              |
|------------|---------|-------|--------------|
| <b>282</b> | 4 coins | 22–23 | Av. 7.04 (4) |
|------------|---------|-------|--------------|

Similar. Details illegible.

[**281, 282**] 11 coins.

Similar. **AΘH-NA-IΩN**, **AΘHN-A-IΩN**, Sv. 99.7–9, 23  
**AΘHN-AIΩN**, or **AΘHNA-IΩN**  
Boukranion with fillet hanging from  
each horn, as **185**; border of dots.

|            |          |       |               |
|------------|----------|-------|---------------|
| <b>283</b> | 76 coins | 21–24 | Av. 6.75 (47) |
| *a         | OA-219   | 22    | 6.53          |
| *b         | M-140    | 22    | 6.62          |
| *c         | ΠΠ-172   | 21    | 7.11          |
| *d         | Σ-1172   | 23    | 7.27          |

## UNCLASSIFIED

Similar. Illegible reverse type.

[**248–283**] 83 coins.

|   |        |    |
|---|--------|----|
| a | I-1336 | 24 |
|---|--------|----|

heavily worn and halved



## PERIOD VI

ca. A.D. 264–267

## DRACHMS

|            |           |  |                |  |  |
|------------|-----------|--|----------------|--|--|
|            |           | Head or bust of Athena r., rarely l., wearing Corinthian, Attic, or composite helmet, often highly varied in style. She occasionally wears a necklace. If a head, truncation is either bare or with slight drapery; if a bust, it may be heavily draped or armored with aegis; border of dots. |                | AΘHN-A-IΩN Athena Parthenos stg. l., holding Nike in outstretched r. hand and spear with l., which rests on a shield, shown in profile, with base on the ground line; similar to <b>169–171</b> and <b>248</b> ; border of dots. | Sv. 82.5–24, 26–28; <i>NCP</i> , Y:xviii   |
| <b>284</b> | 133 coins | 19–23  | Av. 5.15 (108) |  |  |
| *a         | AA-1091   | 20   | 5.43           | (Q 19:3)   |  |
| *b         | AA-1029   | 23   | 5.96           | (Q 19:3)   |  |
| *c         | AA-1006   | 21   | 3.67           | (Q 19:3)   |  |
| d          | AA-1070   | 21   | 4.35           | (Q 19:3)   | H. A. Thompson 1958, pl. 44:b  |
| e          | AA-1097   | 21   | 6.61           | (Q 19:3)   | H. A. Thompson 1958, pl. 44:c  |
| *f         | B-328     | 22   | 4.55           | (F 10:2)   |  |
| *g         | ΠΠ-491    | 21   | 3.78           | (B 17:1b)  |  |
| h          | Γ-279     | 22   | 8.25           | <i>GRC</i> , fig. 4  |  |
|            |           | Similar.   |                |  | AΘHN-AIΩN, AΘHN-A-I-ΩN, AΘHNA-IΩN or AΘH-N-A-IΩN Athena Parthenos as <b>284</b> ; border of dots. Sv. 82.25  |
| <b>285</b> | 10 coins  | 19–23  | Av. 6.23 (8)   |  |  |
| *a         | AA-1019   | 21   | 7.07           | (Q 19:3)   |  |
|            |           | Similar.   |                |  | AΘH-N-AIΩN Athena Parthenos as last, but at l., snake coiled to l., as <b>171</b> ; border of dots. Sv. 83.8 |
| <b>286</b> | 13 coins  | 20–23  | Av. 5.32 (13)  |  |  |
|            |           | Similar.   |                |  | AΘ-H-NAIΩN As <b>286</b> . Sv. 82.39, 40; 83.4, 10; <i>NCP</i> , Y:xx  |
| <b>287</b> | 15 coins  | 20–23  | Av. 5.33 (14)  |  |  |
| *a         | AA-1050   | 21   | 4.65           | (Q 19:3)   |  |
| *b         | AA-1132   | 21   | 5.21           | (Q 19:3)   |  |
|            |           | Similar.   |                |  | AΘH-NAIΩN As <b>286</b> . Sv. 83.12  |
| <b>288</b> | 19 coins  | 20–22  | Av. 5.13 (15)  |  |  |
| *a         | AA-1118   | 21   | 2.99           | (Q 19:3)   |  |

|             |                    |           |               |          |  |                                     |
|-------------|--------------------|-----------|---------------|----------|--|-------------------------------------|
|             |                    | Similar.  |               |          | AΘ-HNAIΩN or AΘ-H-N-AIΩN<br>As <b>286</b> .  | Sv. 82.36, 38;<br>83.1–3            |
| <b>289</b>  | 14 coins           | 20–22     | Av. 4.91 (10) |          |  |                                     |
| <b>*a</b>   | AA-1104            | 20        | 4.55          | (Q 19:3) |  |                                     |
|             |                    | Similar.  |               |          | AΘH-N-AIΩN, AΘH-NA-IΩN,<br>AΘHN-A-IΩN, or AΘHNA-IΩN<br>As <b>286</b> .   | Sv. 83.5–7, 9, 11,<br>13, 14        |
| <b>290</b>  | 4 coins            | 20–21     | Av. 4.36 (4)  |          |  |                                     |
|             |                    | Similar.  |               |          | AΘ-H-NAΩN As <b>286</b> .  | Sv. 82.37, 41                       |
| <b>291</b>  | 4 coins            | 20–23     | Av. 4.82 (2)  |          |  |                                     |
|             |                    | Similar.  |               |          | AΘ-H-NAIΩN or AΘH-N-AIΩN<br>Similar to <b>286</b> but, at l., in place<br>of snake, owl stg. l.; border of dots.   | Sv. 82.42                           |
| <b>292</b>  | 2 coins            | 20–21     | Av. 5.12 (2)  |          |  |                                     |
|             |                    | Similar.  |               |          | Similar, but details illegible.  |                                     |
|             | [ <b>284–292</b> ] | 82 coins. |               |          |  |                                     |
|             |                    | Similar.  |               |          | A-ΘH-NAIΩN Athena stg. l.,<br>similar to <b>284</b> , but, in place of<br>Nike, holding owl r. in r. hand;<br>at l., snake coiled to l.; border<br>of dots.  | Sv. 83.38, 40                       |
| <b>*293</b> | AA-1098            | 21        | 6.32          | (Q 19:3) | H. A. Thompson 1958, pl. 44:d  |                                     |
|             |                    | Similar.  |               |          | AΘH-NAIΩN or AΘH-N-AIΩN<br>Athena stg. l., similar to <b>284</b> , but<br>seen so that shield is facing and<br>not in profile; shield emblazoned<br>with gorgoneion; border of dots.   | Sv. 83.15–19;<br><i>NCP</i> , Y:xix |
| <b>294</b>  | 3 coins            | 21–23     | Av. 5.76 (3)  |          |  |                                     |
|             |                    | Similar.  |               |          | AΘ-H-NA-I Athena stg. l.,<br>holding Nike in outstretched<br>r. hand and raising l. to grasp<br>upright spear; at r., between<br>Athena's legs and spear butt,<br>shield seen in profile; at l.,<br>snake coiled to l.; border<br>of dots. | Sv. 83.22, 23                       |
| <b>295</b>  | 3 coins            | 21–23     | Av. 6.71 (3)  |          |  |                                     |

|            |          |          |               |  |   |
|------------|----------|----------|---------------|--|---|
|            |          | Similar. |               | <b>AΘH-NAIΩN</b> or <b>AΘHN-AIΩN</b>   | Sv. 84.24, 25                             |
|            |          |          |               | Athena stg. r., raising r. hand to grasp upright spear and resting l. on profile shield with base on ground before her to r.; between shield and Athena's legs, sometimes snake to r.; border of dots. |   |
| <b>296</b> | 3 coins  | 20–21    | Av. 4.76 (3)  |  |   |
|            |          | Similar. |               | <b>AΘ-H-NAIΩN</b> or <b>AΘ-HNAIΩN</b>  | Sv. 83.24–28;<br><i>NCP</i> , Z:xxiii     |
|            |          |          |               | Athena stg. l., holding Nike in outstretched r. hand; she passes her l. arm through strap of shield at shoulder and holds spear with l. hand; wreathed or dotted border.                               |   |
| <b>297</b> | 7 coins  | 20–22    | Av. 5.07 (7)  |  |   |
| <b>*a</b>  | ZZ-95    | 21       | 5.76          |  |   |
|            |          | Similar. |               | <b>AΘHNAI-ΩN</b> or <b>AΘHNA-I-ΩN</b>  | Sv. 83.33, 34                             |
|            |          |          |               | Athena stg. r., holding Nike and spear, as <b>172</b> ; border of dots.  |   |
| <b>298</b> | 4 coins  | 20–21    | Av. 3.76 (3)  |  |   |
| <b>*a</b>  | I-509    | 20       | 3.93          |  |   |
|            |          | Similar. |               | <b>AΘHNA-I-ΩN</b> As <b>298</b> , but  | Sv. 83.35, 36                             |
|            |          |          |               | Athena holds owl l. or r. in place of Nike; border of dots.  |   |
| <b>299</b> | 6 coins  | 19–22    | Av. 5.04 (2)  |  |   |
| <b>*a</b>  | AA-1087  | 22       | 5.59          |  | (Q 19:3) <i>GRC</i> , fig. 22             |
| <b>*b</b>  | Ξ-802    | 19       | 4.60          |  |   |
|            |          | Similar. |               | <b>AΘH-NA-IΩN</b> , <b>AΘH-N-AIΩN</b> , <b>AΘ-HNAIΩN</b> , <b>AΘ-H-NAIΩN</b> , or <b>A-Θ-HNAI</b>  | Sv. 83.39, 41, 42;<br><i>NCP</i> , AA:iii |
|            |          |          |               | Athena stg. l., holding owl in outstretched r. hand and grasping downward-pointing spear in upraised l.; sometimes with coiled snake to l.; similar to <b>299</b> ; border of dots.                    |   |
| <b>300</b> | 5 coins  | 19–21    | Av. 4.58 (4)  |  |   |
| <b>*a</b>  | Θ-357    | 20       | 4.59          |  |   |
|            |          | Similar. |               | <b>AΘHNAI-ΩN</b> or <b>AΘHNAI-Ω-N</b>  | Sv. 84.1–7;<br><i>NCP</i> , AA:iv         |
|            |          |          |               | Athena stg. r., holding owl r. or l. in r. hand and transverse spear with point downward in l.; between spear point and legs of Athena, usually snake coiled to r.; border of dots.                    |   |
| <b>301</b> | 11 coins | 21–22    | Av. 4.91 (11) |  |   |
| <b>*a</b>  | I-1420   | 21       | 6.04          |  |   |
| <b>b</b>   | NN-963   | 22       | 5.04          |  | <i>GRC</i> , fig. 22                      |

|            |         |             |              |          |  |                                   |
|------------|---------|-------------|--------------|----------|--|-----------------------------------|
|            |         | Similar.    |              |          | AΘHN-AIΩN Athena stg. r. with owl in r. hand, as <b>301</b> , l. hand not visible; at l., column on base supporting flat plinth, upon which stands owl facing; border of dots. | Sv. 84.9–14                       |
| <b>302</b> | 3 coins | 20–21       | Av. 4.82 (3) |          |  |                                   |
| <b>*a</b>  | ΣA-231  | 21          | 5.04         |          |  |                                   |
|            |         | Similar.    |              |          | AΘHNAI-Ω-N Athena stg. r., as <b>301</b> ; in addition to spear, she carries large, round shield over l. shoulder; border of dots.   | Sv. 84.15–17, 22, 23              |
| <b>303</b> | AA-1083 | 20          | 7.07         | (Q 19:3) | H. A. Thompson 1958, pl. 44:e  |                                   |
|            |         | Similar.    |              |          | AΘH-N-AIΩN As <b>303</b> , but Athena's r. arm extended straight out, not bent upwards at elbow, and she holds Nike in place of owl; border of dots.                           | Sv. 84.18–21                      |
| <b>304</b> | O-375   | fragmentary |              |          |  |                                   |
|            |         | Similar.    |              |          | AΘHN-AI-ΩN or AΘHNA-IΩN Athena stg. r., holding round shield with l. hand and butt of downward-pointing spear with upraised r.; at r., snake coiled to r.; border of dots.     | Sv. 84.26; <i>NCP</i> , AA:ix     |
| <b>305</b> | 4 coins | 20–22       | Av. 5.29 (3) |          |  |                                   |
| <b>*a</b>  | NN-841  | 22          | 5.85         |          |  |                                   |
|            |         | Similar.    |              |          | AΘHN-A-IΩN or AΘHN-AI-ΩN Athena advancing r., brandishing aegis before her with l. hand and holding spear with r.; border of dots.   | Sv. 84.31–35; <i>NCP</i> , AA:xix |
| <b>306</b> | 3 coins | 20–22       | Av. 6.61 (3) |          |  |                                   |
| <b>*a</b>  | AA-1085 | 21          | 4.20         | (Q 19:3) |  |                                   |
|            |         | Similar.    |              |          | AΘHNA-IΩN Athena attacking to r., as <b>253</b> ; border of dots.  | Sv. 84.37–40                      |
| <b>307</b> | 2 coins | 20–22       | 6.94 (1)     |          |  |                                   |
| <b>*a</b>  | AA-1032 | 22          | 6.94         | (Q 19:3) | H. A. Thompson 1958, pl. 44:f  |                                   |

|            |          |          |               |                      |  |   |
|------------|----------|----------|---------------|----------------------|--|---|
|            |          | Similar. |               |                      | <b>AΘHN-A-ΙΩΝ</b> Athena stg. r., holding shield with l. hand and preparing to hurl spear with upraised r.; border of dots.  | Sv. 84.29, 30;<br><i>NCP</i> , AA:xv    |
| <b>308</b> | 2 coins  | 20–22    | Av. 6.24 (2)  |                      |  |   |
| <b>*a</b>  | Γ-368    | 21       | 8.15          |                      |  |   |
|            |          | Similar. |               |                      | <b>AΘHNAI-ΩΝ</b> Athena advancing r., holding round shield with l. hand and transverse spear, point upwards, with l.; at r., snake coiled to r.; Athena wears either Attic or Corinthian helmet; border of dots.                             | Sv. 85.1–3                              |
| <b>309</b> | 3 coins  | 20–22    | Av. 5.11 (3)  |                      |  |   |
|            |          | Similar. |               |                      | <b>AΘHN-A-ΙΩΝ</b> Athena running to r., round shield over l. shoulder; she points r. with l. hand and holds transverse spear, point upwards, in r.; at r., snake coiled to r.; border of dots.   | Sv. 85.5–7;<br><i>NCP</i> , AA:xi       |
| <b>310</b> | 3 coins  | 21–22    | Av. 5.59 (2)  |                      |  |   |
| <b>a</b>   | ΠΙΙ-469  | 22       | 4.49          | <i>GRC</i> , fig. 22 |  |   |
|            |          | Similar. |               |                      | <b>AΘHNA-ΙΩΝ</b> or <b>AΘHNAI-ΩΝ</b> Athena advancing r., head turned back, holding round shield with l. hand and pointing r. with r.; at r., snake coiled to r.; border of dots.  | Sv. 85.38–40;<br><i>NCP</i> , AA:x      |
| <b>311</b> | 9 coins  | 20–22    | Av. 4.75 (9)  |                      |  |   |
| <b>*a</b>  | AA-1004  | 22       | 6.96          | (Q 19:3)             |  |   |
|            |          | Similar. |               |                      | <b>AΘHNA-ΙΩ-N</b> , <b>AΘHN-AI-ΩΝ</b> , <b>AΘHN-A-ΙΩΝ</b> , <b>AΘH-NA-I-ΩΝ</b> , <b>AΘH-N-AIΩΝ</b> , or <b>AΘH-N-A-ΙΩΝ</b> Athena advancing r., head turned back; similar to <b>254–256</b> but without snake, owl, or tree; border of dots. | Sv. 85.24–31                            |
| <b>312</b> | 20 coins | 20–22    | Av. 5.58 (20) |                      |  |   |
| <b>*a</b>  | K-1633   | 22       | 7.54          |                      |  |   |
|            |          | Similar. |               |                      | <b>AΘHN-AI-Ω-N</b> As last, but with snake to r., as <b>256</b> ; border of dots.  | Sv. 85.21 variant;<br><i>NCP</i> , Z:ix |
| <b>313</b> | 2 coins  | 20–22    | Av. 7.75 (2)  |                      |  |   |
| <b>*a</b>  | AA-1049  | 20       | 7.96          | (Q 19:3)             |  |   |

|             |          |          |               |          |   |   |
|-------------|----------|----------|---------------|----------|---|---|
|             |          | Similar. |               |          | AΘH-NA-I-ΩN, AΘ-HNA-I-ΩN,<br>or A-Θ-HNAIΩN As last, but at l.<br>of Athena, snake coiled to l.;<br>border of dots.  | Sv. 85.19, 20, 22,<br>23; <i>NCP</i> , Z:x  |
| <b>314</b>  | 4 coins  | 20–21    | Av. 6.00 (4)  |          |   |   |
| <b>*a</b>   | AA-1033  | 20       | 5.88          | (Q 19:3) |   |   |
|             |          | Similar. |               |          | AΘH-NAI-Ω-N Similar, but at l.<br>of Athena, olive tree entwined by<br>snake; as <b>255</b> but no owl; border<br>of dots.  | Sv. 85.36, 37                               |
| <b>*315</b> | Σ-6401   | 20       | 5.59          |          |   |   |
|             |          | Similar. |               |          | AΘHN-A-I-ΩN Athena stg. r.,<br>head to l., holding Nike with<br>r. hand outstretched to l., and<br>spear and round shield with l.;<br>at l., snake coiled to l.; border<br>of dots. | Sv. —                                       |
| <b>*316</b> | Σ-3220   | 21       | 5.16          |          |   |   |
|             |          | Similar. |               |          | AΘH-N-AIΩN Athena stg. l.,<br>holding Nike in outstretched<br>r. hand, round shield over<br>l. shoulder and spear in<br>l. hand; at l., snake coiled to l.;<br>border of dots.      | Sv. —                                       |
| <b>*317</b> | ΣT-353   | 21       | 5.58          |          |   |   |
|             |          | Similar. |               |          | AΘHN-A-I-ΩN Athena with<br>spear and shield, as <b>257</b> ;<br>border of dots.   | Sv. 86.6–12, 14–18;<br><i>NCP</i> , Z:i, ii |
| <b>318</b>  | 71 coins | 20–24    | Av. 5.43 (63) |          |   |   |
| <b>*a</b>   | AA-1018  | 22       | 5.38          | (Q 19:3) |   |   |
| <b>*b</b>   | ΞΞ-2     | 21       | 7.37          |          |   |   |
| <b>*c</b>   | Σ-4308   | 22       | 4.98          |          |   |   |
|             |          | Similar. |               |          | AΘHNAI-Ω-N Athena as <b>257</b> .   | Sv. —                                       |
| <b>319</b>  | 3 coins  | 21–22    | Av. 5.28 (3)  |          |   |   |
| <b>*a</b>   | I-768    | 21       | 4.74          |          |   |   |
|             |          | Similar. |               |          | AΘHNA-I-ΩN As last.   | Sv. 86.24, 25, 28, 29                       |
| <b>320</b>  | 10 coins | 20–22    | Av. 5.60 (9)  |          |   |   |
|             |          | Similar. |               |          | AΘHN-AI-ΩN As last.   | Sv. 86.13, 19                               |
| <b>321</b>  | 7 coins  | 20–22    | Av. 4.72 (6)  |          |   |   |
| <b>*a</b>   | AA-1057  | 20       | 6.06          | (Q 19:3) |   |   |

|            |          |          |              |  |                     |
|------------|----------|----------|--------------|--|---------------------|
|            |          | Similar. |              | <b>AΘH-NA-I-ΩN</b> As last.  | Sv. —               |
| <b>322</b> | 3 coins  | 20–21    | Av. 6.52 (3) |  |                     |
| <b>*a</b>  | AA-1022  | 21       | 4.67         | (Q 19:3)   |                     |
|            |          | Similar. |              | <b>AΘH-N-AIΩN</b> As last.   | Sv. —               |
| <b>323</b> | 1 coin   | 22       | 4.05         |  |                     |
|            |          | Similar. |              | <b>AΘHN-AI-ΩN</b> Athena with<br>spear and shield, as <b>257</b> but,<br>to r., snake coiled to r.;<br>border of dots. | Sv. 86.21, 23       |
| <b>324</b> | 11 coins | 20–23    | Av. 5.95 (8) |  |                     |
| <b>a</b>   | AA-1023  | 21       | 5.43         | (Q 19:3) H. A. Thompson 1958, pl. 44:a   |                     |
|            |          | Similar. |              | <b>AΘHN-AI-Ω-N</b> As last.  | Sv. 86.20, 39       |
| <b>325</b> | 7 coins  | 20–22    | Av. 5.02 (7) |  |                     |
|            |          | Similar. |              | <b>AΘHNAIΩ-N</b> As last.  | Sv. 86.22, 38       |
| <b>326</b> | 6 coins  | 21–22    | Av. 5.56 (4) |  |                     |
|            |          | Similar. |              | <b>AΘHNAI-Ω-N</b> As last.   | Sv. —               |
| <b>327</b> | AA-1028  | 21       | 5.38         | (Q 19:3)   |                     |
|            |          | Similar. |              | <b>AΘHNA-I-ΩN</b> As last.   | Sv. 86.26, 27       |
| <b>328</b> | 5 coins  | 20–22    | Av. 5.27 (3) |  |                     |
|            |          | Similar. |              | <b>AΘHNA-I-Ω-N</b> As last.  | Sv. —               |
| <b>329</b> | 4 coins  | 20–21    | Av. 5.85 (4) |  |                     |
|            |          | Similar. |              | <b>AΘHN-A-IΩN</b> As last.   | Sv. —               |
| <b>330</b> | III-337  | 21       | 4.53         |  |                     |
|            |          | Similar. |              | <b>AΘHN-A-I-ΩN</b> As last.  | Sv. 86.37           |
| <b>331</b> | 4 coins  | 21–22    | Av. 6.77 (4) |  |                     |
| <b>*a</b>  | IIA-164  | 22       | 7.83         |  |                     |
|            |          | Similar. |              | <b>AΘH-NA-I-ΩN</b> As last,<br>sometimes with owl at l.  | Sv. 86.5, 31, 33–36 |
| <b>332</b> | 7 coins  | 21–24    | Av. 5.95 (6) |  |                     |
| <b>a</b>   | Z-1408   | 21       | 4.49         | GRC, fig. 22   |                     |
|            |          | Similar. |              | <b>AΘH-N-AI-ΩN</b> As <b>324</b> .   | Sv. 86.32           |
| <b>333</b> | 10 coins | 20–22    | Av. 5.72 (9) |  |                     |

|             |          |          |              |          |  |                                 |
|-------------|----------|----------|--------------|----------|--|---------------------------------|
|             |          | Similar. |              |          | <b>AΘ-HNAI-ΩN</b> or <b>AΘ-HNA-I-ΩN</b>  | Sv. 86.40                       |
|             |          |          |              |          | Athena stg. r., head l., holding phiale l. in outstretched r. hand, and round shield and spear in l.; at l., snake coiled to l.; border of dots.   |                                 |
| <b>334</b>  | 3 coins  | 20–22    | Av. 5.97 (3) |          |  |                                 |
| <b>*a</b>   | AA-1101  | 20       | 5.18         | (Q 19:3) |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNAIΩ-N</b> As <b>334</b> , but snake, coiled to r., at r. of Athena; border of dots.   | Sv. —                           |
| <b>335</b>  | OO-1196  | 21       | 4.87         |          |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNAI</b> Similar to last, but at l., low altar and no snake; border of dots.  | Sv. 86.41, 42                   |
| <b>*336</b> | B-318    | 22       | 5.26         | (F 10:2) |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNAI-ΩN</b> Athena stg. l., holding phiale in outstretched r. hand; l. arm goes through strap of round shield at l. shoulder, and she holds transverse spear, point upwards, with l. hand; at l., low flaming altar; at r., snake coiled to l.; border of dots. | Sv. 87.8, 11                    |
| <b>*337</b> | AA-1109  | 20       | 4.80         | (Q 19:3) |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNAI-ΩN</b> As last, but in place of snake, owl facing; border of dots.   | Sv. 87.9, 10                    |
| <b>338</b>  | AA-1007  | 20       | 4.72         | (Q 19:3) |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNA-IΩN</b> Athena stg. l., as <b>250</b> , but in place of snake, low altar; border of dots.   | Sv. 87.14                       |
| <b>339</b>  | 3 coins  | 20–22    | Av. 4.84 (3) |          |  |                                 |
|             |          | Similar. |              |          | <b>AΘHNA-IΩN</b> Athena stg. l., with l. hand on hip and right holding upward-pointing spear; at r., below, round shield; similar to <b>173</b> ; border of dots.  | Sv. 87.1–5; <i>NCP</i> , AA:vii |
| <b>340</b>  | 2 coins  | 21–22    | Av. 5.53 (2) |          |  |                                 |
| <b>*a</b>   | III-1036 | 22       | 5.89         |          |  |                                 |



|            |           |          |              |          |  |                               |
|------------|-----------|----------|--------------|----------|--|-------------------------------|
|            |           | Similar. |              |          | <b>AΘHN-AIΩN</b> Athena stg. l., with olive tree to l.; similar to <b>258</b> , but without snake between Athena and tree; border of dots. | Sv. 87.27, 29, 30             |
| <b>341</b> | 5 coins   | 20–21    | Av. 5.86 (4) |          |  |                               |
| <b>*a</b>  | AA-1122   | 20       | 5.75         | (Q 19:3) |  |                               |
|            |           | Similar. |              |          | <b>AΘ-H-NAIΩ</b> As last.  | Sv 87.23                      |
| <b>342</b> | 2 coins   | 21–22    | 4.99 (1)     |          |  |                               |
|            |           | Similar. |              |          | <b>AΘHN-AIΩN</b> or <b>AΘH-NAIΩN</b> Similar, but with owl perched to l. or r. in tree; border of dots.                                    | Sv. 87.28; <i>NCP</i> , Z:xix |
| <b>343</b> | 6 coins   | 20–21    | Av. 6.28 (6) |          |  |                               |
| <b>*a</b>  | AA-1111   | 21       | 5.44         | (Q 19:3) |  |                               |
|            |           | Similar. |              |          | <b>AΘHN-AIΩN</b> Similar to <b>341</b> , but with snake entwined around tree; border of dots.  | Sv. 87.31, 32                 |
| <b>344</b> | Ξ-428     | 20       | 3.32         |          |  |                               |
|            |           | Similar. |              |          | <b>AΘH-NAIΩN</b> Athena and olive tree, as <b>258</b> ; border of dots.  | Sv. 87.22, 24, 25             |
| <b>345</b> | 3 coins   | 20–21    | Av. 6.34 (2) |          |  |                               |
| <b>*a</b>  | B-354     | 21       | 6.58         |          |  |                               |
|            |           | Similar. |              |          | <b>AΘH-NAIΩN</b> As <b>345</b> but, in place of snake, owl stg. l.; border of dots.  | Sv. 87.26                     |
| <b>346</b> | 4 coins   | 20–21    | Av. 5.42 (4) |          |  |                               |
|            |           | Similar. |              |          | <b>A-ΘHNAIΩN</b> Athena stg. l., holding round shield and spear with l. hand, and extending r. towards olive tree at l.; border of dots.   | Sv. 87.12                     |
| <b>347</b> | IIII-1055 | 21       | 4.96         |          |  |                               |
|            |           | Similar. |              |          | Similar, but details illegible.  |                               |

[**341–347**] 3 coins.

|            |          |          |               |           |  |                                       |
|------------|----------|----------|---------------|-----------|--|---------------------------------------|
|            |          | Similar. |               |           | <b>AΘ-H-N-AIΩN, AΘ-H-NAIΩN,</b><br>or <b>AΘH-N-AIΩN</b> Athena seated l.<br>on backless throne, holding Nike<br>in outstretched r. hand, transverse<br>spear in l.; she rests l. elbow on<br>an upright shield seen in profile;<br>border of dots.   | Sv. 88.1–7;<br><i>NCP</i> , AA:xx     |
| <b>348</b> | 9 coins  | 20–22    | Av. 5.50 (8)  |           |  |                                       |
| <b>*a</b>  | AA-1102  | 21       | 6.29          | (Q 19:3)  |  |                                       |
|            |          | Similar. |               |           | <b>A-ΘH-NAIΩN</b> Similar to <b>348</b> ,<br>but Athena holds phiale in place<br>of Nike; at l., olive tree entwined<br>with snake; border of dots.  | Sv. 87.34, 35;<br><i>NCP</i> , AA:xxi |
| <b>349</b> | 2 coins  | 20–21    | Av. 5.90 (2)  |           |  |                                       |
| <b>a</b>   | AA-1103  | 20       | 6.90          | (Q 19:3)  | <i>GRC</i> , fig. 22   |                                       |
|            |          | Similar. |               |           | <b>AΘHNAIΩN</b> or <b>AΘH-NAIΩN</b><br>Athena seated l., on backless<br>throne, holding phiale in<br>outstretched r. hand, raising<br>l. to grasp upright spear; at l.,<br>olive tree entwined by snake;<br>at r., leaning against back of<br>throne, upright shield seen in<br>profile; border of dots. | Sv. 87.33, 36                         |
| <b>350</b> | 4 coins  | 20–21    | Av. 4.90 (4)  |           |  |                                       |
| <b>*a</b>  | AA-1081  | 21       | 4.84          | (Q 19:3)  |  |                                       |
|            |          | Similar. |               |           | <b>AΘ-HNAIΩN, AΘHN-A-IΩ-N,</b><br><b>AΘHN-AIΩ-N, AΘHNAI-ΩN,</b><br><b>AΘHNA-IΩN,</b> or <b>AΘHN AIΩ N</b><br>Athena in biga galloping to r., as<br><b>260</b> , but without giant emerging<br>from ground; wreathed or dotted<br>border.   | Sv. 88.14–18;<br><i>NCP</i> , AA:xxii |
| <b>351</b> | 13 coins | 20–22    | Av. 5.71 (10) |           |  |                                       |
| <b>*a</b>  | O-204    | 21       | 5.56          |           |  |                                       |
| <b>b</b>   | AA-1056  | 20       | 6.10          | (Q 19:3)  | <i>GRC</i> , fig. 22   |                                       |
|            |          | Similar. |               |           | <b>AΘHNA IΩN</b> or <b>AΘHN-A I NΩ</b><br>As <b>351</b> , but biga to l.; border<br>of dots.   | Sv. 88.19, 20                         |
| <b>352</b> | 5 coins  | 20–22    | Av. 4.57 (4)  |           |  |                                       |
| <b>*a</b>  | III-478  | 21       | 5.13          | (B 17:1b) |  |                                       |
|            |          | Similar. |               |           | <b>AΘHN A IΩN</b> Similar to <b>351</b> ,<br>but Athena in triga to r.;<br>border of dots.   | Sv. 88.22; <i>NCP</i> ,<br>AA:xxiii   |
| <b>353</b> | 3 coins  | 21–22    | Av. 5.88 (3)  |           |  |                                       |
| <b>*a</b>  | AA-1030  | 22       | 6.40          | (Q 19:3)  |  |                                       |

|             |          |          |              |  |                                      |
|-------------|----------|----------|--------------|--|--------------------------------------|
|             |          | Similar. |              | <b>AΘH NAI ΩN</b> Similar to <b>351</b> ,<br>but Athena in quadriga to r.;<br>border of dots.  | Sv. 88.21                            |
| <b>354</b>  | 5 coins  | 20–22    | Av. 5.76 (3) |  |                                      |
| <b>*a</b>   | I-970    | 21       | 4.20         |  |                                      |
|             |          | Similar. |              | <b>AΘH</b> (in ex.) Olive tree<br>entwined with snake, owl<br>perched r. in branches; at l.,<br>Athena stg. r., l. hand pointing<br>to r., and r. holding spear and<br>resting on profile shield; at r.,<br>Poseidon stg. l., r. foot on rock,<br>holding trident (head downwards?)<br>in upraised l. hand and dolphin (?)<br>in r.; border of dots. | Sv. 89.16–18;<br><i>NCP</i> , Z:xvii |
| <b>355</b>  | 7 coins  | 20–22    | Av. 4.99 (5) |  |                                      |
| <b>*a</b>   | III-1100 | 20       | 4.03         |  |                                      |
|             |          | Similar. |              | <b>AΘHNA-I-ΩN</b> Zeus seated r. on<br>stool, holding vertical scepter in<br>upraised r. hand and eagle,<br>looking back with wreath in<br>beak, in l.; border of dots.  | Sv. 92.3, 4                          |
| <b>356</b>  | 3 coins  | 20–22    | Av. 6.22 (3) |  |                                      |
| <b>*a</b>   | AA-1009  | 21       | 7.47         | (Q 19:3) H. A. Thompson 1958, pl. 44:g   |                                      |
|             |          | Similar. |              | <b>AΘHNAI-Ω-N</b> Zeus sacrificing<br>r., over altar; as <b>175</b> , but with<br>eagle on l. wrist; border of<br>dots.  | Sv. 92.7                             |
| <b>*357</b> | Z-415    | 20       | 5.98         |  |                                      |
|             |          | Similar. |              | <b>AΘH-NAIΩN</b> (retrograde from<br>lower r.) Hermes, nude but for<br>cloak billowing over shoulders,<br>striding l., wearing petasos and<br>holding coin sack with<br>outstretched r. hand, caduceus<br>with l.; border of dots.   | Sv. 92.27–29;<br><i>NCP</i> , DD:xxi |
| <b>358</b>  | 2 coins  | 22–23    | Av. 6.75 (2) |  |                                      |
| <b>*a</b>   | I-1400   | 23       | 6.17         |  |                                      |
| <b>b</b>    | AA-1034  | 22       | 7.33         | (Q 19:3) <i>GRC</i> , fig. 22  |                                      |
|             |          | Similar. |              | <b>AΘH-N-AIΩN</b> Hermes as <b>358</b> ,<br>but striding r. and r. hand<br>empty (?); border of dots.  | Sv. 92.35–37                         |
| <b>359</b>  | 2 coins  | 20–21    | Av. 5.94 (2) |  |                                      |
| <b>*a</b>   | I-593    | 20       | 3.70         |  |                                      |

|             |          |          |               |                      |  |                                       |
|-------------|----------|----------|---------------|----------------------|--|---------------------------------------|
|             |          | Similar. |               |                      | AΘH-NAI-ΩN Apollo Patroos<br>stg. l., as <b>268</b> ; border of dots.  | Sv. 93.5–7; <i>NCP</i> ,<br>CC:xx     |
| <b>*360</b> | III-544  | 20       | 7.52          | (B 17:1c)            |  |                                       |
|             |          | Similar. |               |                      | AΘHN-AIΩN or AΘHN-A-IΩN<br>Nude Apollo stg. r., as <b>269</b> ;<br>border of dots.   | Sv. 93.10–14;<br><i>NCP</i> , CC:xvi  |
| <b>361</b>  | 4 coins  | 20–22    | Av. 6.30 (3)  |                      |  |                                       |
| <b>*a</b>   | I-1520   | 20       | 5.80          |                      |  |                                       |
|             |          | Similar. |               |                      | AΘHNA-I-Ω-N Similar to <b>361</b> ,<br>but Apollo holds laurel branch<br>before him with r. hand; border<br>of dots.                                 | Sv. 93.15–20;<br><i>NCP</i> , CC:xvii |
| <b>*362</b> | Γ-1258   | 21       | 5.66          |                      |  |                                       |
|             |          | Similar. |               |                      | AΘHNAI-Ω-N Apollo Lykeios<br>stg. r., holding bow with r. hand<br>and placing l. atop head; at r.,<br>tripod entwined with snake;<br>border of dots. | Sv. 93.28                             |
| <b>*363</b> | M-193    | 21       | 4.82          | <i>GRC</i> , fig. 22 |  |                                       |
|             |          | Similar. |               |                      | AΘHNAI-Ω-N Apollo Lykeios,<br>as <b>363</b> , but with laurel bush at<br>l.; border of dots.   | Sv. 93.27                             |
| <b>*364</b> | I-1036   | 21       | 4.64          |                      |  |                                       |
|             |          | Similar. |               |                      | AΘHNAI-ΩN Herakles leaning<br>on club r., as <b>179</b> ; border of<br>dots.   | Sv. 95.3–5; <i>NCP</i> ,<br>DD:xi     |
| <b>365</b>  | 8 coins  | 21–22    | Av. 5.84 (7)  |                      |  |                                       |
| <b>*a</b>   | Z-1979   | 21       | 6.51          |                      |  |                                       |
|             |          | Similar. |               |                      | AΘH-N-AIΩN Herakles holding<br>phiale l., as <b>272</b> ; border of dots.  | Sv. 95.9                              |
| <b>366</b>  | Σ-1281   | 21       | 5.03          |                      |  |                                       |
|             |          | Similar. |               |                      | AΘHN-AIΩN, AΘH-NAIΩN, or<br>AΘHNA-IΩN Asklepios stg. l.,<br>as <b>277</b> ; border of dots.  | Sv. 98.3–10; <i>NCP</i> ,<br>EE:iii   |
| <b>367</b>  | 17 coins | 21–23    | Av. 6.30 (16) |                      |  |                                       |
| <b>*a</b>   | M-191    | 21       | 8.73          |                      |  |                                       |
| <b>*b</b>   | ΠΘ-551   | 21       | 6.94          |                      |  |                                       |

|             |          |          |               |          |  |                       |
|-------------|----------|----------|---------------|----------|--|-----------------------|
|             |          | Similar. |               |          | <b>ΑΘΗΝΑ-Ι-ΩΝ, ΑΘΗ-Ν-ΑΙΩΝ,</b>                 | Sv. 94.25, 26, 28, 29 |
|             |          |          |               |          | or <b>Α-ΘΗΝΑ-ΙΩ-Ν</b> Triptolemos in           |                       |
|             |          |          |               |          | chariot to l., as <b>271</b> ; border of dots. |                       |
| <b>368</b>  | 9 coins  | 21–22    | Av. 5.44 (6)  |          |  |                       |
| <b>*a</b>   | N-202    | 22       | 7.57          |          |  |                       |
|             |          | Similar. |               |          | <b>ΑΘΗ-Ν-Α-ΙΩΝ</b> or <b>Α-ΘΗΝΑ-Ι-ΩΝ</b>       | Sv. 94.27, 30, 31     |
|             |          |          |               |          | Similar to <b>368</b> , but Triptolemos        |                       |
|             |          |          |               |          | holds wheat ear in outstretched r.             |                       |
|             |          |          |               |          | hand, sheaf of wheat in l.; border             |                       |
|             |          |          |               |          | of dots.                                       |                       |
| <b>369</b>  | 2 coins  | 20       | Av. 3.84 (2)  |          |  |                       |
|             |          | Similar. |               |          | <b>ΑΘ-ΗΝ-ΑΙΩΝ</b> or <b>ΑΘ-Η-ΝΑΙΩΝ</b>         | Sv. 94.44, 45;        |
|             |          |          |               |          | Artemis walking l., usually                    | <i>NCP</i> , BB:xi    |
|             |          |          |               |          | quiver over shoulder, holding                  |                       |
|             |          |          |               |          | two torches; border of dots.                   |                       |
| <b>370</b>  | 2 coins  | 21–22    | 4.59 (1)      |          |  |                       |
| <b>*a</b>   | Φ-154    | 22       | 4.59          | holed    |  |                       |
|             |          | Similar. |               |          | <b>ΑΘΗΝ-ΑΙ-Ω-Ν</b> Theseus r.,                 | Sv. 95.30–36          |
|             |          |          |               |          | raising rock at Troizen, as <b>181</b>         |                       |
|             |          |          |               |          | and <b>274</b> ; border of dots.               |                       |
| <b>*371</b> | Π-888    | 20       | 5.52          |          |  |                       |
|             |          | Similar. |               |          | <b>ΑΘΗΝΑ-Ι-ΩΝ, ΑΘΗΝ-Α-Ι-ΩΝ,</b>                | Sv. 96.8–14;          |
|             |          |          |               |          | <b>ΑΘΗΝ-Α-ΙΩ-Ν, ΑΘΗΝ-Α-ΙΩ,</b> or              | <i>NCP</i> , DD:ii    |
|             |          |          |               |          | <b>ΑΘΗΝ-ΑΙ-Ω</b> Theseus and fallen            |                       |
|             |          |          |               |          | Minotaur, as <b>276</b> ; border of dots.      |                       |
| <b>372</b>  | 17 coins | 21–24    | Av. 4.94 (13) |          |  |                       |
| <b>*a</b>   | AA-1072  | 21       | 5.22          | (Q 19:3) |  |                       |
| <b>*b</b>   | AA-1099  | 21       | 4.92          | (Q 19:3) | H. A. Thompson 1958, pl. 44:h                  |                       |
|             |          | Similar. |               |          | <b>Α-ΘΗ-Ν-ΑΙ-Ω-Ν</b> Theseus, nude             | Sv. 95.37–40;         |
|             |          |          |               |          | but for chlamys covering                       | <i>NCP</i> , DD:xviii |
|             |          |          |               |          | outstretched l. arm, striding                  |                       |
|             |          |          |               |          | r., preparing to swing club                    |                       |
|             |          |          |               |          | held in r. hand outstretched                   |                       |
|             |          |          |               |          | behind him; border of dots.                    |                       |
| <b>373</b>  | 4 coins  | 20–22    | Av. 4.57 (3)  |          |  |                       |
|             |          | Similar. |               |          | <b>ΑΘ-ΗΝΑΙΩ-Ν, ΑΘΗΝ-ΑΙΩΝ,</b>                  | Sv. 97.27–31          |
|             |          |          |               |          | or <b>ΑΘΗΝ-Α-ΙΩΝ</b> Themistokles              |                       |
|             |          |          |               |          | on galley to r., as <b>279</b> , but           |                       |
|             |          |          |               |          | sometimes with owl on stern;                   |                       |
|             |          |          |               |          | border of dots.                                |                       |
| <b>374</b>  | 6 coins  | 20–22    | Av. 5.96 (3)  |          |  |                       |
| <b>*a</b>   | AA-1067  | 22       | 5.97          | (Q 19:3) |  |                       |

|            |            |          |               |   |                                     |
|------------|------------|----------|---------------|---|-------------------------------------|
|            |            | Similar. |               | <b>AΘHNA-ΙΩΝ, AΘHNAIΩ-N, or AΘHNAI-ΩΝ</b> Akropolis, seen from north and west, as <b>280</b> ; border of dots.  | Sv. 98.30–36                        |
| <b>375</b> | 6 coins    | 21–22    | Av. 5.76 (4)  |   |                                     |
|            | *a AA-1059 | 21       | 7.42          | (Q 19:3) H. A. Thompson 1958, pl. 44:j; <i>GRC</i> , fig. 22  |                                     |
|            | *b B-329   | 21       | 3.56          | broken (F 10:2)   |                                     |
|            | *c I-560   | 21       | 5.67          |   |                                     |
|            |            | Similar. |               | <b>AΘHN-AIΩΝ or AΘHNA-ΙΩΝ</b> Theater of Dionysos, seen from south; above, at center, Parthenon; at l., possibly the Chalkotheke or Propylaia; at r. of Parthenon, round temple of Roma and Augustus; border of dots. | Sv. 98.44–46; <i>NCP</i> , CC:ix, x |
| <b>376</b> | 4 coins    | 21–22    | Av. 4.38 (3)  |   |                                     |
|            | *a AA-1052 | 21       | 4.72          | (Q 19:3) H. A. Thompson 1958, pl. 44:i; <i>GRC</i> , fig. 22  |                                     |
|            |            | Similar. |               | <b>AΘHNAIΩ N, AΘHNAI ΩΝ, AΘHNA IΩN, AΘHNA, or AΘH</b> (legends in ex. only). From l. to r., amphora, olive tree, and owl stg. r.; sometimes palm branch under legend in ex.; border of dots.                          | Sv. 90.1, 2, 5–8                    |
| <b>377</b> | 14 coins   | 19–22    | Av. 4.54 (10) |   |                                     |
|            | *a Z-393   | 21       | 6.88          |   |                                     |
|            | *b ΠΠ-986  | 19       | 4.73          |   |                                     |
|            |            | Similar. |               | <b>ΘA HN-AI-ΩΝ, HΘA N-A-I-Ω, HΘA N-A-I-Ω-N, AΘH N, or AΘHN N-Ω-I-A</b> (legends begin in ex., often partially retrograde). As <b>377</b> .  | Sv. 90.19, 20                       |
| <b>378</b> | 17 coins   | 19–22    | Av. 4.86 (17) |   |                                     |
|            | *a AA-1035 | 19       | 5.09          | (Q 19:3)  |                                     |
|            | *b Ψ-302   | 22       | 7.70          |   |                                     |
|            |            | Similar. |               | <b>A-ΘH-N-AI-ΩΝ</b> (legend ending in ex.). As <b>377</b> .   | Sv. 90.15                           |
| <b>379</b> | K-1452     | 21       | 4.23          |   |                                     |
|            |            | Similar. |               | <b>AΘHNAIΩN, AΘH-NAI ΩN, or AΘH</b> From l. to r., amphora, olive tree, owl facing; palm branch sometimes in ex.; border of dots.   | Sv. 90.9–12, 16, 18                 |
| <b>380</b> | 5 coins    | 19–23    | Av. 4.92 (5)  |   |                                     |
|            | *a B-320   | 23       | 5.74          | (F 10:2)  |                                     |

|            |                     |          |               |          |  |                          |
|------------|---------------------|----------|---------------|----------|--|--------------------------|
|            |                     | Similar. |               |          | <b>ΑΘΗΝΑΙ ΩΝ</b> or <b>ΑΘΗ Ν-Ω-ΙΑΝ</b>   | Sv. 90.13                |
|            |                     |          |               |          | (legend in ex. or beginning in ex. and then retrograde). From l. to r., amphora, olive tree, owl stg. l.; border of dots.  |                          |
| <b>381</b> | 6 coins             | 20–22    | Av. 4.42 (6)  |          |  |                          |
|            | *a Ε-734            | 20       | 4.11          |          |  |                          |
|            |                     | Similar. |               |          | Similar, but details illegible.  |                          |
|            | [377–381] 6 coins.  |          |               |          |  |                          |
|            |                     | Similar. |               |          | <b>ΑΘΗΝΑΙΩΝ, ΑΘΗΝΑΙΩ-Ν, ΑΘΗΝ-Α ΝΩΙ, or ΑΘΗ ΝΑΙΩΝ</b> (legend sometimes finishing in ex.). From l. to r., owl facing, olive tree, amphora; sometimes palm tree on r. or palm branch in ex.; border of dots. | Sv. 90.17, 22–26, 30, 31 |
| <b>382</b> | 14 coins            | 20–22    | Av. 4.42 (11) |          |  |                          |
|            | *a ΠΠ-710           | 21       | 5.82          |          |  |                          |
|            | *b Κ-1482           | 21       | 4.53          |          |  |                          |
|            |                     | Similar. |               |          | <b>ΑΘΗΝΑΙ ΩΝ</b> (in ex.). From l. to r., owl stg. r., olive tree, amphora; border of dots.  | Sv. —                    |
| <b>383</b> | 2 coins             | 19–20    | Av. 5.05 (2)  |          |  |                          |
|            | *a ΑΑ-1016          | 20       | 4.83          | (Q 19:3) |  |                          |
|            | *b ΔΔ-61            | 19       | 5.27          |          |  |                          |
|            |                     | Similar. |               |          | Similar, but details illegible.  |                          |
|            | [382, 383] 6 coins. |          |               |          |  |                          |
|            |                     | Similar. |               |          | <b>ΑΘΗΝΑΙ ΝΩ</b> (legend finishing in ex.). From l. to r., owl stg. r., amphora, olive tree; border of dots.   | Sv. 90.27                |
| <b>384</b> | ΑΑ-297              | 21       | 5.24          | (Q 19:3) |  |                          |
|            |                     | Similar. |               |          | <b>ΑΘΗΝΑΙ ΩΝ</b> (legend in ex.). From l. to r., olive tree, amphora, owl facing, palm tree; border of dots.   | Sv. 90.29                |
| <b>385</b> | PP-841              | 19       | 4.87          |          |  |                          |
|            |                     | Similar. |               |          | Similar, but details illegible.  |                          |
|            | [377–385] 1 coin.   |          |               |          |  |                          |

|            |            |          |               |          |  |                      |
|------------|------------|----------|---------------|----------|--|----------------------|
|            |            | Similar. |               |          | AΘHNAIΩN, AΘHNAIΩ-N,<br>AΘHN-A-IΩN, AΘHN-A-IΩ-N,<br>AΘHN-A-I-ΩN, AΘH-N-AI-ΩN,<br>AΘH-N-AI NΩ, or AΘH-N-A-IΩN<br>Four-legged table, sometimes<br>seen in perspective, with amphora<br>below; on table top, from l. to r.,<br>wreath, head of Athena r., owl<br>stg. l.; border of dots. | Sv. 91.2–7, 9–15, 19 |
| <b>386</b> | 12 coins   | 19–23    | Av. 4.46 (12) |          |  |                      |
|            | *a Ω-242   | 21       | 5.54          |          |  |                      |
|            | b AA-1069  | 21       | 4.49          | (Q 19:3) | H. A. Thompson 1958, pl. 44:l  |                      |
|            |            | Similar. |               |          | AΘHNAI-Ω-N, AΘHN-AI-Ω-N,<br>or AΘHNAI As <b>386</b> , but with<br>palm branch to r.; border of<br>dots.  | Sv. 91.16–18, 20, 21 |
| <b>387</b> | 7 coins    | 20–22    | Av. 5.91 (6)  |          |  |                      |
|            | *a AA-1092 | 20       | 5.44          | (Q 19:3) | GRC, fig. 22   |                      |
|            | *b I-796   | 20       | 6.55          |          |  |                      |
|            |            | Similar. |               |          | AΘ-H-N-AIΩN or AΘHN AIΩN<br>Similar to <b>386</b> , but no amphora<br>below table; border of dots.   | Sv. 91.1, 22, 23     |
| <b>388</b> | 4 coins    | 20–21    | Av. 5.08 (2)  |          |  |                      |
|            |            | Similar. |               |          | AΘH-NAIΩN or AΘH-NAI NΩ<br>Similar to <b>386</b> , but with owl<br>facing; border of dots.   | Sv. 91.8             |
| <b>389</b> | 4 coins    | 20–22    | Av. 4.96 (3)  |          |  |                      |
|            |            | Similar. |               |          | AΘH Similar to <b>386</b> , but on<br>top of table, from l. to r., owl<br>stg. r., head of Athena r.,<br>wreath; border of dots.   | Sv. 91.29            |
| <b>390</b> | 4 coins    | 20–21    | Av. 4.21 (4)  |          |  |                      |
|            |            | Similar. |               |          | AΘH-NAIΩN As <b>390</b> , but owl<br>facing; border of dots.   | Sv. —                |
| <b>391</b> | AA-1125    | 22       | 4.24          | (Q 19:3) |  |                      |
|            |            | Similar. |               |          | AΘH-N-AIΩN or AΘH-N-A-I<br>As <b>386</b> , but on top of table,<br>from l. to r., owl stg. r., head of<br>Athena l., wreath; border<br>of dots.  | Sv. —                |
| <b>392</b> | 4 coins    | 20–21    | Av. 4.93 (3)  |          |  |                      |
|            | *a AA-1001 | 20       | 4.30          | (Q 19:3) |  |                      |
|            | *b AA-1079 | 20       | 4.94          | (Q 19:3) | H. A. Thompson 1958, pl. 44:k  |                      |



|             |         |          |              |  |               |
|-------------|---------|----------|--------------|--|---------------|
|             |         | Similar. |              | AΘHN AIΩN As <b>392</b> , but legend beneath table and amphora, and palm to r.; border of dots.  | Sv. 91.30     |
| <b>393</b>  | Z-1214  | 23       | 6.01         |  |               |
|             |         | Similar. |              | AΘ HN A As last, but no amphora, and palm to l.; border of dots.   | Sv. 91.31     |
| <b>*394</b> | OO-431  | 21       | 3.10         |  |               |
|             |         | Similar. |              | AΘHNAI-Ω-N or AΘ-HNAIΩN Four-legged table seen in elevated perspective with amphora below; on top of table, from l. to r., owl stg. l. or r., bust of Athena r., prize crown; palm branch sometimes to r.; border of dots. | Sv. 91.27, 28 |
| <b>395</b>  | 6 coins | 21–22    | Av. 6.17 (5) |  |               |
|             |         | Similar. |              | AΘHN-AIΩ-N Four-legged table with amphora below; on table top, from l. to r., bust of Athena r., owl facing, wreath; along front of table, in tiny letters, AΔPIANĒIA; palm branch in ex.; border of dots.                 | Sv. 91.33–38  |
| <b>396</b>  | T-174   | 20       | 5.73         |  |               |
|             |         | Similar. |              | AΘH-NAIΩN Similar to <b>396</b> , but on table top, from l. to r., wreath, bust of Athena r., owl stg. l.; along front of table, in tiny letters, [ΕΛΕVCINEIA]; border of dots.  | Sv. —         |
| <b>*397</b> | Σ-3694  | 21       | 5.60         |  |               |
|             |         | Similar. |              | AΘHN-AIΩN As <b>397</b> , but owl facing; border of dots.  | Sv. 91.42     |
| <b>398</b>  | 3 coins | 20–21    | Av. 4.20 (3) |  |               |
|             |         | Similar. |              | AΘHNA-I-ΩN Similar. On table top, from l. to r., owl facing, bust of Athena l., wreath; along front of table, in tiny letters, ΟΛΥΜΠΙΑ; border of dots.  | Sv. 91.39, 40 |
| <b>399</b>  | 5 coins | 21–22    | Av. 4.93 (4) |  |               |

|            |                     |          |               |              |   |               |
|------------|---------------------|----------|---------------|--------------|---|---------------|
|            |                     | Similar. |               |              | AΘHNAIΩ-N Similar to <b>399</b> , but along front of table, in tiny letters, ΠANAΘHNEA; border of dots.                         | Sv. 91.41, 45 |
| <b>400</b> | III-769             | 20       | 4.14          |              |   |               |
|            |                     | Similar. |               |              | Similar, but details illegible.   |               |
|            | [386–400] 15 coins. |          |               |              |   |               |
|            |                     | Similar. |               |              | AΘH-NA-IΩN Boukranion with fillets hanging from horns; rarely, star above skull; as <b>185</b> and <b>283</b> ; border of dots. | Sv. 99.24–37  |
| <b>401</b> | 74 coins            | 20–23    | Av. 5.21 (63) |              |   |               |
|            | *a AA-1013          | 21       | 5.49          | (Q 19:3)     |   |               |
|            | *b AA-1002          | 21       | 5.87          | (Q 19:3)     |   |               |
|            | *c BB-352           | 21       | 4.86          | GRC, fig. 4  |   |               |
|            | d T-598             | 22       | 6.42          | GRC, fig. 22 |   |               |
|            |                     | Similar. |               |              | AΘH-NAI-ΩN As last.   | Sv. 99.38     |
| <b>402</b> | 7 coins             | 20–22    | Av. 5.46 (6)  |              |   |               |
|            |                     | Similar. |               |              | AΘHN-AIΩN As last.  | Sv. 99.10–12  |
| <b>403</b> | 15 coins            | 20–22    | Av. 5.79 (14) |              |   |               |
|            | *a AA-1096          | 20       | 7.69          | (Q 19:3)     |   |               |
|            | b AA-1012           | 21       | 7.19          | (Q 19:3)     | H. A. Thompson 1958, pl. 44:m   |               |
|            | c AA-1089           | 21       | 6.17          | (Q 19:3)     | H. A. Thompson 1958, pl. 44:n   |               |
|            |                     | Similar. |               |              | AΘHN-AI-ΩN As last.   | Sv. 99.19–22  |
| <b>404</b> | 14 coins            | 20–22    | Av. 5.55 (13) |              |   |               |
|            | *a AA-1062          | 21       | 6.66          | (Q 19:3)     |   |               |
|            |                     | Similar. |               |              | AΘHNA-IΩN, AΘHNA-I-ΩN, A-ΘHN-AI-ΩN, or A-ΘH-NAIΩN As last.  | Sv. 99.15–18  |
| <b>405</b> | 11 coins            | 20–22    | Av. 5.63 (10) |              |   |               |
|            | *a AA-1003          | 20       | 5.70          | (Q 19:3)     |   |               |
|            | *b AA-1063          | 21       | 5.60          | (Q 19:3)     |   |               |
|            |                     | Similar. |               |              | AΘHN-AIΩN Boukranion as above, but within ornamental frame; border of dots.   | Sv. 99.13, 14 |
| <b>406</b> | 3 coins             | 20–21    | Av. 4.73 (2)  |              |   |               |
|            | *a I-559            | 21       | 5.13          |              |   |               |
|            |                     | Similar. |               |              | Similar, but details illegible.   |               |
|            | [401–406] 20 coins. |          |               |              |   |               |

## UNCLASSIFIED

|                     |            |   |               |  |                  |
|---------------------|------------|---|---------------|--|------------------|
|                     |            | Similar.                                      |               | Types illegible.   |                  |
| [284–406] 88 coins. |            |   |               |  |                  |
| OBOLS               |            |   |               |  |                  |
|                     |            | Head or bust of Athena r.,<br>border of dots. |               | AΘ-H-N-AIΩN (obscure)<br>Triptolemos in chariot to l.,<br>as 206; border of dots.                                      | Sv. 94.37        |
| 407                 | H'-3647    | fragmentary                                   |               |  |                  |
|                     |            | Similar.                                      |               | AΘHNA-ΙΩN or AΘHN-AIΩN<br>Theseus attacking to l., as 209;<br>border of dots.  | Sv. 96.22–25, 29 |
| 408                 | 15 coins   | 16–18   | Av. 3.15 (14) |  |                  |
|                     | *a NN-666  | 16  | 3.48          |  |                  |
|                     |            | Similar.                                      |               | AΘHN-AIΩN Nike advancing r.,<br>holding wreath in r. hand and<br>palm branch over shoulder with l.;<br>border of dots. | Sv. 96.45        |
| 409                 | 13 coins   | 15–18   | Av. 2.89 (12) |  |                  |
|                     | *a ΓΓ-47   | 16  | 3.59          |  |                  |
|                     | *b NN-833  | 17  | 4.44          |  |                  |
|                     |            | Similar.                                      |               | AΘ-HN AI-ΩN Olive tree with<br>owl perching r. in branches;<br>border of dots.   | Sv. 89.20, 21    |
| 410                 | 3 coins    | 15–18   | Av. 3.81 (3)  |  |                  |
|                     | *a AA-880  | 15  | 4.52          |  |                  |
|                     | *b NN-1283 | 18  | 3.96          |  |                  |
|                     | *c T-1425  | 17  | 2.95          |  |                  |
|                     |            | Similar.                                      |               | AΘHNAI ΩN (legend in ex.).<br>From l. to r., owl facing,<br>olive tree, amphora; border<br>of dots.                    | Sv. —            |
| 411                 | 4 coins    | 16–17   | Av. 2.44 (4)  |  |                  |
| HEMIOBOLS           |            |   |               |  |                  |
|                     |            | Similar.                                      |               | AΘH-NA-ΙΩN Tripod; border<br>of dots.  | Sv. 93.31        |
| *412                | I-1324     | 13  | 1.69          |  |                  |
|                     |            | Similar.                                      |               | AΘHN NΩIA (legend ending<br>in ex.). Prow of galley to r.;<br>border of dots.  | Sv. 97.40        |
| 413                 | 2 coins    | 12–13   | Av. 1.35 (2)  |  |                  |
|                     | *a Σ-3562  | 13  | 0.99          |  |                  |

|            |         |                    |                                  |           |
|------------|---------|--------------------|----------------------------------|-----------|
|            |         | Similar.           | A-Θ Owl stg. r.; border of dots. | Sv. 88.38 |
| <b>414</b> | 5 coins | 13-14 Av. 1.59 (4) |                                  |           |
| <b>*a</b>  | Ω-139   | 14 1.98            |                                  |           |

|             |        |          |                    |       |
|-------------|--------|----------|--------------------|-------|
|             |        | Similar. | AΘH-NAIΩN As last. | Sv. — |
| <b>*415</b> | Σ-4658 | 12 1.94  |                    |       |

|            |         |                    |                                  |           |
|------------|---------|--------------------|----------------------------------|-----------|
|            |         | Similar.           | A-Θ Owl stg. l.; border of dots. | Sv. 88.54 |
| <b>416</b> | 5 coins | 11-13 Av. 1.41 (5) |                                  |           |
| <b>*a</b>  | Φ-237   | 11 1.10            |                                  |           |
| <b>*b</b>  | E-869   | 13 1.43            |                                  |           |

|                    |  |          |                 |  |
|--------------------|--|----------|-----------------|--|
|                    |  | Similar. | Type uncertain. |  |
| [414-416] 2 coins. |  |          |                 |  |

## IV NON-ATHENIAN COINS

THE 2,197 identifiable foreign coins catalogued in this chapter span nearly the entire chronological range of ancient Greek numismatic history. The earliest coins, two Aiginetan silver staters (658*a* and *b*) and a plated counterfeit of a Siphnian hemidrachm (846), go back to the 6th century B.C. The latest, dating after the collapse of civic minting in the Greek East in the 260's and 270's of our era, belong to the final issues of the Roman province of Egypt under Diocletian (1029, 1030) and to the last known ruler of the Black Sea Kingdom of Bosphoros, King Rheskouporis VI, a contemporary of Constantine the Great (853*a* and *b*).

Geographical representation extends from Italy and Sicily in the west to the Persian Empire in the east, and from the Crimean coast of the Black Sea in the north to Egypt, Cyrene, and Numidia in the south. The range is impressive, but no more so than one would expect from excavations in the heart of Athens, which possessed one of the major ports of the Eastern Mediterranean and whose festivals, monuments, and educational institutions made it a cultural mecca for visitors from all over the Greco-Roman world.

Predictably, most of the larger concentrations of coins come from neighboring and nearby states. Megara heads the list with over 300 pieces, chiefly from two prolific bronze varieties of the late 4th and earlier 3rd centuries B.C. (643, 644). Then follow three mints that are represented by more than 100 catalogued pieces each: the Boiotian League, the city of Chalkis, and, particularly after refoundation as a Roman colony in 44 or 43 B.C., the city of Corinth.

The only other foreign coinage that has been found in comparable quantity is the coinage of the Macedonian kings from Alexander III through Antigonos Gonatas. Many of the more than 250 Macedonian regal coins must have originally been used by Macedonian troops in the garrisons imposed on the Athenians from 317 to 307 and again from 296 to 229. But it should be emphasized that about two-thirds of the total come from a single coinage and reign, the Pan-erecting-trophy bronze of Antigonos Gonatas (507, 508). Although it is possible that all coins of this type were originally consigned to Attica for garrison pay and dispersed only secondarily into general circulation, the tremendous number of the Pan-erecting-trophy coins in the currency pool of 3rd-century Athens might equally result from an undocumented donative of bronze money by Gonatas to the Athenian people (p. 36 above). Nor can one insist that all the precious-metal coins of Alexander and Philip III recovered from the Agora, a gold stater (487) and ten silver drachms (488*a-h*, 496*a, b*), were necessarily sent to Athens in military payrolls; for such coins of Alexander served as one of the dominant international trade currencies of the Aegean world as late as the early 2nd century B.C., and some at least must have arrived in commerce.

It is notable in this connection that most of the other foreign gold and silver from the excavations also belongs to coinages that enjoyed in their day a similar status as preferred international currencies for commerce and for military pay. These include the several silver staters of Aigina (658*a* and *b*, 660, 661), an electrum stater of Kyzikos (866), a Persian gold daric (1003), three silver Lysimachi (461–463), a Rhodian didrachm and two or three pseudo-Rhodian drachms (959–962), and fifteen Histiaian tetrobols (632*a-o*, of which eight had been deposited together in a hoard). If the loss of these pieces in the Agora is somehow a reflection of their wide distribution and popularity, the presence of plated forgeries of silver coins can be attributed to their worthlessness once they were

detected and evidently thrown away. To the *fournée* Athenian coins mentioned previously (pp. 4, 7, 9–10), the non-Athenian catalogue adds a plated Celtic drachm (417), a plated drachm of Alexander (488i), a plated hemidrachm of Siphnos (846), a plated stater of Elis (747), which had been cut in half to expose and probably demonitize it, and a plated Aiginetan stater cunningly provided with a bogus test cut during manufacture (659). Three hemidrachms of Demetrios Poliorketes (502a and b, 503), whose presence suggests, perhaps, Macedonian military pay, a Euboian League drachm (610), a Corinthian drachm (666), an Achaian League hemidrachm (745), a tetradrachm of Ptolemy VI (1011), and a denarius of Juba I (1035) complete the modest total of foreign non-Roman silver from the excavations.

The bronze coins struck by or in the name of Athens' several cleruchies make up another notable group. As full-fledged citizens of Athens permanently residing abroad in territorial communities of their own, Athenian cleruchs are sometimes identified in writings and inscriptions as Athenians but at other times by a localized ethnic, as Lemnians, the people of Salamis, or the like.<sup>1</sup> Their coinages are similarly varied. In the 4th and early 3rd centuries B.C., Myrina and Hephaistia, the two cleruchy cities on the island of Lemnos, each minted coins with Athenian Athena head/Owl types that were accompanied by a local legend and an adjunct symbol, ΜΥΡΙ with a branch of Apollo and ΗΦΑ with the tongs of Hephaistos (455, 455A). But when Lemnos, after a century of independence, was returned to Athens in 167/6 and the cleruchies were reestablished, their coins bore the legend ΑΘΕ but used reverse types emblematic of the issuing city: Artemis' quiver and bow at Myrina (456) and a lighted race torch at Hephaistia (454). Still later, in the early Augustan period, Athens minted for the island a coinage with the types of Athena head/Hephaistos head and the joint ethnic ΑΘΕ|ΑΗΜΝΙ (159A). Similar Augustan issues were struck for the cleruchies of Skyros (160: ΑΘΕ|CKY) and Imbros (161: ΑΘΕ|ΙΝΒΠΙ). Whether Augustan or earlier, the smaller Lemnian cleruchy coins with Artemis/Stag types (159: ΑΘΕ|ΑΗΜΝΙ) also belong to the 1st century B.C.

Upon transfer to Athenian ownership in 167/6 B.C., Delos became the most important of Athens' overseas possessions. Because of its proximity and closer ties to Athens, the island used Athenian money and did not have a coinage of its own. The one momentary exception is a special bronze emission in two denominations struck by the Roman legate Gaius Valerius Triarius after the piratical devastation of the island in 69 B.C. (see 830); Triarius' name appears on obverses, but the ethnic is the ΑΘΕ of the Athenian demos.

Owing to its entirely "non-Athenian" character, the more common 4th-century bronze "of the people of Salamis," inscribed ΣΑΛΑ(μινίων) (640–642), stands somewhat apart from foregoing cleruchy coinages. Archaeological data indicate that the Salaminian bronze began in the first half of the century, apparently to fill a void in the small-denomination currency on the island and ultimately throughout Attica in general. Its utility was diminished when Athens' Eleusinian bronze entered circulation, and after Athens was coining bronze in her own name later in the century, the Salamis bronze was finally discontinued.

Turning to the smaller concentrations of foreign coins, one suspects that the nine pieces from the northern Black Sea ports of Olbia, Pantikapaion, Istrion Limen, and Phanagoria (430–434, 852) were brought by sailors aboard transports engaged in the Euxine grain trade and that the majority of the fifteen early Ptolemaic bronzes (1004–1006, 1009) came with the soldiers sent by Ptolemy II to guard Attica at the outbreak of the Chremonidean War. The abundant finds of Ptolemy I and II coins at several Attic forts where these troops were stationed make it clear that for a few years in the early 260's B.C., Athens was being supplied with Ptolemaic money as at no other time in her history

<sup>1</sup> A. J. Graham, *Colony and Mother City in Ancient Greece*, 2nd ed., Chicago 1983, pp. 167–168.

(note 42 above, p. 11). But beyond such limited conjectures as these, diminishing historical returns set in quickly, and it becomes difficult to attach significance to the rest of the mostly isolated and seemingly random finds from dozens of Greek mints. A few coins owe their interest to discovery in a chronologically significant context. Good examples are the three-assaria coins of Chios, 948a and 949, whose contexts of the mid-3rd century after Christ strengthen the recent downdating of the important series of Chiote imperials as a whole. Mention should also be made of the few bronze coins from the excavations that are noteworthy for their artistic merit. The large medallionlike imperial bronzes from Philippolis (447), Pergamon (878), and Mytilene (905) stand out for their showiness and exceptional condition. Less well preserved but of considerable documentary value for the later career, heroization, and portraiture of the ostracized Athenian statesman Themistokles is the large and quite rare imperial bronze of Magnesia on the Maiandros that pictures the altar and bronze statue of Themistokles that stood in the city agora (926).

The essential question for the bronze coins catalogued in this chapter is to what extent they could have been used as money in a foreign city like Athens. Produced as token or fiduciary currency, did they retain their value when transported across the borders of the state that issued them and implicitly guaranteed their redeemability at a given amount of silver? Or, leaving their value behind, were they lost or intentionally discarded in the Agora on account of their very worthlessness? The large cast bronze of Olbia, 433, may have made a fine souvenir or bartering trinket in 4th-century Athens, but it is hard to imagine an Athenian shopkeeper accepting it as a conventional means of payment in a normal retail transaction. But this is a highly unusual coin, which ordinarily would have to be taken to a moneychanger. When we turn to smaller, more conventional coins, there is reason to believe that at least in the 4th and 3rd centuries B.C., foreign bronzes were generally negotiable in Athenian commerce.<sup>2</sup>

The best evidence comes from the Agora A 18:8 hoard, analyzed and dated to the 260's B.C. on pages 35 and 302. Apart from four Athenian lead military tokens and two small silver coins (a hemidrachm of Demetrios Poliorketes and a drachm of Lysimachos), the deposit contained 92 legible bronze coins, of which 45 are Athenian, 21 Eleusinian, and the remaining 30 percent from foreign mints: Megara (16), Phokis (4), Lokris (2), and the Carian mint of Demetrios Poliorketes, Aigina, Chalkis, and Larissa (1 coin each). Since the hoard's owner clearly regarded these non-Attic bronze coins as worth holding on to, the presumption is that he could have spent them about as freely as he could have spent his local Athenian bronze money. And since all the non-Attic bronzes are essentially similar in diameter and weight to the Athenian and Eleusinian pieces in the hoard, all AE 3 dichalkia, one expects that the non-Attic coins would have passed in Athens at the same value. In support of these suppositions it should be remembered that in the 4th century the Athenians became accustomed to using the bronze coins of Salamis and the Eleusinian festivals for a generation or more before the appearance of their Athena/Owl bronze and that for a while after the latter entered circulation, all three bronze currencies remained in use together.<sup>3</sup> In an already mixed monetary context such as this, one would not expect random AE 3 pieces from Megara, Chalkis, or other Greek states to meet with much discrimination, especially since their value was so slight: if each coin was worth no more than a quarter of an obol, it is unlikely to have made much difference to anyone whether a given AE 3 piece happened to have been minted locally or outside Attica. This suggests in turn that it did not make much difference to the state. For whether or not the

<sup>2</sup> Acceptability of most foreign bronze coins found at Corinth is assumed in Price 1967, pp. 367–369.

<sup>3</sup> See the late 4th-century destruction deposit of Kerameikos Building Z-3, p. 298 below.

Athenians ever passed a law in the 4th or earlier 3rd century discriminating against the use of foreign bronze coins, there is certainly no evidence for the effectiveness of such legislation.

The higher-value Pan-erecting-trophy AE 2 hemiobols of Antigonos Gonatas provide further evidence of the actual use of non-Athenian bronze coins in 3rd-century B.C. Athens. Granted that these were introduced while Athens was under Macedonian control and before Athens had begun to mint in this larger bronze denomination, the Macedonian bronze circulated nevertheless in such volume that when the Athenians called it in after 224, they were able to restrike over it a very substantial bronze coinage of their own (69).

The duoviral bronze of Antonian and Julio-Claudian Corinth (670–704) is another non-Attic currency that calls for special consideration. The close size equivalency between the duoviral asses and the Athenian Period IV AE 1 pieces that constituted Athens' main bronze currency in these same periods surely accounts for the exceptional total of 48 Corinthian asses found in the Agora. Proof of their absorption into the pool of circulating money comes from the five asses with heads of Nero that had been intentionally cut in half. This operation was performed on a number of local AE 1 coins circulating in Julio-Claudian Athens but is unattested among the duoviral asses recovered in the excavations at Corinth itself.<sup>4</sup> Even so, it is doubtful whether such Corinthian asses ever reached Athens in sufficient quantity to have had a perceptible effect on the city's currency. In numbers of Agora finds, no other non-Athenian Greek coinage of the Roman period can begin to rival the duoviral bronze of Corinth. But when the Agora total of 63 duoviral asses and fractions is compared with the approximately 4,000 Athenian Period IV coins from the excavations, it is clear that this Corinthian coinage could have made a barely marginal difference at most. Indeed, for non-Attic Greek bronze coinages that did have a significant impact on Athenian monetary circulation, one must go back to the late 4th- and early 3rd-century AE 3 coinage of Megara and to the Pan-erecting-trophy bronze of Antigonos Gonatas.

After the Athenian restriking of this Macedonian bronze in the 220's, therefore, the inflow of supplementary outside bronze currencies was sharply reduced, either because the supply of Athenian bronze had become more abundant or, more probably, because a new attitude or policy discouraged the use of non-Athenian bronze now that bronze coins were more commonly issued in larger denominations and were playing a larger role vis-à-vis silver in the monetary economy. The figures collected on page xxvi show that of the total 4th- and 3rd-century B.C. bronze coins excavated in the Agora, approximately 20 percent are non-Attic. For later centuries (except for the 1st century after Christ when Athens did not strike coins), the percentage ranges from 7 to 2 percent if we count only Greek coins, or 12 to 2 percent if we include all Roman bronze with the Greek. Attic hoards give the same picture. In contrast to the sizable non-Attic component of the 3rd-century A 18:8 hoard, bronze hoards from the 2nd and 1st centuries B.C. contain only the occasional stray foreign piece. If allowance is made for the exceptional hoarding of Roman sestertii in the mid-3rd century after Christ, the evidence from the Herulian-invasion hoards of A.D. 267 is no different. The stray non-Athenian Greek coins account for a mere 0.3 percent of the total coins in all these post-3rd-century B.C. hoards.<sup>5</sup> Whether such strays were keepsakes or coins hastily mistaken

<sup>4</sup> See above, pp. 92–93. 729, a Neronian as of Sikyon, was also halved at Athens.

<sup>5</sup> Only 15 of the 3,402 bronze coins from the fourteen Attic hoards of the late 2nd and early 1st centuries B.C. surveyed on pp. 66 and 67 above are not Athenian. There is 1 non-Athenian piece among the 713 coins of the Chaidari and Agia Varvara hoards of the end of the 1st century B.C. (pp. 80–81 above). Herulian-invasion hoards (p. 117 above) have produced just 4 coins from other Greek cities: 1 of Thessalonike and 1 of Argos in the ca. 972-piece Numismatic Collection of Athens lot of the Eleusis 1902 hoard, and 1 of Chios (949) and 1 of Lydian Tripolis (969b) in the Agora hoard Deposit B 17:1A.



as Athenian, one cannot attach any more significance to them than to the occasional Canadian penny or dime that will usually turn up in a large accumulation of U.S. change today.

The Canadian-U.S. analogy probably illuminates the "circulation" at Athens of most of the non-Attic coins catalogued below. As with any Canadian coin in the U.S., the lower its value and the more similar its appearance to local coins, the more likely that a foreign coin might informally pass from hand to hand. But this is hardly the same as official acceptability. No foreign coin could ever enjoy the advantage of legally enforced circulation<sup>6</sup> and could always be refused, in which case its owner would have to go to the money-changers and take the best exchange he was offered. After the restriking of Macedonian bronze in the later 220's B.C., foreign bronze coins apparently were disfavored in normal retail transactions. Nevertheless, since they were always worth something at the money-changers' tables, the great bulk of those that have turned up in the Agora were, like the thousands of local Athenian bronze coins from the excavations, most likely lost by accident.

The coins are catalogued in the traditional order: by geographical area, then by cities of the area arranged alphabetically and by rulers. Coin varieties in the earlier part of the catalogue, Italy to Thessaly, are chiefly referenced to entries in the fully illustrated Copenhagen *Sylloge*, which is generally more useful than the corresponding early volumes of the *British Museum Catalogue*. From Illyricum onwards I cite the more complete *BMC*. References to these works are directly to the coin numbers of the city (*BMC*) or region (Copenhagen *Sylloge*) under consideration. Thus, for example, the reference *BMC* 145–148 under variety **573** is to coin nos. 145–148 of Leukas, region of Akarnania, in the *BMC* volume *Thessaly to Aetolia* (p. 184). The dates assigned to the pre-imperial coinages are probably more eclectically derived than they should be. On the whole, the dating of the Copenhagen *Sylloge* with its practice of assigning broad dates by centuries is preferred to the absolute historical dates favored by the *BMC*, except when such precise historical dating is warranted.

## CATALOGUE

### ITALY

#### CISALPINE CELTS

*2nd–1st century B.C.*

#### PLATED COUNTERFEIT OF MASSALIAN AR DRACHM

Female head r.

Lion l.; above, traces of a few blundered letters.

A. Pautasso, *Le Monete Preromane dell' Italia Settentrionale*, Varese 1966, pls. xxvii ff.

**\*417** PP'-1153 15 ↘ 2.80

No traces of silver plating remain. For subaerate Gaulish coins such as this that have been found in North Italian hoards, see *ibid.*, pp. 95–96.

<sup>6</sup> On this essential principle, see the papers of Buttrey referenced note 3 above, p. 5.

## BRUNDISIUM

ca. 217–200 B.C.<sup>7</sup>

## SEMIS

Head of Poseidon r.

B[RVN] below  
Youth on dolphin l.,  
holding Nike and lyre;  
to r, S.C<sup>op</sup> 723–729**\*418** ΛΑ-126 20 ← 8.45

## KROTON

4th century B.C.

Head of young Herakles r.

[KPO] below Crab.

C<sup>op</sup> 1823**\*419** K-645a 12 ↘ 1.29

## RHEGION

ca. 203–89 B.C.

## TETRAS

Head of Artemis r.

PHΓINΩN at r. of Lyre.

C<sup>op</sup> 1980**\*420** Σ-3806 16 ↗ 2.40

## SICILY

## AKRAGAS

late 5th century–406 B.C.

## HEMLITRON

[AKPAΓANTINON]  
Eagle stg. l., wings  
spread.Crab; below, conch shell and  
octopus; six pellets around.Calciati I, p. 177,  
no. 47**\*421** OO-1142 26 ↗ 12.11intentionally halved (found with coin OO-1141, a specimen of  
Athens variety **59**, of the 260's B.C.)<sup>7</sup> *SNG Deutschland*, Staatliche Münzsammlung München 3, Berlin 1973, nos. 558–569; cf. Crawford, *CMRR*, p. 66.

## GELA

ca. 420–405 B.C.

## TRIAS

|             |       |   |   |   |
|-------------|-------|---|---|---|
|             |       | Horned head of river god r;<br>behind, wheat grain. | ΓΕΛΑΣ above<br>Bull walking l.;<br>in ex., three pellets. | G. K. Jenkins, <i>The<br/>Coinage of Gela</i> ,<br>Berlin 1970, no. 497 |
| <b>*422</b> | ΞΞ-82 | 18 ↓ 3.93   | GRC, fig. 19  |   |

## MAMERTINOI

ca. 220–200 B.C.

## PENTOKION

|            |        |                                     |   |                               |
|------------|--------|-------------------------------------|---|-------------------------------|
|            |        | Head of Apollo l.;<br>behind, lyre. | [MAMEPTINΩN] Warrior<br>stg., facing; at r., Π. | Calciati I, p. 103,<br>no. 26 |
| <b>423</b> | Ψ-280a | 25 ↓ 7.88+                          |   |                               |

## PENTOKION

|            |        |  |  |                                    |
|------------|--------|--|--|------------------------------------|
|            |        | Head of Zeus r.;<br>behind, spearhead. | [MAMEPTINΩN]<br>Warrior charging r.; at r., Π. | Calciati I, p. 109,<br>no. 41 Ds 2 |
| <b>424</b> | H-1234 | 27 ↗ 9.70+                             |  |                                    |

## SYRACUSE

ca. 410–400 B.C.

## HEMILITRON

|            |       |                |   |                                   |
|------------|-------|----------------|---|-----------------------------------|
|            |       | Female head l. | [ΣΥΡΑ] between<br>Dolphin l. and scallop shell. | Calciati II,<br>pp. 55–58, no. 24 |
| <b>425</b> | EE-30 | 17 ↓ 2.93+     |   |                                   |

## LITRA

|            |           |  |              |  |
|------------|-----------|--|--------------|--|
|            |           | [ΣΥΡΑ] above<br>Head of Athena l.,<br>wearing Corinthian helmet. | Hippocamp l. | Calciati II,<br>pp. 76–94, nos. 34,<br>35, 41–45 |
| <b>426</b> | a NN-2123 | 20 ↖ 6.65+   |              |  |
|            | b Z-2994  | 17 ↙ 4.85 (broken)   |              |  |

317–289 B.C.

|            |       |                                 |  |   |
|------------|-------|---------------------------------|--|---|
|            |       | [ΣΩΤΕΙΡΑ]<br>Head of Artemis r. | Winged thunderbolt between<br>illegible two-line legend. | Calciati II,<br>pp. 277–279,<br>no. 142 |
| <b>427</b> | Ξ-706 | 22 → 7.23+                      |  |   |

SICULO-PUNIC COINAGE<sup>8</sup>

ca. 310–270 B.C.

|            |   | Head of Persephone l. |            | Horse stg. r., before palm tree. | <i>Cop (Zeugitania:<br/>Carthage) 109–119</i> |
|------------|---|-----------------------|------------|----------------------------------|---|
| <b>428</b> | a | H'-2682               | 17 ✓ 1.83+ | Sicilian mint                    |   |
|            | b | T-158a                | 16 ↓ 2.09  | same                             |   |

*early–mid-3rd century B.C.*

|  |  | Head of Persephone l. |           | Horse head r.; at r., o.             | <i>Cop (Zeugitania:<br/>Carthage) 151</i> |
|--|--|-----------------------|-----------|--------------------------------------|---|
| <b>*429</b>  |  | ΠΘ-105                | 19 ↖ 4.01 | Sardinian mint; <i>GRC</i> , fig. 19 |   |
| For a modern imitation of a Siculo-Punic tetradrachm found while demolishing a modern house in the Agora, see Appendix A, coin b (p. 291 below). |  |                       |           |                                      |   |

## TAURIC CHERSONESE

ΠΑΝΤΙΚΑΡΑΙΟΝ

ca. 330–315 B.C.

|                                    |    | Head of young satyr r. |             | ΠΑΝ ΤΙ above and below<br>Bow in case. | Shelov, no. 55      |
|------------------------------------|----|------------------------|-------------|--|---------------------|
| <b>430</b>                         | *a | Σ-4260                 | 13 ↑ 1.75   |  |                     |
|                                    | b  | N-316                  | 14 - broken |  |                     |
| <i>first half 3rd century B.C.</i> |    |                        |             |  |                     |
|                                    |    | Head of young satyr l. |             | ΠΑΝ below<br>Bow and arrow.            | Shelov, nos. 65, 66 |
| <b>431</b>                         | a  | E-1163                 | 18 - 3.36   | Shelov, no. 65                         |                     |
|                                    | *b | ΒΔ-405                 | 14 ↓ 1.85   | Shelov, no. 66                         |                     |

*third quarter 3rd century B.C.*

|             |  | Head of Poseidon r. |           | ΠΑΝ[ΤΙ] below<br>Prow l.                          | Shelov, no. 75 |
|-------------|--|---------------------|-----------|---|----------------|
| <b>*432</b> |  | Δ-195a              | 22 ↑ 3.95 | obv. cmk.: head of Athena r. in Corinthian helmet |                |

<sup>8</sup> For mint attributions and dating, see *Morgantina* II, pp. 113, 150–151, nos. 436, 437.

## SARMATIA

## OLBIA

*4th century* B.C.

|             |                    |  |               |
|-------------|--------------------|--|---------------|
|             | Gorgoneion.        | O-Λ I-Θ  | <i>Cop 74</i> |
|             |                    | Eagle on dolphin l.                            |               |
| <b>*433</b> | NN-2160 37 ↑ 19.43 | rev. in ex., inscribed Π; <i>GRC</i> , fig. 19 |               |

## ISTRION LIMEN

*late 5th–early 4th century* B.C.

|               |                    |   |  |
|---------------|--------------------|---|--|
|               | Four-spoked wheel. | ΙΣΤ.  | E. H. Minns,<br><i>Scythians and Greeks</i> ,<br>Cambridge 1913,<br>p. 484, pl. II:5 |
| <b>434</b> *a | PP'-1221 13 - 1.30 | (found with pottery of first half 4th century B.C.) |  |
| b             | ΣΤ'-458a 12 - 1.71 |   |  |

## THRACE

## ABDERA

*4th century* B.C.

|            |                             |                                     |                |
|------------|-----------------------------|-------------------------------------|----------------|
|            | [Griffin seated on club r.] | ΑΒΔ-ΗΡ Ι[ΤΕ-ΩΝ]                     | <i>Cop 374</i> |
|            |                             | Head of Apollo r. in linear square. |                |
| <b>435</b> | N-1116 13 ↑ 2.24+           | (K 9–10:1)                          |                |

## APOLLONIA PONTICA

*after 400* B.C.

|            |                          |   |                                      |
|------------|--------------------------|---|--------------------------------------|
|            | Head of Apollo r., laur. | A at lower l. of Anchor; at r., crayfish. | cf. <i>Cop 462</i> (which is larger) |
| <b>436</b> | AA-251 11 ↓ 0.91         |   |                                      |

## BYZANTION

4th century B.C.<sup>9</sup>

|     |         |                                       |  |                               |         |
|-----|---------|---------------------------------------|--|-------------------------------|---------|
|     |         | ΓΥ above<br>Cow walking on dolphin l. |  | Trident between two dolphins. | Cop 488 |
| 437 | B'-620a | 17 ↖ 3.09+                            |  |                               |         |

## DEULTUM

A.D. 222–235: *Julia Mamaea*

|      |        |                             |                       |  |   |
|------|--------|-----------------------------|-----------------------|--|---|
|      |        | IVLIA MA-MEA AVG<br>Bust r. |                       | COL-FLPA-CDEVL around<br>Eagle on altar; on each side a<br>standard with a star in center;<br>in ex., T. | J. Jurukova, <i>Die<br/>Münzprägung von<br/>Deultum</i> , Berlin 1973,<br>no. 173 |
| *438 | ΠΘ-790 | 24 ↑ 6.93                   | (A 14:2) GRC, fig. 24 |  |   |

## MARONEIA

ca. 398–347 B.C.

|     |           |                   |  |  |  |
|-----|-----------|-------------------|--|--|--|
|     |           | Horse prancing r. |  | MAP-ΩNI-TΩN<br>Square containing<br>vine and grapes. | E. Schönert-Geiss,<br><i>Die Münzprägung<br/>von Maroneia</i> , Berlin<br>1987, nos. 598–943 |
| 439 | *a BΓ-279 | 13 ↘ 1.95         |  |  |  |
|     | b BB-274  | 15 ↑ 1.90+        |  |  |  |
|     | c OO-934  | 11 ↑ 1.35         |  |  |  |

ca. 189–45 B.C.

|     |          |                           |  |  |  |
|-----|----------|---------------------------|--|--|--|
|     |          | Head of young Dionysos r. |  | [ΔΙΟΝΥΣΟΥ- ΣΩΤΗΡΟΣ-<br>ΜΑΡΩΝΙΤΩΝ] Dionysos<br>stg. l., holding two spears and<br>grapes. | Schönert-Geiss<br>(under 439 above),<br>nos. 1354–1510 |
| 440 | Γ-964a   | 26 ↑ 6.77+                | obv., two circular cmks.: one containing a head, one a rose(?) |  |  |
|     |          | Similar.                  |  | Similar, but at lower l.<br>monogram based on H.   | Schönert-Geiss<br>(under 439 above),<br>nos. 1511–1639 |
| 441 | *a X-120 | 18 ↖ 5.92                 |  |  |  |
|     | b Γ-171  | 17 ↑ 3.99+                |  |  |  |

<sup>9</sup> E. Schönert-Geiss (*Die Münzprägung von Byzantion*, Berlin/Amsterdam 1970, pp. 128–129) gives this variety to the 5th and 4th centuries B.C.

## MESEMBRIA

*4th century B.C.*

|            |   |                |            |  |                |
|------------|---|----------------|------------|--|----------------|
|            |   | Helmet facing. |            | [M]-E-T-A within four spokes of Wheel. | <i>BMC 5-7</i> |
| <b>442</b> | a | NN-2068        | 19 - 4.42+ | ( <i>BMC 5, 6</i> )                    |                |
|            | b | AA-634         | 13 - 1.63  | smaller module ( <i>BMC 7</i> )        |                |

*3rd-2nd century B.C.*

|            |  |                |            |   |                     |
|------------|--|----------------|------------|---|---------------------|
|            |  | Female head r. |            | [M]ETA[M BPIANΩN]<br>Athena fighting l. | <i>Cop 660, 661</i> |
| <b>443</b> |  | NN-279         | 16 ↑ 4.35+ |   |                     |

## PAUTALIA

*A.D. 161: Lucius Verus*

|             |  |   |            |   |  |
|-------------|--|---|------------|---|--|
|             |  | AV KAI Λ AV-PHΛIOC<br>OVHPOC<br>Bust r. |            | Ἡ ΓΑΡ ΑΝ[ΤΕΙΚ-ΟV<br>ΠΑΥΤΑΛΙΩΤΩΝ]<br>Fish-tailed serpent rising erect from multiple coils. | <i>L. Ruzicka, Die Münzen von Pautalia, Sophia 1933, no. 161</i> |
| <b>*444</b> |  | O-428                                   | 30 ✓ 17.47 |   |  |

## PERINTHOS

*late 3rd century B.C. and later*

|            |  |                                     |           |                               |  |
|------------|--|-------------------------------------|-----------|-------------------------------|--|
|            |  | Jugate heads of Serapis and Isis r. |           | [ΠΕΡΙΝΘΙΩΝ]<br>Anubis stg. r. | <i>E. Schönert-Geiss, Die Münzprägung von Perinthos, Berlin 1965, nos. 31-39</i> |
| <b>445</b> |  | ΠΠ-53a                              | 23 ↑ 5.42 |                               |  |

*A.D. 253-268: Gallienus*

|             |  |   |            |   |  |
|-------------|--|---|------------|---|--|
|             |  | ΑΥΤ ΓΑΛΛΙΗΝΟC CEB<br>Bust l., cuir, spear and shield. |            | ΠΕΡΙΝΘΙΩΝ ΔΙΣ<br>ΝΕΩΚΟΡΩΝ<br>Herakles slaying stag l. | <i>Schönert-Geiss (under 445 above), nos. 899 (obv.) and 854 (rev. [Gordian ΠΠ])</i> |
| <b>*446</b> |  | I-1590  | 30 ✓ 17.80 |   |  |

## PHILIPPOPOLIS

A.D. 218–222: *Elagabalus*

- |             |  |            |  |                |
|-------------|--|------------|--|----------------|
|             | AVTO M AVPHΛ-<br>ANTONEINOC<br>CEB Bust l., laur.,<br>cuir., dr. |            | ΜΗΤΡΟΠΟΛΕΩΣ<br>ΦΙΛΙΠΠΟΠΟΛΕΩΣ ΝΩ[[Κ]ΟΡΟΝ<br>(sic) Herakles stg. l., hand<br>resting on club, holding lion's skin. | <i>Cop</i> 784 |
| <b>*447</b> | Σ-3788   | 41 ↑ 37.63 | <i>GRC</i> , fig. 25   |                |

## AUGUSTA TRAIANA

A.D. 193–217: *Julia Domna*

- |            |                                 |           |   |                     |
|------------|---------------------------------|-----------|---|---------------------|
|            | [ΙΟΥΛΙΑ] ΔΟ-ΜΝΑ CEBA<br>Bust r. |           | ΑΥΓΟΥΣΤΗΣ<br>ΤΡΑΙΑΝ[ΗC] Illegible type. | cf. <i>BMC</i> 8, 9 |
| <b>448</b> | Z-2135a                         | 26 - 6.53 | (H 12:4)                                |                     |

## THE THRACIAN CHERSONESE

## COELA

A.D. 218–222: *Elagabalus*

- |             |  |           |  |              |
|-------------|--|-----------|--|--------------|
|             | ANTO-NINVS PIVS<br>Bust of Elagabalus r.,<br>laur., cuir., dr. |           | AELMVNI COE-LA<br>Prow r.; cornucopia above. | <i>BMC</i> 4 |
| <b>*449</b> | ΓΓ-5   | 17 ↑ 2.54 |  |              |

## SESTOS

4th–3rd century B.C.

- |            |                   |             |                      |                     |
|------------|-------------------|-------------|----------------------|---------------------|
|            | Herm.             |             | [Σ]-A Amphora.       | <i>Cop</i> 932, 933 |
| <b>450</b> | NN-1036a          | 12 → 1.63   |                      |                     |
|            | Head of Hermes r. |             | [ΣΗΣ] at r. of Lyre. | <i>Cop</i> 936, 937 |
| <b>451</b> | K-1073            | 19 ↑ broken |                      |                     |



## THRACIAN ISLANDS

## IMBROS

276/261–167 B.C.

|            |                |           |  |                    |
|------------|----------------|-----------|--|--------------------|
|            | Female head r. |           | [IMBPOY] at l. of Hermes<br>Imbriamos stg. r., before<br>thymiaterion, holding branch. | <i>Cop</i> 952–957 |
| <b>452</b> | *a NN-1126     | 15 ↑ 3.45 | Kleiner 1976, p. 20, no. 1 (B 20:9)  |                    |
|            | b Θ-994        | 13 ↑ 1.92 |  |                    |
|            | *c ΣT-285      | 12 ↓ 1.27 |  |                    |

Between 166 and 86 B.C. the reestablished Athenian cleruchy on Imbros struck an AE 2 emission with a reverse that repeats the present reverse of ithyphallic Hermes Imbriamos before thymiaterion, although with the legend ΑΘΕΝΑΙΩΝ; the obverse type, Athena head in Corinthian helmet, was modeled on the obverse of the standard 2nd-century B.C. Athenian Fulminating Zeus AE 2 (F. W. Imhoof-Blumer, "Münzen der Kleruchen auf Imbros," *AM* 7, 1882, pp. 146–148; *idem*, *Monnaies grecs*, Amsterdam 1883, p. 49, no. 49).

The bronze here represented in three Agora specimens should be earlier and presumably belongs to the long period of Imbrian independence from Athens which began in 276 or 261 B.C. (Ferguson, p. 320, note 3). For an Augustan "cleruchy" issue with the compound legend ΑΘΕ ΙΝΒΡΙ, see **161**.

## LEMNOS

## Hephaistia

276/261–167 B.C.

|            |                     |            |   |                |
|------------|---------------------|------------|---|----------------|
|            | Male head r., diad. |            | Η-Φ Α-Ι Race torch<br>between pilei of the<br>Kabeiroi. | <i>Cop</i> 979 |
| <b>453</b> | *a T-856            | 15 ↗ 3.24+ | (from drain deposit with coins to 86 B.C.)              |                |
|            | b NN-1498           | 18 ↑ 5.03  |   |                |
|            | c A-1104            | 18 ↑ 3.75  |   |                |
|            | d Π-902             | 16 ↑ 3.99  |   |                |

166–86 B.C.

|            |  |           |  |   |
|------------|--|-----------|--|---|
|            | Head of Athena r., wearing<br>Corinthian helmet. |           | Α<br>Θ -Ε Race torch bound<br>with fillet. | <i>Cop</i> ( <i>Attica</i> ) 102,<br><i>BMCAttica</i> 577 |
| <b>454</b> | *a ΠΘ-115  | 15 ↘ 2.88 |  |   |
|            | b Ψ-44   | 12 ↗ 2.79 |  |   |
|            | c Δ-26   | 14 ↘ 2.70 |  |   |

By size and arrangement of the ethnic, this last variety is related to Athenian AE 3 varieties of *ca.* 170–86 B.C. (Period III). The race-torch reverse and the rude style of the Athena head make it clear, however, that it should be attributed to the Athenian cleruchy at Hephaistia after Lemnos was returned to Athens in 167/6 (Polybios 30.20).

**456** is a parallel striking from Lemnos' second cleruchy city, Myrina.

It is probable that at least a few of the coins listed under **455A** are from 4th- or early 3rd-century B.C. Hephaistia. For an early Augustan issue in the name of the Lemnian Athenians but with an Hephaistos-head reverse type, see **159A**.

## Myrina

386–276/261 B.C.

|            |          | Head of Athena r.,<br>wearing Corinthian helmet. |               | MYPI (usually upward at l.)<br>Owl stg., facing; usually at r.,<br>a branch. | <i>Cop</i> 988, 990                 |
|------------|----------|--|---------------|--|-------------------------------------|
| <b>455</b> | 41 coins | 12–16  | Av. 2.19 (27) |  |                                     |
| *a         | MΣ-31    | 14   | ↑             | 3.16   |                                     |
| *b         | Θ-505    | 15   | ↑             | 2.82   |                                     |
| *c         | ΣΤ'-528  | 14   | →             | 2.16   |                                     |
| *d         | Ω-432    | 17   | ↑             | 2.47   |                                     |
| *e         | NN-1790  | 13   | ↑             | 1.82   | <i>GRC</i> , fig. 19                |
| *f         | T-1602   | 12   | ↑             | 1.71   | MYPI downward at l. (as also Φ-173) |
| g          | ΠΘ-697   | 13   | ↗             | 2.26   | (B 13:1)                            |
| h          | X-107    | 15   | ←             | very worn  | (N 18:3)                            |

Similar.

Similar, except legend and symbol illegible.

|             |          |   |   |      |                               |
|-------------|----------|---|---|------|-------------------------------|
| <b>455A</b> | 28 coins | 12–15 mm., of variety <b>455</b> or the parallel but less common Hephaistia variety <i>Cop</i> 973: Head of Athena in Corinthian helmet/Owl, stg., facing, between tongs (on l.) and ΗΦΑ downwards (at r.). |   |      |                               |
| *a          | Z-2854   | 14  | ↘ | 1.98 | obv. cmk.: X in incuse circle |
| b           | Θ-657    | 14  | ↑ | 1.91 | same                          |
| c           | E-91     | 14  | - | -    | very worn (N 21:4)            |
| d           | ΠΘ-529   | 14  | ← | 2.58 | (B 13:1)                      |

Three specimens of **455** were excavated at Olynthos, one definitely from the floor of a house destroyed in 348,<sup>10</sup> the other two in less clear stratigraphical circumstances, which nevertheless relate to the pre-348 occupation of the city.<sup>11</sup> The Athena/Owl coinage of Myrina (and Hephaistia, see **455A**) thus began between the restoration of the Lemnian cleruchies in 386 and the middle of the 4th century. A considerable variety in style implies a lengthy period of minting, lasting probably until the loss of Lemnos to Athens in 314, or even later if some of the coins should happen to belong to the restored cleruchy of 307–276 or –261 (Ferguson, pp. 49, 64, 320, note 3). Since the larger 14–17 mm. pieces were probably issued as dichalkia (see p. 38 above), the countermarking of 455Aa and b with an X might have served to devalue each to a χ(αλοῦς).

For specimens in published 2nd-century B.C. deposits, see Kleiner 1975, p. 307, nos. 112, 113 (Myrina), p. 312, no. 195 (Myrina or Hephaistia, not Athens as published); p. 319, no. 267 (Myrina); Kleiner 1976, p. 12, nos. 4, 5 (Myrina or Hephaistia).

<sup>10</sup> *Olynthus* XIV, p. 422, no. 1; from the floor of house B vi, room f.

<sup>11</sup> *Olynthus* VI, p. 86, nos. 760, 761, respectively from Street vi before house A vi 2, and from a house(?) in Section G, Area 29, probably at floor level. Nicholas Cahill informs *per litteras* that the areas, levels, coins, and other material found with these coins point to deposit at the time of the 348 destruction or during the habitation that preceded it. Although also belonging to 348 destruction debris, *Olynthus* IX, p. 240, no. 1 is not a coin of Myrina.

166–86 B.C.

|            |           |  |              |                      |  |               |
|------------|-----------|--|--------------|----------------------|--|---------------|
|            |           | Head of Athena r., wearing<br>Corinthian helmet. |              | Α<br>Θ <sup>-E</sup> | Quiver, upright, crossed by<br>diagonal bow. | Sv. 106.27–29 |
| <b>456</b> | 13 coins  | 13–16  | Av. 2.42 (7) |                      |  |               |
|            | *a Θ-370a | 14   | ✓ 2.49       |                      |  |               |
|            | *b ΠΘ-84  | 14   | ↗ 3.25       |                      |  |               |
|            | *c T-1809 | 13   | ↘ 2.21       |                      |  |               |
|            | *d Δ-347a | 13   | ↘ 2.12       |                      | A-ΘE; same obv. die as 456c                  |               |

Size, format, and crude obverse style associate this variety with the Athena/Race torch AE 3 cleruchy emission of Hephaistia **454**. Since the bow and quiver of Apollo or Artemis was, like Apollo's branch on **455** and the bow on *Cop* 989, used from time to time as a symbol of Myrina (see under **159** and note 218 above, p. 111), the present emission is doubtless from this second cleruchy city on Lemnos.

## SAMOTHRACE

2nd–early 1st century B.C.<sup>12</sup>

|            |          |  |        |  |                     |
|------------|----------|--|--------|--|---------------------|
|            |          | Head of Athena r., wearing<br>Corinthian helmet. |        | ΣΑΜΟ (457a, b) or ΣΑΜΟΘΡ<br>(457c) at l. of great goddess<br>seated l. | <i>Cop</i> 993–1001 |
| <b>457</b> | a I-57   | 19   | ↘ 4.47 | rev., downwards at r., ΠΥΘΟΚ   |                     |
|            | b K-1558 | 18   | ← 4.51 | same   |                     |
|            | c E-988a | 18   | - 6.38 | name illegible   |                     |
|            |          | Similar.   |        | [ΣΑΜΟ] Forepart of ram r.  | cf. <i>Cop</i> 1002 |
| <b>458</b> | OO-1479  | 15   | ↑ 3.89 |  |                     |

## THASOS

ca. 390–310 B.C.<sup>13</sup>

## CHALKOUS

|            |          |                           |        |  |                           |
|------------|----------|---------------------------|--------|--|---------------------------|
|            |          | Head of young Herakles r. |        | [ΘΑ]ΣΙΟΝ between Bow and<br>club; rudder within bow. | cf. <i>Cop</i> 1050, 1051 |
| <b>459</b> | a K-176  | 11                        | → 0.97 | below bow, star                                      |                           |
|            | b A-1554 | 10                        | - 0.63 | within bow, Λ, and caduceus?                         |                           |

## HEMIOBOL

|            |        |                             |        |                              |                     |
|------------|--------|-----------------------------|--------|------------------------------|---------------------|
|            |        | Head of bearded Herakles r. |        | ΘΑΣΙΟΝ above. Club over bow. | cf. <i>Cop</i> 1052 |
| <b>460</b> | BΔ-316 | 20                          | → 5.72 |                              |                     |

<sup>12</sup> O. Picard, "Thrace," in *CRWLR* (pp. 79–92), p. 81.

<sup>13</sup> O. Picard, "L'atelier monétaire de Thasos," *RN*, ser. 6, 29, 1987, pp. 7–9, identifying also the denominations of **459** and **460**.

## KINGS OF THRACE

*Lysimachos, 306–281 B.C.*

## AR DRACHM

|             |        |                            |                              |   |  |
|-------------|--------|----------------------------|------------------------------|---|--|
|             |        | Head of young Herakles, r. |                              | ΒΑΣΙΛΕΩΣ  ΛΥΣΙΜΑΧΟΥ<br>Zeus seated l., holding eagle<br>and scepter; at l., dolphin<br>above lion's forepart; below<br>throne, tripod or quiver(?). | Thompson,<br><i>Essays Robinson</i> ,<br>no. 36 (but with<br>different symbol<br>below throne) |
| <b>*461</b> | T-1598 | 16 ↗ 3.41                  | Lampsakos mint, 299–296 B.C. |   |  |

## AR DRACHM

|             |       |                              |  |  |  |
|-------------|-------|------------------------------|--|--|--|
|             |       | Head of deified Alexander r. |  | ΒΑΣΙΛΕΩΣ  ΛΥΣΙΜΑΧΟΥ<br>Athena seated l., holding Nike;<br>at l., lyre. | Thompson,<br><i>Essays Robinson</i> ,<br>no. 174 |
| <b>*462</b> | ΞΞ-79 | 20 ↓ 4.26                    | Ephesos mint, ca. 294–287 B.C.; <i>EABC</i> , p. 152, pl. 17, coin R:69 (A 18:8); <i>GRC</i> , fig. 16 |  |  |

## AR TETRADRACHM

|             |          |   |   |   |                           |
|-------------|----------|---|---|---|---------------------------|
|             |          | Similar.                                  |   | Similar, except at l., ✱;<br>on throne, BY; below, trident<br>between dolphins. | cf. <i>Cop</i> 1142, 1143 |
| <b>*463</b> | ΛΛ-300   | 35 ↑ 13.85                                | Posthumous striking of Byzantion: 2nd century B.C.; <sup>14</sup> (D 4:1) |   |                           |
|             |          | Head of Ares r., wearing<br>Attic helmet. |   | ΒΑΣΙΛΕΩΣ  ΛΥΣΙΜΑΧΟΥ<br>Lion running r.; beneath,<br>spearhead.                  | <i>Cop</i> 1149–1157      |
| <b>464</b>  | a ZZ-109 | 18 ↘ 3.76                                 | above lion l., Δ; below, ΜΕ ( <i>Cop</i> 1157)                            |   |                           |
|             | b Θ-345  | 18 ↑ 3.03                                 | no details  |   |                           |

*Rhoimetalkes I, 11 B.C.–A.D. 12*

|            |        |  |  |   |   |
|------------|--------|--|--|---|---|
|            |        | ΒΑΣΙΛΕΩΣ ΡΟΙΜΗΤΑΛΚΟΥ<br>Head r., diad. |  | ΚΑΙΣΑΡΟΣ ΣΕΒΑΣΤΟΥ<br>Head of Augustus r., bare. | <i>Cop</i> 1192–1195;<br><i>RPC</i> I, 1718 |
| <b>465</b> | BB-619 | 19 ↓ 4.39                              |  |   |   |

<sup>14</sup> H. Seyrig, "Monnaies hellénistiques de Byzance et de Calcedoine," in *Essays Robinson* (pp. 183–200), pp. 197–198: "Les émissions de Byzance avec trident orné et initiales."

## MACEDONIA

## AKANTHOS

*first half of 4th century B.C.*<sup>15</sup>

|            |       |  |  |               |
|------------|-------|--|--|---------------|
|            |       | Head of Athena r., wearing Attic helmet. | A-K A-N in the four quarters of a Wheel. | <i>Cop</i> 24 |
| <b>466</b> | Z-461 | 18 → 4.39                                |  |               |

## AMPHIPOLIS

*ca. 31–27 B.C.: Octavian*

|            |       |   |  |   |
|------------|-------|---|--|---|
|            |       | [ΚΑΙΣΑΡ ΘΕΟΥ ΥΙΟΣ]<br>Head of Octavian r. | ΑΜΦΙΠΟΛ[ΕΙΤΩΝ] below Artemis Tauropolis riding bull r. | <i>Cop</i> 89–91;<br><i>RPC</i> I, 1626 |
| <b>467</b> | Ξ-729 | 22 → 4.84                                 |  |   |

*A.D. 161–175: Faustina II*

|             |        |                                |   |                |
|-------------|--------|--------------------------------|---|----------------|
|             |        | [ΦΑΥΣΤΕΙΝΑ] ΣΕΒΑΣΤΗ<br>Bust r. | [ΑΜΦΙΠΟΛΕΙ]ΤΩΝ<br>Artemis Tauropolis riding bull r. | <i>Cop</i> 107 |
| <b>*468</b> | AA-451 | 18 ↓ broken                    |   |                |

## ΑΡΗΥΤΙΣ

*ca. 187 B.C.*

|             |         |                       |  |                     |
|-------------|---------|-----------------------|--|---------------------|
|             |         | Head of Zeus Ammon r. | [ΑΦΥ] above Two birds billing.           | <i>Cop</i> 131, 132 |
| <b>*469</b> | NN-1121 | 16 ↑ 3.46             | Kleiner 1976, p. 15, no. 1 (A–B 19–20:1) |                     |

## ΒΟΤΤΙΑΙΑ

*187–168/7 B.C.*<sup>16</sup>

|            |        |                      |  |                               |
|------------|--------|----------------------|--|-------------------------------|
|            |        | Head of young Pan r. | Β above Two goats, kneeling r.; all in oak wreath. | <i>BMC</i> , p. 13,<br>no. 46 |
| <b>470</b> | ΠΠ-533 | 21 ↖ 11.55           |  |                               |

<sup>15</sup> *Olynthus* IX, p. 216, no. 3; pp. 263–266: eight specimens. Note the seventy Olynthos specimens of the related smaller denomination (*Cop* 22, 23), Athena head/ΑΚ|ΑΝ in square (*Olynthus* IX, p. 263, and *Olynthus* XIV, p. 413, no. 2).

<sup>16</sup> Touratsoglou, *CRWLR*, p. 55, pl. 7:17.

## DION

*43 B.C. (or later)*

|             |                          |           |   |                    |
|-------------|--------------------------|-----------|---|--------------------|
|             | COL-[DIENSIS]<br>Plow r. |           | DI[ANA BAPHYR]<br>Diana Baphyras<br>running r., trampling<br>on a vexillum. | <i>RPC I, 1503</i> |
| <b>*471</b> | P-549a                   | 16 → 3.00 |   |                    |

## OLYNTHOS: CHALKIDIAN LEAGUE

*ca. 400–348 B.C.*

|             |                          |           |                          |                |
|-------------|--------------------------|-----------|--------------------------|----------------|
|             | Head of Apollo r., laur. |           | ΧΑΛ-ΚΙΔ-ΕΩΝ around Lyre. | <i>Cop 246</i> |
| <b>*472</b> | T-11                     | 15 ↓ 2.87 |                          |                |

## OURANOPOLIS

*4th–3rd century B.C.*

|            |                     |                   |  |                    |
|------------|---------------------|-------------------|--|--------------------|
|            | Star of eight rays. |                   | [ΟΥΡΑΝΙΔΩ-ΠΟΛΕΩΣ]<br>Aphrodite Ourania seated l. | <i>Cop 455–457</i> |
| <b>473</b> | a ΓΓ-268            | 18 - blistered    |  |                    |
|            | b ΒΓ'-309           | 16 - broken edges |  |                    |

## PELLA

*after 168/7 B.C.<sup>17</sup>*

|            |                             |           |                          |                    |
|------------|-----------------------------|-----------|--------------------------|--------------------|
|            | Head of Athena Parthenos r. |           | ΠΕΛ [ΛΗΣ] Cow feeding r. | <i>Cop 266–275</i> |
| <b>474</b> | PP'-443                     | 16 ↗ 5.97 |                          |                    |

## PHILIPPOI

*ca. 356–350 B.C.*

|             |                           |           |  |               |
|-------------|---------------------------|-----------|--|---------------|
|             | Head of young Herakles r. |           | ΦΙΛΙΠΠΩΝ at r. of<br>Tripod; above, branch; at l.,<br>bunch of grapes. | <i>BMC 13</i> |
| <b>*475</b> | K-7                       | 16 → 5.45 |  |               |

<sup>17</sup> Price, *CRWLR*, p. 100, and Mattingly 1990, p. 67. Touratsoglou (*CRWLR*, pp. 55, 63, pl. 10:2) prefers 187–168/7 B.C.

27 B.C.—A.D. 68

|            |    |                      |            |  |  |  |
|------------|----|----------------------|------------|--|--|--|
|            |    | VIC-AVG Nike stg. l. |            | COHOR PRAE PHIL Three<br>military standards. |  | <i>Cop</i> 305, 306;<br><i>RPC</i> I, 1651 |
| <b>476</b> | *a | MM-150               | 20 ↑ 2.75  |  |  |  |
|            | b  | ΠΘ-864               | 18 ↓ 2.99+ |  |  |  |
|            | c  | Π-650                | 17 ↓ 3.01+ |  |  |  |

For possible additional coins of the Roman colony, see under **868–870**.

## SKIONE

*first half of 4th century B.C.*<sup>18</sup>

|            |  |                      |           |                 |  |                |
|------------|--|----------------------|-----------|-----------------|--|----------------|
|            |  | Head of Aphrodite r. |           | [Σ]ΚΙ-Ω Dove r. |  | <i>Cop</i> 322 |
| <b>477</b> |  | Z-1695               | 13 ↓ 3.01 |                 |  |                |

## THESSALONIKE

*187–168/7 B.C.*<sup>19</sup>

|            |   |  |                |   |  |                  |
|------------|---|--|----------------|---|--|------------------|
|            |   | Head of Athena r., wearing<br>Corinthian helmet. |                | ΘΕΣΣΑΛΟ ΝΙΚΗΣ<br>Horse running r.<br>below horse, caduceus ( <i>BMC</i> 40) (E 14:3)<br>rev. symbol illegible |  | <i>BMC</i> 40–42 |
| <b>478</b> | a | Γ-1099   | 21 ↑ blistered |   |  |                  |
|            | b | Λ-291  | 20 ↑ 5.69      |   |  |                  |

*168/7–146 B.C.*<sup>20</sup>

|            |  |                |           |  |  |                |
|------------|--|----------------|-----------|--|--|----------------|
|            |  | Head of Janus. |           | [Θ]ΕΣΣΑΛ[Ο] ΝΙΚΗΣ]<br>Two centaurs rearing back to back. |  | <i>Cop</i> 370 |
| <b>479</b> |  | Σ-2981         | 18 → 4.22 |  |  |                |

37 B.C.

|             |  |  |           |                           |  |   |
|-------------|--|--|-----------|---------------------------|--|---|
|             |  | [ΑΓΩΝΟΘΕΣΙΑ]<br>Head of Agonothesia r. |           | ΑΝΤ ΚΑΙ in laurel wreath. |  | <i>Cop</i> 375–377;<br><i>RPC</i> I, 1552 |
| <b>*480</b> |  | E-1325                                 | 20 ↖ 5.41 |                           |  |   |

A.D. 54–68: *Nero*

|            |  |                                |           |  |  |  |
|------------|--|--------------------------------|-----------|--|--|--|
|            |  | [- - - - -]<br>Head of Nero l. |           | ΘΕΣΣ[Α-Λ]Ο[ΝΙΚΗ]<br>Nike stg. l. on globe. |  | Touratsoglou 1988,<br>p. 174, nos. 6–10;<br><i>RPC</i> I, 1595 |
| <b>481</b> |  | ΣΤ-91a                         | 16 ↓ 4.11 |  |  |  |

<sup>18</sup> *Olynthus* IX, p. 227, no. 4; pp. 311–312; *Olynthus* XIV, p. 419, no. 2: total of fifty-eight specimens from Olynthos.

<sup>19</sup> Touratsoglou, *CRWLR*, p. 55, pl. 8:9.

<sup>20</sup> *Ibid.*, pl. 8:16.

A.D. 98–117: *Trajan*

|            |       |                   |  |   |   |
|------------|-------|-------------------|--|---|---|
|            |       | [- - - - -]       |  | ΘΕΣΣΑΛΟ[Ν ΙΚΕΩΝ]                            |   |
|            |       | Bust of Trajan r. |  | Nike striding l.;<br>in field l., crescent. | Touratsoglou 1988,<br>pp. 186–187,<br>nos. 5–12 |
| <b>482</b> | ΔΔ-7a | 26 ↓ 10.76+       |  |   |   |

A.D. 211–217: *Julia Domna*

|            |       |                     |  |   |  |
|------------|-------|---------------------|--|---|--|
|            |       | [- - - - -]         |  | [ΘΕC]CΑΛΟ-[ΝΙΚΕΩΝ] Nike                           |  |
|            |       | Bust of J. Domna r. |  | striding l., carrying Kabeiros<br>image and palm. | Touratsoglou 1988,<br>pp. 222–223,<br>nos. 31–55 |
| <b>483</b> | Γ-158 | 24 ↑ 9.18           |  |   |  |

A.D. 243–249: *time of Philip I (?)*

|            |         |  |                            |  |
|------------|---------|--|----------------------------|--|
|            |         | ΘΕ[CCA]ΛΟΝ[ΙΚΗ] Bust of                  | ΘΕC CΑΛΟ ΝΙΚΕ ΩΝ in laurel |  |
|            |         | city goddess r., veiled and<br>turreted. | wreath.                    | Touratsoglou 1988,<br>pp. 348–350,<br>nos. 1–8 |
| <b>484</b> | Z-1756a | 16 ← 2.17                                |                            |  |

## KINGS OF MACEDONIA

*Philip II, 359–336 B.C.*

|            |           |  |  |                    |
|------------|-----------|--|--|--------------------|
|            |           | Young male head (Apollo?) r.,<br>wearing taenia. | [ΦΙΛΙΠΠΟΥ] above<br>Nude horseman r.         | <i>Cop</i> 581–612 |
| <b>485</b> | a BB-1262 | 19 - blistered                                   | below horse, ΝΕ (as <i>McClellan</i> 3374)   |                    |
|            | b OO-1011 | 17 ↖ broken                                      | same?  |                    |
|            | c Ω-473   | 15 ← broken                                      | below horse, N-monogram                      |                    |
|            | d OO-563  | 17 - 4.34  | no details                                   |                    |
|            | e T-1369  | 15 - broken                                      | obv. head l. (as <i>Cop</i> 616); no details |                    |

|            |       |                            |                      |                    |
|------------|-------|----------------------------|----------------------|--------------------|
|            |       | Head of young Herakles, r. | ΦΙΛΙΠ [ΠΟΥ]<br>Club. | <i>Cop</i> 618–620 |
| <b>486</b> | Φ-215 | 12 - broken                |                      |                    |

*Alexander III, 336–323 B.C., including posthumous coinage*

## AV STATER

|             |        |  |   |                           |
|-------------|--------|--|---|---------------------------|
|             |        | Head of Athena r., wearing<br>Corinthian helmet decorated<br>with snake. | ΑΛΕΞΑΝΔΡΟΥ behind<br>Nike stg. l., holding wreath<br>and stylis; to l., ⚡ and<br>race torch.  | <i>BMC</i> Alexander 2598 |
| <b>*487</b> | ΜΣ-204 | 19 ↑ 8.60  | Sardis mint, ca. 323–319 B.C.; Kleiner 1975, p. 307, pl. 76, no. 114 (H–K 12–14); <i>GRC</i> , fig. 16; M. Thompson, <i>Alexander's Drachm Minis I: Sardes and Miletus</i> ( <i>Numismatic Studies</i> 16), New York 1983, no. 170, pl. 8 |                           |



## AR DRACHM

|               |        | Head of young Herakles r. | ΑΛΞΑΝΔΡΟΥ behind<br>Zeus seated l., holding<br>eagle and scepter.   |  |
|---------------|--------|---------------------------|---|--|
| <b>488</b> *a | ΣΤ-250 | 16 ↑ 3.90                 | rev. at l., Κ. <i>BMCAlexander</i> 3109: Kition mint, ca. 325–320 B.C. <i>GRC</i> ,<br>fig. 16            |  |
| *b            | Π-525  | 18 ↑ 3.96                 | rev. at l., spearhead; below, star. <i>BMCAlexander</i> 1761: “Kolophon”<br>mint, ca. 323–319 B.C.        |  |
| *c            | Λ-415  | 17 ↑ 3.47                 | rev. at l., Φ; below, Γ. <i>BMCAlexander</i> 1817: “Kolophon” mint, ca.<br>310–301 B.C.                   |  |
| *d            | Τ-1503 | 16 ↑ 3.00                 | rev. at l., ΜΕ; below [ivy leaf]. <i>BMCAlexander</i> 1560: “Abydos” mint,<br>ca. 310–301 B.C.            |  |
| *e            | Ε-356  | 20 ↗ 3.52                 | rev. at l., Σ; no symbol below. <i>BMCAlexander</i> 2771: Western Asia<br>Minor(?) mint, ca. 323–280 B.C. |  |
| *f            | Κ-1387 | 19 ↑ 3.02                 | rev. at l., crescent(?)   |  |
| *g            | Ω-431  | 16 ↑ 3.41                 | no details  |  |
| h             | Τ-352  | 18 ↓ broken               | no details  |  |
| *i            | ΕΛ-320 | 18 ↗ 2.47                 | plated AE; no details   |  |

## Macedonian Bronze, ca. 336–323 B.C.

|            |         | Young male head r., diad. | ΑΛΞΑΝΔΡΟΥ above<br>Horse prancing r.     | <i>BMCAlexander</i> 338–<br>370 |
|------------|---------|---------------------------|--|---------------------------------|
| <b>489</b> |         | Symbols on rev. illegible |  |                                 |
| a          | Δ-217   | 17 → 3.76                 |  |                                 |
| b          | Β'-935  | 14 ↘ 3.44                 |  |                                 |
| c          | Κ-1505  | 15 ↑ 4.10                 |  |                                 |
| d          | ΝΝ-1686 | 17 ↓ 3.59                 |  |                                 |
| e          | Ξ-440   | 16 ↘ 4.31                 |  |                                 |
|            |         |                           | Kleiner 1976, p. 16, no. 2 (A–B 19–20:1) |                                 |

|               |         | Head of young Herakles r. | ΑΛΞΑΝΔΡΟΥ between<br>Bow in case and club. | <i>BMCAlexander</i> 325,<br>326, 329–333, etc. |
|---------------|---------|---------------------------|--|--|
| <b>490</b>    |         | Symbols on rev. illegible |  |  |
| *a            | Κ-1756  | 18 ↑ 4.90                 |  |  |
| b             | ΒΕ-298  | 20 ↓ 4.20                 |  |  |
| c             | ΒΕ-576  | 17 ↓ 5.23                 |  |  |
| d             | ΞΞ-3a   | 19 - 4.97                 |  |  |
| <b>491</b>    | H-292   | Similar.<br>13 ✓ 1.64     | Similar.                                   | <i>BMCAlexander</i> 328                        |
| <b>492</b> *a | ΒΒ-546  | Similar.<br>10 ↖ 1.15     | Similar, except club above<br>bow in case. | <i>BMCAlexander</i> 327                        |
| *b            | ΜΜ-23   | 11 ↘ 1.34                 |  |  |
| c             | ΟΟ-1246 | 12 - 2.01                 |  |  |

ca. 325–310 B.C.

|             |         |          |      |   |                             |
|-------------|---------|----------|------|---|-----------------------------|
|             |         | Similar. |      | ΒΑΣΙ between Bow in case and club.                        | <i>BMCAlexander</i> 267     |
| <b>*493</b> | NN-2046 | 18 ✓     | 4.84 | Macedonian mint   |                             |
|             |         | Similar. |      | B A between Bow with quiver and club.                     | <i>BMCAlexander</i> 376–390 |
| <b>494</b>  | AA-939a | 18 -     | 4.85 | symbol on rev. illegible; Macedonian mint                 |                             |
|             |         | Similar. |      | ΒΑΣΙΛΕΩΣ between Bow in case and club; below, race torch. | <i>BMCAlexander</i> 2800    |
| <b>495</b>  | AP-34   | 19 ←     | 5.68 | Western Asia Minor(?) mint                                |                             |

*Philip III, 323–316 B.C.*

## AR DRACHM

|               |         |          |      |   |  |
|---------------|---------|----------|------|---|--|
|               |         | Similar. |      | ΦΙΛΙΠΠΟΥ behind Zeus seated l., holding eagle and scepter.  |  |
| <b>496 *a</b> | OO-1051 | 16 ↑     | 3.80 | rev. at l., torch; below, ΓΓ. <i>BMCAlexander</i> P68: Sardis mint, ca. 323–319 B.C.              |  |
| <b>*b</b>     | ΜΣ-136  | 16 ↑     | 3.90 | rev. at l., bee or rosebud; below ΤΙ. <i>BMCAlexander</i> P92, 92A: Sardis mint, ca. 323–319 B.C. |  |

*Anonymous Regal Bronze*

ca. 325–300 B.C.

|             |        |                                     |      |                        |                         |
|-------------|--------|-------------------------------------|------|------------------------|-------------------------|
|             |        | Macedonian shield; in center, club. |      | B-A Macedonian helmet. | <i>BMCAlexander</i> 419 |
| <b>*497</b> | E-1946 | 16 -                                | 3.98 |                        |                         |

The dating by K. Liampi (“Zur Chronologie der sogenannten ‘anonymen’ makedonischen Münzen des späten 4. Jhs. v. Chr.,” *JNG* 36, 1986, pp. 41–65) of this (*ibid.*, group II.3) and all other varieties of the Macedonian Shield/Helmet Bronze without a royal monogram on the shield to the last quarter of the 4th century is confirmed by the thirteen Shield/Helmet pieces that were excavated, along with coins of Alexander III and a coin of Kassandros, in the Northwest Quarter of Olynthos, inhabited until 316 (*Olynthus IX*, pp. 237, 394, nos. 2–4, with pp. 329–330 and p. 297 below) and the twenty examples excavated at the Olynthian port at Mekyberna, also abandoned in 316 (*Olynthus IX*, pp. 257, 397, nos. 3–5, with pp. 372–374).

|            |   |   |  |          |  |
|------------|---|---|--|----------|--|
|            |   | Similar, except symbol or monogram on shield illegible. |  | Similar. |  |
| <b>498</b> | 9 coins, 16–17 mm., of uncertain Macedonian Shield/Helmet variety |   |  |          |  |

Traces of a royal monogram appear in the center of the obverse on two of these coins (BB-666, T-346), but it is unclear whether the monogram is that of Demetrios (as **506**), Pyrrhos, or Antigonos Gonatas. For the issues of these kings, see Liampi (above under **497**), p. 45, pl. 6:a–c.

*Kassandros, 316–297 B.C.*

|             |            |                           |  |   |                      |
|-------------|------------|---------------------------|--|---|----------------------|
|             |            | Head of young Herakles r. |  | [Κ]ΑΣΣΑ[Ν ΔΡΟΥ]<br>Recumbent lion r.                          | <i>Cop</i> 1138–1141 |
| <b>499</b>  | ΣΑ-76      | 17 ↑ 4.33                 |  |   |                      |
|             |            | Similar.                  |  | ΒΑΣΙΛΕΩΣ  ΚΑΣΣΑΝΔΡΟΥ<br>Nude horseman crowning<br>horse r.    | <i>Cop</i> 1142–1153 |
| <b>500</b>  | 16 coins   | 17–21 Av. 5.35 (12)       |  |   |                      |
|             | *a NN-1462 | 19 - 3.80                 |  | below horse's belly, Λ (?), cf. <i>Cop</i> 1147               |                      |
|             | b E-2458   | 19 ↑ 5.69                 |  | between horse's legs, bunch of grapes(?), cf. <i>Cop</i> 1151 |                      |
|             | *c Ψ-151   | 20 ↑ 4.87                 |  | no details, as on all other specimens                         |                      |
|             |            | Head of Apollo r., laur.  |  | ΚΑΣΣΑΝΔ[ΡΟΥ]  ΒΑΣΙΛΕΩΣ<br>Tripod lebes.                       | <i>Cop</i> 1160–1162 |
| <b>*501</b> | ΟΟ-1343    | 17 ↑ 5.85                 |  |   |                      |

*Demetrios Poliorketes, 306–283 B.C.*

## AR HEMIDRACHM

|             |           |  |  |   |  |
|-------------|-----------|--|--|---|--|
|             |           | Nike on prow l.  |  | ΔΗΜΗΤΡΙΟΥ  ΒΑΣΙΛΕΩΣ<br>Poseidon, striding, brandishing<br>trident l.; at l., A; at r., ☉. | Newell, no. 45                           |
| <b>502</b>  |           |  |  | Tarsos mint, ca. 298–295 B.C.   |  |
|             | *a ΓΓ-187 | 14 ↑ 1.59  |  | <i>GRC</i> , fig. 16  |  |
|             | *b ΞΞ-78  | 13 ↑ 1.51<br>(reweighed)   |  | <i>EABC</i> , p. 152, pl. 17, no. Q:68 (A 18:8)   |  |
|             |           | AR HEMIDRACHM  |  |   |  |
|             |           | Head of Demetrios r., wearing<br>diadem and bull's horn.         |  | ΔΗΜΗ[ΤΡΙΟΥ  ΒΑΣ]ΙΛΕ[ΩΣ]<br>Poseidon brandishing<br>trident l.; at r., ivy leaf.           | Newell, no. 56 or 58                     |
| <b>*503</b> | Ψ-330     | 12 ← 0.96+   |  | Ephesos mint, ca. 301–295 B.C.  |  |
|             |           | Head of Demetrios r.,<br>wearing Corinthian helmet<br>with horn. |  | B A above Prow r.   | Newell, nos. 20, 34,<br>40, 170, 172–174 |
| <b>504</b>  | 18 coins  | 15–17 Av. 2.87 (13)  |  | 300–295 B.C.  |  |
|             | *a Λ-283  | 16 ↑ 3.94  |  | no details  |  |
|             | *b Π-6    | 16 ↑ 2.55  |  | same  |  |
|             | c NN-131  | 16 ↑ 2.27  |  | same  |  |
|             | d ΒΒ-20   | 16 ↑ 3.61  |  | same  |  |
|             | e Γ-781   | broken   |  | below prow, ⚡. Newell, no. 20: Salamis mint   |  |
|             | f ΠΠ-1002 | broken   |  | same (A 17:3)   |  |
|             | g ΟΟ-338  | broken   |  | below prow, ⚡. Newell, no. 34: Tarsos mint  |  |
|             | h ΣΑ-377  | broken   |  | (O–R 7–10)  |  |
|             |           | Head of Poseidon r.  |  | B A above Prow r.; at r.,<br>double axe; below, ⚡.  | Newell, no. 167                          |
| <b>*505</b> | ΞΞ-63     | 16 ↑ 2.11  |  | Carian mint?, after 300 B.C.; <i>EABC</i> , p. 152, pl. 17, no. P:67 (A 18:8)             |  |

- Macedonian shield; in center, BA-ΣI Macedonian helmet; Newell, nos. 125–131  
 506 NN-1688 17 ✓ 3.81 Amphipolis or Pella mint, ca. 294–288 B.C.; Kleiner 1976, p. 16, no. 10 (A–B 19–20:1)  
 For the attribution of this variety to Demetrios Poliorketes (as opposed to Demetrios II, cf. *Cop* 1224–1229), see Newell, pp. 118–120, and Liampi (under **497** above), p. 45.

*Antigonos Gonatas, 277–239 B.C.*

- |            |           |   |   |                      |
|------------|-----------|---|---|----------------------|
|            |           | Head of Athena r., wearing Corinthian helmet. | B-A on either side of Pan erecting trophy; between legs, Α. | <i>Cop</i> 1205–1211 |
| <b>507</b> | 160 coins | 18–22 Av. 5.52 (99)                           |   |                      |
| *a         | OO-305    | 20 → 5.39                                     | rev. at l., Ξ   |                      |
| *b         | NN-1585   | 21 ← 8.73                                     | at l., Φ (as also Γ-619 and Γ-1098)                         |                      |
| *c         | N-529     | 21 ↓ 6.06                                     | at l., Φ or flower(?) (as also H'-2326)                     |                      |
| d          | III-260   | 19 ↖ 6.12                                     | at l., K over Φ (as also K-1307)                            |                      |
| *e         | Γ-1110    | 21 → 8.00                                     | thick, angular flan, as 507b                                |                      |
| *f         | NN-2116   | 18 ↗ 4.49                                     | rev. Pan, holding wreath in r., crowning trophy             |                      |
| g          | Σ-4386    | 20 ↘ 6.68                                     | at l., K (as also Ψ-7)                                      |                      |
| h          | MΣ-328    | 22 → 5.28                                     | at l., Macedonian helmet with two side plumes               |                      |
| i          | Z-1118    | 20 ↖ 4.43                                     | same, and at lower r., B                                    |                      |
| j          | Θ-189     | 21 ← worn                                     | at lower r., trident  |                      |
| *k         | Λ-210a    | 19 ↓ 6.22                                     | at lower l., pedum; obv. cmk.: facing head of Hera          |                      |
| *l         | H-46      | 19 ↓ 5.29                                     | obv. cmk.: facing head of Hera (as also OO-327)             |                      |
| *m         | A-1       | 18 ← 5.25                                     | cmk.: head of Pan r. in circular incuse (as also ΓΓ-348)    |                      |
| *n         | Ξ-467     | 19 ↘ 6.57                                     | cmk.: wreath (as also K-1004)                               |                      |

- |            |         |                    |                        |                       |
|------------|---------|--------------------|------------------------|-----------------------|
|            |         | Similar.           | Similar.               | <i>Cop</i> 1212, 1213 |
| <b>508</b> | 5 coins | 16–17 Av. 3.50 (5) |                        |                       |
| *a         | NN-969  | 16 ✓ 2.66          | Pan crowning(?) trophy |                       |
| *b         | A-1106  | 17 → 3.94          | same                   |                       |

The size distinction between the two denominations of this Pan-erecting-trophy bronze is clearer from the specimens illustrated in the Copenhagen *Sylloge* than from our illustrations. To judge from the Athenian evidence (p. 38 above), the common AE 2 variety **507** ought to represent the hemiobol, the rare AE 3 variety **508** the quarter-obol.

The countermark of a facing head of Hera on three Agora specimens (see 507k, l) was added at Chalcis; Picard, *Chalcis*, pp. 180–181, for other examples and discussion. The identification of the profile head in the countermark of 507m (cf. *McClellan* 3606, 3608; also 509c below) as Pan's seems clear from the little horn above the brow.

- |            |          |                           |  |                      |
|------------|----------|---------------------------|--|----------------------|
|            |          | Head of young Herakles r. | B A above Nude horseman crowning horse r.; below, Α. | <i>Cop</i> 1214–1221 |
| <b>509</b> | 19 coins | 16–19 Av. 4.00 (15)       |  |                      |
| *a         | ΘΘ-6     | 16 ↓ 3.32                 | at r. of horse, crescent                             |                      |
| *b         | ΠΘ-759   | 17 ↑ 4.10                 |  |                      |
| *c         | NN-1455  | 17 ↘ 4.40                 | rev. cmk.: head of Pan r. in incuse circle           |                      |
| *d         | ΣT'-549  | 19 ← 3.84                 | obv. cmk.: Boiotian helmet in incuse circle          |                      |
| e          | ΣA-161   | - ↓ broken                | between front legs of horse, Φ                       |                      |

These Herakles/Horseman coins bear the same ANTI monogram as Gonatas' Athena/Pan bronze (**507**, **508**) and have been variously ascribed to Gonatas (*Cop* 2114–2121; Price 1967, p. 374, no. 28) or to Antigonos Doson, 229–220 B.C. (e.g., by Head 1881, pp. 261–263; Svoronos 1908, p. 230; Walker 1978, p. 43). The problem is bound up with the attribution of the Antigonid Poseidon/Apollo-prow tetradrachms, which I. L. Merker gave to

Doson ("The Silver Coinage of Antigonos Gonatas and Antigonos Doson," *ANSMN* 9, 1960, pp. 39–52, followed by Boehringer [p. 99]), but which more recent studies (R. W. Mathisen, "Pan Heads and Poseidon Heads: Two Third-Century Macedonian Tetradrachm Types," *SAW* 16, 1985, pp. 29–35; N. G. L. Hammond and F. W. Walbank, *A History of Macedonia* III, Oxford 1988, pp. 594–595, following C. T. H. R. Erhardt, *Studies in the Reigns of Demetrius II and Antigonos Doson* [diss. State University of New York at Buffalo 1975]) now reattribute to the later years of Gonatas' long reign. This reattribution leaves Doson without any silver in his own name, but this is paralleled by the preceding monarch, Demetrius II, 239–229 B.C., who did not mint, at least in his own name, in either silver or bronze.

Professor Mathisen has compiled a record of several hundred Antigonid bronzes and in correspondence has kindly explained that there are good grounds for assigning the Herakles/Horseman pieces to Gonatas. Some of these coins are marked with a control symbol of Macedonian helmet with two large side plumes, which occurs also on a number of the Athena/Pan bronzes (cf. 507h and *Cop* 1205–1207) and all Gonatas' silver drachms (*Cop* 1203). To this one may add that (leaving aside the rare, small-module Athena/Pans, 508, which may antedate the start of the horseman series) the two bronze varieties have different sizes and weights, clearly represent two different denominations, and could very well have been struck concurrently. Unlike the AE 2 Athena/Pan pieces, the AE 3 Herakles/Horseman bronze did not circulate very commonly in Athens, nor like the Athena/Pan coins were they called in during the 220's and overstruck with Athenian types (see 69). But both circumstances may be explained by the smaller size and value of the Herakles/Horseman coins and need not imply any chronological distinction.

Just as Athens massively recoined the larger Athena/Pan pieces, so thousands of the Antigonid Herakles/Horseman bronzes were overstruck with local types in Boiotia; see 595.

[500 or 509] 4 coins of 18–19 mm. Herakles/Horseman type of either Kassandros or Antigonos.

*Philip V, 220–178 B.C.*

|      |        |                           |  |                       |
|------|--------|---------------------------|--|-----------------------|
|      |        | Head of Zeus r.           | B [A] Φ Athena Alkidamos striding r., brandishing thunderbolt in raised r. hand, holding shield on extended l. arm; at lower r., bird. | <i>Cop</i> 1244–1246  |
| *510 | H-2190 | 19 → 3.35                 |  |                       |
|      |        | Head of young Herakles r. | B-A [Φ]<br>Two goats kneeling r.   | <i>Cop</i> 1248–1251  |
| 511  | ΠΘ-852 | 21 → broken               |  |                       |
|      |        | Similar.                  | ΒΑΣΙΛΕΩΣ  ΦΙΛΙΠΠΟΥ<br>Harpa r.; all in oak wreath.   | <i>Cop</i> 1261, 1262 |
| 512  | Γ-1390 | 23 → broken               |  |                       |
|      |        | [Head of Perseus r.]      | [ΒΑΣΙ]ΛΕ[ΩΣ]  ΦΙΛΙΠΠΟΥ<br>Harpa l.; all in oak wreath.   | <i>Cop</i> 1264       |
| 513  | ΣΑ-385 | 18 - 4.06                 | (intrusive in O–R 7–10)  |                       |

*Philip V or Perseus, 178–168 B.C.*

|     |        |                      |   |                                   |
|-----|--------|----------------------|---|-----------------------------------|
|     |        | [Head of Perseus r.] | [- - - - -]<br>Eagle stg. three-quarters l., wings lifted, head to r. | <i>Cop</i> 1254–1256 or 1271–1280 |
| 514 | ΒΔ-362 | 20 - 3.73            | (Q 6:2, see under P 6:2 and Q 6:2)                                    |                                   |

## MACEDONIAN LEAGUE

*3rd century after Christ*

|            |    |   |      |  |                       |
|------------|----|---|------|--|-----------------------|
|            |    | ΑΛΕΞΑΝΔΡΟΥ Head of<br>Alexander wearing<br>lion's skin r. |      | ΚΟΙΝΟΝ ΜΑΚΕΔΟΝΩΝ<br>Β ΝΕΩ<br>Horseman r. | <i>Cop</i> 1372, 1373 |
| <b>515</b> | *a | Ψ-316   | 24 ↓ | 9.95                                     |                       |
|            | b  | K-1796  | 24 ↓ | 10.93                                    |                       |
|            | c  | ΞΞ-1a   | 27 ↓ | 6.75                                     |                       |

## THESSALY

## ΑΙΝΙΑΝΕΣ

*4th–3rd century B.C.*

|            |   |                        |      |                                |                                     |
|------------|---|------------------------|------|--------------------------------|-------------------------------------|
|            |   | Head of Zeus l., laur. |      | [ΑΙΝΙΑΝΩΝ] Warrior slinging r. | Rogers, no. 137;<br><i>Cop</i> 4, 5 |
| <b>516</b> | a | A-511                  | 16 ↓ | 1.18                           |                                     |
|            | b | Λ-315                  | 15 ↙ | 1.78                           |                                     |

*ca. 168–1st century B.C.*

|             |  |                        |      |          |   |
|-------------|--|------------------------|------|----------|---|
|             |  | Head of Zeus r., laur. |      | Similar. | Rogers, nos. 143–<br>150; <i>Cop</i> 22, 23 |
| <b>*517</b> |  | Ψ-132                  | 20 ↑ | 6.48     |   |

## ΑΤΡΑΧ

*3rd century B.C.*

|            |  |                          |      |                          |   |
|------------|--|--------------------------|------|--------------------------|---|
|            |  | Head of Apollo r., laur. |      | ΑΤΡ-[ΑΓΙ]-ΩΝ Horseman r. | Rogers, nos. 169–<br>172; <i>Cop</i> 30, 31 |
| <b>518</b> |  | KΤΛ-123                  | 18 ↑ | 4.66                     |   |

## ΓΟΜΦΟΙ

*4th–3rd century B.C.*

|            |  |  |      |  |                                   |
|------------|--|--|------|--|-----------------------------------|
|            |  | Head of nymph facing three-<br>quarters r. |      | [ΓΟΜΦ] Zeus Palamnaios,<br>with scepter, seated l. on rocks. | Rogers, no. 214;<br><i>Cop</i> 50 |
| <b>519</b> |  | K-294                                      | 19 ↑ | 4.16+  |                                   |

## GYRTON

4th century B.C.

|            |   |        |                              |  |   |
|------------|---|--------|------------------------------|--|---|
|            |   |        | Head of Zeus l. or r., laur. | ΓΥΡΤ-Ω ΝΙΩΝ Horse stepping r.                | Rogers, nos. 232–235; <i>Cop</i> 59, 60 |
| <b>520</b> | a | ΩΔ-47  | 19 - 4.53                    | Zeus head r.                                 |   |
|            | b | Σ-1841 | 18 ✓ 5.08                    | same   |   |
|            | c | ΛΛ-298 | 21 ↑ 5.74                    | Zeus head l.; M monogram below horse (D 4:1) |   |
|            | d | ΚΚ-523 | 18 ↑ 4.15                    | Zeus head l.                                 |   |

## HALOS

4th century B.C.

|             |  |          |                      |  |  |
|-------------|--|----------|----------------------|--|--|
|             |  |          | Head of nymph facing | [ΑΛΕΩΝ] Phrixos riding ram r.  | cf. Rogers, nos. 238–240, 242–245 and <i>Cop</i> 64, 65, all with Zeus-head obverses |
| <b>*521</b> |  | NN-2104a | 15 ✘ 4.75            | (4th-century B.C. context: in stone bedding of pebble floor of house)<br>A. Moustaka, <i>Kulte und Mythen auf thessalische Münzen</i> , Würzburg 1983, p. 135, pl. 2, no. 168. |  |

## KRANNON

4th century B.C.

|             |  |        |                            |                              |   |
|-------------|--|--------|----------------------------|------------------------------|---|
|             |  |        | Head of Poseidon r., laur. | [KPA] Thessalian horseman r. | Rogers, nos. 179–185; <i>Cop</i> 39, 40               |
| <b>522</b>  |  | B-504  | 19 ↗ 3.69+                 |                              |   |
|             |  |        | Thessalian horseman r.     | ΜΑΓΝ ΚΡΑΝΝ Bull charging r.  | variant of Rogers, nos. 187–189 and <i>Cop</i> 41, 42 |
| <b>*523</b> |  | Σ-5010 | 15 ↑ 2.46                  |                              |   |

## LAMIA

4th century B.C.

|            |  |        |   |   |                                    |
|------------|--|--------|---|---|------------------------------------|
|            |  |        | Head of Athena r., wearing Corinthian helmet. | [M]ΑΛΙΕ[ΩΝ] Philoktetes stg., shooting r.   | Rogers, no. 384; <i>Cop</i> 87, 88 |
| <b>524</b> |  | I-1209 | 15 ↓ 1.75                                     |   |                                    |
|            |  |        | Head of nymph Lamia r.                        | [ΛΑΜΙΕΩΝ] Philoktetes kneeling, shooting r. | Rogers, no. 388; <i>Cop</i> 84–86  |
| <b>525</b> |  | II-532 | 14 ↗ broken                                   |   |                                    |

## LARISSA

4th century B.C.

|      |          |  |  |   |   |
|------|----------|--|--|---|---|
|      |          | Head of nymph Larissa facing three-quarters l. |  | [ΛΑΡΙΣΣΑΙΩΝ]<br>Horse stepping r.               | Rogers, nos. 269–280; <i>Cop</i> 136–139  |
| 526  | Υ-22     | 20 ↖ 7.75                                      |  |   |   |
|      |          | [Similar.]                                     |  | [ΛΑΡΙΣΣΑΙΩΝ]<br>Horseman holding lance r.       | Rogers, nos. 284–287; <i>Cop</i> 140, 141 |
| 527  | Λ-11     | 17 - 7.05                                      |  |   |   |
|      |          | Head of nymph Larissa r.                       |  | [ΛΑΡΙΣ ΣΑΙΩΝ]<br>Horse grazing r.               | Rogers, no. 288;<br><i>Cop</i> 142        |
| *528 | ΛΛ-167   | 17 ↑ 4.26                                      |  |   |   |
|      |          | Similar.                                       |  | [ΛΑΠΙΣ ΣΑΙΩΝ]<br>Horse grazing l.               | Rogers, no. 295;<br><i>Cop</i> 144        |
| 529  | *a ΞΞ-30 | 13 ↑ 2.34                                      |  | <i>EABC</i> , p. 152, pl. 17, coin S:70 (A18:8) |   |
|      | b ΠΘ-408 | 12 ✓ broken                                    |  |   |   |

The good condition (w2) of 529a in the A 18:8 hoard of the 260's suggests that the bronze coinage of Larissa might have continued into the 3rd century (so Kroll, *EABC*, p. 152), even though Larissa ceased to mint in silver around 320 B.C. (Martin [note 50 above, p. 12], p. 52). That this and the other Larissa bronze varieties began well before the middle of the 4th century is clear nevertheless from the seventeen pieces (mostly of varieties 528 and 529) from the Olynthos excavations (*Olynthus* IX, p. 343; *Olynthus* XIV, p. 424).

## LARISSA KREMASTE

ca. 302–286 B.C.

|     |       |                  |  |   |   |
|-----|-------|------------------|--|---|---|
|     |       | Head of nymph l. |  | ΛΑΡΙ below Harpa r;<br>all in olive wreath. | Rogers, nos. 319, 320; cf. <i>Cop</i> 152 (head r.) |
| 530 | O-137 | 12 ← 1.68        |  |   |   |

## MAGNETES

ca. 197–146 B.C.

|      |          |                              |              |  |   |
|------|----------|------------------------------|--------------|--|---|
|      |          | Head of Zeus r., laur.       |              | ΜΑΓ-ΝΗ-ΤΩ[N]<br>Centaur r.; below, star. | Rogers, no. 339; cf. <i>Cop</i> 157–160   |
| *531 | OO-290   | 31 ← 6.56                    |              |  |   |
|      |          | Head of Zeus l. or r., diad. |              | ΜΑΓΝΗ ΤΩΝ<br>Prow r.                     | Rogers, nos. 348–352; <i>Cop</i> 161, 162 |
| 532  | *a I-487 | 20 ↗ 5.67                    | Zeus head r. |  |   |
|      | b T-671  | 17 ↓ 2.21                    | same         |  |   |



|                                |    |         |    |   |        |  |   |  |
|--------------------------------|----|---------|----|---|--------|--|---|--|
|                                | c  | A-10    | 20 | ↑ | 5.38   | Zeus head l.   |   |  |
|                                | d  | I-227   | 18 | ↑ | 4.45   | same   |   |  |
|                                |    |         |    |   |        | Head of Zeus r.  | ΜΑΓ[N H]ΤΩΝ                               | Rogers, no. 353  |
|                                |    |         |    |   |        |  | Horse stepping r.                         |  |
| <b>533</b>                     |    | Φ-15    | 18 | → | 4.99   |  |   |  |
| A.D. 235–238: <i>Maximinus</i> |    |         |    |   |        |  |   |  |
|                                |    |         |    |   |        | [ΓΑ]ΙΟΥ Κ ΒΗ [ΜΑΞΙΜΕΙΝΟΣ]  | [ΑΡΓΩ ΜΑΓΝΗΤΩΝ]                           | Rogers, no. 375  |
|                                |    |         |    |   |        | Bust r., laur., dr.  | Argo with rowers r.                       |  |
| <b>534</b>                     |    | O-44    | 23 | ↘ | 5.38+  |  |   |  |
| ΟΡΘΗ                           |    |         |    |   |        |  |   |  |
| 4th–3rd century B.C.           |    |         |    |   |        |  |   |  |
|                                |    |         |    |   |        | Head of Athena r., wearing<br>Attic helmet.                                      | [ΟΡ-ΘΙ]<br>Trident in wreath.             | Rogers, nos. 423–<br>425; <i>Cop</i> 184                 |
| <b>535</b>                     |    | Ω-206a  | 16 | → | broken |  |   |  |
| ΦΗΛΑΝΝΑ                        |    |         |    |   |        |  |   |  |
| 4th century B.C.               |    |         |    |   |        |  |   |  |
|                                |    |         |    |   |        | Young male head r.   | ΦΑΛΑΝΝΑΙΩΝ<br>Head of nymph r.            | Rogers, nos. 446–<br>452; <i>Cop</i> 203–208             |
| <b>536</b>                     | *a | ΚΚ-267  | 20 | ↑ | 6.36   |  | rev., behind head, Α; behind shoulder, Βο |  |
|                                | *b | Ο-323   | 20 | ↗ | 5.90   |  | no rev. letters (Rogers, no. 452)         |  |
|                                | c  | Z-2268  | 19 | ↗ | 6.41   |  |   |  |
|                                | d  | ΣΤ'-450 | 19 | ↗ | 7.45   |  |   |  |
| ΦΗΡΑΣΑΛΟΣ                      |    |         |    |   |        |  |   |  |
| 4th century B.C.               |    |         |    |   |        |  |   |  |
|                                |    |         |    |   |        | Head of Athena facing<br>three-quarters l., wearing<br>helmet with three crests. | Φ-Α-Ρ-Σ<br>Horseman charging r.           | Rogers, nos. 494,<br>495                                 |
| <b>*537</b>                    |    | Σ-4593  | 17 | ↖ | 2.74   |  |   |  |
|                                |    |         |    |   |        | Similar.   | Similar.                                  | Rogers, nos. 489–<br>492, 496–507;<br><i>Cop</i> 230–233 |
| <b>538</b>                     | a  | ΛΛ-64   | 20 | ↑ | 5.81   |  |   |  |

b T-660 20 ↑ 5.27  
c H-1568 19 - 3.75

Head of Athena r., wearing Attic helmet. [Φ-A-P-Σ] Horse's head r. Rogers, no. 509

**\*539** NN-1642 10 ← 0.98

## THESSALIAN LEAGUE

196–1st century B.C.

Head of Apollo r., laur. ΘΕΣΣΑ|ΛΩΝ Athena Itonia fighting r. Rogers, nos. 5–42; *Cop* 310–317

**540** 21 coins 17–23 Av. 5.80 (17)

**\*a** NN-1992 19 ↖ 6.93 rev. at r.,  $\mathcal{R}$  (Rogers, no. 17)

**\*b** OO-14 18 ↑ 6.43 [ΦI]-ΛΟΚ|Α-ΟΡ|Σ- $\mathcal{P}$  (Rogers, nos. 29, 30)

c I-168 17 ↑ 4.44

d Σ-3490 20 ↑ 6.62 [ΦI]-ΛΟΚ (Rogers, nos. 29–32)

e Φ-36 19 ↑ 6.62 T-[I]|M-[A] (Rogers, nos. 42, 42b)

f Π-1276 19 ↑ 6.70 at l., T (cf. Rogers, no. 15)

g K-1467 21 ↑ 6.48 Kleiner 1975, p. 312, pl. 76, no. 201 (H–I 14:1)

Head of Athena r., wearing Corinthian helmet. ΘΕΣΣΑ|ΛΩΝ Horse stepping r. Rogers, nos. 43–51b; *Cop* 324–328

**541** **\*a** Γ-912 18 ↑ 5.43 obv., ΝΥΣ|ΣΑΝ|[ΔΡΟΥ] (Rogers, no. 45)

b Π-651 18 ↑ 5.41

c Θ-242 18 ↑ 3.23 Kleiner 1975, p. 307, no. 117 (H–K 12–14)

d Θ-352 16 ↑ 2.53

e ΚΤΛ-2 16 ↑ 2.60

A.D. 14–37: Tiberius

ΘΕΣΣ[ΑΛΩΝ ΣΕΒΑ]ΣΤΗΩΝ ΣΤΡΑΤΗΓΟΥ [ΑΝΤΙΓΟΝΟΥ] Rogers, no. 64; *Cop* 333; *RPC* I, 1435

Head of emperor l. Athena Itonia fighting r.

**542** Θ-857 24 ↑ 5.75

A.D. 81–96: Domitian and Domitia

[ΔΟΜΙΤΙΑΝΟΝ ΚΑΙΣΑΡΑ [ΔΟΜΙΤΙΑΝ ΣΕΒΑΣΤΗ] Rogers, nos. 88, 89; *Cop* 339

ΘΕΣΣΑΛΟΙ] Bust r. Bust r.

**543** BB-655a 19 - 4.15

A.D. 117–138: *Hadrian*

|             |         |   |  |  |
|-------------|---------|---|--|--|
|             |         | [ΑΔΡΙΑΝΟΝ ΚΑΙCΑΡΑ<br>ΘΕCΣΑΛΟΙ]<br>Bust r., laur.                | [Α OX ΝΙΚΟ-ΜΑΧΟΥ]<br>Athena Itonia fighting r. | Rogers, nos. 90, 91;<br><i>Cop</i> 340 |
| <b>544</b>  | H'-3439 | 21 ↓ 4.38   |  |  |
|             |         | [ΑΧΙΛΛ-ΛΕΥC]<br>Bust of Achilles r.,<br>wearing crested helmet. | ΝΙΚΟ-[ΜΑΧΟΥ]<br>Horse stepping r.; below, Α.   | Rogers, no. 92;<br><i>Cop</i> 341, 342 |
| <b>545</b>  | OO-698  | 17 ↓ broken   |  |  |
|             |         | [ΑΧΙΛΛ]-ΛΕΥC<br>Bust of Achilles r.,<br>wearing crested helmet. | [ΘΕ]CΣΑΛΩΝ<br>Horse stepping r.                | Rogers, no. 93;<br><i>Cop</i> 344      |
| <b>*546</b> | A-479   | 13 ↗ 2.13   |  |  |

*probably* A.D. 211–217: *Caracalla*

|            |        |   |  |  |
|------------|--------|---|--|--|
|            |        | [- - - - -]<br>Bust of emperor<br>(Caracalla?) r. | [ΚΟΙΝΟΝ ΘΕCΣΑΛΩΝ]<br>Athena Itonia fighting r. | cf. Rogers, nos. 107,<br>108; <i>Cop</i> 351 |
| <b>547</b> | ΠΘ-32a | 27 ↓ extremely worn                               |  |  |

*probably* A.D. 253–268: *Gallienus*

|            |       |   |   |   |
|------------|-------|---|---|---|
|            |       | [- - - - -]<br>Bust of emperor<br>(Gallienus?) r. | ΘΕCΣΑΛ[ΩΝ]<br>Athena Itonia fighting r. | cf. Rogers, nos. 126,<br>127; <i>Cop</i> 355, 356 |
| <b>548</b> | Ψ-321 | 24 ↓ extremely worn                               |   |   |

## ISLANDS OF THESSALY: PEPARETHOS

*3rd–2nd century* B.C.

|             |       |   |                       |                                    |
|-------------|-------|---|-----------------------|------------------------------------|
|             |       | Head of young Dionysos r.,<br>wearing ivy wreath. | Π-Ε Π-Α<br>Kantharos. | Rogers, no. 562;<br><i>Cop</i> 362 |
| <b>*549</b> | Γ-727 | 18 ↑ 3.00   |                       |                                    |

*2nd–1st century* B.C.

|            |        |                           |                  |                 |
|------------|--------|---------------------------|------------------|-----------------|
|            |        | Athena Itonia fighting r. | ΠΕ[ΠΑ]<br>Owl l. | Rogers, no. 566 |
| <b>550</b> | H-1907 | 16 ↓ 3.45                 |                  |                 |

For a coin of Peparethos in a 4th-century B.C. context, see p. 300 below. For coins of early Augustan times struck in the name of the Athenian cleruchs of the Thessalian island of Skyros, see **160**.

## ILLYRICUM

## DYRRHACHION

*2nd–1st century B.C.*

|               | Head of Dodonian Zeus r. |           | ΔΥΡ below Tripod; at l. and r.,<br>magistrate's name; all in olive<br>wreath. | <i>BMC</i> 158–169 |
|---------------|--------------------------|-----------|---|--------------------|
| <b>551</b> *a | Θ-462                    | 17 ↓ 3.36 | ΧΑΙΡΙΛ ΛΟΥ ( <i>BMC</i> 169)  |                    |
| b             | ΠΘ-297                   | 18 ↑ 3.76 | ΦΙΛΩ ΤΑ ( <i>BMC</i> 167, 168)  |                    |
| c             | A-297                    | 18 ↑ 3.90 | [ΦΙ]ΛΩ ΤΑ   |                    |
| d             | Ω-504                    | 17 - 4.81 | [ΠΟ]ΛΛΙ [ΩΝΟΣ] ( <i>BMC</i> 165)  |                    |
| e             | Σ-4885                   | 18 ↓ 2.85 |   |                    |
| f             | Γ-1617a                  | 16 ↑ 3.22 | [- - -] ΑΡΓΟ[- -  |                    |

551f comes from a context of the earlier 1st century B.C.: “Γ Martyr II, layer 4 to east of terracotta pipes.” In this layer, the latest Athenian coin, of variety **94** (99/8 B.C.), is worn to the same slight degree as the Dyrrhachion coin.

## SKODRA

*168–1st century B.C.*

|             | Head of Dodonian Zeus r. |           | [ΣΚΟΔΡΙ-ΝΩΝ]<br>Illyrian galley. | <i>BMC</i> 1 |
|-------------|--------------------------|-----------|----------------------------------|--------------|
| <b>*552</b> | ΟΟ-320a                  | 16 → 6.33 |                                  |              |

## EPEIROS

## ΝΙΚΟΠΟΛΙΣ

*A.D. 98–117: Trajan*

|             | [- - - - - -] |           | [- - - - - -]  | Oikonomidou,<br>Trajan, nos. 2–4<br>(obv.); rev. unpub-<br>lished |
|-------------|---------------|-----------|--|---|
| <b>*553</b> | E-1245        | 19 ↓ 3.37 | Bust of Trajan r., laur., cuir.<br>Emperor charging<br>on horseback r. |   |

*A.D. 117–138: Hadrian*

|             | ΑΔΡΙΑΝΟΣ ΚΑΙ[CAP] |           | ΝΕΙΚ[ΟΠ]Ο-[ΛΕΩC]  | Oikonomidou,<br>Hadrian, no. 32 |
|-------------|-------------------|-----------|---|---------------------------------|
| <b>*554</b> | NN-979            | 19 ↘ 2.68 | Bust r., laur.<br>Tyche stg. r., with<br>rudder and cornucopia. |                                 |

|                                    |         |   |  |  |
|------------------------------------|---------|---|--|--|
|                                    |         | [ΑΥΓΟΥΣΤΟΣ]<br>Head of Augustus r.                  | [ΝΕΙΚΟΠΟΛΕΩΣ]<br>Prow in form of boar's head r.  | Oikonomidou,<br>Augustus, no. 53<br>(obv.); Augustus,<br>no. 57 and Hadrian,<br>no. 5 (rev.) <sup>21</sup> |
| <b>*555</b>                        | E-155a  | 21 ← 3.01   |  |  |
| A.D. 136–137: <i>Aelius Caesar</i> |         |   |  |  |
|                                    |         | [Λ ΑΙΛΙΟΣ ΚΑΙΣΑΡ]<br>Head of Aelius r.              | [ΝΙΚΟΠΟΛΕΩΣ]<br>Galley l.  | cf. Oikonomidou,<br>Aelius Caesar,<br>nos. 12–15   |
| <b>556</b>                         | OO-726a | 17 ↘ 3.19   |  |  |
| A.D. 193–217: <i>Julia Domna</i>   |         |   |  |  |
|                                    |         | [Ι]ΟΥΛΙΑ ΔΟ[ΜΝΑ ΣΕΒ]<br>Bust r.                     | [ΝΕΚΟΠΟΛΕΩΣ] ΙΕΡΑ[C]<br>Kybele riding lion r.  | Oikonomidou, Julia<br>Domna, no. 43  |
| <b>557</b>                         | B-255a  | 22 ↑ 5.65   |  |  |
| A.D. 198–217: <i>Caracalla</i>     |         |   |  |  |
|                                    |         | [- - - - -]<br>Bust of Caracalla r.                 | [ΙΕΡΑ[C] ΝΕΙΚΟ]ΠΟΛΕΩ[C]<br>Tyche stg. r., with scepter and<br>cornucopia.                                | Oikonomidou,<br>Caracalla, no. 21  |
| <b>558</b>                         | ΠΑ-260  | 23 ↘ 7.86   |  |  |
|                                    |         | A K M AV-ANTΩ[ΝΕΙΝΟΣ]<br>Bust r., laur., dr., cuir. | ΙΕΡΑ[C] ΝΕΙ-ΚΟΠΟΛΕΩ[C]<br>Turreted Nike, walking r.,<br>holding palm and wreath;<br>at lower r., wreath. | Oikonomidou,<br>Caracalla, nos. 22,<br>23 (obv.); Julia<br>Domna, no. 25a<br>(rev.)                        |
| <b>*559</b>                        | Π-582   | 25 ↑ 6.81   |  |  |
|                                    |         | M AV ANTΩΝΕΙΝΟΥ<br>Bust r.                          | ΝΕΙΚΟΠΟΛΕΩ[C]<br>Aktia seated l., holding<br>agonistic urn and scepter.                                  | Oikonomidou,<br>Caracalla, no. 41  |
| <b>*560</b>                        | Σ-3696  | 23 ✓ 6.38   |  |  |
|                                    |         | [- - - - -]<br>Bust of Caracalla r.,<br>laur., dr.  | ΙΕΡΑ[C] ΝΕΙΚΟΠΟΛΕΩ[C]<br>Nike walking r., with globe.  | Oikonomidou,<br>Caracalla, no. 128   |
| <b>561</b>                         | ΠΘ-719a | 22 ✓ 6.48   |  |  |

<sup>21</sup> On the posthumous Augustus issues of Nikopolis, see C. M. Kraay's review of Oikonomidou, *NC*, ser. 7, 16, 1976, pp. 238–244; *RPC* I, p. 272.

A.D. 218–222: *Elagabalus*

|     |        |                        |  |               |              |
|-----|--------|------------------------|--|---------------|--------------|
|     |        | [- - - - -]            |  | [ΝΕΙΚΟ]ΠΟΛΕΩC | Oikonomidou, |
|     |        | Bust of Elagabalus r., |  | Galley r.     | Elagabalus,  |
|     |        | laur., dr.             |  |               | no. 17       |
| 562 | BB-130 | 22 ↓ 4.56              |  |               |              |

A.D. 260–268: *Salonina*

|     |         |                 |  |                            |                  |
|-----|---------|-----------------|--|----------------------------|------------------|
|     |         | [ΚΟΡ] CΑΛΩΝΙΝΑ] |  | [ΙΕΡΑC ΝΙΚΟΠΟΛΙ]           | Oikonomidou,     |
|     |         | Bust r.         |  | Nike walking l.; at l., Δ. | Salonina, no. 96 |
| 563 | Δ'-482a | 20 ↓ 5.55       |  |                            |                  |

EPEIROTE LEAGUE

234–168 B.C.

|      |       |                             |  |                               |                               |
|------|-------|-----------------------------|--|-------------------------------|-------------------------------|
|      |       | Head of Dione r., wearing   |  | [ΑΠ]ΕΙΡΩΤΑΝ                   | P. Franke, <i>Die Antiken</i> |
|      |       | stephanos and veil; behind, |  | Tripod; all in laurel wreath. | <i>Münzen von Epirus,</i>     |
|      |       | ⚔.                          |  |                               | Wiesbaden 1961,               |
|      |       |                             |  |                               | no. 400 (this coin)           |
| *564 | E-887 | 22 ← 4.80                   |  |                               |                               |

|      |       |                             |  |                          |                     |
|------|-------|-----------------------------|--|--------------------------|---------------------|
|      |       | Bust of Artemis r.; bow and |  | ΑΠΕΙΡΩΤΑΝ                | Franke (under 564), |
|      |       | quiver at shoulder;         |  | Spearhead; all in laurel | nos. 610–612        |
|      |       | at l., ⚔; at r., ⚔.         |  | wreath.                  |                     |
| *565 | O-475 | 21 ↗ 7.69                   |  |                          |                     |

|     |       |                           |  |                      |                     |
|-----|-------|---------------------------|--|----------------------|---------------------|
|     |       | Head of young Herakles r. |  | ΑΠΕΙΡΩΤΑΝ            | Franke (under 564), |
|     |       |                           |  | Club; all in wreath. | nos. 663–676        |
| 566 | T-28a | 12 ✓ 1.69                 |  |                      |                     |

KORKYRA

4th century B.C.

|     |          |                           |         |                  |             |
|-----|----------|---------------------------|---------|------------------|-------------|
|     |          | Head of young Herakles r. |         | Ο-Π or Κ-Ο       | BMC 101–116 |
|     |          |                           |         | Bunch of grapes. |             |
| 567 | a A-323  | 17 - 2.56                 | Ο-Π     |                  |             |
|     | b A-415  | 15 ↑ 3.60                 | ethnic? |                  |             |
|     | c Δ-234  | 16 ↑ 2.89                 | same    |                  |             |
|     | d Σ-3175 | 17 ↑ 2.90                 | same    |                  |             |

300–229 B.C.

|     |       |                   |  |                  |         |
|-----|-------|-------------------|--|------------------|---------|
|     |       | Prow of galley r. |  | Bunch of grapes. | BMC 281 |
| 568 | K-154 | 16 ↓ 1.71+        |  |                  |         |

229–48 B.C.

|               |        |                            |  |   |                                      |
|---------------|--------|----------------------------|--|---|--------------------------------------|
|               |        | Head of Poseidon r., laur. |  | Ρ-Ο<br>Bull's head; all in laurel wreath.                 | <i>BMC</i> 449–468                   |
| <b>569</b>    | ΠΠ-440 | 17 ↑ 3.40                  |  |   |                                      |
|               |        | [ΚΟΡΚΥ ΡΑΙΩΝ]<br>Aplustre. |  | ΝΙΚΑ ΝΩΡ  | <i>BMC</i> 521–523                   |
| <b>570</b>    | ΣΑ-402 | 17 → 2.85                  |  |   |                                      |
|               |        | Head of young Herakles r.  |  | Forepart of galley r.                                     | <i>BMC</i> 482–550,<br><i>passim</i> |
| <b>571</b> *a | ΔΕ-6   | 20 ↑ 7.81                  |  | rev. above, Ρ ΦΙΛΩΝ ( <i>BMC</i> 536, 537)                |                                      |
| b             | ΠΠ-102 | 22 ↓ 8.84                  |  | same  |                                      |
| c             | ΟΟ-673 | 20 ↑ 7.63                  |  | same  |                                      |
| d             | Μ-430  | 24 ↑ 6.98                  |  | same  |                                      |
| e             | Ζ-2096 | 21 ↑ 7.15                  |  | rev. above, [ΚΟΡΚΥ ΡΑΙΩΝ]; below, illegible name (H 12:4) |                                      |
| f             | Τ-651  | 19 ↑ 5.94                  |  | rev. same   |                                      |
| g             | Α-976  | 20 ↓ 3.66                  |  | rev. same   |                                      |
| h             | ΣΑ-416 | 20 - 4.87                  |  |   |                                      |

|             |       |  |  |                        |                    |
|-------------|-------|--|--|------------------------|--------------------|
|             |       | Bust of Poseidon r.,<br>trident at shoulder. |  | [ΚΟΡ] ΚΥΡΑ<br>Amphora. | <i>BMC</i> 619–621 |
| <b>*572</b> | ΑΡ-50 | 16 ↓ 3.68                                    |  |                        |                    |

## ΑΚΑΡΝΑΝΙΑ

## ΛΕΥΚΑΣ

after 167 B.C.

|               |        |                           |  |  |                    |
|---------------|--------|---------------------------|--|--|--------------------|
|               |        | Head of young Herakles r. |  | ΛΕΥΚΑΔΙΩ[N] and wheat<br>ear above Club r.; below,<br>ΔΗΜΑΡΕΤΟΣ; all in oak<br>wreath. | <i>BMC</i> 145–148 |
| <b>573</b> *a | ΠΘ-358 | 19 ↖ 3.45                 |  |  |                    |
| b             | ΒΕ-487 | 18 - 2.60                 |  |  |                    |

## ΜΕΔΟΝ

4th century B.C.

|             |        |   |  |                             |                                 |
|-------------|--------|---|--|-----------------------------|---------------------------------|
|             |        | Head of Athena r., wearing<br>Attic helmet. |  | ΜΕ upwards behind<br>Owl r. | cf. <i>BMC</i> 6, 7<br>(owl 1.) |
| <b>*574</b> | ΒΓ-921 | 14 → broken                                 |  |                             |                                 |

## THYRRHEION

4th century B.C.

|      |       |  |      |  |  |        |
|------|-------|--|------|--|--|--------|
|      |       | Head of Athena r., wearing Attic helmet. |      | ΘΥΡ at lower r. of Owl r.; at l. boukranion. |  | BMC 10 |
| *575 | I-812 | 14 ↘                                     | 2.50 |  |  |        |

## AITOLIA

## AITOLIAN LEAGUE

late 4th century B.C.<sup>22</sup>

|     |         |                                     |      |                                |  |           |
|-----|---------|-------------------------------------|------|--------------------------------|--|-----------|
|     |         | Head of Aitolia r., wearing kausia. |      | ΑΙΤΩ ΛΩΝ<br>Kalydonian boar r. |  | BMC 27–33 |
| 576 | BB-1219 | 18 ←                                | 3.33 |                                |  |           |

|     |   |          |      |                            |                    |           |
|-----|---|----------|------|----------------------------|--------------------|-----------|
|     |   | Similar. |      | [ΑΙΤΩ ΛΩΝ]<br>Spearhead l. |                    | BMC 35–37 |
| 577 | a | H'-3562  | 18 ↖ | 5.04                       | no details         |           |
|     | b | ΠΘ-878   | 17 - | 4.29                       | same               |           |
|     | c | Ψ-242    | 16 ↖ | -                          | same; heavily worn |           |

ca. 300–191 B.C.

|      |        |                    |      |                                       |  |        |
|------|--------|--------------------|------|---------------------------------------|--|--------|
|      |        | Young male head r. |      | [Α]ΙΤΩ ΛΩΝ<br>Trophy; at lower l., ✱. |  | BMC 39 |
| *578 | ΠΠ-851 | 15 →               | 3.45 |                                       |  |        |

|     |     |                              |            |  |  |           |
|-----|-----|------------------------------|------------|--|--|-----------|
|     |     | Similar.                     |            | ΑΙΤΩ ΛΩΝ<br>Spearhead and jawbone of boar; at l., bunch of grapes. |  | BMC 43–62 |
| 579 | *a  | BB-10                        | 19 ↗       | 4.29   |  |           |
|     | b   | Σ-4742                       | 17 ↘       | 3.15   | between spearhead and jawbone, ΦΙ or ΦΙΓ |           |
|     | c   | A-1272                       | 17 ✓       | broken   | ΚΛΕΙ (BMC 58)                            |           |
|     | d   | AA-982                       | 16 ✓       | broken   | ✱ (BMC 51)                               |           |
|     | e   | ΠΠ-942                       | 20 ✓       | 4.40   |  |           |
|     | f   | T-67a                        | 16 -       | 3.64   |  |           |
|     | g   | Γ-540                        | 16 ↑       | 4.23   |  |           |
|     | h–k | H-144, NN-139, O-440, Ω-354, | all broken |  |  |           |

<sup>22</sup> Picard, *Antre*, pp. 284–285, whose chronology is followed also for the other Aitolian League varieties.



*early 2nd century B.C.?*

|            |    |  |           |  |                  |
|------------|----|--|-----------|--|------------------|
|            |    | Head of Athena r., wearing<br>Corinthian helmet. |           | ΑΙΤΩ ΛΩΝ<br>Herakles stg. half l.        | <i>BMC</i> 64–72 |
| <b>580</b> | a  | Θ-288  | 18 ↖ 4.25 | rev. above, Ῥ; at l., Π ( <i>BMC</i> 64) |                  |
|            | *b | Φ-103  | 18 ↘ 4.50 |  |                  |
|            | c  | H'-3542  | 17 ← 3.87 |  |                  |
|            | d  | Z-2798a  | 20 ↑ 4.10 |  |                  |

## LOKRIS

## LOKRIAN LEAGUE

*338–ca. 300 B.C.*

|            |    |  |                     |   |                  |
|------------|----|--|---------------------|---|------------------|
|            |    | Head of Athena r., wearing<br>Corinthian helmet. |                     | ΛΟΚ-ΡΩΝ<br>Bunch of grapes.                           | <i>BMC</i> 57–68 |
| <b>581</b> |    | 14 coins   | 13–15 Av. 1.75 (11) |   |                  |
|            | *a | Π-59   | 14 ↑ 1.52           | obv. above, KA ( <i>BMC</i> 66); <i>GRC</i> , fig. 17 |                  |
|            | b  | ΠΘ-514   | 13 ↑ 1.17           |   |                  |
|            | c  | ΞΞ-72  | 13 ↖ 1.42           | <i>EABC</i> , p. 153, no. 71 (A 18:8)                 |                  |

*ca. 300 B.C.*

|            |  |          |           |                                   |                  |
|------------|--|----------|-----------|-----------------------------------|------------------|
|            |  | Similar. |           | ΛΟΚΡ-ΕΠΙΚΝ[A]<br>Bunch of grapes. | <i>BMC</i> 71–76 |
| <b>582</b> |  | I-567    | 13 ↑ 1.94 |                                   |                  |

[**581**, **582**] 7 coins of uncertain Athena/Grapes variety.*ca. 300–272 B.C.*

|            |    |  |                     |                                       |                  |
|------------|----|--|---------------------|---------------------------------------|------------------|
|            |    | Head of Apollo l., laur.                         |                     | Λ-O<br>Bunch of grapes.               | <i>BMC</i> 51–56 |
| <b>583</b> |    | ΠΘ-195a  | 15 ↙ 2.20           |                                       |                  |
|            |    | Head of Athena r., wearing<br>Corinthian helmet. |                     | Λ-O<br>Bunch of grapes.               | <i>BMC</i> 77–80 |
| <b>584</b> |    | 19 coins   | 14–16 Av. 2.23 (14) |                                       |                  |
|            | *a | ΠΠ-841   | 14 ↑ 2.34           | rev. at l., greave ( <i>BMC</i> 80)   |                  |
|            | *b | ΣΤ'-506  | 15 → 2.61           | at r., ivy leaf ( <i>BMC</i> 79)      |                  |
|            | c  | Ξ-518  | 15 - 2.23           | same                                  |                  |
|            | d  | ΞΞ-77d   | 16 ↑ 2.31           | <i>EABC</i> , p. 153, no. 72 (A 18:8) |                  |

*196–146 B.C.*

|            |   |          |           |                                 |                  |
|------------|---|----------|-----------|---------------------------------|------------------|
|            |   | Similar. |           | [ΟΠΟΥΝΤΙΩΝ]<br>Bunch of grapes. | <i>BMC</i> 81–84 |
| <b>585</b> | a | I-1635   | 17 ↖ 4.26 |                                 |                  |

- b NN-1396 17 - 4.35  
c ΠΘ-537 18 - 4.62

Head of Apollo r., laur.

[ΟΠΟΥΝΤΙΩΝ] behind  
Hero stg. r., with sword and  
lance, feeding snake.

*Cop* 79

- 586 OO-948 19 - 5.75

For the dating of varieties 581–584, see Picard, *Antre*, pp. 287–288, following Jacqueline Humphris' Lokrian mint study currently in preparation. We thank Mme. Humphris for her assistance in classifying the more worn Agora specimens.

The two Lokrian coins from the Agora A 18:8 hoard of the 260's, 581c and 584d, are heavily and identically worn, suggesting that the second coin was minted probably not much after the start of the 3rd century.

## PHOKIS

### PHOKIAN LEAGUE

*mid-4th century–346 B.C.*

Facing bull's head.

ΦΩ in laurel wreath.

*BMC* 94–100

- 587 a Ξ-207 18 - 4.82  
b NN-1843 12 - 1.97

*BMC* 94–96  
small module: *BMC* 97–100

*late 4th–earlier 3rd century B.C.*

Helmeted head of Athena,  
facing.

Φ or ΦΩ in olive wreath.

*BMC* 66–77

- 588 22 coins 12–15 Av. 1.70 (14)  
\*a Θ-335 14 ↓ 1.51  
\*b NN-1828 12 ↓ 1.93  
c ΞΞ-25a 14 ↑ 1.30  
d ΞΞ-25b 13 ↑ 1.94  
e ΞΞ-43a 12 ↑ 1.50  
f ΞΞ-43b 13 ↑ 1.62

(H–K 12–14)<sup>23</sup>  
Kleiner 1976, p. 16, no. 12 (A–B 19–20:1)  
*EABC*, p. 153, pl. 17, no. 73 (A 18:8)  
*EABC*, no. 74 (A 18:8)  
*EABC*, pl. 17, no. 75 (A 18:8)  
*EABC*, no. 76 (A 18:8)

For the chronology of the two varieties see Picard, *Antre*, pp. 281–283. The Agora A 18:8 hoard of the 260's produced four pieces of the facing Athena variety (588c–f) in a notably worn (w4) condition.

## DELPHI

*A.D. 117–138: Hadrian*

ΑΥΤ[Ο ΚΑΙ ΤΡΑΙΑΝΟΣ]-  
ΑΔΡΙΑΝΟΣ ΑΥ[  
Bust r., laur., cuir.

ΔΕΛ-ΦΩΝ around  
Laurel wreath, within which  
ΠΥ|ΘΙΑ.

*BMC* 24

- \*589 ΚΤΑ-19 21 → 3.59

<sup>23</sup> For the coin mistakenly listed as Θ-335 in Kleiner 1975, p. 308, no. 150, see 723A (Sikyon: Θ-450). At the time Kleiner was preparing his paper, Θ-335 and Θ-450 had become transposed.

after A.D. 141: deified Faustina I

|      |        |                           |              |   |            |
|------|--------|---------------------------|--------------|---|------------|
|      |        | ΘΕΑ ΦΑΥ-CTEINA<br>Bust r. |              | ΔΕΛΦΩΝ below Temple of<br>Apollo: side and front, with<br>statue of Apollo shown<br>within. | BMC 33, 34 |
| *590 | NN-978 | 24 ↘ 8.02                 | GRC, fig. 23 |   |            |
|      |        | Similar.                  |              | ΔΕΛΦ[ΩΝ]<br>Bust of Apollo with long<br>hair, r.  | BMC 41     |
| *591 | II-447 | 20 ↑ 6.00                 |              |   |            |

## BOIOTIA

## BOIOTIAN LEAGUE

338–early 3rd century B.C.<sup>24</sup>

|     |          |                     |                                    |  |           |
|-----|----------|---------------------|------------------------------------|--|-----------|
|     |          | Boiotian shield.    |                                    | ΒΟΙΩΤΩΝ at l. of<br>Ornamented trident;<br>at r., dolphin. | BMC 57–62 |
| 592 | 33 coins | 12–14 Av. 1.98 (27) |                                    |  |           |
| *a  | II-536   | 13 ↑ 1.36           | rev., symbol?; GRC, fig. 17        |  |           |
| *b  | ΠΘ-768   | 13 ↑ 2.69           | symbol?                            |  |           |
| *c  | K-1320   | 12 ↑ 2.34           | symbol?                            |  |           |
| *d  | P-134    | 14 / 2.58           | symbol?                            |  |           |
| e   | P-1602   | 13 ↑ 2.06           | at lower r., ivy leaf (BMC 57, 58) |  |           |
| f   | Δ-165    | 14 - 1.20+          | at lower r., K                     |  |           |

288–244 B.C.<sup>25</sup>

|     |           |  |                                     |                             |            |
|-----|-----------|--|-------------------------------------|-----------------------------|------------|
|     |           | Head of Athena r., wearing<br>Corinthian helmet. |                                     | ΒΟΙΩΤΩΝ at r. of<br>Trophy. | BMC 64, 65 |
| 593 | a NN-1106 | 23 ↑ 5.64  | Kleiner 1976, p. 20, no. 2 (B 20:9) |                             |            |
|     | b ΠΙΙ-652 | 23 - 5.48  |                                     |                             |            |
|     | c NN-1369 | 21 ↑ 5.78  |                                     |                             |            |
|     | d ΓΓ-108  | 19 ↑ 5.71  |                                     |                             |            |
|     | e Ω-188   | 18 ↑ 4.43  | smaller flan and dies than 593a–d   |                             |            |

<sup>24</sup> See Picard, *Antre*, p. 289, who observes that Head's (1881, p. 254) 338–315 B.C. dating must be extended to account for specimens in Boiotian tombs of the second quarter of the 3rd century (C. Vatin, P. Bruneau, C. Rolley, and T. Hackens, *Médéon de Phocide*, V, *Tombs hellénistiques, Objets de métal—monnaies*, Paris 1976, pp. 21, 127, coin M 79).

<sup>25</sup> Head 1881, pp. 258–259. Relative wear of specimens in *IGCH* 229 and 233 confirm the priority of Athena/Trophy (593) to the Facing Demeter or Kore head/Poseidon overstrikes (595). On the other hand, it is unlikely that the trophy reverse of the former could belong after the Aitolians defeated the Boiotians in 246 and 244 B.C.

Head of young Dionysos r. [ΒΟΙΩ]Τ[ΩΝ] at r. of Apollo with bow seated l. on cippus; behind on cippus, tripod; on side of cippus, trident r.; [at l., wreath]. *BMC 74*

\*594  $\Xi\Xi$ -82a 17 → 3.04

*later 3rd (or early 2nd?) century B.C.*

Head of Demeter or Kore, three-quarters facing l., wearing wheat wreath. ΒΟΙΩΤΩΝ behind Poseidon stg. l., with trident, resting r. foot on rock. *BMC 81–89*

595 122 coins 16–20 Av. 3.54 (52)  
 \*a ΓΓ-23 20 ← 3.77 traces of undertypes; *GRC*, fig. 5  
 \*b ΠΘ-357 20 ↓ 3.98 traces of undertypes  
 \*c Γ-164 18 ↘ 3.61 same  
 \*d AA-984 16 ↓ 2.89  
 e X-102 18 - - damaged (N 18:3)

This entire coinage was overstruck on Herakles head/Horseman bronzes of Antigonos Gonatas (509). Assuming that the Antigonid coins date from the reign of Antigonos Doson, Svoronos (1908, pp. 230–232) thought they were given by the king as a gift to the Boiotians, who fought with him against Sparta in the late 220's, and that the overstriking was a routine conversion of foreign into local money. Because of the presence of the overstruck coins in two hoards that date from the second quarter of the 2nd century (*IGCH* 229 and 233), Hackens (1969, pp. 727–728) preferred to date the overstriking around 168, while Crawford (*CMRR*, pp. 124, 316), noting the wear of the hoarded coins, inclines to an earlier date, “between the late third century and 168.” Since the Macedonian undertypes almost certainly antedate Doson, however, and since the Boiotian types used for the bronze first appear on drachms as early as the middle of the 3rd century (Picard, *Chalcis*, p. 162; *idem*, *Antre*, p. 289), a plausible case can be made that the Macedonian coins entered Boiotia during the reign of Antigonos Gonatas or Demetrios II (who occupied the country after 236) and that the overstriking took place during the sharp anti-Macedonian reaction upon Demetrios' death in 229 (see Hammond and Walbank [above under 509], pp. 326–329, 341). This reconstruction at least has the advantage of close parallelism with Athens, where a similarly tremendous influx of Gonatas' bronze accompanied Macedonian occupation but was eventually overstruck after the occupation ended (pp. 36, 51–52 above).

*196–146 B.C.*

Boiotian shield. [ΒΟΙΩΤΩΝ] at r. of Nike stg. l. with wreath and trident. *BMC 105–107*

596 a Θ-696 15 ↑ 3.08  
 b ΠΘ-600a 14 ↑ 3.67

Boiotian shield. ΒΟΙΩΤΩΝ at l. of Trident; at r., dolphin. *BMC 108–111*

597 6 coins 12–13 Av. 1.60 (5)  
 \*a Σ-3341 13 \ 1.24

General confirmation of Head's 196–146 dating for 596 comes from the Agrinion hoard (*IGCH* 271) with its fresh Boiotian League drachms, which have an identical Nike-left reverse. Whether 597 is to be similarly dated is less clear. The coins are a revival of 592 but with a plainer, squared trident and no issue symbol.

[592 or 597] 6 coins of uncertain Shield/Trident variety.

ORCHOMENOS

*2nd–1st century B.C.?*

|            |         |  |  |  |                   |
|------------|---------|--|--|--|-------------------|
|            |         | Veiled head of Hera r;<br>scepter over shoulder. |  | E-P [X-O]<br>Tripod; all in laurel wreath. | <i>BMC</i> 39, 40 |
| <b>598</b> | NN-1906 | 12 ↗ 1.59  |  |  |                   |

TANAGRA

*1st–2nd century after Christ*

|            |        |                                   |  |                             |               |
|------------|--------|-----------------------------------|--|-----------------------------|---------------|
|            |        | TANA ΓΡΑΙ ΩΝ<br>in laurel wreath. |  | T-A N-A<br>Winged caduceus. | <i>BMC</i> 50 |
| <b>599</b> | Z-3011 | 15 ← 2.95                         |  |                             |               |

*1st century after Christ*

|             |        |   |  |  |                    |
|-------------|--------|---|--|--|--------------------|
|             |        | Head of Julio-Claudian<br>emperor(?) r.; border<br>of dots. |  | T-A N-A<br>Bearded male, nude, stg.,<br>facing, holding spear in r. hand<br>and sword on shield resting<br>on ground in l. | <i>RPC</i> I, 1322 |
| <b>*600</b> | K-1469 | 12 ↑ 1.16   |  |  |                    |

*A.D. 5–19: Germanicus*

|            |            |                         |  |  |  |
|------------|------------|-------------------------|--|--|--|
|            |            | [ΓΕΡΜΑΝΙΚΟΣ]<br>Head r. |  | T-A N-A<br>Apollo stg., facing,<br>holding branch and bow. | <i>BMC</i> 57, 58;<br><i>RPC</i> I, 1318 |
| <b>601</b> | *a Σ-1036a | 16 ↑ 3.04               |  |  |  |
|            | b OO-447   | 14 ↑ 2.57               |  |  |  |

*A.D. 14–37: Tiberius*

|            |           |                             |                                  |                        |                                      |
|------------|-----------|-----------------------------|----------------------------------|------------------------|--------------------------------------|
|            |           | TΙΒΕΡΙ-ΟC ΚΑΙCΑΡ<br>Head r. |                                  | TANA ΓΡΑΙΩΝ<br>Tripod. | <i>BMC</i> 55;<br><i>RPC</i> I, 1317 |
| <b>602</b> | *a OO-273 | 18 ↓ 5.06                   |                                  |                        |                                      |
|            | *b BE-541 | 19 ↖ 5.80                   | rev. cmk.: tripod in incuse oval |                        |                                      |
|            | c K-433a  | 19 ← 6.29                   |                                  |                        |                                      |
|            | d Z-2944  | 19 → 5.69                   |                                  |                        |                                      |

A.D. 161–180: *Marcus Aurelius*

|     |       |                               |      |  |                |
|-----|-------|-------------------------------|------|--|----------------|
|     |       | [- - - - -]                   |      | TΑΝΑΓΡΑ[ΙΩΝ] at l. of  | <i>Cop</i> 240 |
|     |       | Head of M. Aurelius r., laur. |      | Hermes stg. r. before tree,<br>on which eagle; at r., altar. |                |
| 603 | Σ-457 | 27 ↑                          | 9.55 |  |                |

## THEBES

## 378–338 B.C.

|     |        |                           |      |   |                     |
|-----|--------|---------------------------|------|---|---------------------|
|     |        | Head of young Herakles r. |      | Club and bow; above, [ΣΑ],<br>below ΦΕΡΓ. | <i>BMC</i> 184, 185 |
| 604 | BB-310 | 14 ✓                      | 2.11 |   |                     |

## 315–288 B.C.

|     |           |          |              |                                     |                    |
|-----|-----------|----------|--------------|-------------------------------------|--------------------|
|     |           | Similar. |              | ΘΗΒΑΙΩΝ between<br>Thyrso and club. | <i>BMC</i> 201–206 |
| 605 | 8 coins   | 11–14    | Av. 1.88 (7) |                                     |                    |
|     | *a Σ-4323 | 13 ←     | 2.41         |                                     |                    |
|     | *b Δ-268  | 12 ←     | 1.47         |                                     |                    |
|     | c Γ-1055  | 14 ↗     | broken       | (E 14:3)                            |                    |

## THESPIAI

## ca. 210–208 B.C.

|     |           |  |              |   |                  |
|-----|-----------|--|--------------|---|------------------|
|     |           | Head of Muse r., wearing<br>modius and veil, laur. |              | ΘΕΣΠΙ ΕΩΝ<br>Lyre; all in laurel wreath.                | <i>BMC</i> 14–25 |
| 606 | 8 coins   | 14–16  | Av. 3.75 (8) |   |                  |
|     | *a Σ-6461 | 16 ✓   | 3.89         |   |                  |
|     | *b K-38   | 16 ✓   | 4.72         |   |                  |
|     |           | Same.  |              | Same, except no wreath.                                 | <i>BMC</i> 26    |
| 607 | *a K-1282 | 12 ✓   | 1.45         | (from fill containing Athenian bronze to the 80's B.C.) |                  |
|     | b Σ-4753  | 12 ←   | 1.64         |   |                  |

The above dating is that of A. Schachter, "A Note on the Reorganization of the Thespian Museia," *NC*, ser. 7, 1, 1961, pp. 67–70. A specimen of 606 has been recovered from a pre-146 B.C. well deposit at Corinth (Price 1967, p. 377, no. 62); another was overstruck in an emission of Sikyon, dated probably ca. 200 B.C. (Warren 1984, p. 2, no. 7.C.xiv).

A.D. 81–96: *Domitian*

|     |          |                           |      |                                 |                      |
|-----|----------|---------------------------|------|---------------------------------|----------------------|
|     |          | [- - - - -]               |      | [ΘΕΣΠΙ-ΕΩΝ]                     | cf. <i>BMC</i> 30–32 |
|     |          | Head of Domitian r., rad. |      | Apollo seated r., holding lyre. |                      |
| 608 | a OO-799 | 15 ✓                      | 3.20 |                                 |                      |
|     | b Σ-6323 | 15 ↗                      | 2.67 | obv. head may be laureate       |                      |

|   |         |    |   |      |                                   |
|---|---------|----|---|------|-----------------------------------|
| c | ΒΓ'-432 | 14 | ↖ | 2.40 | obv. head radiate; rev. illegible |
| d | ΠΘ-396a | 15 | - | 3.23 | same                              |

EUBOIA<sup>26</sup>

## EUBOIAN LEAGUE

348–338 B.C.

| UNIT       |   |                         |    |  |  |
|------------|---|-------------------------|----|--|--|
|            |   | Head of nymph Euboia r. |    | [EYB] Protome of bull r., head facing. | Picard, <i>Chalcis</i> , p. 168, no. 5 |
| <b>609</b> | a | ΒΔ-482                  | 14 | ↑                                      | 1.45                                   |
|            | b | T-857                   | 13 | -                                      | -                                      |

304–ca. 290 B.C.

| AR DRACHM   |  |   |    |  |   |
|-------------|--|---|----|--|---|
|             |  | Head of nymph Euboia l.                       |    | [E Y] above Protome of bull r., head facing; at r., symbol(?). | Picard, <i>Chalcis</i> , pp. 155–156, nos. 9–12       |
| <b>*610</b> |  | T-1512  | 15 | ↑  | broken  |
| QUADRUPLE   |  |   |    |  |   |
|             |  | Bull recumbent l.                             |    | [EY-BO-EΩN] below Two bunches of grapes on a branch.           | Picard, <i>Chalcis</i> , pp. 168–169, nos. 13–19      |
| <b>611</b>  |  | I-328   | 21 | ↑  | 6.92  |
| DOUBLE      |  |   |    |  |   |
|             |  | Bull stg. l.; [above, star; below, monogram]. |    | E-Y below Bunch of grapes; [above, star].                      | Picard, <i>Chalcis</i> , p. 170, no. 20 <sup>27</sup> |
| <b>*612</b> |  | Γ-969   | 14 | ✓  | 2.40  |

ca. 253–245 B.C.

| UNIT       |          |              |               |                                    |   |
|------------|----------|--------------|---------------|------------------------------------|---|
|            |          | Bull stg. r. |               | EYBO<br>Bunch of grapes on branch. | Picard, <i>Chalcis</i> , pp. 170–171, nos. 22–26                              |
| <b>613</b> | 24 coins | 12–15        | Av. 1.85 (15) |                                    |   |
|            | a        | Γ-1063       | 13            | ↑                                  | 1.74  |
|            | b        | NN-2103      | 14            | ↑                                  | 2.18  |
|            |          |              |               |                                    | rev. below, EY-BO (no symbol) (Picard, <i>Chalcis</i> , no. 22) (E 14:3) same |

<sup>26</sup> For the chronology followed below, see Picard, *Chalcis*, especially the “Tableau des monnayages eubéens (IV<sup>e</sup>–II<sup>e</sup> siècle),” facing p. 350. The denominational nomenclature is also Picard’s. His “unit”, “double unit”, and “quadruple unit” denote the chalkous, the dichalkon, and the hemibol (note 62 above, p. 38).

<sup>27</sup> With W. P. Wallace, *The Euboian League and Its Coinage*, New York 1956, p. 128, no. 3, pl. XIV:11.

|    |         |    |   |       |   |
|----|---------|----|---|-------|---|
| c  | OO-412  | 12 | ↑ | 1.84  | same  |
| d  | NN-1990 | 12 | ↑ | 1.98  | rev. below, [E]-Y   |
| e  | AA-581  | 13 | ↑ | 1.78  | obv. above, club; rev. at r. EYBO downwards (Picard, <i>Chalcis</i> , no. 23)   |
| f  | NN-1484 | 12 | ↑ | 1.62  | similar, with leaf on grape branch at l.  |
| g  | Θ-399   | 13 | ← | 1.95  | obv. above, sword; rev. at r., EYBO downward (Picard, <i>Chalcis</i> , no. 26). Kleiner 1975, p. 307, no. 123 (H-K 12-14) |
| h  | OO-750  | 13 | ↑ | 1.85  | same obv. and rev.  |
| i  | Ω-512   | 14 | ↑ | 1.90  | obv. above, sword; rev. at r., trophy(?) ( <i>BMC</i> 22)   |
| j  | ΛΛ-222  | 13 | ↗ | 2.35  | obv. at r., thymiaterion(?); rev. below, EY-[BO] ( <i>BMC</i> 28)   |
| *k | HH-283  | 13 | ↑ | 1.60  | rev. at l., leaf on grape branch  |
| *l | Ω-471   | 12 | ↑ | 1.41+ | rev. at l., star(?)   |
| *m | A-1065  | 12 | ↑ | 2.11  | rev. at r., EYB[ downwards  |

## 191-170 B.C.

## DOUBLE UNIT

|            |           |       |   |              |                       |  |  |
|------------|-----------|-------|---|--------------|-----------------------|--|--|
|            |           |       |   |              | Veiled female head r. | EYBO  EΩN  | Picard, <i>Chalcis</i> ,<br>pp. 194-195,<br>nos. 29-38 |
|            |           |       |   |              |                       | Bull butting r.  |  |
| <b>614</b> | 6 coins   | 16-18 |   | Av. 3.94 (4) |                       |  |  |
|            | *a HH-322 | 18    | ✓ | 3.80         |                       | rev. in ex. at r., wheat ear (Picard, <i>Chalcis</i> , no. 37); <i>GRC</i> , fig. 17 |  |
|            | *b E-1611 | 17    | ↑ | 3.92         |                       | rev. symbol effaced  |  |
|            | c NN-1088 | 17    | ↖ | 4.93         |                       | same; Kleiner 1976, p. 20, no. 5 (B 20:9)  |  |

## before 146 B.C.

|            |        |    |   |      |                   |              |                             |
|------------|--------|----|---|------|-------------------|--------------|-----------------------------|
|            |        |    |   |      | Head of Hermes r. | EY[BO]  EΩN  | <i>BMC</i> 48 <sup>28</sup> |
|            |        |    |   |      |                   | Wheat ear r. |                             |
| <b>615</b> | E-1494 | 12 | ↑ | 1.64 |                   |              |                             |

## CHALKIS

Coins catalogued with Agora inventory numbers in Picard, *Chalcis* are referenced in italics.

## 338-308 B.C.

|            |           |    |   |        |      |  |  |  |
|------------|-----------|----|---|--------|------|--|--|--|
|            |           |    |   |        | UNIT | Bust of Hera facing,<br>wearing diadem with five<br>disks, resting on Ionic capital. | XAA                                    | Picard, <i>Chalcis</i> ,<br>nos. 12-22 |
|            |           |    |   |        |      |  | Eagle holding snake;<br>at r., symbol. |  |
| <b>616</b> | *a ΓΓ-110 | 13 | ↑ | 2.04   |      | trophy symbol (Picard, <i>Chalcis</i> , p. 48, pl. XI, no. 15)                       |  |  |
|            | b I-110   | 13 | ↑ | broken |      | cornucopia (Picard, <i>Chalcis</i> , p. 49, no. 17)                                  |  |  |
|            | c NN-2056 | 14 | ↑ | broken |      | star (Picard, <i>Chalcis</i> , p. 50, no. 19)  |  |  |
|            | *d ΣΤ-380 | 13 | ↑ | 1.77   |      | no symbol (Picard, <i>Chalcis</i> , p. 51, no. 20)                                   |  |  |
|            | e BB-638  | 13 | ↓ | 2.04   |      | same   |  |  |
|            | f B'-1034 | 13 | ↗ | 1.58   |      | same   |  |  |

<sup>28</sup> Cf. Wallace (note 27 above, p. 208), pp. 130-131, pl. XV:21, which, like the *BMC*, also puts this rare variety at the end of the Euboian League coinage.



|  |         |    |   |        |  |
|--|---------|----|---|--------|--|
| g                                      | BΔ-343  | 13 | ↑ | 1.99   | same   |
| h                                      | H'-3301 | 14 | ↗ | 1.43   | same   |
| Obv. below, collar in place of capital |         |    |   |        |  |
| *i                                     | KTA-106 | 12 | ↑ | 1.75   | no symbol (Picard, <i>Chalcis</i> , p. 53, pl. XI, no. 21) |
| j                                      | ΠΘ-644  | 13 | ↖ | broken | no symbol (Picard, <i>Chalcis</i> , p. 53, no. 21)         |
| k                                      | ΞΞ-50   | 13 | ↑ | 1.11   | same; <i>EABC</i> , p. 153, pl. 17, coin U:73 (A 18:8)     |

## 290–273 B.C.

|            |         |          |   |          |  |
|------------|---------|----------|---|----------|--|
|            |         | Similar. |   | Similar. | Picard, <i>Chalcis</i> ,<br>p. 71, no. 33f |
| <b>617</b> | NN-1887 | 13       | ↑ | 1.23     | trophy symbol                              |

## 245–196 B.C.

|            |  |          |   |          |   |
|------------|--|----------|---|----------|---|
|            |  | Similar. |   | Similar. | Picard, <i>Chalcis</i> ,<br>nos. 43–53                                |
| <b>618</b> |  |          |   |          |   |
|            | UNIT   |          |   |          |   |
| a          | ΠΠ-1056  | 13       | - | 2.09     | bunch of grapes (Picard, <i>Chalcis</i> , p. 79, no. 43)              |
| *b         | Λ-224  | 12       | ✓ | 1.29     | herm (Picard, <i>Chalcis</i> , p. 80, pl. XVII, no. 44)               |
| c          | KK-331   | 13       | ↓ | 1.20     | herm (Picard, <i>Chalcis</i> , p. 80, no. 44)                         |
| d          | Δ-155  | 13       | ↑ | 1.76     | wreath (Picard, <i>Chalcis</i> , p. 81, pl. XVII, no. 46)             |
| e          | ZZ-135   | 13       | ✓ | 1.13     | rose (Picard, <i>Chalcis</i> , p. 82, pl. XVII, no. 48)               |
|            | DOUBLE   |          |   |          |   |
| f          | Γ-873  | 18       | ↓ | 3.83     | ΦΙΛΙΣ-ΑΑΘ (Picard, <i>Chalcis</i> , p. 86, no. 53 [14-Ζ])             |
| *g         | Ο-39   | 17       | ✓ | 3.80     | ΦΙΛΙΣ-ΑΑΘ obv. cmk.: dolphin (Picard, <i>Chalcis</i> , p. 87, no. 53) |
| h-y        | 18 other Agora specimens of Picard emission no. 53, all listed in Picard, <i>Chalcis</i> , p. 87 |          |   |          |   |

[616–618] 41 coins of Facing Hera/Eagle type that cannot be classified by emission. Of these, 6 are of the double, 16–18 mm. denomination.

## 170–46 B.C.

|            |          |                 |     |  |  |
|------------|----------|-----------------|-----|--|--|
|            | DOUBLE   |                 |     |  |  |
|            |          | Head of Hera r. |     | XΑΛ                                    | Picard, <i>Chalcis</i> ,<br>nos. 66–80         |
|            |          |                 |     | Eagle holding snake;<br>at r., symbol. |  |
| <b>619</b> | 17 coins | 16–18           | Av. | 3.99 (9)                               |  |
| a          | H-1757   | 16              | -   | broken                                 | star (Picard, <i>Chalcis</i> , p. 100, no. 66) |
| b          | A-1427   | 15              | ✓   | 4.30                                   | symbol?  |

|  |  |          |  |                                    |  |
|--|--|----------|--|------------------------------------|--|
|  |  | Similar. |  | XΑΛΚΙ-ΔΕΩΝ                         | Picard, <i>Chalcis</i> ,<br>p. 110, no. 81 |
|  |  |          |  | Eagle holding snake;<br>no symbol. |  |

|            |         |    |   |        |  |
|------------|---------|----|---|--------|--|
| <b>620</b> |         |    |   |        |  |
|            | DOUBLE  |    |   |        |  |
| a          | Z-2145  | 15 | ↓ | 3.33   |  |
| b          | E-2410  | 17 | ↘ | 3.00   |  |
| c          | K-937   | 16 | - | 3.21   |  |
| d          | ΠΘ-100  | 15 | ↓ | broken |  |
| e          | ΟΟ-1379 | 15 | ↓ | 3.85   |  |

|    |         |    |   |      |                            |
|----|---------|----|---|------|----------------------------|
| f  | Z-2239  | 16 | - | 3.95 |                            |
| *g | AA-873a | 16 | ↓ | 4.19 | obv. cmk.: bunch of grapes |
| h  | ΣA-21   | 16 | - | 2.91 | same                       |
| i  | T-833   | 15 | - | 3.39 |                            |
|    | UNTT    |    |   |      |                            |
| *j | K-1496  | 11 | ↑ | 1.37 |                            |
| *k | Z-2964  | 11 | ↓ | 1.63 |                            |

*1st century after Christ*

|            |    |   |    |  |  |   |
|------------|----|---|----|--|--|---|
|            |    | Head of Poseidon r.;<br>trident behind. |    | ΧΑΛΚΙ-ΔΕΩΝ<br>Baetyl within baldacino. | Picard, <i>Chalcis</i> ,<br>p. 127, no. 97 |   |
| <b>621</b> | *a | KK-538                                  | 18 | ↑                                      | 6.05                                       | Picard, <i>Chalcis</i> , pl. XXII, no. 97 |
|            | b  | OO-1481                                 | 18 | ↑                                      | 5.58                                       |   |

|             |  |                 |    |                        |  |  |
|-------------|--|-----------------|----|------------------------|--|--|
|             |  | Head of Zeus r. |    | Eagle holding snake r. | Picard, <i>Chalcis</i> ,<br>p. 128, pl. XXII,<br>no. 98.2b |  |
| <b>*622</b> |  | OO-1330         | 18 | ↑                      | 3.88   |  |

Obv. cmk.: owl stg. r., facing, over ✕ or X, in incuse square. Picard (*Chalcis*, p. 128) notes that the countermark is known only from this specimen and suggests because of the owl that it was added in Athens.

*A.D. 198–217: Caracalla*

|             |    |  |    |   |  |  |
|-------------|----|--|----|---|--|--|
|             |    | [AV K MAP AV ANTΩNINOC]<br>Bust r., laur., dr. |    | ΧΑΛΚΙ-ΔΕΩΝ<br>Hera seated l., bull at<br>her feet.  | Picard, <i>Chalcis</i> ,<br>p. 132, no. 101:[4-g]        |  |
| <b>623</b>  | *a | Ω-347a   | 24 | ↖   | 10.25  |  |
|             | b  | Σ-3905   | 25 | ↑   | 9.07   |  |
|             |    | Similar.                                       |    | ΧΑΛΚΙ-[ΔΕΩΝ]<br>Hermes facing, striking fallen<br>opponent (Panoptes) at r.<br>with caduceus. | Picard, <i>Chalcis</i> ,<br>p. 136, pl. XXIV,<br>no. 108 |  |
| <b>*624</b> |    | AA-766a  | 27 | ↗   | 16.06  |  |

## ERETRIA

*192–191 B.C.*

## DOUBLE

|             |  |   |    |   |  |  |
|-------------|--|---|----|---|--|--|
|             |  | Bull recumbent r.; in ex.<br>[MANTΙΔΩΡΟΣ] |    | [ΕΡΕΤΡΙΕΩΝ] above<br>Two bunches of grapes. | Picard, <i>Chalcis</i> ,<br>p. 185, pl. XXX:1a–<br>11t |  |
| <b>*625</b> |  | BB-821                                    | 14 | ↗   | 2.39   |  |

Attributable to this Eretrian emission by size. Cf. the larger 16+ mm. pieces of the Euboian League with same types, Picard, *Chalcis*, pl. XXX:28.

170–146 B.C.

|            |   |                       |           |  |   |
|------------|---|-----------------------|-----------|--|---|
|            |   | Veiled female head l. |           | ΕΡΕΤΡΙΕΩΝ below<br>Bull recumbent l.; above,<br>name in two lines. | <i>BMC</i> 46–48;<br>Picard, <i>Chalcis</i> ,<br>p. 196 |
| <b>626</b> | a | N'-1343               | 17 ↑ 3.50 | obv., [ΛΥ]ΣΑΝ ΔΡΟΣ   |   |
|            | b | NN-1953               | 17 ↑ 3.02 | obv. name illegible  |   |

*soon after 146 B.C.?*

|             |  |  |                    |   |                                    |
|-------------|--|--|--------------------|---|------------------------------------|
|             |  | UNIT   |                    |   |                                    |
|             |  | Head of bull, with fillets,<br>facing; [border of dots]. |                    | E-PE below at l. and r. of<br>Octopus; [all in border of dots]. | <i>BMC</i> , pp. 96,<br>nos. 19–20 |
| <b>*627</b> |  | ΣΤ'-578  | 12 ← 1.73 (H 16:4) |   |                                    |

The post-146 B.C. dating is tentatively proposed by Picard (*Chalcis*, table facing p. 350) and suits the late, sketchy style of the coinage and its dotted obverse and reverse borders. Even so, the Agora context precludes a date much after the middle of the 2nd century. Note that the types are revived from 5th-century B.C. Eretrian silver fractions (*BMC*, p. 122, nos. 33–39).

## HISTIAIA

338–late 3rd century B.C.<sup>29</sup>

|            |    |  |                    |  |                     |
|------------|----|--|--------------------|--|---------------------|
|            |    | Head of Maenad r., wearing<br>vine wreath. |                    | [ΙΣΤΙ] below Bull stg. r.,<br>before vine with two<br>bunches of grapes.                         | <i>Cop</i> 510, 511 |
| <b>628</b> | a  | T-18                                       | 17 ↓ 3.53          |  |                     |
|            | b  | K-138a                                     | 19 ↓ 4.37          |  |                     |
|            | c  | ΠΑ-384                                     | 16 ↓ 3.40          |  |                     |
|            |    | Similar.                                   |                    | ΙΣ-ΤΙ below<br>Forepart of bull r.   | <i>BMC</i> 10–20    |
| <b>629</b> |    | 7 coins                                    | 13–16 Av. 1.84 (4) |  |                     |
|            | *a | ΓΓ-69                                      | 13 ↑ 1.81          | rev. above, two bunches of grapes  |                     |
|            | b  | K-907                                      | 13 ↖ 1.35+         | same   |                     |
|            | c  | N-96                                       | 14 ↑ 2.04          | symbol? (found with 1007e, 247–222 B.C.)   |                     |
|            |    | Similar.                                   |                    | Similar, except bull walking r.  | <i>BMC</i> 7–9      |
| <b>630</b> | a  | T-319                                      | 14 ↖ 2.40          | rev. above, trophy   |                     |
|            | b  | ΣΤ-125                                     | 12 ↑ 1.50          | same   |                     |
|            |    | Similar.                                   |                    | ΙΣΤΙ above<br>Protome of bull, with fillets,<br>three-quarters to r.; at l.,<br>bunch of grapes. | <i>BMC</i> 29, 30   |
| <b>631</b> | a  | E-803                                      | 16 ↑ broken        |  |                     |
|            | b  | BB-1221                                    | 16 ↓ 2.47          |  |                     |
|            | c  | I-1235                                     | 14 ↓ 2.09          |  |                     |

<sup>29</sup> Picard, *Antre*, pp. 289–291; with reference to Picard, *Chalcis*, pp. 176–178 (start of bronze after 338).

late 3rd century to 146 B.C.

## AR TETROBOL

|            |             | Similar.           | ΙΣΤΙ-ΑΙΕΩΝ  | BMC 34–131 |
|------------|-------------|--------------------|---|------------|
|            |             |                    | Nymph Histiaia seated r.<br>on stern of ship, holding stylis.           |            |
| <b>632</b> | From M 21:1 |                    |   |            |
| *a         | ΔΔ-72       | 14 ← 1.73          | on stern, aplustre  |            |
| *b         | ΔΔ-90       | 15 → 1.88          | winged thunderbolt; cf. BMC 113, GRC, fig. 16                           |            |
| *c         | ΔΔ-91       | 15 ↑ 2.06          | AE  |            |
| *d         | ΔΔ-92       | 14 ↗ 1.62          | no rev. symbols visible   |            |
| *e         | ΔΔ-93       | 15 ↖ 1.49          | on stern, star?; cf. BMC 123–126  |            |
| *f         | ΔΔ-94       | 14 ✓ 1.51          | star?, aplustre; below, trident (BMC 36, 37)                            |            |
| *g         | ΔΔ-95       | 14 ↑ 2.01          | rev. symbols off flan   |            |
| *h         | ΔΔ-96       | 15 → 1.89          | rev. below, ΣΩ (BMC 131)  |            |
|            |             | Other proveniences |   |            |
| *i         | H-1380      | 15 ← 1.71          | on stern, aplustre; below, Ξ (BMC 79, 80)                               |            |
| *j         | Σ-944       | 14 ↓ 2.20          | aplustre; below, A?, cf. BMC 42; same obv. die as 632b                  |            |
| *k         | T-1224      | 15 ↗ 1.79          | obv.: gorgoneion cmk.; Kleiner 1975, p. 319, pl. 76, no. 268 (M–N 15:1) |            |
| l          | B-155       | 14 - 1.56          | same obv.: cmk.   |            |
| m          | ΠΠΠ-737     | - - broken         | same  |            |
| n          | ΑΑ-185      | - - broken         | same  |            |
| *o         | T-180       | 14 ↑ 1.79          | obv.: indistinct cmk.   |            |
| p          | KΤΑ-130     | 12 - chipped       | no details  |            |

For the late 3rd century–146 B.C. dating of this prolific tetrobol coinage, see W. P. Wallace, “The Meeting-Point of the Histiaian and Macedonian Tetrobols,” *NC*, ser. 7, 2, 1962, pp. 17–22, who isolates a small group of emissions of ca. 178–168 B.C. and explains that it belongs about midway in the full series. Our 632a–h were found together in the uppermost fill of cistern M 21:1, known as the Komos Cistern. Shortly after excavation of the cistern in 1947 Professor Wallace examined the tetrobols and reported (in a letter to Virginia Grace at the Agora, dated September 7, 1949) that based on the issues represented and the respective wear of the coins, the cistern hoard was deposited “considerably after 170, say, 160–150 B.C.” He noted that similar issues in similar condition are known from another hoard “believed to date very roughly about 150 B.C.” The two latest bronze coins from the cistern date from the 180’s, as does its latest stamped amphora handle (Rhodian, ca. 186 B.C.), and there is no reason to suspect that any of the pottery from the fill is later. Consequently, it appears that the “purse” of eight Histiaean tetrobols lost or secreted at the top of the filling is a later intrusion.

The gorgoneion countermark of 632k–n has been attributed to Parion in Mysia by W. Schwabacher in a review of L. Robert, *Études de numismatique grecque*, Paris 1951, *Gnomon* 25, 1953, p. 242; cf. L. Robert, “Circulation des monnaies d’Histiée,” *Hellenica* 11–12, 1960 (pp. 63–69), pp. 63–64.

ca. 2nd–1st century B.C.

|             |          | Similar.  | ΙΣΤΙ[A]-ΙΕ[ΩΝ]      | BMC 138     |
|-------------|----------|-----------|---------------------|-------------|
| <b>*633</b> | OO-1043  | 16 ↑ 3.25 | Tripod.<br>(D 17:5) |             |
|             |          | Similar.  | ΙΣΤΙΑ-ΙΕΩΝ          | BMC 134–136 |
| <b>634</b>  | *a N-230 | 18 ↘ 3.70 | Bunch of grapes.    |             |
|             | b M-94   | 19 ↓ 2.93 | rev. above, club?   |             |

|   |        |      |        |                       |
|---|--------|------|--------|-----------------------|
| c | Σ-4690 | 18 ↓ | 3.44   |                       |
| d | K-1022 | 18 - | broken | alpha with broken bar |

Similar. cf. *BMC* 137  
 ΙΣΤΙΑ|ΙΕΩ[N] above and below  
 ΕΥΔ/ [- -]; all in ivy wreath.

**635** Z-475 15 ↑ broken

#### KARYSTOS

*2nd–1st century B.C.*

Head of young Herakles r. *BMC* 19–21  
 K A above Protome of bull with  
 fillets, three-quarters r;  
 at r. ΑΚ.

|            |          |      |        |  |
|------------|----------|------|--------|--|
| <b>636</b> | a KK-82a | 17 - | 3.62   |  |
|            | b Z-939a | 17 ↑ | broken |  |

[**636** or *BMC* 15, 16]: 2 coins (K-326, NN-1004) with the types Herakles head (young or bearded)/Bull's protome three-quarters r. No details.

Head of Poseidon r. *BMC* 24  
 [K-A|P-Y|T-Σ|Ω-I|N]  
 Dolphin twined around trident.

**637** Θ-390 16 ↑ 4.09

Similar. *BMC* 25  
 [KA] above  
 Trident.

**638** Z-2661 13 ↑ 1.50

[Youthful bust r.] *BMC* 27  
 KA|PY  
 Dolphin r.

**639** ΠΘ-221 13 - - damaged

#### ATTICA

excluding Athens and the Eleusinian coinage

#### SALAMIS

*4th century B.C.*

Head of nymph Salamis r., *BMC* 1–6; *Cop* 455,  
456  
 wearing stephane. ΣΑ-ΑΑ Shield of Ajax,  
on which his sword in  
sheath with strap.

|            |          |       |               |  |
|------------|----------|-------|---------------|--|
| <b>640</b> | 42 coins | 15–19 | Av. 2.99 (18) |  |
|            | a PP-631 | 19 -  | 3.57          |  |
|            | b ΑΑ-30  | 18 -  | 3.25          |  |

|    |         |    |   |      |  |
|----|---------|----|---|------|--|
| *c | N'-1360 | 17 | \ | 2.28 |  |
| *d | NN-2104 | 16 | - | 2.98 | (from a layer containing pottery of the 5th and early 4th centuries B.C.) <sup>30</sup>    |
| *e | NN-1876 | 15 | ↑ | 2.84 |  |
| *f | OO-1045 | 15 | \ | 3.20 |  |
| g  | Ω-322   | 17 | - | -    | broken (from a fill with "a few sherds of the late 5th century" B.C. [section Ω notebook]) |
| h  | Γ-1432  | 18 | - | -    | broken (D 15:3)  |
| i  | Γ-1441a | 17 | - | -    | same   |
| j  | Γ-1441b | 15 | - | -    | same   |

Only eight of the forty-two-coin total are entirely legible. The rest are attributed to this variety solely by their large 17–19 mm. flans.

|      |       |  |   |   |                                 |
|------|-------|--|---|---|---------------------------------|
|      |       | Similar.                               |   | ΣΑΛ[A] downward at r. of Shield of Ajax; at l., sword in sheath; [?triskeles device on shield]. | <i>BMC</i> 7, 8; <i>Cop</i> 458 |
| *641 | ΞΞ-16 | 16                                     | ↖ | 2.72  |                                 |
|      |       | Head of Kore r., wearing wheat wreath. |   | [Σ]Α-Λ[A] Shield of Ajax, [on which sword in sheath].   | <i>BMC</i> 9                    |
| *642 | B-524 | 15                                     | — | 2.59  |                                 |

[640–642] 55 coins (13–16 mm.) of uncertain Female head/Shield type. Most have 15–16 mm. diameters, and of these the bulk doubtless belong to the common variety 640.

Clearly of some duration, the bronze coinage of Salamis was minted in several phases, the first and most substantial of which is represented by the common, larger pieces of variety 640, almost certainly dichalkia. In a later emission, the sword on the reverse is displaced to the left (641), on at least some pieces by a triskeles device on the shield (American Numismatic Society). The slightly smaller coins of variety 642 with the Kore obverse represent another emission. There are finally several small-flan varieties (cf. *BMC* 9, 10, *Cop* 547; *Traité*, pl. 194:5), some with blazons (including a gorgoneion and an eagle) on the shield: at 11–13 mm. and 1.50–2.00 g., these should be AE 4 chalkoi; their cruder style locates them at the end of the series.

The two specimens of 640 excavated at Olynthos<sup>31</sup> inform that minting began earlier than 348. But by how much? The contexts of 640d and g suggest a relatively early date in the 4th century, as does the report of another Salamis coin (18 mm.) that was excavated in the Kerameikos from a grave dated 400–395 B.C.,<sup>32</sup> although it would be premature to draw any firm chronological conclusions until the pottery from this important grave group has been published. The destruction deposit of Building Z-3 in the Kerameikos (p. 298 below) shows that the Salamis bronze was still in use as late as the last decade of the 4th century, while the absence of any pieces in the sizable Agora A 18:8 hoard is a good indication that it had ceased to circulate by the 260's.

<sup>30</sup> Room 4B of house "N", Layer 11: "pottery mostly of 5th century but note a fragment of a small coarse saucer with b[lack] g[laze], probably early IV" (NN notebook, p. 7226).

<sup>31</sup> *Olynthus* VI, no. 830 (pl. 20), found on the floor of the destroyed house A 11, room 1; and *Olynthus* IX, no. 1722 (pl. 32:23) from house A vii, room 5. The stratigraphic position of the latter coin is unknown, but in correspondence Nicholas Cahill explains that the area was free of later occupation.

The three coins reported to be from a hoard found at Aspropyrgos near Eleusis (*IGCH* 99) comprise another find of around the middle of the 4th century. The date is implied by two of the pieces, which are early Eleusinian (38: ivy-branch symbol, 17 mm., w4; grapevine symbol, 16 mm., w3); the third is Salamis, 18 mm., in fine (w2) condition.

<sup>32</sup> Mentioned in ΑρχΔελτ 18, 1963, B', p. 50, note 6. Dr. Peter R. Franke kindly sent a photograph of the (18 mm.) coin and his notes on the find.

The very existence of a Salaminian coinage is curious. Since the island was a subject territory of Athens and settled by Athenian cleruchs, some scholars have argued that the coinage must belong to a time of political independence from Athens.<sup>33</sup> In 317<sup>34</sup> a successionist party of Salaminians, probably cleruchs, betrayed the island to Kassandros and apparently governed it for a decade, but this episode belongs around the end, not the start of the coinage. More than a century ago Paul Monceaux suggested that Salamis may have broken away from Athens for a time at the conclusion of the Peloponnesian War,<sup>35</sup> but however convenient this hypothesis might be for explaining an early 4th-century origin of the coinage, it, too, does not carry conviction. Apart from the unsoundness of Monceaux's epigraphical argument, it is known that the island was still subject to Athens under the Thirty Tyrants in the spring of 403 and that when Athens sent out new cleruchies in 386 to Lemnos, Imbros, and Skyros, overseas possessions that she had lost in 404, these cleruchies were to be modeled on the one then existing on Salamis.<sup>36</sup> Salamis had remained Athenian.

If the coinage cannot be attributed to an independent Salamis, it has to be understood in terms of the cleruchy status of the island. As explained under 455, the cleruchy cities of Lemnian Myrina and Hephaistia also struck coins before the middle of the 4th century. Although these cities were certainly more distant from Athens than was Salamis, their constitutional position with respect to Athens was the same, and so, one assumes, was their motivation for minting a bronze coinage: such a coinage was apparently needed, and as none was being supplied by Athens, the cleruchy governments were left to produce it themselves. It may well be that the Athenians encouraged the Salaminian bronze, which they were able to use while continuing their policy of striking exclusively in silver.

## MEGARIS

## MEGARA

*last half or third of 4th–early 3rd century B.C.*

|            |                           | Prow l., on which stands a tripod. |               | MEΓ or MEΓA between Two dolphins swimming r. in circle; border of dots. | BMC 21–29 |
|------------|---------------------------|------------------------------------|---------------|---|-----------|
| <b>643</b> | 160 coins                 | 13–16                              | Av. 2.43 (54) |   |           |
|            | MEΓ (legible on 35 coins) |                                    |               |   |           |
| *a         | Σ-3655                    | 15                                 | ↑ 2.42        | obv. above, trident l. (BMC 22); GRC, fig. 17                           |           |
| *b         | A-891                     | 15                                 | → 2.20        | same obv.   |           |
| *c         | MΣ-192                    | 14                                 | ↘ 2.76        | same  |           |
| d          | ΠA-1                      | 14                                 | ↑ 2.56        | same  |           |
| *e         | X-36                      | 14                                 | → 2.40        |   |           |

<sup>33</sup> *Traité* II, iii, pp. 142–143; Picard, *Antre*, pp. 292–293.

<sup>34</sup> According to Picard, *Antre*, and C. Horner, *Quaestiones Salaminiae*, Basel (dissertation) 1901, pp. 11–12; Ferguson (p. 117, note 2) prefers 304 B.C.

<sup>35</sup> P. Monceaux, "Inscriptions de Salamine," *BCH* 6, 1882 (pp. 521–539), pp. 522–523. Monceaux's argument for Salaminian independence rested on *IG II<sup>2</sup>* 3093, an early 4th-century choregic monument from Salamis that names a local archon in its dating formula. We know, however, from Aristotle, *Athenaion Politeia* 58.8 and 62.2 that ὁ ἐν Σαλαμῖνι ἀρχων was an Athenian official, that he was directly responsible for organizing the local Dionysia, and that he served as the normal eponymous magistrate of the island. Horner (note 34 above) adds that, as a private dedication, *IG II<sup>2</sup>* 3093 should not be expected to record the name of the archon in Athens after the name of the archon in Salamis.

<sup>36</sup> Salamis under the Thirty: Diodorus Siculus 14.32.4. Existing cleruchy in 386: *IG II<sup>2</sup>* 30, line b 7 (= p. 165, line 34, in the expanded text with commentary by R. S. Stroud, "Inscriptions from the North Slope of the Acropolis, I," *Hesperia* 40, 1971, pp. 162–173), citing the cleruchy on Salamis as a legal precedent in regulations for the new cleruchy on Lemnos.

|    |                            |      |      |
|----|----------------------------|------|------|
|    | ΜΕΓΑ (legible on 20 coins) |      |      |
| *f | AP-25                      | 15 ↘ | 2.38 |
| *g | NN-1054                    | 16 ✓ | 1.90 |
| *h | NN-1754                    | 15 ↖ | 2.17 |

Either ethnic

|     |            |      |      |   |
|-----|------------|------|------|---|
| i   | OO-1075    | 14 → | 2.15 | obv., prow r.                                       |
| j-q | 8 ≡≡ coins |      |      | <i>EABC</i> , p. 153, pl. 17, nos. W:78-85 (A 18:8) |

The above dating is deduced from the worn example from a 348-316 B.C. house at Olynthos<sup>37</sup> and the moderate to heavy wear of the eight pieces (643j-q) in the Agora A 18:8 hoard of the 260's (*EABC*, p. 154). For fifteen published specimens from Late Hellenistic deposits in the Agora, see Kleiner 1975, p. 308, pl. 76, nos. 141-143, and p. 312, no. 203 (all H-K 12-14); Kleiner 1976, p. 18, nos. 131-141 (A-B 19-20:1).

*second quarter 3rd century B.C.*

|            | ΜΕΓΑ above or below<br>Prow l. |       | Tripod between two dolphins<br>upward; border of dots. | <i>BMC</i> 30-34   |
|------------|--------------------------------|-------|--|--|
| <b>644</b> | 127 coins                      | 13-16 | Av. 2.23 (44)  |  |
|            | ΜΕΓΑ above (23 coins)          |       |  |  |
| *a         | ≡≡-31                          | 14 ✓  | 2.16   | <i>EABC</i> , p. 153, pl. 17, no. X:86 (A 18:8)          |
| *b         | NN-1014                        | 16 ↑  | 2.58   |  |
| *c         | ΠΘ-488                         | 14 ↗  | 1.85   |  |
| *d         | Γ-301                          | 13 ↗  | 2.42   |  |
|            | ΜΕΓΑ below (8 coins)           |       |  |  |
| *e         | M-209                          | 14 ↘  | 2.51   |  |
| *f         | Γ-456                          | 14 ↘  | 2.30   |  |
| *g         | NN-1741                        | 14 ↓  | 2.18   |  |
|            | Either format                  |       |  |  |
| h          | AA-762                         | 14 ↑  | 2.50   | obv., prow r.  |
| i-o        | 7 ≡≡ coins                     |       |  | <i>EABC</i> , pp. 153-154, pl. 17, nos. X:87-93 (A 18:8) |

644i-o were among the freshest coins in the A 18:8 hoard and could hardly have been minted before the 270's (*EABC*, p. 154).

Twenty Agora pieces from deposits of the 2nd and early 1st century B.C. are listed in Kleiner 1975, p. 308, nos. 144-146; p. 311, nos. 186-188 (H-K 12-14); Kleiner 1976, p. 19, nos. 142-154 (A-B 19-20:1); and p. 21, no. 111 (B 20:9).

*second half 3rd century-early 2nd century B.C.*

|             | ΜΕΓΑ above<br>Prow l. |       | Obelisk of Apollo between<br>two dolphins upwards;<br>border of dots. | <i>BMC</i> 35-39                         |
|-------------|-----------------------|-------|---|--|
| <b>645A</b> | 15 coins              | 13-15 | Av. 2.04 (10)   |  |
| *a          | NN-1966               | 15 ↓  | 1.80  |  |
| *b          | H'-3298               | 15 ↑  | 1.83  |  |
| *c          | NN-743                | 14 ↑  | 2.09  |  |
| *d          | ΓΓ-44                 | 13 ↑  | 2.03  |  |
| e           | T-1284                | 13 ↓  | broken  | Kleiner 1975, p. 323, no. 332 (M-N 15:1) |

<sup>37</sup> *Olynthus* IX, pp. 245, 249-250, 370, pl. 32:24.



|             |         |       |        |       |
|-------------|---------|-------|--------|-------|
|             |         | Same. |        | Same. |
| <b>645B</b> |         |       |        |       |
| *a          | Γ-1323  | 11 ✓  | 0.73   |       |
| *b          | NN-2024 | 11 ✓  | 1.07   |       |
| c           | NN-1871 | 12 ↗  | 1.03   |       |
| d           | ΠΠ-918  | 12 -  | broken |       |

F. O. Waagé (*Greek Bronze Coins from a Well at Megara* [N<sup>o</sup> 70], New York, 1935, p. 17) has already noted that this Prow/Obelisk-dolphins bronze was minted in two denominations. The smaller ("AE 4": here 11–12 mm., ca. 1.00 g.) should be the chalkous, the larger AE 3 denomination, represented by varieties **643** and **644**, as well as **645A**, its double (see p. 38 above). Typologically derived from Prow/Tripod-dolphins (**644**), the Prow/Obelisk bronze ought to follow it at some point after the 260's B.C. burial of the A 18:8 hoard. A pre-183 B.C. dating for the following Apollo/Lyre AE 2 is provided by the context of 646b.

|            |         |                   |              |   |  |           |
|------------|---------|-------------------|--------------|---|--|-----------|
|            |         | Head of Apollo r. |              | ΜΕΓΑ ΠΕΩΝ                                 |  | BMC 11–14 |
|            |         |                   |              | Lyre.                                     |  |           |
| <b>646</b> | 6 coins | 19–21             | Av. 5.46 (6) |   |  |           |
| *a         | Λ-229   | 21 ↗              | 5.01         | obv.: illegible cmk.                      |  |           |
| *b         | K-1310  | 19 ↓              | 5.27         | Kleiner 1975, p. 311, no. 185 (H–K 12–14) |  |           |

*2nd–1st century B.C.*

|            |           |                          |              |                        |  |           |
|------------|-----------|--------------------------|--------------|------------------------|--|-----------|
|            |           | Head of Apollo r., laur. |              | ΜΕΓΑ ΠΕΩΝ              |  | BMC 16–18 |
|            |           |                          |              | Tripod.                |  |           |
| <b>647</b> | 10 coins  | 15–17                    | Av. 3.76 (7) |                        |  |           |
| *a         | BB-51     | 16 ↑                     | 4.63         |                        |  |           |
| *b         | AA-230    | 15 ↑                     | 2.17         |                        |  |           |
|            |           | Similar.                 |              | ΜΕ Γ in laurel wreath. |  | BMC 19    |
| <b>648</b> | *a AA-995 | 15 ↑                     | 2.66         |                        |  |           |
|            | *b Π-330  | 15 ↑                     | 4.66         |                        |  |           |

|            |         |          |        |       |  |           |
|------------|---------|----------|--------|-------|--|-----------|
|            |         | Similar. |        | [M-E] |  | BMC 44–46 |
|            |         |          |        | Lyre. |  |           |
| <b>649</b> | H'-3565 | 16 -     | broken |       |  |           |

*1st century B.C.–3rd century after Christ*

|             |          |   |        |   |  |             |
|-------------|----------|---|--------|---|--|-------------|
|             |          | Head of Zeus r.;<br>linear border.                                  |        | [ΜΕΓΑ] ΠΕΩΝ   |  | unpublished |
|             |          |   |        | at l. and r. of Tripod.                                       |  |             |
| <b>*650</b> | ΠΘ-680a  | 14 ↓  | broken |   |  |             |
|             |          | Bust of Athena r., wearing<br>Corinthian helmet;<br>border of dots. |        | [ΜΕ]-ΓΑ-ΡΕ l., above,<br>and r. of Tripod; border<br>of dots. |  | unpublished |
| <b>651</b>  | *a N-976 | 12 ✓  | 2.21   |   |  |             |
|             | *b Π-957 | 11 ↘  | 0.85   |   |  |             |

Lunate epsilons and the cursive omega of **650** place the latter and **651** in the Roman era. Although the Athena bust of **651** is similar to some on Hadrianic-Antonine coins of Athens (see **229–231**), it is most unlikely that

the coin was minted to commemorate a reconciliation between Athens and Megara under Hadrian, as mentioned in T. L. Shear, "The Campaign of 1937," *Hesperia* 7, 1938 (pp. 311–362), pp. 357–358.

A.D. 172–192: *Commodus*

|             |         |                                       |  |                                   |
|-------------|---------|---------------------------------------|--|-----------------------------------|
|             |         | ANT K[- -AN]ΤΩΝΙΝΟ<br>Head r., laur.  | ΜΕΓ[ΑΡ]ΕΩΝ<br>Demeter stg. r., lighting<br>large torch.    | cf. <i>BMC</i> 48<br>(S. Severus) |
| <b>*652</b> | ΒΓ'-486 | 25 ✓ 6.21                             |  |                                   |
|             |         | [- - - - -]<br>Head of Commodus(?) r. | ΜΕΓΑ-Ρ[ΕΩΝ]<br>Zeus seated r., with scepter<br>[and Nike]. | <i>BMC</i> 46                     |
| <b>653</b>  | Σ-4700  | 24 ↑ 4.04                             |  |                                   |

A.D. 193–217: *Septimius Severus*

|            |        |   |  |                   |
|------------|--------|---|--|-------------------|
|            |        | Α[ΥΤ- -C]ΕΠ-C[ΕΟΝΗΡΟ]C<br>Π[ΕΡ]<br>Head r., laur. | Μ[ΕΓ-ΑΡΕΩΝ]<br>Tyche, with phiale, sacrificing<br>l. over altar. | <i>BMC</i> 51, 52 |
| <b>654</b> | Σ-6410 | 25 ↗ 8.69   |  |                   |

A.D. 193–217: *Julia Domna*

|             |         |                                       |   |                                 |
|-------------|---------|---------------------------------------|---|---------------------------------|
|             |         | [- - - - -]<br>Bust of Julia Domna r. | ΜΕΓ[ΑΡ]ΕΩΝ<br>Artemis running r., with torch<br>in each hand. | cf. <i>BMC</i> 47<br>(Commodus) |
| <b>*655</b> | ΒΓ'-487 | 24 ↓ 6.02                             |   |                                 |

A.D. 202–212: *Geta*

|             |        |                                 |  |  |
|-------------|--------|---------------------------------|--|--|
|             |        | [ΛΟΥ ΣΕΠΤ] ΓΕΤΑ [ΚΑ]<br>Bust r. | ΜΕΓΑ-ΡΕΩΝ<br>Artemis running r., holding<br>bow and drawing arrow. | cf. <i>BMC</i> 49<br>(S. Severus), 53<br>(Caracalla) |
| <b>*656</b> | Σ-4259 | 25 ↓ 5.46                       |  |  |

## ΠΑΓΑΙ

A.D. 161–180: *Marcus Aurelius*

|             |        |  |  |  |
|-------------|--------|--|--|--|
|             |        | Μ ΑΥΡ ΑΝΤΩ-ΝΕΙΝΟC ΑΥ<br>Bust r., laur. | ΠΑΓ-ΑΙΩΝ<br>Gate with large central<br>entrance and two smaller<br>niches with statues at either<br>side; on top, three statues. | cf. <i>NCP</i> , p. 9,<br>pl. A:v, vi; <i>Cop</i> 500<br>(all Severan) |
| <b>*657</b> | Σ-3979 | 26 ↖ 9.80                              | <i>GRC</i> , fig. 23   |  |

## AIGINA

ca. 510–490 B.C.

## AR STATER

|            |            |             |      |   |  |
|------------|------------|-------------|------|---|--|
|            |            | Sea turtle. |      | Incuse square with five sunken triangular segments. | Kraay, <i>ACGC</i> , p. 44, pl. 6, no. 116 <sup>38</sup> |
| <b>658</b> | * <i>a</i> | Υ-240       | 18 - | 11.78   |  |
|            | * <i>b</i> | H-2192      | 17 ↗ | 11.23   |  |

## PLATED COUNTERFEIT OF AR STATER

|             |  |          |      |   |  |
|-------------|--|----------|------|---|--|
|             |  | Similar. |      | Incuse square with “windmill sail” pattern of four triangular segments. | cf. Kraay, <i>ACGC</i> , p. 44, pl. 6, no. 115 <sup>39</sup>   |
| <b>*659</b> |  | ΞΞ-4     | 20 - | 7.03  | obv. cut with two chisel gashes before plating in order to deceive the receiver. No traces of the silver plating remain. |

ca. 490–480 B.C.

## AR STATER

|             |  |          |      |  |  |
|-------------|--|----------|------|--|--|
|             |  | Similar. |      | Incuse square divided into five “small skew” compartments. | Kraay, <i>ACGC</i> , p. 44, pl. 6, no. 117 <sup>40</sup> |
| <b>*660</b> |  | PP-273   | 19 - | 10.31  |  |

479–456 B.C.

## AR STATER

|             |  |   |      |  |  |
|-------------|--|---|------|--|--|
|             |  | Sea turtle with T-shaped arrangement of pellets on shell. |      | Incuse square divided into five “large skew” compartments. | Kraay, <i>ACGC</i> , p. 46, pl. 6, no. 123 |
| <b>*661</b> |  | KK-9  | 22 ↑ | 11.71  | <i>GRC</i> , fig. 7                        |

4th–first half 3rd century B.C.

|            |            |                                 |       |   |   |
|------------|------------|---------------------------------|-------|---|---|
|            |            | A between Two dolphins upwards. |       | Incuse square divided into five compartments. | <i>BMC</i> 206–222  |
| <b>662</b> |            | 14 coins                        | 10–14 | Av. 1.58 (8)                                  |   |
|            | * <i>a</i> | ΞΞ-66                           | 11 ↓  | 1.59  | rev., in lower l. compartment, A ( <i>BMC</i> 213, 214); <i>EABC</i> p. 154, p. 16, no. Y:94 (A 18:8) |
|            | * <i>b</i> | Π-464                           | 12 ↓  | 1.27  | same rev.   |
|            | * <i>c</i> | Ψ-79                            | 12 ↑  | 1.50  |   |
|            | d          | ΠΘ-765                          | 14 ↗  | blistered                                     |   |

<sup>38</sup> M. Price and N. Waggoner, *Archaic Greek Coinage: The “Asyut” Hoard*, London 1975, pp. 69–70, “Group III,” with the chronology of C. Arnold-Biucchi, L. Beer-Tobey, and N. M. Waggoner, “A Greek Archaic Silver Hoard from Selinus,” *ANSMN* 33, 1988 (pp. 1–36), p. 17.

<sup>39</sup> Price and Waggoner, *op. cit.*, p. 71, “Group IV”.

<sup>40</sup> *Ibid.*, p. 73, “Group VII”.

- e ΜΣ-57 10 - chipped Kleiner 1975, p. 308, no. 147 (H-K 12-14)  
 f NN-1669 14 ↓ chipped Kleiner 1976, p. 19, no. 155 (A-B 19-20)

Two examples from the Olynthos excavations<sup>41</sup> imply a starting date before 348 B.C. The context and good condition of 662a suggest that the coinage extended through the first quarter or third of the 3rd century.

*3rd-2nd century B.C.*

- |               |       |                         |  |   |                    |
|---------------|-------|-------------------------|--|---|--------------------|
|               |       | ΑΙ[ΓΙ] above<br>Prow r. |  | ΑΓΛΑ below<br>Ram's head r.; border of dots.      | <i>BMC</i> 230-232 |
| <b>663</b> *a | ΜΣ-53 | 16 ↑ 4.18               |  | Kleiner 1975, p. 308, pl. 76, no. 148 (H-K 12-14) |                    |
| b             | A-661 | 17 ↑ 3.99               |  |   |                    |

- |             |        |                                     |  |   |                     |
|-------------|--------|-------------------------------------|--|---|---------------------|
|             |        | Head of Zeus r.;<br>border of dots. |  | A-[Ι]Γ-Ι N-H<br>Archaic statue of Apollo<br>stg. r., with branch and bow. | <i>BMC</i> 236, 237 |
| <b>*664</b> | ΠΠ-183 | 17 ↑ 4.25                           |  | (found in earth layer with 67i of the 220's B.C.)                         |                     |

*A.D. 202-212: Plautilla*

- |             |        |                                |  |   |                |
|-------------|--------|--------------------------------|--|---|----------------|
|             |        | [ΦΟΥ]ΛΒΙΑ ΠΛΑΥΤΙΛΛΑ<br>Bust r. |  | ΑΙΓΕΙ N-ΗΤΩΝ <br>Hekate triformis holding<br>two torches. | <i>BMC</i> 239 |
| <b>*665</b> | NN-689 | 23 ↗ 4.69                      |  |   |                |

## CORINTHIA

## CORINTH

*4th century B.C.*

## AR DRACHM

- |             |       |                              |  |   |                     |
|-------------|-------|------------------------------|--|---|---------------------|
|             |       | ♀ below<br>Pegasus flying l. |  | Head of Aphrodite l.,<br>hair bound up. | <i>BMC</i> 181, 182 |
| <b>*666</b> | EE-22 | 13 ↑ 1.55+                   |  |   |                     |

*late 5th-3rd century B.C.*

- |            |          |                              |  |   |                    |
|------------|----------|------------------------------|--|---|--------------------|
|            |          | ♀ below<br>Pegasus flying l. |  | Trident upward.   | <i>BMC</i> 423-471 |
| <b>667</b> | 54 coins | 11-14 Av. 1.60 (24)          |  |   |                    |
| *a         | BB-1263  | 13 ↗ 1.81                    |  | rev. at r., running griffin ( <i>BMC</i> 437); <i>GRC</i> , fig. 18 |                    |
| b          | T-4      | 11 - 1.16                    |  | tripod ( <i>BMC</i> 439)  |                    |
| *c         | ΓΓ-4     | 12 ↗ 1.58                    |  | race torch ( <i>BMC</i> 441)  |                    |
| d          | Θ-354    | 13 ↘ 1.29                    |  | same  |                    |
| e          | X-52     | 13 ← 1.59                    |  | same  |                    |

<sup>41</sup> *Olynthos* IX, pp. 350-351.

|    |         |      |           |  |
|----|---------|------|-----------|--|
| f  | ΣΤ'-510 | 13 ↖ | 1.65      | rev. at l., A ( <i>BMC</i> 453)                          |
| g  | Ψ-176   | 14 → | blistered | rev. [Δ] - pine cone ( <i>BMC</i> 453)                   |
| h  | K-1586  | 12 ↓ | 1.24      | EY - Ares holding scepter ( <i>BMC</i> 456)              |
| *i | I-894   | 13 → | 1.59      | H - wreath ( <i>BMC</i> 458-460)                         |
| j  | OO-1210 | 13 ↗ | 1.40      | Σ - thunderbolt ( <i>Corinth</i> VI, p. 15)              |
| k  | A-81    | 13 ↗ | 1.10+     | ? - amphora  |
| *l | Z-1020  | 12 ↘ | 1.72      | amphora - ?  |
| m  | T-1252  | 12 ↘ | 1.69      | A? - ?; Kleiner 1975, p. 323, pl. 76, no. 333 (M-N 15:1) |
| n  | Ξ-795   | 12 ↑ | -         | ? - Δ  |
| *o | Z-400   | 13 ← | 1.58      | flan cut down before striking                            |

Five published examples from context of ca. 100 B.C.: Kleiner 1976, p. 19, nos. 156-160 (A-B 19-20:1).

|            |    |   |                                     |                     |
|------------|----|---|-------------------------------------|---------------------|
|            |    | Head of Athena r., wearing<br>Corinthian helmet.  | K beneath<br>Pegasos flying r.      | <i>BMC</i> 476      |
| <b>668</b> | *a | ΠΘ-574  | 14 ↙                                | 2.35                |
|            | b  | T-254   | 14 ←                                | 1.30+               |
|            |    | [Head of bearded Herakles r.,<br>wearing wreath.] | ♀ beneath<br>Forepart of Pegasos r. | <i>BMC</i> 481, 482 |
| <b>669</b> |    | A-892   | 11 ↓                                | 1.15                |

Recent excavation data at Corinth indicate that the start of the Pegasos/Trident bronze (**667**) may go back as early as the later 5th century; see O. Zervos, "Coins Excavated at Corinth, 1978-1980," *Hesperia* 55, 1986, pp. 184, 203; with Warren 1983, p. 33, note 46, supplemented in Warren 1984, pp. 23-24. Price (1967, pp. 365-367) puts the end of the pre-Roman bronze of Corinth before 200 B.C.

#### AS ROMAN COLONY

#### Coinage Signed by Duoviri

Coins catalogued with Agora inventory numbers in Amandry are referenced in italics.

#### *L. Aeficius Certus, C. Iulius, 44 or 43 B.C.*

As

|            |   |                                    |   |  |
|------------|---|------------------------------------|---|--|
|            |   | LAVS IVLI CORINT                   | [L CE]RTO AEFICIO [C<br>IVLIO IIVIR]                      | Amandry, p. 121,<br>no. Ia; <i>RPC</i> I, 1116 |
|            |   | Head of Julius Caesar r.,<br>laur. | Bellerophon, striking with<br>spear, on Pegasos flying r. |  |
| <b>670</b> | a | Θ-401                              | 23 ↗  | 7.02   |
|            | b | Π-944                              | 23 -  | broken   |

*Amandry, no. Ia:d7-r19:3*

#### *P. Tadius Chilo, C. Iulius Nicephorus, 43 or 42 B.C.*

As

|             |  |   |   |  |
|-------------|--|---|---|--|
|             |  | CORINTHVM in ex.<br>Bellerophon restraining<br>Pegasos r. before a porch. | P TADI CHILO C IVLI<br>NICEP IIVIR            | Amandry, p. 124,<br>no. II; <i>RPC</i> I, 1117 |
|             |  |   | Poseidon, with trident, seated r.<br>on rock. |  |
| <b>*671</b> |  | NN-465  | 24 ↗  | 7.10   |

*Amandry, no. II: d6-r7:1*

*Cn. Publius, M. Antonius Orestes, 40 B.C.*

## SEXTANS

|               |        |  |                          |   |
|---------------|--------|--|--------------------------|---|
|               |        | C $\overline{\text{PVBL}} \overline{\text{ANT}} \text{ OR}$<br>Vase with one handle l. | CO RIN in wreath.        | Amandry, pp. 129–<br>130, no. IVb;<br>RPC I, 1123 |
| <b>672</b> *a | II-66  | 11 ↓ 1.98  | Amandry, no. IVb:d3-r5   |   |
| b             | OO-683 | 11 ↓ 1.58  | Amandry, no. IVb:d4-r5:6 |   |

*P. Aebutius, C. Pinnius, 39–36 B.C.*

|            |        |                                    |  |  |
|------------|--------|------------------------------------|--|--|
|            | As     | [CORIN̄T̄]<br>Head of M. Antony l. | P AE[BVTIO C PIN]NIO IIVIR<br>Prow l.        | Amandry, pp. 130–<br>131, no. Va;<br>RPC I, 1124 |
| <b>673</b> | BB-515 | 24 → broken                        |  |  |
|            | As     | [CORIN̄T̄]<br>Head of Poseidon r.  | P AEBVTIO C PINNIO IIVIR<br>Chimaera r.      | Amandry, p. 132,<br>no. Vb; RPC I, 1125          |
| <b>674</b> | II-304 | 22 ↓ 5.74                          |  |  |
|            | SEMIS  | Similar.                           | P AEBVTIO  C PINNIO IIVIR<br>in pine wreath. | Amandry, p. 133,<br>no. Vc; RPC I, 1126          |
| <b>675</b> | BΓ-931 | 16 ↘ 4.07                          | Amandry, no. Vc:d11-r5:2                     |  |

*C. Heius Pamphilus, Q. Caecilius Niger, 34–31 B.C.*

|              |        |                                    |  |   |
|--------------|--------|------------------------------------|--|---|
|              | As     | [CORIN̄T̄]<br>Head of Aphrodite r. | Q CAECIL-NIGR [C HEIO P̄AM  <br>IIVIR]<br>Bellerophon on Pegasos r.,<br>fighting Chimaera. | Amandry, pp. 137–<br>138, no. VIc; RPC I,<br>1128 |
| <b>676</b> a | Σ-6295 | 22 → broken                        | as above   |   |
| b            | Θ-69   | 22 ↓ 6.73                          | inscriptions effaced   |   |

*M. Antonius Theophilus, P. Aebutius, 30 B.C.*

|             |        |   |   |  |
|-------------|--------|---|---|--|
|             | SEMIS  | [MA.ĀNT̄:]THEO-<br>PH[IL .]II-VIR- [QVINQ]<br>Boukranion. | [P] AEBVTIVS IIVIR QUINQ<br>Vase to r., with palm drooping<br>over top. | Amandry, p. 139,<br>no. VIIb; RPC I,<br>1130 |
| <b>*677</b> | E-1685 | 18 ✓ 2.94   |   |  |

*C. Servilius C. f. Primus, M. Antonius Hipparchus, 2/1 B.C.*

As

[CAESAR | CORINT]  
Head of Augustus r.[C SERVILIO C F PRIMO M  
ANTONIO HIPPARCHO IIVIR]  
Heads of Gaius and Lucius l.  
and r.Amandry, pp. 145–  
147, no. XIa, b;  
*RPC* I, 1136

**678** a KK-244 20 → 5.39  
b MM-104 20 - 5.57

*C. Mussius Priscus, C. Heius Pollio, A.D. 4/5*

As

GER[MANIC]VS CAESAR [COR]  
Head of Germanicus r.C HĒIO PO|LLIONĒ IĒR| C  
MVSSIO PR|ISCO IIVIR in  
parsley wreath.Amandry, p. 154,  
no. XIIIe; *RPC* I,  
1139

**679** H'-3619 22 ↓ 6.38 Amandry, pls. XIII, XIV, no. XIIIe4:2

*L. Rutilius Plancus, A. Vatronius Labeo, A.D. 12/13–15/16*

As

[- - - - - - - - -]  
Head of Tiberius l.[- - - - - - - - -]  
Nike stg. l. [on globe].Amandry, pp. 160–  
165, nos. XIV.21–  
41, 60–73; *RPC* I,  
1146

**680** Γ-1205 19 ← 5.61

*L. Arrius Peregrinus, L. Furius Labeo, A.D. 32/33*

As

[L ARR]IO PERE[GRINO IIVIR]  
Head of Augustus l., rad.[L FV]RIO LABE-ONE IIVIR|  
in ex. [COR]  
Hexastyle temple, inscribed  
[GĒT̄ IVLI].Amandry, p. 173,  
no. XVI.19; *RPC* I,  
1151

**\*681** Σ-1934 21 ↑ 6.61 Amandry, pl. XXI, no. XVI.19:b-If3

As

[L. FVRIO LA-BEONE IIV]  
Head of Augustus l., rad.[L ARRIO] PEREGRIN[O  
IIVIR]| in ex. [COR]  
Similar hexastyle temple.Amandry, p. 174,  
no. XVI.22; *RPC* I,  
1157

**682** Γ-1481a 19 → 6.49 Amandry, no. XVI.22:aa-IIa2:2

SEMIS

[COR] below  
Melikertes with thyrsos  
riding dolphin r.[C]OR below  
Pegasos flying r.Amandry, p. 178,  
no. XVI.47;  
*RPC* I, 1162

**683** a OO-742 16 ✓ 2.84  
b OO-1187 16 ↖ 3.76

## SEMIS

|            |         |                                |                                  |   |
|------------|---------|--------------------------------|----------------------------------|---|
|            |         | COR below<br>Pegasos flying r. | [COR] below<br>Pegasos flying r. | Amandry, p. 178,<br>no. XVI.48; <i>RPC</i> I,<br>1163 |
| <b>684</b> | III-564 | 16 ↖ 2.32                      |                                  |   |

## SEMIS

|            |          |                                |  |   |
|------------|----------|--------------------------------|--|---|
|            |          | COR below<br>Pegasos flying r. | [S E] Isthmos, nude, stg.<br>frontally, with rudder in<br>each hand. | Amandry, p. 179,<br>nos. XVI.54–61;<br><i>RPC</i> I, 1168 |
| <b>685</b> | a AA-444 | 14 ↑ 2.43                      |  |   |
|            | b Γ-1105 | 16 ← 2.94                      |  |   |

*P. Vipsanius Agrippa, M. Bellius Proculus, A.D. 37/38*

## As

|            |           |   |   |   |
|------------|-----------|---|---|---|
|            |           | (1) C CAESAR AVGVS<br>or<br>(2) CAIVS-CAESAR AVG<br>Head of Caligula. | P.VIPSANIO AGRIPPA IIVIR <br>COR below<br>Pegasos flying r. | Amandry,<br>pp. 184–186,<br>nos. XVII.1–27;<br><i>RPC</i> I, 1172 |
| <b>686</b> | *a N-429  | 19 ↑ 5.91   | head l.; obv. legend (1);                                   | Amandry, nos. XVII.3, 8, 11, or 22                                |
|            | *b NN-968 | 21 → 7.49   | head r.; obv. legend (2);                                   | Amandry, no. XVII.17:e-Ih3:2                                      |
|            | c H-163   | 22 ↘ 5.92   | head r.; obv. legend ?                                      |   |
|            | d II-293  | 21 ↑ 6.39   | same  |   |

## As

|            |           |           |  |  |
|------------|-----------|-----------|--|--|
|            |           | Similar.  | M BELLIO PROCVLO IIVIR <br>COR below Pegasos flying r. | Amandry,<br>pp. 186–189,<br>nos. XVII.29–67;<br><i>RPC</i> I, 1173 |
| <b>687</b> | *a MM-136 | 21 → 7.73 | head r.; obv. legend ?                                 |  |
|            | b Σ-4224  | 20 ↑ 7.06 | same   |  |
|            | c ΣT'-739 | 21 ↓ 4.96 | same   |  |

[686 or 687] Two asses of uncertain Caligula head/Pegasos variety.

|  |          |           |                     |
|--|----------|-----------|---------------------|
|  | a ΣA-453 | 19 → 6.10 | head r.             |
|  | b P-1609 | 20 ← 6.51 | head r.; Pegasos l. |

*M. Acilius Candidus, Q. Fulvius Flaccus, A.D. 54/55*

## As

|             |        |   |   |  |
|-------------|--------|---|---|--|
|             |        | AGRIPPINA-AVGVSTA<br>Bust of Agrippina Minor r. | Q FVL FLACCO IIVIR COR<br>Genius of Colony with phiale<br>and cornucopia; in field,<br>GEN COR. | Amandry, p. 204,<br>no. XX.21; <i>RPC</i> I,<br>1190 |
| <b>*688</b> | AA-203 | 20 ↑ 8.39                                       | <i>GRC</i> , fig. 24; Amandry, pl. XXXIV, no. XX.21:h-b5  |  |



As

|            |          |           |   |   |  |
|------------|----------|-----------|---|---|--|
|            |          |           | AGRIPPIN-AVGV<br>Bust of Agrippina Minor l. | [M AC] CANDIDO IIVIR COR<br>Aphrodite in biga drawn l. by<br>tritons. | Amandry, p. 208,<br>no. XX.73; <i>RPC</i> I,<br>1198 |
| <b>689</b> | a NN-128 | 21 ↖ 6.48 |   | Amandry, no. XX.73:2  |  |
|            | b Π-173  | 21 ↗ 6.61 |   | effaced obv. and rev. legends   |  |

As

|            |       |           |  |   |  |
|------------|-------|-----------|--|---|--|
|            |       |           | [NERO] CLA[V-CA]ES AVG<br>Head of Nero r., laur. | [Q] FVL FLACCO IIVIR COR<br>Bust of Aphrodite l.; beneath,<br>galley l. | Amandry, p. 209,<br>no. XX.80; <i>RPC</i> I,<br>1200 |
| <b>690</b> | Ξ-589 | 21 ↖ 6.58 |  | Amandry, no. XX.80:3  |  |

*Ti. Claudius Optatus, C. Iulius Polyaeus, A.D. 57/58 or 58/59*

As

|            |           |             |   |   |   |
|------------|-----------|-------------|---|---|---|
|            |           |             | NERO CLAV̄-CAES AV̄G<br>Head of Nero r. | (1) TI CL[AVDIO] OPTATO IIVIR<br>COR or<br>(2) C IV[LIO POLYAENO IIVIR]<br>COR<br>Bellerophon with shield leaning r.,<br>restraining Pegasos l. | Amandry, pp. 211–<br>213, no. XXI.1–18;<br><i>RPC</i> I, 1201 |
| <b>691</b> | *a Z-653  | 21 ↘ 8.64   |   | rev. legend (1); Amandry, pl. XXXVI, no. XXI.5:a-a6:1   |   |
|            | b N-1138  | 21 ✓ 7.40   |   | rev. legend (1); Amandry, no. XXI.5:a-a6:2 (L 19:2)   |   |
|            | *c H-1544 | 21 ↘ halved |   | rev. legend (2); Amandry, no. XXI.12–18   |   |

As

|            |           |           |   |   |   |
|------------|-----------|-----------|---|---|---|
|            |           |           | NĒRO CLAV̄D -CAĒS AV̄G<br>Head of Nero. | (1) TI CLAVDIO OPTATO IIVIR<br>or<br>(2) C. IVLIO [POLYA]ENO IIVIR<br>ISTH MIA in parsley wreath;<br>COR below. | Amandry,<br>pp. 213–215,<br>nos. XXI.19–33;<br><i>RPC</i> I, 1202 |
| <b>692</b> | *a ΠA-213 | 19 → 6.85 |   | head l.; rev. legend (1); Amandry, pl. XXXVII, no. XXI.22:g-a4:1  |   |
|            | b Γ-291   | 19 → 4.99 |   | head r., legend ?; rev. legend (1); Amandry, nos. XXI.19, 20, 23–26   |   |
|            | c KTA-17  | 21 ↓ 7.07 |   | head r., legend ?; rev. legend (2); Amandry, nos. XXI.29–31   |   |

*L. Rutilius Piso, P. Memmius Cleander, A.D. 66/67*

As

|            |          |           |   |  |   |
|------------|----------|-----------|---|--|---|
|            |          |           | NERO CAE-AVG IMP<br>Head of Nero r., rad. | [L] R PISON[E IIVI] QVI COR<br>Galley l.; in field, ADVĒ  AVG. | Amandry,<br>pp. 217–219,<br>nos. XXII.1–28;<br><i>RPC</i> I, 1204 |
| <b>693</b> | *a Φ-6   | 22 ← 7.19 |   | Amandry, no. XXII.9  |   |
|            | b ΛΛ-161 | 20 → 6.40 |   | similar, but head l. and both legends effaced                  |   |

As

|                                    |   |  |
|------------------------------------|---|--|
| [NERO CAESAR IMP]<br>Head of Nero. | (1) [L RVT PISONE IIVIR QVIN]<br>or<br>(2) [P MEM CLEANDRO IIVIR<br>QUIN]<br>Emperor on tribunal, orating<br>to l.; in field, AD-LO AV-G. | Amandry,<br>pp. 219–221,<br>nos. XXII.29–51;<br><i>RPC</i> I, 1205 |
|------------------------------------|---|--|

|            |           |             |  |
|------------|-----------|-------------|--|
| <b>694</b> | a ΠΘ-224  | 19 ✓ 7.00   | head r., laur.; rev. legend (1); Amandry, <i>no. XXII.29:3</i> |
|            | b ΓΓ-122  | 20 ↑ 5.64   | head r., laur.   |
|            | *c I-143a | 18 ↑ halved | head l.; rev. legend (2); Amandry, <i>no. XXII.44:2</i>        |
|            | d P-512a  | 18 ↓ halved | head l.  |
|            | e Ψ-325a  | 20 - halved | head r.  |
|            | f I-1257a | 19 - halved | head r.  |

*Ti. Claudius Anaxilaus, P. Ventidius Fronto, A.D. 67/68*

As

|  |   |  |
|--|---|--|
| [NERO CAE-SAR]<br>Head of Nero l., laur. | P VE FRONTONE IIVIR COR<br>Emperor stg. l., with phiale,<br>being crowned by Tyche. | Amandry,<br>pp. 221–223,<br>nos. XXIII.1–12;<br><i>RPC</i> I, 1207 |
|--|---|--|

|            |          |           |   |
|------------|----------|-----------|---|
| <b>695</b> | *a ΔE-1  | 20 ↖ 6.88 | Amandry, pl. XL, <i>no. XXIII.7</i> ; obv. cmk.: tripod in incuse square<br>(Howego, no. 478) |
|            | b AP-49a | 16 - 4.24 | rev. legend effaced   |

As

|  |  |   |
|--|--|---|
| [NERO CAE-SAR]<br>Head of Nero l., laur. | P VE ]FRON-TONE[ IIVIR <br>[COR]<br>Emperor stg., facing, with<br>phiale, on podium of<br>tetrastyle temple. | Amandry, p. 225,<br>no. XXIII.24;<br><i>RPC</i> I, 1208 |
|--|--|---|

|            |        |           |  |
|------------|--------|-----------|--|
| <b>696</b> | P-1555 | 19 ↖ 6.21 |  |
|------------|--------|-----------|--|

[690–696] As (P-994a) with obv. head of Nero r.; rev. effaced.

*L. Caninius Agrippa, A.D. 68/69*

As

|   |   |  |
|---|---|--|
| [SENATV-P.Q.R.]<br>Veiled bust of Senate r. | [L CAN AGRIPPAE IIVI COR]<br>Clasped hands holding poppy<br>and wheat ears. | Amandry, p. 230,<br>no. XXIV.2 or 9;<br><i>RPC</i> I, 1210 |
|---|---|--|

|            |         |           |  |
|------------|---------|-----------|--|
| <b>697</b> | BB-1315 | 19 - 6.37 |  |
|------------|---------|-----------|--|

As

|  |       |   |
|--|-------|---|
| [ROMAE ET IMPERIO]<br>Turreted bust of Tyche-<br>Roma r. | Same. | Amandry,<br>pp. 230–231,<br>nos. XIV.7, 8,<br>14–16; <i>RPC</i> I, 1213 |
|--|-------|---|

|            |       |           |  |
|------------|-------|-----------|--|
| <b>698</b> | Υ-229 | 19 - 3.66 |  |
|------------|-------|-----------|--|

|  |          |   |  |   |  |  |   |
|--|----------|---|--|---|--|--|---|
|  | As       |   |  |   |  |  |   |
|  |          | [SENATV]-P.Q.R.<br>Veiled bust of Senate r. |  | L CAN AG[RIPP]AE IIVI  COR<br>Tetrastyle temple shown in<br>perspective.      |  |  | Amandry, p. 234,<br>no. XXIV.59;<br>RPC I, 1218     |
| <b>699</b>                             | EA-215   | 21 → 6.56                                   |  | Amandry, no. XXIV.59:a-IIIb6:2  |  |  |   |
|  | As       |   |  |   |  |  |   |
|  |          | [NEPTVNO  AVG]<br>Head of Poseidon r.       |  | [L CAN AGRIPPAE IIVIR]<br>[COR] Isthmos stg. 1.,<br>with two rudders.         |  |  | Amandry, p. 236,<br>nos. XXIV.71-73;<br>RPC I, 1222 |
| <b>700</b>                             | ΠΘ-345a  | 19 ↖ 6.37                                   |  |   |  |  |   |
| <i>Anonymous Fractions, 41-31 B.C.</i> |          |   |  |   |  |  |   |
|  | SEMIS    |   |  |   |  |  |   |
|  |          | Bust of Helios r.                           |  | [COR INT] below<br>Pegasos flying r.  |  |  | Amandry, p. 238,<br>no. C3; RPC I, 1227             |
| <b>701</b>                             | a BB-186 | 14 ↖ 2.35                                   |  |   |  |  |   |
|  | b Z-470  | 16 ← 2.58                                   |  |   |  |  |   |
|  | QUADRANS |   |  |   |  |  |   |
|  |          | [COR] beside<br>Rudder.                     |  | Dolphin l.  |  |  | Amandry, p. 240,<br>no. F1; RPC I, 1231             |
| <b>702</b>                             | KK-209a  | 12 - 1.03                                   |  |   |  |  |   |
|  | QUADRANS |   |  |   |  |  |   |
|  |          | COR at l. of<br>Rudder.                     |  | Trident.  |  |  | Amandry, p. 240,<br>no. F2; RPC I, 1232             |
| <b>*703</b>                            | Δ-94     | 15 ↓ 2.79                                   |  | Amandry, pl. XLVI, no. F2:1   |  |  |   |
|  | SEMIS    |   |  |   |  |  |   |
|  |          | Head of Poseidon r.                         |  | COR below<br>Pegasos flying r.  |  |  | Amandry, p. 242,<br>no. I; RPC I, 1235              |
| <b>704</b>                             | *a Δ-3   | 16 ↑ 2.76                                   |  | Amandry, no. I:2  |  |  |   |
|  | b N-372a | 14 ↗ 1.93                                   |  |   |  |  |   |
| Without Names of Duoviri               |          |   |  |   |  |  |   |
| A.D. 117-138: Hadrianic                |          |   |  |   |  |  |   |
|  |          | Head of Aphrodite r.                        |  | COL-IVL COR<br>Tyche stg. 1., with cornucopia<br>and phiale(?). <sup>42</sup> |  |  | Cop 30  |
| <b>*705</b>                            | H-1761   | 24 ↓ 7.52                                   |  |   |  |  |   |

<sup>42</sup> Although it should be a phiale, the object held in the goddess' right hand is large and globular, like the apple held by Aphrodite on other imperial reverses of Corinth; see **706** and **719**. The die cutter may have conflated attributes.

A.D. 161–80: *Marcus Aurelius*

706 T-947 27 ↑ 13.72  
 [- - - - -]  
 Head of M. Aurelius r., laur. CLI-COR  
 Aphrodite stg. r., with scepter  
 and apple. BMC 607

707 H'-3678 21 ↑ 4.96  
 [M AVR] ANTO[NINVS AVG]  
 Head r., laur. [CLI COR]  
 Melikertes on dolphin r.,  
 under pine tree. Cop 329

708 PP'-62 26 ↗ 13.24  
 ]M AVR A[NTONINVS AVG]  
 Bust r. IS|THMI|A in celery wreath. Cop 325

A.D. 161–169: *Lucius Verus*

\*709 Γ-124 21 ↑ 6.62  
 IMP L AVR-VERVS AVG  
 Bust r., laur. CLI COR  
 Melikertes on dolphin r.,  
 under pine tree. BMC 623  
 GRC, fig. 24

\*710 Ω-277 27 → 11.90  
 IMP L AVR VERVS AVG  
 Bust r., laur., dr. CLI COR  
 Tyche sacrificing l. at altar,  
 with cornucopia and phiale. cf. Cop 323  
 (M. Aurelius)

\*711 T-716 26 ↖ 10.74  
 [- - - -]AVG  
 Bust of L. Verus r. CLI COR  
 Hermes seated l. on rock;  
 at l., a ram. Cop 344

A.D. 176–192: *Commodus*

712 OO-272 27 ← 11.93  
 [- - COMMOD]V[S] A[NTON- -]  
 Bust r., laur. [CLI COR]  
 Athena stg. l., with Nike and  
 spear; at foot, owl and shield. Corinth VI, 174

A.D. 193–211: *Septimius Severus*

\*713 Λ-44 25 ← 10.97  
 L SEPT SEVRE [PT AVG]  
 Bust r., laur. CLI COR  
 Peirene seated l. on rock,  
 holding vase. BMC 656

|            |       |  |   |                    |
|------------|-------|--|---|--------------------|
|            |       | L SEPT SEV PER[T A]VG IMP<br>VIII<br>Bust l., laur., with shield<br>and spear. | [. .]C COR<br>Melikertes on dolphin r.,<br>under pine tree. | <i>BMC</i> 648–649 |
| <b>714</b> | O-434 | 18 ↗ broken  |   |                    |

|            |          |                                      |                                 |                     |
|------------|----------|--------------------------------------|---------------------------------|---------------------|
|            |          | [- - - - -]<br>Bust of S. Severus r. | [CLI COR]<br>Pegasos walking l. | <i>McClean</i> 6201 |
| <b>715</b> | ΣT'-669a | 16 ↘ broken                          |                                 |                     |

A.D. 198–217: *Caracalla*

|             |        |                                |  |                                     |
|-------------|--------|--------------------------------|--|-------------------------------------|
|             |        | M AVRELIVS CAE[SAR]<br>Bust r. | CL[.]C[OR]<br>Building, from which rises<br>tapering column with statue<br>on top; at l. and r., equestrian<br>statue. | <i>NCP</i> , p. 15,<br>pl. C.xlviii |
| <b>*716</b> | P-1035 | 25 ↓ 8.71                      | obv.: obscure cmk.   |                                     |

A.D. 202–212: *Plautilla*

|             |        |                                |   |                |
|-------------|--------|--------------------------------|---|----------------|
|             |        | PLAVTILLAE AVGVSTAE<br>Bust r. | CLI COR<br>Tyche sacrificing l. before<br>lighted altar, with cornucopia<br>and phiale. | <i>BMC</i> 673 |
| <b>*717</b> | NN-702 | 24 ↘ 5.35                      |   |                |

|             |       |                              |  |                     |
|-------------|-------|------------------------------|--|---------------------|
|             |       | PLAVTILLA AVGVSTA<br>Bust r. | CLI COR<br>Athena stg. l., with Nike<br>and spear. | <i>BMC</i> 667, 668 |
| <b>*718</b> | OO-50 | 24 ← 5.70                    |  |                     |

|            |        |                                  |  |                |
|------------|--------|----------------------------------|--|----------------|
|            |        | PLAVTILLAE AVGV[STAE]<br>Bust r. | CLI [C]OR<br>Aphrodite stg. r., with scepter<br>and apple. | <i>BMC</i> 669 |
| <b>719</b> | I-1047 | 24 → broken                      |  |                |

A.D. 209–212: *Geta*

|             |      |                                 |   |              |
|-------------|------|---------------------------------|---|--------------|
|             |      | SEPTIMIVS GETAS CAES<br>Bust r. | CLI COR<br>Nike walking r., head l.,<br>holding palm in l., and in r.<br>shield with gorgoneion(?)<br>device.   | unpublished? |
| <b>*720</b> | ΠΘ-3 | 23 ↑ 7.37                       | The reverse is entirely different from the other Nike reverses<br>described and illustrated in <i>Corinth</i> VI, pp. 39–40, pl. VI, nos. 223,<br>224, 227. |              |

## PHLIASIA

## PHLIOS

4th century B.C.

|               |               | Bull butting l. | $\Phi$ framed by four globules. | cf. <i>BMC</i> 13–17 |
|---------------|---------------|-----------------|---------------------------------|----------------------|
| <b>721</b> *a | H-1112        | 14 \ broken     |                                 |                      |
| b             | K-1086        | 14 \ 1.16       |                                 |                      |
| c             | $\Theta$ -272 | 13 - 1.82       |                                 |                      |
| d             | B'-910        | 12   1.11+      |                                 |                      |
| e             | H'-3758       | 12 - broken     |                                 |                      |
| f             | OA-181        | 17 / 2.66       |                                 |                      |

Kleiner 1975, p. 308, no. 149 (H–K 12–14)

All belong to "Issue 1 [ca. 400–350 B.C.]" of J. D. Mac Isaac, "Phliasian Bronze Coinage," *ANSMN* 33, 1988, pp. 45–54. Denominations are the chalkous (721a–e, Mac Isaac type A) and the dichalkon (721f, Mac Isaac type B).

## SIKYONIA

## SIKYON

ca. 345/325 B.C.

|            |       | Head of Apollo r.  | $\Sigma$ in olive wreath. | Warren 1983,<br>Group 3 |
|------------|-------|--------------------|---------------------------|-------------------------|
| <b>722</b> | K-299 | 17 $\uparrow$ 2.49 |                           |                         |

ca. 330–200 B.C.

|            |                 | Dove flying r. or l. | $\Sigma$ or $\Sigma$ l in olive wreath. | Warren 1983,<br>Group 4     |
|------------|-----------------|----------------------|---|-----------------------------|
| <b>723</b> | 16 coins        | 12–16 Av. 1.97 (8)   |   |                             |
| *a         | O-15            | 16 $\downarrow$ 2.81 |   |                             |
| *b         | $\Sigma$ T'-468 | 14 \ 2.20            |   | Warren 1983, no. 4.c.8.viii |
| *c         | NN-447          | 12 / 2.11            |   |                             |

ca. 303 B.C.?

|             |               | Dove flying l.       | $\Delta$ H above $\text{M}$ in olive wreath. | Warren 1983,<br>Group 5.9f |
|-------------|---------------|----------------------|--|----------------------------|
| <b>723A</b> | $\Theta$ -450 | 14 $\checkmark$ 3.06 |  |                            |

Kleiner 1975, p. 308, no. 150, but with wrong inventory number and provenience. See note 23 above, p. 203.

*late 3rd century–160/150 B.C.*

|            |           |                          |              |   |  |   |
|------------|-----------|--------------------------|--------------|---|--|---|
|            |           | ΣΙ above Dove feeding r. |              | Tripod in olive wreath.                 |  | Warren 1983,<br>Group 6B; or 1984,<br>Group 9 |
| <b>724</b> | 9 coins   | 13–16                    | Av. 2.24 (8) |   |  |   |
|            | *a Z-2248 | 16                       | ← 3.42       |   |  |   |
|            | *b Σ-2057 | 15                       | ↗ 2.91       | obv. below, ΔΗ (Warren 1984, Group 9.8) |  |   |
|            | c OO-848  | 14                       | - 1.63       | dove l.                                 |  |   |

*ca. 196–160/150 B.C.*

|             |        |  |        |   |  |                         |
|-------------|--------|--|--------|---|--|-------------------------|
|             |        | Dove flying l.;<br>in field, [letter]. |        | ΣΙ (with serifs) in olive wreath<br>tied above. |  | Warren 1984,<br>Group 8 |
| <b>*725</b> | Z-1180 | 15                                     | ↖ 2.32 |   |  |                         |

*ca. 160/150–146 B.C.*

|            |       |  |        |                     |  |                            |
|------------|-------|--|--------|---------------------|--|----------------------------|
|            |       | Dove flying l.;<br>above wing, ΟΛ[ΥΜΠΙΑ](?). |        | ΣΙ in olive wreath. |  | Warren 1984,<br>Group 10.1 |
| <b>726</b> | Γ-483 | 15   | → 2.86 |                     |  |                            |

[723, 725, 726] 39 coins of Dove flying l./Σ, ΣΙ, or [?] in olive-wreath type. A few of these pieces could belong to Warren 1983, Group 5: letters other than ΣΙ in the reverse wreath. The 39 coins include 2 from Deposit B 20:9 (Kleiner 1976, p. 21, nos. 112, 113).

*1st century B.C.*

|            |           |                   |        |   |  |                          |
|------------|-----------|-------------------|--------|---|--|--------------------------|
|            |           | Head of Apollo r. |        | [ΣΙ] Dove flying or alighting l.;<br>in field, name.            |  | Warren 1984,<br>Group 12 |
| <b>727</b> | *a ΠΘ-636 | 17                | ↖ 2.00 | dove flying; ΑΙΝΕΑ[Σ]. Warren, Group 12.1; <i>GRC</i> , fig. 18 |  |                          |
|            | b O-647   | 17                | ↙ 1.86 | similar, but name not preserved                                 |  |                          |
|            | c BB-7a   | 17                | ↑ 3.43 | dove alighting; name(?)   |  |                          |
|            | d ΛΛ-260  | 17                | ↑ 4.68 | same  |  |                          |

For the overstriking of pieces signed by Aineas in late 1st-century B.C. Athens, see Warren 1984, p. 20, and under **152** (p. 108 above).

*A.D. 67–68: Nero*

|             |         |  |        |   |  |                    |
|-------------|---------|--|--------|---|--|--------------------|
|             |         | N Κ ΖΕΥC ΕΛΕΥΘΕΡΙ-OC<br>Head of Nero r., laur. |        | ΕΠΙ Γ.Ι.ΠΟ-ΛΥΑΙΝΟΥ<br>Nude, male youth, walking r.<br>with raised arms. |  | <i>RPC</i> I, 1241 |
| <b>*728</b> | BZ-29   | 19   | ↗ 7.30 |   |  |                    |
|             |         | [NE ΚΑΙ ΖΕΥC] ΕΛΕΥΘΕΡΙOC<br>Head of Nero r.    |        | [ΠΟΛΥ]ΑΙΝΟΥ·ΔΑ<br>Man on horse l.; in ex., [CI].                        |  | <i>RPC</i> I, 1238 |
| <b>*729</b> | Z-1922a | 18   | ↓ 3.28 | intentionally halved  |  |                    |





## PATRAI

ca. 146–14 B.C.

|               |        |  |             |  |                     |
|---------------|--------|--|-------------|--|---------------------|
|               |        | Head of bearded<br>Herakles r.                 |             | ⲡ at l. of Athena,<br>advancing r., with shield and<br>lowered spear.    | <i>BMC</i> 7–13     |
| <b>735</b> *a | X-178  | 21 ← 6.67                                      |             | rev, ΜΗΤΠΟΔΩΡΟΣ ΜΕΝΕΚΛΕΟΣ ΠΑΤΡΕΩΝ; at r., owl<br>( <i>BMC</i> 8–11)      |                     |
|               | b      | PP-243   | 22 ↑ broken | [ΝΙΚΟΣΤΡ]ΑΤΟΣ ΚΑΛΙΣΤΡΑΤΟΥ ΠΑΤΡ[ΕΩΝ]; at l., palm<br>( <i>BMC</i> 12, 13) |                     |
|               |        | [ΠΑΤΡΕ-ΩΝ] below<br>Cista mystica of Dionysos. |             | ⲡ at l. of<br>Dionysos stg. l.,<br>with torch.                           | <i>Cop</i> 156, 157 |
| <b>736</b> a  | H-417a | 19 ↑ 3.32                                      |             | rev, name (?)  |                     |
|               | b      | ΠΑ-426   | 18 ↗ 4.75   | same   |                     |

As Roman Colony, from 14 B.C.

|            |        |   |  |                          |                                      |
|------------|--------|---|--|--------------------------|--------------------------------------|
|            |        | Cista mystica between bunch<br>of grapes and thyrsos. |  | COL·A· [A PATR]<br>Club. | <i>BMC</i> 16; <i>RPC</i> I,<br>1250 |
| <b>737</b> | OO-982 | 15 ↑ 1.95   |  |                          |                                      |

A.D. 81–96: Domitian

|            |       |                                       |  |  |               |
|------------|-------|---------------------------------------|--|--|---------------|
|            |       | IMP CAES DOM[- - -]<br>Head r., laur. |  | COL A A   [PATRENS]<br>Priest with two oxen plowing l. | <i>BMC</i> 27 |
| <b>738</b> | Ξ-683 | 24 ↓ 6.07                             |  |  |               |

A.D. 161–180: Marcus Aurelius

|            |       |                                       |  |  |  |
|------------|-------|---------------------------------------|--|--|--|
|            |       | [- - - - -]<br>Bust of M. Aurelius r. |  | COL AA PATR<br>Distyle temple containing<br>statue of Athena with spear<br>[and phiale]; at feet, owl. | <i>NCP</i> , Q,xiv (rev.);<br>cf. <i>Cop</i> 200<br>(Commodus) |
| <b>739</b> | Γ-376 | 20 ✓ 4.83                             |  |  |  |

A.D. 176–192: Commodus

|            |       |                                    |  |  |                |
|------------|-------|------------------------------------|--|--|----------------|
|            |       | [- - - - -]<br>Bust of Commodus r. |  | [COL AA P]ATR<br>Zeus seated l., with scepter and<br>[Nike]; at feet, eagle. | <i>Cop</i> 191 |
| <b>740</b> | EE-68 | 24 ← 5.10                          |  |  |                |

A.D. 198–217: Caracalla

|            |         |                                     |  |   |               |
|------------|---------|-------------------------------------|--|---|---------------|
|            |         | [- - - - -]<br>Bust of Caracalla r. |  | COL A[A] PATR<br>Hermes seated l., on rock. | <i>BMC</i> 47 |
| <b>741</b> | BB-1259 | 19 ↑ 3.77                           |  |   |               |

|        |        |                          |                            |               |
|--------|--------|--------------------------|----------------------------|---------------|
|        |        | M AVR ANTONINVS PIVS AVG | PATR COL AA                | <i>BMC</i> 51 |
|        |        | GERM                     | Distyle temple containing  |               |
|        |        | Bust r., laur., dr.      | statue of Hermes seated l. |               |
| 742 *a | AA-977 | 18 ↘ 4.09                |                            |               |
| b      | H-941  | 20 ↘ 4.33                | <i>GRC</i> , fig. 24       |               |

## PELENE

4th–3rd century B.C.

|        |         |                          |   |                  |
|--------|---------|--------------------------|---|------------------|
|        |         | Head of Apollo r., laur. | Γ above Ram's head;<br>all in laurel wreath.    | <i>BMC</i> 10–12 |
| 743 *a | ΣA-475  | 14 ✓ 2.10                |   |                  |
| b      | NN-263  | 15 ↖ 2.65                |   |                  |
| c      | MΣ-99   | 15 ✓ 2.43                |   |                  |
| d      | ΣT'-599 | 16 ✓ 4.03                |   |                  |
| e      | Γ-1356  | 16 ↖ broken              |   |                  |
| f      | NN-1653 | 19 - 3.81                | obv. head l. or r.; rev. ethnic above or below. |                  |

## TENEAE

A.D. 193–211: *Septimius Severus*

|      |        |                       |   |  |
|------|--------|-----------------------|---|--|
|      |        | [- - - - -]           | [ΤΕ]N[ΕΑ]ΤΩN                                  |  |
|      |        | Bust of S. Severus r. | Tyche stg. l., with phiale and<br>cornucopia. |  |
| *744 | I-1034 | 21 → 3.71             |   |  |

## ACHAIA LEAGUE

before 251 B.C.

## AR HEMIDRACHM

|      |       |                        |                     |   |
|------|-------|------------------------|---------------------|---|
|      |       | Head of Zeus r., laur. | Χ in laurel wreath. | M. G. Clerk, <i>Cat-<br/>alogue of the Coins of<br/>the Achaean League</i> ,<br>London 1895, p. 1,<br>no. 1; <i>BMC</i> 1 |
| *745 | A-980 | 14 ← 2.58              |                     |   |

191–146 B.C.<sup>43</sup>

|        |       |   |   |  |
|--------|-------|---|---|--|
|        |       | Zeus stg. l., with Nike<br>and scepter; border of dots. | Female figure (Achaia) seated l.,<br>with wreath and scepter.   |  |
| 746 *a | Σ-305 | 20 ↑ 6.66   | obv., ΑΧΑΙΩΝ over Δ(?); rev. at l., upwards, ΕΡΜΙΟΝΕΩΝ; at<br>r., downwards, ΜΝΗΣΙ[Σ]. Hermione mint (Clerk, <i>op. cit.</i> , p. 24,<br>no. 47: "Epidauros") |  |

<sup>43</sup> According to Jennifer Warren, whose study of the Achaian League bronze is in preparation. We thank her also for the mint attributions of 746b and 746e.

|   |        |    |   |          |   |
|---|--------|----|---|----------|---|
| b | Γ-1239 | 17 | - | broken   | obv., [ΑΧ]ΑΙ[ΩΝ]. Hermione mint?  |
| c | ΒΔ-522 | 22 | ↑ | 6.50     | obv., ΔΕΧΙΑΣ; rev., ΑΧΑΙΩΝ ΜΕΣΣΑΝΙΩΝ. Messene mint (Clerk, <i>op. cit.</i> , p. 31, no. 108; <i>BMC</i> 154)        |
| d | Σ-2229 | 18 | ↑ | 5.90     | obv. at r., ΧΑΡΜΙΔ[ΑΣ]; rev. ΑΧ[ΑΙΩΝ ΠΑΓΑΙΩΝ]. Pagai mint (Clerk, <i>op. cit.</i> , p. 23, no. 33; <i>BMC</i> 135)  |
| e | ΣΑ-62  | 20 | ↗ | 4.47     | rev., [ΜΕΓΑ]ΡΩΝ. Megara mint (Clerk, <i>op. cit.</i> , p. 23, nos. 33–37). Kleiner 1975, p. 317, no. 253 (P–R 6–12) |
| f | ΣΑ-133 | 20 | ↗ | 3.47+    | details and mint unclear  |
| g | Α-1432 | 19 | ✓ | broken   | same  |
| h | ΑΑ-119 | 18 | ↗ | fragment | same  |

## ELIS

ca. 363–323 B.C.<sup>44</sup>

## PLATED COUNTERFEIT OF AR STATER

|               |                        |    |   |       |   |                                 |
|---------------|------------------------|----|---|-------|---|---------------------------------|
|               | [F]-A                  |    |   |       | Eagle stg. r., wings spread;<br>in olive wreath.              | <i>BMC</i> 95, 96               |
|               | Head of Hera r.        |    |   |       |   |                                 |
| <b>*747</b>   | N-328                  | 21 | ↖ | 3.61  | intentionally halved; no surviving trace of silver plating    |                                 |
|               |                        |    |   |       |   |                                 |
|               |                        |    |   |       |   | 312–271 B.C.                    |
|               | Head of Zeus l., laur. |    |   |       | [F-A] Eagle stg. l.,<br>wings spread.                         | <i>BMC</i> 115                  |
| <b>748</b>    | B-351                  | 20 | ↘ | 5.49  |   |                                 |
|               |                        |    |   |       |   |                                 |
|               |                        |    |   |       |   | 271–191 B.C.                    |
|               | [Head of Zeus r.]      |    |   |       | F-A Eagle r., wings<br>spread, seizing snake;<br>at l. [ΚΑΛ]. | <i>BMC</i> 141                  |
| <b>749</b>    | H'-2755                | 20 | - | 6.51  |   |                                 |
|               | Head of Zeus, laur.    |    |   |       | [F-A] Horse trotting r.                                       | <i>BMC</i> 144, 145 (or<br>129) |
| <b>750</b> *a | ΠΘ-406                 | 19 | ↘ | 4.99  | head l. ( <i>BMC</i> 145)                                     |                                 |
| b             | Υ-23                   | 19 | ↖ | 5.13  | head r.   |                                 |
| c             | Β'-849a                | 18 | ↑ | 5.48  | same  |                                 |
|               |                        |    |   |       |   |                                 |
|               |                        |    |   |       |   | after 191 B.C.                  |
|               | [Head of Zeus r.]      |    |   |       | [F-A] Winged thunderbolt;<br>all in olive wreath.             | <i>BMC</i> 148                  |
| <b>751</b>    | Λ-405                  | 18 | - | 4.38+ |   |                                 |

<sup>44</sup> C. T. Seltman, *The Temple Coins of Olympia*, Cambridge 1921, pp. 92–105, Group GH<sup>1</sup>, Series XXX.

|            |   |                        |           |  |                    |
|------------|---|------------------------|-----------|--|--------------------|
|            |   | Head of Zeus r., laur. |           | [FA AEI ΩN] in olive wreath.             | <i>BMC</i> 149–155 |
| <b>752</b> | a | MΣ-295                 | 20 - 6.08 |  |                    |
|            | b | T-1650                 | 18 - 3.39 | Kleiner 1975, p. 324, no. 353 (M–N 15:1) |                    |

A.D. 117–138: *Hadrian*

|             |  |                           |           |  |                     |
|-------------|--|---------------------------|-----------|--|---------------------|
|             |  | [- - - - -]               |           | [HAEI ΩN] in olive wreath.   | <i>BMC</i> 157, 158 |
|             |  | Bust of Hadrian r., laur. |           |  |                     |
| <b>753</b>  |  | II-1098                   | 27 - 9.84 |  |                     |
|             |  | Same.                     |           | [HAEI ΩN]<br>Zeus striding r., throwing<br>thunderbolt.  | <i>BMC</i> 159      |
| <b>754</b>  |  | ΣT-52                     | 19 ↓ 2.55 |  |                     |
|             |  | Same.                     |           | [HAEI ΩN]<br>Youthful nude Zeus stg. r.,<br>arms extended l. and r.<br>[holding thunderbolt and<br>eagle]. | Liegle, pl. III:5   |
| <b>*755</b> |  | ΣT'-432a                  | 16 ↓ 3.75 |  |                     |

KEPHALLENIA

Kranion

4th–3rd century B.C.

|            |  |  |           |                       |                   |
|------------|--|--|-----------|-----------------------|-------------------|
|            |  | Ram stg. l.                            |           | Bow in oblong incuse. | <i>BMC</i> 18     |
| <b>756</b> |  | NN-2062                                | 19 \ 5.45 |                       |                   |
|            |  | Crested helmet with cheek<br>pieces l. |           | [K] in incuse square. | <i>BMC</i> 26, 27 |
| <b>757</b> |  | Γ-1568                                 | 12 - 1.70 |                       |                   |

Same

4th–3rd century B.C.

|            |  |                        |                    |              |               |
|------------|--|------------------------|--------------------|--------------|---------------|
|            |  | Bust of Athena facing. |                    | Σ in wreath. | <i>BMC</i> 18 |
| <b>758</b> |  | Φ-242                  | 11 - disintegrated |              |               |

## ZAKYNTHOS

4th–3rd century B.C.

|               |         |                          |        |                           |  |                  |
|---------------|---------|--------------------------|--------|---------------------------|--|------------------|
|               |         | Head of Apollo r., laur. |        | Ι -Α [ . - . ]<br>Tripod. |  | <i>BMC</i> 42–47 |
| <b>759</b> *a | Υ-203   | 15 ↖                     | 3.06   |                           |  |                  |
|               | b Γ-637 | 18 -                     | broken |                           |  |                  |

## MESSENA

## MESSENE

370–280 B.C.

|              |           |  |        |                |  |                 |
|--------------|-----------|--|--------|----------------|--|-----------------|
|              |           | Head of Demeter l., wearing<br>wheat wreath. |        | M-E<br>Tripod. |  | <i>BMC</i> 4, 5 |
| <b>760</b> a | ΣΑ-391    | 16 ↗   | 3.85   |                |  |                 |
|              | b NN-1122 | 15 -   | broken |                | Kleiner 1976, p. 19, no. 162 (A–B 19–20:1) |                 |

280–146 B.C.

|              |           |  |      |  |   |                  |
|--------------|-----------|--|------|--|---|------------------|
|              |           | Head of Demeter r., wearing<br>wheat wreath. |      | ME at l. of Zeus striding r.,<br>throwing thunderbolt; at r.,<br>tripod. |   | <i>BMC</i> 21–36 |
| <b>761</b> a | NN-9      | 20 ↓   | 6.81 |  | no details  |                  |
|              | b Z-147   | 21 ↖   | 6.35 |  | same  |                  |
|              | c NN-1863 | 21 ↑   | 5.78 |  | obv., head l.; rev., tripod at l. (cf. <i>BMC</i> 34) |                  |

|               |          |                             |      |   |  |                |
|---------------|----------|-----------------------------|------|---|--|----------------|
|               |          | Head of Asklepios r., laur. |      | ME at r. of Snake<br>on staff; at l.,<br>ΝΙΚΑΡ ΧΟΣ. |  | <i>Cop</i> 522 |
| <b>762</b> *a | Σ-4256   | 18 ↑                        | 2.62 |   |  |                |
|               | b BB-639 | 18 ↓                        | 3.47 |   |  |                |

## ΚΥΠΑΡΙΣΙΑ

A.D. 198–217: Caracalla

|            |      |   |      |   |  |              |
|------------|------|---|------|---|--|--------------|
|            |      | [- - - - - - - -]<br>Bust of Caracalla r. |      | ΚΥΠΑ[ΡΙCΙCΙΩΝ]<br>Athena stg. l., with spear<br>and phiale. |  | <i>BMC</i> 3 |
| <b>763</b> | Υ-72 | 22 ←                                      | 3.02 |   |  |              |

## MOTHONE

A.D. 193–211: *Septimius Severus*

|            |         |                       |  |                             |                         |
|------------|---------|-----------------------|--|-----------------------------|-------------------------|
|            |         | [- - - - -]           |  | [MOΘ]ΩΝ-[ΑΙΩΝ]              | cf. <i>BMC</i> 6 (Geta) |
|            |         | Bust of S. Severus r. |  | Athena stg. l., with spear. |                         |
| <b>764</b> | E-1553a | 22 ← 5.15             |  |                             |                         |

## THOURIA

ca. 220–182 B.C.

|             |        |                        |  |   |                 |
|-------------|--------|------------------------|--|---|-----------------|
|             |        | Head of Zeus r., diad. |  | ΘΟΥΥ at l. of Athena,<br>stg., facing, with spear<br>and shield; downward at l.,<br>[ΝΙ]ΚΩΝΥΜΟΣ; at r., wreath. | <i>BMC</i> 2, 3 |
| <b>*765</b> | Σ-6462 | 20 ↘ 3.76              |  |   |                 |

A.D. 198–217: *Caracalla?*

|            |       |                         |                         |  |                 |
|------------|-------|-------------------------|-------------------------|--|-----------------|
|            |       | [- - - - -]             |                         | [ΘΟΥΡΙΑΘΩΝ]  | <i>BMC</i> 5, 6 |
|            |       | Bust of Caracalla(?) r. |                         | Λ-A l. and r. of Athena<br>stg. l., with phiale and spear. |                 |
| <b>766</b> | X-185 | 21 ← 3.25+              | pierced with 4 mm. hole |  |                 |

## LAKONIA

## LAKEDAIMON

ca. 223–222 B.C.

|            |       |   |                          |           |                                |
|------------|-------|---|--------------------------|-----------|--------------------------------|
|            |       | Two pilei of the Dioskouroi;<br>border of dots. |                          | Λ-A Club. | Grunauer, p. 116,<br>Group VII |
| <b>767</b> | BB-66 | 15 ← 1.74                                       | Grunauer, p. 116, coin a |           |                                |

ca. 197–192 B.C.

|            |         |                   |  |  |                               |
|------------|---------|-------------------|--|--|-------------------------------|
|            |         | Head of Apollo r. |  | [ΛΑΚΕΔΑΙ-MONΙΩΝ]   | Grunauer, p. 127,<br>Group XI |
|            |         |                   |  | Two pilei of the Dioskouroi;<br>between them the monograms<br>⌘ (above) and ♯ (below). |                               |
| <b>768</b> | BB-1300 | 16 ↑ 2.50         |  |  |                               |

ca. 48–40 B.C.

|            |        |  |                                     |                                   |
|------------|--------|--|-------------------------------------|-----------------------------------|
|            |        | Head of Athena in Corinthian helmet r. | [Λ-Α] Owl stg. r., in olive wreath. | Grunauer, pp. 127–129, Group XIII |
| <b>769</b> | OO-865 | 13 ↗ 1.41                              |                                     |                                   |

|            |          |                             |   |                                  |
|------------|----------|-----------------------------|---|----------------------------------|
|            |          | Head of bearded Herakles r. | Λ-Α Club; in field, [letters]; all in olive wreath. | Grunauer, pp. 129–134, Group XIV |
| <b>770</b> | a Ε-825  | 16 → 2.55                   | Grunauer, p. 134, coin f                            |                                  |
|            | b BB-705 | 14 - 1.80                   |   |                                  |

ca. 43–31 B.C.

|            |          |                                   |  |                                 |
|------------|----------|-----------------------------------|--|---------------------------------|
|            |          | Jugate heads of the Dioskouroi r. | [Λ-Α] Two amphoras entwined by snakes; in field, [letters]; all in olive wreath. | Grunauer, pp. 134–140, Group XV |
| <b>771</b> | a Z-412  | 19 - 2.72                         |  |                                 |
|            | b E-2430 | 18 - 2.85                         |  |                                 |
|            | c Z-1963 | 16 - 1.61+                        |  |                                 |

|            |        |                                 |   |                                      |
|------------|--------|---------------------------------|---|--------------------------------------|
|            |        | [Head of Lakedaimon, r., diad.] | Λ-Α Eagle stg. r., wings closed; at l. Ε; at r., Δ. | Grunauer, p. 147, Group XVI, Ser. 14 |
| <b>772</b> | OO-986 | 19 - 4.68                       |   |                                      |

35–31 B.C.

|             |        |  |  |                                    |
|-------------|--------|--|--|------------------------------------|
|             |        | [ΝΟΜΟΦΥΛΑΚΕΣ]<br>Head of Athena r., wearing Corinthian helmet. | Λ-Α Dioskouroi stg., facing with spears; between them, Α ΠΙC ΤΑ ΝΔ; all in wreath. | Grunauer, pp. 155–156, Group XVIII |
| <b>*773</b> | NN-143 | 27 ↗ 15.47   |  |                                    |

|            |        |  |   |                                     |
|------------|--------|--|---|-------------------------------------|
|            |        | [ΓΕΡΟΝΤΩΝ]<br>Head of Apollo r., laur. | Λ-Α  Ε-ΤΙ Artemis l., leaning on spear; beside her, dog; all in wreath. | Grunauer, p. 156, Group XIX, Ser. 1 |
| <b>774</b> | K-1562 | 25 ↘ 11.43                             |   |                                     |

31–7 B.C.

|            |           |                 |   |  |
|------------|-----------|-----------------|---|--|
|            |           | Head of Zeus r. | Λ-Α  ΕΠΙ-ΕΥ ΡΥ- ΚΛΕ Ο-Σ<br>l. and r. of Club. | Grunauer, pp. 163–168, Group XXVI; RPC I, 1103 |
| <b>775</b> | a Λ-119   | 22 ↓ 5.12       |   |  |
|            | b NN-404a | 20 - 6.60       |   |  |

ca. 21 B.C.: *Augustus*

|               |                     |           |                       |  |  |
|---------------|---------------------|-----------|-----------------------|--|--|
|               | K[ΑΙC]              |           | ΕΠΙ [ΕΥΡ]ΥΚΛῚΕΟΣ [Α-Α |  | Grunauer, p. 168,<br>Group XXVII;<br>RPC I, 1104 |
|               | Head of Augustus r. |           | Eagle stg. r.         |  |  |
| <b>776</b> *a | Σ-949               | 17 ↗ 2.24 |                       |  |  |
|               | b P-1621            | 17 ↗ 1.53 | legends effaced       |  |  |
|               | c Z-605             | 18 ↓ 2.97 | same                  |  |  |

A.D. 117–138: *Hadrian*

|             |   |           |  |  |             |
|-------------|---|-----------|--|--|-------------|
|             | ΑΥ ΚΑΙC[- - -]  |           | ΑΑΚ[- - -]   |  | unpublished |
|             | Bust of Hadrian r., rad.,<br>with drapery on far shoulder;<br>border of dots. |           | Athena stg. r., wearing peplos<br>with archaistic overfolds,<br>holding shield in l. and<br>brandishing spear in upraised r.;<br>border of dots. |  |             |
| <b>*777</b> | Π-2   | 14 → 2.70 | for the reverse type at Sparta, see Grunauer, p. 103, pl. 32:40 (Geta)   |  |             |

A.D. 138–161: *Antoninus Pius*

|            |                        |           |   |  |                                       |
|------------|------------------------|-----------|---|--|---------------------------------------|
|            | [ΑΥΤΟΚΡΑΤΩΡ-ΑΝΤΩΝΕΙΝΟC |           | Club between pilei of<br>Dioskouroi, in wreath. |  | Grunauer, p. 185,<br>Group XL, Ser. 1 |
| <b>778</b> | Δ-308a                 | 19 - 3.58 |   |  |                                       |
|            | Similar.               |           | [ΛΑΚΕΔΑΙΜΟΝΙΩΝ]                                 |  | Grunauer, p. 186,<br>Group XL, Ser. 4 |
| <b>779</b> | ΚΚ-208'                | 19 ↗ 2.95 | Apollo stg. frontally, with<br>lyre, head l.    |  |                                       |

## KYTHERA

after 146 B.C.

|            |                      |           |                |  |            |
|------------|----------------------|-----------|----------------|--|------------|
|            | HΠΙ behind           |           | [Κ-Υ]          |  | BMC 14, 15 |
| <b>780</b> | Ο-416                | 18 - 2.99 | Dove flying l. |  |            |
|            | Bust of Aphrodite r. |           |                |  |            |

## ARGOLIS

## ARGOS

4th–3rd century B.C.

|            |                 |             |                           |  |        |
|------------|-----------------|-------------|---------------------------|--|--------|
|            | Head of wolf l. |             | Α; below, Β               |  | BMC 98 |
| <b>781</b> | ΒΒ-46           | 12 - broken | in shallow incuse square. |  |        |



|               |        |   |   |                     |
|---------------|--------|---|---|---------------------|
|               |        | Head of Hera r., wearing<br>stephanos inscribed [ΑΡΓΕ]. | Archaic Athena fighting l.                | <i>BMC</i> 106, 107 |
| <b>782</b> *a | ΜΣ-304 | 17 ↖ 3.97   | Kleiner 1975, p. 309, no. 151 (H-K 12-14) |                     |
| b             | K-830  | 17 ↑ 3.14   |   |                     |

*3rd-2nd century B.C.*

|              |        |                       |  |                    |
|--------------|--------|-----------------------|--|--------------------|
|              |        | Head of Apollo, laur. | Wolf at bay.   | <i>BMC</i> 125-130 |
| <b>783</b> a | ΛΑ-110 | 15 ↘ broken           | types l.; rev., above, [Α] ( <i>BMC</i> 125, 126)                        |                    |
| b            | T-954  | 15 ← 2.34             | types r.; rev., above, Χ ( <i>BMC</i> 128-130)                           |                    |
| c            | O-196  | 15 ↖ 2.44             | same   |                    |
| d            | I-52   | 17 ↘ 2.84             | types r.; rev. above, ΑΡΓΕΙΩ[N]; below, Κ ( <i>McClellan</i> 6865, 6866) |                    |

|              |        |                          |  |                    |
|--------------|--------|--------------------------|--|--------------------|
|              |        | Head of Apollo r., laur. | Tripod.  | <i>BMC</i> 131-135 |
| <b>784</b> a | PP-736 | 14 ↗ 1.88+               | rev., [Ε]Υ-Θ[Υ] Μ-[Ε], [Θ] and club ( <i>BMC</i> 131, 132) |                    |
| b            | Π-571  | 16 ↖ 1.90                | rev., Λ-[Α] Κ-ΡΑ, club and Θ ( <i>BMC</i> 133)             |                    |
| c            | ΠΠ-852 | 14 - 2.19                | no details   |                    |

|            |        |  |   |                    |
|------------|--------|--|---|--------------------|
|            |        | [Head of Hera r., wearing<br>stephanos.] | Π-[ΑΜ Φ]Α-[ΗΣ]<br>Quiver; to l. [trident]; to r.<br>prow. | <i>BMC</i> 140-142 |
| <b>785</b> | ΠΑ-427 | 16 - 1.37+                               |   |                    |

*A.D. 193-211: Septimus Severus*

|             |       |   |                               |                                     |
|-------------|-------|---|-------------------------------|-------------------------------------|
|             |       | [- - -]CΕ[ΠΤ] CΕΒΗ[ΡΟC]<br>Head r., laur. | ΝΕ ΜΕ Α<br>in parsley wreath. | cf. <i>BMC</i> 170<br>(Julia Domna) |
| <b>*786</b> | Z-320 | 24 ↘ 6.11                                 |                               |                                     |

*A.D. 198-217: Caracalla*

|             |       |                                    |   |  |
|-------------|-------|------------------------------------|---|--|
|             |       | [- - - - -]ΑΝΤΩΝΕΙΝΟ[C]<br>Head r. | ΑΡ[ΓΕ]ΙΩΝ<br>Leto stg. r., l. hand<br>extended over child<br>Chloris. | J. Sabatier,<br>"Monnaies impéria-<br>les grecques," <i>RBN</i> ,<br>ser. 4, 3, 1960<br>(pp. 1-25), pp. 10-<br>11, pl. III:1; with<br><i>NCP</i> , p. 38 |
| <b>*787</b> | T-227 | 26 ↓ 7.44                          |   |  |

## ΕΠΙΔΑΥΡΟΣ

*4th-3rd century B.C.*

|              |         |                             |                     |                  |
|--------------|---------|-----------------------------|---------------------|------------------|
|              |         | Head of Asklepios r., laur. | Ε in laurel wreath. | <i>BMC</i> 16-21 |
| <b>788</b> a | ΣΤ'-638 | 15 ↑ fragment               |                     |                  |
| b            | A-1046  | 12 ↑ 1.21+                  |                     |                  |
| c            | K-83    | 12 - 1.24+                  |                     |                  |
| d            | Γ-1608  | 11 - 1.14+                  |                     |                  |

|            |   |          |      |  |               |
|------------|---|----------|------|--|---------------|
|            |   | Similar. |      | Ε Thymiaterion between<br>two cupping vessels. | <i>BMC 23</i> |
| <b>789</b> | a | Z-2643   | 16 ↖ | 1.77   |               |
|            | b | O-528    | 16 ↑ | 2.66   |               |

|            |   |          |      |                            |   |
|------------|---|----------|------|----------------------------|---|
|            |   | Similar. |      | Ε above<br>Coiled snake r. | cf. <i>BMC 27</i><br>(monogram<br>retrograde) |
| <b>790</b> | a | ΘΘ-123   | 15 ↑ | chipped                    |   |
|            | b | K-1536   | 15 - | 3.14                       |   |
|            | c | OO-476   | 14 - | 4.18                       |   |

*after 146 B.C.*

|             |  |          |      |                                       |                |
|-------------|--|----------|------|---------------------------------------|----------------|
|             |  | Similar. |      | ΕΠΙΔΑΥΡΟΥ around<br>ΙΕ ΡΑΣ in wreath. | <i>Cop 132</i> |
| <b>*791</b> |  | ΓΓ-291a  | 20 ↘ | 6.63                                  |                |

#### HERMIONE

*second quarter 4th century B.C.*

#### CHALKOUS

|            |    |  |      |                                    |   |
|------------|----|--|------|------------------------------------|---|
|            |    | Head of Demeter l., wearing<br>wheat wreath. |      | E-P Torch;<br>all in wheat wreath. | Grandjean,<br>Groups I, II                  |
| <b>792</b> | *a | Σ-5552                                       | 14 ↖ | 2.30                               | Grandjean, p. 33, pl. 8, d4-r6 (emission 1) |
|            | b  | X-175  | 12 - | fragment                           | Grandjean, p. 43 (emission 11) (N 19:1)     |

#### TRICHALKON

|            |  |  |      |                    |                                    |
|------------|--|--|------|--------------------|------------------------------------|
|            |  | Head of Demeter facing,<br>wearing wheat wreath. |      | Ε in wheat wreath. | Grandjean,<br>Group II, emission 6 |
| <b>793</b> |  | Γ-1197   | 15 ↗ | 3.42               | Grandjean, p. 39, pl. 10, d69-r?   |

*third quarter 4th century B.C.*

#### DICHALKON

|            |  |  |      |   |  |
|------------|--|--|------|---|--|
|            |  | Head of Demeter r., wearing<br>wheat wreath. |      | EP between Two torches;<br>all in wheat wreath. | Grandjean,<br>Group IV,<br>emission 13 |
| <b>794</b> |  | NN-2022                                      | 15 ↑ | 2.13+   | Grandjean, p. 44, pl. 11, d107-r112    |

## CHALKOUS

Same as 792.

Same as 792.

Grandjean,  
Group IV,  
emission 14**794A** Z-683 13 ↓ 1.50 Grandjean, p. 45

Although Grandjean (*op. cit.*, note 22) did not rely on the evidence from Olynthos, the Group II Hermione coin excavated at this site (*ibid.*, p. 38 = *Olynthus* III, p. 94, pl. xviii, no. 785 = *Olynthus* IX, p. 352, b) in an area that lay abandoned after 348 B.C. (see p. 297 below) confirms her dating of Groups I and II before *ca.* 350.

A.D. 198–217: *Caracalla*[- - -] M AV ANTΩNI  
Bust r., laur., dr.[Є]PMIONЄWN  
Tyche stg. l., with  
cornucopia and rudder.cf. *BMC* 19  
(Plautilla)**\*795** Σ-3753 25 ↗ 6.22

## KLEONAI

*late 4th century* B.C.

Head of young Herakles r.

ΚΛ|ΕΩ in parsley wreath.

*BMC* 9, 10**796** a Z-1366 14 - 1.72  
b I-502a 12 - 1.41+A.D. 198–212: *Plautilla*[- - - - -]  
Bust of Plautilla r.[Κ]ΛΕΩ[ΝΑΙΩΝ]  
Athena striding r., with  
spear and shield.*Corinth* VI,  
no. 419**797** Z-902 23 ↑ 2.50

## METHANA

A.D. 193–211: *Septimius Severus*[- - - - -]  
Bust of S. Severus r.ΜΕΘΑΝΑ-ΙΩΝ  
Artemis stg. l., holding bow  
and drawing arrows from  
quiver.*BMC* 18**798** OO-51 18 ↓ 4.38

## TROIZEN

*4th–3rd century* B.C.

Head [of Poseidon].

[TPO] Trident.

*BMC* 17 (head l.)  
or *Cop* 160, 161  
(head r.)**799** Γ-1082 16 - 3.37 (E 14:3)

A.D. 180–192: *Commodus*

|            |        |                            |                           |               |
|------------|--------|----------------------------|---------------------------|---------------|
|            |        | [ - - - - - ]              | [ΤΡΟΖΗΝΙΩΝ]               | <i>BMC</i> 20 |
|            |        | Head of Commodus r., laur. | Theseus r., raising rock. |               |
| <b>800</b> | Z-2099 | 22 ✓ 6.75                  | (H 12:4)                  |               |

## ARKADIA

## ARKADIAN LEAGUE

*after ca. 370 B.C.*

|            |          |                        |   |                   |
|------------|----------|------------------------|---|-------------------|
|            |          | Head of young Pan r.   | A Syrinx.   | <i>BMC</i> 62–69  |
| <b>801</b> | A-245    | 20 ↓ 5.32+             |   |                   |
|            |          | Head of Zeus l., laur. | Α Syrinx; below, thunderbolt;<br>in field, [Γ Μ]. | <i>BMC</i> 87, 88 |
| <b>802</b> | a Γ-1584 | 18 ↓ 2.17              |   |                   |
|            | b Φ-107  | 18 ↓ 2.40              |   |                   |

## HERAIA

*4th century B.C.*

|            |       |   |   |                   |
|------------|-------|---|---|-------------------|
|            |       | Head of Athena l., wearing<br>Attic helmet. | H with curved sides and<br>four pellets around. | <i>BMC</i> 23     |
| <b>803</b> | Z-344 | 15 — 2.99                                   |   |                   |
|            |       | Similar.                                    | H with curved sides.                            | <i>BMC</i> 24, 25 |
| <b>804</b> | Φ-328 | 13   2.69                                   |   |                   |

A specimen of **804** was excavated at Olynthos; see *Olynthus* VI, p. 82, pl. XVII, no. 729 = *Olynthus* IX, p. 352, d.

## KLEITOR

*after 370 B.C.*

|            |       |                        |     |                   |
|------------|-------|------------------------|-----|-------------------|
|            |       | Head of Helios facing. | HK. | <i>BMC</i> 12, 13 |
| <b>805</b> | Φ-193 | 13 — 0.81              |     |                   |

## MANTINEIA

*after 370 B.C.*

|            |          |  |  |                |                  |
|------------|----------|--|--|----------------|------------------|
|            |          | Head of Athena r., wearing<br>Corinthian helmet. |  | [MAN] Trident. | <i>BMC</i> 20–23 |
| <b>806</b> | a ΠΘ-581 | 15 ↖ 2.29  |  |                |                  |
|            | b Γ-359  | 14 → 2.40  |  |                |                  |

|            |         |          |        |                                       |              |
|------------|---------|----------|--------|---------------------------------------|--------------|
|            |         | Similar. |        | M-A l. and r. of shaft of<br>Trident. | unpublished? |
| <b>807</b> | OO-597a | 9 ↑ 0.49 | broken |                                       |              |

## MEGALOPOLIS

*ca. 234–146 B.C.*

|            |        |                        |  |   |               |
|------------|--------|------------------------|--|---|---------------|
|            |        | Head of Zeus l., laur. |  | ΜΕ-Γ<br>Pan seated l. on rock;<br>in field, ΛΕ-Φ Ϝ-Α. | <i>BMC</i> 16 |
| <b>808</b> | MM-366 | 23 ↑ 5.59              |  |   |               |

## ORCHOMENOS

*after 370 B.C.*

|            |        |                                |  |   |                 |
|------------|--------|--------------------------------|--|---|-----------------|
|            |        | Artemis kneeling r., with bow. |  | [EPXOMEN-ΙΩΝ]<br>Kallisto seated l., pierced by<br>arrow; child Arkas behind. | <i>BMC</i> 1, 2 |
| <b>809</b> | Z-1103 | 20 ✓ 4.83+                     |  |   |                 |

## PHENEOS

*after 370 B.C.*

|            |         |  |  |                 |               |
|------------|---------|--|--|-----------------|---------------|
|            |         | Head of Demeter r., wearing<br>wheat wreath. |  | [Φ]-Ε Caduceus. | <i>BMC</i> 20 |
| <b>810</b> | ΠΠ-1098 | 15 - broken                                  |  |                 |               |

*A.D. 198–217: Caracalla*

|             |       |                                   |                      |   |  |
|-------------|-------|-----------------------------------|----------------------|---|--|
|             |       | M AVP ANTΩNINOC<br>Bust r., laur. |                      | [ΦΕ]ΝΕ-ΑΤΩΝ<br>Dionysos seated l., with<br>thyrsos and [kantharos]. | unpublished;<br>cf. <i>NCP</i> , p. 98 |
| <b>*811</b> | ΔΔ-22 | 23 ✓ 3.65                         | <i>GRC</i> , fig. 23 |   |  |

## TEGEA

4th–3rd century B.C.

|            |    |  |                     |                                       |
|------------|----|--|---------------------|---------------------------------------|
|            |    | Head of Athena r., wearing Attic helmet. | TEΓE or TE Owl stg. | <i>BMC</i> 8–10                       |
| <b>812</b> | *a | Λ-225                                    | 16 ↑ 3.87           | TEΓE; owl r. (as <i>McClean</i> 7020) |
|            | *b | EE-25                                    | 15 ↘ 1.79           | TE; owl l. ( <i>BMC</i> 10)           |
|            | c  | Ψ-156                                    | 14 → 1.07           | same                                  |
|            | d  | PP'-756                                  | 13 → 2.26           | TEΓ; owl l.                           |
|            | e  | BΓ-293                                   | 15 ↘ 2.55           | legend effaced; owl l.                |

|            |  |   |           |  |
|------------|--|---|-----------|--|
|            |  | Similar.  | [TEΓEA]   | <i>BMC</i> 12, 13  |
| <b>813</b> |  | Π-148a  | 14 ↓ 2.89 | Warrior charging r.  |
|            |  | Head of Eileithyia or Demeter r., [with torch over shoulder]. | [TEΓEA]   | <i>BMC</i> 17–19   |
| <b>814</b> |  | T-1450  | 18 ↗ 2.25 | Athena stg. r., [placing hair of Medusa in amphora held by child Sterope]. |

after 146 B.C.

|            |   |                             |             |   |
|------------|---|-----------------------------|-------------|---|
|            |   | [ΑΛΕΟΣ]<br>Head of Aleos r. | [TEΓEATAN]  | <i>BMC</i> 20, 21   |
| <b>815</b> | a | ΠΘ-315                      | 22 ↑ broken | Athena and Kepheus stg., face to face; between them, Sterope receiving hair of Medusa in amphora; [above and below, monograms]. |
|            | b | ΣΤ'-576                     | 21 - 6.15   |   |

A.D. 193–211: *Septimius Severus*

|            |  |                       |               |  |
|------------|--|-----------------------|---------------|--|
|            |  | [- - - - -]           | TEΓE[- - -]   |  |
| <b>816</b> |  | Bust of S. Severus r. | Type effaced. |  |
| <b>816</b> |  | T-1059                | 21 - 4.37     |  |

## CRETE

## APTEPA

ca. 250–67 B.C.

|             |  |  |   |                       |
|-------------|--|--|---|-----------------------|
|             |  | Head of Artemis r., wearing stephanos. | [ΑΠ]-T[A] at l. and r. of handle of Race torch. | cf. <i>BMC</i> 12, 13 |
| <b>*817</b> |  | Θ-351                                  | 16 ↑ 2.91                                       |                       |

## NON-ATHENIAN COINS

## ARSINOE

*3rd century B.C.*

|             |        |   |  |              |
|-------------|--------|---|--|--------------|
|             |        | Head of Athena l., wearing Corinthian helmet. | [AP]ΣΙ Two dolphins swimming r., the lower one inverted. | <i>BMC 6</i> |
| <b>*818</b> | OO-454 | 15 ↑ 1.01                                     |  |              |

## KNOSSOS

*ca. 200–67 B.C.*

|            |      |                      |                                     |               |
|------------|------|----------------------|-------------------------------------|---------------|
|            |      | [Head of Artemis r.] | [K-N]  Ω-Σ  Ω-N<br>Winged caduceus. | <i>BMC 70</i> |
| <b>819</b> | Θ-24 | 15 - 1.96            |                                     |               |

*A.D. 4–14: Tiberius as Caesar*

|             |         |                        |  |                   |
|-------------|---------|------------------------|--|-------------------|
|             |         | [TI CAESAR]<br>Head r. | [POLLIONE ITER LABEONE<br>F IIVI] Stag stg. r. | <i>RPC I, 983</i> |
| <b>819A</b> | NN-1994 | 19 ↓ 4.32              |  |                   |

## CRETE AS ROMAN PROVINCE

*A.D. 138–161: Antoninus Pius*

|             |        |                                    |  |  |
|-------------|--------|------------------------------------|--|--|
|             |        | AV AN[T-ΩN]EINOC<br>Head r., laur. | K-K Artemis<br>running r., drawing<br>arrow from quiver. | J. N. Svoronos,<br><i>Numismatique de la<br/>Crète ancienne,</i><br>Macon 1890,<br>p. 354, no. 126 |
| <b>*820</b> | X-211a | 16 ↘ 1.95                          |  |  |

See also **1033** and **1034**.

## AEGEAN ISLANDS

## ANDROS

*4th–2nd century B.C.*

|            |           |  |                     |                |
|------------|-----------|--|---------------------|----------------|
|            |           | Head of young Dionysos r., wearing ivy wreath. | [A N- Δ-P] Amphora. | <i>BMC 3–5</i> |
| <b>821</b> | a KK-27   | 18 ↓ 5.50                                      | (C 9:2)             |                |
|            | b ΠΠΠ-667 | 16 - 3.80                                      |                     |                |

- Head of bearded Dionysos r.,  $\Delta|N-[I]|\Delta-[P]$  Kantharos, *BMC 7*  
wearing ivy wreath.
- \*822** NN-1835 15  $\uparrow$  3.30 Kleiner 1976, p. 19, no. 163 (A–B 19–20:1)
- Head of young Dionysos r.,  $A-N|\Delta-PI$  Thyrsos. *BMC 14–19*  
wearing ivy wreath.
- 823** \*a A-1550 16  $\uparrow$  3.07  
b OO-97a 17  $\uparrow$  2.66 obv. cmk.: bunch of grapes in incuse circle  
c  $\Sigma$ -2069 17  $\uparrow$  3.23  
d  $\Sigma$ -5669 17  $\uparrow$  3.65  
e Z-2440 16  $\uparrow$  3.00  
f  $\Upsilon$ -222 16  $\downarrow$  1.05+
- Head of bearded Dionysos r.,  $A-N|\Delta-PI$  Tripod. *BMC 20–22*  
wearing ivy wreath.
- 824**  $\Gamma$ -1612a 10  $\uparrow$  0.90 (context [“Layer 2 of MJ”] with Period III Athenian coins to third quarter of 2nd century B.C. [three variety **98**: Athena/Amphora]; see **984**)
- DELOS
- before 167 B.C.*
- Head of Apollo l., laur.  $\Delta-H$  Palm tree. *Sv. 105.75–78*
- 825** NN-2013 18  $\uparrow$  4.73+
- Similar.  $\Delta$  behind *Sv. 105.91–93*  
Bust of Artemis r., with  
quiver at shoulder.
- 826**  $\Sigma A$ -83 -  $\uparrow$  fragment
- Similar.  $\Delta-H$  Lyre. *Sv. 105.32–34*
- 827** \*a H-8 17  $\uparrow$  3.07  
b Z-2804 16  $\uparrow$  4.08 Kleiner 1976, p. 15, no. 93 (H 12:1)
- Head of Apollo, laur. Similar. *Sv. 105.35–41, 49–74*
- 828** Apollo head l. (*Sv. 105.35–41, 64–74*)  
a BB-903 12  $\uparrow$  0.80  
b NN-857 11  $\uparrow$  0.86  
c Z-2767 10  $\uparrow$  1.41  
\*d  $\Pi$ -447 9  $\uparrow$  0.99  
Apollo head r. (*Sv. 105.49–63*)  
e  $\Omega$ -33 10  $\uparrow$  1.03  
f E-1148 10  $\uparrow$  0.88



|   |                      |    |   |          |  |
|---|----------------------|----|---|----------|--|
| g | NN-935               | 10 | - | 0.70     |  |
| h | Z-2837               | 9  | ↑ | 0.72     | Kleiner 1976, p. 15, no. 95 (corrected) (H 12:1) |
| i | T-1702               | -  | ↑ | fragment | Kleiner 1975, p. 322, no. 325 (M-N 15:1)         |
|   | Apollo head l. or r. |    |   |          |  |
| j | A-1314               | 12 | - | 1.76     |  |
| k | ΠA-148               | 10 | - | 1.11     |  |

|            |        |                          |   |          |  |               |
|------------|--------|--------------------------|---|----------|--|---------------|
|            |        | Head of Apollo r., laur. |   | Similar. |  | Sv. 105.30–31 |
| <b>829</b> | Γ-1565 | 7                        | ↑ | 0.45     |  |               |

The Delian Apollo/Lyre bronze was minted in three denominations. According to the criteria outlined above, p. 38, the larger, AE 3 unit (**827**) should be the dichalkon, which leaves **828** and **829** to be identified as the AE 4 chalkous and the AE 5 half-chalkous respectively. Some of the smaller and lighter pieces listed under **828** may in fact belong to **829**.

#### As ATHENIAN CLERUCHY

ca. 69 B.C.

|             |         |  |   |  |  |               |
|-------------|---------|--|---|--|--|---------------|
|             |         | TPIA below Head of Apollo r., with quiver at neck. |   | A-ΘE Owl stg. r., facing, on horizontal amphora. |  | Sv. 106.66–71 |
| <b>*830</b> | AA-1149 | 18   | ↑ | 4.57   |  |               |

This is the only coin of this variety with a recorded Athenian provenience. All other specimens whose place of discovery is known (namely, the nineteen pieces in the Numismatic Collection of Athens, including Sv. 106.66–71) come from Delos.<sup>45</sup> The obverse inscription is the signature of the admiral Gaius Valerius Triarius, legate of Lucullus in the Aegean and Black Seas during the Second Mithradatic War.<sup>46</sup> Using Delos as his base of operations, Triarius could have minted the coinage to compensate sailors in his fleet; but in view of the Athenian ethnic and types of the coins, it seems far more likely that the coinage was ordered to pay the workmen on the fortification wall that Triarius constructed around the ruined city of Delos after the pirate Athenodoros devastated the island in 69.<sup>47</sup> The nineteen Numismatic Collection specimens have an average weight of 5.05 g.

This AE 2 issue was accompanied by an AE 3 denomination with the first three letters of Triarius' name in a monogram (Sv. 106.73–75, 13–14 mm., av. [of the eight Numismatic Collection specimens] 3.10 g.):

Obv.  $\Phi$ -A at l. and r. of Bust of Artemis r.; border of dots.

Rev. A-ΘE Two wheat ears; border of dots.

All examples with a recorded provenience are also from Delos.<sup>48</sup>

On the mistaken attribution of other AΘE bronze varieties to Delos after its transfer to Athenian control in 167/6 B.C., see above pp. 68–69 and under **104**.

<sup>45</sup> Svoronos 1907, pp. 194–214, nos. 66, 76, 124, 125, 164, 304–306, pl. IV:8–10. *Idem* 1911, pp. 60–61, nos. 85, 105; pp. 83–92, nos. 9.8, 9.9, 11.3, 14.26, 16.20, 16.21.

<sup>46</sup> T. R. S. Broughton, *The Magistrates of the Roman Republic* II, New York 1952, pp. 113, 120, 125, 134, 141; Roussel, p. 48, note 1, and pp. 331–333.

<sup>47</sup> P. Bruneau and J. Ducat, *Guide de Délos*, 3rd ed., Paris 1983, p. 198.

<sup>48</sup> Svoronos 1907, pp. 194–214, nos. 67 (pl. IV:11), 77, 165–166, 307; *idem* 1911, p. 78, no. 7.18.



## Koressia

*4th–2nd century B.C.*

|               |        |                                     |  |   |                   |
|---------------|--------|-------------------------------------|--|---|-------------------|
|               |        | Bearded male head<br>(Aristaios) r. |  | K O P [H] between rays of Star.   | <i>BMC</i> 57, 58 |
| <b>836</b>    | Θ-373  | 13 - broken                         |  | (found with two Athenian bronze of variety <b>85</b> or <b>108</b> :<br>Cicada/Amphora, 2nd century B.C.) |                   |
|               |        | Head of Apollo r., laur.            |  | [KO PH] Bee.  | <i>BMC</i> 66     |
| <b>837</b> *a | T-37a  | 18 ↓ 6.44                           |  | obv. cmk.: head l., in incuse circle  |                   |
| b             | T-1205 | 19 ↑ 3.86                           |  |   |                   |

## Ioulis

*4th–2nd century B.C.*

|             |        |                           |  |  |   |
|-------------|--------|---------------------------|--|--|---|
|             |        | Head of young Dionysos r. |  | IOY l. of<br>Bunch of grapes.                            | cf. <i>BMC</i> 69, 70<br>(bearded Dionysos<br>head) |
| <b>*838</b> | BB-445 | 11 ↑ 1.06                 |  |  |   |
|             |        | Head of Apollo r.         |  | IOY<br>Forepart of dog Sirios r.<br>[encircled by rays]. | cf. <i>McClellan</i> 7246                           |
| <b>839</b>  | Γ-806a | 13 ✓ 1.29                 |  |  |   |
|             |        | Bearded head r., laur.    |  | [IOYΛIC] Bee.  | <i>BMC</i> 78–83                                    |
| <b>840</b>  | EA-182 | 13 ✓ 1.91                 |  |  |   |

## KYTHNOS

*3rd–1st century B.C.*

|            |        |                          |  |   |              |
|------------|--------|--------------------------|--|---|--------------|
|            |        | Female head r.           |  | [K-Υ] Bunch of grapes;<br>all in incuse square. | <i>BMC</i> 5 |
| <b>841</b> | Σ-5564 | 12 ↓ 1.47                |  |   |              |
|            |        | Head of Apollo r., laur. |  | K-[Υ] Rose.                                     | <i>BMC</i> 7 |
| <b>842</b> | N-963  | 17 ↓ 2.76                |  |   |              |

## MELOS

*1st–3rd century after Christ*

|            |          |   |  |                            |               |
|------------|----------|---|--|----------------------------|---------------|
|            |          | Bust of Athena r., wearing Corinthian helmet. |  | MH ΛI[Ω]N in olive wreath. | <i>BMC</i> 38 |
| <b>843</b> | III-1007 | 25 ↑ 7.67                                     |  |                            |               |

A.D. 176–192

|             |        |   |  |  |               |
|-------------|--------|---|--|--|---------------|
|             |        | MΗΛΙΩΝ<br>Bust of Athena r., wearing Corinthian helmet. |  | ΕΠΙ  ΑΡΧΟ  ΦΛ<br>ΕΠΑ ΦΡΟΔΙ ΤΟΥ<br>in olive wreath. | <i>BMC</i> 48 |
| <b>*844</b> | NN-618 | 25 ↓ 6.14   |  |  |               |

## PAROS

*before ca. 150 B.C.*

|            |            |   |  |   |                  |
|------------|------------|---|--|---|------------------|
|            |            | Head of Demeter or Kore r., wearing wheat wreath. |  | ΠΑΡΙ above<br>Goat stg. r.; in front, star. | <i>BMC</i> 32–34 |
| <b>845</b> | a ΣΑ-25    | 16 ↑ 3.58   | (context of before <i>ca.</i> 150 B.C. <sup>50</sup> ) |   |                  |
|            | b Ν'-1315a | 17 ↑ 2.45+  |  |   |                  |

## SIPHOS

*6th century B.C.*

## PLATED COUNTERFEIT OF AR HEMIDRACHM

|             |       |                 |  |  |              |
|-------------|-------|-----------------|--|--|--------------|
|             |       | Eagle flying r. |  | Incuse square.   | <i>BMC</i> 3 |
| <b>*846</b> | A-663 | 15 - 2.13       |  | Bronze clearly visible beneath the silver envelope. The coin appears to have been intentionally flattened. |              |

## SYROS

*3rd–1st century B.C.*

|            |           |                        |  |                       |                 |
|------------|-----------|------------------------|--|-----------------------|-----------------|
|            |           | Head of bearded Pan r. |  | [ΣΥΡΙ] above<br>Goat. | <i>BMC</i> 1–12 |
| <b>847</b> | a OO-1261 | 16 ↑ 2.72              | goat stg. l.; obv.: indistinct circular cmk. |                       |                 |
|            | b NN-57   | 16 ↗ 3.18              | goat stg. l.                                 |                       |                 |
|            | c Θ-414   | 15 ← 3.05              | goat walking r.                              |                       |                 |

<sup>50</sup> The coin was found stuck to a poros fragment from cistern Q 9–10:1, which was covered over during construction of the terrace of the Stoa of Attalos in the middle of the 2nd century B.C. The cistern may have gone out of use in the early 3rd century when the Square Peristyle was built (p. 315 below), but because of 2nd-century B.C. contamination, it is unclear whether the contextual *terminus ante quem* for the coin should be pushed back to *ca.* 300.

## TENOS

288–ca. 230 B.C.

|             |         |   |  |  |                                      |
|-------------|---------|---|--|--|--------------------------------------|
|             |         | Head of bearded Zeus<br>Ammon r., laur. |  | T-H Bunch of grapes.   | <i>Ténos</i> II, p. 232,<br>ser. 110 |
| <b>*848</b> | T-1316  | 12 ↑ 1.23                               |  | <i>Ténos</i> II, p. 246, no. 1 (context of first third of 2nd century B.C. <sup>51</sup> ) |                                      |
|             |         | Head of young Zeus Ammon<br>r., laur.   |  | T-[H] or [N-I] T-[H]<br>Bunch of grapes.   | <i>Ténos</i> II, p. 231,<br>ser. 109 |
| <b>849</b>  | a Θ-336 | 14 ↑ 2.30                               |  | Kleiner 1975, p. 309, no. 152 (H-K 12–14); <i>Ténos</i> II, p. 246, no. 7                  |                                      |
|             | b T-4a  | 16 ↑ 4.70                               |  | <i>Ténos</i> II, p. 246, no. 1   |                                      |

end of 3rd century to ca. 188 B.C.

|            |            |  |  |   |  |
|------------|------------|--|--|---|--|
|            |            | Head of Poseidon r., laur.   |  | [T]-H N-I<br>Trident, handle flanked<br>by dolphins.      | <i>Ténos</i> II, pp. 239–<br>241, ser. 205–206 |
| <b>850</b> | a BΔ-72    | 19 ↑ 4.60+   |  | <i>Ténos</i> II, p. 246, no. 4 (ser. 205:iv)              |  |
|            | *b Σ-5550  | 11 ↑ 1.30  |  | <i>Ténos</i> II, p. 246, no. 5 (ser. 206)                 |  |
|            |            | Head of young Zeus Ammon r.,<br>laur. Cmk.: bunch of grapes in<br>incuse circle. |  | THNION<br>Poseidon stg. I., with trident.                 | <i>Ténos</i> II, pp. 241–<br>243, ser. 207     |
| <b>851</b> | *a KK-278a | 22 ↗ 6.07  |  | <i>Ténos</i> II, p. 246, no. 6                            |  |
|            | b ΣA-46    | 20 - 5.03  |  | rev.: obscure cmk. (owl?); <i>Ténos</i> II, p. 246, no. 3 |  |

## ASIATIC BOSPHOROS

## PHANAGORIA

1st century B.C.

|            |         |                    |  |   |              |
|------------|---------|--------------------|--|---|--------------|
|            |         | Head of Artemis r. |  | ΦANA[ΓΟ ΠΙΤΩΝ] below<br>Stag recumbent l. | <i>Cop</i> 5 |
| <b>852</b> | Σ-3566a | 21 ↑ broken        |  |   |              |

<sup>51</sup> Embedded in layer c, the third floor layer below the final floor of ca. 150 B.C.; Section T Shop Building, room 2. Out of a dozen identifiable Athenian coins from this layer, the latest is from the 180's B.C. (**85**: Cicada/Amphora).

KINGS

*Rheskouporis VI: A.D. 314–342*

|                         |                    |
|-------------------------|--------------------|
| [- - - - -]             | [- - - - -]        |
| Bust of Rheskouporis r. | Bust of Emperor r. |

N. A. Frolova, *The Coinage of the Kingdom of Bosphorus A.D. 242–341/342* (BAR International Series 166), Oxford 1983, pp. 209–210

**853** a MM-27 19 ↓ 6.29  
 b Σ-1147a 18 - 6.42

PONTOS

AMISOS

*time of Mithradates Eupator, ca. 120–63 B.C.*

|   |  |           |
|---|--|-----------|
| Head of young Ares r.,<br>wearing helmet. | [A]MI-ΣO[Y]<br>Sword in sheath with strap. | BMC 40–50 |
|---|--|-----------|

**854** ΠΙΠ-877 18 ↑ 5.72

|   |  |           |
|---|--|-----------|
| Head of young Dionysos r.,<br>wearing ivy wreath. | AMΙΣOY below Cista<br>mystica; behind it, thyrsos with<br>fillet and bell. | BMC 53–56 |
|---|--|-----------|

**855** \*a ΠΘ-632 21 ↑ 6.41 rev. at l.,  $\text{hr}^*$  (BMC 53, 54)  
 b K-552 22 ↑ 5.65+ no details

BITHYNIA

BITHYNIAN LEAGUE

*A.D. 117–138: Hadrian*

|   |  |           |
|---|--|-----------|
| [AVTO KAIC TPAl]-<br>AΔPIANOC CEB<br>Head r., laur. | KOI-[NO]N BEIΘYNIAC<br>Octastyle temple. | BMC 12–21 |
|---|--|-----------|

**856** Γ-1522 33 ↓ 17.10+ (E 14:2)

## ΝΙΚΑΙΑ

A.D. 253–260: *Valerian I and Gallienus*

|            |       |  |  |                        |
|------------|-------|--|--|------------------------|
|            |       | ΑΥΤ ΟΥΑΛΕΡΙΑΝΟΣ<br>ΓΑΛΛΙΗ[ΝΟΣ] ΣΕΒΒ<br>Busts, rad., facing one<br>another. | ΟΜΗ[ΡΟΣ ΝΙ]ΚΑΙΕΩΝ<br>Homer seated l. on cippus,<br>raising r. hand, with l. hand<br>on seat. | <i>Von Aulock</i> 7081 |
| <b>857</b> | Γ-396 | 29 ↑ 11.07   |  |                        |

## ΝΙΚΟΜΕΔΙΑ

A.D. 161–180: *Marcus Aurelius*

|             |        |  |   |                |
|-------------|--------|--|---|----------------|
|             |        | ΑΥ Κ Μ ΑΥΡ-ΑΝΤΩ[ΝΙΝΟΣ]<br>Head r., laur. | ΜΗΤΡ ΝΕΩ ΝΙΚΟΜΗ[ΔΕΩΝ]<br>Eagle stg. r., wings spread,<br>head turned l., fighting snake<br>rising at l. | <i>Cop</i> 557 |
| <b>*858</b> | P-1145 | 25 ← 7.43                                |   |                |

A.D. 248–251: *Trajan Decius*

|             |         |  |  |                       |
|-------------|---------|--|--|-----------------------|
|             |         | ΑΥΤ ΚΑ ΤΡΑΙΝ ΔΕΚΙΟΣ<br>ΑΥ ΣΕΒ<br>Bust r., rad. | ΝΙΚΟΜΗΔΕΩ ΔΙΟ ΝΕΩΚΟΡΩΝ<br>Athena stg. l., with shield on<br>l. arm, holding phiale in r. | <i>Von Aulock</i> 850 |
| <b>*859</b> | ΑΑ-505  | 23 ↑ 4.63                                      | obv.: indistinct circular cmk.   |                       |
|             |         | Similar.                                       | ΝΙΚΟΜΗΔΕΩ[- - - -]<br>[Type effaced].  |                       |
| <b>860</b>  | ΟΟ-1424 | 22 - 5.25                                      | obv. cmk.: Z in incuse circle  |                       |

## ΚΙΝΓΣ

*Prousius II, 183–149 B.C.*

|             |        |   |   |                |
|-------------|--------|---|---|----------------|
|             |        | Head of Prousius II r., diad.                     | [ΒΑΣΙ]ΛΕΩ[Σ] ΠΡΟ[ΥΣΙΟΥ]<br>Herakles stg. l., holding club<br>and lion's skin.   | <i>BMC</i> 3–7 |
| <b>861</b>  | ΠΘ-251 | 18 ↑ broken                                       |   |                |
|             |        | Head of young Dionysos r.,<br>wearing ivy wreath. | ΒΑΣΙΛΕΩΣ ΠΡΟΥΣΙΟΥ<br>Centaur Chiron r., playing lyre;<br>to r., $\beta\alpha$ . | <i>BMC</i> 14  |
| <b>*862</b> | Γ-1036 | 14 ↑ 4.74   | (E 14:3) <i>GRC</i> , fig. 19   |                |

## MYSIA

## ADRAMYTEION

2nd–1st century B.C.

|            |        |                          |  |  |         |
|------------|--------|--------------------------|--|--|---------|
|            |        | Head of Apollo l., laur. |  | ΑΔΡΑ-ΜΥ ΤΗ-[ΝΩΝ]<br>Cornucopia between pilei<br>of the Dioskouroi. | BMC 7–8 |
| <b>863</b> | K-1184 | 20 ↑ 8.13                |  |  |         |

A.D. 198–217: Caracalla

|             |        |  |  |  |   |
|-------------|--------|--|--|--|---|
|             |        | ΑΥΤ ΚΑ[Ι] Μ Α[ΥΡ]<br>ΑΝΤΩΝΕ]ΙΝΟC<br>Bust r., laur. |  | ΕΠΙ [ΣΤΡΑ Α-ΙΛ ΚΟ]ΜΦ<br>ΝΕΙΚΟΝ ΑΔΡΑΜΥ ΤΗ[ΝΩΝ]<br>Zeus stg. l., holding scepter in<br>l. hand; eagle on outstretched r. | H. von Fritz, <i>Die antiken Münzen Mysiens</i> , Berlin 1913, p. 51, no. 152 |
| <b>*864</b> | T-1023 | 34 ↓ 16.17   |  |  |   |

## ATARNEUS

4th–3rd century B.C.

|            |         |                          |  |  |         |
|------------|---------|--------------------------|--|--|---------|
|            |         | Head of Apollo r., laur. |  | [ΑΤΑΡ]<br>Forepart of horse r.; coiled<br>snake above. | BMC 1–4 |
| <b>865</b> | II-353a | 16 ↓ 3.59                |  |  |         |

## KYZIKOS

mid(?)–5th century B.C.

## EL STATER

|             |       |                        |             |                              |   |
|-------------|-------|------------------------|-------------|------------------------------|---|
|             |       | Bull stg. l., on tuna. |             | Quadripartite incuse square. | H. von Fritz, "Die Electronprägung von Kyzikos," <i>Nomisma</i> 7, 1912, no. 88 |
| <b>*866</b> | ΒΓ-68 | 18 - 16.10             | GRC, fig. 6 |                              |   |

Besides being paid into the Athenian treasury as tribute in the second half of the 5th century,<sup>52</sup> great numbers of Kyzikene staters served Athenian private interests. In 403 B.C. the strongbox that the orator Lysias kept in his bedroom contained 3 talents of silver coin, 4 silver cups, 100 gold darics, and 400 Kyzikenes (Lysias 12.11).

<sup>52</sup> See S. K. Eddy, "The Value of the Cyzicene Stater at Athens in the Fifth Century," *ANSMN* 16, 1970, pp. 13–22. *IGCH* 47, a hoard of eighty Kyzikenes found in the Peiraeus in 1882, is now dated to the end of the 5th century (M. Laloux, "Circulation des monnaies de Cyzique," *RBN* 117, 1971 [pp. 31–69], p. 59).



## 4th century B.C.

|            |          |                         |           |                      |                    |
|------------|----------|-------------------------|-----------|----------------------|--------------------|
|            |          | Head of Kore Soteira r. | [K-Y Z-l] | Tripod; below, tuna. | <i>BMC</i> 136–143 |
| <b>867</b> | H'-3178a | 17 ↑ 4.82               |           |                      |                    |

Four specimens from Olynthos (*Olynthus* IX, p. 354, no. 56) confirm that this coinage began before the middle of the century.

## PARION(?)

## A.D. 14–37: Tiberius

|             |          |   |  |   |   |
|-------------|----------|---|--|---|---|
|             |          | [TI AVG]<br>Head of Tiberius r.                                     |  | Two priests plowing with<br>two oxen r. | <i>BMC</i> 89–91; <i>RPC</i> I,<br>1657 |
| <b>868</b>  | E-1484   | 16 ↑ 2.29   |  |   |   |
|             |          | DRV·CA<br>Head of Drusus r.   |  | Similar.                                | <i>RPC</i> I, 1659                      |
| <b>*869</b> | PP'-1249 | 17 ↓ 5.32   |  |   |   |
|             |          | [TI AVG DRVSVS] CAESAR<br>Jugate heads of Tiberius<br>and Drusus r. |  | Similar.                                | <i>BMC</i> 92; <i>RPC</i> I,<br>1658    |
| <b>*870</b> | OA-15    | 17 ✓ 5.41   |  |   |   |

## 1st century after Christ

|            |   |  |           |   |                  |
|------------|---|--|-----------|---|------------------|
|            |   | [- - - - - ]<br>Head of uncertain emperor. |           | Priest or priests plowing with<br>oxen r.             | <i>BMC</i> 86–95 |
| <b>871</b> | a | ΣT'-415                                    | 18 - 5.41 | Julio-Claudian head r.; obv. cmk.: Σ in incuse square |                  |
|            | b | ΣA-399                                     | 17 - 3.71 | Julio-Claudian head r.                                |                  |
|            | c | ΠΠ-1088                                    | 16 - 3.64 | same  |                  |
|            | d | Θ-999                                      | 15 ↑ 2.31 | same  |                  |
|            | e | OO-363                                     | 16 ↓ 2.69 | head l.   |                  |
|            | f | H-1777                                     | 18 ← 4.24 | head l., Nerva(?) ( <i>BMC</i> 94)                    |                  |

In *RPC* I (pp. 309–310), **868–870** are tentatively assigned to an uncertain Roman colony in Macedonia, possibly Philippi.

## PERGAMON

Royal coinage, mid-2nd century B.C.<sup>53</sup>

|            |    |   |           |  |                  |
|------------|----|---|-----------|--|------------------|
|            |    | Head of Athena r., wearing<br>Attic helmet. |           | ΦΙΛΕΤΑΙΡΟΥ at r. of<br>Coiled snake.                             | <i>BMC</i> 78–83 |
| <b>872</b> | *a | T-1297                                      | 16 ↑ 4.30 | rev. at l., Κ1. Kleiner 1975, p. 323, pl. 76, no. 334 (M–N 15:1) |                  |
|            | b  | Γ-507                                       | 16 - -    | details effaced  |                  |

<sup>53</sup> Johnston, *Sardis* M7, pp. 19, 74, following H. von Fritz, *Die Münzen von Pergamon*, Berlin 1910; and E. V. Hansen, *The Attalids of Pergamon*, Ithaca 1971, pp. 475–484.

*Municipal coinage, ca. 197–133 B.C.*<sup>54</sup>

|            |         |   |  |                    |
|------------|---------|---|--|--------------------|
|            |         | Head of Athena r., wearing Attic helmet.                      | ΠΕ[Ρ]Γ[ΑΜΗ]  | <i>BMC</i> 135–138 |
| <b>873</b> | Γ-685   | 17 ↑ 6.0  | Nike stg. r., crowning inscription with wreath in r.; in l., palm.         |                    |
|            |         | Head of Asklepios r., laur.                                   | Π-ΕΡ Γ-Α ΜΗΝΩΝ   | <i>BMC</i> 144–149 |
| <b>874</b> | ΞΞ-99   | 21 ↑ 7.43   | Eagle stg. l., wings spread, on thunderbolt.                               |                    |
|            |         | Head of Athena r., wearing Attic helmet ornamented with star. | [ΑΘΗ]ΝΑ[Σ] ΝΙΚΗΦΟΡΟΥ   | <i>BMC</i> 190–204 |
| <b>875</b> | Β'-669  | 16 - -  | Owl, wings spread, stg., facing, on palm branch; at l., Τ(?); at r., Μ(?). |                    |
|            |         | Bust of Athena l., wearing aegis and Corinthian helmet.       | [ΠΕΡΓΑΜΗΝΩΝ]   | <i>BMC</i> 129–134 |
| <b>876</b> | ΟΟ-533a | 25 ↑ 7.66   | Asklepios stg., facing, with staff.  |                    |

*Period of Vespasian to Hadrian*

|             |        |                   |   |  |
|-------------|--------|-------------------|---|--|
|             |        | [ΘΕΟΝ CYNKΛΗΤΟΝ]  | ΘΕΑΝ Ρ-[ΩΜΗΝ]                               | <i>Von Aulock</i> 1385–1387; with <i>RPC</i> I, p. 399 |
| <b>*877</b> | ΣΑ-401 | Bust of Senate r. | Bust of Roma, turreted, r.; border of dots. |  |
|             |        | 15 ↓ 2.13         |   |  |

*A.D. 176–192: Commodus*

|             |        |                            |  |                                    |
|-------------|--------|----------------------------|--|------------------------------------|
|             |        | ΑΥΤΟ ΚΑΙ Μ-ΑΥΡΗ ΚΟΜΟΔΟΣ    | ΕΠΙ ΣΤΡ Π Α Γ-ΑΥΚΩΝΙΑΝΟΝ  ΠΕΡΓΑΜΗΝΩΝ Β· ΝΕΟΚΟΡΩ Ν                    | <i>Von Aulock</i> 7508 (same dies) |
| <b>*878</b> | ΟΑ-245 | Bust r., laur., cuir., dr. | Statue of Asklepios on pedestal; on each side, centaur with a torch. |                                    |
|             |        | 46 ↑ 49.9                  | <i>GRC</i> , fig. 25   |                                    |

<sup>54</sup> Johnston, *Sardis* M7, pp. 20–21.

## NON-ATHENIAN COINS

## PERPERENE

*1st century after Christ*

|            |   |  |    |                                    |      |                    |
|------------|---|--|----|------------------------------------|------|--------------------|
|            |   | [ΘΕΑΝ ΡΩΜΗΝ]<br>Bust of Roma, turreted, r. |    | [ΠΕΡΠΕ-ΡΗΝΙΩΝ]<br>Bunch of grapes. |      | <i>RPC I, 2350</i> |
| <b>879</b> | a | BB-1292                                    | 16 | ↑                                  | 3.38 |                    |
|            | b | NN-1804                                    | 15 | -                                  | -    |                    |

## PITTANE

*4th–3rd century B.C.*

|            |  |                         |    |   |      |                              |
|------------|--|-------------------------|----|---|------|------------------------------|
|            |  | [Head of Zeus Ammon r.] |    | Π   [T A] between points of<br>Pentagram. |      | <i>BMC 7–10<sup>55</sup></i> |
| <b>880</b> |  | I-1592                  | 13 | -   | 1.26 |                              |

## TROAS

## ALEXANDRIA TROAS

*A.D. 198–217: Caracalla*

|             |  |   |    |  |       |   |
|-------------|--|---|----|--|-------|---|
|             |  | M AV ANTON[IN] PIVS AV<br>Bust r., laur., dr.       |    | COL AVG TROAD<br>Horse grazing r.                        |       | <i>Bellinger A261: cf.<br/>BMC 95–97</i>  |
| <b>881</b>  |  | I-1550  | 24 | ↓  | 7.05  |   |
|             |  | ANTONIN-VS PIVS AV<br>Bust r., laur.                |    | COL ALEX  AVG<br>Horse grazing r.                        |       | <i>Bellinger A261; cf.<br/>BMC 95–97</i>  |
| <b>*882</b> |  | Z-416   | 24 | ↓  | 7.36  |   |
|             |  | M AVR ANT-ONINVS<br>PIVS AVG<br>Bust r., laur., dr. |    | COL A TROAD<br>Eagle flying l., carrying<br>bull's head. |       | <i>Bellinger A262; cf.<br/>BMC 98–101</i> |
| <b>*883</b> |  | NN-1151   | 26 | ↓  | 10.65 |   |

*A.D. 249–251: Trajan Decius*

|            |  |   |    |                                    |      |                       |
|------------|--|---|----|------------------------------------|------|-----------------------|
|            |  | [IMP] Q C M [TRAI]ANV<br>DECIVS<br>Bust r., laur., cuir., dr. |    | COL AVGV   TRO<br>Horse grazing r. |      | <i>Bellinger A396</i> |
| <b>884</b> |  | P-1399  | 17 | ↓                                  | 2.40 |                       |

<sup>55</sup> For a specimen excavated at Olynthos, see *Olynthus IX*, pp. 247, 355.

A.D. 251–253: *Volusian*

|             |        |  |   |                |
|-------------|--------|--|---|----------------|
|             |        | IMP.C.VIBI AFINI<br>OLVSSIANV<br>Bust r., laur., dr. | COL-AVG TRO<br>Eagle stg.; facing, head l.,<br>holding bull's head. | Bellinger A423 |
| <b>*885</b> | ΠΘ-792 | 22 ↓ 5.01  | (A 14:2) <i>GRC</i> , fig. 24                                       |                |

## Assos

A.D. 180–193: *Commodus*

|            |        |  |   |   |
|------------|--------|--|---|---|
|            |        | [- - - - - - - - - -]<br>Bust of Commodus r. | [ΕΠΙ ΤΡΑ ΤΙΒ ΚΛ]-<br>ΑΥ ΑΡΙΤΤΟΔΑ[Μ];<br>upwards in l. field, ΑΣΣΙΩΝ;<br>Zeus stg. frontally, holding<br>eagle in r. and scepter in l. | F. Imhoof-Blumer,<br>"Griechische<br>Münzen aus dem<br>Museum in Klagen-<br>furt," <i>NZ</i> 16, 1884,<br>pp. 264–265, no. 83 |
| <b>886</b> | B-441a | 31 ↓ 13.01                                   |   |   |

## ILION

*Flavian period*, A.D. 79–96

|            |        |  |   |                |
|------------|--------|--|---|----------------|
|            |        | [ΙΑ] Bust of Athena l.,<br>wearing aegis and Corinthian<br>helmet. | Aineas walking r., carrying<br>Anchises and leading Askanios. | Bellinger T129 |
| <b>887</b> | ΟΟ-385 | 20 ↑ 5.06  |   |                |

## NEANDRIA

*before 310 B.C.*

|             |         |                          |   |                 |
|-------------|---------|--------------------------|---|-----------------|
|             |         | Head of Apollo r., laur. | NE-AN Wheat ear.  | <i>BMC</i> 6    |
| <b>*888</b> | ΚΤΑ-109 | 10 ← 1.07                |   |                 |
|             |         | Similar.                 | [NE]AN above<br>Horse grazing r.; in ex.,<br>wheat ear. | <i>BMC</i> 8–11 |
| <b>889</b>  | ΣΑ-99   | 17 → 5.57                |   |                 |

## SKEPSIS

*4th century B.C.*

|            |        |  |                                      |                   |
|------------|--------|--|--------------------------------------|-------------------|
|            |        | Forepart of winged horse l.,<br>body ending in cornucopia. | [Σ]-KH Fir tree in linear<br>square. | <i>BMC</i> 19, 20 |
| <b>890</b> | T-212a | 16 ↑ 3.71+   |                                      |                   |

## NON-ATHENIAN COINS

## TENEDOS

*4th century B.C. or later*

|            |         |                |                   |                  |
|------------|---------|----------------|-------------------|------------------|
|            |         | Female head r. | [T]-E Double axe. | <i>BMC</i> 22–25 |
| <b>891</b> | NN-163a | 9 → 0.50       |                   |                  |

## AIOLIS

## AIGAI

*2nd–1st century B.C.*

|               |        |  |   |                   |
|---------------|--------|--|---|-------------------|
|               |        | Head of Athena r., wearing Attic helmet ornamented with griffin. | AΙΓΑΕΩΝ Zeus stg. l., holding scepter in l.; [eagle] in outstretched r. | <i>BMC</i> 12, 13 |
| <b>892</b> *a | NN-439 | 18 ↑ 6.16  | obv. cmk.: owl r. in incuse circle                                      |                   |
| b             | A-746  | 16 ↑ 4.26+   |   |                   |

*A.D. 222–235: Severus Alexander*

|             |      |  |                         |                            |
|-------------|------|--|-------------------------|----------------------------|
|             |      | [- - - - -]                                | ΕΠΙ CT-PA EVT-VX-OVΣ    | cf. <i>Von Aulock</i> 1601 |
|             |      | Bust of S. Alexander r., laur., cuir., dr. | AΙΓΑΕ[ΩΝ] Similar Zeus. | (Decius)                   |
| <b>*893</b> | X-8a | 26 ↓ 5.91                                  |                         |                            |

## AUTOKANE

*4th–2nd century B.C.*

|            |        |                 |  |   |
|------------|--------|-----------------|--|---|
|            |        | Head of Zeus r. | [AYTOKAN] Female head r., hair rolled. | L. Forrer, <i>The Weber Collection: Greek Coins</i> III, London 1926–1929, p. 171, no. 5472 |
| <b>894</b> | Γ-1412 | 11 ↓ 1.35       |  |   |

## ELAIA

*ca. 133 B.C.–1st century after Christ*

|            |        |  |  |   |
|------------|--------|--|--|---|
|            |        | Head of Kore or Demeter, wearing wheat wreath. | E-ΛΑ IT-ΩΝ Torch; all in wheat wreath. | <i>BMC</i> 20–29; with <i>RPC</i> I, p. 408 |
| <b>895</b> | Z-1190 | 15 ↑ 3.60                                      |  |   |

## ΚΥΜΕ

*4th–3rd century B.C.*

**896** ΣΤ'-539 [Eagle stg. r.] K-Y Vase with one handle. *BMC* 16–20  
10 - 0.75

**897** a T-20 [KY] Forepart of horse r. Vase with one handle. *BMC* 40–52  
16 ↑ 3.04 obv. name and rev. monogram effaced  
b OO-220 17 - 3.39 same

*2nd century B.C.*

**\*898** MM-26 Bust of Artemis r., bow and quiver at shoulder. KY above Vase with one handle; in field, Α-ΠΑ|Τ-ΟΥ|Ρ-Ι|Ο-Σ. *BMC* 90–92  
16 ↑ 4.33

*2nd century after Christ*

**899** AA-749a Head of Athena r., wearing Corinthian helmet. [KVM] Eagle stg. 1. *Cop* 118  
14 ↑ 1.41

*A.D. 238–244: Tranquillina*

**\*900** ΠΘ-788 ΦΟΝΡΙΑ ΤΡΑΝΚΥΛΛΕΙΝΑ Ε ΑΥΡ ΑΣΚΛΗΠ-ΙΑΚΟΝ Γ *BMC* 145 (same rev. die)  
CEB Bust r. Β ΚΥΜ|ΑΙ-ΩΝ Statue of Ephesian Artemis with forepart of stag at either side.  
30 ↓ 15.64 (A 14:2)

## LESBOS

## Methymna

*ca. 350/330–250/240 B.C.*

**901** Φ-32 Head of Athena r., wearing Corinthian helmet. Cmk.: bec. [M]-A|[Θ]-Υ Kantharos. *BMC* 19–23; P. R. Franke, in H.-G. Buchholz, *Methymna*, Mainz 1975, p. 170, no. 22  
12 ↑ 1.44 (M 18:10)

*2nd–1st century B.C.*

|            |       |                          |                                      |  |
|------------|-------|--------------------------|--------------------------------------|--|
|            |       | Similar, but cmk.: lyre. | [M]-A Θ-Y Kantharos; border of dots. | <i>BMC</i> 29–33; Franke (under <b>901</b> ), p. 171, no. 25 |
| <b>902</b> | ΓΓ-49 | 17 ↑ 4.02                |                                      |  |

## Mytilene

*4th–3rd century B.C.*

|               |        |                |                            |                  |
|---------------|--------|----------------|----------------------------|------------------|
|               |        | Female head r. | M-Y T-I Lyre.              | <i>BMC</i> 37–95 |
| <b>903</b> *a | E-1787 | 13 ↑ 1.80      | rev. at l., Π; at r., club |                  |
| b             | Σ-3899 | 14 - 1.53      |                            |                  |

*2nd–1st century B.C.*

|            |        |                       |   |                    |
|------------|--------|-----------------------|---|--------------------|
|            |        | Head of Zeus Ammon r. | M-[Y] T-[I]<br>Herm of Dionysos on prow;<br>at l., vine branch with grapes. | <i>BMC</i> 132–138 |
| <b>904</b> | ΠΑ-428 | 20 ↑ 4.88             |   |                    |

A.D. 198–217: *Caracalla*

|             |        |   |   |  |
|-------------|--------|---|---|--|
|             |        | ΑΥΤ ΚΡΑΤ Κ-ΜΑΡ ΑΥΡΗ<br>ΑΝΤΩΝΕΙΝΟΣ<br>Bust r., laur., cuir., dr. | ΕΠΙ ΣΤΡ ΑΠΕΛΛΟΝ Β·<br>ΜΕΝΕΜΑΧΟΝ <br>ΜΥΤΙΑΗΝΑ ΙΩΝ<br>Mounted emperor r.,<br>spearing fallen enemy. | cf. <i>Von Aulock</i> 1751<br>(but larger) |
| <b>*905</b> | ΟΑ-290 | 47 ↓ 50.49  | <i>GRC</i> , fig. 25  |  |

## IONIA

## EPHESOS

*4th–3rd century B.C.*

|            |        |                                       |  |                               |
|------------|--------|---------------------------------------|--|-------------------------------|
|            |        | E-Φ Bee.                              | Stag kneeling l., head turned back; above, astragal. | <i>BMC</i> 63–67              |
| <b>906</b> | I-696  | 16 ↑ 2.43                             |  |                               |
|            |        | Head of city goddess r.,<br>turreted. | [E]-Φ Bee.   | <i>BMC</i> 68–70<br>(head l.) |
| <b>907</b> | Z-2032 | 11 ↓ 0.73+                            |  |                               |

ca. 48–27 B.C.

|            |        |   |  |                    |
|------------|--------|---|--|--------------------|
|            |        | Bust of Artemis r., bow and quiver at shoulder. | [E-Φ] Long torch between two stags; above, below, and in field [magistrates' names]. | <i>BMC</i> 182–184 |
| <b>908</b> | B'-927 | 19 ↑ 3.77                                       |  |                    |

27 B.C.–A.D. 14: *Augustus*

|            |        |                            |  |   |
|------------|--------|----------------------------|--|---|
|            |        | Head of Augustus r., bare. | [- - - - -] Cult statue of Ephesian Artemis. | <i>BMC</i> 195, 196;<br><i>RPC</i> I, 2586, 2588,<br>2590, 2592 |
| <b>909</b> | Z-3005 | 16 ↑ 3.93                  |  |   |

A.D. 138–161: *Antoninus Pius*

|             |        |  |   |  |
|-------------|--------|--|---|--|
|             |        | [- - - - -]<br>Bust of Antoninus Pius r. | [ΗΡΑΚΛΕΙΤ]ΟC-ΕΦΕC[ΙΩΝ]<br>Herakleitos stg. l., with club in l.; r. hand raised. | cf. <i>BMC</i> 340, 341<br>(Philip II) |
| <b>*910</b> | OO-473 | 23 ↑ 5.05                                |   |  |

A.D. 161–169: *L. Verus*

|            |        |                               |                      |                |
|------------|--------|-------------------------------|----------------------|----------------|
|            |        | OVH-ΠOC KAI<br>Bust r., laur. | ΕΦΕCΙΩΝ Stag stg. r. | <i>BMC</i> 248 |
| <b>911</b> | ΠΠ-156 | 17 ↓ 2.97                     |                      |                |

A.D. 193–211: *Septimius Severus(?)*

|            |        |   |                         |                    |
|------------|--------|---|-------------------------|--------------------|
|            |        | [- - - - -]<br>Bust of S. Severus(?) r. | ΕΦΕCΙΩΝ Stag walking r. | cf. <i>BMC</i> 262 |
| <b>912</b> | I-1603 | 17 ↓ 2.21                               |                         |                    |

A.D. 209–212: *Geta*

|             |        |                                  |                        |                |
|-------------|--------|----------------------------------|------------------------|----------------|
|             |        | ΓΕ-TAC AV<br>Bust r., laur., dr. | ΕΦ-ΕC ΙΩΝ Stag stg. r. | <i>BMC</i> 289 |
| <b>*913</b> | Σ-3807 | 17 ↓ 3.95                        |                        |                |

A.D. 248–251: *Etruscilla*

|             |        |   |  |                                     |
|-------------|--------|---|--|-------------------------------------|
|             |        | ΕΡΕΝ ΕΤΡΟΥCΚΙΛΛΑ CΕΒ<br>Bust r., crescent behind. | ΑΠΗΜΗ-ΙΕΡΑ ΕΦΕCΙΩΝ<br>Sacred wagon drawn by two mules. | cf. <i>BMC</i> 335<br>(Gordian III) |
| <b>*914</b> | ΠΠ-466 | 28 ↓ 8.77   |  |                                     |



A.D. 253–255: *Saloninus*

|             |         |   |  |                                   |
|-------------|---------|---|--|-----------------------------------|
|             |         | KOP OYALEP[IA]NOC KAI<br>Bust r., laur. | ΕΦΕCI[ΩΝ Δ]-ΝΕ-ΟΚΟΡΩ<br>Artemis holding transverse<br>torch r. | cf. <i>BMC</i> 381<br>(Gallienus) |
| <b>*915</b> | BΓ'-474 | 21 ✓ 4.82                               |  |                                   |

## ERYTHRAI

*4th–3rd century B.C.*

|            |        |                             |   |   |
|------------|--------|-----------------------------|---|---|
|            |        | [Head of young Herakles r.] | EPY below Club and bow<br>in case.  | cf. <i>BMC</i> 66–81<br>(ethnic above club) |
| <b>916</b> | ΜΣ-212 | 14 - 1.35                   | (probably from H–K 12–14, but not listed in Kleiner 1975,<br>pp. 304–312) |   |

|            |        |                           |   |                  |
|------------|--------|---------------------------|---|------------------|
|            |        | Head of young Herakles r. | EPY above Club and bow<br>in case; between and below,<br>[- -]AKΛE[- -   - -]ME[- -]. | <i>BMC</i> 85–94 |
| <b>917</b> | H-1714 | 18 ↑ 3.49                 |   |                  |

|            |        |            |  |                |
|------------|--------|------------|--|----------------|
|            |        | Similar.   | ΠΟΛΥΚ[ΡΙ] ΤΟΣ <br>[Π]ΟΛΚ[ΡΙ] ΤΟΥ  EPY. | <i>BMC</i> 115 |
| <b>918</b> | ΠΠ-174 | 15 ↑ 2.79+ |  |                |

*after ca. 133 B.C.*

|            |          |                   |                                    |                |
|------------|----------|-------------------|------------------------------------|----------------|
|            |          | [Head of Zeus r.] | [EYP  M]ENEKPA [THΣ]<br>ΑΓΑ ΘΩΝΟΣ. | <i>Cop</i> 739 |
| <b>919</b> | ΣΤ'-579a | 18 - 5.45+        |                                    |                |

## ΚΛΑΖΟΜΕΝΑΙ

*4th century B.C. and later*

|            |        |   |                               |                  |
|------------|--------|---|-------------------------------|------------------|
|            |        | Helmeted head of Athena<br>three-quarters facing r. | [- - - - -]<br>Ram walking r. | <i>BMC</i> 56–72 |
| <b>920</b> | T-198a | 12 ↑ 1.35   |                               |                  |

|            |        |           |                                      |                  |
|------------|--------|-----------|--------------------------------------|------------------|
|            |        | Similar.  | [ΚΛΑΖΟΜΕ ΝΙΩΝ]<br>Forepart of ram r. | <i>BMC</i> 73–80 |
| <b>921</b> | N-581a | 16 ↑ 3.56 |                                      |                  |

|            |       |  |  |                   |
|------------|-------|--|--|-------------------|
|            |       | Head of Athena r., wearing<br>Corinthian helmet. | ΚΛΑΖΟ[ΜΕ] ΝΙΩΝ above<br>Ram recumbent r.;<br>below, [- - - -   - ]Σ. | <i>BMC</i> 85, 86 |
| <b>922</b> | Δ-317 | 17 ↑ 4.83  |  |                   |

## MAGNESIA ON THE MAIANDROS

*4th–3rd century B.C.*

|             |        |                                 |   |                                   |
|-------------|--------|---------------------------------|---|-----------------------------------|
|             |        | Cavalryman on prancing horse r. | MAGN above Bull butting l.; below, [-]Ω[.]. | <i>BMC</i> 35; <i>Cop</i> 819–821 |
| <b>*923</b> | B'-646 | 8 ↑ 0.57                        |   |                                   |

*after ca. 190 B.C.*

|             |      |  |  |                   |
|-------------|------|--|--|-------------------|
|             |      | Head of Athena r., wearing crested helmet. | [MAGN]HTΩN above Cavalryman charging on horse r.; below [EYKΛHΣ   KPATINOC]. | <i>BMC</i> 44, 45 |
| <b>*924</b> | Π-30 | 19 ↑ 10.57                                 |  |                   |

|            |       |   |   |               |
|------------|-------|---|---|---------------|
|            |       | [MAGNHT] below Stag stg. r.; above, star. | EYKΛHΣ   KPATINOC l. and r. of Statue of Artemis Lykophryene. | <i>BMC</i> 47 |
| <b>925</b> | H-133 | 18 ↑ 3.13                                 |   |               |

*A.D. 198–217: Caracalla*

|             |        |  |  |  |
|-------------|--------|--|--|--|
|             |        | AVT KAI M AVP<br>ANTΩNEINOC<br>Bust r., laur., dr. | ΕΠΙ ΓΡ ΑΡΙCΤΟ[ΚΛ]ΟV<br>ΜΑΓΝΗΤΩΝ Statue of Themistokles stg. l., with phiale in extended r. hand and sword in sheath in l.; at l., burning altar and, on ground, slain bull. Above and below statue's extended hand, ΘΕΜΙC ΤΟΚΛΗ C. | cf. S. Schultz, <i>Die Münzprägung von Magnesia am Mäander in der römischen Kaiserzeit</i> , Hildesheim/New York 1975, p. 61, pl. 7, no. 103 (Antoninus Pius), and p. 85, pl. 19, no. 244 (Severus Alexander). |
| <b>*926</b> | NN-595 | 40 ↓ 23.46   |  |  |

## METROPOLIS

*1st century B.C.*

|            |        |                                    |                                 |                 |
|------------|--------|------------------------------------|---------------------------------|-----------------|
|            |        | Helmeted head of Ares or Athena r. | ΜΗΤΡΟ ΠΟΛΙΤΩ[N]<br>Thunderbolt. | <i>BMC</i> 1, 2 |
| <b>927</b> | Γ-1251 | 15 ← 3.25                          |                                 |                 |

## MILETOS

370–350's B.C.<sup>56</sup>Lion l., looking back;  
above, M.Α Φ Ο Β Η Τ Ο Σ around  
Star with eight rays.B. Deppert-Lippitz,  
*Die Münzprägung  
Milets von vierten bis  
erstern Jahrhundert v.  
Chr., Aarau/  
Frankfurt am Main/  
Salzburg 1984,*  
p. 150, nos. 265–269**\*928** OA-217 13 - 2.05 GRC, fig. 19*mid-late 4th century B.C.*<sup>57</sup>

Head of Apollo r., laur.

Lion stg. r., looking back;  
above, star; below [name].Deppert-Lippitz  
(under **928**),  
pp. 155–158,  
nos. 341–398**929** a N-620 19 ↑ 3.92  
b Σ-6322 18 ↑ 2.94  
c OO-1054 18 ↑ 2.85A.D. 81–96: *Domitian*[ΣΕΒΑ]-ΣΤΟ[Σ]  
Head of Domitian r., laur.[ΜΙΑΗΣΙΩΝ]  
Lion stg. r., looking back  
at star; all in wreath.*BMC 154;*  
*Cop 1015***930** T-282 18 ↓ 3.57

## PHOKAIA

*3rd century B.C. or later*Head of Athena r.,  
wearing Attic helmet.Forepart of griffin between pilei  
of Dioskouroi below, ΠΥΘ[Ι]Σ.*Cop 1036***931** K-975a 12 ↑ 1.68

## SMYRNA

ca. 288–280 B.C.

Veiled head of Eurydike  
(daughter of Lysimachos) r.[ΕΥΡΥΔΙΚΕΩΝ] at l. of  
Tripod.Milne 1923,  
nos. 6, 7**932** NN-1836 14 ↘ 1.19 Kleiner 1976, p. 19, no. 165 (A–B 19–20:1)<sup>56</sup> P. Kinns, "The Coinage of Miletus," *NC* 146, 1986 (pp. 233–260), p. 250.<sup>57</sup> Cf. *ibid.*, p. 251.

ca. 280–190 B.C.

|            |   |                          |      |   |                                      |
|------------|---|--------------------------|------|---|--------------------------------------|
|            |   | Head of Apollo r., laur. |      | ΣΜΥΡΝΑΙΩΝ and [magistrate's name] on either side of Tripod. | Milne 1923, nos. 9–28                |
| <b>933</b> | a | NN-1113                  | 13 ↓ | 1.85  | ΣΜΥΡΝ only, at r.                    |
|            | b | NN-1665                  | 14 ↗ | 1.23  | [ΣΜΥΡ]ΝΑΙΩΝ at r.; [- -]Σ[- -] at l. |

ca. 190–105 B.C.

|            |  |                              |      |  |                                       |
|------------|--|------------------------------|------|--|---------------------------------------|
|            |  | Head of Kybele r., turreted. |      | [ΖΜΥΡΝΑΙΩΝ]<br>[-----] r. and l. of<br>Aphrodite Stratonikis stg. r. | Milne 1927, nos. 92, 98, etc.: Type M |
| <b>934</b> |  | M-78a                        | 18 ↑ | 6.15   |                                       |

ca. 75–50 B.C.

|            |  |                          |      |  |                               |
|------------|--|--------------------------|------|--|-------------------------------|
|            |  | Head of Apollo r., laur. |      | [ΖΜΥΡΝΑΙΩΝ] at r. of Hand<br>in caestus; at l.,<br>[ΜΗ or ΙΑ]ΤΡΟΔΩΡΟ[Σ]. | Milne 1928,<br>no. 383 or 399 |
| <b>935</b> |  | H'-2602                  | 15 → | 2.71   |                               |

A.D. 88/89: *Julia Titi*

|             |  |                           |      |  |                                |
|-------------|--|---------------------------|------|--|--------------------------------|
|             |  | ΙΟΥΛΙΑ ΣΕΒΑΣΤΗ<br>Bust r. |      | [ΕΠΙ ΦΛΟΡΟΥ ΑΝΘΥ]<br>ΖΜΥΡΝΑΙΩΝ<br>Kybele seated l. | Klose, pp. 242–243,<br>no. XLI |
| <b>*936</b> |  | ΠΑ-112                    | 22 ↑ | 4.82   |                                |

A.D. 117–130: *Hadrian*

|            |  |                                     |      |  |                                       |
|------------|--|-------------------------------------|------|--|---------------------------------------|
|            |  | [ΑΥ ΚΑΙ ΤΡΑ ΑΔΡΙΑΝΟΣ ΣΕ]<br>Bust r. |      | [ΣΤΕ ΠΟΜ ΣΕΞΤΟΥ ΖΜΥΡ]<br>Hexastyle temple. | Klose, pp. 247–248,<br>nos. XLIV.1–18 |
| <b>937</b> |  | Ψ-23                                | 22 ↑ | 8.25                                       |                                       |

ca. A.D. 193–235

|            |  |   |      |                        |                                      |
|------------|--|---|------|------------------------|--------------------------------------|
|            |  | ΖΕΥΣ ΑΚΡΑΙΟΣ<br>Head of Zeus Akraios r. |      | CMVPN-A ΙΩΝ<br>Prow r. | Klose, pp. 160–162,<br>nos. VI.65–77 |
| <b>938</b> |  | II-419                                  | 18 ↓ | 2.96                   |                                      |

ca. A.D. 210–235

|            |  |   |      |                            |                                     |
|------------|--|---|------|----------------------------|-------------------------------------|
|            |  | [-----]<br>Bust of Serapis r., wearing<br>modius. |      | [C]ΜΥΡΝ-[ΑΙ]ΙΩΝ<br>Prow r. | Klose, pp. 180–181,<br>nos. XI.2–11 |
| <b>939</b> |  | Γ-1463  | 16 ↓ | broken                     |                                     |

A.D. 222–235: *Julia Mamaea*

|             |        |      |       |                                 |  |                              |
|-------------|--------|------|-------|---------------------------------|--|------------------------------|
|             |        |      |       | IOV MAMΕ-A CEB[ACTH]<br>Bust r. | [CMYP]ΝΑΙΩΝ Γ ΝΕΩΚΟΡΩΝ<br>ΕΠ C Γ Κ ΔΙΟΓΕ-ΝΟΥ[ΥC]<br>Amazon (Smyrna) stg. 1., with<br>temple in r., bipennis and pelta<br>in l. | Klose, p. 301,<br>no. LXVI.5 |
| <b>*940</b> | Z-984a | 29 ↓ | 10.46 |                                 |  |                              |

A.D. 260–268: *Gallienus*

|             |        |      |      |  |  |                                   |
|-------------|--------|------|------|--|--|-----------------------------------|
|             |        |      |      | AVT Κ ΠΟ ΛΙΚΙΝ ΓΑΛΛΙΗΝΟC<br>Bust r., laur., cuir., dr. | CMYPΝΑΙΩΝ Γ ΝΕΩΚΟ ΕΠ<br>C M AVP CEE-CT-OV<br>Similar Amazon with temple,<br>bipennis, and pelta. | Klose, p. 321,<br>nos. LXXV.36–50 |
| <b>*941</b> | PP-797 | 24 ↑ | 6.69 |  | obv. cmk: 5 in incuse circle (Howgego, no. 813)  |                                   |

TEOS

*3rd–1st century B.C.*

|            |        |      |      |                   |  |                        |
|------------|--------|------|------|-------------------|--|------------------------|
|            |        |      |      | Griffin seated r. | TH-ΙΩ[N] above<br>Kantharos; below,<br>ΑΝΤΑ-ΓΟΡ[ΑΣ]. | <i>Von Aulock</i> 2284 |
| <b>942</b> | E-1456 | 17 ↑ | 3.44 |                   |  |                        |

CHIOS

*3rd–2nd century B.C.*<sup>58</sup>

|            |        |      |      |                    |   |  |
|------------|--------|------|------|--------------------|---|--|
|            |        |      |      | [Sphinx seated r.] | [ΧΙ]ΟΣ  [Μ]ΕΝΕΣ at l. and r.<br>of Amphora. | Mavrogordato 1916,<br>no. 62β;<br><i>BMC</i> 82–83 |
| <b>943</b> | X-113a | 19 - | 4.07 | (N 18:3)           |   |  |

Sphinx seated with forepaw  
raised over bunch of grapes.ΧΙΟΣ at l. of Amphora; at r.,  
magistrate's name; all in vine  
wreath.Mavrogordato 1916,  
no. 67; *BMC* 85–97**944**

|    |           |      |      |  |  |  |
|----|-----------|------|------|--|--|--|
|    | Sphinx r. |      |      |  |  |  |
| a  | H'-2939   | 14 ↑ | 2.21 |  | ΑΠΕΛΛΗΣ ( <i>BMC</i> 86)                     |  |
| b  | B'-770    | 12 ↑ | 1.61 |  | ΜΗΤΡΟΔ[Ω ΡΟΣ] ( <i>BMC</i> 94)               |  |
| *c | ΓΓ-225    | 14 ↑ | 2.85 |  | ΓΟΡΓΙΑΣ (Mavrogordato 1916, p. 321) (F 19:6) |  |
| d  | NN-1730   | 14 ↑ | 1.40 |  | same   |  |
| *e | ΔΔ-51     | 16 ↖ | 1.98 |  | ΓΡΥΨΙΟΣ?                                     |  |
| f  | B'-962    | 12 ↑ | 1.71 |  | no details                                   |  |
| g  | K-841     | 13 - | 1.65 |  | same   |  |

<sup>58</sup> Mavrogordato (1916, pp. 297–355) assigns these issues of his Period IX to 190–84 B.C. But it is clear from the context of 943 that this variety began before then.

|    |                 |    |   |      |  |
|----|-----------------|----|---|------|--|
| h  | OO-945          | 13 | ↑ | 2.49 | same   |
| i  | ΠΠ-239          | 14 | ↑ | 2.66 | same   |
| j  | Φ-29            | 13 | ↑ | 2.64 | same   |
|    | Sphinx l.       |    |   |      |  |
| *k | Ψ-239           | 14 | ↑ | 1.56 | ΑΣΠΑΣΙ ΟΣ; two pilei of the Dioskouroi between ΧΙ and ΟΣ<br>(cf. <i>BMC</i> 89: sphinx r.) |
| l  | ΓΓ-77           | 14 | ↑ | 2.59 | [Ζ]ΗΝΟΔΟΡ ΟΣ] ( <i>sic</i> ) (cf. <i>BMC</i> 50: drachm)                                   |
| m  | NN-1937         | 10 | ↑ | 0.75 | no details   |
|    | Sphinx l. or r. |    |   |      |  |
| n  | Σ-6405          | 12 | - | -    |  |

*1st century B.C.—1st century after Christ*

|            |       |                                      |   |      |   |   |
|------------|-------|--------------------------------------|---|------|---|---|
|            |       | Sphinx seated l.; border<br>of dots. |   |      | [ΧΙΟΣ] at l. of Amphora;<br>at r., [magistrate's name]. | Mavrogordato 1917,<br>nos. 83–87; <i>BMC</i><br>103–106 |
| <b>945</b> | T-106 | 16                                   | ↑ | 1.95 |   |   |

*2nd century after Christ*<sup>59</sup>

## TETRACHALKON

|            |        |   |   |      |   |  |
|------------|--------|---|---|------|---|--|
|            |        | [ΧΙΩΝ] above<br>Sphinx seated l., with<br>raised forepaw. |   |      | [ΤΕΤΡΑ-ΧΑΛΚΟΝ] around<br>Bunch of grapes. | Mavrogordato 1918,<br>no. 124γ, <i>BMC</i> 110,<br>111 |
| <b>946</b> | Γ-1467 | 16  | ↑ | 2.95 |   |  |

## ASSARION

|            |        |                            |   |      |  |                                |
|------------|--------|----------------------------|---|------|--|--------------------------------|
|            |        | [ΧΙΩΝ]<br>Sphinx seated l. |   |      | ACCA-[PION] around<br>Amphora between two stars. | Mavrogordato 1918,<br>no. 115β |
| <b>947</b> | I-1055 | 17                         | ↑ | 3.42 |  |                                |

*later 2nd or early 3rd century after Christ*

## 3 ASSARIA

|               |        |  |   |             |  |                                      |
|---------------|--------|--|---|-------------|--|--------------------------------------|
|               |        | AC-CAP-IA  TPIA (in ex.)<br>Sphinx seated r. or l.,<br>forepaw raised over prow. |   |             | Χ-Ι Ω-N Amphora between<br>two poppies; all in wreath. | Mavrogordato 1918,<br>nos. 127α, 128 |
| <b>948</b> *a | ΠΘ-793 | 30   | ↑ | 10.79       | sphinx r. (A 14:2: <i>ca.</i> A.D. 250)                |                                      |
| b             | I-895  | 32   | ↑ | 8.83 (worn) | sphinx l.; inscriptions effaced                        |                                      |

<sup>59</sup> Klose (pp. 114–115) provides a chronological framework for the later imperial bronze coinage of Chios by dating the issues signed by the magistrates Preimos, Irenaios, and Chrysogonos to specific periods in the 2nd and 3rd centuries after Christ on metrological grounds. Pending an inclusive re-study of the entire coinage, it can be noted here that the comparative weights of the unsigned varieties catalogued here locate **946** and **947** respectively before and around the time of the Hadrianic–early Antonine issue of Preimos, **948** between the issue of Preimos and the essentially Severan issue of Irenaios (the context and condition of 948a imply a date as late in the Antonine or Severan period as possible), **949** around the time of Irenaios, and **950** around the time of Chrysogonos (between A.D. 222 and 238 [Klose]).

*first half 3rd century after Christ*

## 3 ASSARIA

|             |  |   |                               |
|-------------|--|---|-------------------------------|
|             | ACCAP-IA  TPIA (in ex.)<br>Sphinx seated r., l. forepaw<br>raised over prow. | X I Ω N around Apollo<br>and Dionysos stg.,<br>facing, sacrificing at altar<br>between them; in ex., star.  | Mavrogorgato 1918,<br>no. 134 |
| <b>*949</b> | ΠΙΠ-442 29 ↓ 7.94  | Kroll 1973, p. 319, no. 14 (B 17:1a: A.D. 267). As shown by the fairly fresh condition of the obverse, the effacement of the reverse is due to corrosion, not wear. |                               |

## 1½ ASSARIA

|            |  |   |  |
|------------|--|---|--|
|            | X I Ω N above Sphinx<br>seated r., r. forepaw<br>raised above amphora. | [ACCAP-ION HM-VCV]<br>around Two crossed thyrsos;<br>all in ivy wreath. | Mavrogordato 1918,<br>no. 136α; <i>BMC</i> 136,<br>137 |
| <b>950</b> | Σ-6376 20 - 3.95   |   |  |

## SAMOS

*ca. 129–20 B.C.*

|            |  |   |   |
|------------|--|---|---|
|            | Head of Hera r., wearing<br>stephane.                            | [ΣΑΜΙΩΝ] below<br>Peacock r. [on caduceus;<br>behind, scepter; in field,<br>two monograms]. | <i>BMC</i> 201–208;<br><i>Cop</i> 1721–1724 |
| <b>951</b> | Large module, as <i>Cop</i> 1721                                 |   |   |
| <b>*a</b>  | ΣΤ-55 20 ↑ 7.77  |   |   |
|            | Intermediate module, as <i>BMC</i> 201–208, <i>Cop</i> 1722–1724 |   |   |
| <b>b</b>   | ΣΑ-392 15 → 2.90   | rev. above, A-monogram (cf. <i>BMC</i> 201)   |   |
| <b>c</b>   | Ο-429a 15 ↑ 4.02   |   |   |
| <b>d</b>   | Ο-629 15 ↑ 3.55  |   |   |
| <b>e</b>   | ΣΑ-488 14 ↑ 3.75   |   |   |

*A.D. 238–244: Tranquillina*

|            |  |  |                |
|------------|--|--|----------------|
|            | ΦΟΥΡΙΑ ΤΡΑ-ΝΚΥΙΑΛΙΝΑ<br>CЄB<br>Bust r. | CAM-ΙΩΝ<br>Tyche stg. l., with rudder<br>and cornucopia. | <i>BMC</i> 311 |
| <b>952</b> | P-354 22 ↓ 6.15                        |  |                |

## KARIA

## KNIDOS

*4th–mid-3rd century B.C.*<sup>60</sup>

|            |   |                      |             |                        |                  |
|------------|---|----------------------|-------------|------------------------|------------------|
|            |   | Head of Aphrodite r. |             | [KNI] above<br>Prow r. | <i>BMC</i> 55–64 |
| <b>953</b> | a | Γ-384                | 12 ↑ 0.64   |                        |                  |
|            | b | ΒΔ-438               | 13 - broken |                        |                  |

|             |  |                          |           |                                      |                  |
|-------------|--|--------------------------|-----------|--------------------------------------|------------------|
|             |  | Head of Apollo r., laur. |           | Similar.                             | <i>BMC</i> 67–71 |
| <b>*954</b> |  | Z-2835                   | 10 ↓ 0.84 | Kleiner 1976, p. 15, no. 96 (H 12:1) |                  |

*210–190 B.C.*<sup>61</sup>

|             |  |                                       |           |                                  |                  |
|-------------|--|---------------------------------------|-----------|----------------------------------|------------------|
|             |  | Head of city-goddess l.,<br>turreted. |           | ΚΝΙΔΙ[ΩΝ]<br>Forepart of lion l. | <i>BMC</i> 52–54 |
| <b>*955</b> |  | BZ-73                                 | 18 ↖ 4.66 |                                  |                  |

## MYLASA

*2nd–1st century B.C.*

|             |  |             |          |                                    |                  |
|-------------|--|-------------|----------|------------------------------------|------------------|
|             |  | Double axe. |          | ΜΥΛΑ ΣΕΩΝ l. and r. of<br>Trident. | <i>BMC</i> 14–16 |
| <b>*956</b> |  | Γ-121       | 9 ↑ 1.40 |                                    |                  |

## MYNDOS

*2nd–1st century B.C.*

|             |  |                        |           |   |  |
|-------------|--|------------------------|-----------|---|--|
|             |  | Head of Zeus r., laur. |           | M-[YN] ΔΙ-ΩΝ l. and r. of<br>vertical Winged thunderbolt. | cf. <i>Cop</i> 445 (thunder-<br>bolt horizontal) |
| <b>*957</b> |  | OA-270a                | 15 ↓ 4.20 |   |  |

<sup>60</sup> J. H. Nordbø, "The Coinage of Cnidus after 394 B.C.," in *Proceedings of the 10th International Congress of Numismatics*, I. A. Carradice, ed., London 1986 (pp. 50–56), pp. 53–54, 56, pl. 5:8, 9, 11.

<sup>61</sup> *Ibid.*, pp. 54–56, pl. 5:17.



## Kos

ca. 190–166 B.C.<sup>62</sup>

|            |   | Head of young Herakles<br>three-quarters facing, r. |            | KΩION above<br>Bow in case and club;<br>below, magistrate's name.   | <i>BMC</i> 103–110 |
|------------|---|---|------------|---|--------------------|
| <b>958</b> | a | K-1422  | 17 ✓ 1.95+ | [KΩION] TEΛΕΣΦΟΡ[ΟΣ]; <sup>63</sup> Kleiner 1975, p. 311, no. 189<br>(corrected) (H–K 12–14)  |                    |
|            | b | Θ-291   | - - broken | KΩION [- -]; (found with other coins, the latest being Athenian<br>Period II pieces of ca. 220's–190's B.C. and <b>991</b> , Antiochos III, 223–<br>187 B.C.) |                    |
|            | c | Ξ-52  | 17 ↑ 2.55+ | inscriptions effaced  |                    |
|            | d | T-860   | 15 ↑ 2.93  | same  |                    |

It is possible that 958c, d, or both might come from the later variety, *BMC* 156–164, “166–88 B.C.,” ethnic ΚΩΙΩΝ.

## RHODES

304–ca. 265 B.C.<sup>64</sup>

## AR DIDRACHM

|             |  | Head of Helios three-quarters<br>facing, r. |           | ΡΟΔΙΟΝ above<br>Rose with bud at r.; at lower l.,<br>ΕΥ and bunch of grapes. | <i>BMC</i> 35 |
|-------------|--|---|-----------|--|---------------|
| <b>*959</b> |  | E-551                                       | 18 ↑ 6.02 |  |               |

*Imitations minted in central or northern Greece, ca. 175 B.C.*<sup>65</sup>

## AR DRACHM

|             |  | Similar. Crmk: dolphin in<br>incuse rectangle. |           | [P]-O Rose with bud at r.;<br>above, ΔΗΜΟΚΛΗ[Σ];<br>at l., dolphin. | <i>BMC</i> 199, 200    |
|-------------|--|--|-----------|---|------------------------|
| <b>*960</b> |  | ΠΘ-130   | 15 → 2.42 |   |                        |
|             |  | Similar. Same crmk.                            |           | Rose with bud at r.;<br>above, ΝΙΚΟΣΤΡΑ[ΤΟΣ].                       | cf. <i>BMC</i> 199–202 |
| <b>*961</b> |  | ΠΘ-512   | 19 ↗ 2.35 |   |                        |

<sup>62</sup> The contexts of 958a and b are compatible with this standard catalogue dating but suggest that the series might have begun somewhat earlier.

<sup>63</sup> W. R. Paton and E. L. Hicks, *The Inscriptions of Cos*, Oxford 1891, p. 309, no. 85.

<sup>64</sup> R. Ashton, “Rhodian Coinage and the Colossus,” *RN*, ser. 6, 30, 1988, pp. 78, 86: Series 2.

<sup>65</sup> R. Ashton, “Pseudo-Rhodian Drachms and the Beginning of the Lycian League Coinage,” *NC* 147, 1987, pp. 16–17, notes 15 and 18, which mentions both Agora specimens and attributes their dolphin countermark also to mainland Greece, “perhaps after the battle of Pydna in 168.”

*4th–2nd century B.C.*

## AR DRACHM

|            |         |          |       |                                |  |
|------------|---------|----------|-------|--------------------------------|--|
|            |         | Similar. |       | Similar.                       |  |
| <b>962</b> | OO-1160 | 14 -     | 1.61+ | too damaged for classification |  |

*ca. 330's–late 3rd century B.C.*<sup>66</sup>

|            |          |                                      |      |                         |                   |
|------------|----------|--------------------------------------|------|-------------------------|-------------------|
|            |          | Head of Rhodos r., wearing stephane. |      | P-O Rose with bud on r. | <i>BMC</i> 74–117 |
| <b>963</b> | a MM-172 | 11 ↑                                 | 1.21 | rev. at l., H           |                   |
|            | *b A-492 | 11 ↑                                 | 1.42 |                         |                   |
|            | c A-900  | 11 ↓                                 | 1.10 |                         |                   |
|            | d Γ-489  | 9 ↑                                  | 1.16 |                         |                   |
|            | e Σ-6105 | 9 ↑                                  | 1.05 |                         |                   |

*ca. 200 B.C.*

|            |           |                         |      |           |                    |
|------------|-----------|-------------------------|------|-----------|--------------------|
|            |           | Head of Helios r., rad. |      | P-O Rose. | <i>BMC</i> 324–326 |
| <b>964</b> | a Z-3303  | 11 ↓                    | 0.97 |           |                    |
|            | b BB-1231 | 12 -                    | -    |           |                    |

*ca. 188–88 B.C.*

|            |           |  |      |  |                    |
|------------|-----------|--|------|--|--------------------|
|            |           | Head of Rhodos r., rad., wearing stephane. |      | P-O Rose with branch on each side; all in incuse square. | <i>BMC</i> 327–333 |
| <b>965</b> | a BB-841  | 13 ↑                                       | 1.69 | rev. above, (?)ΠΟΥ[- -]                                  |                    |
|            | b NN-1085 | 13 ↑                                       | 1.68 | Kleiner 1976, p. 21, no. 114 (B 20:9)                    |                    |

*late 1st century B.C. or later*

|             |        |                         |      |   |                    |
|-------------|--------|-------------------------|------|---|--------------------|
|             |        | Head of Helios r., rad. |      | ΡΟΔΙΩ-N Asklepios stg., facing, with staff. | <i>BMC</i> 411–413 |
| <b>*966</b> | NN-113 | 16 ↓                    | 2.26 |   |                    |

## LYDIA

## HERMOKAPELIA

*A.D. 117–138: time of Hadrian*

|            |       |                              |      |                                      |                  |
|------------|-------|------------------------------|------|--------------------------------------|------------------|
|            |       | ΘΕΟΝ CVN-[ΚΛΗΤΟΝ]            |      | ΕΡΜΟΚΑΠΗ-ΛΙΤΩΝ                       | <i>BMC</i> 11–12 |
|            |       | Young male bust of Senate r. |      | Bust of Roma r., turreted; at r., ☉. |                  |
| <b>967</b> | M-141 | 17 ↓                         | 2.83 |                                      |                  |

<sup>66</sup> Dates for the Rhodian bronze we owe to personal communication from Mr. Ashton.

## SARDIS

*after 133 B.C.*<sup>67</sup>

|            |   |                          |      |   |                  |
|------------|---|--------------------------|------|---|------------------|
|            |   | Head of Apollo r., laur. |      | ΣΑΡΔΙ ΑΝΩΝ Club;<br>[monogram] below; all in<br>oak wreath. | <i>BMC</i> 10–21 |
| <b>968</b> | a | Γ-98                     | 15 ↓ | 2.39  |                  |
|            | b | X-187                    | 15 - | 2.36  |                  |
|            | c | ΣΑ-394                   | 15 ↑ | 3.41  |                  |

## TRIPOLIS

*late 2nd or early 3rd century after Christ*

|            |    |  |      |   |   |
|------------|----|--|------|---|---|
|            |    | Bust of Serapis r., wearing<br>modius. |      | ΤΡΙΠΟ-ΛΕΙΤΩΝ<br>Isis stg. l., with sistrum<br>and situla. | <i>Von Aulock</i> 3312  |
| <b>969</b> | *a | Ξ-426                                  | 18 ↓ | 3.49  |   |
|            | b  | ΠΠ-464                                 | 18 ↓ | 2.62  | Kroll 1973, p. 319, no. 15, where wrongly identified as from<br>Phrygian Hierapolis (B 17:1a) <sup>68</sup> |

## PHRYGIA

## AKMONEIA

*1st century B.C.*

|            |  |                        |      |   |               |
|------------|--|------------------------|------|---|---------------|
|            |  | Head of Zeus r., laur. |      | [AKMONEΩΝ <br>ΜΗΝ]ΟΔΟΤΟ  ΣΙΛΛΩΝ<br>Asklepios leaning frontally<br>on staff. | <i>BMC</i> 16 |
| <b>970</b> |  | OO-729a                | 15 ↑ | 3.20  |               |

## APAMEIA

*ca. 133–48 B.C.*

|            |  |                        |      |  |  |
|------------|--|------------------------|------|--|--|
|            |  | Head of Zeus r., laur. |      | [ΑΠ]ΑΜΕ at r. of Cult<br>statue of Artemis Anaitis;<br>[magistrate's name] at l. | <i>BMC</i> 33–36, 40–42,<br>48, 61, etc. |
| <b>971</b> |  | Γ-393                  | 18 ↑ | 5.05   |  |

<sup>67</sup> *Sardis* M7, pp. 42, 79–80.<sup>68</sup> The somewhat worn condition of the coin (w4/5) is comparable to that of the Severan and late Antonine coins in this Herulian-invasion hoard.

## LAODIKEIA

*after 133 B.C.*

|            |       |                                   |  |                                |                  |
|------------|-------|-----------------------------------|--|--------------------------------|------------------|
|            |       | Female head r., wearing stephane. |  | [ΛΑΟΔΙ]ΚΕΩΝ Double cornucopia. | <i>BMC</i> 31–38 |
| <b>972</b> | K-779 | 18 ↑ 4.79                         |  |                                |                  |

## SYNNADA

*Imperial period*

|               |         |                                    |  |   |                   |
|---------------|---------|------------------------------------|--|---|-------------------|
|               |         | Head of city-goddess r., turreted. |  | CVNNA-ΔΕΩΝ<br>Athena stg. l., with phiale in r. and spear in l. | <i>BMC</i> 13, 14 |
| <b>973</b> *a | H'-3811 | 19 ↑ 3.87                          |  |   |                   |
| b             | ΠΠ-456  | 19 ↓ 2.82                          |  |   |                   |

## LYCIA

## LYCIAN LEAGUE

*ca. 100–mid-30's B.C.*

|              |       |                          |  |   |  |
|--------------|-------|--------------------------|--|---|--|
|              |       | Head of Apollo r., laur. |  | [ΛΥΚΙ] above and initials of mint city on either side of] Crossed bow and quiver; all in incuse square. | H. A. Troxell, <i>The Coinage of the Lycian League</i> ( <i>NNM</i> 162), New York 1982, p. 100 (unit) |
| <b>974</b> a | I-925 | 12 - 1.12                |  |   |  |
| b            | K-8   | 10 - 0.91                |  |   |  |

*late 30's–early 20's B.C.*

|            |        |   |                |                                 |  |
|------------|--------|---|----------------|---------------------------------|--|
|            |        | [Λ-Υ] Head of Artemis r., bow and quiver at shoulder. |                | M A Stag stg. r.; [ΙΠΠΟ above]. | Troxell (under <b>974</b> ), p. 191, no. 169; <i>RPC</i> I, 3314 |
| <b>975</b> | OO-546 | 18 ↖ 2.39   | Masikytes mint |                                 |  |

## PATARA

*168 B.C.–Imperial period*

|            |         |                          |  |  |                |
|------------|---------|--------------------------|--|--|----------------|
|            |         | Head of Apollo r., laur. |  | [ΠΑΤΑΡΕΩΝ] Head of Artemis l., wearing stephane. | <i>BMC</i> 5–8 |
| <b>976</b> | AA-123a | 8 ↑ 0.83                 |  |  |                |

## PAMPHYLIA

## ΑΤΤΑΛΕΙΑ

A.D. 116–117: *Trajan (Parthicus)*

|             |        |                           |  |               |
|-------------|--------|---------------------------|--|---------------|
|             |        | [Α Κ ΤΡΑΙΑΝΟΣ]-ΠΑ[ΡΘΙΚΟΣ] | [ΑΤΤΑΛΕΩΝ]                                       | <i>BMC</i> 16 |
|             |        | Head r., laur.            | Head of Athena r.,<br>wearing Corinthian helmet. |               |
| <b>*977</b> | Σ-5588 | 18 ↓ 3.83                 |  |               |

## PERGE

*3rd century B.C.*

|             |       |                  |  |                  |
|-------------|-------|------------------|--|------------------|
|             |       | Sphinx seated l. | ΙΑΝΑΨΑΣ  ΠΡΕΙ[ΙΑΣ]                           | <i>BMC</i> 15–20 |
|             |       |                  | Artemis stg. l., with wreath<br>and scepter. |                  |
| <b>*978</b> | N-805 | 13 ↑ 2.08        |  |                  |

## SIDE

*3rd–2nd century B.C.*

|            |          |  |  |                          |
|------------|----------|--|--|--------------------------|
|            |          | Head of Athena r., wearing<br>Corinthian helmet. | Pomegranate.                             | <i>BMC</i> 59–61, 71, 72 |
| <b>979</b> |          | Larger module ( <i>BMC</i> 59–61)                |  |                          |
| a          | PP'-1024 | 15 ↖ 2.69  | (U 13:2)                                 |                          |
|            |          | Smaller module ( <i>BMC</i> 71, 72)              |  |                          |
| *b         | T-1652   | 13 ↑ 1.91  | Kleiner 1975, p. 324, no. 354 (M–N 15:1) |                          |
| c          | E-65a    | 12 - -   |  |                          |
| d          | NN-8777a | 10 - -   |  |                          |

*ca. 200–36 B.C.*

|            |        |  |                           |                  |
|------------|--------|--|---------------------------|------------------|
|            |        | Head of Athena r., wearing<br>Corinthian helmet. | ΣΙ-ΔΗΤ[ΩΝ] before Nike l. | <i>BMC</i> 65–68 |
| <b>980</b> | K-1551 | 16 ↑ 2.69  |                           |                  |

## SILLYON

A.D. 181–193: *Commodus*

|             |         |                               |                     |                                       |
|-------------|---------|-------------------------------|---------------------|---------------------------------------|
|             |         | M AP AV KOMM-[ΑΝΤΩΝ]<br>ΕΙΝΟC | [CΙΛΛΥ]ΕΩΝ          | <i>Von Aulock</i> 4874<br>(same dies) |
|             |         | Bust r., laur., cuir.         | Mēn on horseback l. |                                       |
| <b>*981</b> | OO-1499 | 34 ↓ 29.30                    |                     |                                       |

## PISIDIA

## ANTIOCH

*2nd century after Christ*

ANTI[OCH]

Bust of Hermes r., caduceus  
at shoulder.

COLO-NIAE

Lighted altar.

A. Krzyzanowska,  
*Monnaies coloniales  
d'Antioche de Pisi-  
die*, Warsaw 1970,  
p. 140, no. VI/6;  
p. 144, no. V/5**982** Z-1725 14 ↖ 1.85

## SELGE

*2nd-1st century B.C.*Head of bearded Herakles  
r., club at shoulder.[Σ]-E Winged thunderbolt  
and bow terminating at upper  
end in head of stag.*BMC 47, 48***983** K-92 13 ↑ 2.73

## CILICIA

## SELEUKIA ON THE KALYKADNOS

*2nd century B.C.*N  
Σ-E Head of Apollo r., laur.ΣΕΛΕΥΚΕΩΝ ΤΩΝ ΠΡΟΣ ΤΩΙ  
ΚΑΛΥΚΑΔΝΩΙ Forepart of  
horse r.; above, ΔϜ; below, ΑΥΗΕ.*BMC 11-14***\*984** Γ-1612 20 ↑ 4.25 (from the same 2nd-century B.C. layer as 824 [Andros])

## SOLOI-POMPEIOPOLIS

*4th century B.C.*

Head r., [wearing helmet?].

[ΣΟΛ]ΕΩΝ(?) Bunch of grapes.

cf. *BMC 34***985** E-2368 11 ↓ - attribution of this coin to Soloi uncertain

*after 66 B.C.*

|             |                   |           |   |                              |
|-------------|-------------------|-----------|---|------------------------------|
|             | Head of Pompey r. |           | ΠΟΜΠΕ-ΙΟΠΟΛΙΕΩΝ Nike walking r., with wreath and palm; at r., $\text{IAP.}$<br>$\Delta\text{H}$ | <i>Von Aulock 5887, 5888</i> |
| <b>*986</b> | ΠΘ-64a            | 20 ↑ 7.57 |   |                              |

## SYEDRA

*A.D. 235–238: Maximus*

|            |  |           |  |              |
|------------|--|-----------|--|--------------|
|            | Γ ΙΟΥΟΝΗ ΜΑΣΙΜΟC ΚΑΙ<br>Bust r., cuir, dr. |           | CVΕΔΡΕΩΝ Prize crown containing two palm branches. | <i>BMC 8</i> |
| <b>987</b> | Σ-3422                                     | 19 ↑ 3.57 |  |              |

## TARSOS

*ca. 130–31 B.C.*<sup>69</sup>

|            |                                       |           |   |                    |
|------------|---------------------------------------|-----------|---|--------------------|
|            | Head of city-goddess r.,<br>turreted. |           | [Τ]ΑΡΣΕΩ[Ν] at r. of<br>Pyramidal pyre of Sandon. | <i>BMC 106–114</i> |
| <b>988</b> | ΚΤΑ-121                               | 20 ↑ 7.14 |   |                    |

## KINGS OF GALATIA

*Amyntas, 36–25 B.C.*

|            |  |           |                                       |                                |
|------------|--|-----------|---------------------------------------|--------------------------------|
|            | Bust of Artemis r., bow and<br>quiver at shoulder. |           | ΒΑΣΙΛΕ-ΩΣ [ΑΜΥ]ΝΤΟ[Υ]<br>Stag stg. r. | <i>BMC 14, 15; RPC I, 3503</i> |
| <b>989</b> | Η'-2742a   | 17 ↑ 3.26 |                                       |                                |

## SYRIA

## SELEUCID KINGS

*WSM and Cop assign all the following to the mint of Antioch on the Orontes.**Seleukos III, 226–223 B.C.*

|            |  |           |   |                      |
|------------|--|-----------|---|----------------------|
|            | Head of Artemis r., quiver<br>at shoulder. |           | [ΒΑΣΙΛΕΩΣ]  Σ]ΕΛΕΥΚΟΥ<br>Apollo seated l., on omphalos. | <i>WSM, no. 1032</i> |
| <b>990</b> | E-1295                                     | 15 ↑ 3.71 |   |                      |

<sup>69</sup> D. H. Cox, "The Coins," in *Excavations at Gözlı Kule (Tarsus I)*, H. Goldman, ed., Princeton 1950, pp. 54–61.

*Antiochos III, 223–187 B.C.*

|            |       |                     |  |                                       |                                 |
|------------|-------|---------------------|--|---------------------------------------|---------------------------------|
|            |       | [Head of Apollo r.] |  | [ΒΑΣΙΛ]ΕΩΣ  [ΑΝ]ΤΙΟΧΟΥ<br>Elephant l. | <i>WSM</i> , nos. 1110,<br>1114 |
| <b>991</b> | Θ-309 | 11 - 1.65           |  |                                       |                                 |

*Seleukos IV, 187–175 B.C.*

|             |       |   |               |   |                                      |
|-------------|-------|---|---------------|---|--------------------------------------|
|             |       | Bust of young Dionysos r.,<br>wearing ivy wreath, thrysos at<br>shoulder; behind, ME. |               | ΒΑΣΙΛΕΩΣ  ΣΕΛΕΥΚΟΥ<br>Forepart of galley l.;<br>above, ΑΓ . | <i>BMC</i> 26;<br>cf. <i>Cop</i> 176 |
| <b>*992</b> | Σ-468 | 20 ↑ 6.09   | serrated edge |   |                                      |

*Alexander I Balas, 150–145 B.C.*

|            |        |  |  |   |   |
|------------|--------|--|--|---|---|
|            |        | Head of Alexander r., wearing<br>helmet. |  | [ΒΑΣΙΛΕΩΣ  ΑΛΕΞΑΝΔΡΟΥ]<br>Nike stg. l., crowning second<br>line of inscription with wreath. | <i>BMC</i> 51–54;<br><i>Cop</i> 263–265 |
| <b>993</b> | ΟΟ-256 | 9 ↑ 5.82                                 |  |   |   |

*Antiochos VII, 138–129 B.C.*

|             |         |                        |  |  |  |
|-------------|---------|------------------------|--|--|--|
|             |         | Winged bust of Eros r. |  | ΒΑΣΙΛΕΩΣ  ΑΝΤΙΟΧΟΥ <br>ΕΥΡΓΕΤ[ΟΥ] Crown of Isis;<br>below, ΠΡ; at r., Η. | cf. <i>BMC</i> 60, 61;<br><i>Cop</i> 327 |
| <b>*994</b> | ΝΝ-1964 | 18 ↑ 5.09              |  |  |  |

## ANTIOCH ON THE ORONTES

## 47–40 B.C.

|             |        |                        |         |   |  |
|-------------|--------|------------------------|---------|---|--|
|             |        | Head of Zeus r., laur. |         | ΑΝΤΙΟΧΕ[ΩΝ]  ΤΗΣ <br>ΜΗΤΡΟΠΟΛΕ[ΩΣ] <br>ΚΑΙ ΑΥΤΟΝΟ[ΜΟΥ]<br>Zeus seated l., holding Nike<br>and scepter; thunderbolt above;<br>pilei of Dioskouroi l. and r.;<br>all in wreath. | <i>BMC</i> 49; with<br><i>RPC</i> I, 4218–4225<br>for date |
| <b>*995</b> | ΛΛ-268 | 30 ↗ 12.60             | (D 4:1) |   |  |

A.D. 117–138: *Hadrian*

|            |        |   |  |                     |                |
|------------|--------|---|--|---------------------|----------------|
|            |        | [- - - - - - - -]<br>Bust of Hadrian r. |  | S C<br>A in wreath. | <i>BMC</i> 289 |
| <b>996</b> | I-983a | 20 ↑ broken                             |  |                     |                |





## PERSIAN EMPIRE

480's–mid-4th century B.C.

## AV DARIC

King running r., carrying  
spear and bow.

Oblong incuse.

I. Carradice, "The  
'Regal' Coinage  
of the Persian  
Empire," in Car-  
radice, pp. 73–93,  
Type IIIb (early)**\*1003** Ψ-83 15 - 8.33 *GRC*, fig. 16On darics at Athens, see under **866** and the Athens 1929 hoard (*IGCH* 32) of several hundred darics, recovered near the Ilissos river.

## EGYPT

## PTOLEMAIC KINGS

*Ptolemy II, 285–246 B.C.*

Veiled head of Arsinoe II r.

ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ  
Eagle stg. l. on thunderbolt,  
wings lifted; at r., Δ|.Πτολεμαίων,  
no. 351**\*1004** NN-995 18 ↑ 4.33

Head of Zeus r., laur.

[ΠΤΟΛΕΜΑΙΟΥ] ΒΑΣΙΛΕ[ΩΣ]  
Eagle stg. l. on thunderbolt,  
wings lifted; at l., Σ above shield;  
between legs, [letter].Πτολεμαίων,  
pl. XIII:18–24**1005** X-207 27 ↑ 14.60

Head of Zeus Ammon r.

[ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]  
Eagle stg. l.; at l., trident.Πτολεμαίων,  
no. 839**1006** K-1676 14 ↑ 2.64

Berytos mint

*Ptolemy III, 247–222 B.C.*Bust of Ptolemy III, laur.  
and wearing aegis.ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ  
Eagle stg. l. on thunderbolt;  
cornucopia behind.Πτολεμαίων,  
no. 1000**1007** \*a BB-874 20 ↑ 5.24  
b Z-517a 23 ↑ 7.15+  
c ΞΞ-9a 20 ↑ 4.59+  
d O-78 20 ↑ 4.59+  
e N-95a 19 ↑ broken

(found with 629c)

*Ptolemy IV, 222–204 B.C.*

|             |       |           |                           |   |                         |
|-------------|-------|-----------|---------------------------|---|-------------------------|
|             |       |           | Veiled head of Arsinoe r. | [ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]<br>Double cornucopia. | Πτολεμαίων,<br>no. 1160 |
| <b>1008</b> | K-861 | 13 ↑ 1.38 | Cyprus mint               |   |                         |

*Unclassifiable Ptolemy I–IV, 3rd century B.C.*

|             |                    |             |                       |   |  |
|-------------|--------------------|-------------|-----------------------|---|--|
|             |                    |             | Head of Zeus Ammon r. | [ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]<br>Eagle stg. l. on thunderbolt,<br>wings lifted. |  |
| <b>1009</b> | All extremely worn |             |                       |   |  |
| a           | ΔΔ-82              | 29 - 13.58+ | (M 21:1)              |   |  |
| b           | O-583              | 28 ↑ 13.62+ | pierced               |   |  |
| c           | N-1167             | 28 ↑ 14.18+ | (K 9–10:1)            |   |  |
| d           | Γ-1224             | 27 ↑ 14.09+ |                       |   |  |
| e           | OO-621             | 27 - 11.12+ |                       |   |  |
| f           | Θ-166              | 27 - 8.90+  |                       |   |  |
| g           | ΩΔ-94              | 27 ↑ 10.65+ |                       |   |  |
| h           | Ω-152              | 26 ↑ 10.80+ | (N 20:4)              |   |  |
| i           | OO-875             | 26 ↑ 11.44+ |                       |   |  |
| j           | K-882              | - - -       | fragment              |   |  |
| k           | NN-1888            | 20 ↑ 6.30+  |                       |   |  |
| l           | ΠΘ-272a            | 21 - 6.40+  |                       |   |  |

*Ptolemy VI and VIII, joint coinage of 170–163 B.C.*

|             |    |         |                       |  |                         |
|-------------|----|---------|-----------------------|--|-------------------------|
|             |    |         | Head of Zeus Ammon r. | ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ<br>Two eagles stg. l. on<br>thunderbolt; at l.,<br>cornucopia. | Πτολεμαίων,<br>no. 1426 |
| <b>1010</b> | *a | KΤΛ-120 | 19 ↑ 8.34             |  |                         |
|             | b  | T-102   | 19 ↑ 8.91             |  |                         |
|             | c  | NN-1786 | 18 ↑ 6.80             |  |                         |

*Ptolemy VI, 181–146 B.C.*

## AR TETRADRACHM

|              |        |             |  |  |                         |
|--------------|--------|-------------|--|--|-------------------------|
|              |        |             | Head of Ptolemy I, diad. and<br>wearing aegis.             | [ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]<br>Eagle stg. l. on thunderbolt;<br>at r., ΠΑ; at l., ΛΚΑ.         | Πτολεμαίων,<br>no. 1433 |
| <b>*1011</b> | ΠΘ-590 | 23 ↑ 11.64+ | Year 21 (160 B.C.). Paphos mint                            |  |                         |
|              |        |             | Head of Ptolemy VII r., diad.<br>Cmk.: K in incuse square. | [ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]<br>Eagle stg. l., wings lifted,<br>on thunderbolt; at l., dolphin. | Πτολεμαίων,<br>no. 1488 |
| <b>1012</b>  | Γ-1330 | 19 ↑ 4.31   | Syrian mint  |  |                         |

*Ptolemy VIII, 145–116 B.C.*

|             |    |                       |    |   |   |  |
|-------------|----|-----------------------|----|---|---|--|
|             |    | Head of Zeus Ammon r. |    |   | [ΒΑΣΙΛΕΩΣ ΠΤΟΛΕ]ΜΑ[ΙΟΥ]<br>ΕΥΓΕΡΓ[ΕΤΟΥ]<br>Eagle stg. l., wings lifted,<br>on thunderbolt, at l., ΘΕ. | Πτολεμαίων,<br>nos. 1651, 1652   |
| <b>1013</b> | a  | NN-1972               | 22 | ↑ | 6.05  | larger module (Πτολεμαίων, no. 1651); legend effaced. Cyrenaica mint <sup>70</sup> |
|             | *b | BB-561                | 17 | ↑ | 4.01  | smaller module (Πτολεμαίων, no. 1652); legend as above. Same mint                  |

|              |  |          |    |   |       |  |                         |
|--------------|--|----------|----|---|-------|--|-------------------------|
|              |  | Similar. |    |   |       | ΒΑΣΙ[ΛΕΩΣ ΠΤ]ΟΛΕΜΑΙΟΥ<br>ΕΥΕΡΓΕΤ°<br>Eagle stg. r., wings lifted,<br>on thunderbolt. | Πτολεμαίων,<br>no. 1653 |
| <b>*1014</b> |  | NN-1581  | 33 | ↑ | 19.86 | (?) Cyrenaica mint. <i>GRC</i> , fig. 19   |                         |

*Ptolemy IX, 117–81 B.C.*

|             |    |          |    |   |      |   |                         |
|-------------|----|----------|----|---|------|---|-------------------------|
|             |    | Similar. |    |   |      | ΒΑΣΙΛ[ΕΩΣ ΠΤΟΛ]ΕΜΑΙ[ΟΥ]<br>Isis crown; at l. and r., Σ-Ω. | Πτολεμαίων,<br>no. 1722 |
| <b>1015</b> | *a | Σ-147    | 14 | ↑ | 1.7  | Cyrenaica mint  |                         |
|             | b  | B-514    | 14 | ↑ | 1.67 | same  |                         |

*Ptolemy XI, 114–88 B.C.*

|             |    |          |    |   |      |                                      |                         |
|-------------|----|----------|----|---|------|--------------------------------------|-------------------------|
|             |    | Similar. |    |   |      | B-A Eagle stg. l. on<br>thunderbolt. | Πτολεμαίων,<br>no. 1733 |
| <b>1016</b> | a  | OO-1039  | 12 | ↑ | 0.96 |                                      |                         |
|             | *b | NN-1009  | 11 | ↑ | 1.20 |                                      |                         |
|             | c  | ΓΓ-26    | 13 | ↑ | 1.25 |                                      |                         |

|              |  |          |    |   |      |  |                         |
|--------------|--|----------|----|---|------|--|-------------------------|
|              |  | Similar. |    |   |      | ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ<br>Eagle stg. l. on thunderbolt;<br>at l., aplustre. | Πτολεμαίων,<br>no. 1813 |
| <b>*1017</b> |  | H-1002   | 28 | ↑ | 7.30 | Cyprus mint  |                         |

*Ptolemy XII, 80–51 B.C.*

|             |  |          |    |   |      |   |                         |
|-------------|--|----------|----|---|------|---|-------------------------|
|             |  | Similar. |    |   |      | [ΠΤΟΛΕΜΑΙΟΥ ΒΑΣΙΛΕΩΣ]<br>Two eagles stg. l. on<br>thunderbolt; at l., Isis crown<br>on stand. | Πτολεμαίων,<br>no. 1842 |
| <b>1018</b> |  | NN-201   | 20 | ↑ | 3.12 |   |                         |

<sup>70</sup> In the forthcoming catalogue of coins from the University of Pennsylvania Museum excavations of the Demeter sanctuary at Cyrene, Theodore V. Buttrey attributes **1013**, **1014**, and **1015** to the Cyrenaica. See also **1032** below.

*Kleopatra VII, 51–30 B.C.*

|             |      |                          |  |   |                         |
|-------------|------|--------------------------|--|---|-------------------------|
|             |      | Bust of Kleopatra, diad. |  | [ΚΛΕΟΠΑΤΡΑΣ ΒΑΣΙΛΙΣΣΗΣ]<br>Eagle stg. l. on thunderbolt;<br>at r., [M]. | Πτολεμαίων,<br>no. 1872 |
| <b>1019</b> | N-2a | 20 ↑ 7.81+               |  |   |                         |

## ALEXANDRIA

*Domitian, A.D. 81–96*

|             |         |   |        |  |  |
|-------------|---------|---|--------|--|--|
|             |         | ΑΥΤΟΚ ΚΑΙ-ΣΑΡ<br>Δ[ΟΜΙΤΙΑΝΟΣ ΣΕΒ]<br>Head r., laur. |        | Hawk stg. r., wearing skhent;<br>at l., [L]. | Milne 1933,<br>no. 477; <i>BMC</i> 329 |
| <b>1020</b> | BB-1252 | 19 ↑ 4.05   | Year 3 |  |  |

*Trajan, A.D. 96–117*

|             |         |   |         |  |  |
|-------------|---------|---|---------|--|--|
|             |         | [- - - - -]<br>Head of Trajan r., laur. |         | Hemhem crown of Harpokrates;<br>in field, [L]-Z. | Milne 1933,<br>no. 710; <i>BMC</i> 561 |
| <b>1021</b> | Σ-4447a | 13 ↑ 1.79                               | Year 17 |  |  |

*Hadrian, A.D. 117–138*

|              |        |  |                               |  |   |
|--------------|--------|--|-------------------------------|--|---|
|              |        | Head of Hadrian r.                       |                               | Two pilei of Dioskouroi;<br>below, ΛΔΕ.  | Milne 1933,<br>no. 1172;<br><i>BMC</i> 909            |
| <b>*1022</b> | A-1443 | 10 ↑ 0.98                                | Year 10. <i>GRC</i> , fig. 23 |  |   |
|              |        | ΑΥΤ ΚΑΙ-ΤΡΑΙ ΑΔΡΙΑ ΣΕΒ<br>Bust r., laur. |                               | Nilus reclining l., with<br>cornucopia and reed,<br>l. arm on elephant; in ex.,<br>ΛΔΩΔΕΚ. | Milne 1933,<br>nos. 1264–1269;<br><i>BMC</i> 786, 787 |
| <b>*1023</b> | Σ-5882 | 33 ↑ 20.10                               | pierced. Year 12              |  |   |

|             |         |                                |        |  |  |
|-------------|---------|--------------------------------|--------|--|--|
|             |         | [- - -]-ΤΡΑΙ[- - -]<br>Bust r. |        | Similar, but letters and details<br>effaced. |  |
| <b>1024</b> | H-2151a | 35 ↑ 20.10                     | Year ? |  |  |

*Antoninus Pius, A.D. 138–161*

|              |        |   |                                |  |  |
|--------------|--------|---|--------------------------------|--|--|
|              |        | ΑΥΤ Κ Τ ΑΙ[Λ ΑΔΡ<br>ΑΝΤΩΝΙΝΟΣ] ΕΥ<br>Head r., laur. |                                | Bust of Hermanubis r.,<br>wearing modius [date letters]. | cf. Milne 1933,<br>no. 1722; <i>BMC</i><br>1135–1137 |
| <b>*1025</b> | I-488a | 34 ↑ 20.90  | pierced with two holes. Year ? |  |  |

|             |        |                                     |        |                               |                         |
|-------------|--------|-------------------------------------|--------|-------------------------------|-------------------------|
|             |        | [- - - - -]<br>Head of Antoninus r. |        | Griffin seated r.; above, LH. | Milne 1933,<br>no. 1843 |
| <b>1026</b> | X-147a | 20 ↑ 3.36                           | Year 8 |                               |                         |

*Trajan-Antoninus Pius*

Effaced head of emperor.

Crown of Isis.

Milne 1933,  
nos. 1171, 5270–  
5272; *BMC* 560,  
561, 891–901, 1211**1027** OO-543 12 - 0.99+*Probus, A.D. 276–282*

BILL. TETRADRACHM

Α Κ Μ ΑΥΡ ΠΡΟ-ΒΟC CEB

Bust r., laur., dr.

Elpis stg. l., with flower;  
at l., B.  
LMilne 1933,  
no. 4528;  
*BMC* 2417**\*1028** I-1 21 ↑ 6.86 Year 2*Diocletian, A.D. 284–305*

BILL. TETRADRACHM

Α Κ ΓΟΥΑ ΔΙΟΚΛΗΤΙΑΝΟC

CEB Bust r., laur., dr.

Dikaiosyne stg. l., with scales  
and cornucopia; in field, L-[?].Milne 1933,  
nos. 4768–4773,  
4935–4936**\*1029** Σ-2889 20 ↑ 6.78 Years 2–6

BILL. TETRADRACHM

ΔΙΟΚΛΗΤΙΑΝΟC CEB

Bust r., laur., cuir.

Bust of Serapis r.;  
in field, L-IA.cf. Milne 1933,  
nos. 5229, 5230**\*1030** OO-705 19 ↑ 5.68 Year 11

## CYRENAICA

## CYRENE

*late 4th century B.C.*

Head of Karneios r.

K Y P Triple silphium plant.

*BMC* 198–200**1031** OO-1286 14 ↓ 1.15

## "REGAL" COINAGE

*ca. 140–96 B.C.*

Head of Ptolemy I r.

Head of Libya r.

*BMC*, p. 89,  
nos. 95–104**\*1032** I-1115a 13 ↑ 1.17See also **1013–1015**.

## ROMAN PROVINCE OF CYRENAICA AND CRETE

ca. 67 B.C.

|             |       |  |                          |  |
|-------------|-------|--|--------------------------|--|
|             |       | Head of Roma r., wearing<br>Corinthian helmet. | Bee in dotted circle.    | <i>BMC</i> , p. 113,<br>no. 1; <i>RPC</i> I, 904 |
| <b>1033</b> | EE-78 | 24 ↑ 11.63                                     | (N 21:4) Minted in Crete |  |

37–34 B.C.

|              |        |  |  |   |
|--------------|--------|--|--|---|
|              |        | Head of Artemis r., bow<br>and quiver at shoulder;<br>beneath chin, Γ. | [L. LOL-LI]VS Stag stg. r.;<br>below belly, [two letters]. | <i>BMC</i> , p. 115,<br>nos. 14 or 16;<br><i>RPC</i> I, 909 |
| <b>*1034</b> | Γ-1122 | 29 ↑ 13.01   | Minted in Crete  |   |

## NUMIDIA

*Juba I, 60–46 B.C.*

## AR DENARIUS

|              |        |   |  |   |
|--------------|--------|---|--|---|
|              |        | REX IVBA<br>Bust r., diad.,<br>scepter over shoulder. | HMMLKT IOBAI in<br>Neo-Punic characters.<br>Octastyle temple<br>approached by steps. | J. Mazard, <i>Corpus<br/>Nummorum Numidiae<br/>Mauretanie</i> , Paris<br>1955, nos. 84–86;<br><i>Cop</i> 523, 524 |
| <b>*1035</b> | K-1477 | 18 ↑ 3.30   |  |   |

## UNCLASSIFIED

## Unattributable Greek Imperials with Identifiable Obverse Portraits

**1036**

|   |                                    |    |
|---|------------------------------------|----|
|   | Augustus                           |    |
| a | PP-62                              | 15 |
|   | Nero                               |    |
| b | Ω-600                              | 16 |
| c | T-1092                             | 16 |
|   | Julio-Claudian emperor             |    |
| d | O-619                              | 24 |
| e | OO-771                             | 11 |
| f | PP'-284                            | 18 |
|   | Hadrian                            |    |
| g | Z-2126                             | 18 |
|   | M. Aurelius, L. Verus, or Commodus |    |
| h | Σ-1843a                            | 22 |
| i | OO-1276                            | 21 |
| j | O-239                              | 22 |
|   | Caracalla                          |    |
| k | ΣT-364                             | 22 |

## Illegible Coins with Countermarks

- 1037** The listing is by countermarks, which are stamped in an incuse circle unless otherwise noted. Nearly all the coins are totally worn.

*4th century B.C. and Hellenistic*

- Cornucopia in incuse oval
- a Σ-3912 14
- Dolphin on trident
- b NN-502 18 rev. type of beardless head
- c Γ-1088 20
- Dolphin on trident in incuse square
- d KK-166 15
- Lyre
- e K-1568 15
- Rosette or star
- f H-1810 17
- g EA-15 14
- h Z-3004 13
- i BE-424 18
- Bunch of grapes
- j K-1497 15
- k OO-1263 15
- Crude wreath?
- l N-1120 20
- X
- m B-606 15

*Greek Imperials*

- Open left hand in incuse field of same shape
- n ΠΙΙ-230 22 The countermark, located in front of the obv. head, is considerably larger than the open-hand countermarks found on earlier duoviral asses of Corinth (Amandry, pp. 30–31, pl. I).
- Star(?) in incuse square
- o T-141a 21 obv. head of Julio-Claudian emperor
- IN
- p BE-501 20
- R in incuse field of same shape
- q P-1494 17

## Halved Coins, Worn Illegible

- 1038**
- a Θ-182 16
- b Ψ-323 17
- c BZ-165 19
- d Z-1003 21
- e Z-1273 24
- f Z-1511 25

By size and fabric the first three could be Athenian (Periods III and IV).



## UNIDENTIFIED

- 1039** 130 badly preserved non-Athenian coins have so far resisted identification. These are kept together in the Agora records office for further study by staff and visiting numismatic specialists.

## APPENDIX A

### THREE MODERN IMITATIONS

(Plate 32:a–c)

As noted in Chapter I (p. 7 above), a few of the 5th-century B.C. Athenian drachms and tetradrachms from the Agora are suspect: if not ancient imitations, one or two conceivably could be modern. Here we list three Greek coins from the Agora whose modern fabrication cannot be doubted. The source of the first, the Athenian tetradrachm, is uncertain, but one assumes that the coin either is a lost souvenir or derives from a house or tourist shop that stood above or near the place of discovery. The other two come from 19th- or early 20th-century houses that were demolished for excavation. Whether any of the bona fide ancient coins from recent or disturbed contexts in the excavations might be similar strays from modern collections, antiquities shops, or the like, there is usually no way of knowing. But these three fakes make it a clear possibility.

\*a. "AR" forgery of an Athenian tetradrachm of the second half of the 5th century B.C. Compare variety *8* above.

|        |  |  |
|--------|--|--|
|        | Head of Athena r., wearing Attic helmet. | AΘE Owl stg. r., facing; behind, olive spray and crescent. |
| PP-192 | 24 → 10.14 g.                            |  |

Betrayed by its mediocre style, light weight, pewterlike alloy, and dulled, cast relief, all of which are typical of cheap, modern imitations. Found in mixed, late, although not obviously "modern" fill.

\*b. AR forgery of a Siculo-Punic tetradrachm of the 4th century B.C. Compare *Cop (Sicily)* 978–982.

|     |   |   |
|-----|---|---|
|     | Head of Persephone-Tanit; around, three dolphins. | Horse's head l.; behind, palm tree; below, traces of Punic inscription. |
| Z-1 | 22 ↗ 7.33 g.                                      |   |

The metal has a pitted, cast look, and the weight is less than half of what it should be. Found in the cellar of a modern house.

\*c. AR forgery of a gold stater of Philip II, King of Macedon, 359–336 B.C. Compare G. Le Rider, *Le monnayage d'argent et d'or de Philippe II*, Paris 1977, pp. 71–198, pls. 53–82.

|       |                          |  |
|-------|--------------------------|--|
|       | Head of Apollo r., laur. | ΦΙΛΙΠΠΟΥ<br>Chariot drawn by two galloping horses r. |
| AA-14 | 18 ↘ 4.06 g.      holed  |  |

Apart from the fact that these types were not anciently struck in silver, the surface of the metal, especially on the reverse, has the pitted texture of a modern cast. The coin, drilled for attachment as an ornament, was found in 1937 during the demolition of modern houses.

## APPENDIX B

### UNSTRUCK BLANKS AND THE MINTS OF THE AGORA

(Plates 32 and 33)

#### I

The large square building known as “The Mint” at the southeast corner of the Agora square (P–Q 16) owes its identification to the more than 160 coin blanks excavated from its floors.<sup>1</sup> The best-known blanks are the ten that were found in 1953 with the remainder of the bronze rod from which they had been chopped (Pl. 32:d). Renewed excavation in 1959 recovered eight similar blanks from the floor of another room (see Pl. 32:e). During the final exploration of the building in 1978, floor areas and refuse pits dug through the floor yielded an additional 144 blanks and related pieces of scrap bronze.

Measuring about 27 by 29 m., the structure had the form of an open courtyard with three roofed rooms along the back wall. The room at the southwest corner was much the largest, taking up about a quarter of the entire plan. The remains of two furnaces and some cement-lined water basins set in the floor show that most of the bronze-working activity took place in this southwest room.

Before the excavations of 1978, it was assumed that this was the mint of Classical and Hellenistic Athens, τὸ ἀργυροκοπεῖον, mentioned in several epigraphical and literary texts of the 5th, 4th, and 2nd centuries B.C.,<sup>2</sup> and that Athenian silver as well as bronze coins were minted here. It is now apparent, however, that the present building played a far more limited role in the history of Athenian coinage. Analyses of furnishings and debris excavated from the building in 1978 failed to produce trace elements of silver, much less any more conspicuous indications of silver working. And although the latest pottery recovered beneath the floors placed the construction of the building as early as “the years around 400 B.C.,”<sup>3</sup> none of the excavated bronze blanks appear to be earlier than the Period IVB coinage of 42/1–32 B.C., by which time Athens had ceased to mint in silver. Further study of the coin blanks may require minor chronological adjustments, but at present the dating of the three main groups of blanks from the mint rests on the following considerations:

Group 1 (1953). Plate 32:d illustrates ten of the eleven pieces that were found together “immediately beneath the latest ancient ground level” just northeast of the large southwest room in 1953 and prompted identification of the building as a mint.<sup>4</sup> Collectively inventoried as B(ronze)

<sup>1</sup> For the building: H. A. Thompson, “Excavations in the Athenian Agora: 1953,” *Hesperia* 23, 1954 (pp. 31–67), pp. 45–48; *idem*, “Activities in the Athenian Agora: 1954,” *Hesperia* 24, 1955 (pp. 50–71), p. 59; *idem*, “Activities in the Athenian Agora: 1959,” *Hesperia* 29, 1960 (pp. 327–368), pp. 343–344. A. Frantz, *The Church of the Holy Apostles (The Athenian Agora XX)*, Princeton 1971, p. 3, pls. 2:b, 28. *Agora XIV*, pp. 78–79. Camp, pp. 128–130, figs. 107, 108. *Guide*<sup>4</sup>, pp. 162–163, figs. 106, 107.

<sup>2</sup> To the testimonia collected in *Agora III*, pp. 160–161, add B. D. Meritt, “Greek Inscriptions,” *Hesperia* 32, 1963 (pp. 1–56), pp. 31–32, no. 29.

<sup>3</sup> Camp, p. 129.

<sup>4</sup> Thompson 1954 (note 1 above), pp. 46–47, pl. 14:b (with the photograph reproduced in M. Lang, *The Athenian Citizen* [Excavations of the Athenian Agora Picture Book 4], Princeton 1960, fig. 13; *Agora XIV*, pl. 33:c; *Guide*<sup>3</sup>, fig. 78; *GRC*, fig. 3); Thompson 1955 (note 1 above), p. 59.

1046, they comprise a short length of bronze rod, eight usable blanks that had been chopped from it, and two unusable blanks that had been chopped off incompletely. Diameters are 12 to 14 mm. The eight complete blanks have thicknesses of 7 to 10 mm., with an average thickness of 8 mm., and weights of 7.58 to 5.10 g., with an average of 6.48 g.<sup>5</sup>

One of the two incomplete blanks was sent for chemical analysis to E. R. Caley and W. H. Deebel at The Ohio State University, who determined that its alloy was composed of 66.5 percent copper, 7 percent tin, and 26.7 percent lead.<sup>6</sup> The lead:tin ratio (a critical index for metallurgical comparison, according to Caley and Deebel) is 3.62:1. Since the lead percentage is extremely high for any pre-imperial issue of Athens (see Tables III and IV, pp. 324–327 below), Caley and Deebel correctly recognized that the blanks must belong to the Athenian bronze coinage of the 1st century B.C., that is, the coinage of Periods IVB–E. In fact, the only AE 1 issue of Athens that even approaches this percentage is the Antonian Zeus/Dionysos issue **144**, which dates a year before the Battle of Actium to 32 B.C. The one specimen of **144** (from a private collection) that has been metallurgically analyzed proved to have a lead content of 22.73 percent and a 3.61:1 lead:tin ratio<sup>7</sup> that is essentially identical to the one obtained for the blank. Eighteen slightly worn hoard specimens of **144** (Table IV) gave an average weight of 6.33 g., which again is remarkably close to the 6.48-g. average of the eight complete blanks.

It would be helpful to analyze more Period IV coins for comparison. Towards this end several specimens of each Period IVB–D issue were selected in 1991 for nondestructive analysis. Until the results of this project are available, the blanks and rod fragment found in 1953 are to be connected with variety **144** and dated with it to 32 B.C.

Group 2 (1959). The second group consists of eight pieces that were found in 1959 “embedded in the ancient floor in one of the rooms of the SW block.”<sup>8</sup> Six others are illustrated on Plate 32:e: B 1242 (5.33 g.), B 1243 (5.32 g.), B 1237 (7.70 g.), B 1238 (broken, 1.85 g.), B 1239 (end of rod, 6.94 g.), B 1244 (7.60 g.). There is no reason to disassociate these chronologically from the pieces found in 1953. Diameters and weights are similar.

The two blanks, B 1068a (7.02 g.) and b (6.58 g.), on Plate 32:e are also contemporary. Both were found in 1952 in the same area as the 1953 blanks but at a higher level. The one blank from within the mint that may be slightly earlier, or, less likely, later, than the rest is B 1245, which is wider (diam. 15 mm.) and heavier (8.96 g.). Its relation to the other blanks and its place in the IVB or IVB–E coinage (it is too light for Period IVA) should become clear when it is analyzed for its lead content along with the coins mentioned above and with a number of other blanks. In addition to the foregoing blanks excavated within the mint, ten similar blanks randomly turned up in the 1950’s in digging in the general vicinity, mostly in Roman Imperial and later contexts.

Group 3 (1978). The 1978 excavations recovered 144 blanks, rod ends, and pieces of bronze scrap. Most come from pits in the floor of the building and are in such a corroded condition that little of the original metal remains. Consisting almost entirely of corrosion products, they could not be cleaned. A full listing with weights will be published once samples have been analyzed. Here, however, it should be mentioned that three sizes are represented. In diameter and weight the larger pieces are similar to the better-preserved (reduced AE 1) Group 1 and 2 blanks found in the 1950’s.

<sup>5</sup> Weights of the eight: 7.58, 7.14, 6.78 (2), 6.50, 6.03, 5.93, 5.10.

<sup>6</sup> E. R. Caley and W. H. Deebel, “The Chemical Dating of Bronze Coin Blanks from the Athenian Agora,” *The Ohio Journal of Science* 44, 1955, pp. 44–46. Cf. Thompson 1954 (note 1 above, p. 292), p. 47, note 21.

<sup>7</sup> *New Style*, p. 640.

<sup>8</sup> Thompson 1960 (note 1 above, p. 292), p. 343.

The intermediate blanks are of reduced AE 2 size (*ca.* 2.25–4.00 g.); a few smaller ones are AE 4 (1.50–2.00 g.). At the time of excavation, it was assumed from the sizes of the blanks that most of them belong to the 3rd and 2nd centuries B.C.<sup>9</sup> But a date in the Antonian Period IVB (42/1–32 B.C.) is just as suitable for the three denominations and is to be preferred in light of the more closely studied blanks from the earlier excavations.

Whatever purpose the building served before the middle of the 1st century B.C., present evidence suggests that it was probably not converted to use as a mint until after the Battle of Philippi in 42 B.C. Metallurgical analyses of more blanks should clarify whether minting continued here only to the end of Period IVB in 31 B.C. or whether some of the blanks belong as late as the Augustan Period IVC–E coinage, in which case the building will have functioned as a mint well into the last quarter of the 1st century B.C. A new mint was clearly established at some other location when coining resumed in the 2nd century after Christ (Period V), for in the course of that century the site of the structure in the southeast corner of the Agora was largely built over by the Southeast Temple and the Nymphaeum.<sup>10</sup>

## II

All or nearly all the blanks from the Period IV mint in the southeast corner of the Agora are unfinished. Very thick and having rough, faceted surfaces, they are still chopped segments of a bronze rod. Before being struck between coin dies they had to be heated and hammered to give them the necessary smoothness and disk shape of the twenty-five finished coin blanks illustrated on Plate 32:f. Size, weight, and fabric indicate that these finished blanks date too from Period IVB or B–E, and so they were very likely prepared in the mint at the southeast corner of the Agora. They were found, however, in 1933 in the opposite, southwest corner of the Agora square, between the Tholos and the Middle Stoa, in a pocket of gravelly fill beside the Great Drain (Deposit H 12:4); the latest coins date the fill to the middle of the 3rd century after Christ. Presumably discarded in the second half of the 1st century B.C., the blanks were probably transported from their original place of deposition in old, redug earth.

The sharp, unworn edges of the pieces make it clear that these are unstruck coin blanks from a mint and not heavily circulated Period IV coins like those pictured on Plate 34 that had lost their types through wear. There are two sizes. The twenty-two reduced AE 1 pieces<sup>11</sup> measure 16–18 mm. in diameter and weigh 5.44 to 8.55 g.; the mean weight is 6.95 g. The three smaller pieces<sup>12</sup> have 13-mm. diameters and weigh 2.7 to 2.9 g. Several specimens will be analyzed for lead content to assist identification with specific issues of the Period IV coinage.

## III

The one Agora blank that survives from the manufacture of the Hadrianic-Antonine Period VB or C coinage is the stray B 1641 (Pl. 33:a; 22 mm., 8.51 g.). Association with the 2nd-century imperial coinage is shown instantly by the shallow cavity punched on one side.<sup>13</sup> The beveled edge of the blank is further proof that the blank had been manufactured by casting. Found during excavation

<sup>9</sup> Camp, p. 129; *Guide*<sup>4</sup>, p. 162.

<sup>10</sup> W. B. Dinsmoor, Jr., "Anchoring Two Floating Temples," *Hesperia* 51, 1982 (pp. 410–452), p. 411, fig. 1, and pp. 432–433, for the date of the temple in the first half of the 2nd century. The Nymphaeum is Antonine.

<sup>11</sup> These blanks still carry their original coin inventory numbers: Z-2076, 2077, 2083, 2084, 2086, 2088, 2089, 2091, 2093–2095, 2101, 2104, 2105, 2109, 2111, 2113, 2116, 2118, 2121, 2131, 2140.

<sup>12</sup> Z-2079, 2100, 2117.

<sup>13</sup> Pp. 113–114, 115 above.

of the northern part of the Stoa of Attalos in mixed fill, it had apparently circulated as a coin, since it has been stamped with a countermark of an open right hand in an incuse oval. This particular countermark has not been found on other Agora coins, although for the countermark of an open left hand, see 1037n.

#### IV

The Athenian mint of the 2nd century after Christ apparently lay outside the excavated area. In the middle of the 3rd century, however, minting returned to the south side of the Agora square, although this time in the venerable old building at the opposite, southwest corner, the building labeled on Plate 36 the Rectangular Peribolos.<sup>14</sup> Originally built in the 6th century B.C. as a governmental or religious structure, it was heavily damaged by Sulla's forces in 86 B.C. and was subsequently occupied for most of the Roman period by various industrial establishments. In the 1st and 2nd centuries after Christ, occupants included potters and marble workers.<sup>15</sup> Remains of bronze working have also been found and were assigned to a reuse of the site after the Herulians destroyed the building in A.D. 267.<sup>16</sup> But this evidence will have to be reexamined since at least some of it dates just before the destruction, *ca.* A.D. 264–267, when the building served as the mint for Athens' last coinage, the Period VI imperials.

In 1961 thirty-eight unstruck flans of sawn, Period VI type (Inv. B 1254) and four broken or misstruck Period VI coins (K-1641–1644) were found together in a pit in the floor of the building's southwest peristyle (Deposit I 1:3; Pl. 33:b). Like the four coins, most of the blanks are rejects. Six of the blanks were sawn from a bar at an angle and are not completely circular. A large air bubble in the bar from which fifteen of the other blanks were sawn was responsible for the holes in them. The burial of this refuse in a pit implies that it had been swept together in a clean-up, possibly while the mint was still in operation. It is doubtful, of course, whether this building was ever formally called a mint since coins were never struck here for more than a few years. As with the building in the southeast corner of the Agora, we again have to do with a structure that was temporarily taken over for the manufacture of bronze coins long after its use in other capacities.<sup>17</sup>

<sup>14</sup> See *Agora XIV*, pp. 62–65, identifying the building as the Heliæia. Camp (pp. 46–47, 108) calls it probably a lawcourt. Now R. S. Stroud ("The Sanctuary of Aiakos in the Athenian Agora" [lecture, New Orleans 1992], abstract in *AJA* 97, 1993, pp. 308–309) identifies it as the Aiækeion.

<sup>15</sup> *Guide*<sup>3</sup>, pp. 168 = *Guide*<sup>4</sup>, pp. 180–181; *Agora XIV*, p. 186.

<sup>16</sup> *Guide*<sup>2</sup>, p. 106: "The final destruction came with the Herulian sack of A.D. 267 after which a colony of bronze workers settled for a time among the ruins."

<sup>17</sup> Unstruck coin blanks have been found at a number of other Greek sites: Eretria (G. F. Hill, "Ancient Methods of Coining," *NC*, ser. 5, 2, 1922, p. 11, pl. 1:6); Olynthos (*Olynthus XIV*, pp. 403–406, pl. 173:23–25); Halieis (J. A. Dengage, "The Mint of Ancient Halieis" [lecture, Washington, D.C. 1975], abstract in *Summaries of the Papers Presented at the 77th General Meeting of the Archaeological Institute of America, December 28–30, 1975*, New York 1975, p. 4); Argos (H. Consolaki and T. Hackens, "Un atelier monétaire dans un temple argien?," *Études argiennes* [*BCH* Supplement 4], Paris 1980, pp. 279–284, figs. 10–13); Chalkis (*ibid.*, p. 289, fig. 14 [silver]); Tauric Chersonesos (if these blanks are indeed Classical and not Byzantine, see *ibid.*, p. 286, note 16); and Pella, where the Hellenistic mint has been recently excavated at the edge of the agora (publication by Dr. Mando Oikonomidou, forthcoming).

# DEPOSITS, INCLUDING HOARDS

## A. OUTSIDE THE AGORA

Summarized here is the evidence from the Olynthos, Kerameikos, and Pnyx excavations that has a special relevance for the chronology of Athenian and related bronze coinages in the 4th century B.C. The other accumulations of coins found outside the Agora and cited in this volume are the hoards listed under item 6 below.

### 1. OLYNTHOS

At a colloquium on ancient Olynthos held in Boston in December 1989, the two principle participants confirmed the conclusions of the excavator, D. M. Robinson, that the excavated portion of the city was destroyed and abandoned in 348 B.C. except for the Northwest Quarter, whose houses continued to be inhabited until the founding of Kassandrea in 316.<sup>1</sup> Susan Rotroff inferred the correctness of Robinson's historical reconstruction from independent ceramic comparanda.<sup>2</sup> Nicholas Cahill, who has studied the excavation notebooks and wrote his doctoral dissertation (University of California at Berkeley 1991) on Olynthos, emphasized, as Robinson had earlier, that nearly all the Macedonian regal coins from the excavation that date after 348 B.C. were concentrated in the pre-316 B.C. Northwest houses; the few, random exceptions are to be understood as stray pieces that scavengers dropped while plundering the ruins for stone and other building material.<sup>3</sup> The proposal of some of Robinson's critics to downdate the abandonment of all the Olynthos houses to 316 or later<sup>4</sup> can no longer be regarded as tenable.

Even so, one still has to be cautious in citing Olynthos for numismatic chronology. Every coin should be checked for its findspot and the coins found with it to ensure that it does come from a house destroyed or abandoned in 348. In most cases the provenience concordances at the back of *Olynthus* IX and XIV are sufficient for this kind of checking. More detailed information, including the level at which each coin was found, is recorded in the unpublished notebooks. I am grateful to Dr. Cahill for generously providing such unpublished information for the catalogue notes on the coins of Lemnian Myrina (455) and Attic Salamis (640).

<sup>1</sup> *Olynthus* IX, pp. 368–370.

<sup>2</sup> S. I. Rotroff, "Olynthos and Other Deposits—The Pottery" (lecture, Boston 1989), abstract in *AJA* 94, 1990, pp. 315–316. *Idem*, "Athenian Hellenistic Pottery: Towards a Firmer Chronology," *Actes des XIII. Internationales Kongresses für klassische Archäologie: Berlin 1988*, Mainz 1990 (pp. 175–178), pp. 174–176.

<sup>3</sup> The published abstract of Cahill's paper, "Social and Spatial Organization at Olynthos," *AJA* 94, 1990, pp. 314–315, does not include his prefatory observations on the coins and on the destruction chronology. On the later coins from the Northwest Quarter, see under 497 above. On stone robbing as a major activity after 348 at the site, see W. Hoepfner and E.-L. Schwandner, *Haus und Stadt im klassischen Griechenland*, Munich 1986, p. 29, with note 67.

<sup>4</sup> A. R. Bellinger, "Notes on Coins from Olynthus," in *Studies Presented to David Moore Robinson* II, G. E. Mylonas and D. Raymond, eds., St. Louis 1953 (pp. 180–186), pp. 184–185. M. Rose, "A Reconsideration of the Coins Found at Olynthus" (lecture, Cincinnati 1983), abstract in *AJA* 88, 1984, p. 258; *idem*, "Coins and the History of Olynthus" (lecture, Boston 1989), abstract in *AJA* 94, 1990, p. 315. J. Dengate, "The Abandonment of Olynthos in 316: A Solution to the Problem of Early Hellenistic Chronology, 350–260" (unpublished lecture), followed by W. D. E. Coulson, "Chatby Reconsidered," *Journal of Egyptian Archaeology* 73, 1987, pp. 234–236.

## 2. KERAMEIKOS BUILDING Z-3 DESTRUCTION DEBRIS

In the last quarter of the 4th century, the superstructure of this large building just inside the Sacred Gate<sup>5</sup> collapsed and covered *inter alia* an unusually large number of coins scattered on the floor. Among them was a tetradrachm of Alexander III from the mint of Amphipolis<sup>6</sup> and datable, through the latest Amphipolis issues in the Demanhur hoard, to ca. 320–317 B.C.<sup>7</sup> The remaining coins, summarized here through the generosity of the excavator, Dr. Ursula Knigge, are bronze:

|         |   |
|---------|---|
| Athens  | 1 Eleusis Piglet on staff (38)                                      |
|         | 1 AΘE Piglet on staff (39)  |
|         | 33 Double-bodied owl (41–43)  |
|         | 10 Two owls, no symbol (46)   |
|         | 4 Two owls, details illegible (44–47)                               |
|         | 4 Eleusis Wreathed piglet, short ethnic above or below (48, 49)     |
| Salamis | 2 Nymph/Shield (640)  |
| Megara  | 1 Two dolphins (643)  |
| Aigina  | 1 Two dolphins (662)  |
| Grynyon | 1 Apollo/Musselshell ( <i>Cop [Aeolis-Lesbos]</i> , pl. 5:202–207). |

The destruction of the building occurred between the ca. 320–317 issue of the Alexander tetradrachm and the circulation of Athens' Owl-left bronze (50), which is absent from the deposit but which must have been in circulation by 304 B.C. (see item 3, next) and probably began in 307/6 (p. 33 above). Dr. Knigge has attributed the destruction to a natural catastrophe, possibly an earthquake.<sup>8</sup> But since there is no contemporary evidence elsewhere in Athens for such an event, a respectable alternative case can be made that the structure was hastily demolished to facilitate the extensive 307–304 B.C. renovation of the adjacent city walls.<sup>9</sup>

## 3. KERAMEIKOS DIPYLON ROAD LEVELS

During excavations of the Dipylon gate in the 1960's, Gottfried Gruben recovered a small but important sequence of bronze coins from the successive 4th-century levels of the road that ran through the gate.<sup>10</sup> In advance of the final excavation report, we are able, through the kindness of Drs. Gruben, Peter Franke, and Judith Binder, to list the coins from the numismatically significant Levels III through IV.

|                             |         |                                |
|-----------------------------|---------|--------------------------------|
| Found on Road Level IIIb    | Athens  | 1 Eleusis Piglet on staff (38) |
|                             | Salamis | 1 Nymph/Shield (640)           |
| embedded in Road Level IIIb | Salamis | 1 Nymph/Shield (640)           |
| embedded in Road Level IIIc | Athens  | 1 Eleusis Piglet on staff (38) |
| embedded in Road Level IV   | Salamis | 1 Nymph/Shield (640)           |
|                             | Athens  | 3 Double-bodied owl (42, 43)   |
|                             |         | 1 Owl l. (50)                  |

Road Level IV, which gives the earliest datable context for the Athenian Owl-left variety, was laid immediately after the rebuilding of the Dipylon that took place between the publication of *IG II<sup>2</sup> 463* in 307/6

<sup>5</sup> U. Knigge, *Der Kerameikos von Athen, Führung durch Ausgrabungen und Geschichte*, Athens 1988, pp. 88–94.

<sup>6</sup> U. Knigge, "Kerameikos: Tätigkeitsbericht 1978," *AA* 1980 (pp. 246–265), p. 265, note 13, with fig. 12. Variety of *BMC Alexander* 129.

<sup>7</sup> *BMC Alexander*, pp. 52, 86, 101, 102. Cf. G. K. Jenkins ("An Early Ptolemaic Hoard from Phacous," *ANSMN* 9, 1960 [pp. 17–37], pp. 19, 27), who dates this Amphipolis series ca. 318–316 B.C. For the Demanhur hoard of ca. 318 B.C., see *IGCH* 1664.

<sup>8</sup> Knigge (note 5 above), p. 93.

<sup>9</sup> For the renovation, *ibid.*, pp. 55, 64.

<sup>10</sup> G. Gruben, "Die Ausgraben im Kerameikos," *AA* 1964 (pp. 384–419), pp. 409–410.



(cf. line 53) and Kassandros' siege of Athens in 304.<sup>11</sup> Road Level IIIb goes back probably to around 350 and ought not in any case be later than *ca.* 325 (according to Judith Binder, who was assigned the pottery from Gruben's investigations).

The Athenian bronze coin that was found in a joint of the Dipylon masonry and that originally led Gruben to date the gate complex to the early 3rd century<sup>12</sup> has now been cleaned and found to be of the Double-bodied owl variety of the third quarter of the 4th century.

#### 4. KERAMEIKOS DIPYLON WELL B-1

Two corroded lumps of bronze coins from the bottom of this well in the courtyard of the Dipylon<sup>13</sup> represent two purses that were dropped down the well early in its use. The coins, illustrated by Karin Braun<sup>14</sup> and assigned factors of wear in *EABC*, pp. 140–142, are

|         |        |   |
|---------|--------|---|
| Purse A | Athens | 12 Two owls over plemochoe (45)<br>4 Eleusis Wreathed piglet, EAEY above (48)   |
| Purse B | Athens | 1 AR triobol (19)<br>1 Two owls over plemochoe (45)<br>6 Two owls, no symbol (46)<br>8 Owl 1. (50)<br>2 Eleusis Wreathed piglet, EAEYΣI below (51). |

The well was constructed sometime after 307/6, since it was dug through the Dipylon Road Level IV and was apparently in use already by the time that Kassandros was besieging Athens in 304. Christian Habicht attributes the lead curse tablet from the bottom of the well to the year of this siege.<sup>15</sup> The tablet, which curses Kassandros, two of his generals, and Demetrios of Phaleron, could hardly have been buried in a tomb outside the city walls before being dumped down the well<sup>16</sup> if the cursing was performed while the siege was in progress. The tablet would, rather, have been intentionally thrown into the well immediately after inscribing, like the lead *defixiones* deposited in wells and springs in Roman times.<sup>17</sup> Deposition in a well may have been exceptional as early as the 4th century B.C.; but with enemy forces occupying the cemetery outside the Dipylon, it would have been impossible to activate the curse by the preferred procedure of burying it in a grave. The latest pottery from the bottom fill of the well has been independently estimated to date from around 300 B.C. or a little later.<sup>18</sup>

#### 5. FILL OF THE LAST PERIOD (III) OF THE ASSEMBLY PLACE ON THE PNYX

The construction date of the Third Period of the Assembly Place is disputed. The excavators originally believed it to be Hadrianic.<sup>19</sup> Later work and reflection led Homer Thompson to argue for the third quarter of

<sup>11</sup> G. Gruben, "Der Dipylon-Brunnen B<sub>1</sub>: Lage und Befund. Datierung des Dipylon," *AM* 85, 1970 (pp. 114–128), pp. 125–127. Cf. Knigge (note 5 above, p. 298), pp. 70–72.

<sup>12</sup> Gruben 1964 (note 10 above, p. 298), pp. 409–410; Gruben 1970 (note 11 above), p. 125.

<sup>13</sup> Gruben 1970 (note 11 above), pp. 114–124.

<sup>14</sup> K. Braun, "Der Dipylon-Brunnen B<sub>1</sub>: Die Funde," *AM* 85, 1970 (pp. 129–269), pp. 138–139, pl. 78.

<sup>15</sup> C. Habicht, *Pausanias' Guide to Ancient Greece*, Berkeley 1985, pp. 81–82.

<sup>16</sup> So D. R. Jordan, "Two Inscribed Lead Tablets from a Well in the Athenian Kerameikos," *AM* 95, 1980, pp. 225–239.

<sup>17</sup> See D. R. Jordan, "Defixiones from a Well near the Southwestern Corner of the Athenian Agora," *Hesperia* 54, 1985 (pp. 205–255), pp. 207–210. W. S. Fox, "Submerged Tabellae Defixionum," *AJP* 33, 1912, pp. 301–330. R. S. O. Tomlin, *Tabellae Sulis: Roman Inscribed Tablets of Tin and Lead from the Sacred Spring at Bath*, Oxford 1988.

<sup>18</sup> Braun 1970 (note 14 above), pp. 194, 196; J. Binder, cited by Gruben (note 11 above), p. 233; cf. *Agora* XXII, p. 111, and Rotroff 1984, pp. 352–353, nos. 9 and 12.

<sup>19</sup> K. Kouroniotes and H. A. Thompson, "The Pnyx in Athens," *Hesperia* 1, 1932 (pp. 90–217), pp. 181–189.

the 4th century B.C., in particular the 340's and 330's.<sup>20</sup> Recently, Mogens H. Hansen writes that the original attribution to the time of Hadrian was right all along.<sup>21</sup>

The eight bronze coins excavated in 1931 from the fill<sup>22</sup> fall into two tight chronological groups, one of approximately the third quarter of the 4th century B.C., the other of the Early Imperial period:

- (a) Athens 1 Double-bodied owl (41–43)
- Salamis 4 Nymph/Shield (640)
- Peparethos 1 Dionysos/Kantharos (*Cop [Thessaly]* 359, 360)
- (b) Athens 1 Parthenos/Owl on prow (152)
- 1 Parthenos/Sphinx (153).

The six 4th-century coins go with the great mass of material from the fill that dates from the third quarter of the 4th century and earlier. The two Augustan coins of the second group are the kind that remained in circulation throughout the 1st century into the 2nd century after Christ. They indicate either that the final construction of the Assembly Place was indeed Roman or, if the construction happened to be earlier, that its fill was heavily disturbed by some kind of Roman repair work. Others will want to discuss these two possibilities further. Here it needs only be observed that the fill, or at least the main 4th-century part of the fill, provides another important context before the last quarter or third of the century for coins of Salamis.

## 6. HOARDS CITED

|      |                                       |                       |
|------|---------------------------------------|-----------------------|
| IGCH | 32 Athens (Ilissos river) 1929        | p. 283 above          |
|      | 46 Peiraeus (not "Eleusis") 1902      | pp. 7–8 above         |
|      | 47 Peiraeus 1882                      | note 52 above, p. 257 |
|      | 89 Agios Ioannis Rentis, Attica, 1962 | note 25 above, p. 8   |
|      | 99 Aspropyrgos, Attica, 1951          | note 31 above, p. 215 |
|      | 127 Peiraeus 1956                     | note 66 above, p. 49  |
|      | 134 Thorikos 1969                     | p. 10 above           |
|      | 159 Phytatos ca. 1956                 | note 47 above, p. 12  |
|      | 187 Corinth 1938                      | p. 13 above           |
|      | 193 Thebes 1935                       | pp. 10–11 above       |
|      | 229 Kopais 1908                       | pp. 204–205 above     |
|      | 233 Thebes 1965                       | pp. 204–205 above     |
|      | 237 Larissa-Sitichoro 1968            | p. 13 above           |
|      | 249 Tambouria, Peiraeus, 1938         | p. 66 above           |
|      | 269 Attica 1949                       | p. 66 above           |
|      | 271 Agrinion 1959                     | p. 205 above          |
|      | 274 Attica (Pnyx) 1937                | note 109 above, p. 67 |
|      | 275 Athens (Plaka) ca. 1942           | note 109 above, p. 67 |
|      | 276 Athens 1955                       | p. 66 above           |
|      | 277 Keratea, Attica, 1954             | p. 67 above           |
|      | 279 Porto Raphti, Attica, 1967        | p. 67 above           |
|      | 280 Attica 1906                       | note 109 above, p. 67 |
|      | 281 Attica 1927                       | note 109 above, p. 67 |
|      | 282 Attica 1937                       | note 109 above, p. 67 |
|      | 283 Attica ca. 1951                   | note 109 above, p. 67 |

<sup>20</sup> H. A. Thompson and R. L. Scranton, "Stoas and City Walls on the Pnyx," *Hesperia* 12, 1943 (pp. 269–383), pp. 298–299. H. A. Thompson, "The Pnyx in Models," *Studies in Attic Epigraphy, History, and Topography Presented to Eugene Vanderpool* (*Hesperia* Supplement 19), Princeton 1982 (pp. 133–147), pp. 144–145.

<sup>21</sup> M. H. Hansen, *The Athenian Ecclesia*, II, *A Collection of Articles 1983–89*, Copenhagen 1989, p. 141; *idem*, *The Athenian Democracy in the Age of Demosthenes*, Oxford/Cambridge, Mass. 1989, pp. 4, 128.

<sup>22</sup> Kouroniotes and Thompson (note 19 above, p. 299), pp. 211–212, nos. 1–3, 5–9.

|                   |      |                            |   |
|-------------------|------|----------------------------|---|
|                   | 297  | Delos (ΞΘ) 1912            | note 144 above, p. 81                         |
|                   | 316  | Peiraeus 1926              | note 111 above, p. 67; p. 68                  |
|                   | 322  | Delos 1910                 | note 141 above, p. 81; Table VI, p. 329 below |
|                   | 324  | Delos 1968                 | note 105 above, pp. 65–66                     |
|                   | 340  | Akropolis North Slope 1936 | note 141 above, p. 81                         |
|                   | 341  | Agia Varvara, Attica, 1932 | pp. 80–81 above                               |
|                   | 342  | Chaidari, Attica, 1929     | pp. 80–81 above                               |
|                   | 343  | Attica 1927                | note 141 above, p. 81                         |
|                   | 347  | Delos (A) 1905             | note 144 above, p. 81                         |
|                   | 352  | Hierapytna 1933?           | p. 97 above                                   |
|                   | 1664 | Demanhur 1905              | p. 298 above                                  |
|                   | 2117 | Leontini 1957              | note 25 above, p. 8                           |
|                   | 2119 | Contessa 1888              | note 25 above, p. 8                           |
|                   | 2121 | Manfria 1948               | note 25 above, p. 8                           |
| <i>CH</i> 1, 1975 | 38   | Babylon 1973               | note 29 above, p. 9                           |
|                   | 95   | Athens 1969                | note 109 above, p. 67                         |
| <i>CH</i> 3, 1977 | 22   | Babylon 1973               | note 29 above, p. 9                           |
|                   | 73   | Peiraeus 1973              | note 111 above, p. 67                         |
|                   | 75   | Attica before 1940         | note 112 above, p. 67                         |
|                   | 95   | Eastern Attica 1975        | p. 117 above                                  |
| Noe               | 380  | Eleusis 1902               | p. 117 above                                  |

## B. AGORA DEPOSITS

These are the more important Agora deposits for Greek numismatic chronology. Each deposit is identified by its letter and number coordinates on the Agora grid (Pls. 35 and 36) and the number assigned to the deposit within this grid square. Since most of the deposits are summarized or discussed in other publications, the following notices rarely go beyond bibliography and a listing of the coins. In the case of deposits that have been variously dated, asterisks denote the most current or informative citation or citations. Boldface variety numbers are used to reference coins that are not catalogued individually in this volume. Coin numbers in roman type cite the coins that are individually catalogued. Factors of wear (w1–6, see p. 2 above) are given when potentially useful. Eight of the deposits are hoards, that is, groups of coins that were intentionally collected before being buried or lost together. The remaining deposits are accumulations of discarded and randomly lost material.

|                  |   |                     |
|------------------|---|---------------------|
| <b>A 14:2</b>    | <b>Cistern (middle fill)</b>  | <i>ca.</i> A.D. 250 |
|                  | Walker 1980, pp. 49, 123, no. 2.  |                     |
| Athens           | 6 pre-imperial (Period IV and earlier)<br>1 Period VC imperial ( <b>279</b> ), w5 |                     |
| Deultum          | 1 J. Mamea, A.D. 222–235 (438), w2  |                     |
| Alexandria Troas | 1 Volusian, A.D. 251–253 (885), w1  |                     |
| Kyme             | 1 Tranquillina, A.D. 238–244 (900), w3  |                     |
| Chios            | 1 3-assaria (948a), w3  |                     |
| Roman            | 1 Faustina II, sestertius, rev. illegible, w5                                     |                     |

|               |  |                             |
|---------------|--|-----------------------------|
| <b>A 17:3</b> | <b>Well</b>  | into early 3rd century B.C. |
|               | Rotroff 1983, p. 262.                                |                             |
| Athens        | 2 Two owls ( <b>44–47</b> )<br>1 Two owls, AΘH (47b) |                             |
| Macedon       | 1 Demetrios Poliorketes (504f)                       |                             |

**A 18:8****Hoard in bottom of tile-lined shaft**

mid- or late 260's B.C.

See pp. 35, 168 above. Full publication of coins, with coefficients of relative wear, in *EABC*, pp. 139–142, 150–154, pl. 17. Thompson 1942, pp. 223–224, note 32. *IGCH* 157. Four lead tokens found with the coins: *Agorà* X, p. 36, with Kroll 1977, pp. 141–146.

|           |  |
|-----------|--|
| Athens    | 1 Double-bodied owl (41–43)<br>8 Two owls, no symbol (46, including l–p)<br>3 Owl l. (50, including l, m)<br>3 Owl r., AΘH (52f–h)<br>15 Owl in wheat wreath (53, including i–n)<br>6 Owl in olive wreath (54, including b)<br>19 Eleusis Wreathed piglet (55, including c)<br>2 Eleusis Wreathed or unwreathed piglet (38, 48, 49, 51, 55)<br>1 Two owls (56d)<br>3 Owl with symbol (57b, c; [57–60]a)<br>5 Owl r. (52–54, 57–60) |
| Thrace    | 1 Lysimachos AR drachm (462)   |
| Macedon   | 2 Demetrios Poliorketes: 1 AR hemidrachm (502b)<br>1 Poseidon/Prow (505)   |
| Larissa   | 1 Nymph/Horse l. (529a)  |
| Lokris    | 2 Athena/Grapes (581c, 584d)   |
| Phokis    | 4 Athena/ΦΩ (588c–f)   |
| Chalkis   | 1 Hera/Eagle (616k)  |
| Megara    | 8 Two dolphins (643j–q)<br>8 Tripod and dolphins (644a, i–o)   |
| Aigina    | 1 Two dolphins (662a)  |
| Illegible | 9  |

**A–B 19–20:1****Fill in Great Drain**

to 86 B.C.

Kleiner 1976, pp. 15–19, 32, observing that the deposit is essentially of the third quarter of the 2nd century B.C. but with slight, later contamination. *Agora* IV, X, XII, \*XXII. R. S. Young, “An Industrial District of Ancient Athens,” *Hesperia* 20, 1951 (pp. 135–288), pp. 262–263.

|        |  |
|--------|--|
| Athens | 28 Double-bodied owl (41–43)<br>18 Two owls (44–47)<br>11 Owl l. (50)<br>1 Owl r., AΘH (52)<br>12 Owl in wheat wreath (53)<br>1 Owl in olive wreath (54d)<br>12 Eleusis Wreathed and unwreathed piglet (38, 48, 49, 51, 55)<br>2 Two owls (56)<br>10 Owl with symbol (57–60)<br>1 Zeus/Athena Polias (66)<br>1 Owl on thunderbolt (67q)<br>4 Owl three-quarters r., amphora (69)<br>2 Owl on rudder (71)<br>1 Owl on thunderbolt (81)<br>2 Fulminating Zeus, eagle, wheat ear (83)<br>1 Cicada/Amphora (85)<br>1 Demeter/Piglet (86)<br>1 Apollo/Owl with lyre (87)<br>2 Two owls on thunderbolt (99)<br>1 Apollo/Plemochoe (103b) |
|--------|--|

|         |  |
|---------|--|
| Macedon | 1 Aphytis: Zeus/Two birds (469)<br>1 Alexander III: Head/Horse (489d)<br>2 Demetrios Poliorketes: 1 Head/Prow (504)<br>1 Helmet/Shield (506) |
| Phokis  | 1 Athena/ΦΩ (588b)   |
| Salamis | 2 Head/Shield (640–642)  |
| Megara  | 11 Two dolphins (643)<br>13 Tripod and dolphins (644)  |
| Aigina  | 1 Two dolphins (662f)  |
| Corinth | 5 Pegasos/Trident (667)  |
| Sikyon  | 1 Dove flying/Σ in olive wreath (723)  |
| Messene | 1 Demeter/Tripod (760b)  |
| Andros  | 1 Bearded Dionysos/Kantharos (822)   |
| Keos    | 1 Bearded head/Forepart of dog (831b)  |
| Smyrna  | 1 Eurydike/Tripod (932)  |

**B 13:1****Cistern, lower dumped fill**

late 3rd century B.C.

*Agora* V, VII

|                         |   |
|-------------------------|---|
| Athens                  | 1 Owl I. (50c)<br>1 Owl three-quarters r., amphora (69), unworn |
| Myrina                  | 1 Athena/Owl (455g)   |
| Myrina or<br>Hephaestia | 1 Athena/Owl (455Ad)  |

**B 17:1****Three hoards from the “South House”**

destroyed by fire A.D. 267

Kroll 1973, pp. 318–320, with references to *Agora* II for the Roman coins. Walker 1980, pp. 53–54, 126, no. 12. H. A. Thompson, “The Excavation of the Athenian Agora, Twelfth Season: 1947,” *Hesperia* 17, 1948 (pp. 149–196), pp. 178, 192; *idem*, “Excavations in the Athenian Agora: 1948,” 18, 1949 (pp. 211–229), pp. 217–218.

*Hoard a*, a savings hoard that probably had been hidden in a wall or upper superstructure of the house in the 250’s, before the striking of Athens Period VI imperials began. The coins were found together on the floor of the “Room of the Two Marble Busts”.

|                  |   |
|------------------|---|
| Athens           | 1 Parthenos/Athena advancing (151), w6<br>4 Period VB imperials (169–185 [2], 195–196 [2]), w6<br>4 Period VB/C imperial fractions (204, 211), w5–6<br>4 Period VC imperials (248 [3], 256), w5 |
| Chios            | 1 Sphinx/Apollo and Dionysos (949), w2  |
| Tripolis (Lydia) | 1 Serapis/Isis (969b), w4/5   |
| Roman            | 42 Trajan to Trajan Decius (A.D. 249–251), sestertii, w2–6 <sup>23</sup><br>?1 Gallienus, antoninianus, A.D. 260–268, w2  |

If the hoard was secreted before *ca.* 260, this last coin could not belong. It would have to be a stray piece that had separately come to rest on the floor with the hoard coins at the time of the destruction of the house.

*Hoard b*, the contents of a purse that had been dropped on the floor of the kitchen.

|        |   |
|--------|---|
| Athens | 8 Period VB imperials (172, 178a, 185, 186 [2], 195, 197, 167–185), w6<br>3 Period VB/C imperial fractions (204, 216, 213–247)<br>14 Period VC imperials (248 [2], 250, 254, 256 [2], 257 [2], 264a, 267, 270, 280b, 283, 248–283), w4–6<br>15 Period VI imperials (284 [3, including 284g], 286, 318 [2], 328, 333 [2], 343, 352a, 375, 388, 401, 405), w1–2 |
|--------|---|

<sup>23</sup> Four of these sestertii are illustrated in *GRC*, fig. 32: Maximinus, Philip I, Otacilia Severa, and Trajan Decius.

*Hoard c*, another “dropped purse” on the house floor.

- Athens  
 1 Period VB imperial (182)  
 2 Period VC imperials (252, 256)  
 11 Period VI imperials (284 [2], 318 [2], 333, 352, 355, 360, 386, 392, 402)

**B 20:9****Fill in Great Drain South**

to ca. 86 B.C.

Kleiner 1976, pp. 19–21, 32. *Agora X*, p. 135.

- Athens  
 1 Eleusis Piglet on staff (38)  
 3 Double-bodied owl (41–43)  
 1 Owl l. (50)  
 1 Eleusis Wreathed piglet (55)  
 1 Owl on rudder (71)  
 1 Plemochoe/Eleusis ring (75)  
 4 Fulminating Zeus: 1 eagle, wheat ear (80)  
                                   1 eagle, cornucopia, plemochoe (91)  
                                   1 thyrsos (96)  
                                   1 mystic staff or thyrsos (95 or 96)  
 2 Athena/Amphora (98)  
 23 Two owls on thunderbolt (99)  
 2 Cicada/Owl on thunderbolt (100)  
 64 Cicada/Amphora (85 and 108)
- Imbros  
 Boiotian League  
 Thespiiai  
 Euboian League  
 Chalkis  
 Megara  
 Sikyon  
 Rhodes
- 1 Female head/Hermes (452a)  
 1 Athena/Trophy (593a)  
 1 Veiled head/Lyre (606)  
 1 Female head/Bull butting (614c)  
 1 Hera/Eagle flying, serpent (616–618)  
 1 Tripod and dolphins (644)  
 2 Dove flying l. /(?) in olive wreath (723, 725, or 726)  
 1 Rhodos head/Rose (965b)

**C 9:2****Cistern, dumped fill**

mid-4th into 3rd century B.C.

*Agora XII* (under C 8:5).

- Athens  
 Andros
- 3 Double-bodied owl (41–43)  
 1 Young Dionysos/Amphora (821a)

Susan I. Rotroff (personal communication) states that most of the pottery dates from the third quarter of the 4th century.

**D 4:1 (Group G)****Cistern**

Price 1964, pp. 32–33, deposit V. \*Kroll 1973, p. 325, no. 6. Walker 1980, pp. 62, 113, 115, no. 34. *Agora IV, V, VII*.

- Layer II  
 Athens
- Dumped fill*  
 2 Double-bodied owl (41–43)  
 1 Apollo/Amphora (105)  
 1 Parthenos/Owl on amphora, no symbol (115a)  
 1 Parthenos/Apollo Delios (143)  
 1 Parthenos/Illegible  
 1 Demeter/Poppy and wheat ear (150)  
 1 Triptolemos/Mystic staff and wheat ear (154)
- Thrace  
 Gyrtion  
 Aigina
- 1 Lysimachos posthumous AR tetradrachm (463)  
 1 Zeus/Horse (520c)  
 1 Two dolphins (643)
- second quarter 1st century after Christ

|           |  |                 |
|-----------|--|-----------------|
| Antioch   | 1 Zeus/Seated Zeus (995)   |                 |
| Roman     | 1 Tiberius, denarius, A.D. 27–37 ( <i>Agora</i> II, no. 18), w2/3  |                 |
| Layer III | <i>Dumped fill</i>   | time of Hadrian |
| Athens    | 1 Eleusis Wreathed piglet (55)   |                 |
|           | 1 Parthenos/Owl on prow (152), w6  |                 |
|           | 1 Period IV reduced AE 1, worn illegible, countermarked with A and amphora (p. 110 above, Pl. 15 [115–158]a), w6 |                 |
|           | 1 VA imperial, Athena/Owl (163), w1  |                 |

This last coin was found inside a small, complete jug (*Agora* V, G 182).

**D 11:1** **Well, dumped fill** to mid-1st century after Christ

Kroll 1973, p. 324, no. 1. Walker 1980, p. 63, no. 36, *Agora* IV, \*V, \*VII.

|        |  |
|--------|--|
| Athens | 1 Owl three-quarters r., amphora (69)              |
|        | 1 Fulminating Zeus, plemochoe, cornucopia (91), w5 |
|        | 1 Parthenos/Owl on prow (152), w4                  |
|        | 1 Parthenos/Sphinx (153), w6                       |
|        | 2 Parthenos/Owl on amphora, cicada (158), w5       |

**D 15:3** **Cistern, dumped fill** second into fourth quarter of 4th century B.C.

*Agora* XII: “ca. 375–330 B.C.”, P. E. Corbett, “Attic Pottery of the Later Fifth Century from the Athenian Agora,” *Hesperia* 18, 1949 (pp. 298–351), p. 343, no. 140.

|         |                                     |
|---------|-------------------------------------|
| Athens  | 3 Double-bodied owl, no symbol (42) |
| Salamis | 3 Nymph/Shield (640h–j)             |

According to the unpublished notes of Susan I. Rotroff, most of the pottery belongs to the mid- and third quarter of the 4th century, but one pot (P 5364) is later, probably of the last quarter.

**D 17:5** **Cistern**

*Agora* IV, \*XXII. Young 1951 (under A–B 19–20:1 above), p. 182; D. B. Thompson, “Three Centuries of Hellenistic Terracottas: V The Mid-Second Century B.C., VI Late Second Century B.C. to 86 B.C.,” *Hesperia* 34, 1965 (pp. 34–71), p. 50 (Papposilenos Cistern).

|                   |                       |                                 |
|-------------------|-----------------------|---------------------------------|
| <i>Upper fill</i> |                       | third quarter 2nd century B.C.  |
| Athens            | 2 Cicada/Amphora (85) |                                 |
| Megara            | 1 Two dolphins (643)  |                                 |
| <i>Lower fill</i> |                       | second quarter 2nd century B.C. |
| Hestiaia          | 1 Maenad/Tripod (633) |                                 |

**D–E 8–9:1** **Cistern system (dumped fill)** into early 3rd century B.C.

*Agora* XX, \*XXII. P. E. Corbett, “Palmette Stamps from an Attic Black-Glaze Workshop,” *Hesperia* 24, 1955 (pp. 172–186), p. 178, no. 2.

|        |                                    |
|--------|------------------------------------|
| Athens | 1 Eleusis Piglet on staff (38)     |
|        | 1 Double-bodied owl (41–43)        |
|        | 1 Two owls, Eleusis ring (44)      |
|        | 1 Two owls, no symbol (46)         |
|        | 1 Two owls, variety? (44–47)       |
|        | 1 Wreathed piglet, EAEY above (48) |
|        | 1 Wreathed piglet, EAEY below (49) |

**E 14:2** **Well**

Kroll 1973, pp. 325–327, no. 7. Walker 1980, pp. 69, 113–115, no. 49. *Agora* IV, V, dating Level II to the late 1st century after Christ. But unless the three early Period V Athenian imperial fractions from near the top of this fill filtered down from Level III, it is probable that Level II continued into the 2nd century.

Level I: *Lower use fill*

to mid-1st century after Christ

- Athens
- 2 Gorgoneion/Athena (139)
  - 1 Dionysos/Athena (140)
  - 3 Zeus/Dionysos (144)
  - 1 Parthenos/Nike (147)
  - 4 Parthenos/Athena advancing (149, 151)
  - 2 Parthenos/Owl on Prow (152)
  - 1 Parthenos/Sphinx (153)
  - 1 Parthenos/Owl on amphora, cicada (158)

Level II: *Upper use fill*

probably early 2nd century after Christ

- Athens
- 1 Parthenos/Owl on amphora, caduceus (124)
  - 1 Zeus/Dionysos (144)
  - 1 Parthenos/Nike (147)
  - 4 Parthenos/Athena advancing (149, 151)
  - 2 Period IV AE 1 worn illegible
  - 2 VA imperial: Athena/Owl (163), 1 unworn, 1 heavily corroded
  - 1 VA (or B) imperial fraction no longer available for study

Level III: *Dumped fill*

3rd century after Christ

- Athens
- 1 Parthenos/Owl on amphora, wheat ear (122)
  - 1 Parthenos/Athena advancing (149, 151)
  - 1 Period IV AE 1 worn illegible
- Bithynian League
- 1 Hadrian/Temple (856)

**E 14:3****Drawshaft (middle fill)**

early 70's B.C.

See Table VI, p. 329 below. Price 1964, pp. 32–33. Kroll 1973, p. 89, note 6. *Agora* IV, \*XXII. D. B. Thompson, "Three Centuries of Hellenistic Terracottas: VII The Early First Century B.C., B. The Mask Cistern; VIII The Late First Century B.C.," *Hesperia* 35, 1966 (pp. 252–267), pp. 252–259; *Délos* XXVII, p. 391.

- Athens
- 1 Owl three-quarters r., amphora (69)
  - 1 Demeter/Piglet (86)
  - 1 Zeus/Fulminating Athena (89)
  - 5 Fulminating Zeus: 1 eagle, cornucopia (91)
    - 1 two pilei (94)
    - 2 star and crescents (97)
    - 1 issue?
  - 1 Two owls on thunderbolt (99)
  - 1 Cicada/Owl on thunderbolt (100)
  - 1 Apollo/Amphora (101 or 105)
  - 5 Owl on amphora: 3 no symbol (115)
    - 1 poppy and wheat ears (118d)
    - 1 issue? (115, 118–126)
  - 1 Kore/Iakchos (117a)
  - 2 Demeter/Triptolemos (127, 128)
  - 3 Apollo/Cicada (131, including g)
  - 1 Apollo/Poppy and wheat ears (133a)
  - 5 Apollo/Two wheat ears (135g–k)
  - [1 Triptolemos/Mystic staff and wheat ear (154f)<sup>24</sup>]
- Thessalonike
- 1 Athena/Horse (478a)

<sup>24</sup> Worn and clearly intrusive contamination from the upper fill, as is also a fragment of Western Arretine ware (P 20494), of the second or third decade after Christ.



|                |                                       |
|----------------|---------------------------------------|
| Macedon        | 1 Antigonos Gonatas: Athena/Pan (507) |
| Thebes         | 1 Herakles/Thyrsos-club (605c)        |
| Euboian League | 1 Bull/Grapes (613a)                  |
| Troizen        | 1 Poseidon/Trident (799)              |
| Bithynia       | 1 Prousius II (862)                   |

**E 15:3** **Cistern** to near end of 1st century B.C.  
*Agora IV; \*XXII*, but coins not so late as there stated. The five Period IVD–E coins show little wear.

|        |   |
|--------|---|
| Athens | 1 Parthenos/Tripod (138)                                  |
|        | 1 Demeter/Poppy between wheat ears (150g)                 |
|        | 2 Parthenos/Owl on prow (152)                             |
|        | 2 Parthenos/Owl on amphora, cicada (158), one cut in half |

**F 10:2** **Hoard at inner corner of late wall** A.D. 267  
 Kroll 1973, p. 317, note 23, hoard a. Walker 1980, p. 72, no. 58.  
 Athens 13 Period VI imperials, w1–2 (284f, 290, 301, 318, 336, 348, 375b, 378, 380a, 382, 401 [2], 403)

**F 11:1** **Well, dumped fill** into early 2nd century after Christ  
 Kroll 1973, p. 324, no. 4. Walker 1980, pp. 72, 117, no. 59. *Agora V, VII*.  
 Athens 1 Dolphin-trident/Plemochoe (129c), w3  
 1 Parthenos/Athena advancing owl (149), w5  
 2 Parthenos/Illegible, Period IV, AE I, w6  
 Roman 1 Trajan, plated denarius, A.D. 112–117 (*Agora II*, no. 51), w3

**F 11:2** **Well** ca. late 290's B.C.  
 Dumped fill containing much ceramic debris from damage to the Tholos around the turn of the 4th to the 3rd century B.C.: H. A. Thompson, "The American Excavations in the Athenian Agora, Eleventh Report: Buildings on the West Side of the Agora," *Hesperia* 6, 1937 (pp. 1–226), pp. 165–167; *idem*, *The Tholos of Athens and Its Predecessors* (*Hesperia* Supplement 4), Princeton 1940, pp. 98–101, 134–135. *Agora IV, XII*. Susan I. Rotroff (\*1984, pp. 343–346) associates the damage with a presumed civil disturbance either during the *stasis* of Lachares in March of 295 or during Demetrios Poliorketes' siege of Athens in 295/4. In either case the debris would have been cleaned up and discarded after Athens' capitulation in the spring of 294.

|        |  |
|--------|--|
| Athens | 1 AR tetradrachm (8h)  |
|        | 3 Double-bodied owl (41–43)                                  |
|        | 1 Two owls on Eleusis ring (44)                              |
|        | 2 Two owls, no details (44–47)                               |
|        | 1 Owl l. (50), w2  |
|        | 2 Eleusis Heavy wreathed piglet (51), w1 and 3               |
|        | 1 Eleusis Wreathed or unwreathed piglet (38, 48, 49, 51, 55) |

**F 19:6** **Well** to mid-1st century B.C.  
*Agora IV, X; \*XXII. Délos XXVII*, p. 391.  
 Chios 1 Sphinx/Amphora (944c)

**G 6:2 (Group C)** **Cistern (sealed lower fill)** to early second quarter of 2nd century B.C.  
*Agora IV; XII; XXII*, pp. 101, 109. H. A. Thompson, "Two Centuries of Hellenistic Pottery" *Hesperia* 3, 1934 (pp. 309–476), pp. 345–369; \*Rotroff 1983, pp. 276–278.  
 Athens 2 Owl r. in wreath (50–54)  
 1 Two piglets/Mystic staff (62f)

- 1 Athena/Triobol owl (64f)  
1 Owl three-quarters r., amphora (69)

**H 6:9****Cistern (lower fill)**

260's B.C.

See p. 35 above. \*Pounder (note 52 above, p. 35), pp. 243–244; Rotroff 1983, pp. 258–276, 283–294. *Agora* IV, X, XII, XXII.

- Athens 1 Owl with wreath (57g)

**H 12:1****Fill in Great Drain**

into third or fourth quarter  
of 2nd century B.C.

Kleiner 1976, pp. 11–15, 32. *Agora* IV, X, XXII. H. A. Thompson 1940 (under F 11:2 above), pp. 119–121.

- Athens
- 2 Piglet on staff (39)
  - 7 Double-bodied owl (41–43)
  - 7 Two owls (44–47)
  - 3 Owl l. (50)
  - 1 Owl r., AΘH (52)
  - 12 Owl in wheat wreath (53)
  - 1 Owl with cornucopia (59)
  - 8 Owl r. (52–54, 57–60)
  - 1 Two owls (65b)
  - 2 Owl on thunderbolt (67j and r)
  - 2 Owl three-quarters r.: 1 amphora (69)  
1 symbol? (69, 70)
  - 3 Demeter/Plemochoe (72–74)
  - 7 Plemochoe/Eleusis ring (75)
  - 1 Zeus/Amphora (76g)
  - 3 Standing Zeus: 1 owl (78)  
1 prow (79)  
1 symbol? (78–80)
  - 3 Owl on thunderbolt (81)
  - 10 Fulminating Zeus, eagle: 1 star (82)  
1 wheat ear (83)  
3 cornucopia (84)  
5 symbol? (82–84)
  - 2 Fulminating Zeus, illegible (82–84)
  - 4 Cicada/Amphora (85)
  - 1 Demeter/Piglet (86e)
  - 1 Zeus/Plemochoe (102g)
  - 1 Apollo/Plemochoe (103e)
- Myrina
- 2 Athena/Owl (455)
- Macedon
- 3 Antigonos Gonatas: 2 Athena/Pan (507)  
1 Herakles/Horseman (509)
- Boiotian League
- 1 Shield/Trident (592)
  - 1 Demeter/Poseidon (595)
- Delos
- 1 Apollo/Lyre (828h)
- Knidos
- 1 Apollo/Prow (954)

**H 12:4****Gravelly pocket beside Great Drain**

to A.D. 267

See p. 294 above, with Plate 32:f (the 25 unstruck coin blanks). Walker 1980, p. 78, no. 72.

- Athens
- 1 Double-bodied owl, Eleusis ring (43)
  - 1 Owl on thunderbolt (81)

- 1 Apollo/Owl with lyre (87)
- 1 Two owls on thunderbolt (99)
- 2 Parthenos/Owl on amphora, issue? (115, 118, etc.)
- 22 Unstruck Period IV, reduced AE 1 blanks
- 3 Unstruck Period IV, reduced AE 2 or 3 blanks
- 8+ Period VB–C imperials (177, 197, 204, 220, 226, 3+ unclassifiable)
- 3 Period VI imperials (297, 318–333, 409)

|                 |                                      |
|-----------------|--------------------------------------|
| Augusta Traiana | 1 Julia Domna/Illegible (448)        |
| Korkyra         | 1 Herakles/Forepart of galley (571e) |
| Megara          | 1 Two Dolphins (643)                 |
| Sikyon          | 1 Dove feeding/Tripod (724)          |
| Troizen         | 1 Commodus/Theseus (800)             |

**H 16:3 (Group B) Cisterns** to ca. 240 B.C.  
*Agora* IV; XII; XXI; \*XXII, pp. 102, 108. H. A. Thompson 1934 (under G 6:2 above), pp. 330–345.  
 V. R. Grace, “Revisions in Early Hellenistic Chronology” (with a “Numismatic Appendix” by J. H. Kroll), *AM* 89, 1974, pp. 196–197, 202–203.

|        |  |
|--------|--|
| Athens | 1 Eleusis Wreathed piglet (48, 49, 51, 55), worn |
|        | 1 Owl in wheat wreath (53), heavily worn         |

**H 16:4 (Group D) Pithos** third quarter 2nd century B.C.  
*Agora* IV; XII; XXI; \*XXII, pp. 102, 109–110. H. A. Thompson 1934 (under G 6:2 above), pp. 369–392;  
 \*Grace 1985, p. 37.

|         |                             |
|---------|-----------------------------|
| Athens  | 1 Double-bodied owl (41–43) |
|         | 1 Owl with cornucopia (59)  |
|         | 1 Cicada/Amphora (85)       |
| Eretria | 1 Bull head/Octopus (627)   |

**H–I 14:1 Fill near northwest corner of the Rectangular Peribolos** to ca. 140 B.C.

Kleiner 1975, pp. 311–312, 329, deposit III.

|                   |  |
|-------------------|--|
| Athens            | 1 Eleusis Piglet on staff (38)         |
|                   | 3 Doubled-bodied owl (41–43)           |
|                   | 1 Two owls (44–47)                     |
|                   | 1 Owl with symbol (57–60)              |
|                   | 1 Owl r. (52–54, 57–60)                |
|                   | 1 Owl three-quarters r., amphora (69)  |
|                   | 1 Owl on rudder (71)                   |
|                   | 2 Owl on thunderbolt (81, including h) |
|                   | 1 Zeus/Fulminating Athena ([88–89]a)   |
| Thessalian League | 1 Apollo/Athena Itonia (540g)          |
| Megara            | 1 Two dolphins (643)                   |

**H–K 12–14 Middle Stoa building fill** to ca. 183 B.C.

See note 70 above, p. 50 and Kleiner 1975, pp. 304–313, 329, deposits I (construction fill under floor of west end of the stoa) and II (fill between stoa and Rectangular Peribolos to south). Kleiner 1976, pp. 29, 32. *Agora* IV; XII; XIV, pp. 66–68; \*XXII. *Délos* XXVII, pp. 317–319. \*Grace 1985, pp. 11–54. S. I. Rotroff, “The Long-Petal Bowl from the Pithos Settling Basin,” *Hesperia* 57, 1988, pp. 87–93.

|        |  |
|--------|--|
| Athens | 1 AR triobol (19c)                                       |
|        | 4 Eleusis Piglet on staff (38)                           |
|        | 14 Double-bodied owl (41–43, including 43m and [41–43]h) |

- 36 Two owls (**44–47**, including 44f, 46a, 46f)  
 15 Owl l. (**50**, including f and g)  
     2 Owl r., AΘH (**52**, including c)  
     8 Owl in wheat wreath (**53**, including c)  
 13 Eleusis Wreathed piglet (**48, 49, 51, 55**)  
     3 Two owls (**56**, including g)  
     9 Owl with symbol (**57–60**)  
 13 Owl r. (**52–54, 57–60**)  
     1 Two piglets/Mystic staff (62e)  
     1 Two owls (65f)  
     1 Zeus/Athena Polias (66e)  
     1 Owl on thunderbolt (67h)  
     1 Artemis/Athena Polias (68d)  
 6 Owl three-quarters r.: 3 amphora (**69**, including j, k)  
     1 plemochoe (70c)  
     2 symbol? (**69, 70**)  
     1 Owl on rudder (**71**, including h)  
     4 Demeter/Plemochoe (**72–74**)  
     3 Plemochoe/Eleusis ring (**75**, including e, g)  
     6 Standing Zeus: 3 prow (**79**, including b)  
     3 symbol? (**78–80**)  
     1 Owl on thunderbolt (81h)  
 12 Fulminating Zeus, eagle: 4 star (**82**, including f)  
     4 wheat ear (**83**, including g)  
     4 cornucopia (**84**, including f, g)  
     4 Cicada/Amphora (**85**, including i)  
 Myrina  
 Macedon  
     2 Athena/Owl (**455**)  
     1 AV Alexander III (**487**)  
     1 Demetrios Poliorketes: Head/Prow (**504**)  
     2 Antigonos Gonatas: Athena/Pan (**507**)  
 Thessalian League  
 Phokis  
 Boiotian League  
     1 Athena/Horse (541c)  
     1 Athena/ΦΩ (588a)  
     1 Shield/Trident (**592**)  
     2 Demeter/Poseidon (**595**)  
 Euboian League  
 Chalkis  
 Salamis  
 Megara  
     1 Bull/Grapes (613g)  
     1 Hera/Eagle (**616–618**)  
     1 Nymph/Shield (**640–642**)  
     3 Two dolphins (**643**)  
     6 Tripod, dolphins (**644**)  
     1 Apollo/Lyre (646b)  
 Aigina  
     1 Two dolphins (662e)  
     1 Prow/Ram's head (663a)  
 Phlious  
 Argos  
 Tenos  
 ?Erythrai  
 Kos  
     1 Bull/Φ (721c)  
     1 Hera/Athena (782a)  
     1 Zeus/Grapes (848b)  
     1 Herakles/Club and bow in case (916)  
     1 Herakles/Bow case and club (958a)

**I 1:3****Pit in southwest corner of the Rectangular Peribolos**

A.D. 264–267

See p. 295 above and Plate 33:b. Walker 1980, pp. 83, 127–128, no. 85.

- Athens  
     4 misstruck Period VI imperials, of which 2 are fragments  
     38 unstruck blanks for Period VI imperials



**L 19:2****Cistern**

to ca. 150 B.C.

*Agora XXII.*

Athens

- 1 Eleusis Piglet on staff (38c)
- 1 Double-bodied owl (41–43)
- 2 Two owls (44–47)
- 1 Artemis/Athena Polias (68h) (in lower fill, of late 3rd/early 2nd century B.C.)
- 1 Standing Zeus, symbol? (78–80)
- 2 or 3 Owl on thunderbolt (81)

**M 17:1 (Group M)****Well, use fills**

1st to 6th century after Christ

Kroll 1973, pp. 325–326, no. 8, gives a synopsis of the coins recorded from the lowest three levels, representing the mid-1st to late 2nd centuries after Christ. It would be pointless to list these coins again since most of them have disintegrated or were discarded as being insufficiently legible after preliminary, and usually very vague, identifications were made at time of excavation in 1937. The interesting coin is an Athenian imperial Period VB fraction with Theseus or Herakles sacrificing reverse (199) recovered from Level I of the 1st century after Christ, apparently with another Period VB fraction that is now unavailable for examination. Coming from a continuous-use accumulation, these two 2nd-century coins were doubtless intrusions from a higher level in the well. Walker 1980, pp. 88, 114, 119, 130, no. 95. *Agora V*, VII.

**M 18:10****Well, homogeneous fill**late 3rd to first quarter  
of 2nd century B.C.

\**Agora XXII*. D. B. Thompson, "Three Centuries of Hellenistic Terracottas, The Second Century B.C. Part IV, The Early Second Century," *Hesperia* 32, 1963 (pp. 301–317), p. 317; *idem* 1965 (under D 17:5 above), p. 50.

Athens

- 1 Owl r. in wreath (52–54)

Macedon

- 1 Antigonos Gonatas: Athena/Pan (507)

Methymna

- 1 Athena/Kantharos (901)

**M 21:1****Cistern, homogeneous fill**

to 180's B.C.

See p. 213 above. *Agora IV*, V, XII, \*XXII. H. A. Thompson 1948 (under B 17:1 above), pp. 160–161; G. R. Edwards, "Panathenaics of Hellenistic and Roman Times," *Hesperia* 26, 1957 (pp. 320–349), pp. 345–346; D. B. Thompson, "Three Centuries of Hellenistic Terracottas, Part III, The Late Third Century B.C.," *Hesperia* 32, 1963 (pp. 276–292), pp. 276–291 (Komos Cistern). *Délos XXVII*, p. 391.

Athens

- 3 Two owls (44–47)
- 2 Owl r. (52–54, 57–60)
- 1 Athena/Triobol owl (64g)
- 2 Demeter/Plemochoe: 1 owl (74b)
- 1 symbol? (72–74)
- 2 Fulminating Zeus, eagle, symbol? (78–80)

Histiaia

- 8 AR tetrobols (632a–h) (hoard from the top of the fill, apparently inserted there later)

Egypt

- 1 Ptolemy I–IV (1009a), extremely worn

**M–N 15:1****South Stoa II construction fill**

to ca. 140 B.C.

Kleiner 1975, pp. 318–325, deposits VI (construction fill), VII (South Stoa I destruction debris), and VIII (South Stoa I latest floor fills). Kleiner 1976, pp. 29, 32. *Agora XII*; XIV, p. 68; \*XXII. D. B. Thompson 1963 (under M 18:10 above), p. 317. *Délos XXVII*, p. 392.

Athens

- 2 Eleusis Piglet on staff (38)
- 1 Piglet on staff (39)
- 7 Double-bodied owl (41–43)
- 9 Two owls (44–47, including 46h)
- 2 Owl r., AΘH (52) *correcting Kleiner*



- 1 Parthenos/Athena advancing, snake (151)
- 1 Parthenos/Owl on prow (152)
- 1 Parthenos/Owl on amphora (157 or 158)

*Middle fill*

Athens

- 1 Owl three-quarters r., amphora (69)
- 1 Fulminating Zeus, two pilei (94)
- 2 Fulminating Zeus, star and crescents (97)
- 1 Two owls on thunderbolt (99)
- 2 Cicada/Owl (100)
- 1 Apollo/Cicada (131)
- 1 Demeter/Torch (792b)

Sullan destruction debris

Hermione

**N 20:4****Cistern**

soon after 86 B.C.

See Table VI, p. 329 below. Price 1964, pp. 32–33, deposit I. Kleiner 1973, pp. 183–189. *Agora* IV, V, \*XXII. D. B. Thompson 1966 (under E 14:3 above), pp. 252–259. *Délos* XXVII, p. 391.

Athens

- 1 Two owls (44–47)
- 1 Eleusis Wreathed piglet (48, 49, 51, 55)
- 2 Zeus/Fulminating Athena (1 89; 1 88, 89)
- 16 Fulminating Zeus: 1 two pilei (94)
  - 13 star and crescents (97)
  - 2 symbol?
- 2 Two owls on thunderbolt (99)
- 1 Cicada/Amphora (108)
- 1 Owl on amphora, no symbol (115)
- 1 Demeter/Triptolemos (127, 128)
- 1 Ptolemy I–IV (1009h)

Egypt

**N 20:6****Cistern**

to early 2nd century B.C.

*Agora* XXII.

Athens

- 1 Owl l. (50)
- 1 Standing Zeus, owl (78b)

**N 21:4****Cistern**

*Agora* IV, XII,\*XXII. D. B. Thompson 1962 (under N 18:3 above), pp. 244–262 (Satyr Cistern).

*Upper fill*

Athens

- 1 Fulminating Zeus, star and crescents (97)

Cyrenaica

- 1 Head/Bee (1033), worn

1st century after Christ

*Middle fill*

Athens

- 1 Fulminating Zeus, eagle, star (82),
- 1 Fulminating Zeus, symbol?
- [1 Parthenos/Owl on prow (152), probably from upper fill]
- 1 Hera/Eagle (618)

first quarter 2nd century B.C.

Chalkis

*Lower fill*

Athens

- 2 Double-bodied owl (41–43)
- 1 Two owls (44–47)
- 4 Owl l. or r. (50, 52–54, 57–60)
- 1 Athena/Owl (455Ac)

last quarter 3rd century B.C.

Myrina or  
Hephaistia



**O 17:1** **Cistern, dumped fill** into last quarter 1st century after Christ

Kroll 1973, p. 324, no. 3. *Agora* V, VII. All coins extremely worn.

|        |   |
|--------|---|
| Athens | 2 Parthenos/Owl on amphora (115, 118–126) |
|        | 1 Parthenos/Apollo Delios (143)           |
|        | 1 Parthenos/Sphinx (153)                  |
|        | 1 Parthenos/Illegible                     |

**O–R 7–10** **Square Peristyle building fill** early 3rd century B.C.

Earlier discussions of the building placed it in the teens and 20's of the 4th century (*Agora* XIV, p. 61; *EABC*, pp. 146–147; H. A. Thompson, "Athens Faces Adversity," *Hesperia* 50, 1981 [pp. 343–355], p. 350), but Sparks and Talcott believed that the construction fill was "probably not sealed over until or near the end of the century" (*Agora* XII, p. 396). Rotroff's reexamination of the pottery and the subsequent identification of a coin fragment as belonging to an issue of Demetrios Poliorketes (Kroll 1982, pp. 241–242) have led to the current dating to soon after ca. 300 (Rotroff 1984, p. 348). Full publication is forthcoming in R. F. Townsend, *The East Side of the Agora: Remains beneath the Stoa of Attalos*, volume 27 in the *Athenian Agora* series.

|         |  |
|---------|--|
| Athens  | 8 Double-bodied owl (41–43)                                  |
|         | 1 Two owls over plemochoe (45)                               |
|         | 2 Two owls, no symbol (46)                                   |
|         | 4 Owl I. (50)  |
|         | 2 Eleusis Wreathed or unwreathed piglet (38, 48, 49, 51, 55) |
|         | [1 Standing Zeus (78–80), intrusive]                         |
| Macedon | 1 Demetrios Poliorketes (504h)                               |
|         | [1 Philip V (513), intrusive]                                |

In addition, an Athens Two owls, no symbol (42) and Eleusis Piglet on staff (38) were found on the floor of the structure that was demolished to make way for the Square Peristyle (*EABC*, p. 146, note 17).

A third group of coins from the Square Peristyle is the hoard of six early 2nd-century Athenian bronzes found stuck together and embedded in the earthen floor of the building at grid P–Q 7–8. The coins are Kleiner 1975, p. 317, nos. 254–259 (deposit V): 3 Fulminating Zeus, eagle and star (82, including g and h) and 3 Fulminating Zeus, eagle and wheat ear (83, including h and i).

**P 6:2 and Q 6:2** **Refuse pits** early 2nd century after Christ

Fills of debris from buildings demolished for construction of the Early Hadrianic Northeast Basilica. \*T. L. Shear, Jr., "The Athenian Agora: Excavations of 1971," *Hesperia* 42, 1973 (pp. 121–179), pp. 136–139, notes 39–42. Kroll 1973, p. 324, pl. 61, no. 5. Walker 1980, pp. 94, 114, no. 109. All coins are exceedingly worn.

|         |  |
|---------|--|
| Athens  | 1 Zeus/Dionysos (144)                    |
|         | 4 Parthenos/Owl on prow (151)            |
|         | 2 Parthenos/Owl on amphora, cicada (158) |
| Macedon | 1 Philip V or Perseus (514)              |

One 151 and both 158 were found stuck to the bottom of a discarded terracotta savings bank (Kroll 1973, pl. 61).

**P 7:10** **Hoard or dropped purse** second quarter 3rd century after Christ

Kroll 1973, p. 317, note 23, group b; but the absence of any Period VI imperials implies a date before the 260's. Walker 1980, p. 95, no. 110.

|        |  |
|--------|--|
| Athens | 2 Period VB imperials (169–185, 172), w6                         |
|        | 7 Period VC imperials (257, 262, 270, 278, 281 [2], 283), w4–5   |
| Roman  | 1 Commodus, sestertius, A.D. 192 ( <i>Agora</i> II, no. 192), w5 |

- P 21:4** **Cistern, homogeneous fill** into early 2nd century B.C.  
 \**Agora* XXII. Shear 1973 (under P 6:2 and Q 6:2 above), pp. 154–156.
- |         |   |
|---------|---|
| Athens  | 1 Artemis/Athena Polias ( <b>68</b> )<br>1 Fulminating Zeus, eagle, star ( <b>82</b> )<br>1 Fulminating Zeus, eagle, wheat ear ( <b>83</b> )<br>2–3 Cicada/Amphora ( <b>85</b> )<br>[1 Parthenos/Athena advancing ( <b>149</b> or <b>151</b> ), heavily worn and intrusive] |
| Macedon | 1 Antigonos Gonatas: Athena/Pan ( <b>507</b> )  |
| [Roman] | 1 Theodosius or colleague, A.D. 393–395, intrusive]   |

- P-R 6–12** **Stoa of Attalos building fill** to ca. 157 B.C.  
 Kleiner 1975, pp. 313–318, 329, deposit IV (this deposit and Q–R 10–11:1; see also under O–R 7–10 for the coins listed in Kleiner 1975 as deposit V). Kleiner 1976, pp. 29, 32. *Agora* IV; XII; XIV, pp. 104–107; \*XXII: to 145 B.C.; D. B. Thompson 1963 (under M 18:10 above), p. 317. *Délos* XXVII, pp. 391–392. \*Grace 1985, pp. 14–15: ca. 157 B.C. Rotroff 1988 (under H–K 12–14 above), pp. 92–93.

- |                |  |
|----------------|--|
| Athens         | 2 Eleusis Piglet on staff ( <b>38</b> , including k)<br>6 Doubled-bodied owl ( <b>41–43</b> )<br>9 Two owls ( <b>44–47</b> )<br>1 Owl l. ( <b>50</b> )<br>1 Two owls ( <b>51</b> )<br>1 Owl in wheat wreath ( <b>53</b> )<br>3 Owl with symbol ( <b>57–60</b> )<br>1 Athena/Triobol owl (64h)<br>3 Owl three-quarters r.: 1 amphora ( <b>69</b> )<br>2 symbol? ( <b>69, 70</b> )<br>2 Owl on rudder ( <b>71</b> , including j)<br>1 Demeter/Plemochoe, aplustre (73a)<br>1 Plemochoe/Eleusis ring ( <b>75</b> )<br>5 Owl on thunderbolt ( <b>81</b> )<br>1 Fulminating Zeus, eagle: cornucopia ( <b>84</b> )<br>3 Fulminating Zeus, symbol? ( <b>82–84</b> )<br>3 Cicada/Amphora ( <b>85</b> ) |
| Achaian League | 1 Zeus/Achaia (746e)   |

- Q 9–10:1** **Cistern**  
 See note 50 above, p. 253, under 845a (Paros).

- Q 19:3** **Hoard from pit in floor of house** destroyed A.D. 267  
 H. A. Thompson 1958, pp. 155–157, pl. 44. Kroll 1973, p. 318. Walker 1980, pp. 101, 129, no. 126. For the house in its rebuilt, post-Herulian phase, see *Agora* XXIV, pp. 39–40, pls. 6, 26, 29 (Areopagus House B).

- |        |   |
|--------|---|
| Athens | 1 Period VB imperial (illegible hemidrachm, cf. Sv. 96.30, 31) w5<br>130 Period VI imperials ( <b>284</b> [15, including a–e], <b>285</b> [2, including a], <b>286, 287</b> [4, including a, b], <b>288</b> [3, including a], 289a, <b>291</b> [4], 293a, <b>298, 299a, 300, 301, 303a, 305, 306a, 307a, 311a, 312, 313a, 314</b> [2, including a], <b>318</b> [8, including a], <b>320, 321</b> [2, including a], 322a, <b>324</b> [3, including a], 327, <b>331, 332, 333</b> [2], 334a, 337a, 338, <b>341</b> [2, including a], 343a, 346a, 348a, 349a, 350a, <b>351</b> [2, including b], <b>352, 353</b> [2, including a], 356a, 358b, <b>361, 365, 368, 369, 372</b> [4, including a, b], <b>374</b> [3, including a], 375a, 376a, <b>377</b> [2], <b>378</b> [2, including a], <b>382</b> [3], 383a, 384, <b>386</b> [2, including b], 387a, <b>388, 389, 391, 392a, b, 398, 399, 401</b> [10, including a, b], <b>402, 403a–c, 404</b> [2, including a], <b>405</b> [3, including a, b]) w1–2 |
| Roman  | 2 Gallienus, antoniniani, w1–2  |

**Q-R 10-11:1** **Fill under floor of Brick Building** second quarter 2nd century B.C.  
*Agora XXII*. In Kleiner 1975, pp. 313-318, 329, cf. Kleiner 1976, pp. 29, 32, these Brick Building coins (Kleiner, nos. 220, 223, 233, 242, 245, 250) are listed together with the coins from the more extensive and slightly later Deposit P-R 6-12, Stoa of Attalos building fill.

|         |   |
|---------|---|
| Athens  | 1 Two owls (44-47)<br>1 Owl with symbol (57-60)<br>1 Two piglets/Mystic staff (62b)<br>1 Fulminating Zeus, eagle cornucopia (84)<br>1 Fulminating Zeus, symbol? (82-84) |
| Macedon | 1 Antigonos Gonatas: Herakles/Horseman (509)  |

**S 19:3** **Cistern (upper layer)** to ca. 330-320 B.C.  
 D. B. Thompson, "Three Centuries of Hellenistic Terracottas, IA," *Hesperia* 21, 1952 (pp. 116-164), pp. 120-164 (Coroplasts' Dump). *Agora* IV, \*XII.

|        |   |
|--------|---|
| Athens | 1 Eleusis Piglet on staff (38)<br>6 Double-bodied owl (41-43) |
|--------|---|

**U 13:2** **Library of Pantainos North Stoa, floor fills of Room 7**

See note 185 above, p. 92, with Plate 34 (a selection of thirty-four coins from fill "a"). \*T. L. Shear, Jr., "The Athenian Agora: Excavations of 1973-1974," *Hesperia* 44, 1975 (pp. 331-374), pp. 343-346, note 23. Walker 1980, pp. 108, 118, no. 145. The date of the first (construction) fill is that of the library itself, which was dedicated between ca. 98 and 103. The Period VB fractions in the second fill date it no earlier than the reign of Hadrian. All Athenian Period III and IV coins are exceedingly worn (w6).

a. Packing beneath original floor (Floor A) ca. A.D. 100

|                 |   |
|-----------------|---|
| Athens          | 1 Two-bodied owl, Eleusis ring (43)<br>1 Owl r., AΘH (52)<br>1 Owl three-quarters r., amphora (69)<br>3 Fulminating Zeus (82-84, 90-97).<br>Plate 34:1-3 = [82-84, 90-97]c, d; 97j<br>1 Two owls on thunderbolt (99)<br>1 Parthenos/Owl on amphora, wheat ears (122)<br>1 Parthenos/Tripod (138)<br>1 Gorgoneion/Athena (139)<br>2 Parthenos/Athena advancing, owl (149). Plate 34:4 = 149j<br>2 Parthenos/Owl on prow (152). Plate 34:5 = 152h<br>3 Parthenos/Owl on amphora, cicada or snake (157, 158).<br>Plate 34:6, 7 = 158g, [157-158]a<br>26 Period IV AE 1 coins, worn illegible. Plate 34:8-33, with p. 110 above |
| Side            | 1 Athena/Pomegranate (979a)   |
| Greek imperials | 3 non-Athenian illegible  |
| Roman           | 1 Titus: denarius, A.D. 79, w4. Plate 34:34   |

b. Packing beneath second major floor (Floor D) ca. A.D. 125-130 or later

|        |   |
|--------|---|
| Athens | 1 Owl r. (52-54, 57-60)<br>1 Parthenos/Fulminating Zeus (137)<br>1 Parthenos/Tripod (138)<br>1 Zeus/Dionysos (144)<br>1 Parthenos/Owl on amphora, cicada (158)<br>8 Period IV AE 1 worn illegible |
|--------|---|

## DEPOSITS, INCLUDING HOARDS

4 Period VB imperials: 1 Athena/Owl (**229, 230**)

1 Owl on amphora (**197**)

1 Altar and olive tree (**202**)

1 Basket and snake (**220**)

Roman

1 Nero: denarius, A.D. 64–68 (*BMCRE* 90–93), w4

2 Trajan: 1 sestertius, A.D. 100 (*BMCRE* 730–733), w4

1 dupondius, rev. illegible, w5

## TABLES

## TABLE I

## PERIOD I CHRONOLOGY

|  | Athens legend  | Eleusis legend  |
|--|--|---|
| (i)<br><i>ca.</i> 350's–early/mid-330's B.C.               |  | <b>38</b> Piglet on mystic staff,<br>ΕΛΕΥΣΙ (above)<br>15 emissions<br>15–18 mm., 3.20 g. |
|  | <b>39</b> [& <b>40</b> ] Piglet on mystic staff,<br>ΑΘΕ (above) [or below, <b>40</b> ]<br>13–15 mm., 2.51 g. |   |
| (ii)<br><i>ca.</i> early/mid-330's<br>through 322/317 B.C. | Double-bodied owl, Θ <sup>A</sup> Ε  |   |
|  | <b>41</b> on mystic staff<br>13–15 mm., 2.14 g.  |   |
|  | <b>42</b> no symbol<br>11–15 mm., 1.75 g.  |   |
|  | <b>43</b> on Eleusis ring<br>10–14 mm., 1.85 g.  |   |
| (iii)<br>322/317–307 B.C.                                  | <b>44</b> Two owls over Eleusis ring,<br>ΑΘΕ, in olive wreath<br>13–15 mm., 2.70 g.                          |   |
|  | <b>45</b> Two owls over plemochoe,<br>ΑΘ, in olive wreath<br>13–15 mm., 2.50 g.                              | <b>48</b> Piglet in wheat wreath,<br>ΕΛΕΥ (above)<br>13–15 mm., 2.55 g.                   |
|  | <b>46</b> Two owls, no symbol,<br>ΑΘ, in olive wreath<br>13–15 mm., 2.34 g.                                  | <b>49</b> Piglet in wheat wreath,<br>ΕΛΕΥ (below)<br>13–15 mm., 2.40 g.                   |
|  | <b>47</b> Two owls, no symbol<br>ΑΘΗ, in olive wreath<br>14–15 mm., 2.81                                     |   |
| (iv)<br>307– <i>ca.</i> 300 B.C.                           | <b>50</b> Owl l., ΗΘ/Α,<br>in olive wreath<br>14–16 mm., 3.52 g.   | <b>51</b> Piglet in wheat wreath,<br>ΕΛΕΥΣΙ (below)<br><i>Heavy</i> : 15–17 mm., 3.73 g.  |

|                | Athens legend  | Eleusis legend   |
|----------------|--|--|
| (v)            |  |  |
| 287–284 B.C.   | 52 Owl r, A/ΘH, in olive wreath<br>13–15 mm., 2.40 g.  |  |
| 284–270's B.C. | 53 Owl r, A/Θ, in wheat wreath<br>12–15 mm., 2.37 g.   |  |
|                | 54 Owl r, A/Θ, in olive wreath<br>12–14 mm., 2.34 g.   | 55 Piglet in wheat wreath,<br>ΕΛΕΥΣΙ (below)<br><i>Light:</i> 11–14 mm., 2.26 g.   |
| (vi)           |  |  |
| ca. 270 B.C.   | <sup>A</sup><br>56 Two owls, Θ in olive wreath<br>13–15 mm., 2.35 g.   |  |
| (vii)          |  |  |
| 260's B.C.     | <sup>A</sup><br>Owl r, Θ E, with symbol<br>57 wreath<br>13–15 mm., 2.13 g.<br>58 wheat ear<br>13–15 mm., 2.27 g.<br>59 cornucopia<br>12–14 mm., 2.35 g.<br>60 Eleusis ring |  |
| (viii)         |  |  |
| 261–229 B.C.   |  | 62 Two piglets l./Upright mystic staff, A-E, in olive wreath<br>13–14 mm., 2.21 g.<br>63 Piglet r., (?)AΘE/Upright mystic staff, ΕΛΕ-ΥΣΙ<br>12 mm., 1.50–1.75 g. |

**(Chronological position uncertain)**

61 Demeter head/Plemochoe on Eleusis ring,  
in wheat wreath, ΕΛΕΥΣΙ (above)  
13–15 mm., 3.23 g.

## TABLE II

## STRUCTURE OF THE PERIOD II COINAGE

| AE 1                | AE 2   |
|---------------------|--|
| 229 B.C.            | <b>64</b> Athena, Attic helmet/Triobol owl<br><b>66</b> Zeus/Athena Polias<br><br><b>68</b> Artemis/Athena Polias  |
| 224/3 B.C.          | <b>69</b> Athena, Attic helmet/Owl three-quarters r.,<br>amphora (struck over Antigonos Gonatas)<br><b>70</b> Athena, Attic helmet/Owl three-quarters r., plemochoe<br><b>72</b> Demeter/Plemochoe, Eleusis ring (struck over ?)<br><b>73</b> Demeter/Plemochoe, aplusre (struck over <b>69</b> , <b>70</b> )<br><b>74</b> Demeter/Plemochoe, owl (struck over <b>69</b> , <b>70</b> ) |
| 198 B.C.            | <b>76</b> Zeus/Amphora with owl in olive wreath<br>(struck over <b>69</b> , <b>70</b> , <b>72–74</b> , and Antigonos Gonatas)  |
| 196 B.C.            | <b>78</b> Athena, Winged, then Corinthian helmet/Standing Zeus, owl<br>(first ones struck over?)<br><b>79</b> Athena, Corinthian helmet/Standing Zeus, prow<br>(some struck over ?)<br><b>80</b> Athena, Corinthian helmet/Standing Zeus, wheat ear  |
| <i>ca.</i> 190 B.C. | <b>82</b> Athena, Corinthian helmet/Fulminating Zeus, eagle, star<br><b>83</b> Athena, Corinthian helmet/Fulminating Zeus, eagle, wheat ear<br><b>84</b> Athena, Corinthian helmet/Fulminating Zeus, eagle, cornucopia   |
| <i>ca.</i> 183 B.C. |  |



|              | <b>AE 3</b>   | <b>AE 4</b>  |
|--------------|---|--|
| 229 B.C.     | <b>65</b> Athena, Attic helmet/Two owls<br><b>67</b> Athena, Corinthian helmet/Owl r.<br>on thunderbolt |  |
| 224/3 B.C.   |   | <b>71</b> Athena, Corinthian helmet/Owl r. on rudder<br><b>75</b> Plemochoe/Eleusis ring in wheat wreath |
| 198 B.C.     | <b>77</b> Athena, winged helmet/Owl l.<br>with amphora in olive wreath                                  |  |
| 196 B.C.     |   | <b>81</b> Athena, Attic helmet/Owl r. on thunderbolt   |
| ca. 190 B.C. |   | <b>85</b> Cicada/Amphora   |
| ca. 183 B.C. |   |  |

TABLE III

## LATE PERIOD II AND PERIOD III VARIETIES

|  | Number from<br>Agora | Number from<br>Delos <sup>1</sup> | Average weight<br>of hoard<br>specimens <sup>2</sup> | Average weight<br>of Agora<br>specimens | Lead % <sup>3</sup> |
|--|----------------------|-----------------------------------|--|---|---------------------|
| AE 2   |                      |                                   |  |   |                     |
| Late Period II <sup>4</sup>                                |                      |                                   |  |   |                     |
| <b>79</b> Standing Zeus, prow                              | 58                   | —                                 | 4.96 (1)   | 5.00 (27)                               | 0.22 (1)            |
| <b>82</b> Fulminating Zeus, star,<br>eagle                 | 41                   | —                                 | 6.25 (23)  | 6.19 (37)                               |                     |
| <b>83</b> Fulminating Zeus, wheat ear,<br>eagle            | 68                   | —                                 | 6.65 (40)  | 6.10 (37)                               |                     |
| <b>84</b> Fulminating Zeus,<br>cornucopia, eagle           | 42                   | —                                 | 6.65 (26)  | 5.96 (23)                               | 2.73 (1)            |
| Period III   |                      |                                   |  |   |                     |
| <b>86</b> Demeter/Piglet                                   | 18                   | —                                 | 5.70 (9)   | 6.15 (5)                                | 6.54 (1)            |
| <b>87</b> Apollo/Owl with lyre                             | 24                   | —                                 | 4.52 (12)  | 4.54 (11)                               |                     |
| <b>88</b> Zeus/Fulminating Athena,<br>helmet, horse head   | 10                   | —                                 | 6.60 (29)  | 6.53 (6)                                |                     |
| <b>89</b> Zeus/Fulminating Athena,<br>wheat ear, snake     | 23                   | —                                 | 5.97 (83)  | 5.36 (5)                                | 0.28 (1)            |
| <b>90</b> Fulminating Zeus, pileus,<br>eagle               | 4                    | —                                 | 5.35 (12)  | 5.13 (4)                                |                     |
| <b>91</b> Fulminating Zeus, plemochoe<br>cornucopia, eagle | 25                   | —                                 | 5.48 (34)  | 5.12 (22)                               |                     |
| <b>92</b> Fulminating Zeus, amphora<br>cornucopia, eagle   | 1                    | —                                 | 5.94 (8)   | 3.72 (1)                                |                     |
| <b>93</b> Fulminating Zeus, amphora<br>eagle               | 18                   | —                                 | 5.96 (37)  | 5.20 (13)                               |                     |
| <b>94</b> Fulminating Zeus, two pilei                      | 69                   | 2                                 | 6.04 (184)   | 5.55 (26)                               | 1.03 (2)            |
| <b>95</b> Fulminating Zeus, mystic staff                   | 10                   | —                                 | 6.53 (63)  | 5.80 (8)                                |                     |
| <b>96</b> Fulminating Zeus, thyrsos                        | 9                    | —                                 | 6.58 (83)  | 6.18 (6)                                |                     |
| <b>97</b> Fulminating Zeus, star and<br>crescents          | 201                  | 2                                 | 7.65 (235)   | 7.27 (62)                               | 12.33 (3)           |

<sup>1</sup> Figures from *Delos* XXVII, p. 409, and *IGCH* 324 (for AE 4 and 5 varieties); Svoronos 1907, pp. 196, 208, and Svoronos 1911, pp. 58, 78, 87 (for AE 2 varieties), and Numismatic Collection of Athens trays for AE 3 varieties.

<sup>2</sup> Weights from *IGCH* 316 (Kleiner 1975), 249, 269, 276, 277, 283 (Kleiner 1976, pp. 23–28), 274 (*Phyx* I, pp. 24–27), and 324 (note 105 above, p. 66).

<sup>3</sup> Analyses from Caley, pp. 26–53 and *New Style*, pp. 639–640.

<sup>4</sup> Four AE 2 issues listed for metrological and metallurgical comparison with AE 2 issues of Period III.

TABLE III: LATE PERIOD II AND PERIOD III VARIETIES

|            |                                   | Number from<br>Agora | Number from<br>Delos | Average weight<br>of hoard<br>specimens | Average weight<br>of Agora<br>specimens | Lead %    |
|------------|-----------------------------------|----------------------|----------------------|---|---|-----------|
|            |                                   |                      | AE 3                 |   |   |           |
| <b>98</b>  | Athena/Amphora                    | 29                   | —                    | 2.55 (24)                               | 2.61 (12)                               |           |
| <b>99</b>  | Athena/Two owls on<br>thunderbolt | 635                  | —                    | 2.69 (579)                              | 2.84 (147)                              | 13.98 (2) |
| <b>100</b> | Cicada/Owl on<br>thunderbolt      | 72                   | 2                    | 3.49 (182)                              | 2.85 (18)                               |           |
|            |                                   |                      | AE 4                 |   |   |           |
| <b>101</b> | Apollo/Amphora                    | 19                   | 1                    | —                                       | 1.64 (15)                               |           |
| <b>102</b> | Zeus/Plemochoe                    | 8                    | —                    | —                                       | 1.63 (7)                                |           |
| <b>103</b> | Apollo/Plemochoe                  | 21                   | 1                    | 1.97 (1)                                | 1.58 (10)                               |           |
| <b>104</b> | Artemis/Plemochoe                 | 2                    | 104                  | —                                       | 1.37 (2)                                |           |
| <b>105</b> | Apollo/Amphora                    | 31                   | 14 <sup>5</sup>      | —                                       | 1.72 (20)                               | 1.10 (1)  |
| <b>106</b> | Kore(?)/Piglet                    | 81                   | 2                    | —                                       | 1.45 (42)                               | 20.84 (1) |
| <b>107</b> | Nike/Quiver                       | 33                   | 7                    | —                                       | 1.34 (21)                               |           |
| <b>108</b> | Cicada/Amphora                    | 58+? <sup>6</sup>    | 100                  | 1.07 (27)                               | 1.13 (20)                               |           |
| <b>109</b> | Cicada/Quiver                     | 3                    | 9                    | —                                       | 1.17 (1)                                |           |
|            |                                   |                      | AE 5                 |   |   |           |
| <b>110</b> | Apollo/Owl on amphora             | 54                   | 163                  | 0.55 (6)                                | 0.88 (11)                               |           |
| <b>111</b> | Apollo/Lyre                       | 6                    | 32                   | —                                       | 0.43 (3)                                |           |
| <b>112</b> | Apollo/Tripod                     | 5                    | 14                   | —                                       | 0.59 (5)                                |           |
| <b>113</b> | Apollo/Cicada                     | 4                    | 30                   | —                                       | 0.56 (3)                                |           |
| <b>114</b> | Athena/Tripod                     | 2                    | 1                    | —                                       | 0.34 (2)                                |           |

<sup>5</sup> Some of these may belong to variety **101**.

<sup>6</sup> To the total of fifty-eight should be added a substantial but uncertain number of specimens listed under the heavier Period II Cicada/Amphora variety **85**. See pp. 65–66.

TABLE IV

## PERIOD IV AE 1 VARIETIES

|   | Number from<br>Agora | Average weight<br>of Agora<br>specimens | Average weight<br>of hoard<br>specimens <sup>1</sup> | Lead % <sup>2</sup> |
|---|----------------------|---|--|---------------------|
| <b>Period IVA: 86–42 B.C.</b>                               |                      |   |  |                     |
| <b>115</b> Parthenos/Owl on amphora,<br>no symbol           | 60                   | 10.46 (31)                              | 10.82 (46)   | 5.15 (1)            |
| <b>116</b> Demeter/Triptolemos                              | 1                    |   |  |                     |
| <b>117</b> Kore/Iakchos                                     | 2                    | 9.07 (1)                                |  |                     |
| <b>118</b> Parthenos/Owl on amphora<br>poppy and wheat ears | 18                   | 9.72 (13)                               | 11.85 (11)   |                     |
| <b>119</b> mystic staff                                     | 33                   | 10.11 (16)                              | 10.20 (16)   |                     |
| <b>120</b> plemochoe  | 1                    | 11.32 (1)                               | [9.57 (2)]   |                     |
| <b>121</b> tripod   | 8                    | 8.64 (5)                                | 10.31 (17)   |                     |
| <b>122</b> two wheat ears                                   | 31                   | 9.61 (11)                               | 10.73 (26)   |                     |
| <b>123</b> flower   | 1                    | 11.50 (1)                               |  |                     |
| <b>124</b> caduceus   | 23                   | 9.61 (12)                               | 10.78 (9)  |                     |
| <b>125</b> thyrsos  | 1                    | 9.72 (1)                                | [13.30 (2)]  |                     |
| <b>126</b> two pilei  | 25                   | 9.40 (14)                               | 10.99 (13)   |                     |
| <b>Period IVB: 42/1–32 B.C.</b>                             |                      |   |  |                     |
| <b>137</b> Parthenos/Fulminating Zeus                       | 45                   | 7.65 (21)                               | 9.24 (18)  |                     |
| <b>138</b> Parthenos/Tripod                                 | 139                  | 7.47 (47)                               | 8.67 (32)  | 9.93 (1)            |
| <b>139</b> Gorgoneion/Athena advancing                      | 79                   | 7.88 (30)                               | 8.54 (17)  | 15.31 (2)           |
| <b>140</b> Young Dionysos/Athena advancing                  | 29                   | 5.68 (16)                               | 6.31 (11)  | 18.82 (1)           |
| <b>143</b> Parthenos/Apollo Delios                          | 81                   | 5.33 (36)                               | 5.84 (15)  |                     |
| <b>144</b> Zeus/Bearded Dionysos head                       | 152                  | 5.47 (61)                               | 6.33 (18)  | 22.73 (1)           |

<sup>1</sup> Chaidari and Agia Varvara hoards, Kroll 1973, pp. 106–119. The number of hoard coins weighed (in parentheses) is the same as the total number of each variety present in the two hoards. Abnormal average weights skewed by too small a sample are bracketed.

<sup>2</sup> From *New Style*, p. 640 and (for variety 146) Caley, pp. 52–53, table IX, no. 10.

TABLE IV: PERIOD IV AE 1 VARIETIES

|  | Number from<br>Agora | Average weight<br>of Agora<br>specimens | Average weight<br>of hoard<br>specimens | Lead %    |
|--|----------------------|---|---|-----------|
| <b>Period IVC: 31–early 20's B.C.</b>          |                      |   |   |           |
| <b>146</b> Athena, Corinthian helmet/Demeter   | 5                    | 7.82 (5)                                | 8.09 (3)                                | 10.45 (1) |
| <b>147</b> Parthenos/Nike                      | 43                   | 8.08 (17)                               | 8.51 (14)                               |           |
| <b>148</b> Parthenos/Standing Zeus             | 1                    | 8.16 (1)                                | 9.52 (1)                                |           |
| <b>Period IVD: mid-20's–19 B.C.</b>            |                      |   |   |           |
| Parthenos/<br><b>149</b> Athena advancing, owl | 345                  | 6.88 (101)                              | 7.80 (118)                              | 18.68 (1) |
| <b>151</b> Athena advancing, snake             | 135                  | 6.83 (49)                               | 7.53 (43)                               |           |
| <b>152</b> Owl on prow                         | 501                  | 6.84 (140)                              | 7.48 (88)                               |           |
| <b>153</b> Sphinx                              | 277                  | 6.80 (92)                               | 7.57 (42)                               | 17.49 (4) |
| <b>Period IVE: ca. later 10's B.C.</b>         |                      |   |   |           |
| Parthenos/<br><b>157</b> Owl on amphora, snake | 116                  | 5.55 (38)                               | 6.42 (49)                               |           |
| <b>158</b> Owl on amphora, cicada              | 199                  | 5.53 (57)                               | 6.20 (58)                               | 17.72 (1) |

## TABLE V

## PERIOD IV FRACTIONS

Normal range of diameters and average weights of Agora specimens

|   | AE 2             | AE 3            | AE 4             |
|---|------------------|-----------------|------------------|
| <b>Period IVA: 86–42 B.C.</b>                         |                  |                 |                  |
| 127 Demeter/Triptolemos                               | 16–18/5.76 (7)   |                 |                  |
| 128 similar, with poppy head                          | 15–17/4.35 (7)   |                 |                  |
| 129 Dolphin on trident/Plemochoe                      | 14–17/4.09 (15)  |                 |                  |
| 130 Athena/Artemis                                    | 15–16/3.85 (6)   |                 |                  |
| 131 Apollo/Cicada                                     |                  | 14–16/3.89 (35) |                  |
| 132 Apollo/Two wheat ears in wreath                   |                  |                 | 12/1.93 (1)      |
| 133–134 Apollo or Athena/<br>Poppy and two wheat ears |                  |                 | 10–12/1.84 (12)  |
| 135–136 Apollo or Athena/<br>Two wheat ears           |                  |                 | 10–11/1.74 (25)  |
| <b>Period IVB: 42/1–32 B.C.</b>                       |                  |                 |                  |
| 141 Young Dionysos/Kantharos                          | 13–15/2.60* (16) |                 |                  |
| 142 Bearded Dionysos/Athena bust                      |                  |                 | 11–12/1.39* (19) |
| 145 Zeus/Eagle on thunderbolt                         | 13–15/3.24 (13)  |                 |                  |
| <b>Period IVD: mid-20's to 19 B.C.</b>                |                  |                 |                  |
| 150 Demeter/Poppy and wheat ears                      | 13–15/3.26 (26)  |                 |                  |
| 154 Triptolemos/Mystic staff and wheat ear            | 14–15/3.46 (17)  |                 |                  |
| 155 Triptolemos/Nike                                  | 13–14/3.14 (6)   |                 |                  |
| 156 Parthenos/Two owls on thunderbolt                 | 15–19/2.97 (9)   |                 |                  |

\* Note reduction of module size and weight after Period IVA.

## TABLE VI

## THREE EARLY PERIOD IVA DEPOSITS

|   | Agora Deposit<br>N 20:4 | Delos 1910<br>Hoard <sup>1</sup> | Agora Deposit<br>E 14:3 |
|---|-------------------------|----------------------------------|-------------------------|
| <b>Before Period IV</b>   |                         |                                  |                         |
| Various, including non-Athenian                                     | 11                      | 1                                | 15                      |
| <b>97</b> Fulminating Zeus, star between crescents<br>(87/6 B.C.)   | 13 w1-2                 |                                  | 2 w2                    |
| <b>Period IVA</b>   |                         |                                  |                         |
| <b>AE 1</b>   |                         |                                  |                         |
| <b>115</b> Owl on amphora<br>no symbol (86 B.C.)                    | 1 w2                    | 9 w2-3                           | 3 w2-3                  |
| <b>117</b> Kore/Iakchos (?84 B.C.)                                  |                         |                                  | 1 w2                    |
| <b>118</b> Owl on amphora<br>poppy and wheat ears (early 70's B.C.) |                         | 1 w2                             | 1 w2                    |
| — illegible symbol  |                         |                                  | 1 w?<br>(damaged)       |
| <b>AE 2</b>   |                         |                                  |                         |
| <b>127</b> Demeter/Triptolemos (?84 B.C.)                           |                         |                                  | 1 w2                    |
| <b>127</b> or <b>128</b> Same, but poppy head?                      | 1w? (damaged)           |                                  | 1 w3                    |
| [ <b>154</b> Triptolemos/Mystic staff and wheat ear                 |                         |                                  | 1 w5] <sup>2</sup>      |
| <b>AE 3</b>   |                         |                                  |                         |
| <b>131</b> Apollo/Cicada  |                         |                                  | 3 w3-4                  |
| <b>AE 4</b>   |                         |                                  |                         |
| <b>132</b> Apollo/Two wheat ears in wreath                          |                         | 4 w2-3                           |                         |
| <b>133</b> Apollo/Poppy and wheat ears                              |                         |                                  | 1 w1                    |
| <b>135</b> Apollo/Two wheat ears                                    |                         |                                  | 5 w1-3                  |

<sup>1</sup> *JGCH* 322; Kroll 1973, pp. 87-88. The actual date of burial may be 69 B.C. (see note 145 above, p. 82).

<sup>2</sup> 154f, a worn Period IVD coin, is intrusive (see note 216 above, p. 109) and hence listed here in brackets.

## TABLE VII

HYPOTHETICAL DEVELOPMENT OF THE ATHENIAN BRONZE  
DENOMINATIONAL SYSTEMS  
AND COMPARISON WITH THE ROMAN SYSTEM

| Module <sup>1</sup> | Athens<br>before 86 B.C.<br>(Period III)     | Athens<br>86–42 B.C.<br>(Period IVA)             | Athens<br>after 42 B.C.<br>(Period IVB–IVE)     | Athens<br>2nd cent. after Christ<br>(Period V)      | Roman <sup>2</sup>                     |
|---------------------|--|--|---|---|--|
| AE 0                |  |  |   | AE Drachm<br>( $\frac{1}{6}$ denarius)              |  |
| AE 1                |  | AE Drachm<br>( $\frac{1}{6}$ AR drachm)          | AE Hemidrachm<br>( $\frac{1}{12}$ denarius)     | AE Hemidrachm<br>( $\frac{1}{12}$ denarius)         | As<br>( $\frac{1}{16}$ denarius)       |
| AE 2                | Hemiobol<br>( $\frac{1}{12}$ AR drachm)      | AE Hemidrachm<br>( $\frac{1}{12}$ AR drachm)     | AE Quarter-drachm<br>( $\frac{1}{24}$ denarius) | Obol<br>( $\frac{1}{36}$ denarius)                  | Semis<br>( $\frac{1}{32}$ denarius)    |
| AE 3                | Quarter-obol<br>( $\frac{1}{24}$ AR drachm)  | AE Quarter-drachm<br>( $\frac{1}{12}$ AR drachm) | discontinued                                    |   | Quadrans<br>( $\frac{1}{64}$ denarius) |
|                     |  |  |   | Hemiobol <sup>3</sup><br>( $\frac{1}{72}$ denarius) |  |
| AE 4                | Chalkous<br>( $\frac{1}{48}$ AR drachm)      | Chalkous?<br>( $\frac{1}{48}$ AR drachm)         | Half chalkous?<br>( $\frac{1}{96}$ denarius?)   |   | Sextans<br>( $\frac{1}{96}$ denarius)  |
| AE 5                | Half chalkous<br>( $\frac{1}{96}$ AR drachm) | discontinued                                     |   |   |  |

<sup>1</sup> See pp. 38, 90 and Tables III–V and VIII. After 42 B.C., the AE 1 and 2 modules were reduced in size and weight to become the effective equivalent of the former AE 2 and 3 modules.

<sup>2</sup> Using the general weight/size modules of the Corinthian duoviral bronze, Amandry, pp. 82–83, table 12.

<sup>3</sup> The fourth denomination of Athens' imperial coinage began at AE 3 size but was soon reduced to AE 4 for Period VB (see Table VIII).



## TABLE VIII

## ATHENIAN IMPERIAL DENOMINATIONS

(Normal range of diameters, average weights, and numbers of Agora specimens)

|            | Period VA                     | VB                            | VC                              | VI                             |
|------------|-------------------------------|-------------------------------|---------------------------------|--------------------------------|
| Drachm     |                               | 24–26 mm.<br>7.37 g.<br>(175) | 22–23 mm.<br>6.67 g.<br>(709)   | 20–22 mm.<br>5.30 g.<br>(1115) |
| Hemidrachm |                               | 18–22 mm.<br>5.40 g.<br>(154) |                                 |                                |
| Obol       |                               | 16–18 mm.<br>4.28 g.<br>(133) | 16–18mm.<br>3.39 g.<br>(18)     | 16–18 mm.<br>3.20 g.<br>(36)   |
| Hemiobol   | 14–16 mm.<br>2.43 g.<br>(250) | 11–12 mm.<br>1.50 g.          | 11–12mm.<br>1.50 g.<br>—(845)*— | 12–13 mm.<br>1.53 g.<br>(16)   |

\*It is impossible to distinguish between VB and VC hemiobols when the obverse depicts some figure other than Athena. Nearly all the Athena-head hemiobols, however, appear to be VB, and this is probably the case for the VB–VC hemiobols as a whole.

## TABLE IX

## TOTALS OF ATHENIAN IMPERIAL DIES

Based on specimens from the Agora and other public and private collections

| Period |             |  | Number of<br>obverse dies | Number of<br>reverse dies |
|--------|-------------|--|---------------------------|---------------------------|
| VA     | hemiobols   |  | 28+                       | 61                        |
| VB     | drachms     |  | 32+                       | 59                        |
| VB     | hemidrachms |  | 12+                       | 36                        |
| VB-C   | obols       |  | 24+                       | 51                        |
| VB-C   | hemiobols   |  | 60+                       | 163                       |
| VC     | drachms     |  | 55+*                      | 133                       |
| VI     | drachms     |  | <i>ca.</i> 280            | <i>ca.</i> 554            |
| VI     | obols       |  | 15+                       | 16                        |
| VI     | hemiobols   |  | 6+                        | 7                         |
| <hr/>  |             |  |                           |                           |
| Total  |             |  | <i>ca.</i> 512+           | <i>ca.</i> 1080           |

\*Excluding five or six "transitional" obverse drachm dies introduced in Period VB and continued in Period VC.

## CONCORDANCES

## CONCORDANCE OF CATALOGUED AGORA COINS

|          |                   |           |                          |         |                |
|----------|-------------------|-----------|--------------------------|---------|----------------|
| A-1      | <b>507</b>        | A-1469    | <b>224</b>               | AA-984  | <b>595</b>     |
| A-10     | <b>532</b>        | A-1550    | <b>823</b>               | AA-991  | <b>[41-43]</b> |
| A-81     | <b>667</b>        | A-1554    | <b>459</b>               | AA-995  | <b>648</b>     |
| A-99     | <b>153</b>        | A-1582    | <b>151</b>               | AA-1001 | <b>392</b>     |
| A-159bis | <b>105</b>        | A-1589    | <b>279</b>               | AA-1002 | <b>401</b>     |
| A-200    | <b>197</b>        | AA-14     | Appendix A               | AA-1003 | <b>405</b>     |
| A-223    | <b>115</b>        | AA-15     | <b>158</b>               | AA-1004 | <b>311</b>     |
| A-245    | <b>801</b>        | AA-23     | <b>13</b>                | AA-1006 | <b>284</b>     |
| A-268    | <b>162</b>        | AA-81     | <b>138</b>               | AA-1007 | <b>338</b>     |
| A-297    | <b>551</b>        | AA-119    | <b>746</b>               | AA-1009 | <b>356</b>     |
| A-321    | <b>108</b>        | AA-123a   | <b>976</b>               | AA-1012 | <b>403</b>     |
| A-323    | <b>567</b>        | AA-171    | <b>143</b>               | AA-1013 | <b>401</b>     |
| A-415    | <b>567</b>        | AA-185    | <b>632</b>               | AA-1016 | <b>383</b>     |
| A-479    | <b>546</b>        | AA-191    | <b>97</b>                | AA-1018 | <b>318</b>     |
| A-492    | <b>963</b>        | AA-203    | <b>688</b>               | AA-1019 | <b>285</b>     |
| A-511    | <b>516</b>        | AA-230    | <b>647</b>               | AA-1022 | <b>322</b>     |
| A-599a   | <b>831</b>        | AA-251    | <b>436</b>               | AA-1023 | <b>324</b>     |
| A-661    | <b>663</b>        | AA-266    | <b>108</b>               | AA-1028 | <b>327</b>     |
| A-663    | <b>846</b>        | AA-294a   | <b>35</b>                | AA-1029 | <b>284</b>     |
| A-666    | <b>187</b>        | AA-297    | <b>384</b>               | AA-1030 | <b>353</b>     |
| A-686    | <b>59</b>         | AA-436    | <b>831</b>               | AA-1032 | <b>307</b>     |
| A-746    | <b>892</b>        | AA-444    | <b>685</b>               | AA-1033 | <b>314</b>     |
| A-833    | <b>249</b>        | AA-451    | <b>468</b>               | AA-1034 | <b>358</b>     |
| A-891    | <b>643</b>        | AA-461    | <b>13</b>                | AA-1035 | <b>378</b>     |
| A-892    | <b>669</b>        | AA-489    | <b>226</b>               | AA-1049 | <b>313</b>     |
| A-900    | <b>963</b>        | AA-507    | <b>52</b>                | AA-1050 | <b>287</b>     |
| A-976    | <b>571</b>        | AA-520    | <b>119</b>               | AA-1052 | <b>376</b>     |
| A-980    | <b>745</b>        | AA-555    | <b>144</b>               | AA-1056 | <b>351</b>     |
| A-985    | <b>12</b>         | AA-581    | <b>613</b>               | AA-1057 | <b>321</b>     |
| A-998    | <b>57</b>         | AA-605    | <b>273</b>               | AA-1059 | <b>375</b>     |
| A-1046   | <b>788</b>        | AA-634    | <b>442</b>               | AA-1062 | <b>404</b>     |
| A-1065   | <b>613</b>        | AA-665    | <b>145</b>               | AA-1063 | <b>405</b>     |
| A-1104   | <b>453</b>        | AA-749a   | <b>899</b>               | AA-1067 | <b>374</b>     |
| A-1106   | <b>508</b>        | AA-755    | <b>218</b>               | AA-1069 | <b>386</b>     |
| A-1109   | <b>149</b>        | AA-762    | <b>644</b>               | AA-1070 | <b>284</b>     |
| A-1145   | <b>151</b>        | AA-766a   | <b>624</b>               | AA-1072 | <b>372</b>     |
| A-1230   | <b>[149, 151]</b> | AA-788    | <b>[115-126, etc.]</b> , | AA-1079 | <b>392</b>     |
| A-1241   | <b>158</b>        |           | p. 110                   | AA-1081 | <b>350</b>     |
| A-1272   | <b>579</b>        | AA-845bis | <b>87</b>                | AA-1083 | <b>303</b>     |
| A-1314   | <b>828</b>        | AA-873a   | <b>620</b>               | AA-1085 | <b>306</b>     |
| A-1427   | <b>619</b>        | AA-880    | <b>410</b>               | AA-1087 | <b>299</b>     |
| A-1432   | <b>746</b>        | AA-939a   | <b>494</b>               | AA-1089 | <b>403</b>     |
| A-1443   | <b>1022</b>       | AA-973    | <b>38</b>                | AA-1091 | <b>284</b>     |
| A-1452   | <b>62</b>         | AA-977    | <b>742</b>               | AA-1092 | <b>387</b>     |
| A-1466   | <b>64</b>         | AA-982    | <b>579</b>               | AA-1096 | <b>403</b>     |

|          |             |           |                          |         |             |
|----------|-------------|-----------|--------------------------|---------|-------------|
| AA-1097  | <b>284</b>  | B'-729bis | <b>110</b>               | BB-638  | <b>616</b>  |
| AA-1098  | <b>293</b>  | B'-770    | <b>944</b>               | BB-639  | <b>762</b>  |
| AA-1099  | <b>372</b>  | B'-830    | <b>41</b>                | BB-655a | <b>543</b>  |
| AA-1101  | <b>334</b>  | B'-849a   | <b>750</b>               | BB-666  | <b>498</b>  |
| AA-1102  | <b>348</b>  | B'-861    | <b>79</b>                | BB-705  | <b>770</b>  |
| AA-1103  | <b>349</b>  | B'-910    | <b>721</b>               | BB-706  | <b>108</b>  |
| AA-1104  | <b>289</b>  | B'-927    | <b>908</b>               | BB-821  | <b>625</b>  |
| AA-1109  | <b>337</b>  | B'-928    | <b>128</b>               | BB-841  | <b>965</b>  |
| AA-1111  | <b>343</b>  | B'-929    | <b>206</b>               | BB-874  | <b>1007</b> |
| AA-1118  | <b>288</b>  | B'-935    | <b>489</b>               | BB-892  | <b>48</b>   |
| AA-1122  | <b>341</b>  | B'-948    | <b>130</b>               | BB-903  | <b>828</b>  |
| AA-1125  | <b>391</b>  | B'-962    | <b>944</b>               | BB-945  | <b>732</b>  |
| AA-1132  | <b>287</b>  | B'-996    | <b>126</b>               | BB-980  | <b>122</b>  |
| AA-1140  | <b>211</b>  | B'-1009   | <b>90</b>                | BB-1015 | <b>149</b>  |
| AA-1149  | <b>830</b>  | B'-1011   | <b>119</b>               | BB-1203 | <b>17</b>   |
| AP-25    | <b>643</b>  | B'-1018   | <b>65</b>                | BB-1219 | <b>576</b>  |
| AP-31    | <b>100</b>  | B'-1024   | <b>50</b>                | BB-1221 | <b>631</b>  |
| AP-34    | <b>495</b>  | B'-1034   | <b>616</b>               | BB-1231 | <b>964</b>  |
| AP-49a   | <b>695</b>  | B'-1104   | <b>153</b>               | BB-1252 | <b>1020</b> |
| AP-50    | <b>572</b>  | BB-7a     | <b>727</b>               | BB-1259 | <b>741</b>  |
| AP-84    | <b>48</b>   | BB-10     | <b>579</b>               | BB-1262 | <b>485</b>  |
| B-77     | <b>150</b>  | BB-15     | <b>66</b>                | BB-1263 | <b>667</b>  |
| B-100    | <b>143</b>  | BB-18     | <b>163</b>               | BB-1280 | <b>87</b>   |
| B-155    | <b>632</b>  | BB-20     | <b>504</b>               | BB-1292 | <b>879</b>  |
| B-165    | <b>154</b>  | BB-46     | <b>781</b>               | BB-1300 | <b>768</b>  |
| B-171    | <b>199</b>  | BB-51     | <b>647</b>               | BB-1315 | <b>697</b>  |
| B-255a   | <b>557</b>  | BB-52     | <b>153</b>               | BΓ-68   | <b>866</b>  |
| B-262    | <b>129</b>  | BB-63     | <b>122</b>               | BΓ-230  | <b>10</b>   |
| B-318    | <b>336</b>  | BB-66     | <b>767</b>               | BΓ-238  | <b>10</b>   |
| B-320    | <b>380</b>  | BB-130    | <b>562</b>               | BΓ-279  | <b>439</b>  |
| B-328    | <b>284</b>  | BB-161    | <b>[157, 158]</b>        | BΓ-293  | <b>812</b>  |
| B-329    | <b>375</b>  | BB-177    | <b>[115–126, etc.]</b> , | BΓ-465  | <b>98</b>   |
| B-351    | <b>748</b>  |           | p. 110                   | BΓ-895  | <b>9</b>    |
| B-354    | <b>345</b>  | BB-186    | <b>701</b>               | BΓ-921  | <b>574</b>  |
| B-358bis | <b>135</b>  | BB-226    | <b>39</b>                | BΓ-931  | <b>675</b>  |
| B-370    | <b>254</b>  | BB-274    | <b>439</b>               | BΓ'-111 | <b>153</b>  |
| B-374    | <b>51</b>   | BB-285    | <b>91</b>                | BΓ'-281 | <b>166</b>  |
| B-441a   | <b>886</b>  | BB-286    | <b>51</b>                | BΓ'-309 | <b>473</b>  |
| B-504    | <b>522</b>  | BB-310    | <b>604</b>               | BΓ'-432 | <b>608</b>  |
| B-508    | <b>8</b>    | BB-324    | <b>20</b>                | BΓ'-474 | <b>915</b>  |
| B-511    | <b>70</b>   | BB-352    | <b>401</b>               | BΓ'-486 | <b>652</b>  |
| B-514    | <b>1015</b> | BB-416    | <b>134</b>               | BΓ'-487 | <b>655</b>  |
| B-524    | <b>642</b>  | BB-445    | <b>838</b>               | BΓ'-875 | <b>42</b>   |
| B-533    | <b>217</b>  | BB-475    | <b>81</b>                | BΔ-56   | <b>59</b>   |
| B-556    | <b>68</b>   | BB-494    | <b>99</b>                | BΔ-72   | <b>850</b>  |
| B-560    | <b>16</b>   | BB-499    | <b>238</b>               | BΔ-78   | <b>108</b>  |
| B-602bis | <b>109</b>  | BB-515    | <b>673</b>               | BΔ-107  | <b>127</b>  |
| B-606    | <b>1037</b> | BB-546    | <b>492</b>               | BΔ-197  | <b>135</b>  |
| B'-620a  | <b>437</b>  | BB-561    | <b>1013</b>              | BΔ-207  | <b>38</b>   |
| B'-646   | <b>923</b>  | BB-602    | <b>137</b>               | BΔ-316  | <b>460</b>  |
| B'-669   | <b>875</b>  | BB-605    | <b>[149, 151]</b>        | BΔ-343  | <b>616</b>  |
| B'-693   | <b>116</b>  | BB-619    | <b>465</b>               | BΔ-362  | <b>514</b>  |

|        |             |         |                        |         |             |
|--------|-------------|---------|------------------------|---------|-------------|
| BΔ-363 | <b>137</b>  | Γ-421   | <b>205</b>             | Γ-1224  | <b>1009</b> |
| BΔ-405 | <b>431</b>  | Γ-432   | <b>152</b>             | Γ-1239  | <b>746</b>  |
| BΔ-414 | <b>144</b>  | Γ-456   | <b>644</b>             | Γ-1251  | <b>927</b>  |
| BΔ-437 | <b>26</b>   | Γ-483   | <b>726</b>             | Γ-1258  | <b>362</b>  |
| BΔ-438 | <b>953</b>  | Γ-484   | <b>152</b>             | Γ-1284  | <b>79</b>   |
| BΔ-482 | <b>609</b>  | Γ-489   | <b>963</b>             | Γ-1323  | <b>645B</b> |
| BΔ-522 | <b>746</b>  | Γ-498   | <b>125</b>             | Γ-1330  | <b>1012</b> |
| BE-73  | <b>20</b>   | Γ-507   | <b>872</b>             | Γ-1356  | <b>743</b>  |
| BE-115 | <b>3</b>    | Γ-522   | <b>94</b>              | Γ-1390  | <b>512</b>  |
| BE-298 | <b>490</b>  | Γ-540   | <b>579</b>             | Γ-1412  | <b>894</b>  |
| BE-325 | <b>12</b>   | Γ-619   | <b>507</b>             | Γ-1432  | <b>640</b>  |
| BE-337 | <b>13</b>   | Γ-637   | <b>759</b>             | Γ-1441a | <b>640</b>  |
| BE-424 | <b>1037</b> | Γ-642   | <b>13</b>              | Γ-1441b | <b>640</b>  |
| BE-483 | <b>226</b>  | Γ-654   | <b>58</b>              | Γ-1452  | <b>255</b>  |
| BE-487 | <b>573</b>  | Γ-670   | <b>76</b>              | Γ-1456  | <b>33</b>   |
| BE-501 | <b>1037</b> | Γ-685   | <b>873</b>             | Γ-1463  | <b>939</b>  |
| BE-541 | <b>602</b>  | Γ-727   | <b>549</b>             | Γ-1467  | <b>946</b>  |
| BE-576 | <b>490</b>  | Γ-781   | <b>504</b>             | Γ-1481  | <b>831</b>  |
| BZ-29  | <b>728</b>  | Γ-806a  | <b>839</b>             | Γ-1481a | <b>682</b>  |
| BZ-73  | <b>955</b>  | Γ-873   | <b>618</b>             | Γ-1482  | <b>272</b>  |
| BZ-165 | <b>1038</b> | Γ-912   | <b>541</b>             | Γ-1522  | <b>856</b>  |
| Γ-2    | <b>731</b>  | Γ-963   | <b>147</b>             | Γ-1565  | <b>829</b>  |
| Γ-98   | <b>968</b>  | Γ-964a  | <b>440</b>             | Γ-1568  | <b>757</b>  |
| Γ-110  | <b>106</b>  | Γ-969   | <b>612</b>             | Γ-1584  | <b>802</b>  |
| Γ-121  | <b>956</b>  | Γ-981   | <b>57</b>              | Γ-1605  | <b>106</b>  |
| Γ-124  | <b>709</b>  | Γ-1036  | <b>862</b>             | Γ-1608  | <b>788</b>  |
| Γ-137  | <b>37</b>   | Γ-1038  | <b>154</b>             | Γ-1611a | <b>98</b>   |
| Γ-140  | <b>99</b>   | Γ-1043  | <b>118</b>             | Γ-1612  | <b>984</b>  |
| Γ-149  | <b>50</b>   | Γ-1045  | <b>127</b>             | Γ-1612a | <b>824</b>  |
| Γ-153  | <b>156</b>  | Γ-1054a | <b>135</b>             | Γ-1617a | <b>551</b>  |
| Γ-158  | <b>483</b>  | Γ-1054b | <b>135</b>             | Γ-1630  | <b>99</b>   |
| Γ-164  | <b>595</b>  | Γ-1055  | <b>605</b>             | ΓΓ-4    | <b>667</b>  |
| Γ-170  | <b>137</b>  | Γ-1056  | <b>127</b>             | ΓΓ-5    | <b>449</b>  |
| Γ-171  | <b>441</b>  | Γ-1059  | <b>135</b>             | ΓΓ-8    | <b>81</b>   |
| Γ-208  | <b>101</b>  | Γ-1063  | <b>613</b>             | ΓΓ-14   | <b>141</b>  |
| Γ-242  | <b>94</b>   | Γ-1064  | <b>133</b>             | ΓΓ-18   | <b>147</b>  |
| Γ-279  | <b>284</b>  | Γ-1068  | <b>131</b>             | ΓΓ-23   | <b>595</b>  |
| Γ-291  | <b>692</b>  | Γ-1080  | <b>135</b>             | ΓΓ-26   | <b>1016</b> |
| Γ-301  | <b>644</b>  | Γ-1082  | <b>799</b>             | ΓΓ-37   | <b>44</b>   |
| Γ-302  | <b>226</b>  | Γ-1084  | <b>117</b>             | ΓΓ-38   | <b>194</b>  |
| Γ-325  | <b>57</b>   | Γ-1088  | <b>1037</b>            | ΓΓ-44   | <b>645A</b> |
| Γ-326  | <b>111</b>  | Γ-1098  | <b>507</b>             | ΓΓ-47   | <b>409</b>  |
| Γ-354  | <b>76</b>   | Γ-1099  | <b>478</b>             | ΓΓ-49   | <b>902</b>  |
| Γ-359  | <b>806</b>  | Γ-1105  | <b>685</b>             | ΓΓ-65   | <b>835</b>  |
| Γ-368  | <b>308</b>  | Γ-1110  | <b>507</b>             | ΓΓ-69   | <b>629</b>  |
| Γ-376  | <b>739</b>  | Γ-1122  | <b>1034</b>            | ΓΓ-77   | <b>944</b>  |
| Γ-381  | <b>53</b>   | Γ-1150b | <b>158</b>             | ΓΓ-87   | <b>188</b>  |
| Γ-384  | <b>953</b>  | Γ-1197  | <b>793</b>             | ΓΓ-94   | <b>129</b>  |
| Γ-391  | <b>67</b>   | Γ-1204  | <b>150</b>             | ΓΓ-95   | <b>1000</b> |
| Γ-393  | <b>971</b>  | Γ-1205  | <b>680</b>             | ΓΓ-97   | <b>52</b>   |
| Γ-396  | <b>857</b>  | Γ-1208  | <b>46</b>              | ΓΓ-99   | <b>234</b>  |
| Γ-404  | <b>176</b>  | Γ-1222  | <b>[64, 66, or 68]</b> | ΓΓ-101  | <b>142</b>  |

|         |                            |        |                            |         |                |
|---------|----------------------------|--------|----------------------------|---------|----------------|
| ΓΓ-108  | <b>593</b>                 | ΔΔ-22  | <b>811</b>                 | E-1299  | <b>113</b>     |
| ΓΓ-110  | <b>616</b>                 | ΔΔ-39  | <b>81</b>                  | E-1325  | <b>480</b>     |
| ΓΓ-122  | <b>694</b>                 | ΔΔ-50  | <b>38</b>                  | E-1365  | <b>16</b>      |
| ΓΓ-151  | <b>97</b>                  | ΔΔ-51  | <b>944</b>                 | E-1456  | <b>942</b>     |
| ΓΓ-181  | <b>152</b>                 | ΔΔ-55  | <b>54</b>                  | E-1463  | <b>38</b>      |
| ΓΓ-187  | <b>502</b>                 | ΔΔ-61  | <b>383</b>                 | E-1484  | <b>868</b>     |
| ΓΓ-191  | <b>1002</b>                | ΔΔ-63  | <b>68</b>                  | E-1494  | <b>615</b>     |
| ΓΓ-225  | <b>944</b>                 | ΔΔ-72  | <b>632</b>                 | E-1553a | <b>764</b>     |
| ΓΓ-258  | [115–126, etc.],<br>p. 110 | ΔΔ-80  | <b>64</b>                  | E-1610  | <b>71</b>      |
|         |                            | ΔΔ-81  | <b>74</b>                  | E-1611  | <b>614</b>     |
| ΓΓ-268  | <b>473</b>                 | ΔΔ-82  | <b>1009</b>                | E-1685  | <b>677</b>     |
| ΓΓ-285  | [149, 151]                 | ΔΔ-90  | <b>632</b>                 | E-1703  | <b>10</b>      |
| ΓΓ-291a | <b>791</b>                 | ΔΔ-91  | <b>632</b>                 | E-1787  | <b>903</b>     |
| ΓΓ-301  | <b>132</b>                 | ΔΔ-92  | <b>632</b>                 | E-1917  | <b>55</b>      |
| ΓΓ-348  | <b>507</b>                 | ΔΔ-93  | <b>632</b>                 | E-1946  | <b>497</b>     |
| ΓΓ-420  | <b>53</b>                  | ΔΔ-94  | <b>632</b>                 | E-2024  | <b>211</b>     |
| Δ-3     | <b>704</b>                 | ΔΔ-95  | <b>632</b>                 | E-2122  | <b>163</b>     |
| Δ-9     | <b>76</b>                  | ΔΔ-96  | <b>632</b>                 | E-2175  | <b>13</b>      |
| Δ-26    | <b>454</b>                 | ΔE-1   | <b>695</b>                 | E-2249  | <b>151</b>     |
| Δ-31    | <b>46</b>                  | ΔE-6   | <b>571</b>                 | E-2334  | <b>226</b>     |
| Δ-67    | <b>138</b>                 | ΔE-10  | <b>126</b>                 | E-2368  | <b>985</b>     |
| Δ-94    | <b>703</b>                 | ΔE-14  | <b>208</b>                 | E-2406  | <b>48</b>      |
| Δ-137   | <b>147</b>                 | E-24   | <b>144</b>                 | E-2410  | <b>620</b>     |
| Δ-155   | <b>618</b>                 | E-65a  | <b>979</b>                 | E-2420  | <b>16</b>      |
| Δ-163   | <b>142</b>                 | E-91   | <b>455A</b>                | E-2430  | <b>771</b>     |
| Δ-165   | <b>592</b>                 | E-155a | <b>555</b>                 | E-2450  | <b>97</b>      |
| Δ-169   | <b>101</b>                 | E-189  | <b>13</b>                  | E-2458  | <b>500</b>     |
| Δ-195a  | <b>432</b>                 | E-242  | <b>19</b>                  | E-2494  | <b>154</b>     |
| Δ-207   | <b>43</b>                  | E-260  | <b>152</b>                 | E-2499  | <b>152</b>     |
| Δ-208   | <b>39</b>                  | E-318  | <b>142</b>                 | EE-4    | <b>35</b>      |
| Δ-217   | <b>489</b>                 | E-356  | <b>488</b>                 | EE-22   | <b>666</b>     |
| Δ-222   | <b>8</b>                   | E-441  | [115–126, etc.],<br>p. 110 | EE-25   | <b>812</b>     |
| Δ-234   | <b>567</b>                 |        |                            | EE-30   | <b>425</b>     |
| Δ-244   | <b>53</b>                  | E-473  | <b>46</b>                  | EE-37   | <b>67</b>      |
| Δ-257   | <b>186</b>                 | E-474  | <b>99</b>                  | EE-40   | <b>91</b>      |
| Δ-267   | <b>41</b>                  | E-545  | <b>4</b>                   | EE-68   | <b>740</b>     |
| Δ-268   | <b>605</b>                 | E-548  | <b>100</b>                 | EE-78   | <b>1033</b>    |
| Δ-270   | [41–43]                    | E-551  | <b>959</b>                 | EA-15   | <b>1037</b>    |
| Δ-287   | <b>92</b>                  | E-562  | <b>13</b>                  | EA-182  | <b>840</b>     |
| Δ-293   | <b>19</b>                  | E-724  | <b>14</b>                  | EA-189  | <b>83</b>      |
| Δ-308a  | <b>778</b>                 | E-729  | <b>105</b>                 | EA-203  | <b>243</b>     |
| Δ-317   | <b>922</b>                 | E-803  | <b>631</b>                 | EA-215  | <b>699</b>     |
| Δ-322   | <b>22</b>                  | E-869  | <b>416</b>                 | EA-223  | <b>43</b>      |
| Δ-347   | <b>69</b>                  | E-887  | <b>564</b>                 | EA-320  | <b>488</b>     |
| Δ-347a  | <b>456</b>                 | E-988a | <b>457</b>                 | Z-1     | Appendix A     |
| Δ-356   | <b>64</b>                  | E-1053 | <b>112</b>                 | Z-27    | [115, 118–126] |
| Δ-416   | <b>69</b>                  | E-1104 | <b>14</b>                  | Z-147   | <b>761</b>     |
| Δ-422   | <b>103</b>                 | E-1148 | <b>828</b>                 | Z-275   | <b>39</b>      |
| Δ'-482a | <b>563</b>                 | E-1163 | <b>431</b>                 | Z-320   | <b>786</b>     |
| ΔΔ-4    | <b>226</b>                 | E-1206 | <b>29</b>                  | Z-344   | <b>803</b>     |
| ΔΔ-7a   | <b>482</b>                 | E-1245 | <b>553</b>                 | Z-393   | <b>377</b>     |
| ΔΔ-11   | <b>56</b>                  | E-1295 | <b>990</b>                 | Z-394   | <b>43</b>      |

|          |                            |           |             |        |             |
|----------|----------------------------|-----------|-------------|--------|-------------|
| Z-400    | <b>667</b>                 | Z-1716bis | <b>114</b>  | Z-2884 | <b>153</b>  |
| Z-412    | <b>771</b>                 | Z-1725    | <b>982</b>  | Z-2944 | <b>602</b>  |
| Z-415    | <b>357</b>                 | Z-1756a   | <b>484</b>  | Z-2964 | <b>620</b>  |
| Z-416    | <b>882</b>                 | Z-1895    | <b>140</b>  | Z-2986 | <b>55</b>   |
| Z-438    | <b>240</b>                 | Z-1922a   | <b>729</b>  | Z-2994 | <b>426</b>  |
| Z-457    | <b>832</b>                 | Z-1963    | <b>771</b>  | Z-2995 | <b>50</b>   |
| Z-461    | <b>466</b>                 | Z-1965    | <b>234</b>  | Z-3004 | <b>1037</b> |
| Z-470    | <b>701</b>                 | Z-1973    | <b>199</b>  | Z-3005 | <b>909</b>  |
| Z-475    | <b>635</b>                 | Z-1975    | <b>209</b>  | Z-3011 | <b>599</b>  |
| Z-517a   | <b>1007</b>                | Z-1979    | <b>365</b>  | Z-3303 | <b>964</b>  |
| Z-526    | <b>183</b>                 | Z-2032    | <b>907</b>  | ZZ-34  | <b>99</b>   |
| Z-605    | <b>776</b>                 | Z-2096    | <b>571</b>  | ZZ-35  | <b>133</b>  |
| Z-610bis | <b>101</b>                 | Z-2099    | <b>800</b>  | ZZ-95  | <b>297</b>  |
| Z-653    | <b>691</b>                 | Z-2126    | <b>1036</b> | ZZ-109 | <b>464</b>  |
| Z-671    | <b>12</b>                  | Z-2135a   | <b>448</b>  | ZZ-129 | <b>152</b>  |
| Z-680    | <b>133</b>                 | Z-2145    | <b>620</b>  | ZZ-135 | <b>618</b>  |
| Z-683    | <b>794A</b>                | Z-2198bis | <b>100</b>  | H-8    | <b>827</b>  |
| Z-699    | <b>226</b>                 | Z-2205    | <b>106</b>  | H-17   | <b>97</b>   |
| Z-733    | <b>241</b>                 | Z-2221    | <b>246</b>  | H-46   | <b>507</b>  |
| Z-767    | [115–126, etc.],<br>p. 110 | Z-2231    | <b>152</b>  | H-83   | <b>158</b>  |
| Z-833    | <b>29</b>                  | Z-2239    | <b>620</b>  | H-133  | <b>925</b>  |
| Z-902    | <b>797</b>                 | Z-2248    | <b>724</b>  | H-144  | <b>579</b>  |
| Z-904    | <b>153</b>                 | Z-2268    | <b>536</b>  | H-163  | <b>686</b>  |
| Z-917    | <b>155</b>                 | Z-2403    | <b>68</b>   | H-292  | <b>491</b>  |
| Z-939a   | <b>636</b>                 | Z-2416    | <b>184</b>  | H-416  | <b>234</b>  |
| Z-984a   | <b>940</b>                 | Z-2440    | <b>823</b>  | H-417a | <b>736</b>  |
| Z-1003   | <b>1038</b>                | Z-2541    | <b>12</b>   | H-421  | <b>34</b>   |
| Z-1020   | <b>667</b>                 | Z-2594    | <b>138</b>  | H-941  | <b>742</b>  |
| Z-1077   | [115–126, etc.],<br>p. 110 | Z-2617    | <b>13</b>   | H-1002 | <b>1017</b> |
| Z-1103   | <b>809</b>                 | Z-2643    | <b>789</b>  | H-1112 | <b>721</b>  |
| Z-1108   | <b>143</b>                 | Z-2644bis | <b>85</b>   | H-1148 | <b>21</b>   |
| Z-1113   | <b>157</b>                 | Z-2661    | <b>638</b>  | H-1234 | <b>424</b>  |
| Z-1118   | <b>507</b>                 | Z-2711    | <b>69</b>   | H-1380 | <b>632</b>  |
| Z-1147   | <b>223</b>                 | Z-2716    | <b>182</b>  | H-1439 | [157, 158]  |
| Z-1180   | <b>725</b>                 | Z-2723    | <b>103</b>  | H-1465 | <b>16</b>   |
| Z-1182   | [115, 118–126]             | Z-2738    | <b>86</b>   | H-1466 | <b>16</b>   |
| Z-1190   | <b>895</b>                 | Z-2743    | <b>102</b>  | H-1544 | <b>691</b>  |
| Z-1196   | [157, 158]                 | Z-2750    | <b>67</b>   | H-1568 | <b>538</b>  |
| Z-1214   | <b>393</b>                 | Z-2759    | <b>223</b>  | H-1714 | <b>917</b>  |
| Z-1273   | <b>1038</b>                | Z-2767    | <b>828</b>  | H-1718 | <b>144</b>  |
| Z-1366   | <b>796</b>                 | Z-2769    | <b>76</b>   | H-1725 | <b>16</b>   |
| Z-1398   | <b>67</b>                  | Z-2781    | <b>78</b>   | H-1757 | <b>619</b>  |
| Z-1408   | <b>332</b>                 | Z-2785    | <b>19</b>   | H-1761 | <b>705</b>  |
| Z-1506   | <b>73</b>                  | Z-2798a   | <b>580</b>  | H-1777 | <b>871</b>  |
| Z-1511   | <b>1038</b>                | Z-2804    | <b>827</b>  | H-1810 | <b>1037</b> |
| Z-1528   | <b>114</b>                 | Z-2812    | <b>67</b>   | H-1887 | <b>158</b>  |
| Z-1538   | <b>153</b>                 | Z-2835    | <b>954</b>  | H-1907 | <b>550</b>  |
| Z-1581   | <b>268</b>                 | Z-2837    | <b>828</b>  | H-1935 | <b>16</b>   |
| Z-1687   | <b>221</b>                 | Z-2852    | <b>110</b>  | H-1936 | <b>16</b>   |
| Z-1695   | <b>477</b>                 | Z-2854    | <b>455A</b> | H-1937 | <b>16</b>   |
|          |                            | Z-2856    | <b>65</b>   | H-1938 | <b>16</b>   |
|          |                            | Z-2869    | <b>3</b>    | H-1962 | <b>16</b>   |



|            |         |        |                |          |                            |
|------------|---------|--------|----------------|----------|----------------------------|
| H-2024     | 16      | HH-283 | 613            | Θ-672    | 153                        |
| H-2099     | 75      | HH-322 | 614            | Θ-696    | 596                        |
| H-2134     | 16      | Θ-24   | 819            | Θ-714    | 85                         |
| H-2151a    | 1024    | Θ-69   | 676            | Θ-737    | 35                         |
| H-2164     | 16      | Θ-94   | 51             | Θ-768    | 151                        |
| H-2165     | 16      | Θ-114  | 100            | Θ-785    | 56                         |
| H-2166     | 16      | Θ-148  | 84             | Θ-787    | 44                         |
| H-2186     | 58      | Θ-150  | 44             | Θ-792bis | 85                         |
| H-2190     | 510     | Θ-166  | 1009           | Θ-857    | 542                        |
| H-2192     | 658     | Θ-174  | 89             | Θ-949    | 195                        |
| H'-2245    | 44      | Θ-182  | 1038           | Θ-991    | 99                         |
| H'-2247    | 50      | Θ-189  | 507            | Θ-994    | 452                        |
| H'-2326    | 507     | Θ-206  | 45             | Θ-999    | 871                        |
| H'-2337    | 29      | Θ-218  | 35             | ΘΘ-6     | 509                        |
| H'-2357    | 153     | Θ-231  | 73             | ΘΘ-25    | [115–126, etc.],<br>p. 110 |
| H'-2504    | 19      | Θ-237  | 82             |          |                            |
| H'-2602    | 935     | Θ-240  | 79             | ΘΘ-123   | 790                        |
| H'-2627a   | 13      | Θ-242  | 541            | I-1      | 1028                       |
| H'-2682    | 428     | Θ-269  | 46             | I-50     | 165                        |
| H'-2742a   | 989     | Θ-272  | 721            | I-52     | 783                        |
| H'-2755    | 749     | Θ-274  | [41–43]        | I-57     | 457                        |
| H'-2817    | 171     | Θ-288  | 580            | I-110    | 616                        |
| H'-2901    | 38      | Θ-291  | 958            | I-143a   | 694                        |
| H'-2939    | 944     | Θ-296  | 69             | I-168    | 540                        |
| H'-3178a   | 867     | Θ-309  | 991            | I-227    | 532                        |
| H'-3181    | 38      | Θ-314  | 65             | I-312    | 84                         |
| H'-3273    | 38      | Θ-335  | 588            | I-320    | [115, 118–126]             |
| H'-3296bis | 136     | Θ-336  | 849            | I-328    | 611                        |
| H'-3298    | 645     | Θ-345  | 464            | I-487    | 532                        |
| H'-3301    | 616     | Θ-351  | 817            | I-488a   | 1025                       |
| H'-3347    | 32      | Θ-352  | 541            | I-502a   | 796                        |
| H'-3379    | 240     | Θ-354  | 667            | I-509    | 298                        |
| H'-3439    | 544     | Θ-357  | 300            | I-559    | 406                        |
| H'-3542    | 580     | Θ-370a | 456            | I-560    | 375                        |
| H'-3562    | 577     | Θ-373  | 836            | I-567    | 582                        |
| H'-3565    | 649     | Θ-375  | 64             | I-593    | 359                        |
| H'-3600    | 129     | Θ-384  | 76             | I-650    | 259                        |
| H'-3619    | 679     | Θ-390  | 637            | I-696    | 906                        |
| H'-3647    | 407     | Θ-396  | 45             | I-768    | 319                        |
| H'-3648    | 69      | Θ-399  | 613            | I-796    | 387                        |
| H'-3678    | 707     | Θ-401  | 670            | I-799    | 119                        |
| H'-3726    | 997     | Θ-403  | 53             | I-812    | 575                        |
| H'-3758    | 721     | Θ-414  | 847            | I-846    | 95                         |
| H'-3811    | 973     | Θ-426  | [115, 118–126] | I-855    | 75                         |
| H'-3850    | 21      | Θ-450  | 723A           | I-894    | 667                        |
| H'-3859    | 8       | Θ-462  | 551            | I-895    | 948                        |
| HH-26      | 143     | Θ-499  | 167            | I-925    | 974                        |
| HH-27      | [41–43] | Θ-505  | 455            | I-969    | 39                         |
| HH-60      | 93      | Θ-534  | 67             | I-970    | 354                        |
| HH-77      | 152     | Θ-624  | 10             | I-983a   | 996                        |
| HH-217     | 79      | Θ-637  | 68             | I-1034   | 744                        |
| HH-222     | 67      | Θ-657  | 455A           | I-1036   | 364                        |

|         |                  |         |                   |        |                       |
|---------|------------------|---------|-------------------|--------|-----------------------|
| I-1043  | <b>248</b>       | K-154   | <b>568</b>        | K-1301 | <b>46</b>             |
| I-1047  | <b>719</b>       | K-176   | <b>459</b>        | K-1307 | <b>507</b>            |
| I-1055  | <b>947</b>       | K-201   | <b>143</b>        | K-1310 | <b>646</b>            |
| I-1115a | <b>1032</b>      | K-269   | <b>67</b>         | K-1317 | <b>97</b>             |
| I-1209  | <b>524</b>       | K-290   | <b>49</b>         | K-1320 | <b>592</b>            |
| I-1235  | <b>631</b>       | K-294   | <b>519</b>        | K-1322 | <b>71</b>             |
| I-1257a | <b>694</b>       | K-299   | <b>722</b>        | K-1327 | <b>[78–80]</b>        |
| I-1262  | <b>265</b>       | K-326   | <b>[636]</b>      | K-1356 | <b>19</b>             |
| I-1324  | <b>412</b>       | K-360   | <b>102</b>        | K-1387 | <b>488</b>            |
| I-1336  | <b>[248–283]</b> | K-366   | <b>[149, 151]</b> | K-1388 | <b>30</b>             |
| I-1344  | <b>5</b>         | K-367   | <b>217</b>        | K-1398 | <b>179</b>            |
| I-1400  | <b>358</b>       | K-401   | <b>43</b>         | K-1415 | <b>[149, 151]</b>     |
| I-1420  | <b>301</b>       | K-433a  | <b>602</b>        | K-1422 | <b>958</b>            |
| I-1458  | <b>105</b>       | K-476   | <b>[149, 151]</b> | K-1428 | <b>43</b>             |
| I-1483  | <b>156</b>       | K-520   | <b>102</b>        | K-1452 | <b>379</b>            |
| I-1520  | <b>361</b>       | K-552   | <b>855</b>        | K-1458 | <b>89</b>             |
| I-1537  | <b>152</b>       | K-584   | <b>138</b>        | K-1466 | <b>81</b>             |
| I-1550  | <b>881</b>       | K-587   | <b>131</b>        | K-1467 | <b>540</b>            |
| I-1590  | <b>446</b>       | K-645a  | <b>419</b>        | K-1469 | <b>600</b>            |
| I-1592  | <b>880</b>       | K-772   | <b>44</b>         | K-1477 | <b>1035</b>           |
| I-1603  | <b>912</b>       | K-779   | <b>972</b>        | K-1482 | <b>382</b>            |
| I-1607  | <b>164</b>       | K-801   | <b>999</b>        | K-1487 | <b>141</b>            |
| I-1635  | <b>585</b>       | K-830   | <b>782</b>        | K-1496 | <b>620</b>            |
| I-1664  | <b>154</b>       | K-841   | <b>944</b>        | K-1497 | <b>1037</b>           |
| II-6    | <b>504</b>       | K-861   | <b>1008</b>       | K-1505 | <b>489</b>            |
| II-8    | <b>832</b>       | K-882   | <b>1009</b>       | K-1518 | <b>[115, 118–126]</b> |
| II-28   | <b>38</b>        | K-898   | <b>12</b>         | K-1536 | <b>790</b>            |
| II-66   | <b>672</b>       | K-907   | <b>629</b>        | K-1549 | <b>81</b>             |
| II-243  | <b>175</b>       | K-937   | <b>620</b>        | K-1551 | <b>980</b>            |
| II-247  | <b>158</b>       | K-939   | <b>12</b>         | K-1558 | <b>457</b>            |
| II-289  | <b>89</b>        | K-975a  | <b>931</b>        | K-1562 | <b>774</b>            |
| II-353a | <b>865</b>       | K-981   | <b>86</b>         | K-1568 | <b>1037</b>           |
| II-419  | <b>938</b>       | K-1004  | <b>507</b>        | K-1586 | <b>667</b>            |
| II-447  | <b>591</b>       | K-1022  | <b>634</b>        | K-1592 | <b>136</b>            |
| II-453  | <b>112</b>       | K-1028  | <b>108</b>        | K-1603 | <b>149</b>            |
| II-489  | <b>64</b>        | K-1036  | <b>140</b>        | K-1610 | <b>71</b>             |
| II-510  | <b>10</b>        | K-1054  | <b>13</b>         | K-1616 | <b>50</b>             |
| II-582  | <b>559</b>       | K-1073  | <b>451</b>        | K-1622 | <b>[82–84, 90–97]</b> |
| II-592  | <b>13</b>        | K-1086  | <b>721</b>        | K-1630 | <b>115</b>            |
| II-615  | <b>68</b>        | K-1176  | <b>1001</b>       | K-1633 | <b>312</b>            |
| II-616  | <b>99</b>        | K-1184  | <b>863</b>        | K-1647 | <b>64</b>             |
| II-629  | <b>59</b>        | K-1190  | <b>130</b>        | K-1676 | <b>1006</b>           |
| II-644  | <b>229</b>       | K-1198  | <b>106</b>        | K-1687 | <b>122</b>            |
| II-650  | <b>476</b>       | K-1211  | <b>107</b>        | K-1692 | <b>160</b>            |
| K-7     | <b>475</b>       | K-1254  | <b>142</b>        | K-1702 | <b>50</b>             |
| K-8     | <b>974</b>       | K-1255  | <b>106</b>        | K-1730 | <b>25</b>             |
| K-38    | <b>606</b>       | K-1262a | <b>99</b>         | K-1756 | <b>490</b>            |
| K-39    | <b>86</b>        | K-1264  | <b>94</b>         | K-1759 | <b>103</b>            |
| K-83    | <b>788</b>       | K-1282  | <b>607</b>        | K-1770 | <b>48</b>             |
| K-92    | <b>983</b>       | K-1284  | <b>102</b>        | K-1796 | <b>515</b>            |
| K-125   | <b>151</b>       | K-1294  | <b>69</b>         | K-1821 | <b>251</b>            |
| K-138a  | <b>628</b>       | K-1298  | <b>75</b>         | KK-9   | <b>661</b>            |

|           |                       |        |                          |        |            |
|-----------|-----------------------|--------|--------------------------|--------|------------|
| KK-9bis   | <b>131</b>            | Λ-119  | <b>775</b>               | ΛΛ-505 | <b>859</b> |
| KK-12     | <b>[157, 158]</b>     | Λ-164  | <b>152</b>               | ΛΛ-540 | <b>153</b> |
| KK-14     | <b>126</b>            | Λ-190  | <b>149</b>               | M-36   | <b>229</b> |
| KK-27     | <b>821</b>            | Λ-210a | <b>507</b>               | M-78a  | <b>934</b> |
| KK-29bis  | <b>135</b>            | Λ-214  | <b>42</b>                | M-94   | <b>634</b> |
| KK-59     | <b>120</b>            | Λ-224  | <b>618</b>               | M-107  | <b>97</b>  |
| KK-65     | <b>153</b>            | Λ-225  | <b>812</b>               | M-129  | <b>12</b>  |
| KK-67     | <b>82</b>             | Λ-229  | <b>646</b>               | M-140  | <b>283</b> |
| KK-82a    | <b>636</b>            | Λ-265  | <b>4</b>                 | M-141  | <b>967</b> |
| KK-114    | <b>237</b>            | Λ-283  | <b>504</b>               | M-191  | <b>367</b> |
| KK-134    | <b>52</b>             | Λ-291  | <b>478</b>               | M-193  | <b>363</b> |
| KK-149    | <b>138</b>            | Λ-315  | <b>516</b>               | M-208  | <b>227</b> |
| KK-166    | <b>1037</b>           | Λ-400  | <b>53</b>                | M-209  | <b>644</b> |
| KK-208'   | <b>779</b>            | Λ-405  | <b>751</b>               | M-282  | <b>124</b> |
| KK-209a   | <b>702</b>            | Λ-410  | <b>50</b>                | M-353  | <b>122</b> |
| KK-231    | <b>152</b>            | Λ-414  | <b>75</b>                | M-430  | <b>571</b> |
| KK-244    | <b>678</b>            | Λ-415  | <b>488</b>               | MM-23  | <b>492</b> |
| KK-267    | <b>536</b>            | Λ-417  | <b>44</b>                | MM-26  | <b>898</b> |
| KK-278a   | <b>851</b>            | Λ-419  | <b>22</b>                | MM-27  | <b>853</b> |
| KK-282    | <b>128</b>            | ΛΛ-30  | <b>640</b>               | MM-36  | <b>244</b> |
| KK-300    | <b>276</b>            | ΛΛ-50  | <b>60</b>                | MM-83  | <b>48</b>  |
| KK-331    | <b>618</b>            | ΛΛ-54  | <b>[115–126, etc.]</b> , | MM-104 | <b>678</b> |
| KK-359    | <b>137</b>            |        | p. 110                   | MM-136 | <b>687</b> |
| KK-419bis | <b>113</b>            | ΛΛ-64  | <b>538</b>               | MM-139 | <b>257</b> |
| KK-435    | <b>247</b>            | ΛΛ-73  | <b>161</b>               | MM-150 | <b>476</b> |
| KK-461    | <b>10</b>             | ΛΛ-110 | <b>783</b>               | MM-172 | <b>963</b> |
| KK-523    | <b>520</b>            | ΛΛ-126 | <b>418</b>               | MM-193 | <b>152</b> |
| KK-538    | <b>621</b>            | ΛΛ-161 | <b>693</b>               | MM-346 | <b>157</b> |
| KTA-2     | <b>541</b>            | ΛΛ-167 | <b>528</b>               | MM-366 | <b>808</b> |
| KTA-15    | <b>151</b>            | ΛΛ-178 | <b>167</b>               | MM-378 | <b>69</b>  |
| KTA-17    | <b>692</b>            | ΛΛ-185 | <b>10</b>                | MM-430 | <b>69</b>  |
| KTA-19    | <b>589</b>            | ΛΛ-222 | <b>613</b>               | MM-446 | <b>248</b> |
| KTA-51    | <b>163</b>            | ΛΛ-247 | <b>139</b>               | MM-485 | <b>95</b>  |
| KTA-57    | <b>52</b>             | ΛΛ-254 | <b>117</b>               | MM-500 | <b>162</b> |
| KTA-105   | <b>84</b>             | ΛΛ-256 | <b>163</b>               | MM-505 | <b>144</b> |
| KTA-106   | <b>616</b>            | ΛΛ-260 | <b>727</b>               | MΣ-14  | <b>84</b>  |
| KTA-109   | <b>888</b>            | ΛΛ-263 | <b>[115–126, etc.]</b> , | MΣ-20  | <b>53</b>  |
| KTA-115   | <b>13</b>             |        | p. 110                   | MΣ-31  | <b>455</b> |
| KTA-117   | <b>280</b>            | ΛΛ-268 | <b>995</b>               | MΣ-35  | <b>43</b>  |
| KTA-120   | <b>1010</b>           | ΛΛ-271 | <b>56</b>                | MΣ-53  | <b>663</b> |
| KTA-121   | <b>988</b>            | ΛΛ-276 | <b>84</b>                | MΣ-57  | <b>662</b> |
| KTA-123   | <b>518</b>            | ΛΛ-278 | <b>160</b>               | MΣ-58  | <b>70</b>  |
| KTA-130   | <b>632</b>            | ΛΛ-285 | <b>143</b>               | MΣ-64  | <b>141</b> |
| Λ-1       | <b>38</b>             | ΛΛ-295 | <b>43</b>                | MΣ-67  | <b>62</b>  |
| Λ-9       | <b>38</b>             | ΛΛ-298 | <b>520</b>               | MΣ-99  | <b>743</b> |
| Λ-11      | <b>527</b>            | ΛΛ-299 | <b>115</b>               | MΣ-131 | <b>85</b>  |
| Λ-20      | <b>[82–84, 90–97]</b> | ΛΛ-300 | <b>463</b>               | MΣ-136 | <b>496</b> |
| Λ-44      | <b>713</b>            | ΛΛ-328 | <b>75</b>                | MΣ-157 | <b>14</b>  |
| Λ-56      | <b>263</b>            | ΛΛ-365 | <b>160</b>               | MΣ-169 | <b>55</b>  |
| Λ-72bis   | <b>135</b>            | ΛΛ-387 | <b>222</b>               | MΣ-176 | <b>49</b>  |
| Λ-73      | <b>124</b>            | ΛΛ-404 | <b>153</b>               | MΣ-186 | <b>48</b>  |
| Λ-94      | <b>89</b>             | ΛΛ-488 | <b>139</b>               | MΣ-192 | <b>643</b> |

|         |                   |          |             |          |                       |
|---------|-------------------|----------|-------------|----------|-----------------------|
| MΣ-204  | <b>487</b>        | N'-1290  | <b>281</b>  | NN-833   | <b>409</b>            |
| MΣ-212  | <b>916</b>        | N'-1315a | <b>845</b>  | NN-841   | <b>305</b>            |
| MΣ-216  | <b>66</b>         | N'-1321  | <b>20</b>   | NN-857   | <b>828</b>            |
| MΣ-230  | <b>82</b>         | N'-1342  | <b>220</b>  | NN-881   | <b>153</b>            |
| MΣ-238  | <b>50</b>         | N'-1343  | <b>626</b>  | NN-922   | <b>81</b>             |
| MΣ-249  | <b>51</b>         | N'-1360  | <b>640</b>  | NN-934   | <b>6</b>              |
| MΣ-261  | <b>69</b>         | NN-9     | <b>761</b>  | NN-935   | <b>828</b>            |
| MΣ-270  | <b>56</b>         | NN-20    | <b>97</b>   | NN-957   | <b>[82-84, 90-97]</b> |
| MΣ-295  | <b>752</b>        | NN-50    | <b>82</b>   | NN-963   | <b>301</b>            |
| MΣ-304  | <b>782</b>        | NN-57    | <b>847</b>  | NN-968   | <b>686</b>            |
| MΣ-315  | <b>67</b>         | NN-66    | <b>261</b>  | NN-969   | <b>508</b>            |
| MΣ-316  | <b>83</b>         | NN-84a   | <b>733</b>  | NN-978   | <b>590</b>            |
| MΣ-328  | <b>507</b>        | NN-113   | <b>966</b>  | NN-979   | <b>554</b>            |
| MΣ-327  | <b>53</b>         | NN-128   | <b>689</b>  | NN-987   | <b>136</b>            |
| MΣ-337  | <b>66</b>         | NN-131   | <b>504</b>  | NN-995   | <b>1004</b>           |
| MΣ-366  | <b>52</b>         | NN-139   | <b>579</b>  | NN-1004  | <b>[636]</b>          |
| N-2a    | <b>1019</b>       | NN-143   | <b>773</b>  | NN-1006  | <b>35</b>             |
| N-95a   | <b>1007</b>       | NN-163a  | <b>891</b>  | NN-1009  | <b>1016</b>           |
| N-96    | <b>629</b>        | NN-200   | <b>108</b>  | NN-1014  | <b>644</b>            |
| N-166   | <b>106</b>        | NN-201   | <b>1018</b> | NN-1036a | <b>450</b>            |
| N-202   | <b>368</b>        | NN-208   | <b>248</b>  | NN-1048  | <b>1000</b>           |
| N-230   | <b>634</b>        | NN-210   | <b>219</b>  | NN-1054  | <b>643</b>            |
| N-298   | <b>65</b>         | NN-217   | <b>229</b>  | NN-1066  | <b>153</b>            |
| N-316   | <b>430</b>        | NN-224   | <b>149</b>  | NN-1072  | <b>56</b>             |
| N-328   | <b>747</b>        | NN-263   | <b>743</b>  | NN-1074  | <b>12</b>             |
| N-339   | <b>146</b>        | NN-279   | <b>443</b>  | NN-1085  | <b>965</b>            |
| N-340   | <b>118</b>        | NN-322   | <b>95</b>   | NN-1088  | <b>614</b>            |
| N-372a  | <b>704</b>        | NN-328   | <b>43</b>   | NN-1106  | <b>593</b>            |
| N-429   | <b>686</b>        | NN-368   | <b>150</b>  | NN-1113  | <b>933</b>            |
| N-440   | <b>137</b>        | NN-404a  | <b>775</b>  | NN-1120  | <b>103</b>            |
| N-529   | <b>507</b>        | NN-439   | <b>892</b>  | NN-1121  | <b>469</b>            |
| N-581a  | <b>921</b>        | NN-447   | <b>723</b>  | NN-1122  | <b>760</b>            |
| N-583   | <b>87</b>         | NN-465   | <b>671</b>  | NN-1126  | <b>452</b>            |
| N-620   | <b>929</b>        | NN-474   | <b>107</b>  | NN-1151  | <b>883</b>            |
| N-663   | <b>138</b>        | NN-502   | <b>1037</b> | NN-1165  | <b>119</b>            |
| N-722   | <b>149</b>        | NN-524   | <b>139</b>  | NN-1205  | <b>124</b>            |
| N-723   | <b>245</b>        | NN-565   | <b>122</b>  | NN-1220  | <b>99</b>             |
| N-805   | <b>978</b>        | NN-569   | <b>160</b>  | NN-1243  | <b>67</b>             |
| N-813   | <b>138</b>        | NN-595   | <b>926</b>  | NN-1259  | <b>70</b>             |
| N-824   | <b>150</b>        | NN-618   | <b>844</b>  | NN-1283  | <b>410</b>            |
| N-833   | <b>[149, 151]</b> | NN-661   | <b>1000</b> | NN-1284  | <b>85</b>             |
| N-850   | <b>53</b>         | NN-666   | <b>408</b>  | NN-1285  | <b>137</b>            |
| N-899   | <b>107</b>        | NN-676   | <b>148</b>  | NN-1297  | <b>13</b>             |
| N-963   | <b>842</b>        | NN-679   | <b>142</b>  | NN-1299  | <b>110</b>            |
| N-976   | <b>651</b>        | NN-683   | <b>105</b>  | NN-1304  | <b>90</b>             |
| N-1112  | <b>143</b>        | NN-689   | <b>665</b>  | NN-1309  | <b>138</b>            |
| N-1113  | <b>934</b>        | NN-702   | <b>717</b>  | NN-1318  | <b>157</b>            |
| N-1116  | <b>435</b>        | NN-705   | <b>734</b>  | NN-1323  | <b>128</b>            |
| N-1120  | <b>1037</b>       | NN-743   | <b>645A</b> | NN-1334  | <b>167</b>            |
| N-1138  | <b>691</b>        | NN-781   | <b>57</b>   | NN-1369  | <b>593</b>            |
| N-1167  | <b>1009</b>       | NN-788   | <b>56</b>   | NN-1370  | <b>150</b>            |
| N'-1257 | <b>831</b>        | NN-816   | <b>150</b>  | NN-1372  | <b>82</b>             |

|          |             |          |                |        |                |
|----------|-------------|----------|----------------|--------|----------------|
| NN-1396  | <b>585</b>  | NN-1990  | <b>613</b>     | ΞΞ-2   | <b>318</b>     |
| NN-1401  | <b>85</b>   | NN-1992  | <b>540</b>     | ΞΞ-3a  | <b>490</b>     |
| NN-1445  | <b>10</b>   | NN-1994  | <b>819A</b>    | ΞΞ-4   | <b>659</b>     |
| NN-1455  | <b>509</b>  | NN-2004  | <b>38</b>      | ΞΞ-9a  | <b>1007</b>    |
| NN-1462  | <b>500</b>  | NN-2013  | <b>825</b>     | ΞΞ-16  | <b>641</b>     |
| NN-1484  | <b>613</b>  | NN-2015  | <b>197</b>     | ΞΞ-25a | <b>588</b>     |
| NN-1498  | <b>453</b>  | NN-2022  | <b>794</b>     | ΞΞ-25b | <b>588</b>     |
| NN-1546a | <b>138</b>  | NN-2024  | <b>645B</b>    | ΞΞ-26  | <b>56</b>      |
| NN-1556  | <b>103</b>  | NN-2035  | <b>62</b>      | ΞΞ-27  | <b>57</b>      |
| NN-1581  | <b>1014</b> | NN-2040  | <b>50</b>      | ΞΞ-28a | <b>57</b>      |
| NN-1585  | <b>507</b>  | NN-2046  | <b>493</b>     | ΞΞ-28b | <b>[57-60]</b> |
| NN-1586  | <b>65</b>   | NN-2053  | <b>109</b>     | ΞΞ-30  | <b>529</b>     |
| NN-1612  | <b>831</b>  | NN-2056  | <b>616</b>     | ΞΞ-31  | <b>644</b>     |
| NN-1625  | <b>35</b>   | NN-2062  | <b>756</b>     | ΞΞ-43a | <b>588</b>     |
| NN-1633  | <b>157</b>  | NN-2068  | <b>442</b>     | ΞΞ-43b | <b>588</b>     |
| NN-1642  | <b>539</b>  | NN-2071  | <b>46</b>      | ΞΞ-44d | <b>54</b>      |
| NN-1653  | <b>743</b>  | NN-2099  | <b>54</b>      | ΞΞ-45b | <b>55</b>      |
| NN-1656  | <b>103</b>  | NN-2103  | <b>613</b>     | ΞΞ-50  | <b>616</b>     |
| NN-1658  | <b>71</b>   | NN-2104  | <b>640</b>     | ΞΞ-63  | <b>505</b>     |
| NN-1665  | <b>933</b>  | NN-2104a | <b>521</b>     | ΞΞ-66  | <b>662</b>     |
| NN-1669  | <b>662</b>  | NN-2116  | <b>507</b>     | ΞΞ-70a | <b>53</b>      |
| NN-1686  | <b>489</b>  | NN-2120  | <b>11</b>      | ΞΞ-72  | <b>581</b>     |
| NN-1688  | <b>506</b>  | NN-2122  | <b>[41-43]</b> | ΞΞ-77d | <b>584</b>     |
| NN-1719  | <b>54</b>   | NN-2123  | <b>426</b>     | ΞΞ-78  | <b>502</b>     |
| NN-1730  | <b>944</b>  | NN-2135  | <b>13</b>      | ΞΞ-79  | <b>462</b>     |
| NN-1732  | <b>107</b>  | NN-2160  | <b>433</b>     | ΞΞ-82  | <b>422</b>     |
| NN-1741  | <b>644</b>  | NN-8777a | <b>979</b>     | ΞΞ-82a | <b>594</b>     |
| NN-1746  | <b>74</b>   | NSR-76   | <b>105</b>     | ΞΞ-84  | <b>15</b>      |
| NN-1754  | <b>643</b>  | Ξ-52     | <b>958</b>     | ΞΞ-99  | <b>874</b>     |
| NN-1786  | <b>1010</b> | Ξ-134    | <b>109</b>     | O-15   | <b>723</b>     |
| NN-1788  | <b>66</b>   | Ξ-207    | <b>587</b>     | O-39   | <b>618</b>     |
| NN-1789  | <b>9</b>    | Ξ-278    | <b>88</b>      | O-44   | <b>534</b>     |
| NN-1790  | <b>455</b>  | Ξ-289    | <b>226</b>     | O-78   | <b>1007</b>    |
| NN-1804  | <b>879</b>  | Ξ-292    | <b>144</b>     | O-86   | <b>71</b>      |
| NN-1828  | <b>588</b>  | Ξ-426    | <b>969</b>     | O-94   | <b>115</b>     |
| NN-1835  | <b>822</b>  | Ξ-428    | <b>344</b>     | O-102  | <b>115</b>     |
| NN-1836  | <b>932</b>  | Ξ-440    | <b>489</b>     | O-126  | <b>9</b>       |
| NN-1843  | <b>587</b>  | Ξ-465    | <b>152</b>     | O-137  | <b>530</b>     |
| NN-1845  | <b>54</b>   | Ξ-467    | <b>507</b>     | O-177  | <b>102</b>     |
| NN-1863  | <b>761</b>  | Ξ-518    | <b>584</b>     | O-196  | <b>783</b>     |
| NN-1871  | <b>645B</b> | Ξ-589    | <b>690</b>     | O-204  | <b>351</b>     |
| NN-1876  | <b>640</b>  | Ξ-598    | <b>85</b>      | O-239  | <b>1036</b>    |
| NN-1887  | <b>617</b>  | Ξ-681    | <b>227</b>     | O-323  | <b>536</b>     |
| NN-1888  | <b>1009</b> | Ξ-683    | <b>738</b>     | O-375  | <b>304</b>     |
| NN-1906  | <b>598</b>  | Ξ-706    | <b>427</b>     | O-416  | <b>780</b>     |
| NN-1937  | <b>944</b>  | Ξ-729    | <b>467</b>     | O-428  | <b>444</b>     |
| NN-1952  | <b>85</b>   | Ξ-734    | <b>381</b>     | O-429a | <b>951</b>     |
| NN-1953  | <b>626</b>  | Ξ-795    | <b>667</b>     | O-434  | <b>714</b>     |
| NN-1964  | <b>994</b>  | Ξ-802    | <b>299</b>     | O-440  | <b>579</b>     |
| NN-1966  | <b>645A</b> | Ξ-803    | <b>82</b>      | O-475  | <b>565</b>     |
| NN-1972  | <b>1013</b> | Ξ-825    | <b>770</b>     | O-528  | <b>789</b>     |
| NN-1979  | <b>58</b>   | ΞΞ-1a    | <b>515</b>     | O-583  | <b>1009</b>    |

|         |             |         |                       |         |                   |
|---------|-------------|---------|-----------------------|---------|-------------------|
| O-589   | <b>161</b>  | OO-543  | <b>1027</b>           | OO-1187 | <b>683</b>        |
| O-619   | <b>1036</b> | OO-546  | <b>975</b>            | OO-1196 | <b>335</b>        |
| O-629   | <b>951</b>  | OO-551  | <b>154</b>            | OO-1203 | <b>224</b>        |
| O-635   | <b>170</b>  | OO-563  | <b>485</b>            | OO-1210 | <b>667</b>        |
| O-647   | <b>727</b>  | OO-597a | <b>807</b>            | OO-1215 | <b>[149, 151]</b> |
| OA-15   | <b>870</b>  | OO-618  | <b>147</b>            | OO-1222 | <b>103</b>        |
| OA-125  | <b>163</b>  | OO-619  | <b>269</b>            | OO-1228 | <b>210</b>        |
| OA-181  | <b>721</b>  | OO-621  | <b>1009</b>           | OO-1230 | <b>153</b>        |
| OA-217  | <b>928</b>  | OO-673  | <b>571</b>            | OO-1246 | <b>492</b>        |
| OA-219  | <b>283</b>  | OO-683  | <b>672</b>            | OO-1248 | <b>152</b>        |
| OA-220  | <b>13</b>   | OO-698  | <b>545</b>            | OO-1261 | <b>847</b>        |
| OA-245  | <b>878</b>  | OO-705  | <b>1030</b>           | OO-1263 | <b>1037</b>       |
| OA-259  | <b>99</b>   | OO-726a | <b>556</b>            | OO-1276 | <b>1036</b>       |
| OA-270a | <b>957</b>  | OO-729a | <b>970</b>            | OO-1286 | <b>1031</b>       |
| OA-275  | <b>110</b>  | OO-742  | <b>683</b>            | OO-1330 | <b>622</b>        |
| OA-290  | <b>905</b>  | OO-750  | <b>613</b>            | OO-1343 | <b>501</b>        |
| OE-42   | <b>59</b>   | OO-771  | <b>1036</b>           | OO-1376 | <b>197</b>        |
| OE-43   | <b>45</b>   | OO-799  | <b>608</b>            | OO-1379 | <b>620</b>        |
| OO-14   | <b>540</b>  | OO-814  | <b>15</b>             | OO-1424 | <b>860</b>        |
| OO-35   | <b>182</b>  | OO-815  | <b>59</b>             | OO-1479 | <b>458</b>        |
| OO-50   | <b>718</b>  | OO-826  | <b>181</b>            | OO-1480 | <b>153</b>        |
| OO-51   | <b>798</b>  | OO-848  | <b>724</b>            | OO-1481 | <b>621</b>        |
| OO-97a  | <b>823</b>  | OO-865  | <b>769</b>            | OO-1486 | <b>115</b>        |
| OO-173  | <b>1000</b> | OO-875  | <b>1009</b>           | OO-1499 | <b>981</b>        |
| OO-220  | <b>897</b>  | OO-934  | <b>439</b>            | OO-1506 | <b>172</b>        |
| OO-246  | <b>28</b>   | OO-945  | <b>944</b>            | OO-1586 | <b>144</b>        |
| OO-256  | <b>993</b>  | OO-948  | <b>586</b>            | OX-9    | <b>[133, 134]</b> |
| OO-263  | <b>111</b>  | OO-956  | <b>135</b>            | Π-2     | <b>777</b>        |
| OO-269  | <b>203</b>  | OO-982  | <b>737</b>            | Π-8     | <b>149</b>        |
| OO-270  | <b>166</b>  | OO-986  | <b>772</b>            | Π-10    | <b>39</b>         |
| OO-272  | <b>712</b>  | OO-1011 | <b>485</b>            | Π-30    | <b>924</b>        |
| OO-273  | <b>602</b>  | OO-1013 | <b>221</b>            | Π-59    | <b>581</b>        |
| OO-290  | <b>531</b>  | OO-1032 | <b>43</b>             | Π-148a  | <b>813</b>        |
| OO-305  | <b>507</b>  | OO-1039 | <b>1016</b>           | Π-173   | <b>689</b>        |
| OO-320a | <b>552</b>  | OO-1043 | <b>633</b>            | Π-240   | <b>62</b>         |
| OO-327  | <b>507</b>  | OO-1045 | <b>640</b>            | Π-265   | <b>149</b>        |
| OO-332  | <b>54</b>   | OO-1051 | <b>496</b>            | Π-289   | <b>215</b>        |
| OO-338  | <b>504</b>  | OO-1054 | <b>929</b>            | Π-293   | <b>686</b>        |
| OO-363  | <b>871</b>  | OO-1069 | <b>99</b>             | Π-304   | <b>674</b>        |
| OO-385  | <b>887</b>  | OO-1075 | <b>643</b>            | Π-330   | <b>648</b>        |
| OO-412  | <b>613</b>  | OO-1089 | <b>77</b>             | Π-347   | <b>157</b>        |
| OO-431  | <b>394</b>  | OO-1105 | <b>[149, 151]</b>     | Π-420   | <b>99</b>         |
| OO-447  | <b>601</b>  | OO-1116 | <b>143</b>            | Π-447   | <b>828</b>        |
| OO-453  | <b>140</b>  | OO-1121 | <b>19</b>             | Π-464   | <b>662</b>        |
| OO-454  | <b>818</b>  | OO-1127 | <b>119</b>            | Π-473   | <b>138</b>        |
| OO-461  | <b>38</b>   | OO-1134 | <b>18</b>             | Π-507   | <b>42</b>         |
| OO-468  | <b>102</b>  | OO-1141 | <b>59, see p. 171</b> | Π-525   | <b>488</b>        |
| OO-473  | <b>910</b>  | OO-1142 | <b>421</b>            | Π-532   | <b>525</b>        |
| OO-476  | <b>790</b>  | OO-1147 | <b>159A</b>           | Π-536   | <b>592</b>        |
| OO-510  | <b>55</b>   | OO-1149 | <b>19</b>             | Π-569   | <b>12</b>         |
| OO-528  | <b>81</b>   | OO-1152 | <b>71</b>             | Π-571   | <b>784</b>        |
| OO-533a | <b>876</b>  | OO-1160 | <b>962</b>            | Π-602   | <b>128</b>        |

|        |                                     |         |                         |         |             |
|--------|-------------------------------------|---------|-------------------------|---------|-------------|
| Π-651  | <b>541</b>                          | ΠΘ-143  | <b>149</b>              | ΠΘ-632  | <b>855</b>  |
| Π-667  | <b>73</b>                           | ΠΘ-146  | <b>38</b>               | ΠΘ-636  | <b>727</b>  |
| Π-702  | <b>107</b>                          | ΠΘ-149  | <b>91</b>               | ΠΘ-644  | <b>616</b>  |
| Π-741  | [ <b>115–126</b> , etc.],<br>p. 110 | ΠΘ-156  | <b>161</b>              | ΠΘ-649  | <b>35</b>   |
| Π-877  | <b>38</b>                           | ΠΘ-161  | <b>244</b>              | ΠΘ-654  | <b>12</b>   |
| Π-888  | <b>371</b>                          | ΠΘ-167  | [ <b>149, 151</b> ]     | ΠΘ-680a | <b>650</b>  |
| Π-895  | <b>27</b>                           | ΠΘ-172  | <b>124</b>              | ΠΘ-690  | <b>50</b>   |
| Π-902  | <b>453</b>                          | ΠΘ-177  | [ <b>115, 118–126</b> ] | ΠΘ-697  | <b>455</b>  |
| Π-903  | <b>3</b>                            | ΠΘ-195a | <b>583</b>              | ΠΘ-698  | <b>60</b>   |
| Π-944  | <b>670</b>                          | ΠΘ-221  | <b>639</b>              | ΠΘ-719a | <b>561</b>  |
| Π-957  | <b>651</b>                          | ΠΘ-224  | <b>694</b>              | ΠΘ-759  | <b>509</b>  |
| Π-966  | <b>180</b>                          | ΠΘ-229  | <b>156</b>              | ΠΘ-765  | <b>662</b>  |
| Π-972  | <b>110</b>                          | ΠΘ-238  | <b>144</b>              | ΠΘ-768  | <b>592</b>  |
| Π-998  | <b>99</b>                           | ΠΘ-245  | <b>248</b>              | ΠΘ-788  | <b>900</b>  |
| Π-1098 | <b>753</b>                          | ΠΘ-251  | <b>861</b>              | ΠΘ-790  | <b>438</b>  |
| Π-1276 | <b>540</b>                          | ΠΘ-272a | <b>1009</b>             | ΠΘ-792  | <b>885</b>  |
| ΠΑ-1   | <b>643</b>                          | ΠΘ-287  | <b>105</b>              | ΠΘ-793  | <b>948</b>  |
| ΠΑ-5   | <b>2</b>                            | ΠΘ-290a | <b>104</b>              | ΠΘ-796  | <b>151</b>  |
| ΠΑ-8   | <b>57</b>                           | ΠΘ-297  | <b>551</b>              | ΠΘ-815  | <b>106</b>  |
| ΠΑ-77  | <b>277</b>                          | ΠΘ-312  | <b>69</b>               | ΠΘ-852  | <b>511</b>  |
| ΠΑ-112 | <b>936</b>                          | ΠΘ-314  | <b>94</b>               | ΠΘ-864  | <b>476</b>  |
| ΠΑ-144 | <b>38</b>                           | ΠΘ-315  | <b>815</b>              | ΠΘ-878  | <b>577</b>  |
| ΠΑ-148 | <b>828</b>                          | ΠΘ-321  | <b>139</b>              | ΠΠ-46   | <b>139</b>  |
| ΠΑ-164 | <b>331</b>                          | ΠΘ-323  | <b>156</b>              | ΠΠ-53a  | <b>445</b>  |
| ΠΑ-213 | <b>692</b>                          | ΠΘ-327  | <b>81</b>               | ΠΠ-89   | <b>46</b>   |
| ΠΑ-260 | <b>558</b>                          | ΠΘ-345a | <b>700</b>              | ΠΠ-102  | <b>571</b>  |
| ΠΑ-384 | <b>628</b>                          | ΠΘ-350  | <b>137</b>              | ΠΠ-117  | <b>153</b>  |
| ΠΑ-412 | <b>211</b>                          | ΠΘ-357  | <b>595</b>              | ΠΠ-118  | <b>240</b>  |
| ΠΑ-426 | <b>736</b>                          | ΠΘ-358  | <b>573</b>              | ΠΠ-132  | <b>127</b>  |
| ΠΑ-427 | <b>785</b>                          | ΠΘ-396a | <b>608</b>              | ΠΠ-152  | <b>237</b>  |
| ΠΑ-428 | <b>904</b>                          | ΠΘ-406  | <b>750</b>              | ΠΠ-156  | <b>911</b>  |
| ΠΘ-3   | <b>720</b>                          | ΠΘ-408  | <b>529</b>              | ΠΠ-172  | <b>283</b>  |
| ΠΘ-12  | <b>43</b>                           | ΠΘ-424  | <b>99</b>               | ΠΠ-173  | <b>131</b>  |
| ΠΘ-30  | <b>93</b>                           | ΠΘ-426  | <b>231</b>              | ΠΠ-174  | <b>918</b>  |
| ΠΘ-32a | <b>547</b>                          | ΠΘ-447  | <b>131</b>              | ΠΠ-175  | <b>118</b>  |
| ΠΘ-33  | <b>96</b>                           | ΠΘ-470  | <b>201</b>              | ΠΠ-183  | <b>664</b>  |
| ΠΘ-47  | <b>256</b>                          | ΠΘ-488  | <b>644</b>              | ΠΠ-191  | <b>67</b>   |
| ΠΘ-51  | <b>834</b>                          | ΠΘ-491  | <b>99</b>               | ΠΠ-229  | <b>270</b>  |
| ΠΘ-59  | <b>154</b>                          | ΠΘ-493  | <b>236</b>              | ΠΠ-230  | <b>1037</b> |
| ΠΘ-63  | <b>253</b>                          | ΠΘ-512  | <b>961</b>              | ΠΠ-239  | <b>944</b>  |
| ΠΘ-64a | <b>986</b>                          | ΠΘ-514  | <b>581</b>              | ΠΠ-242  | <b>67</b>   |
| ΠΘ-84  | <b>456</b>                          | ΠΘ-516  | <b>66</b>               | ΠΠ-260  | <b>507</b>  |
| ΠΘ-85  | <b>51</b>                           | ΠΘ-519  | <b>961</b>              | ΠΠ-273  | <b>202</b>  |
| ΠΘ-100 | <b>620</b>                          | ΠΘ-529  | <b>455A</b>             | ΠΠ-274  | <b>102</b>  |
| ΠΘ-105 | <b>429</b>                          | ΠΘ-537  | <b>585</b>              | ΠΠ-277  | <b>262</b>  |
| ΠΘ-115 | <b>454</b>                          | ΠΘ-551  | <b>367</b>              | ΠΠ-282  | <b>230</b>  |
| ΠΘ-124 | [ <b>41–43</b> ]                    | ΠΘ-556  | <b>23</b>               | ΠΠ-289  | <b>128</b>  |
| ΠΘ-130 | <b>960</b>                          | ΠΘ-574  | <b>668</b>              | ΠΠ-322  | <b>58</b>   |
| ΠΘ-139 | <b>126</b>                          | ΠΘ-581  | <b>806</b>              | ΠΠ-337  | <b>330</b>  |
| ΠΘ-142 | <b>138</b>                          | ΠΘ-590  | <b>1011</b>             | ΠΠ-358  | <b>46</b>   |
|        |                                     | ΠΘ-600a | <b>596</b>              | ΠΠ-359  | <b>189</b>  |

|         |      |          |                |           |                  |
|---------|------|----------|----------------|-----------|------------------|
| ΠΠ-384  | 159  | ΠΠ-1088  | 871            | PP'-1005  | [82-84, 90-97]   |
| ΠΠ-385  | 141  | ΠΠ-1098  | 810            | PP'-1006  | 97               |
| ΠΠ-440  | 569  | ΠΠ-1100  | 355            | PP'-1007  | 158              |
| ΠΠ-442  | 949  | P-7      | 96             | PP'-1008  | [157, 158]       |
| ΠΠ-456  | 973  | P-134    | 592            | PP'-1009- | [115-126, etc.], |
| ΠΠ-464  | 969  | P-185    | 173            | 1022      | p. 110           |
| ΠΠ-466  | 914  | P-290    | 137            | PP'-1024  | 979              |
| ΠΠ-469  | 310  | P-354    | 952            | PP'-1031  | 152              |
| ΠΠ-473  | 178  | P-452    | 149            | PP'-1032  | 149              |
| ΠΠ-478  | 352  | P-512a   | 694            | PP'-1033- | [115-126, etc.], |
| ΠΠ-485  | 280  | P-549a   | 471            | 1037      | p. 110           |
| ΠΠ-491  | 284  | P-994a   | [690-696]      | PP'-1047  | 140              |
| ΠΠ-510  | 264  | P-1035   | 716            | PP'1073-  | [115-126, etc.], |
| ΠΠ-531  | 10   | P-1050   | 216            | 1079      | p. 110           |
| ΠΠ-532  | 19   | P-1145   | 858            | PP'-1153  | 417              |
| ΠΠ-533  | 470  | P-1203   | 83             | PP'-1221  | 434              |
| ΠΠ-544  | 360  | P-1395   | 129            | PP'-1249  | 869              |
| ΠΠ-564  | 684  | P-1399   | 884            | Σ-8       | 70               |
| ΠΠ-575  | 174  | P-1494   | 1037           | Σ-92      | 191              |
| ΠΠ-594  | 76   | P-1555   | 696            | Σ-118     | 83               |
| ΠΠ-624  | 100  | P-1602   | 592            | Σ-147     | 1015             |
| ΠΠ-650  | 89   | P-1609   | 687            | Σ-278     | 143              |
| ΠΠ-652  | 593  | P-1621   | 776            | Σ-305     | 746              |
| ΠΠ-663  | 200  | P-1661   | 12             | Σ-457     | 603              |
| ΠΠ-667  | 821  | PP-62    | 1036           | Σ-468     | 992              |
| ΠΠ-710  | 382  | PP-81    | 49             | Σ-595     | 833              |
| ΠΠ-716  | 248  | PP-132   | 137            | Σ-736     | [149, 151]       |
| ΠΠ-737  | 632  | PP-192   | Appendix A     | Σ-861     | 79               |
| ΠΠ-769  | 400  | PP-243   | 735            | Σ-944     | 632              |
| ΠΠ-825  | 50   | PP-273   | 660            | Σ-949     | 776              |
| ΠΠ-835  | 67   | PP-597   | 998            | Σ-1018    | 13               |
| ΠΠ-841  | 584  | PP-628   | 140            | Σ-1036a   | 601              |
| ΠΠ-851  | 578  | PP-631   | 640            | Σ-1090    | 115              |
| ΠΠ-852  | 784  | PP-647   | 135            | Σ-1147a   | 853              |
| ΠΠ-862  | 158  | PP-692   | 159            | Σ-1171    | 278              |
| ΠΠ-871  | 267  | PP-736   | 784            | Σ-1172    | 283              |
| ΠΠ-872  | 28   | PP-797   | 941            | Σ-1205    | 157              |
| ΠΠ-876  | 80   | PP-803   | 134            | Σ-1281    | 366              |
| ΠΠ-877  | 854  | PP-821   | 41             | Σ-1427    | 833              |
| ΠΠ-888  | 83   | PP-823   | 8              | Σ-1841    | 520              |
| ΠΠ-918  | 645B | PP-824   | 8              | Σ-1843a   | 1036             |
| ΠΠ-939  | 104  | PP-827   | 149            | Σ-1934    | 681              |
| ΠΠ-942  | 579  | PP-841   | 385            | Σ-2033    | 119              |
| ΠΠ-986  | 377  | PP'-62   | 708            | Σ-2057    | 724              |
| ΠΠ-990  | 150  | PP'-174  | 72             | Σ-2069    | 823              |
| ΠΠ-1000 | 47   | PP'-284  | 1036           | Σ-2114    | 111              |
| ΠΠ-1002 | 504  | PP'-413  | 24             | Σ-2229    | 746              |
| ΠΠ-1007 | 843  | PP'-443  | 474            | Σ-2889    | 1029             |
| ΠΠ-1036 | 340  | PP'-730  | 161            | Σ-2930    | 55               |
| ΠΠ-1055 | 347  | PP'-756  | 812            | Σ-2981    | 479              |
| ΠΠ-1056 | 618  | PP'-1004 | [82-84, 90-97] | Σ-3018    | 127              |



|           |                       |        |             |          |                   |
|-----------|-----------------------|--------|-------------|----------|-------------------|
| Σ-3019    | <b>15</b>             | Σ-4593 | <b>537</b>  | ΣA-115   | <b>67</b>         |
| Σ-3088    | <b>42</b>             | Σ-4635 | <b>188</b>  | ΣA-133   | <b>746</b>        |
| Σ-3100    | <b>38</b>             | Σ-4649 | <b>8</b>    | ΣA-161   | <b>509</b>        |
| Σ-3175    | <b>567</b>            | Σ-4658 | <b>415</b>  | ΣA-171   | <b>51</b>         |
| Σ-3220    | <b>316</b>            | Σ-4690 | <b>634</b>  | ΣA-173   | <b>86</b>         |
| Σ-3341    | <b>597</b>            | Σ-4700 | <b>653</b>  | ΣA-209   | <b>83</b>         |
| Σ-3392    | <b>149</b>            | Σ-4742 | <b>579</b>  | ΣA-211   | <b>83</b>         |
| Σ-3396    | <b>260</b>            | Σ-4753 | <b>607</b>  | ΣA-212   | <b>82</b>         |
| Σ-3422    | <b>987</b>            | Σ-4879 | <b>211</b>  | ΣA-214   | <b>82</b>         |
| Σ-3486bis | <b>129</b>            | Σ-4885 | <b>551</b>  | ΣA-231   | <b>302</b>        |
| Σ-3490    | <b>540</b>            | Σ-5010 | <b>523</b>  | ΣA-250   | <b>38</b>         |
| Σ-3535    | <b>[88, 89]</b>       | Σ-5021 | <b>163</b>  | ΣA-269   | <b>85</b>         |
| Σ-3562    | <b>413</b>            | Σ-5061 | <b>47</b>   | ΣA-270   | <b>71</b>         |
| Σ-3566a   | <b>852</b>            | Σ-5367 | <b>280</b>  | ΣA-296   | <b>64</b>         |
| Σ-3612    | <b>185</b>            | Σ-5380 | <b>65</b>   | ΣA-373   | <b>45</b>         |
| Σ-3615    | <b>220</b>            | Σ-5469 | <b>101</b>  | ΣA-377   | <b>504</b>        |
| Σ-3655    | <b>643</b>            | Σ-5550 | <b>850</b>  | ΣA-385   | <b>513</b>        |
| Σ-3694    | <b>397</b>            | Σ-5552 | <b>792</b>  | ΣA-391   | <b>760</b>        |
| Σ-3696    | <b>560</b>            | Σ-5564 | <b>841</b>  | ΣA-392   | <b>951</b>        |
| Σ-3721    | <b>139</b>            | Σ-5588 | <b>977</b>  | ΣA-394   | <b>968</b>        |
| Σ-3732    | <b>[41-43]</b>        | Σ-5621 | <b>149</b>  | ΣA-399   | <b>871</b>        |
| Σ-3750    | <b>248</b>            | Σ-5669 | <b>823</b>  | ΣA-401   | <b>877</b>        |
| Σ-3753    | <b>795</b>            | Σ-5688 | <b>155</b>  | ΣA-402   | <b>570</b>        |
| Σ-3788    | <b>447</b>            | Σ-5882 | <b>1023</b> | ΣA-416   | <b>571</b>        |
| Σ-3801    | <b>237</b>            | Σ-6016 | <b>43</b>   | ΣA-453   | <b>687</b>        |
| Σ-3806    | <b>420</b>            | Σ-6096 | <b>228</b>  | ΣA-475   | <b>743</b>        |
| Σ-3807    | <b>913</b>            | Σ-6105 | <b>963</b>  | ΣA-486   | <b>76</b>         |
| Σ-3899    | <b>903</b>            | Σ-6253 | <b>13</b>   | ΣA-488   | <b>951</b>        |
| Σ-3905    | <b>623</b>            | Σ-6295 | <b>676</b>  | ΣT-32    | <b>121</b>        |
| Σ-3912    | <b>1037</b>           | Σ-6322 | <b>929</b>  | ΣT-52    | <b>754</b>        |
| Σ-3957    | <b>144</b>            | Σ-6323 | <b>608</b>  | ΣT-55    | <b>951</b>        |
| Σ-3976    | <b>211</b>            | Σ-6376 | <b>950</b>  | ΣT-91a   | <b>481</b>        |
| Σ-3979    | <b>657</b>            | Σ-6401 | <b>315</b>  | ΣT-97    | <b>43</b>         |
| Σ-3992    | <b>151</b>            | Σ-6405 | <b>944</b>  | ΣT-125   | <b>630</b>        |
| Σ-4035    | <b>1</b>              | Σ-6410 | <b>654</b>  | ΣT-143   | <b>91</b>         |
| Σ-4051    | <b>229</b>            | Σ-6430 | <b>25</b>   | ΣT-163   | <b>94</b>         |
| Σ-4073    | <b>99</b>             | Σ-6448 | <b>38</b>   | ΣT-186   | <b>197</b>        |
| Σ-4129    | <b>146</b>            | Σ-6461 | <b>606</b>  | ΣT-198   | <b>67</b>         |
| Σ-4136    | <b>144</b>            | Σ-6462 | <b>765</b>  | ΣT-209   | <b>45</b>         |
| Σ-4144    | <b>[115, 118-126]</b> | Σ-6467 | <b>55</b>   | ΣT-233   | <b>42</b>         |
| Σ-4154    | <b>220</b>            | Σ-6481 | <b>24</b>   | ΣT-250   | <b>488</b>        |
| Σ-4224    | <b>687</b>            | ΣA-10  | <b>62</b>   | ΣT-285   | <b>452</b>        |
| Σ-4256    | <b>762</b>            | ΣA-15  | <b>84</b>   | ΣT-353   | <b>317</b>        |
| Σ-4259    | <b>656</b>            | ΣA-21  | <b>620</b>  | ΣT-364   | <b>1036</b>       |
| Σ-4260    | <b>430</b>            | ΣA-25  | <b>845</b>  | ΣT-380   | <b>616</b>        |
| Σ-4308    | <b>318</b>            | ΣA-46  | <b>851</b>  | ΣT'-415  | <b>871</b>        |
| Σ-4313    | <b>271</b>            | ΣA-62  | <b>746</b>  | ΣT'-417  | <b>[149, 151]</b> |
| Σ-4323    | <b>605</b>            | ΣA-65  | <b>84</b>   | ΣT'-432a | <b>755</b>        |
| Σ-4386    | <b>507</b>            | ΣA-76  | <b>499</b>  | ΣT'-450  | <b>536</b>        |
| Σ-4433    | <b>67</b>             | ΣA-83  | <b>826</b>  | ΣT'-451  | <b>75</b>         |
| Σ-4437    | <b>147</b>            | ΣA-99  | <b>889</b>  | ΣT'-458a | <b>434</b>        |
| Σ-4447a   | <b>1021</b>           | ΣA-103 | <b>73</b>   | ΣT'-468  | <b>723</b>        |

|          |                   |        |                         |        |            |
|----------|-------------------|--------|-------------------------|--------|------------|
| ΣΤ'-502  | <b>730</b>        | T-286  | <b>206</b>              | T-1425 | <b>410</b> |
| ΣΤ'-506  | <b>584</b>        | T-319  | <b>630</b>              | T-1450 | <b>814</b> |
| ΣΤ'-510  | <b>667</b>        | T-346  | <b>498</b>              | T-1498 | <b>12A</b> |
| ΣΤ'-511  | <b>46</b>         | T-352  | <b>488</b>              | T-1503 | <b>488</b> |
| ΣΤ'-528  | <b>455</b>        | T-405  | <b>190</b>              | T-1508 | <b>78</b>  |
| ΣΤ'-531  | <b>128</b>        | T-420  | <b>97</b>               | T-1509 | <b>68</b>  |
| ΣΤ'-539  | <b>896</b>        | T-517  | <b>100</b>              | T-1512 | <b>610</b> |
| ΣΤ'-549  | <b>509</b>        | T-545  | <b>182</b>              | T-1598 | <b>461</b> |
| ΣΤ'-562  | <b>158</b>        | T-598  | <b>401</b>              | T-1602 | <b>455</b> |
| ΣΤ'-576  | <b>815</b>        | T-636  | <b>79</b>               | T-1604 | <b>46</b>  |
| ΣΤ'-578  | <b>627</b>        | T-651  | <b>571</b>              | T-1645 | <b>84</b>  |
| ΣΤ'-579a | <b>919</b>        | T-660  | <b>538</b>              | T-1650 | <b>752</b> |
| ΣΤ'-584  | <b>[149, 151]</b> | T-661  | <b>88</b>               | T-1651 | <b>66</b>  |
| ΣΤ'-586  | <b>45</b>         | T-671  | <b>532</b>              | T-1652 | <b>979</b> |
| ΣΤ'-590  | <b>112</b>        | T-716  | <b>711</b>              | T-1664 | <b>83</b>  |
| ΣΤ'-599  | <b>743</b>        | T-727  | <b>127</b>              | T-1668 | <b>73</b>  |
| ΣΤ'-625  | <b>12</b>         | T-833  | <b>620</b>              | T-1702 | <b>828</b> |
| ΣΤ'-638  | <b>788</b>        | T-843  | <b>131</b>              | T-1760 | <b>85</b>  |
| ΣΤ'-669a | <b>715</b>        | T-856  | <b>453</b>              | T-1774 | <b>67</b>  |
| ΣΤ'-683  | <b>8</b>          | T-857  | <b>609</b>              | T-1805 | <b>10</b>  |
| ΣΤ'-699  | <b>94</b>         | T-860  | <b>958</b>              | T-1809 | <b>456</b> |
| ΣΤ'-704  | <b>232</b>        | T-866  | <b>214</b>              | T-1844 | <b>64</b>  |
| ΣΤ'-727  | <b>128</b>        | T-920  | <b>44</b>               | T-1863 | <b>67</b>  |
| ΣΤ'-739  | <b>687</b>        | T-926  | <b>207</b>              | T-1867 | <b>65</b>  |
| T-4      | <b>667</b>        | T-947  | <b>706</b>              | Υ-18   | <b>169</b> |
| T-4a     | <b>849</b>        | T-954  | <b>783</b>              | Υ-22   | <b>526</b> |
| T-11     | <b>472</b>        | T-990  | <b>[115, 118-126]</b>   | Υ-23   | <b>750</b> |
| T-18     | <b>628</b>        | T-1013 | <b>281</b>              | Υ-52   | <b>186</b> |
| T-20     | <b>897</b>        | T-1015 | <b>46</b>               | Υ-64   | <b>15</b>  |
| T-28a    | <b>566</b>        | T-1018 | <b>212</b>              | Υ-72   | <b>763</b> |
| T-37a    | <b>837</b>        | T-1023 | <b>864</b>              | Υ-103  | <b>198</b> |
| T-51     | <b>71</b>         | T-1059 | <b>816</b>              | Υ-177  | <b>68</b>  |
| T-56     | <b>152</b>        | T-1064 | <b>[115-126, etc.],</b> | Υ-186  | <b>79</b>  |
| T-67a    | <b>579</b>        |        | <b>p. 110</b>           | Υ-203  | <b>759</b> |
| T-89     | <b>71</b>         | T-1069 | <b>75</b>               | Υ-216  | <b>196</b> |
| T-102    | <b>1010</b>       | T-1092 | <b>1036</b>             | Υ-222  | <b>823</b> |
| T-106    | <b>945</b>        | T-1157 | <b>69</b>               | Υ-229  | <b>698</b> |
| T-113    | <b>139</b>        | T-1189 | <b>112</b>              | Υ-240  | <b>658</b> |
| T-134    | <b>15</b>         | T-1194 | <b>88</b>               | Υ-242  | <b>107</b> |
| T-141a   | <b>1037</b>       | T-1195 | <b>82</b>               | Φ-6    | <b>693</b> |
| T-158a   | <b>428</b>        | T-1196 | <b>67</b>               | Φ-15   | <b>533</b> |
| T-167    | <b>94</b>         | T-1205 | <b>837</b>              | Φ-29   | <b>944</b> |
| T-174    | <b>396</b>        | T-1224 | <b>632</b>              | Φ-32   | <b>901</b> |
| T-180    | <b>632</b>        | T-1227 | <b>77</b>               | Φ-36   | <b>540</b> |
| T-198a   | <b>920</b>        | T-1252 | <b>667</b>              | Φ-75   | <b>204</b> |
| T-206    | <b>61</b>         | T-1284 | <b>645A</b>             | Φ-98   | <b>145</b> |
| T-212a   | <b>890</b>        | T-1297 | <b>872</b>              | Φ-103  | <b>580</b> |
| T-227    | <b>787</b>        | T-1316 | <b>848</b>              | Φ-107  | <b>802</b> |
| T-240    | <b>105</b>        | T-1369 | <b>485</b>              | Φ-132  | <b>86</b>  |
| T-254    | <b>668</b>        | T-1375 | <b>71</b>               | Φ-138  | <b>10</b>  |
| T-282    | <b>930</b>        | T-1377 | <b>101</b>              | Φ-154  | <b>370</b> |
| T-285    | <b>187</b>        | T-1402 | <b>40</b>               | Φ-173  | <b>455</b> |

|        |             |        |                   |        |                |
|--------|-------------|--------|-------------------|--------|----------------|
| Φ-183  | <b>42</b>   | Ψ-32   | <b>118</b>        | Ω-249  | <b>51</b>      |
| Φ-193  | <b>805</b>  | Ψ-44   | <b>454</b>        | Ω-257  | <b>91</b>      |
| Φ-215  | <b>486</b>  | Ψ-73   | <b>83</b>         | Ω-262  | <b>[41-43]</b> |
| Φ-237  | <b>416</b>  | Ψ-79   | <b>662</b>        | Ω-277  | <b>710</b>     |
| Φ-242  | <b>758</b>  | Ψ-83   | <b>1003</b>       | Ω-313  | <b>138</b>     |
| Φ-328  | <b>804</b>  | Ψ-104  | <b>149</b>        | Ω-322  | <b>640</b>     |
| Φ-344  | <b>7</b>    | Ψ-132  | <b>517</b>        | Ω-329  | <b>275</b>     |
| Φ-346  | <b>139</b>  | Ψ-151  | <b>500</b>        | Ω-347a | <b>623</b>     |
| Φ-349  | <b>54</b>   | Ψ-156  | <b>812</b>        | Ω-354  | <b>579</b>     |
| Φ-358  | <b>31</b>   | Ψ-176  | <b>667</b>        | Ω-357  | <b>98</b>      |
| Φ-360  | <b>131</b>  | Ψ-193  | <b>53</b>         | Ω-359  | <b>78</b>      |
| Φ-368  | <b>831</b>  | Ψ-214  | <b>233</b>        | Ω-375  | <b>58</b>      |
| Φ-389  | <b>15</b>   | Ψ-237  | <b>416</b>        | Ω-418  | <b>204</b>     |
| Φ-391  | <b>12</b>   | Ψ-239  | <b>944</b>        | Ω-431  | <b>488</b>     |
| X-8a   | <b>893</b>  | Ψ-242  | <b>577</b>        | Ω-432  | <b>455</b>     |
| X-33   | <b>111</b>  | Ψ-280a | <b>423</b>        | Ω-433  | <b>67</b>      |
| X-36   | <b>643</b>  | Ψ-302  | <b>378</b>        | Ω-434  | <b>197</b>     |
| X-42   | <b>97</b>   | Ψ-316  | <b>515</b>        | Ω-445  | <b>10</b>      |
| X-49   | <b>138</b>  | Ψ-321  | <b>548</b>        | Ω-460  | <b>158</b>     |
| X-52   | <b>667</b>  | Ψ-323  | <b>1038</b>       | Ω-471  | <b>613</b>     |
| X-99   | <b>140</b>  | Ψ-325a | <b>694</b>        | Ω-473  | <b>485</b>     |
| X-101  | <b>79</b>   | Ψ-328  | <b>10</b>         | Ω-504  | <b>551</b>     |
| X-102  | <b>595</b>  | Ψ-330  | <b>503</b>        | Ω-512  | <b>613</b>     |
| X-107  | <b>455</b>  | Ω-6    | <b>43</b>         | Ω-515  | <b>38</b>      |
| X-110  | <b>19</b>   | Ω-19   | <b>258</b>        | Ω-562  | <b>68</b>      |
| X-113a | <b>943</b>  | Ω-33   | <b>828</b>        | Ω-564  | <b>8</b>       |
| X-115  | <b>63</b>   | Ω-58   | <b>266</b>        | Ω-600  | <b>1036</b>    |
| X-120  | <b>441</b>  | Ω-101  | <b>62</b>         | ΩΔ-10  | <b>118</b>     |
| X-147a | <b>1026</b> | Ω-109  | <b>1002</b>       | ΩΔ-13  | <b>84</b>      |
| X-175  | <b>792</b>  | Ω-138  | <b>126</b>        | ΩΔ-41  | <b>127</b>     |
| X-178  | <b>735</b>  | Ω-139  | <b>414</b>        | ΩΔ-42  | <b>145</b>     |
| X-185  | <b>766</b>  | Ω-152  | <b>1009</b>       | ΩΔ-47  | <b>520</b>     |
| X-187  | <b>968</b>  | Ω-157  | <b>87</b>         | ΩΔ-53  | <b>193</b>     |
| X-207  | <b>1005</b> | Ω-164  | <b>[127, 128]</b> | ΩΔ-59  | <b>93</b>      |
| X-211a | <b>820</b>  | Ω-183  | <b>48</b>         | ΩΔ-76  | <b>123</b>     |
| X-220  | <b>15</b>   | Ω-188  | <b>593</b>        | ΩΔ-84  | <b>137</b>     |
| Ψ-7    | <b>507</b>  | Ω-206a | <b>535</b>        | ΩΔ-94  | <b>1009</b>    |
| Ψ-23   | <b>937</b>  | Ω-242  | <b>386</b>        | ΩΔ-105 | <b>186</b>     |

# CONCORDANCE TO ATHENIAN BRONZE COINS ILLUSTRATED IN SVORONOS

| Sv. Pl. and fig. | Variety    | Period            | Sv. Pl. and fig. | Variety    | Period  |
|------------------|------------|-------------------|------------------|------------|---|
| 18.1-179         | p. 24      |                   | 79.2-7           | <b>115</b> | IVA   |
| 22.35-42         | <b>43</b>  | I                 | 8-14             | <b>126</b> | IVA   |
| 43               | <b>41</b>  | I                 | 15-17            | <b>118</b> | IVA   |
| 44-46            | <b>42</b>  | I                 | 18-21            | <b>119</b> | IVA   |
| 50, 51           | <b>37</b>  | —                 | 22-24            | <b>122</b> | IVA   |
| 53, 54           | <b>88</b>  | III               | 25-28            | <b>124</b> | IVA   |
| 55               | <b>89</b>  | III               | 30, 31           | <b>123</b> | IVA   |
| 59-61            | <b>145</b> | IVB               | 32, 33           | <b>121</b> | IVA   |
| 64-70            | <b>53</b>  | I                 | 35               | <b>120</b> | IVA   |
| 71, 72, 84       | <b>54</b>  | I                 | 36, 37           | <b>157</b> | IVE   |
| 73, 74           | <b>59</b>  | I                 | 38-42            | <b>158</b> | IVE   |
| 75               | <b>60</b>  | I                 | 80.1-7           | <b>138</b> | IVB   |
| 76, 77           | <b>57</b>  | I                 | 8-14             | <b>143</b> | IVB   |
| 78, 79           | <b>58</b>  | I                 | 15-17            | <b>147</b> | IVC   |
| 80               | <b>53</b>  | I (see p. 34)     | 18-21            | <b>153</b> | IVD   |
| 81-83            | <b>52</b>  | I                 | 22-24            | <b>148</b> | IVC   |
| 85-88            | <b>50</b>  | I                 | 25-28            | <b>137</b> | IVB   |
| 89-92            | <b>77</b>  | II                | 29-32            | <b>149</b> | IVD   |
| 93-96            | <b>35</b>  | —                 | 33, 34           | <b>151</b> | IVD   |
| 97, 98           | <b>36</b>  | —                 | 37-43            | <b>152</b> | IVD   |
| 23.46            | <b>67</b>  | II                | 44               | —          | IVD: Athens-Myrina (see note 218 above, p. 111) |
| 47-49            | <b>81</b>  | II                |                  |            |   |
| 50-52            | <b>71</b>  | II                | 45-47            | <b>156</b> | IVD   |
| 24.10-17         | <b>69</b>  | II                | 81.1-6           | <b>78</b>  | II  |
| 25-27            | <b>64</b>  | II                | 7, 8             | <b>80</b>  | II  |
| 29-31            | <b>65</b>  | II                | 9-16             | <b>79</b>  | II  |
| 33               | <b>70</b>  | II                | 17, 18           | <b>82</b>  | II  |
| 34-39            | <b>45</b>  | I                 | 19, 22-24        | <b>91</b>  | III   |
| 42-50            | <b>44</b>  | I                 | 20, 21           | <b>92</b>  | III   |
| 51-57            | <b>46</b>  | I                 | 25-27            | <b>93</b>  | III   |
| 58, 59           | <b>56</b>  | I                 | 28, 29           | <b>83</b>  | II  |
| 60-68            | <b>99</b>  | III               | 30, 31           | <b>90</b>  | III   |
| 25.1-4           | <b>66</b>  | II                | 32-39            | <b>94</b>  | III   |
| 5-10             | <b>68</b>  | II                | 40-44            | <b>96</b>  | III   |
| 11, 12           | <b>117</b> | IVA               | 45-48            | <b>97</b>  | III   |
| 13, 14           | <b>146</b> | IVC               | 49-52            | <b>95</b>  | III   |
| 15-21            | <b>76</b>  | II                | 53-56            | <b>130</b> | IVA   |
| 22-28            | <b>139</b> | IVB               | 82.1-4           | <b>169</b> | VB  |
| 29-32            | <b>140</b> | IVB               | 5-24, 26-28      | <b>284</b> | VI  |
| 33-35            | <b>141</b> | IVB               | 25               | <b>285</b> | VI  |
| 36-42            | <b>144</b> | IVB               | 29-31            | <b>171</b> | VB  |
| 43-50            | <b>142</b> | IVB               | 32-35            | <b>248</b> | VC  |
| 70.20            | <b>123</b> | IVA               | 36, 38           | <b>289</b> | VI  |
| 25               | <b>125</b> | IVA               | 37, 41           | <b>291</b> | VI  |
| 72.17            | <b>121</b> | IVA               | 39, 40           | <b>287</b> | VI  |
| 75.24            | <b>159</b> | IV: Athens-Lemnos | 42               | <b>292</b> | VI  |
| 78.10            | <b>147</b> | IVC               |                  |            |   |

| <b>Sv. Pl. and fig.</b> | <b>Variety</b>      | <b>Period</b> | <b>Sv. Pl. and fig.</b> | <b>Variety</b>                         | <b>Period</b> |
|-------------------------|---------------------|---------------|-------------------------|--|---------------|
| 83.1-3                  | <b>289</b>          | VI            | 87.1-5                  | <b>340</b>                             | VI            |
| 4, 10                   | <b>287</b>          | VI            | 6, 7                    | p. 125                                 | VI            |
| 5-7, 9,                 |                     |               | 8, 11                   | <b>337</b>                             | VI            |
| 11, 13, 14              | <b>290</b>          | VI            | 9, 10                   | <b>338</b>                             | VI            |
| 8                       | <b>286</b>          | VI            | 12                      | <b>347</b>                             | VI            |
| 12                      | <b>288</b>          | VI            | 13                      | <b>250</b>                             | VC            |
| 15-19                   | <b>294</b>          | VI            | 14                      | <b>339</b>                             | VI            |
| 20, 21                  | cf. <b>295</b>      | VI            | 15-17                   | <b>173</b>                             | VB            |
| 22, 23                  | <b>295</b>          | VI            | 18-20                   | <b>258</b>                             | VC            |
| 24-28                   | <b>297</b>          | VI            | 21                      | <b>259</b>                             | VC            |
| 29-32                   | <b>172</b>          | VB            | 22, 24, 25              | <b>345</b>                             | VI            |
| 33, 34                  | <b>298</b>          | VI            | 23                      | <b>342</b>                             | VI            |
| 35, 36                  | <b>299</b>          | VI            | 26                      | <b>346</b>                             | VI            |
| 37                      | <b>251</b>          | VC            | 27, 29, 30              | <b>341</b>                             | VI            |
| 38, 40                  | <b>293</b>          | VI            | 28                      | <b>343</b>                             | VI            |
| 39, 41, 42              | <b>300</b>          | VI            | 31, 32                  | <b>344</b>                             | VI            |
| 84.1-7                  | <b>301</b>          | VI            | 33, 36                  | <b>350</b>                             | VI            |
| 8                       | cf. <b>301, 302</b> | VI            | 34, 35                  | <b>349</b>                             | VI            |
| 9-14                    | <b>302</b>          | VI            | 37                      | cf. <b>350</b>                         | VI            |
| 15-17, 22, 23           | <b>303</b>          | VI            | 38-41                   | <b>202</b>                             | VB            |
| 18-21                   | <b>304</b>          | VI            | 42, 43                  | <b>203</b>                             | VB            |
| 24, 25                  | <b>296</b>          | VI            | 88.1-7                  | <b>348</b>                             | VI            |
| 26                      | <b>305</b>          | VI            | 8, 9                    | <b>260</b>                             | VC            |
| 27, 28                  | cf. <b>305</b>      | VI            | 10-13                   | <b>210</b>                             | VC            |
| 29, 30                  | <b>308</b>          | VI            | 14-18                   | <b>351</b>                             | VI            |
| 31-35                   | <b>306</b>          | VI            | 19, 20                  | <b>352</b>                             | VI            |
| 36                      | <b>253</b>          | VC            | 21                      | <b>354</b>                             | VI            |
| 37-40                   | <b>307</b>          | VI            | 22                      | <b>353</b>                             | VI            |
| 41, 42                  | cf. <b>307</b>      | VI            | 23, 26                  | <b>163</b>                             | VA            |
| 85.1-3                  | <b>309</b>          | VI            | 24, 25                  | <b>162</b>                             | VA            |
| 4                       | p. 122              | VB            | 27                      | <b>164</b>                             | VA            |
| 5-7                     | <b>310</b>          | VI            | 28                      | <b>165</b>                             | VA            |
| 8-10                    | <b>254</b>          | VC            | 29, 30, 46              | <b>166</b>                             | VA            |
| 11                      | —                   | VB            | 31-34                   | <b>167</b>                             | VA            |
| 12-18                   | <b>256</b>          | VC            | 35, 39, 40              | <b>226</b>                             | VB            |
| 19, 20, 22, 23          | <b>314</b>          | VI            | 36, 37                  | <b>227</b>                             | VB            |
| 21                      | <b>313</b>          | VI            | 38                      | <b>414</b>                             | VI            |
| 24-31                   | <b>312</b>          | VI            | 41                      | <b>228</b>                             | VB            |
| 32-35                   | <b>255</b>          | VC            | 42                      | Lakedaimon,<br>Grunauer<br>Gruppe XIII |               |
| 36, 37                  | <b>315</b>          | VI            | 43, 44                  | <b>231</b>                             | VB            |
| 38-40                   | <b>311</b>          | VI            | 45                      | cf. <b>229</b>                         | VB            |
| 41, 42                  | p. 125              | VI            | 47-51, 53               | <b>229</b>                             | VB            |
| 86.1-4                  | <b>257</b>          | VC            | 52                      | <b>230</b>                             | VB            |
| 5, 31, 33-36            | <b>332</b>          | VI            | 54                      | <b>416</b>                             | VI            |
| 6-12, 14-18             | <b>318</b>          | VI            | 55-57                   | <b>184</b>                             | VB            |
| 13, 19                  | <b>321</b>          | VI            | 58-60                   | <b>281</b>                             | VC            |
| 20, 39                  | <b>325</b>          | VI            | 61                      | <b>282</b>                             | VC            |
| 21, 23                  | <b>324</b>          | VI            | 89.1-5                  | cf. <b>174</b>                         | VB            |
| 22                      | <b>326</b>          | VI            | 6-10                    | <b>174</b>                             | VB            |
| 24, 25, 28, 29          | <b>320</b>          | VI            | 11-15                   | <b>261</b>                             | VC            |
| 26, 27                  | <b>328</b>          | VI            | 16-18                   | <b>355</b>                             | VI            |
| 30                      | cf. <b>334</b>      | VI            | 19                      | <b>211</b>                             | VB            |
| 32                      | <b>333</b>          | VI            | 20, 21                  | <b>410</b>                             | VI            |
| 37                      | <b>331</b>          | VI            | 22, 23                  | <b>225</b>                             | VB            |
| 38                      | <b>326</b>          | VI            | 24                      | <b>224</b>                             | VB            |
| 40                      | <b>334</b>          | VI            |                         |  |               |
| 41, 42                  | <b>336</b>          | VI            |                         |  |               |

| Sv. Pl. and fig.  | Variety         | Period | Sv. Pl. and fig.   | Variety        | Period |
|-------------------|-----------------|--------|--------------------|----------------|--------|
| 25                | —               | VB-C   | 33, 34             | <b>241</b>     | VB-C   |
| 26-32             | <b>262</b>      | VC     | 35-37              | <b>359</b>     | VI     |
| 33, 34            | —               | VI     | 38-44              | <b>267</b>     | VC     |
| 35-40             | <b>204</b>      | VB     | 93.1               | —              | VB     |
| 90.1, 2, 5-8      | <b>377</b>      | VI     | 2, 3               | <b>268</b>     | VC     |
| 3, 4              | cf. <b>377</b>  | VI     | 4                  | <b>191</b>     | VB     |
| 9-12, 16, 18      | <b>380</b>      | VI     | 5-7                | <b>360</b>     | VI     |
| 13                | <b>381</b>      | VI     | 8, 9               | <b>269</b>     | VC     |
| 14                | cf. <b>379</b>  | VI     | 10-14              | <b>361</b>     | VI     |
| 15                | <b>379</b>      | VI     | 15-20              | <b>362</b>     | VI     |
| 17, 22-26, 30, 31 | <b>382</b>      | VI     | 21, 22             | <b>222</b>     | VB     |
| 19, 20            | <b>378</b>      | VI     | 23, 29, 30         | <b>223</b>     | VB     |
| 21                | —               | VI     | 24-26              | —              | VI     |
| 27                | <b>384</b>      | VI     | 27                 | <b>364</b>     | VI     |
| 28                | —               | VI     | 28                 | <b>363</b>     | VI     |
| 29                | <b>385</b>      | VI     | 31                 | <b>412</b>     | VI     |
| 32                | —               | VB     | 32-35              | <b>188</b>     | VB     |
| 33                | <b>195</b>      | VB     | 36-42              | <b>186</b>     | VB     |
| 34                | <b>196</b>      | VB     | 43-47              | <b>187</b>     | VB     |
| 35-38, 40         | <b>197</b>      | VB     | 94.1               | —              | VB     |
| 39                | —               | VB     | 2-6                | <b>177</b>     | VB     |
| 41, 43            | <b>212</b>      | VB     | 7-12               | <b>168</b>     | VA     |
| 42                | —               | VB     | 14                 | <b>243</b>     | VB-C   |
| 44                | —               | VC     | 15                 | <b>232</b>     | VB-C   |
| 45-47             | <b>234</b>      | VB-C   | 16, 17             | <b>178</b>     | VB     |
| 91.1, 22, 23      | <b>388</b>      | VI     | 18                 | cf. <b>178</b> | VB     |
| 2-7, 9-15, 19     | <b>386</b>      | VI     | 19                 | cf. <b>271</b> | VB     |
| 8                 | <b>389</b>      | VI     | 20, 21, 23, 24     | <b>271</b>     | VC     |
| 16-18, 20, 21     | <b>387</b>      | VI     | 22, 38, 40, 41, 43 | <b>206</b>     | VB     |
| 24, 25            | cf. <b>395</b>  | VI     | 25, 26, 28, 29     | <b>368</b>     | VI     |
| 27, 28            | <b>395</b>      | VI     | 27, 30, 31         | <b>369</b>     | VI     |
| 29                | <b>390</b>      | VI     | 32-35              | <b>221</b>     | VB     |
| 30                | <b>393</b>      | VI     | 36                 | <b>235</b>     | VB-C   |
| 31                | <b>394</b>      | VI     | 37                 | <b>407</b>     | VI     |
| 32                | —               | VI     | 39                 | —              | VI     |
| 33-38             | <b>396</b>      | VI     | 42                 | cf. <b>206</b> | VB     |
| 39, 40            | <b>399</b>      | VI     | 44, 45             | <b>370</b>     | VI     |
| 41, 45            | <b>400</b>      | VI     | 46                 | —              | VB     |
| 42                | <b>398</b>      | VI     | 47, 48             | <b>213</b>     | VB     |
| 43-44             | p. 123, note 53 | VI     | 49                 | <b>244</b>     | VB-C   |
| 46, 47            | <b>192</b>      | VB     | 50-52              | <b>238</b>     | VB-C   |
| 48                | <b>194</b>      | VB     | 53, 54             | <b>239</b>     | VB-C   |
| 92.1, 2           | <b>263</b>      | VC     | 95.1, 2            | <b>179</b>     | VB     |
| 3, 4              | <b>356</b>      | VI     | 3-5                | <b>365</b>     | VI     |
| 5, 6              | <b>175</b>      | VB     | 6, 7               | p. 122         | VB     |
| 7                 | <b>357</b>      | VI     | 8                  | <b>272</b>     | VC     |
| 8-11, 14, 15      | <b>176</b>      | VB     | 9                  | <b>366</b>     | VI     |
| 12, 16            | cf. <b>176</b>  | VB     | 10-12              | <b>270</b>     | VC     |
| 13                | cf. <b>264</b>  | VC     | 13-15              | <b>199</b>     | VB     |
| 17, 18            | <b>264</b>      | VC     | 16-20              | <b>180</b>     | VB     |
| 19                | <b>265</b>      | VC     | 21, 22             | <b>273</b>     | VC     |
| 20, 21            | —               | VI     | 23, 24             | p. 122         | VB     |
| 22, 23            | <b>266</b>      | VC     | 25, 28             | <b>181</b>     | VB     |
| 24-26             | <b>233</b>      | VB-C   | 26, 27, 29         | <b>274</b>     | VC     |
| 27-29             | <b>358</b>      | VI     | 30-36              | <b>371</b>     | VI     |
| 30, 31            | —               | VB-C   | 37-40              | <b>373</b>     | VI     |
| 32                | <b>245</b>      | VB-C   |                    |                |        |

| Sv. Pl. and fig. | Variety   | Period | Sv. Pl. and fig.   | Variety                     | Period                         |
|------------------|---|--------|--------------------|-----------------------------|--------------------------------|
| 96.1-7           | <b>276</b>  | VC     | 103.1-15           | <b>38</b>                   | I                              |
| 8-14             | <b>372</b>  | VI     | 17-21              | <b>51</b>                   | I                              |
| 15, 16           | <b>275</b>  | VC     | 22, 25             | <b>48</b>                   | I                              |
| 17               | <b>189</b>  | VB     | 23, 27             | <b>55</b>                   | I                              |
| 18               | —   | VI     | 26, 28             | <b>49</b>                   | I                              |
| 19               | <b>201</b>  | VB     | 29-32              | <b>61</b>                   | I                              |
| 20, 21           | <b>209</b>  | VC     | 33-37              | <b>39</b>                   | I                              |
| 22-25, 29        | <b>408</b>  | VI     | 40                 | <i>Obv.</i> : <b>57, 58</b> | I (see p. 32)                  |
| 26, 27           | <b>208</b>  | VB     |                    | <i>Rev.</i> : <b>45</b>     |                                |
| 28               | <b>200</b>  | VB     | 41                 | <b>62</b>                   | I (see p. 36)                  |
| 30-36            | p. 122  | VB     | 42-46              | <b>62</b>                   | I                              |
| 37-40            | <b>237</b>  | VB     | 47-49              | —                           | II? (see note 87 above, p. 54) |
| 41-43            | —   | VI     |                    |                             |                                |
| 44               | <b>207</b>  | VB     | 50-56              | <b>86</b>                   | III                            |
| 45               | <b>409</b>  | VI     | 57-64              | <b>106</b>                  | I                              |
| 46, 48, 49       | <b>215</b>  | VB     | 104.1, 2           | <b>64, 66,</b>              |                                |
| 47               | <b>214</b>  | VB     |                    | or <b>68</b>                | II                             |
| 97.1-14          | <b>182</b>  | VB     | 3, 4               | <b>68</b>                   | II                             |
| 15, 19           | <b>278</b>  | VC     | 5-7                | <b>64</b>                   | II                             |
| 16-18            | <b>279</b>  | VC     | 8, 9               | <b>72</b>                   | II                             |
| 20-25            | <b>183</b>  | VB     | 10-13              | <b>74</b>                   | II                             |
| 26               | —   | VC     | 14-19              | <b>73</b>                   | II                             |
| 27-31            | <b>374</b>  | VI     | 21-23              | <b>75</b>                   | II                             |
| 32-35            | <b>190</b>  | VB     | 24-28              | <b>116</b>                  | IVA                            |
| 36               | Lebedus,<br>F. Imhoof-Blumer,<br><i>Kleinasiatische Münzen</i> ,<br>Vienna 1901-1902,<br>p. 72, nos. 1, 2 |        | 29, 30             | <b>127</b>                  | IVA                            |
|                  |   |        | 31-35              | <b>128</b>                  | IVA                            |
|                  |   |        | 38-45              | <b>150</b>                  | IVD                            |
|                  |   |        | 46-50              | <b>154</b>                  | IVD                            |
|                  |   |        | 51-53              | <b>155</b>                  | IVD                            |
| 37-39, 41-44     | <b>220</b>  | VB-C   | 106.1-7            | <b>87</b>                   | III                            |
| 40               | <b>413</b>  | VI     | 8-11               | p. 67                       | III                            |
| 98.1, 2          | <b>277</b>  | VC     | 12-16              | <b>101</b>                  | III                            |
| 3-10             | <b>367</b>  | VI     | 18, 19             | —                           | III                            |
| 11, 12           | <b>216</b>  | VB-C   | 20 = Sv. 107.42-45 |                             |                                |
| 13, 14           | <b>217</b>  | VB-C   | 21, 22             | <b>112</b>                  | III                            |
| 15               | <b>218</b>  | VB-C   | 23-26              | <b>111</b>                  | III                            |
| 16, 18           | <b>242</b>  | VB-C   | 27-29              | <b>456</b>                  | III: Myrina                    |
| 17               | <b>219</b>  | VB-C   | 30                 | —                           | III                            |
| 19, 20           | p. 123  | VB     | 31, 32             | —                           | III                            |
| 21-29            | <b>280</b>  | VC     | 33-35              | <b>107</b>                  | III                            |
| 30-36            | <b>375</b>  | VI     | 36-41              | —                           | III                            |
| 37-43            | cf. <b>375</b>  | VI     | 42, 43             | —                           | III                            |
| 44-46            | <b>376</b>  | VI     | 44                 | <b>114</b>                  | III                            |
| 99.1-3           | <b>185</b>  | VB     | 45, 46             | —                           | III                            |
| 4-6              | cf. <b>185</b>  | VB     | 48-51              | <b>103</b>                  | III                            |
| 7-9, 23          | <b>283</b>  | VC     | 52-64              | <b>110</b>                  | III                            |
| 10-12            | <b>403</b>  | VI     | 66-75              | <b>830</b>                  | IV: Delos                      |
| 13, 14           | <b>406</b>  | VI     | 76-81              | <b>104</b>                  | III                            |
| 15-18            | <b>405</b>  | VI     | 82-83              | —                           | III                            |
| 19-22            | <b>404</b>  | VI     | 107.1-8            | <b>129</b>                  | IVA                            |
| 24-37            | <b>401</b>  | VI     | 9-11               | <b>102</b>                  | III                            |
| 38               | <b>402</b>  | VI     | 12-14              | <b>132</b>                  | IVA                            |
| 39-42            | <b>240</b>  | VB-C   | 15                 | cf. <b>133(?)</b>           | IVA                            |
| 43, 44           | <b>246</b>  | VB-C   | 16, 17             | <b>134</b>                  | IVA                            |
| 45-47            | <b>247</b>  | VB-C   |                    |                             |                                |

| <b>Sv. Pl. and fig.</b> | <b>Variety</b> | <b>Period</b>                     | <b>Sv. Pl. and fig.</b> | <b>Variety</b> | <b>Period</b> |
|-------------------------|----------------|-----------------------------------|-------------------------|----------------|---------------|
| 18-21                   | <b>135</b>     | IVA                               | 50-54                   | <b>100</b>     | III           |
| 22, 23                  | <b>136</b>     | IVA                               | 55-58                   | <b>85</b>      | II            |
| 24, 25                  | —              | III or IV                         | 60-69                   | <b>108</b>     | III           |
| 28-35                   | <b>131</b>     | IVA                               | 70-73                   | <b>109</b>     | III           |
| 36-41                   | <b>105</b>     | III                               | 75-79                   | <b>98</b>      | III           |
| 42-45                   | <b>113</b>     | III                               |                         |                |               |
| 46-49                   | —              | IV (see note 120 above,<br>p. 69) |                         |                |               |



# INDEXES

## I. GENERAL

*References are to page numbers*

- ACHAÏAN LEAGUE: 36, 49, 235–236  
Aesillas: 81<sup>143</sup>  
Agonistic tables: 123. *See also* Index II.3: Table, agonistic.  
Aiakeion: 295<sup>14</sup>  
Akropolis: 53, 55, 56; view of 123, 124<sup>64</sup>. *See also* Index II.3.  
Alexander III: coinage in Athens 34, 124–125<sup>66</sup>, 166, 298. *See also* Index II.2.  
Alkamenes: 122<sup>47</sup>  
Altars: 55–56, 123. *See also* Index II.3.  
Amphictionic Decree: 14–15  
Amphipolis: 26<sup>13</sup>. *See also* Index II.1.  
Amphora: handles, stamped 2, 50<sup>70</sup>, 64, 67, 213; Panathenaic, on Athenian coins 51, 52, 53, 54, 68. *See also* Indexes II.3, II.4.  
Antigonos Doson: 189–190, 205  
Antigonos Gonatas: 10, 12–13, 35, 48, 51, 52, 53, 68, 189–190; coinage in Athens 36–37, 166, 169; coinage overstruck 51–52, 53, 61, 62, 205. *See also* Index II.2.  
Antipatros: 10, 32  
Antoniniani. *See* Roman coins.  
Antoninus Pius: 57, 115, 233. *See also* Index II.3.  
Antony, M.: 15, 80, 85–87, 89, 99, 102, 103, 104, 105, 113, 233. *See also* Kleopatra; Index III.3.  
Apollo: 67–68, 83, 122, 125. *See also* Index II.3.  
Aratos: 49  
Ares, Temple of: 9, 20  
Argos: 295<sup>17</sup>. *See also* Index II.1.  
Aristion: 14, 70, 74, 82  
Aristophanes: 7, 24, 25, 53, 54  
Armor. *See* Tokens or Symbola.  
“Arsenal,” Hellenistic: 35  
Artemis: 52, 54, 68, 83<sup>149</sup>, 111. *See also* Index II.3.  
Asklepios: 121<sup>42</sup>, 125. *See also* Index II.3.  
Athena: Alkis (Alkidamos) 53, 68; Polias (Archegetis) 49, 53, 54, 58; types and statues of on Athenian imperial coins 102, 113–114, 121–126; wearing winged helmet 50–51. *See also* Index II.3.  
Athens: as cultural capital 120–121; decline of 92; as free and allied city 57<sup>102</sup>, 86, 88, 106, 120; revolt of in A.D. 13 81<sup>140</sup>  
Augustus-Octavian: 58, 87–89, 105–106, 111–112; civic coinages under 88–89, 113. *See also* Eleusis; Index II.3.  
“BAKCHOS RING.” *See* Eleusis ring.  
“Bakchos.” *See* Mystic staff.  
Blanks, for manufacture of coins: 104, 116<sup>14</sup>, 292–295  
Boiotian League: 36, 166, 204–206  
Brick Building: 317  
Bouphonia: 56  
Bronze coinage, Athenian: alloy of 31<sup>39</sup>, 33, 70, 84, 104, 117, 293; denominations of 1–2, 26–27, 32, 36–39, 48–49, 52, 68, 80, 82–84, 90–91, 118–120, 168–169. emergency (of 406/5 B.C.) 7–8, 25–26. *See also* Kollybos.  
Brutus: 85–86  
CAVITIES, PUNCHED ON COIN BLANKS AND WORN COINS: 94, 113–114  
Chalkis: 295<sup>17</sup>. *See also* Index II.1.  
Chersonesos, Tauric: 295<sup>17</sup>  
Chios: 88, 113, 120, 168. *See also* Index II.1.  
Chremonidean War: 10–11, 12, 34, 35, 167. *See also* Antigonos Gonatas.  
Cicada: 53, 54, 68, 83, 104. *See also* Indexes II.3, II.4.  
Claudius: 120  
Cleruchies. *See* Delos; Imbros; Hephaistia; Lemnos; Myrina; Salamis; Skyros.  
Coinage Degree: 6  
Commodus: 115, 116. *See also* Index II.3.  
Corinth: 89, 91<sup>182, 183</sup>, 92<sup>189</sup>, 93, 166, 169; well deposits at 38<sup>62</sup>, 207. *See also* Index II.1.  
Counterfeits. *See* Silver coinage, imitations of.  
Countermarking: 64–65, 68, 70–71, 93. *See also* Index II.5.  
Curse tablet: 299  
Cut or intentionally defaced coins: 4, 7, 9, 70, 167. *See also* Halving of coins.  
DARICS, AT ATHENS: 257, 282  
Delos: Athenian acquisition and loss of 13, 54, 66, 67, 82; coinage of cleruchy 15, 68–69, 76, 77, 167; devastation and decline of 14, 81, 104; hoards from 301. *See also* Hoards; Triarius; Index II.1.  
Delphi: 86, 101. *See also* Amphictionic Decree; Index II.1.  
Demeter: 28, 54, 67, 83, 87, 121<sup>42</sup>, 122, 123, 125. *See also* Index II.3.  
Demetrios II, of Macedon: 48, 189, 190, 205

- Demetrios of Phaleron: 32, 299  
 Demetrios Poliorketes: 10, 27, 33, 34<sup>47</sup>, 35, 53, 167, 168, 307. *See also* Index II.2.  
 Denarius: in Athenian inscriptions 83–84, 90, 118–119; in Greece 15–16, 50–51, 86–87, 89, 91, 113, 120. *See also* Bronze coinage, denominations of.  
 Denominations. *See* Bronze coinage.  
 Dexippus, P. Herennius: 118  
 Dionysios Chalkous: 24  
 Dionysos: 84–85, 99, 102–103, 104, 122. *See also* Index II.3.  
 Dipylon. *See* Kerameikos.  
 Dokimastes: 5, 9  
 Dolphin on Trident, on Athenian coins: 98–99. *See also* Index II.3.  
 Domitian: 115. *See also* Index II.3.  
 Dyme: 89
- EAGLE, ON ATHENIAN COINS: 87, 104, 105. *See also* Indexes II.3, II.4.  
 Eirene and Ploutos: 125  
 Electrum. *See* Kyzikos.  
 Eleusinia: 28, 123<sup>53</sup>  
 Eleusis: Athenian control of 27, 25–29, 34; coinage of and Mysteries 27–30, 31–32, 34, 35–36, 52, 54, 67–68, 82, 89, 95, 99, 105; coin types and denominational significance 84, 88; damage by Kostoboks 116; garrisoned against Herulians 118; initiation of Augustus-Octavian at 87, 89, 105, of Hadrian at 124, of Sulla at 82, 95; Macedonian occupation of 27, 34  
 Eleusis ring: 28. *See also* Indexes II.3, II.4.  
 Eleutheria, at Larissa: 57  
 Elis: silver coinage of 29. *See also* Index II.1.  
 Ephesos: 86<sup>166</sup>. *See also* Index II.1.  
 Erechtheion: 123<sup>54, 56</sup>  
 Eretria: 89, 295<sup>17</sup>. *See also* Index II.1.  
 Euboulos: 8  
 Euphranor: 122<sup>48</sup>  
 Exchange rate, bronze:silver: 91<sup>181</sup>
- FESTIVALS, COINAGE OF: 29–30, 66<sup>108</sup>. *See also* Eleusis.  
 Flamininus: 2, 51, 57, 106<sup>207</sup>  
*Fourrée*. *See* Plated or *fourrée* bronze coins.
- GALLIENUS: 117, 118, 121. *See also* Index II.3.  
 Gold coinage, Athenian: 6, 7, 32, 66, 74  
 Gorgoneion, on Athenian coins: 102. *See also* Index II.3.
- HADRIAN: 57, 113, 114, 115, 116, 121, 124, 218–219, 233. *See also* Eleusis, initiation of Hadrian at; Index II.3.  
 Hadriana: 123<sup>53</sup>
- Haleis: 295<sup>17</sup>  
 Halving of coins: 71, 92–93, 236. *See also* Cut coins.  
 Heliaia: 295<sup>14</sup>  
 Hephaestia, Lemnos: 111<sup>218</sup>, 167, 178–179. *See also* Index II.1.  
 Herakles: 123, 125. *See also* Index II.3.  
 Herodes Atticus: 114  
 Herulian invasion: 94, 113, 115, 117, 295. *See also* Hoards, with Herulian invasion.  
 Hippias: 5, 17<sup>70</sup>  
 Hoards: from the Agora 34, 35, 117, 168, 302, 303–304, 315, 316; not from the Agora 300–301 (full list); connected with the Laurion slave revolt(?) 66, with Herulian invasion 94, 115, 117, 118, 126, 169, 276<sup>68</sup>, 303–304, 316, with piratical attack on Delos 81, with Sulla's invasion 67, 118, 169<sup>5</sup>. *See also* Peiraeus.
- IAKCHOS: 82, 95, 122. *See also* Index II.3.  
 Imbros: 69, 88, 111–112, 167, 178. *See also* Index II.1.  
 Imitations. *See* Silver coinage, imitations of.
- KALAMIS: 125<sup>69</sup>  
 Kassandros: 10, 32, 187, 216, 299. *See also* Index II.2.  
 Kephisodotos: 125  
 Kerameikos: Building Z-3 32, 33, 215, 298; Dipylon gate, road and well 32, 298–299; grave 215  
 Kernos: 28<sup>24</sup>. *See also* Plemochoe.  
 Klazomenai: 39<sup>62</sup>. *See also* Index II.1.  
 Kleopatra: 58, 87, 104, 105, 233. *See also* Index II.2.  
 Knidos. *See* Amphora, handles; Index II.1.  
 Kollybos: 24–25, 38. *See also* Bronze coinage, denominations of.  
 Konon: 8  
 Kore: 68, 82, 87, 95, 121<sup>42</sup>, 122, 123. *See also* Index II.3.  
 Koroni fort: 34. *See also* Ptolemaic coinage.  
 Kostoboks: 116  
 Kyzikos: electrum staters of 50, 166, 257
- LACHARES: 10, 307  
 Larissa: 57, 92<sup>187</sup>. *See also* Index II.1.  
 Laurion: mines at 6, 8, 10, 15; slave revolt at 15, 66. *See also* Hoards, connected with Laurion slave revolt(?).  
 Lemnos: 69, 88, 111–112, 167, 178–180, 216. *See also* Index II.1.  
 Leochares: 56  
 Library of Pantainos: 91–92, 317–318  
 Lykourgos: 30, 31  
 Lyre, on Athenian coins: 68, 69<sup>120</sup>. *See also* Indexes II.3, II.4.  
 Lysimachos: 10, 35, 167, 168. *See also* Index II.2.

- MACEDONIAN COINAGE, IN ATHENS: 36–37, 51–52, 166–167, 169, 205. *See also* Antigonos Gonatas.
- Macedonian War: Second 51, 53, 58; Third 13, 68
- Marathon trophy: 123<sup>52</sup>
- Marcus Aurelius: 115, 116, 166. *See also* Index II.3.
- Megara: coinage of in Athens 166, 168, 169; reconciliation of with Athens 219. *See also* Index II.1.
- Metroon-Old Boleuterion: 9, 17<sup>72</sup>, 20
- Middle Stoa: 49–50, 294, 309–310
- Miltiades, monument: 123, 124
- Mints, in Agora: 104, 292–294, 295
- Mithradates VI: 14, 58, 66, 68, 70, 74, 81–82
- Mouseion: garrison at 12, 34
- Mounychia: liberation of 54. *See also* Peiraeus.
- Myrina, Lemnos: 111<sup>218</sup>, 167, 178, 179–180. *See also* Index II.1.
- Myron: 124<sup>65</sup>
- Mysteries. *See* Eleusis, coinage of.
- Mystic staff: 28. *See also* Indexes II.3, II.4.
- NERO: 93, 106<sup>209</sup>, 120. *See also* Index II.3.
- New Style coinage. *See* Silver coinage, Athenian, New Style.
- Nikopolis: 92<sup>189</sup>, 120. *See also* Index II.1.
- Nymphaeum: 294
- OCTAVIA: 85, 103, 104
- Octavian. *See* Augustus-Octavian.
- Olynthos: coins from 25–26, 39, 179, 182<sup>15</sup>, 184<sup>18</sup>, 187, 193, 215, 217, 221, 244, 245, 258, 260<sup>55</sup>; coin blanks from 295<sup>17</sup>; destruction date of 297
- PAMMENES: 115
- Pan, cave of: 123<sup>56</sup>
- Panathenaia: 51, 53, 123<sup>53</sup>; Antonian 85. *See also* Amphora, Panathenaic.
- Panhellenia: 123<sup>53</sup>
- Patrai: 92<sup>189</sup>. *See also* Index II.1.
- Peiraeus: 7, 48, 49, 51, 67, 69, 89, 99<sup>201</sup>; hoards from 300–301 (full list). *See also* Mounychia.
- Peisistratos: 5
- Pella: 12, 53, 86<sup>162</sup>, 295<sup>17</sup>. *See also* Index II.1.
- Pergamon: 51, 88. *See also* Index II.1.
- Perseus: 57. *See also* Index II.2.
- Philip II: forgery of coin of 291. *See also* Index II.2.
- Philip V: 50<sup>74</sup>, 51, 52<sup>77</sup>, 54<sup>87</sup>, 57, 68. *See also* Index II.2.
- Phokion: 32
- Piglet, on Attic coins: 28, 35–36, 38, 67. *See also* Index II.3.
- Plated or *fournée* bronze coins: 4, 7–8, 9–10, 17<sup>72</sup>, 49, 167–168
- Plemochoe, on Athenian coins: 28, 30, 52, 64–65, 68, 99. *See also* Indexes II.3, II.4.
- Pnyx: excavation coins from 26, 299–300; hoard 67<sup>109</sup>
- Pompey the Great: 99. *See also* Index II.3.
- Poppy, on Athenian coins: 83, 98. *See also* Index II.3.
- Poseidon: 99, 122. *See also* Index II.3.
- Praxiteles: 122<sup>46</sup>
- Prow, on Athenian coins: 88. *See also* Indexes II.3, II.4.
- Ptolemaic coinage: Athenian coin types related to 11, 58, 87, 104, 105; in Attica 11, 52, 167
- Ptolemy I: 10, 11<sup>40</sup>, 167
- Ptolemy II: 10, 11, 167. *See also* Index II.2.
- Ptolemy III (Euergetes): 36, 49, 52. *See also* Index II.2.
- Ptolemy V: 36
- RECTANGULAR PERIBOLOS: 295, 309, 310
- Revival of historical Athenian coin types: 90, 102, 110, 113, 114, 120
- Rhodes: 36, 51, 88, 120. *See also* Amphora, handles; Index II.1.
- Roma, goddess: 50, 51, 53, 57, 120. *See also* Index II.3.
- Roman coins: finds of in the Agora xxvi, 92, 115, 117, 301, 303, 307, 311, 315, 316, 317, 318; in Attica 115, 117. *See also* Denarius.
- Rudder, on Athenian coins: 52, 53. *See also* Index II.4.
- SALAMIS: coinage of 25, 27, 29, 37<sup>58</sup>, 69, 167, 168, 214–216, 300. *See also* Themistokles; Index II.1.
- Septimius Severus: 116, 120. *See also* Index II.3.
- Sikyon, coinage of: 93, 108, 207. *See also* Index II.1.
- Silver coinage, Athenian: fineness of 10, 15; imitations of 4, 6–7, 9, 11–12, 291; law on 5, 9, 20; New Style 13–16, 23, 48, 49, 50, 66, 73, 74, 80, 81–82, 83, 84, 85–86, 89, 125<sup>74</sup>. *See also* Denarius; Macedonian coinage; Plated or *fournée* bronze coins; Ptolemaic coinage; Wappenmünzen.
- Skiathos: 102
- Skyros: 69, 88, 111, 167. *See also* Index II.1.
- South Stoa: 67, 76, 312–313
- Southeast Temple: 294
- Sparta: 88, 89, 92<sup>189</sup>, 120. *See also* Index II.1.
- Sphinx: 88
- Square Peristyle: 253<sup>50</sup>, 33<sup>44</sup>, 315
- Stephanephoric coinage. *See* Silver coinage, Athenian, New Style.
- Stephanos, sculptor: 125<sup>70</sup>
- Stoa of Attalos: 67, 253<sup>50</sup>, 295, 316, 317
- Stoa of Zeus: 56–58, 106
- Sulla: 14, 60, 61, 66, 69, 70, 74, 80, 81, 84, 295. *See also* Eleusis, initiation of Sulla at; Hoards, with Sulla's invasion.
- Symbola. *See* Tokens or Symbola.

- TERMESSOS IN PISIDIA:** 113, 120  
**Theater of Dionysos:** 123<sup>52</sup>, 125  
**Thebes:** 26, 300. *See also* Index II.1.  
**Themistokles:** 122, 123<sup>52</sup>, 124, 168  
**Theseus:** 121<sup>42</sup>, 122, 123–124  
**Thessalian League:** 14, 57, 92<sup>189</sup>, 120. *See also* Index II.1.  
**Thessalonike:** 57, 86<sup>162</sup>, 92<sup>189</sup>, 105, 118. *See also* Index II.1.  
**Thucydides:** 54  
**Thunderbolt, on Athenian coins:** 57. *See also* Indexes II.3, II.4.  
**Timotheos:** 25–26  
**Tokens or Symbola:** 24, 40<sup>64</sup>, 115–116; for armor 35, 39, 168, 302  
**Trajan:** 57. *See also* Library of Pantainos; Index II.3.  
**Triarius, G. Valerius:** 69, 84, 167, 250  
**Tripod, on Athenian coins:** 68, 85–86, 101–102. *See also* Indexes II.3, II.4.  
**Triptolemos:** 28, 32, 83, 122. *See also* Index II.3.  
**Tyre:** 88, 120  
  
**VALERIAN:** 118. *See also* Index II.3.  
  
**WAPPENMÜNZEN:** 5, 16, 25, 102  
**Wheat ear, or kernel, on Athenian coins:** 26, 83. *See also* Indexes II.3, II.4.  
  
**XENOPHON:** 8  
  
**ZAKYNTHOS:** 105. *See also* Index II.1.  
**Zeus:** Eleutherios 54, 56–58, 106; head 51, 54, 87, 104, 105; Polieus 55–56; statue of, seated (Olympias) 124, standing or striding 50–51, 54–58, 68, 106, 123, 125, 126. *See also* Index II.3.

## II. INDEXES TO THE CATALOGUE

*References are to coin variety numbers*

### INDEX II.1

#### GEOGRAPHICAL

*Regions are in italics*

- Abdera **435**  
*Achaia* **731–746**  
Adramyteion **863, 864**  
Aigai **892, 893**  
Aigina **658–665**  
Aigion **731–733**  
Ainianes **516, 517**  
*Aiolis* **892–905**  
*Aitolia* **576–580**  
Akanthos **466**  
*Akarnania* **573–575**  
Akmoneia **970**  
Akragas **421**  
Alexandria (Egypt) **1020–1030**  
Alexandria Troas **881–885**  
Amisos **854, 855**  
Amphipolis **467, 468**  
Andros **821–824**  
Antioch on the Orontes **995–997**  
Antioch (Pisidia) **982**  
Apameia **971**  
Aphytis **469**  
Apollonia Pontica **436**  
Aptera **817**  
*Argolis* **781–800**  
Argos **781–787**  
*Arkadia* **801–816**  
Arsinoe (Crete) **818**  
Assos **886**  
Atarneus **865**  
Athens, including “Eleusinian” coinage **1–416, 830**,  
Appendix A:a  
Atrax **518**  
Attaleia **977**  
*Attica* **1–146, 640–642**  
Augusta Traiana **448**  
Autokane **894**  
*Bithynia* **856–862**  
*Boiotia* **592–608**  
*Bosphoros, Asiatic*, **852, 853**  
Bottiaia **470**  
Boura **734**  
Brundisium **418**  
Byzantion **437**  
*Chalkidike* **472**  
Chalkis **616–624**  
Chios **943–950**  
*Cilicia* **984–989**  
Cisalpine Celts **417**  
Coela **449**  
Corinth **666–720**  
Crete **817–820, 1033, 1034**  
Cyrenaica **1031–1034**  
Cyrene **1031, 1032**  
Delos **825–830**  
Delphi **589–591**  
Deultum **438**  
Dion **471**  
Dyrrhachion **551**  
*Egypt* **1004–1030**  
Elaia **895**  
Eleusis. *See* Athens.  
*Elis* **747–759**  
*Epeiros* **553–572**  
Ephesos **906–915**  
Epidauros **788–791**  
Eretria **625–627**  
Erythrai **916–919**  
*Euboa* **609–639**

Gela **422**  
 Gomphoi **519**  
 Gyrtion **520**

Halos **521**  
 Hephaistia **453, 454**  
 Heraia **803, 804**  
 Hermione **792–795**  
 Hermokapelia **967**  
 Histiaia **628–635**

Ilion **887**  
*Illyricum* **551, 552**  
 Imbros **161, 452**  
*Ionian* **906–952**  
 Ioulis **838–840**  
 Istrianon Limen **434**  
*Italy* **417–420**

*Judea* **998–1002**

*Karia* **953–966**  
 Karthaia **833–835**  
 Karystos **636–639**  
 Keos **831–840**  
 Kephallenia **756–758**  
 Klazomenai **920–922**  
 Kleitor **805**  
 Kleonai **796, 797**  
 Knidos **953–955**  
 Knossos **819, 819A**  
 Koressia **836, 837**  
 Korkyra **567–572**  
 Kos **958**  
 Kranion **756, 757**  
 Krannon **522, 523**  
 Kroton **419**  
 Kyme **896–900**  
 Kyparissia **763**  
 Kythera **780**  
 Kythnos **841, 842**  
 Kyzikos **866, 867**

Lakedaimon **767–779**  
*Lakonia* **767–780**  
 Lamia **524, 525**  
 Laodikeia **972**  
 Larissa **526–529**  
 Larissa Kremaste **530**  
 Lemnos **159, 159A, 453–456**  
 Lesbos **901–905**  
 Leukas **573**

*Lokris* **581–586**  
*Lycia* **974–976**  
*Lydia* **967–969**

*Macedonia* **466–515**, Appendix A:c  
 Magnesia on the Maiandros **923–926**  
 Magnetes **531–534**  
 Mamertinoi **423, 424**  
 Mantinea **806, 807**  
 Maroneia **439–441**  
 Medon **574**  
 Megalopolis **808**  
 Megara **643–656**  
*Megaris* **643–657**  
 Melos **843, 844**  
 Mesembria **442, 443**  
 Messene **760–762**  
*Messenia* **760–766**  
 Methana **798**  
 Methymna **901, 902**  
 Metropolis **927**  
 Miletos **928–930**  
 Mothone **764**  
 Mylasa **956**  
 Myndos **957**  
 Myrina (Lemnos) **455, 455A, 456**  
*Mysia* **863–880**  
 Mytilene **903–905**

Neandria **888, 889**  
 Nikaia **857**  
 Nikomedia **858–860**  
 Nikopolis **553–563**  
*Numidia* **1035**

Olbia **433, 434**  
 Olynthos **472**  
 Orchomenos (Boiotia) **598**  
 Orchomenos (Arkadia) **809**  
 Orthe **535**  
 Ouranopolis **473**

Pagai **657**  
*Pamphylia* **977–981**  
 Pantikapaion **430–432**  
 Parion(?) **868–871**  
 Paros **845**  
 Patara **976**  
 Patrai **735–742**  
 Pautalia **444**  
 Pella **474**  
 Pellene **743**

- Peparethos **549, 550**  
 Pergamon **872–878**  
 Perge **978**  
 Perinthos **445, 446**  
 Perperene **879**  
 Persian Empire **1003**  
 Phalanna **536**  
 Phanagoria **852**  
 Pharsalos **537–539**  
 Pheneos **810, 811**  
 Philippoi **475, 476**. *See also* **868–870**  
 Philippopolis **447**  
 Phlious **721**  
 Phokaia **931**  
*Phokis* **587–591**  
*Phrygia* **970–973**  
*Pisidia* **982, 983**  
 Pitane **880**  
*Pontos* **854, 855**  
  
 Rhegion **420**  
 Rhodes **959–966**  
  
 Salamis **640–642**  
 Same **758**  
 Samos **951, 952**  
 Samothrace **457, 458**  
 Sardis **968**  
*Sarmatia* **433, 434**  
 Seleukia on the Kalykadnos **984**  
 Selge **983**  
 Sestos **450, 451**  
*Sicily* **421–429**, Appendix A:b  
 Side **979, 980**  
 Sikyon **722–730**  
  
 Sillyon **981**  
 Siphnos **846**  
 Skepsis **890**  
 Skione **477**  
 Skodra **552**  
 Skyros **160**  
 Smyrna **932–941**  
 Soloi-Pompeiopolis **985, 986**  
 Syedra **987**  
 Synnada **973**  
 Syracuse **425–427**  
*Syria* **990–997**  
 Syros **847**  
  
 Tanagra **599–603**  
 Tarsos **988**  
*Tauric Chersonese* **430–432**  
 Tegea **812–816**  
 Tenea **744**  
 Tenedos **891**  
 Tenos **848–851**  
 Teos **942**  
 Thasos **459, 460**  
 Thebes **604, 605**  
 Thespiiai **606–608**  
*Thessaly* **516–550**  
 Thessalonike **478–484**  
 Thouria **765, 766**  
*Thrace* **435–465**  
 Thyrrheion **575**  
 Tripolis **969**  
*Troas* **881–891**  
 Troizen **799, 800**  
  
 Zakynthos **759**

## INDEX II.2

## KINGS AND RULERS

*Thrace*Lysimachos **461–464**Rhoimetalkes **465***Macedon*Philip II **485, 486**, Appendix A:cAlexander III **487–495**Philip III **496**Anonymous regal coinage **497, 498**Kassandros **499–501**Demetrios Poliorketes **502–506**Antigonos Gonatas **507–509**Philip V **510–513**Philip V or Perseus **514***Bosphoros*Rheskouporis VI **853***Bithymia*Prousius II **861, 862***Galatia*Amyntas **989***Syria*Seleukos III **990**Antiochos III **991**Seleukos IV **992**Alexander I Balas **993**Antiochos VII **994***Judea*Alexander Jannaios **998**Herod Archelaos **999**Agrippa I **1000***Egypt*Ptolemy II **1004–1006**Ptolemy III **1007**Ptolemy IV **1008**Unclassifiable Ptolemy I–IV **1009**Ptolemy VI and VIII **1010**Ptolemy VI **1011, 1012**Ptolemy VIII **1013, 1014**Ptolemy IX **1015**Ptolemy XI **1016, 1017**Ptolemy XII **1018**Kleopatra VII **1019***Numidia*Juba I **1035**

For Roman emperors, generals, and members of the imperial family, see the Index of Types (Index II.3), under the following names (listed here in chronological order):

Pompey

Julius Caesar

M. Antony

Augustus

Gaius and Lucius

Germanicus

Tiberius

Drusus

Caligula

Nero

Agrippina Minor

Julio-Claudian emperor

Julia Titi

Domitian

Trajan

Hadrian

Aelius Caesar

Antoninus Pius

Faustina I

Marcus Aurelius

Faustina II

Verus

Commodus

Septimius Severus

Julia Domna

Geta

Caracalla

Plautilla

Elagabalus

Severus Alexander

Julia Mamea

Maximinus

Maximus

Tranquillina

Trajan Decius

Etruscilla

Volusian

Gallienus and Valerian

Gallienus

Salonina

Saloninus

Probus

Diocletian



## INDEX II.3

## TYPES

*Heads are in profile, unless stated otherwise.*

- A in incuse square: Argos: **781**  
 A or  $\text{\AA}$ : Arkadian League **801, 802**  
 Achaia, seated: Achaian League **746**  
 Achilles, bust: Thessalian League **545, 546**  
 Aelius Caesar, head: Nikopolis **556**  
 Agonothesia, head: Thessalonike **480**  
 Agrippina Minor, bust: Corinth **688, 689**  
 Aineas, with Anchises and Askanios: Ilion **887**  
 Aitolia, head wearing kausia: Aitolian League **576, 577**  
 Ajax. *See* Shield of.  
 Akropolis: Athens **280, 375**. *See also* Theater of Dionysos.  
 Aktia, seated with scepter and agonistic urn: Nikopolis **560**  
 Aleos, head: Tegea **815**  
 Alexander I Balas, helmeted head: Alexander I Balas **993**  
 Alexander III (the Great), head: Lysimachos **462, 463**, Macedonian League **515**  
 Altar: Athens **202, 203**, Antioch **982**; with eagle between standards: Deultum **438**. *See also* Athena; Apollo, standing; Themistokles; Tyche; Zeus, standing.  
 Amazon (Smyrna), standing, holding temple: Smyrna **940, 941**  
 Amphora: Athens **76, 85, 98, 101, 105, 108, 184, 212, 234**, Sestos **450**, Korkyra **572**, Andros **821**, Chios **943–945, 947, 948**. *See also* Tree, olive.  
 Amphoras, two, with snakes: Lakedaimon **771**  
 Anchor: Apollonia Pontica **436**, Alexander Jannaios **998**  
 Antoninus Pius, head or bust: Crete **820**, Lakedaimon **778, 779**, Ephesos **910**, Alexandria **1025, 1026**  
 Antony, M., head: Corinth **673**  
 Anubis, standing: Perinthos **445**  
 Aphrodite  
 head or bust: Skione **477**, Corinth **666, 676, 690, 705**, Kythera **780**, Knidos **953**  
 seated: Ouranopolis **473**; in biga drawn by tritons: Corinth **689**  
 standing: Corinth **706, 719**, Smyrna **934**  
 Aplustre: Korkyra **570**  
 Apollo  
 head or bust: Athens **87, 101, 103, 105, 110–113, 131, 132, 135**, Mamertinoi **423**, Abdera **435**, Apollonia Pontica **436**, Olynthos **472**, Philip II **485(?)**, Kassandros **501**, Atrax **518**, Thessalian League **540**, Lokrian League **583, 586**, Delphi **591**, Megara **646–649**, Sikyon **722, 727**, Pellene **743**, Zakynthos **759**, Lakedaimon **768, 774**, Argos **783, 784**, Delos **825–830**, Keos **832**, Karthaia **834**, Koressia **837**, Ioulis **839**, Kythnos **842**, Adramyteion **863**, Atarneus **865**, Neandria **888, 889**, Miletos **929**, Smyrna **933, 935**, Knidos **954**, Sardis **968**, Lycian League **974**, Patara **976**, Seleukia on Kalykadnos **984**, Antiochos III **991**  
 seated: Boiotian League **594**, Thespiiai **608**, Seleukos III **990**  
 standing: Athens **269, 270, 361, 362**, Tanagra **601**, Lakedaimon **779**; archaic statue: Aigina **664**; Delios statue: Athens **143**; Lykeios: Athens **363, 364**; Patroos, with lyre: Athens **191, 268, 360**; sacrificing, with Dionysos at altar: Chios **949**  
*See also* Temple.  
 Ares, head in helmet: Lysimachos **464**, Amisos **854**; or Athena head in helmet: Metropolis **927**  
 Aristaïos, head, bearded: Keos **831**, Koressia **836**  
 Arkas. *See* Kallisto.  
 Arrow. *See* Bow.  
 Arsinoe, veiled head: Ptolemaic **1004, 1008**  
 Artemis  
 with bow, standing: Methana **798**; running: Dion **471**, Megara **656**, Methana **798**, Crete **820**; kneeling: Orchomenos **809**  
 head or bust: Athens **68, 104**, Athens-Lemnos **159**, Rhegion **420**, Syracuse **427**, Epeirote League **565**, Knossos **819**, Delos **826**, Aptera **817**, Phanagoria **852**, Kyme **898**, Ephesos **908**, Lycian League **975**, Patara **976**, Amyntas **989**, Seleukos III **990**, Cyrenaica and Crete **1034**  
 riding bull: Amphipolis **467, 468**  
 standing, with wreath and scepter: Perge **978**; Ephesia statue: Kyme **900**, Ephesos **909**; Lykophryene statue: Magnesia on the Maiandros **925**; Anaitis statue: Apameia **971**; leaning on spear, with dog: Lakedaimon **774**  
 with torch or torches, standing: Sikyon **730**, Ephesos **915**; walking: Athens **370**; running: Athens **130**, Megara **655**  
 Asklepios  
 head or bust: Athens **242**, Messene **762**, Epidauros **788–791**, Pergamon **874**  
 standing: Athens, **216, 217, 277, 367**, Pergamon **876**, Rhodes **966**, Akmonia **970**; statue flanked by centaurs: Pergamon **878**  
 Athena  
 head or bust in Attic helmet: Athens **6–27, 29–31, 35–37, 41–47, 64–65, 69, 70, 81, 99, 136**,

- 162–168, 177, 183, 187–189, 216, 220, 248, 284–416, Akanthos 466, Orthe 535, Pharsalos 539, Medon 574, Thyrrheion 575, Heraia 803, 804, Tegea 812, 813, Pergamon 872, 873, 875, Phokaia 931, Magnesia on the Maiandros 924; with wing: Athens 77, 78; with griffin: Aigai 892. *See also* Ares, head.
- head or bust in Corinthian helmet: Athens 28, 50, 52–54, 56–60, 67, 71, 78–80, 82–84, 90–98, 114, 130, 134, 142, 146, 166–176, 178–188, 190–215, 217–231, 248–416, Syracuse 426, Hephaistia 454, Myrina 455, 455A, 456, Samothrace 457, 458, Thessalonike 478, Alexander III 487, Antigonos Gonatas 507, 508, Lamia 524, Thessalian League 541, Aitolian League 580, Lokrian League 581, 582, 584, 585, Boiotian League 593, Megara 651, Corinth 668, Lakedaimon 769, 773, Mantinea 806, 807, Arsinoe 818, Melos 843, 844, Pergamon 876, Ilios 887, Kyme 899, Methymna 901, 902, Klazomenai 922, Attaleia 977, Side 979, 980
- helmeted facing head or bust: Pharsalos 537, 538, Phokian League 588, Kranion 758, Klazomenai 920, 921
- and Marsyas: Athens 262
- Parthenos head: Athens 32–34, 115, 118–126, 137, 138, 143, 147–149, 151–153, 156–158, 159A–161, Pella 474. *See also* Table, agonistic.
- and Poseidon with olive tree: Athens 174, 261, 355 seated, with Nike or phiale: Athens 348–350, Lysimachos 462, 463
- standing
- in chariot: Athens 210, 260, 351–354
- facing olive tree: Athens 173, 258, 259, 341–347
- with Nike: Athens 169–171, 248, 249, 284–292, 294 (Athena Parthenos. *See also* Table, agonistic), 172, 251, 252, 295, 298 (Velletri type), 297, 304, 316, 317, Corinth 712, 718
- with owl: Athens 293, 299–303
- with owl and phiale: Athens 66, 68 (Athena Polias)
- with phiale: Athens 250, 334–339, Kyparissia 763, Mothone 764, Thouria 766, Nikomedia 859, Synnada 973
- brandishing spear: Athens 308, Lakedaimon 777
- with spear and shield: Athens 257, 296, 305, 318–333, 340, Thouria 765
- striding: Athens 254–256, 311–315 (Athena of Parthenon East Pediment); brandishing spear: Athens 253, 307, Mesembria 443, Thessalian League 540, 542, 544, 547, 548 (Athena Itonia), Peparethos 550 (Athena Itonia), Argos 782; with lowered spear and aegis: Athens 139, 140, 149, 151, 306; with spear and shield: Athens 309, 310, Patrai 735, Thouria 765, Kleonai 797 throwing thunderbolt Athens 88, 89, Philip V 510 (Athena Alkidamos)
- See also* Sterope.
- Augustus, head or bust: Rhoimetalkes I 465, Amphipolis 467, Nikopolis 555, Corinth 678, 681, 682, Lakedaimon 776, Ephesos 909, uncertain 1036
- Axe, double: Tenedos 891, Mylasa 956
- Baetyl in baldacino: Chalkis 621
- Basket. *See* Cista Mystica; Snake; Wheat ears.
- Bee: Koressia 837, Ioulis 840, Ephesos 906, 907, Cyrenaica and Crete 1033
- Bellerophon, on Pegasus and fighting Chimera: Corinth 676; riding or restraining Pegasus: Corinth 670, 671, 691
- Birds, two, billing: Aphytis 469
- Boar, Kalydonian: Aitolian League 576. *See also* Jawbone of; Prow, in form of boar's head.
- Boukranion, fillet hanging from each horn: Athens 185, 283, 401–406; without fillet: Athens 240, 246, 247, Corinth 677. *See also* Bull, head.
- Bow: Kranion 756
- and arrow: Pantikapaion 431
- in case: Pantikapaion 430
- in case with club: Alexander III 490–493, 495, Erythrai 916, 917, Kos 958
- and club: Thasos 459, 460, Thebes 604
- and club and quiver: Alexander III 494
- crossed with quiver: Athens 107, 109, Myrina 456, Lycian League 974
- with stag-head terminal: Selge 983
- See also* Artemis, with bow.
- Building with column and statues: Corinth 716. *See also* Temple.
- Bull
- butting or charging: Krannon 523, Euboian League 614, Phlious 721, Magnesia on the Maiandros 923
- forepart: Histiaia 629
- head: Athens 5, Korkyra 569, Phokian League 587, Eretria 627. *See also* Eagle, holding.
- protome: Euboian League 609, 610, Histiaia 631, Karystos 636
- recumbent: Euboian League 611, Eretria 625, 626
- standing on tuna or walking: Gela 422, Euboian League 612, 613, Histiaia 628, 630, Kyzikos 866
- See also* Artemis, riding; Boukranion; Hera, seated; Themistokles, statue, facing altar and slain bull; Theseus, driving.

- Caduceus (usually winged): Athens **241, 245**, Tanagra **599**, Pheneos **810**, Knossos **819**. *See also* Hermes.
- Caestus, hand in: Smyrna **935**
- Caligula, head: Corinth **686, 687**
- Caracalla, bust: Thessalian League **547(?)**, Nikopolis **558–561**, Chalkis **623, 624**, Corinth **716**, Patrai **741, 742**, Kyparissia **763**, Thouria **766(?)**, Argos **787**, Hermione **795**, Pheneos **811**, Adramyteion **864**, Alexandria Troas **881–883**, Mytilene **905**, Magnesia on the Maiandros **926**, uncertain **1036**; mounted, spearing enemy: Mytilene **905**
- Cavalryman. *See* Horseman.
- Centaur: Magnetes **531**; with lyre (Chiron): Nikomedea **862**
- Centaur, back to back: Thessalonike **479**; with torches, flanking statue: Pergamon **878**
- Chariot. *See* Athena; Triptolemos.
- Chimera. Corinth **674**. *See also* Bellerophon.
- Chiron. *See* Centaur.
- Chloris. *See* Leto.
- Cicada: Athens **85, 100, 108, 109, 113, 131**
- Cista Mystica: Patrai **736, 737**, Amisos **855**. *See also* Snake.
- City-goddess, bust, veiled and turreted: Thessalonike **484**; head, turreted: Ephesos **907**, Knidos **955**, Synnada **973**, Tarsos **988**
- Club: Athens **237**, Philip II **486**, Epeirote League **566**, Leukas **573**, Patrai **737**, Lakedaimon **767, 770, 775**, Sardis **968**; between pilei of Dioskouroi: Lakedaimon **778**; and thyrsos: Thebes **605**. *See also* Bow; Herakles.
- Column supporting statue: Corinth **716**
- Commodus, bust: Megara **652, 653(?)**, Corinth **712**, Patrai **740**, Troizen **800**, Corinth **712**, Pergamon **878**, Assos **886**, Silyon **981**
- Cornucopia: Skepsis **890**; between pilei of Dioskouroi: Adramyteion **863**; double: Laodikeia **972**, Ptolemy IV **1008**. *See also* Genius of Corinth; Tyche.
- Cow, walking on dolphin: Byzantion **437**; feeding: Pella **474**
- Crab: Kroton **419**, Akragas **421**
- Crescents, three: Athens **21, 37**
- Crown, prize: Synedra **987**; (hemhem) of Harpokrates: Alexandria **1021**; of Isis: Antiochos VII **994**, Ptolemy XII **1015**, Alexandria **1027**
- Cupping vessels. *See* Thymiaterion.
- Demeter  
head: "Eleusis" **61**, Athens **72–74, 86, 116, 127, 128, 150**, Messene **760, 761**, Hermione **792, 794, 794A**, Pheneos **810**, Tegea **814**  
head facing: Hermione **793**  
and Kore, standing: Athens **178**. *See also* Triptolemos between.  
seated: Athens **186, 204(?)**, **205(?)**  
standing: Athens **266**; lighting torch: Megara **652**
- Demeter or Kore, bust: Athens **243, 244**, Paros **845**, Elaia **895**; head facing: Boiotian League **595**; standing, carrying torch: Athens **146**
- Demetrios Poliorketes, head: D. Poliorketes **503, 504**
- Diana. *See* Artemis.
- Dikaiosyne, standing with scales and cornucopia: Alexandria **1029**
- Diocletian, bust: Alexandria **1029, 1030**
- Dione, veiled head: Epeirote League **564**
- Dionysos  
head, bearded: Athens **142, 144**, Andros **822, 824**, Karthaia **835(?)**  
head (or bust), young: Athens **140, 141**, Maroneia **440, 441**, Peparethos **549**, Boiotian League **594**, Aigion **732**, Andros **821, 823**, Karthaia **833**, Ioulis **838**, Amisos **855**, Nikomedea **862**, Seleukos IV **992** (bust)  
sacrificing, with Apollo: Chios **949**  
seated, with torch: Pheneos **811**; before table with thymiaterion (D. Eleutherios): Athens **176, 264, 265**  
standing, with torch: Patrai **736**; holding spears and grapes: Maroneia **440, 441**; herm of, on prow: Mytilene **904**
- Dioskouroi, jugate heads: Lakedaimon **771**; standing: Lakedaimon **773**. *See also* Pilei.
- Dog (Sirios), forepart encircled by rays: Keos **831, 832**, Karthaia **834**, Ioulis **839**. *See also* Artemis.
- Dolphin: Karystos **639**, Corinth **702**; entwined on trident: Athens **129**, Karystos **637**; and shell: Syracuse **425**. *See also* Cow, walking on; Eagle, flying above; Melekertes; Youth, riding.
- Dolphins, two: Megara **643**, Aigina **662**, Arsinoe **818**. *See also* Obelisk, between; Trident, between; Tripod, between.
- Domitian, head: Thespiiai **608**, Patrai **738**, Miletos **930**, Alexandria **1020**
- Domitian and Domitia, busts: Thessalian League **543**
- Dove: Skione **477**, Sikyon **723–727**, Kythera **780**
- Drusus, head: Parion(?) **869**
- Drusus and Tiberius, heads jugate: Parion(?) **870**
- Eagle  
flying: Siphnos **846**; above dolphin: Olbia **433**; holding bull's head, Alexandria Troas **883**  
standing: Akragas **421**, Philip V or Perseus **514**, Aigion **732**, Elis **747–749**, Lakedaimon **772, 776**, Kyme **896, 899**, Ptolemy II, **1006**; on

thunderbolt: Athens **145**, Pergamon **874**, Kings of Egypt **1004–1005**, **1007**, **1009**, **1011–1014**, **1016**, **1017**, **1019**; holding bull's head, Alexandria Troas **885**; holding snake: Chalkis **616–620**, **622**, Nikomedia **858**; holding wreath: Antioch on the Orontes **997**

*See also* Altar; Zeus.

Eagles, two, standing on thunderbolt: Kings of Egypt **1010**, **1018**

Eileithyia, head: Tegea **814**

Eirene, holding Ploutos: Athens **267**

Elagabalus, bust: Philippopolis **447**, Coela **449**, Nikopolis **562**

Elephant: Antiochos III **991**

Eleusis ring in wheat wreath: Athens **75**

Elpis, standing: Alexandria **1028**

Eros, winged bust: Antiochos VII **994**

Etruscilla, bust: Ephesos **914**

Eurydike (daughter of Lysimachos), veiled head: Smyrna **932**

Faustina I, bust: Delphi **590**, **591**

Faustina II, bust: Amphipolis **468**

Female deity, seated on throne: Athens-Syros **160**. *See also* Great Goddess.

Female, head: Cisalpine Celts **417**, Syracuse **425**, Mesembria **443**, Imbros **452**, Kythnos **841**, Tenedos **891**, Autokane **894**, Mytilene **903**, Laodikeia **972**; veiled: Euboian League **614**, Eretria **626**. *See also* Nymph, head.

Fir tree. *See* Tree, fir.

Gaius and Lucius, heads: Corinth **678**

Galley: Skodra **552**, Nikopolis **556**, **562**, Corinth **693**; forepart of: Korkyra **571**, Seleukos IV **992**. *See also* Prow.

Gallienus, bust: Perinthos **446**, Thessalian League **548(?)**, Smyrna **941**

Gallienus and Valerian I, busts: Nikaia **857**

Gate with statues and three arches: Pagai **657**

Genius of Corinth: Corinth **688**

Germanicus, head: Tanagra **601**, Corinth **679**

Geta, bust: Megara **656**, Corinth **720**, Sikyon **730**, Ephesos **913**

Goat, standing or walking: Paros **845**, Syros **847**; nursing Zeus in cave: Aigion **733**

Goats, two, kneeling: Bottiaia **470**, Philip V **511**

Gorgoneion: Athens **139**, Olbia **433**

Grapes, cluster: Athens **233**, Korkyra **567**, **568**, Lokrian League **581–585**, Euboian League **612**, **613**, Histiaia **634**, Karthaia **833**, Ioulis **838**, Kythnos **841**,

Tenos **848**, **849**, Perperene **879**, Chios **946**, Soloi-Pompeipolis **985**, Herod Archelaos **999**; two clusters: Euboian League **611**, Eretria **625**. *See also* Vine, with.

Great Goddess, seated: Samothrace **457**

Griffin, forepart: Phokaia **931**; seated: Abdera **435**, Teos **942**, Alexandria **1026**

H with curved sides: Heraia **804**

⚡ : Kleitor **805**

Hadrian, bust or head: Thessalian League **544**, Nikopolis **554**, Delphi **589**, Elis **753–755**, Lakedaimon **777**, Bithynian League **856**, Smyrna **937**, Antioch on the Orontes **996**, Alexandria **1022–1024**, uncertain **1036**

Hand. *See* Caestus.

Hands, clasped, holding poppy and grain ears: Corinth **697**, **698**

Harpa: Philip V **512**, **513**, Larissa Kremaste **530**

Harpokrates crown. *See* Crown.

Hawk: Alexandria **1020**

Hekate, holding two torches: Aigina **665**

Helios, head or bust: Corinth **701**, Kleitor **805**, Rhodes **964**, **966**; head facing: Rhodes **959–962**

Helmet: Mesembria **442**, Kranion **757**; Macedonian: Macedonian Kings **497**, **498**, **506**, Herod Archelaos **999**

Hephaistos, head: Athens-Lemnos **159A**

Hera

bust, facing, on Ionic capital: Chalkis **616–618**

head: Chalkis **619**, **620**, Elis **747**, Argos **782**, **785**, Samos **951**; veiled: Orchomenos **598**

seated, bull at feet: Chalkis **623**

Herakles

head, bearded: Thasos **460**, Corinth **669**, Patrai **735**, Lakedaimon **770**, Selge **983**

head, young: Kroton **419**, Thasos **459**, Lysimachos **461**, Philipoi **475**, Philip II **486**, Alexander III **488**, **490–495**, Philip III **496**, Kassandros **499**, **500**, Antigonos Gonatas **509**, Philip V **511–512**, Epeirote League **566**, Korkyra **567**, **571**, Leukas **573**, Thebes **604**, **605**, Karystos **636**, Kleonai **796**, Erythrai **916–918**

head, young, facing: Kos **958**

slaying stag: Perinthos **446**

standing, with club and lion skin: Athens **179**, **365** (Herakles Farnese), Philippopolis **447**, Aitolian League **580**, Nikomedia **861**; with club and phiale: Athens **272**, **366**

Herakles or Theseus, standing, with club and phiale: Athens **199**

Herakleitos, standing: Ephesos **910**

Herm: Sestos **450**. *See also* Dionysos, standing.

Hermanubis, bust: Alexandria **1025**

## Hermes

- head or bust: Sestos **451**, Euboian League **615**, Antioch **982**  
 seated: Corinth **711**, Patrai **741**; statue in temple, Patrai **742**  
 standing, before thymiaterion: Imbros **452**; before tree and altar: Tanagra **603**  
 striking fallen Panoptes: Chalkis **624**  
 walking, with coin sack and caduceus: Athens **358**, **359**

Hero, feeding snake: Lokrian League **586**

Hippocamp: Syracuse **426**

Homer, seated: Nikaia **857**

## Horse

- forepart: Atarneus **865**, Kyme **897**, Seleukia on the Kalykadnos **984**; winged, ending in cornucopia: Skepsis **890**  
 grazing: Larissa **528**, **529**, Alexandria Troas **881**, **882**, **884**, Neandria **889**  
 head: Siculo-Punic **429**, Pharsalos **539**  
 hindquarters: Athens **2**  
 running: Thessalonike **478**  
 standing before palm tree: Siculo-Punic **428**  
 stepping or prancing: Maroneia **439**, Alexander III **489**, Gyrtos **520**, Larissa **526**, Magnetes **533**, Thessalian League **541**, **545**, **546**, Elis **750**

Horseman: Philip II **485**, Kassandros **500**, Atrax **518**, Krannon **522**, **523**, Larissa **527**, Macedonian League **515**, Sikyon **729**; charging or on prancing horse: Pharsalos **537**, **538**, Magnesia on the Maiandros **923**, **924**; crowning horse: Antigonos Gonatas **509**. *See also* Mēn.

Iakchos, standing, holding torch: Athens **117**, **188**

Incuse square: Athens **1–5**, Aigina **658–662**, Siphnos **846**, Kyzikos **866**

Isis, standing: Tripolis (Lydia) **969**. *See also* Serapis and Isis.

Isis crown. *See* Crown of Isis.

ΙΣΤ: Istrianon Limen **434**

Isthmos, standing, holding rudder: Corinth **685**, **700**

Janus, head: Thessalonike **479**

Jawbone of boar, and spearhead: Aitolian League **579**

Juba I, bust: Juba I **1035**

Julia Domna, bust: Augusta Traiana **448**, Thessalonike **483**, Nikopolis **557**, Megara **655**

Julia Mamea, bust: Deultum **438**, Smyrna **940**

Julia Titi, bust: Smyrna **936**

Julio-Claudian emperor, head: Tanagra **600(?)**, Parion(?) **871**, uncertain **1036**

Julius Caesar, head: Corinth **670**

K in incuse square: Kranion **757**

Kabeiros or Kabeiroi. *See* Nike; Pilei; Torch.

Kallisto, seated, with child Arkas: Orchomenos **809**

Kantharos: Athens **141**, Peparethos **549**, Andros **822**, Methymna **901**, **902**, Teos **942**

Karneios, head: Cyrene **1031**

Kepheus. *See* Sterope, with Athena and Kepheus.

King, Persian, running: Persian Empire **1003**

Kleopatra VII, bust: Kleopatra VII **1019**

Kore (Persephone), head: Athens **106(?)**, **117**, Siculo-Punic **428**, **429**, Salamis **642**, Kyzikos **867** (Soteira); standing or walking, with torches: Athens **187**, **213**. *See also* Demeter, and Kore; Demeter or Kore.

Krater: Judea **1002**

Kybele, head: Smyrna **934**; riding lion: Nikopolis **557**; seated: Samothrace **457**, Smyrna **936**

Lakedaimon, head: Lakedaimon **772**

Leto, standing, with child Chloris: Argos **787**

Libya, head: Cyrenaica **1032**

Lion, forepart: Knidos **955**; recumbent: Kassandros **499**; running: Lysimachos **464**; standing or walking: Cisalpine Celts **417**, Miletos **928–930**. *See also* Kybele, riding.

Lucius. *See* Gaius and Lucius.

Lucius Verus. *See* Verus.

Lyre: Athens **111**, Rhegion **420**, Sestos **451**, Olynthos **472**, Thespiiai **606–608**, Megara **646**, **649**, Delos **827–829**, Mytilene **903**

Maenad, head: Histiaia **628–635**

Male, bearded, nude, standing, with spear and shield: Tanagra **600**; head or bust, young: Athens **245**, **246**, Hephaistia **453**, Philip II **485**, Alexander III **489**, Phalanna **536**, Aitolian League **578**, **579**, Karystos **639**. *See also* Youth.

Marcus Aurelius, bust or head: Tanagra **603**, Pagai **657**, Corinth **706–708**, Patrai **739**, Nikomedia **858**

Marsyas. *See* Athena, and Marsyas.

Maximinus, bust: Magnetes **534**

Maximus, bust: Syedra **987**

Medusa, hair of. *See* Sterope.

Melikertes, riding dolphin: Corinth **683**, **707**, **709**, **714**

Mēn on horseback: Sillyon **981**

Miltiades, with Persian captive and trophy: Athens **190**

Muse, veiled head with modius: Thespiiai **606**, **607**

Mystic staff: Athens **62**, **63**; crossed with wheat ear: Athens **154**. *See also* Piglet.

## Nero

head: Thessalonike **481**, Corinth **690–696**, Sikyon **728**, **729**, uncertain **1036**

- standing, on temple podium: Corinth **696**; on tribunal orating: Corinth **694**; being crowned by Tyche: Corinth **695**
- Nike**  
 head: Athens **107**  
 standing: Philipoi **476**, Alexander III **487**, Boiotian League **596**, Side **980**; prow: Demetrios Poliorketes **502**; on globe: Thessalonike **481**, Corinth **680**  
 walking and/or crowning: Athens **147, 155, 207, 214, 215, 409**, Thessalonike **482**, Nikopolis **559, 563**, Corinth **720**, Pergamon **873**, Soloi-Pompeipolis **986**, Alexander I Balas **993**; carrying globe: Nikopolis **561**; carrying Kabeiros image: Thessalonike **483**  
*See also* Athena; Zeus.
- Nilus**, reclining: Alexandria **1023**
- Nymph**, head: Lamia **525**, Larissa **528, 529**, Larissa Kremaste **530**, Phalanna **536**, Euboian League **609, 610**, Salamis **640, 641**; head facing: Gomphoi **519**, Halos **521**, Larissa **526, 527**; seated, on stern of ship: Histiaia **632**
- Obelisk**, between dolphins: Megara **645**
- Octavian**. *See* Augustus.
- Octopus**: Eretria **627**
- Olive tree**. *See* Tree, olive.
- Owl**  
 Double-bodied, standing: Athens **20, 41–43**  
 standing facing: Athens **12, 19, 35, 36, 64, 231**, Myrina and Hephaistia **455, 455A**  
 standing sideways, head facing: Athens **6–11, 13–18, 22–27, 30, 31, 50, 52–54, 57–60, 77, 87, 162–167, 226–230, 414–416**, Peparethos **550**, Medon **574**, Thyrreion **575**, Lakedaimon **769**, Tegea **812**; on amphora: Athens **32–34, 110, 115, 118–126, 157, 158, 197**; Delos (cleruchy) **830**; on palm branch: Pergamon **875**; on prow: Athens **152**; on rudder: Athens **71**; on thunderbolt: Athens **67, 81, 100**. *See also* Tree, olive.  
 standing three-quarters facing: Athens **28, 69, 70**
- Owls**, two, standing: Athens **12A, 29, 44–47, 56, 65**; on thunderbolt: Athens **99, 156**
- Palm**, branch: Judea **1001**; tree: Delos **825**; with horse: Siculo-Punic **428**
- Pan**  
 erecting trophy: Antigonos Gonatas **507, 508**  
 head, bearded: Syros **847**  
 head, young: Bottiaia **470**, Arkadian League **801**  
 seated: Megalopolis **808**
- Panoptes**. *See* Hermes, striking.
- Peacock**: Samos **951**
- Pegasos**, flying: Corinth **666–668, 683–687, 701, 704**; forepart: Corinth **669**; walking: Corinth **715**. *See also* Bellerophon.
- Peirene**, seated: Corinth **713**
- Pentagram**: Pitane **880**
- Persephone**. *See* Kore (Persephone).
- Perseus**, head: Philip V **513**, Philip V or Perseus **514**  
 Φ framed by four globules: Phlious **721**
- Philoktetes**, shooting: Lamia **524, 525**
- Phrixos**, riding ram: Halos **521**
- Piglet**, on mystic staff: “Eleusis” **38, 48, 49, 51, 55, Athens 39, 40**; standing: Athens **63, 86, 106, 232, 243**
- Piglets**, two: Athens **62**
- Pilei of Dioskouroi or Kaberoi**: Athens-Imbros **161**, Lakedaimon **767, 768**, Alexandria **1022**. *See also* Cornucopia, between; Club, between; Torch, between.
- Plautilla**, bust: Aigina **665**, Corinth **717–719**, Kleonai **797**
- Plemochos**: “Eleusis” **61**, Athens **72–75, 102–104, 129**
- Plow**: Dion **471**. *See also* Priest.
- Pomegranate**: Side **979**
- Pompey**, head: Soloi-Pompeipolis **986**
- Poppy**, between crossed wheat ears: Athens **133, 134, 150**
- Poseidon**  
 head or bust: Brundisium **418**, Pantikapaion **432**, Demetrios Poliorketes **505**, Krannon **522**, Korkyra **569, 572**, Chalkis **621**, Karystos **637, 638**, Corinth **674, 675, 700, 704**, Troizen **799**, Tenos **850**  
 seated: Corinth **671**  
 standing: Boiotian League **595**, Tenos **851**  
 striding, brandishing trident: Demetrios Poliorketes **502, 503**  
*See also* Athena, and Poseidon.
- Priest or Priests**, plowing with oxen: Patrai **738**, Parion(?) **868–871**
- Prize crown**. *See* Crown.
- Probus**, bust: Alexandria **1028**
- Prousius II**, head: Nikomedia **861**
- Prow**: Pantikapaion **432**, Coela **449**, Demetrios Poliorketes **504, 505**, Magnetes **532**, Korkyra **568**, Megara **643–645**, Aigina **663**, Corinth **673**, Smyrna **938, 939**, Knidos **953, 954**; in form of boar’s head: Nikopolis **555**; often with owl on ram: Athens **220, 413**. *See also* Dionysos, standing, herm on; Galley.
- Ptolemy I**, head: Ptolemy VI **1011**, Cyrenaica **1032**
- Ptolemy III**, bust: Ptolemy III **1007**
- Ptolemy VII**, head: Ptolemy VI **1012**
- Pyre of Sandon**: Tarsos **988**

Quiver: Argos **785**. *See also* Bow, and club.

Race torch. *See* Torch.

Ram, forepart: Samothrace **458**, Klazomenai **921**; head: Aigina **663**, Pellene **743**; recumbent: Klazomenai **922**; standing: Kranion **756**; walking: Klazomenai **920**. *See also* Phrixos, riding.

Rheskouporis VI, bust: **853**

Rhodos, head: Rhodes **963**, **965**

Rhoimetalkes I, head: **465**

River god, horned head: Gela **422**

Roma, head in Corinthian helmet: Cyrenaica and Crete **1033**; turreted bust: Corinth **698**, Pergamon **877**, Perperene **979**, Hermokapelia **967**

Rose: Kythnos **842**, Rhodes **959–965**

Rudder: Corinth **702**, **703**. *See also* Isthmos; Owl; Tyche.

Salonina, bust: Nikopolis **563**

Saloninus, bust: Ephesos **915**

Sandon, *See* Pyre of.

Satyr, young head: Pantikapaion **430**, **431**

Senate, bust: Pergamon **877**, Hermokapelia **967**; veiled: Corinth **697**, **699**

Septimius Severus, bust: Megara **654**, Corinth **713–715**, Boura **734**, Tenea **744**, Mothone **764**, Argos **786**, Methana **798**, Tegea **816**, Ephesos **912(?)**

Serapis, bust: Smyrna **939**, Tripolis **969**, Alexandria **1030**; and Isis, jugate heads: Perinthos **445**

Serpent, fish-tailed: Pautalia **444**

Severus Alexander, bust: Aigai **893**

Shell. *See* Dolphin and.

Shield, Macedonian: Macedonian Kings **497**, **498**, **506**; Boiotian: Boiotian League **592**, **596**, **597**; of Ajax, with sheathed sword: Salamis **640–642**

Ship, Argo with rowers: Magnetes **534**. *See also* Galley; Prow; Themistokles.

Silphium plant: Cyrene **1031**

Sirios. *See* Dog.

Slinger: Ainianes **516**, **517**

Smyrna. *See* Amazon.

Snake, basket with: Athens **221**; coiled: Athens **219**, Epidauros **790**, Pergamon **872**; on staff: Messene **762**. *See also* Amphoras; Eagle, standing, holding; Hero, feeding; Tree, olive; Triptolemos.

Soteira. *See* Kore.

Spearhead: Epeirote League **565**, Aitolian League **577**, *See also* Jawbone of boar.

Sphinx, seated: Athens **153**, Chios **943–950**, Perge **978**

Square. *See* Incuse square; Vine.

Staff, mystic. *See* Mystic staff; Piglet.

Stag, kneeling: Ephesos **906**; recumbent: Phanagoria **852**; standing: Athens-Lemnos **159**, Knossos **819A**,

Ephesos **911**, **913**, Magnesia on the Maiandros **925**, Lycian League **975**, Amyntas **989**, Cyrenaica and Crete **1034**; walking: Ephesos **912**. *See also* Herakles, slaying; Torch, between.

Standards, military: Philippoi **476**. *See also* Altar, with eagle.

Star with eight rays: Ouranopolis **473**, Karthaia **835**, Koressia **836**, Miletos **928**, Alexander Jannaios **998**

Sterope, receiving hair of Medusa with Athena: Tegea **814**; with Athena and Kepheus: Tegea **815**

Sword, sheathed: Amisos **854**. *See also* Shield.

Syrinx: Arkadian League **801**, **802**

Table, agonistic, with amphora, owl, head of Athena or statuette of Athena Parthenos, and usually wreath and/or palm branch: Athens **184**, **192–194**, **281**, **282**, **386–400**

Telesphoros: Athens **218**, **242**

Temple

distyle, with statue of Athena or Hermes: Patrai **739**, **742**

hexastyle: Corinth **681**, **682**, Smyrna **937**

octastyle: Bithynian League **856**, Juba I **1035**

side and front, with statue of Apollo: Delphi **590**

tetrastyle: Corinth **696**, **699**

*See also* Amazon, holding.

Theater of Dionysos: Athens **376**

Themistokles, standing on galley: Athens **182**, **183**, **278**, **279**, **374**; statue facing altar and slain bull: Magnesia on the Maiandros **926**

Theseus

bust: Athens **232–241**

attacking with club: Athens **200**, **208**, **209**, **373**, **408**

driving bull: Athens **180**, **273**

and Minotaur: Athens **189**, **201**, **275**, **276**, **372**

raising rock: Athens **181**, **274**, **371**, Troizen **800**

*See also* Herakles or Theseus.

Thunderbolt: Syracuse **427**, Elis **751**, Pergamon **874**, Metropolis **927**, Myndos **957**, Selge **983**. *See also* Athena; Owl; Owls; Zeus.

Thymiaterion, between cupping vessels: Epidauros **789**. *See also* Dionysos, seated before; Hermes, standing before.

Thyrsoi: Andros **823**; and club: Thebes **605**

Thyrsoi, crossed: Chios **950**

Tiberius, head: Thessalian League **542**, Tanagra **602**, Corinth **680**, Knossos **819A**, Parion(?) **868**

Tiberius and Drusus, heads: Parion(?) **870**

Torch

Hermione **792**, **794A**, Elaia **895**; between stags: Ephesos **908**

- race torch, bound with fillet: Hephaistia **454**, Aptera **817**; between pilei of Kabeiroi: Hephaistia **453**  
*See also* Artemis; Demeter.
- Torches, two: Athens **238**, **244**, Hermione **794**. *See also* Hekate.
- Trajan, charging on horseback: Nikopolis **553**; head or bust: Thessalonike **482**, Nikopolis **553**, Attaleia **977**, Alexandria **1021**
- Trajan Decius, bust: Nikomedia **859**, **860**, Alexandria Troas **884**
- Tranquillina, bust: Kyme **900**, Samos **952**
- Tree  
 fir: Skepsis **890**  
 olive, with owl: Athens **211**, **410**  
 with owl and amphora: Athens **195**, **196**, **377–385**, **411**  
 with owl, amphora, and entwining snake: Athens **224**, **225**  
*See also* Athena, standing; Athena, and Poseidon.
- Trident: Orthe **535**, Boiotian League **592**, **597**, Karystos **638**, Corinth **667**, **703**, Troizen **799**, Mantinea **806**, **807**, Mylasa **956**; between dolphins: Byzantion **437**, Tenos **850**. *See also* Dolphin; Athena, and Poseidon; Poseidon.
- Tripod: Athens **112**, **114**, **138**, **222**, **223**, **236**, **412**: Philippoi **475**, Kassandros **501**, Dyrrachion **551**, Epeirote League **564**, Orchomenos **598**, Tanagra **602**, Histiaia **633**, Megara **647**, **650**, **651**, Sikyon **724**, Zakynthos **759**, Messene **760**, Argos **784**, Andros **824**, Kyzikos **867**, Smyrna **932**, **933**; between dolphins: Megara **644**. *See also* Apollo, seated.
- Triptolemos, between Demeter and Kore: Athens **177**; in or mounting snake-drawn chariot: “Eleusis” **38**, **48**, **49**, **51**, **55**, Athens **39**, **40**, **116**, **127**, **128**, **154**, **155**, **168**, **198**, **206**, **271**, **368**, **369**, **407**
- Trophy: Aitolian League **578**, Boiotian League **593**
- Turtle: Aigina **658–661**
- Tyche  
 bust, turreted: Corinth **698**  
 standing, with cornucopia and rudder: Nikopolis **554**, Boura **734**, Hermione **795**, Samos **952**; and scepter: Nikopolis **558**; and phiale: Corinth **705**, Tenea **744**; and phiale at altar: Megara **654**, Corinth **710**, **717**  
*See also* City-goddess; Nero, standing, being crowned by.
- Umbrella: Agrippa I **1000**
- Valerian. *See* Gallienus and Valerian.
- Vase, with one handle: Corinth **672**, Kyme **896–898**; with palm: Corinth **677**. *See also* Amphora; Kantharos; Krater; Peirene.
- Verus, bust: Pautalia **444**, Corinth **709–711**, Ephesos **911**
- Vine, branch: Judea **1002**; with grapes: Histiaia **628**; with grapes in square: Maroneia **439**
- Volusian, bust: Alexandria Troas **885**, Antioch on the Orontes **997**
- Wagon, drawn by mules: Ephesos **914**
- Warrior, charging: Mamertinoi **424**, Tegea **813**; slinging: Ainianes **516**, **517**; standing: Mamertinoi **423**
- Wheat ear: Euboian League **615**, Neandria **888**
- Wheat ears: Athens **132**, **135**, **136**, **239**, **247**, Agrippa I **1000**; in vase or basket, Athens **235**. *See also* Poppy.
- Wheel, with four spokes: Athens **3**, Istrianon Limen **434**, Mesembria **442**, Akanthos **466**
- Wolf, head: Argos **781**; at bay: Argos **783**
- Wreath, surrounding  
 ANT|KAI in wreath: Thessalonike **480**  
 X : Achaian League **745**  
 ΒΑΣΙΛΕΩΣ|ΦΙΛΙΠΠΟΥ: Philip V **512**, **513**  
 CO|RIN: Corinth **672**  
 ΔΗ|Μ : Sikyon **723A**  
 E in laurel wreath: Epidauros **788**  
 Ê in wheat wreath: Hermione **793**  
 FA|ΛEI|ΩN: Elis **752**  
 ΗΛEI|ΩN: Elis **753**  
 ΘΕΣΑΛΟ|ΝΙΚΕ|ΩN: Thessalonike **484**  
 IE|ΠΑΣ: Epidauros **791**  
 ΙΣ|ΤΗΜΙ|Α: Corinth **708**; ΙΣΤΙΑ|ΙΕΩN: Histiaia **635**  
 ΚΛ|ΕΩ: Kleonai **796**  
 ME|Γ in wreath: Megara **648**  
 MH|ΛΙΩN: Melos **843**  
 ΝΕ|ΜΕΙ|Α: Argos **786**  
 ΝΕΡ|ΩΝΟ|C: Judea **1001**  
 ΠΥ|ΘΙΑ: Delphi **589**  
 ξ : Same **758**  
 Σ or ΣΙ: Sikyon **722**, **723**, **725**, **726**  
 SC| A in wreath: Antioch on the Orontes **996**  
 ΤΑΝΑ|ΓΡΑΙ|ΩN: Tanagra **599**  
 Φ or ΦΩ: Phokian League **587**, **588**
- Youth, riding dolphin: Brundisium **418**; walking, with raised arms: Sikyon **728**
- Zeus  
 head, bearded: Athens **66**, **76**, **88**, **89**, **102**, **144**, **145**, Mamertinoi **424**, Aphytis **469**, Philip V **510**, Ainianes **516**, **517**, Gyrtion **520**, Magnes



**531–533**, Dyrrachion **551**, Skodra **552**, Chalkis **622**, Megara **650**, Aigina **664**, Aigion **731, 733**, Achaian League **745**, Elis **748–752**, Thouria **765**, Lakadaimon **775**, Arkadian League **802**, Megalopolis **808**, Tenos **848**, Pitane **880**, Autokane **894**, Mytilene **904**, Erythrai **919**, Smyrna **938**, Myndos **957**, Akmonia **970**, Apameia **971**, Antioch on the Orontes **995**, Kings of Egypt **1005, 1006, 1009, 1010, 1013–1018**; bearded, young: Tenos **849, 851**

seated, with scepter and eagle: Athens **356**, Lysimachos **461**, Alexander III **488**, Philip III **496**; with scepter and Nike: Athens **263**, Megara **653**,

Patrai **740**, Antioch on the Orontes **995**; with scepter on rocks: Gomphoi **519**

standing

with arms extended: Elis **755**

sacrificing at altar: Athens **175, 357**

with scepter and eagle: Adramyteion **864**, Assos **886**, Aigai **892, 893**

with scepter and Nike: Achaian League **746**

with lowered thunderbolt, Athens **78–80, 148**

striding, throwing thunderbolt: Athens **82–84, 90–97, 137**, Aigion **731**, Elis **754**, Messene **761**

*See also* Goat, nursing Zeus in cave.

## Index II.4

## SYMBOLS AND ADJUNCT TYPES

- Amphora: Athens **28, 69, 77, 92, 93**, Corinth **667**, Chios **950**  
Anchor: Athens **32**  
Aplustre: Athens **73**, Histiaia **632**, Ptolemy XI **1017**  
Ares, holding scepter: Corinth **667**  
Astragal: "Eleusis" **38**, Ephesos **906**  
Axe, double: Demetrios Poliorketes **505**
- Bee: Philip III **496**  
Bird: Philip V **510**  
Boukranion: "Eleusis" **38**, Athens **169, 249**, Thyrrheion **575**  
Branch: Myrina **455**, Philippoi **475**
- Caduceus: Athens **124**, Thasos **459**, Thessalonike **478**, Samos **951**, Herod Archelaos **999**  
Cicada: Athens **143, 158**  
Club: Abdera **435**, Euboian League **613**, Histiaia **634**, Argos **784**, Mytilene **903**  
Cornucopia: Athens **59, 84, 91, 92**, Coela **449**, Chalkis **616**, Ptolemy III **1007**, Ptolemy VI and VIII **1010**  
Crayfish: Apollonia Pontica **436**  
Crescent: Thessalonike **482**, Alexander III **488**, Antigonos Gonatas **509**, Ephesos **914**
- Dolphin: "Eleusis" **38**, Byzantion **437**, Lysimachos **461**, Boiotian League **592, 597**, Rhodes **960**, Ptolemy VI **1012**
- Eagle: Athens **82-84, 90-93**  
Elephant: Alexandria **1023**  
Eleusis ring: Athens **43, 44, 60, 72**, "Eleusis" **61**
- Flower: Athens **123**, Antigonos Gonatas **507(?)**
- Galley: Corinth **690**  
Grapes, cluster: Philippoi **475**, Kassandros **500**, Aitolian League **579**, Chalkis **618**, Histiaia **631**, Patrai **737**, Chios **944**, Rhodes **959**; two clusters: Histiaia **628, 629**. *See also* Vine branch.  
Greave: Lokrian League **584**  
Griffin, running: Corinth **667**
- Helmet: Athens **88**, Antigonos Gonatas **507**  
Herm: Chalkis **618**  
Horse's head: Athens **88**
- Isis crown on stand: Ptolemy XII **1018**  
Ivy branch with leaves: "Eleusis" **38**  
Ivy leaf: "Eleusis" **38**, Alexander III **488**, Demetrios Poliorketes **503**, Lokrian League: **584**, Boiotian League **592**
- Lion, forepart: Lysimachos **461**  
Lyre: Athens **87**, Mamertinoi **423**, Lysimachos **462**
- Mystic staff: Athens **41, 95, 119**
- Octopus: Akragas **421**  
Owl: Athens **74, 76, 78, 149**
- Palm: Patrai **735**  
Pedum: Antigonos Gonatas **507**  
Pig's head: "Eleusis" **38**  
Pilei, two, of the Dioskouroi: Athens **94, 126**, Phokaia **931**, Chios **944**, Antioch on the Orontes **995**  
Pileus: Athens **90**  
Pine cone: Corinth **667**  
Plemochoe: Athens **39, 45, 70, 91, 116, 117, 120, 146**  
Poppies, two : Chios **948**  
Poppy: Athens **128, 138**  
Poppy head, between two wheat ears: Athens **118**  
Prow: Athens **79**, Argos **785**, Chios **948, 949**
- Quiver: Lysimachos **461**
- Race Torch. *See* Torch.  
Ram's head: "Eleusis" **38**  
Rose: Chalkis **618**  
Rosebud: Philip III **496**  
Rudder: Athens **71**, Thasos **459**
- Scepter: Samos **951**  
Shell: "Eleusis" **38**, Akragas **421**  
Shield: Ptolemy II **1005**  
Snake: Athens **89, 151, 157**, Atarneus **865**  
Spearhead: Mamertinoi **424**, Lysimachos **464**, Alexander III **488**  
Staff. *See* Mystic staff.  
Star: Athens **82, 85, 401**, Thasos **459**, Alexander III **488**, Magnetes **531**, Euboian League **612, 613**, Chalkis **616, 619**, Histiaia **632**, Karthaia **833**, Paros **845**, Magnesia on the Maiandros **925**, Miletos **929, 930**, Chios **949**; between crescents: Athens **97**  
Stars, two: Chios **947**  
Sword: Euboian League **613**

- Thunderbolt: Athens **67, 81, 99, 100, 138**, Histiaia **632**, Corinth **667**, Arkadian League **802**, Antioch on the Orontes **995**
- Thymiaterion: Euboian League **613(?)**
- Thyrsos: Athens **96, 125**; Patrai **737**; with fillet and bell: Amisos **855**
- Tongs: Hephaistia **455A**
- Torch: Alexander III **487, 495**, Philip III **496**, Corinth **667**
- Trident: Antigonos Gonatas **507**, Boiotian League **594**, Histiaia **632**, Megara **643**, Argos **785**, Ptolemy II **1006**; between dolphins: Lysimachos **463**
- Tripod: Athens **121**, Lysimachos **461**, Boiotian League **594**, Megara **643**, Corinth **667**, Messene **761**
- Triskeles: Salamis **641(?)**
- Trophy: Euboian League **613(?)**, Chalkis **616, 617**, Histiaia **630**
- Tuna: Kyzikos **866, 867**
- Tyche, holding staff: Athens **34**; voting: Athens **33**
- Vine branch, with grape cluster: Mytilene **904**. *See also* Grapes.
- Wheat ear: Athens **58, 80, 83, 89, 137, 152**, Leukas **573**, Euboian League **614**, Neandria **889**
- Wheat ears, two: Athens **122**
- Wheat kernel: Athens **35, 36**, Gela **422**
- Wreath: Athens **57**, Nikopolis **559**, Chalkis **618**, Corinth **667**, Thouria **765**

## INDEX II.5

## COUNTERMARKS

AΘE: Athens [115–126 etc.], p. 110

5: Smyrna **941**

Z: Nikomedia **860**

IN: uncertain **1037**

K: Ptolemy VI **1012**

R: uncertain **1037**

T|Σ: Parion(?) **871**

X: Myrina or Hephaistia **455A**, uncertain **1037**. *See also*  
Owl, standing

Amphora at r. of A: Athens [115–126 etc.], p. 110

Bee: Methymna **901**

Cicada: Athens **94, 95**

Cornucopia: uncertain **1037**

Dolphin: Chalkis **618**, Rhodes (imitation) **960, 961**; on  
trident: uncertain **1037**

Gorgoneion: Histiaia **633**

Grapes, cluster: Chalkis **620**, Andros **823**, Tenos **851**,  
uncertain **1037**

Hand, open, right: Athens, pp. 294–295; open, left:  
uncertain **1037**

Head: Maroneia **440**; l., Koressia **837**

of Athena r., wearing Corinthian helmet: Pantika-  
paion **432**

of Hera, facing: Antigonos Gonatas **507**

of Pan r.: Antigonos Gonatas **507, 509**

Helmet, Boiotian: Antigonos Gonatas **509**

Lyre: Methymna **902**, uncertain **1037**

Owl: Athens **144**, Tenos **851(?)**, Aigai **892**; standing over  
✕ or X: Chalcis **622**

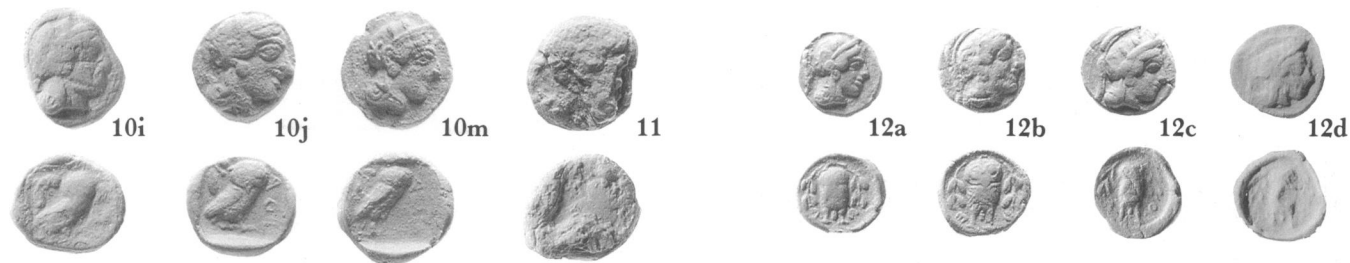
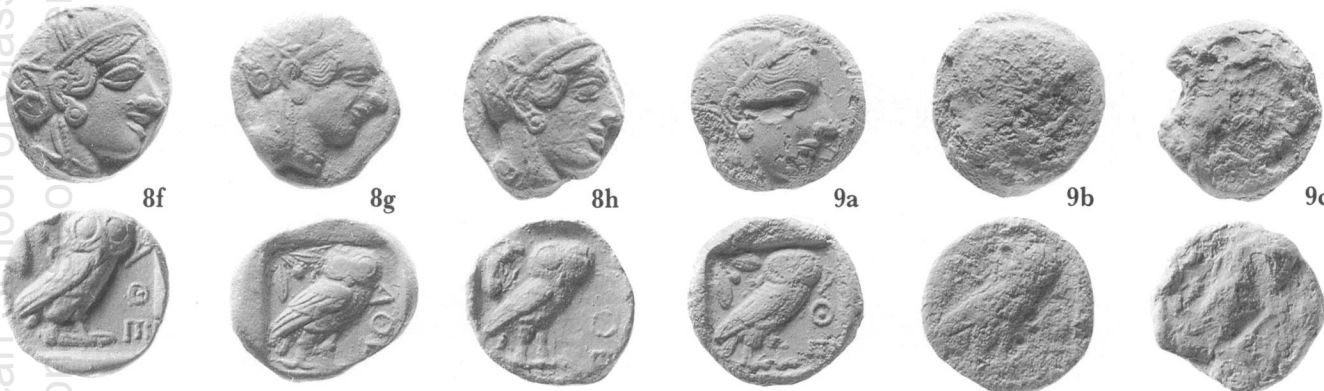
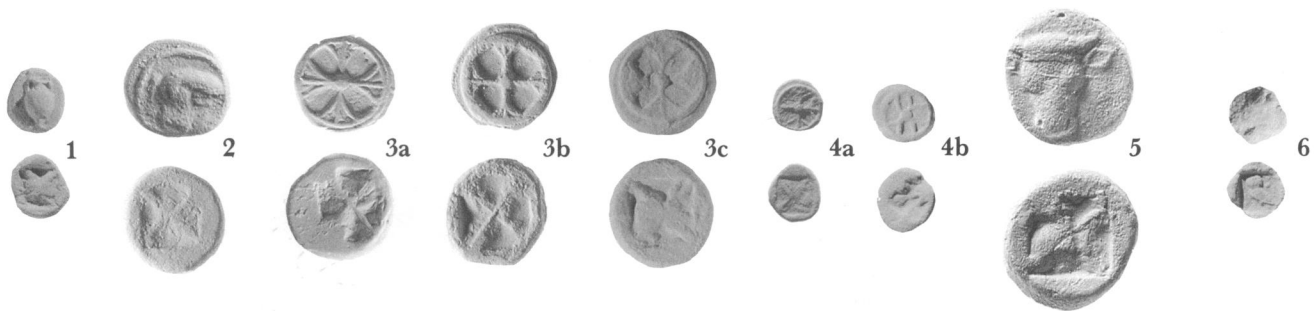
Rose(?): Maroneia **440**

Star or rosette: Athens [**88, 89**], uncertain **1037**

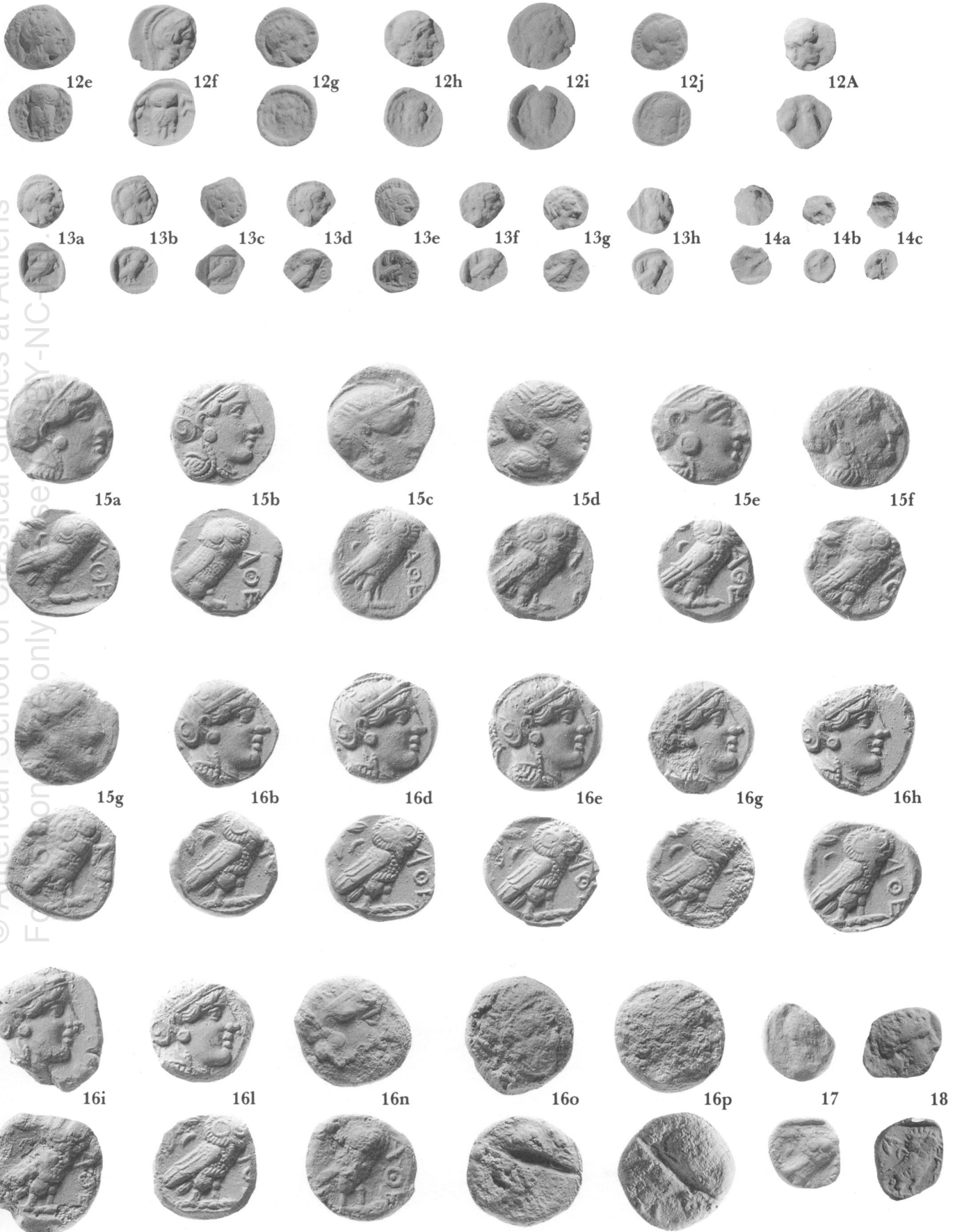
Tripod: Tanagra **602**, Corinth **695**

Wreath: Antigonos Gonatas **507**, uncertain **1037?**

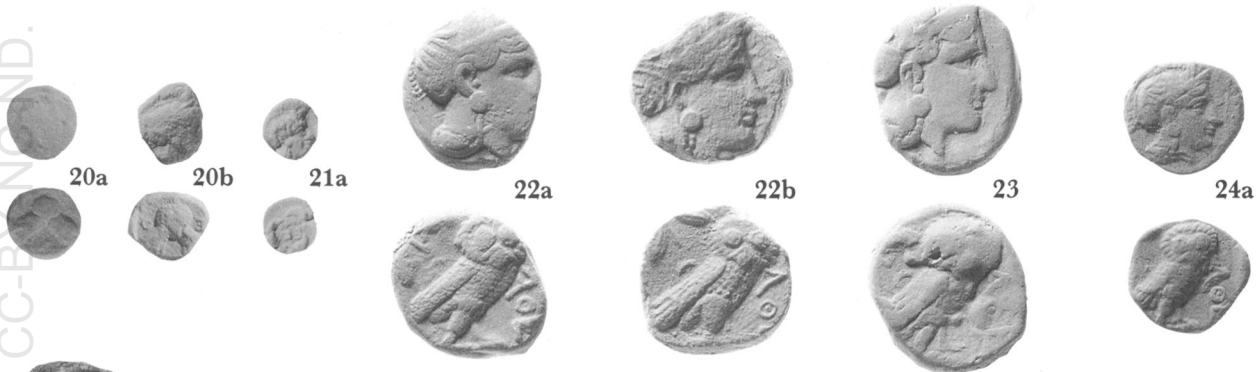
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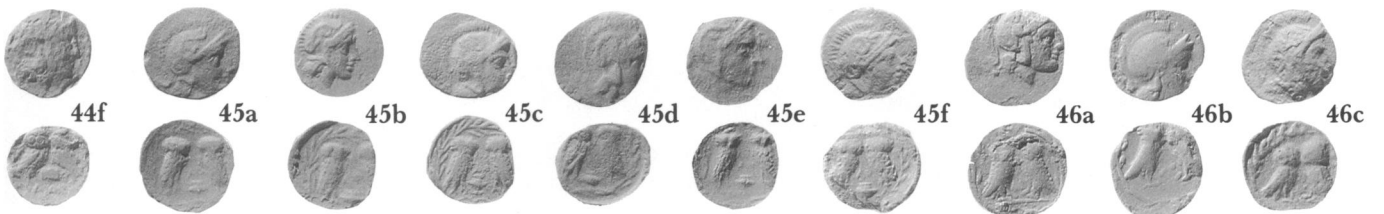
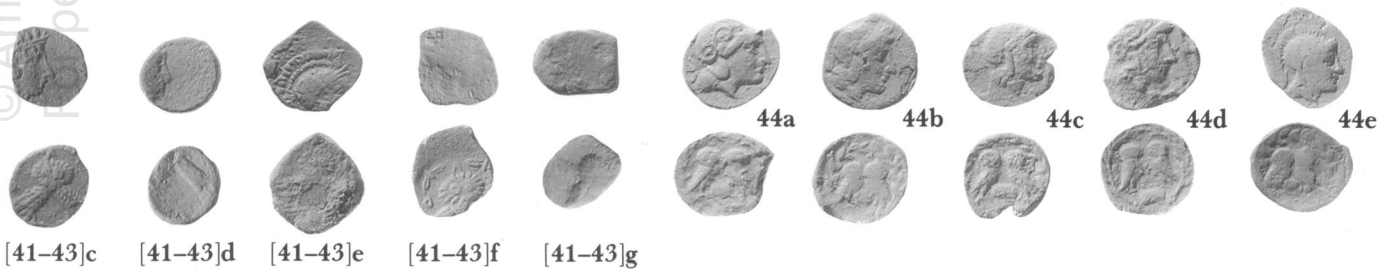
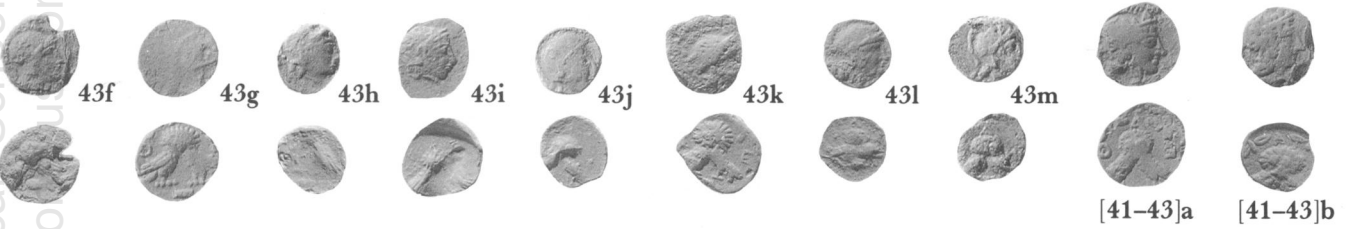
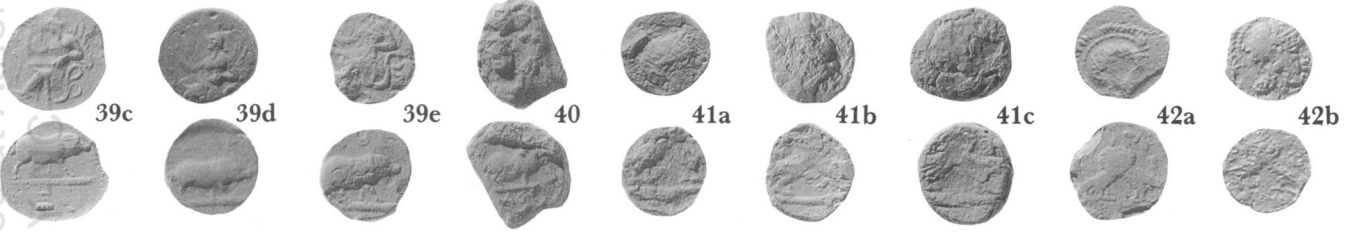
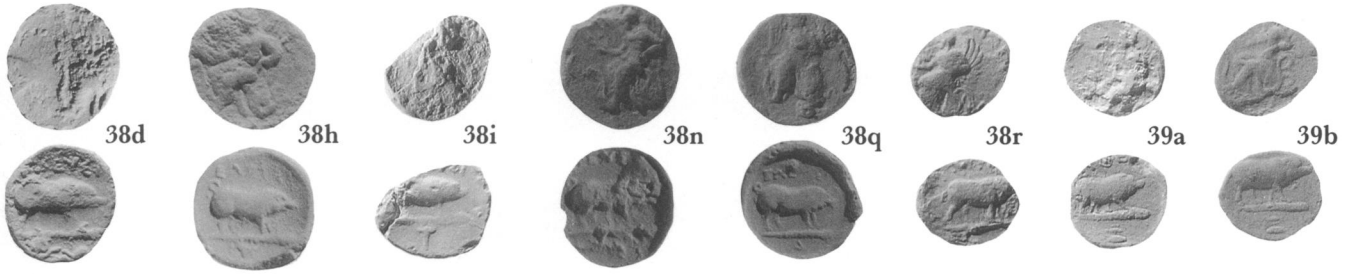


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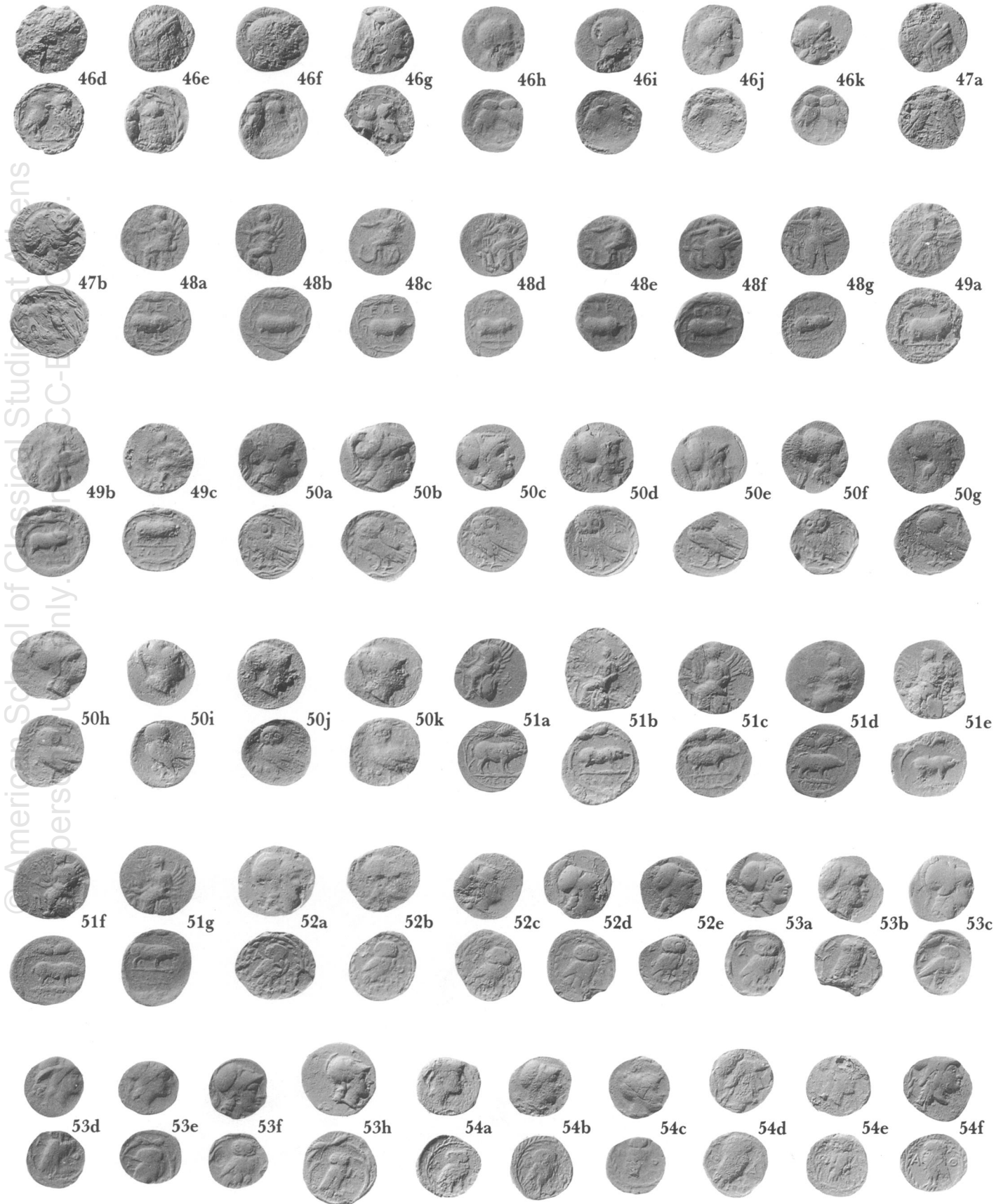


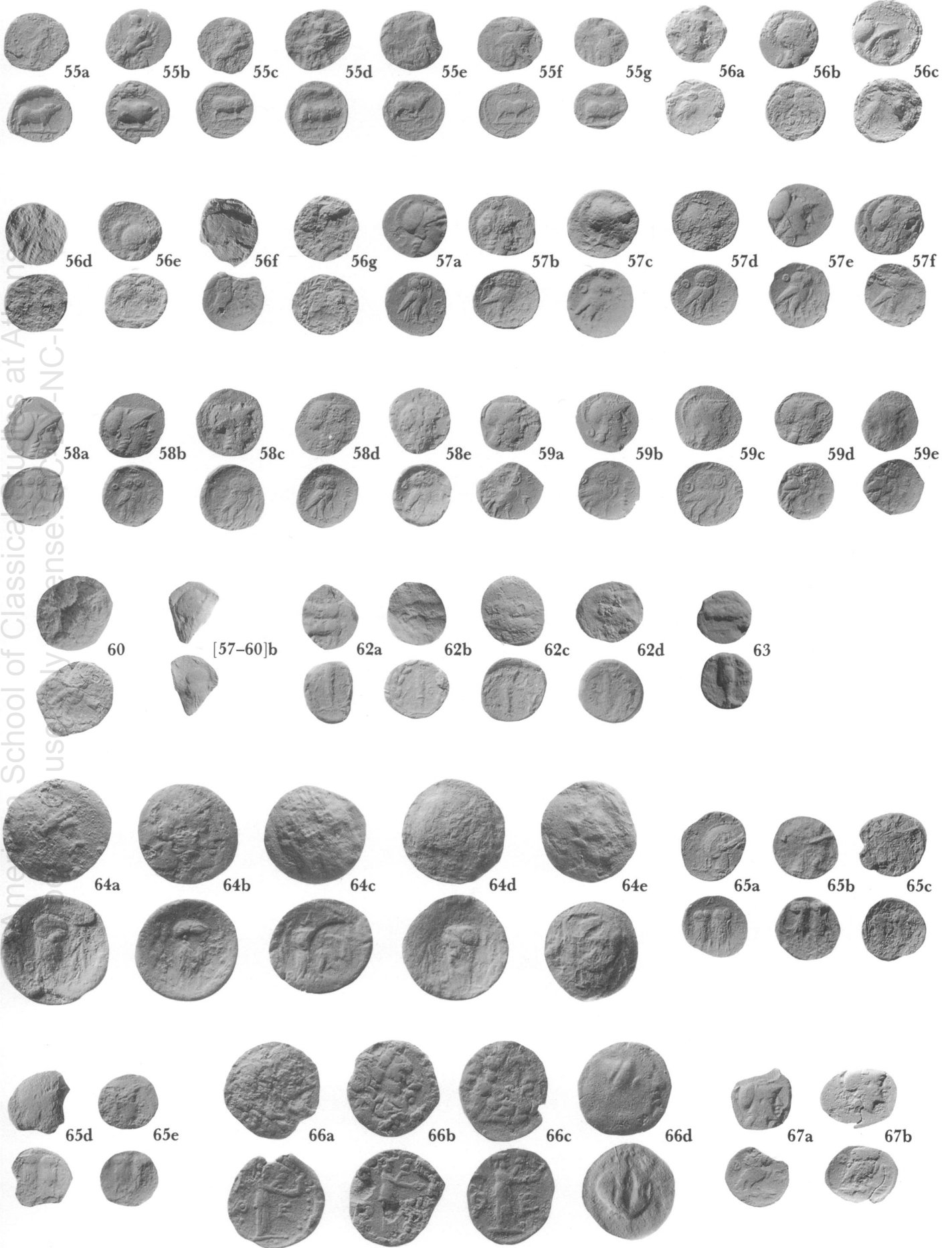
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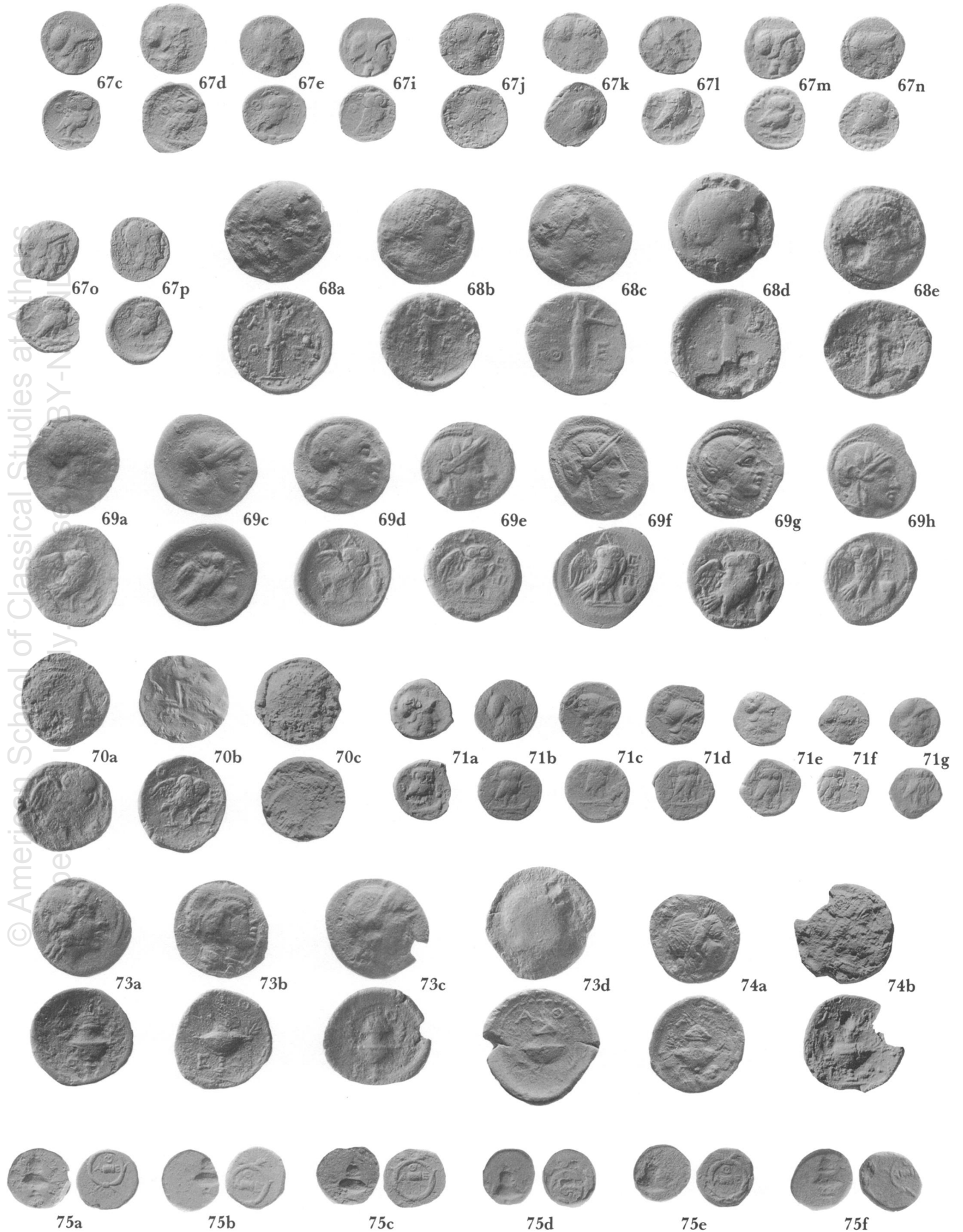


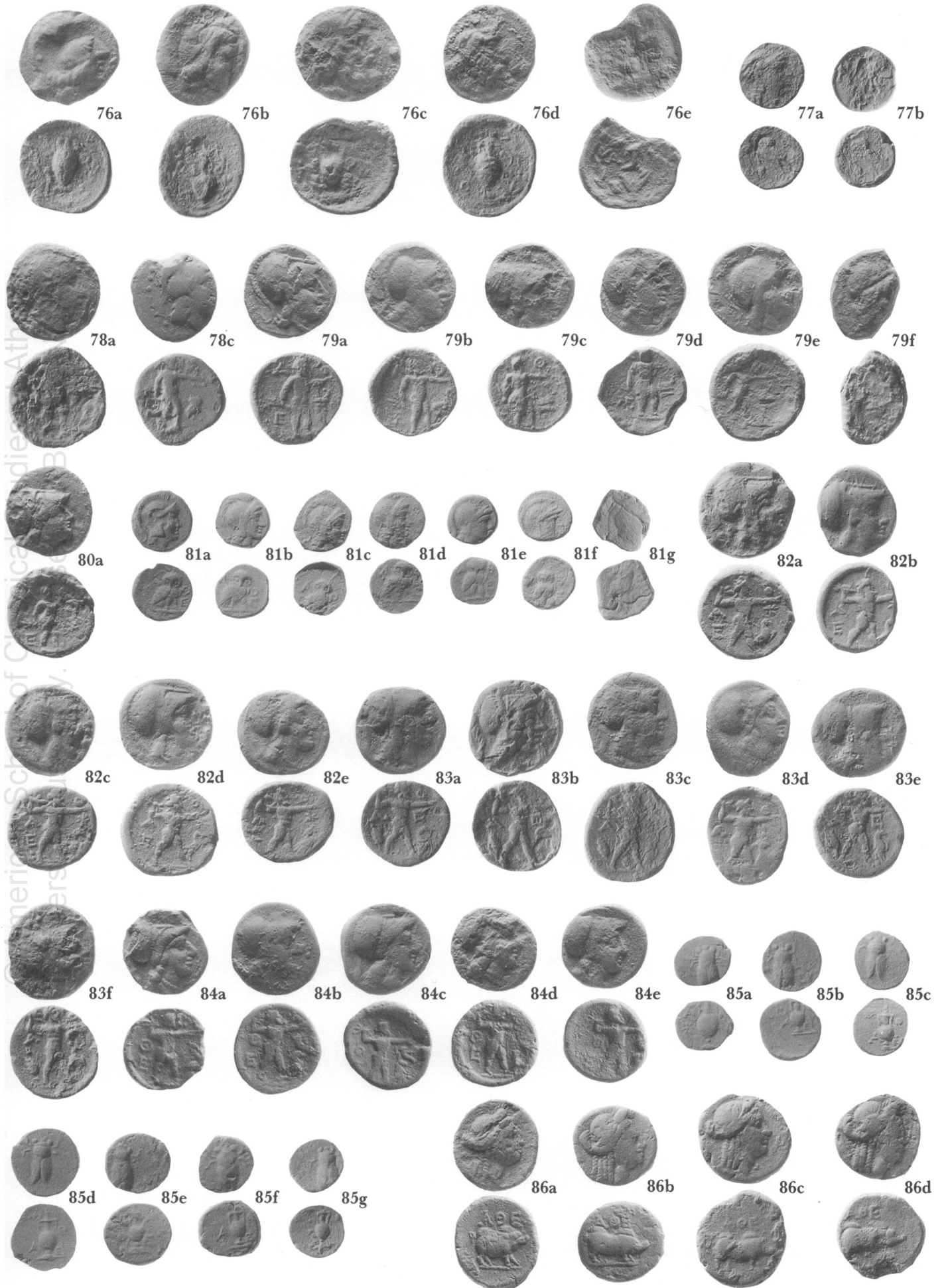


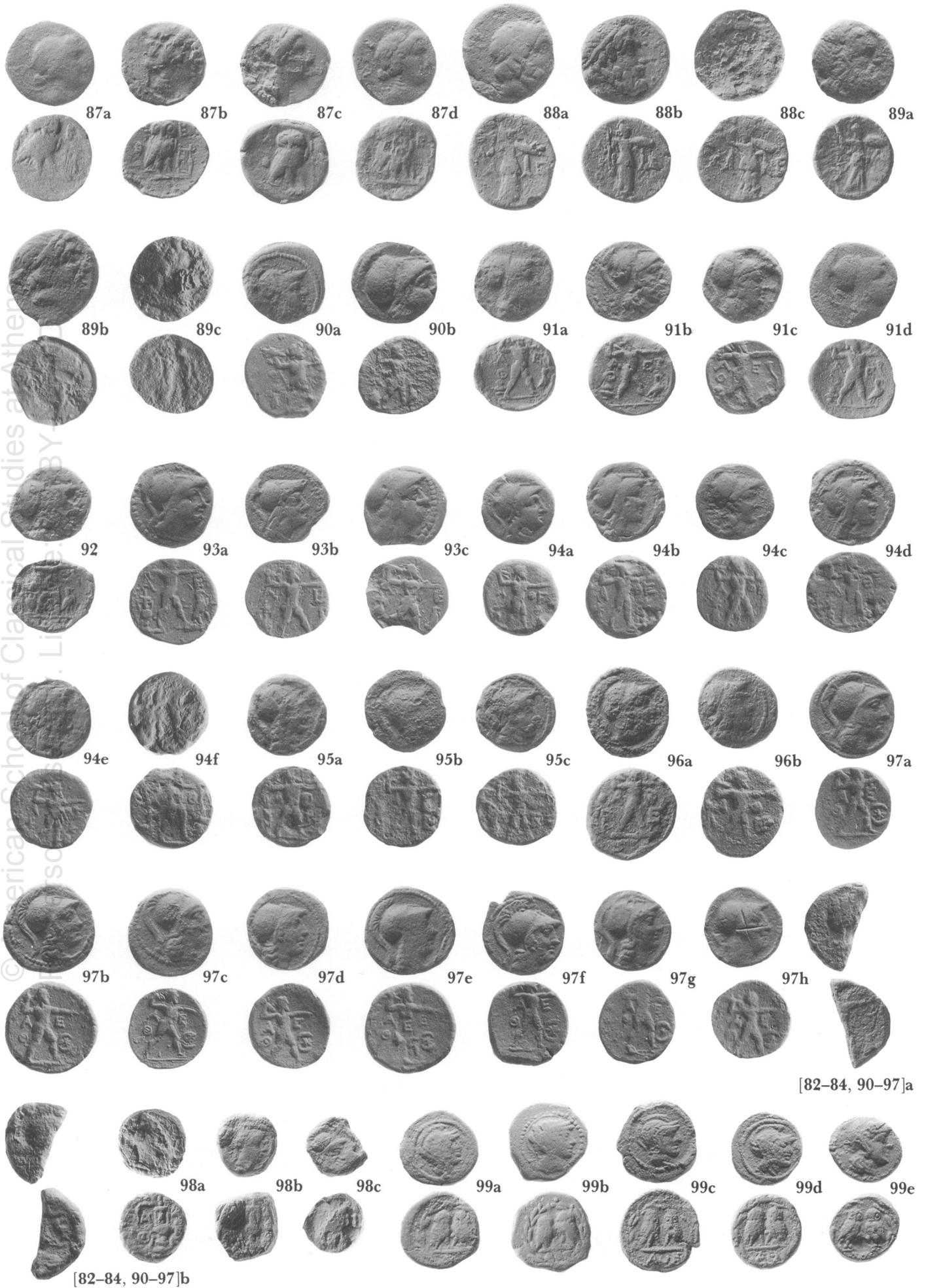
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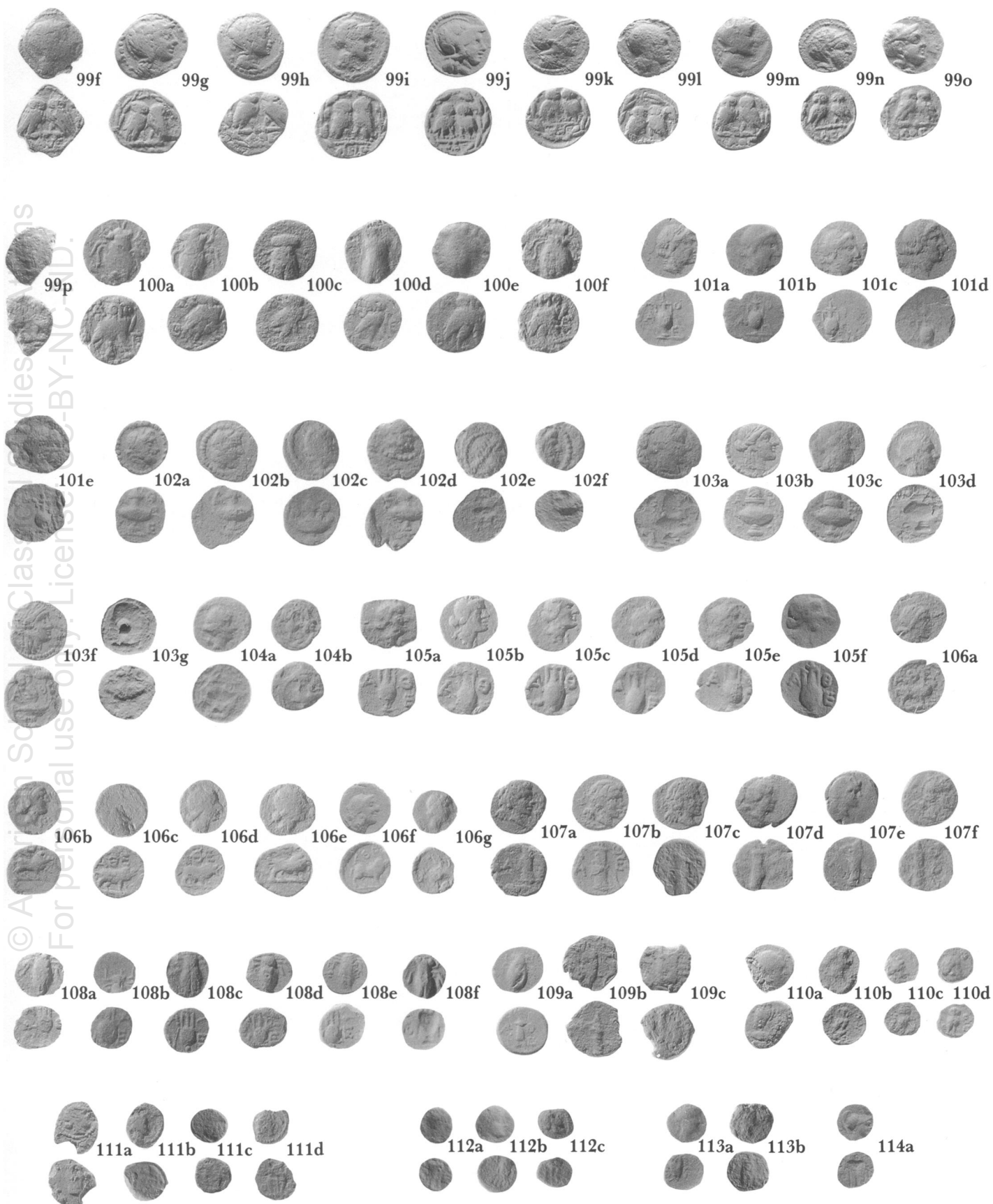


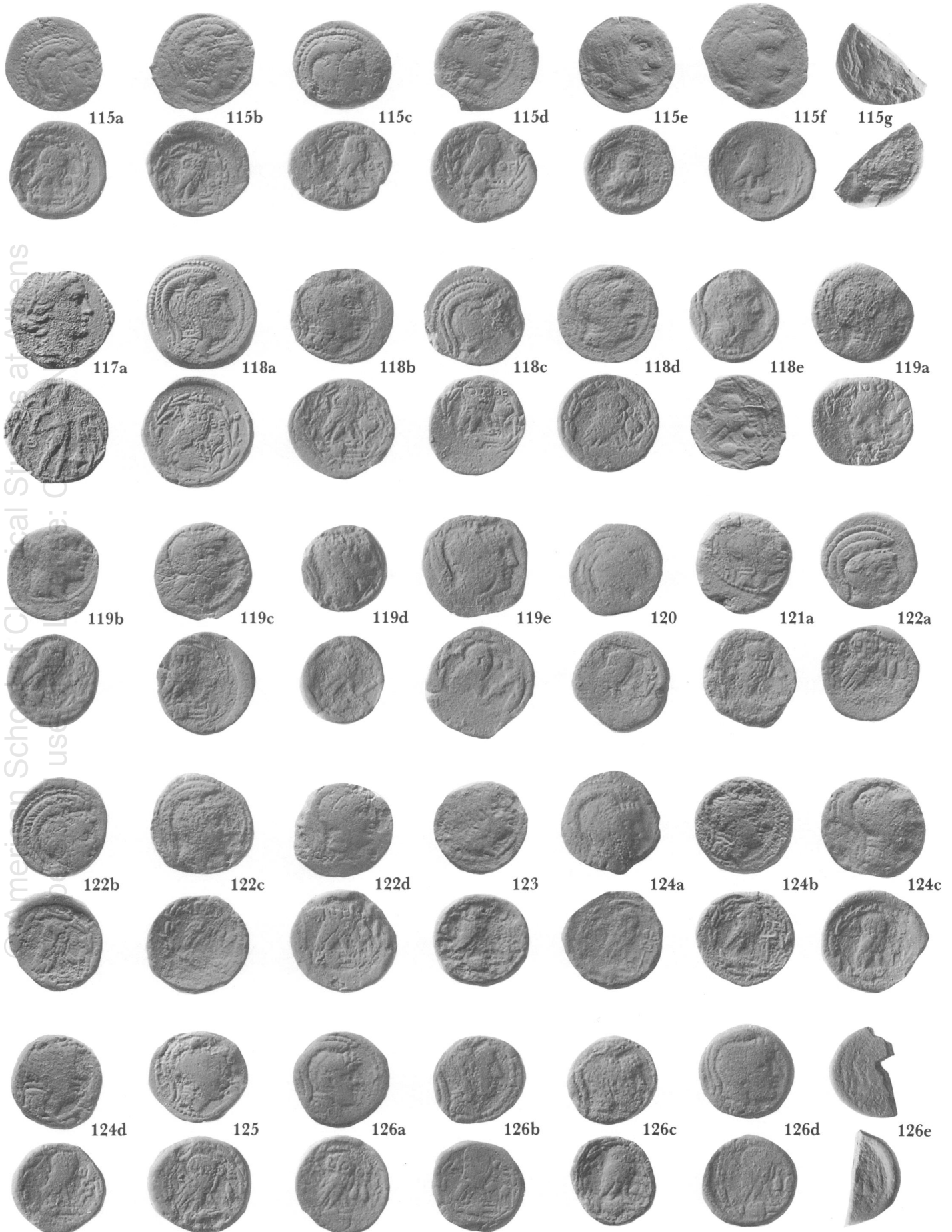




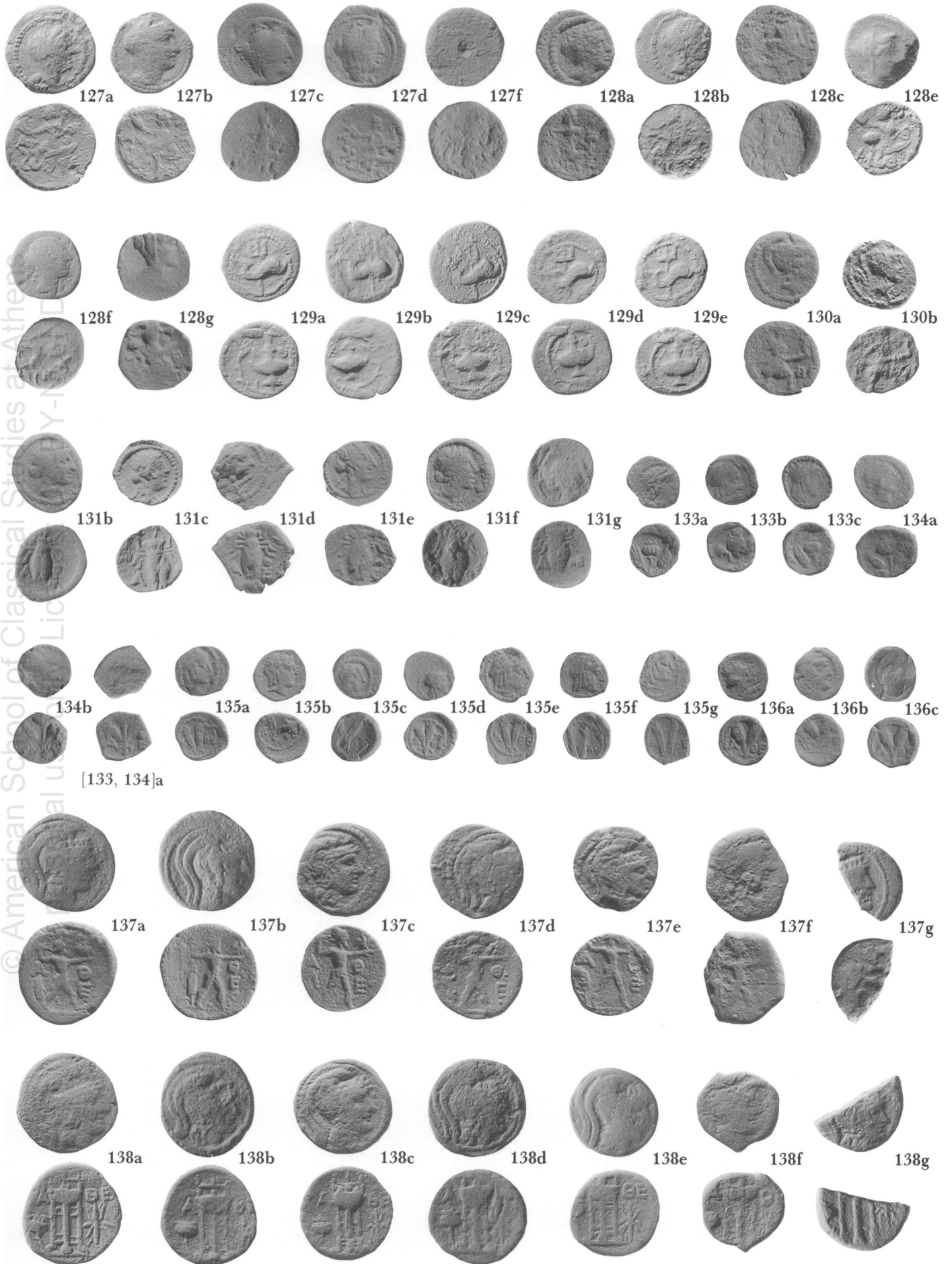




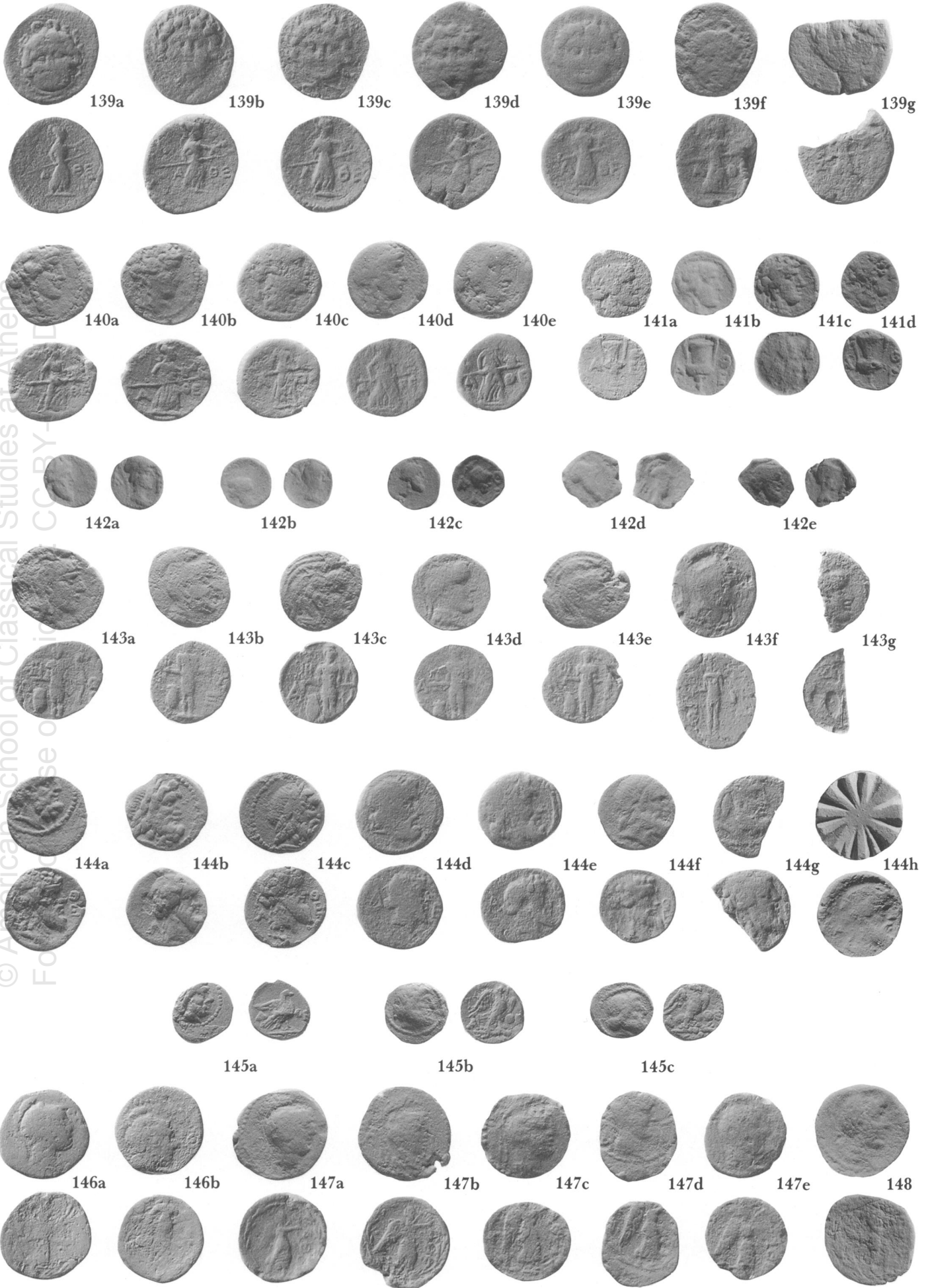


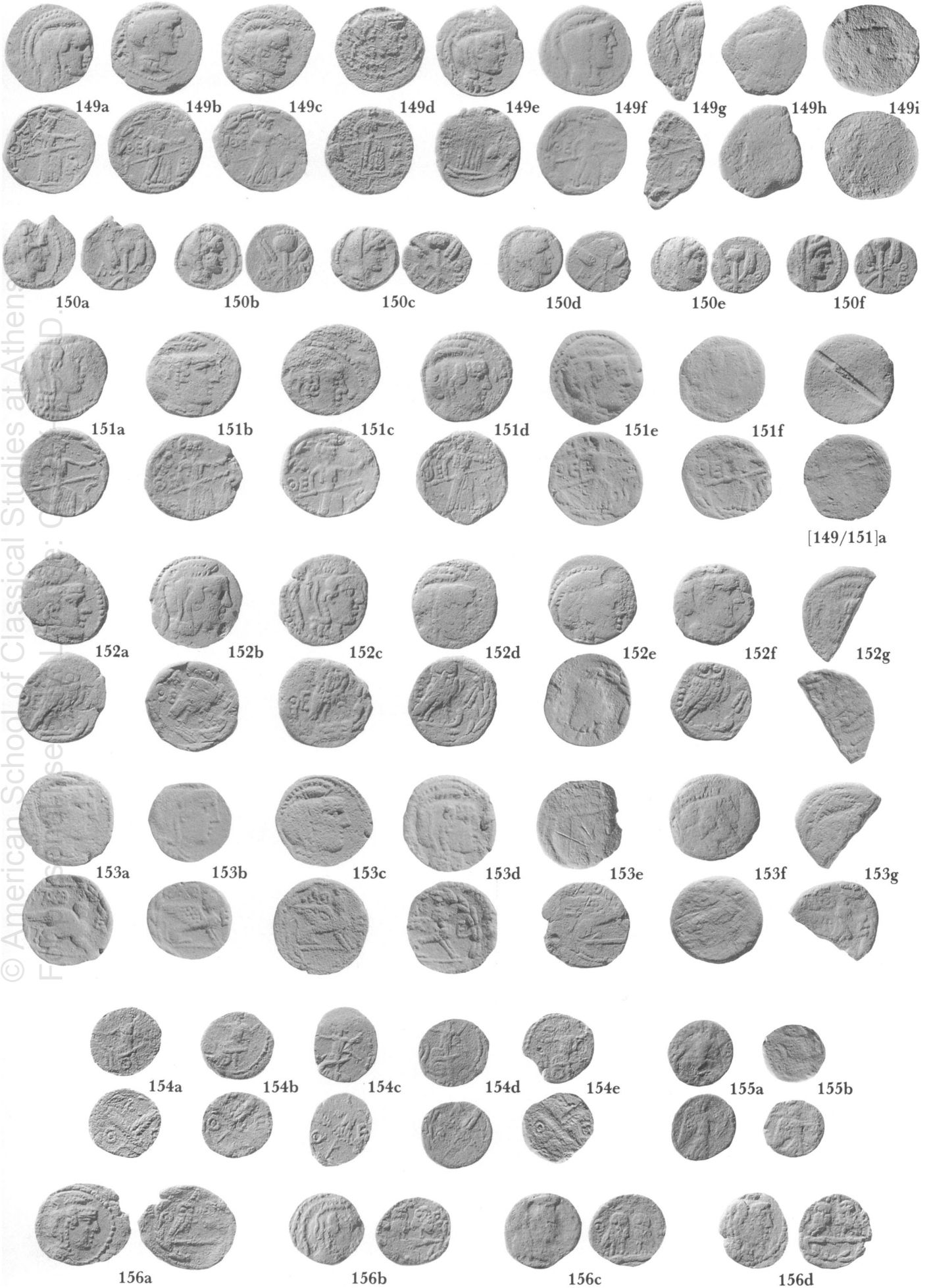




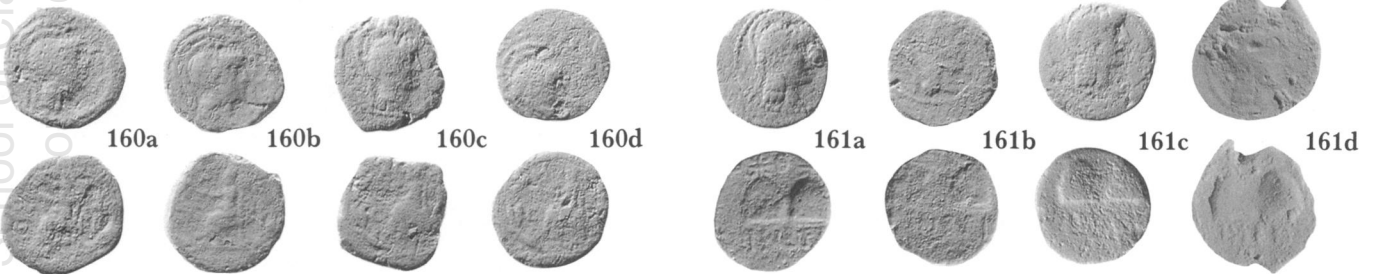
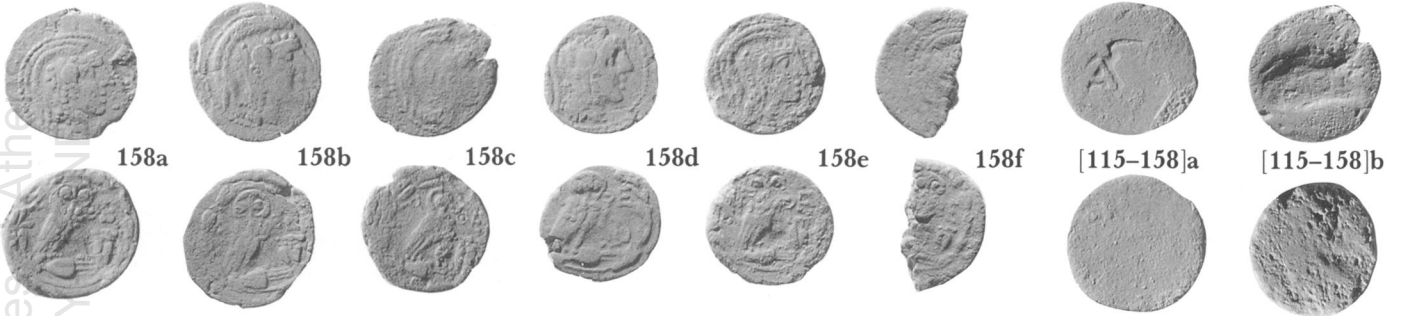


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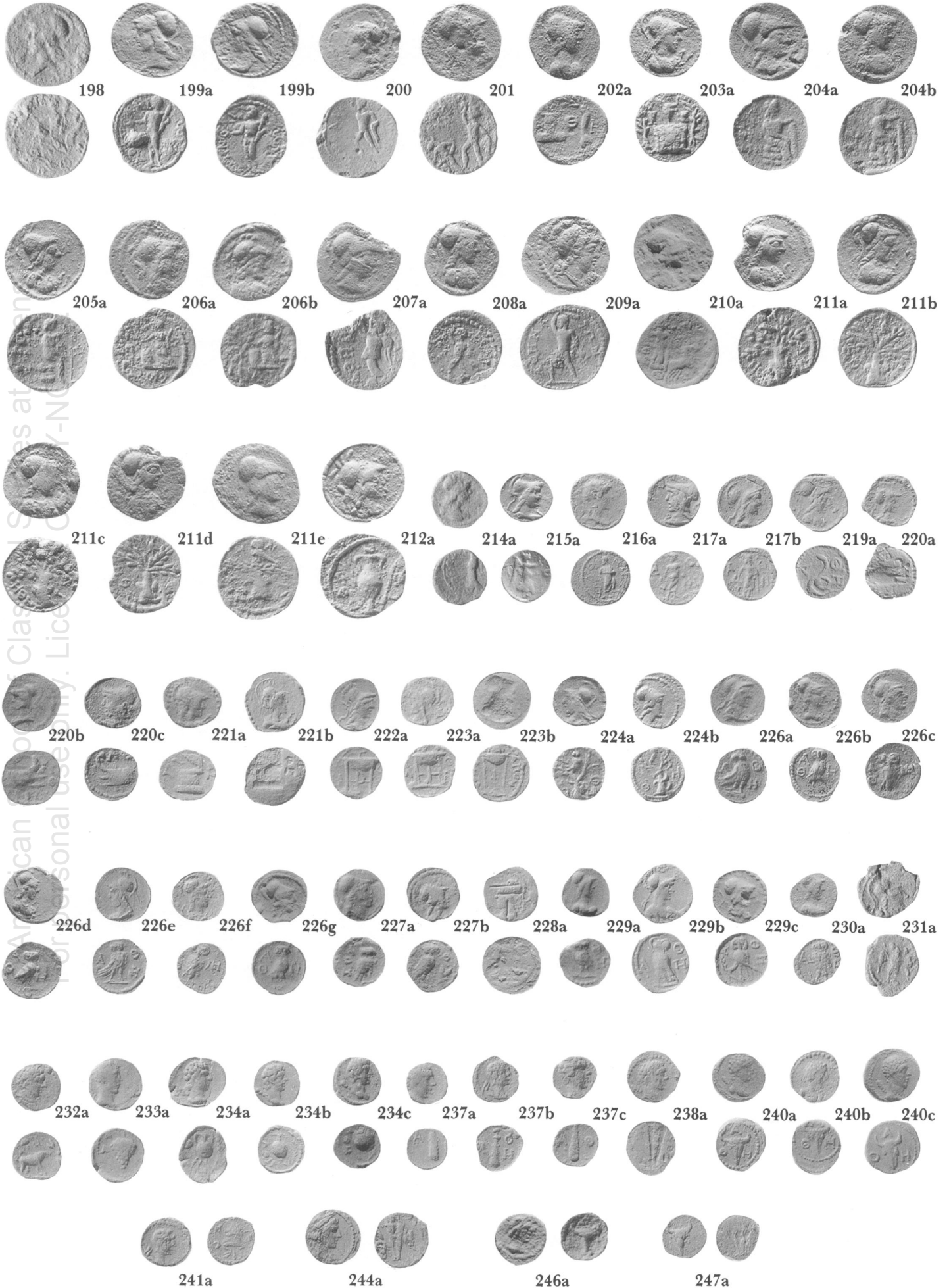




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248a



248b



248c



248d



248e



248f



253



254a



255a



256a



257a



258a



260a



261a



262a



263a



264a



265a



266



267a



268a



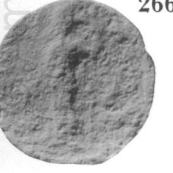
269a



270



271a



272a



273a



275a



276a



277a



278a





279a



280a



280b



280c



281a



281b



283a



283b



283c



283d



284a



284b



284c



284f



284g



285a



287a



287b



288a



289a



293



297a



298a



299a



299b



300a



301a



302a



305a



306a

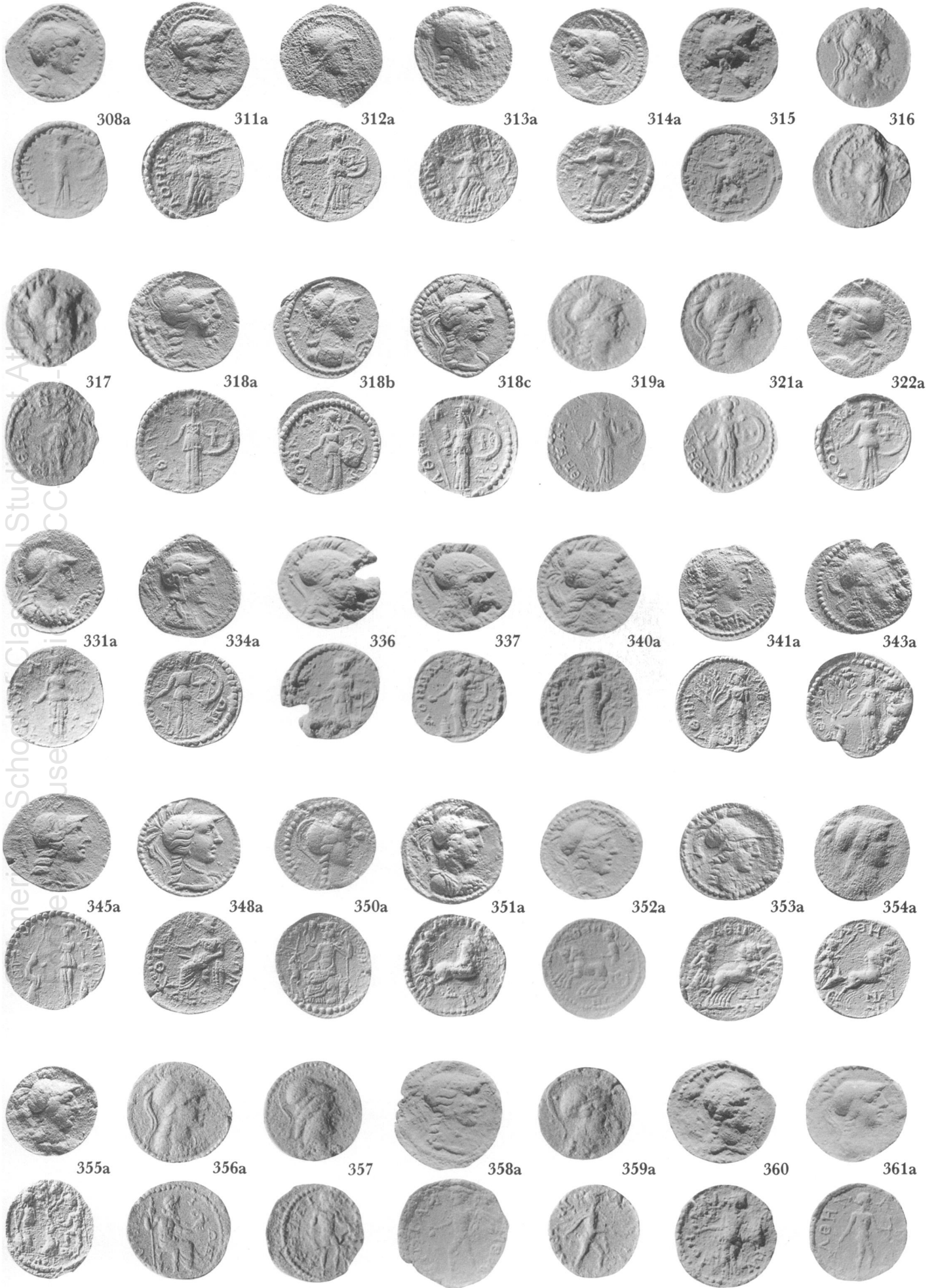


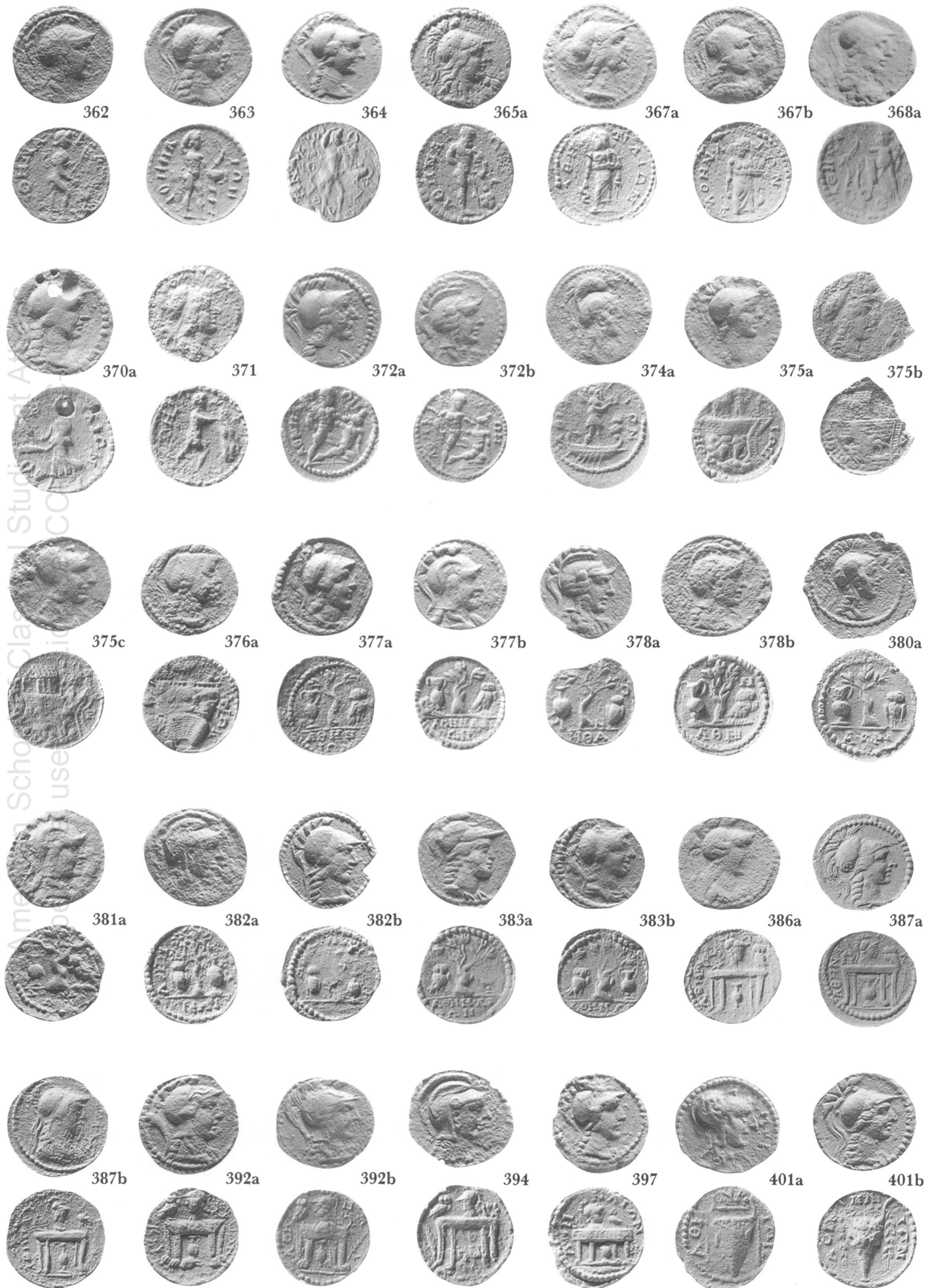
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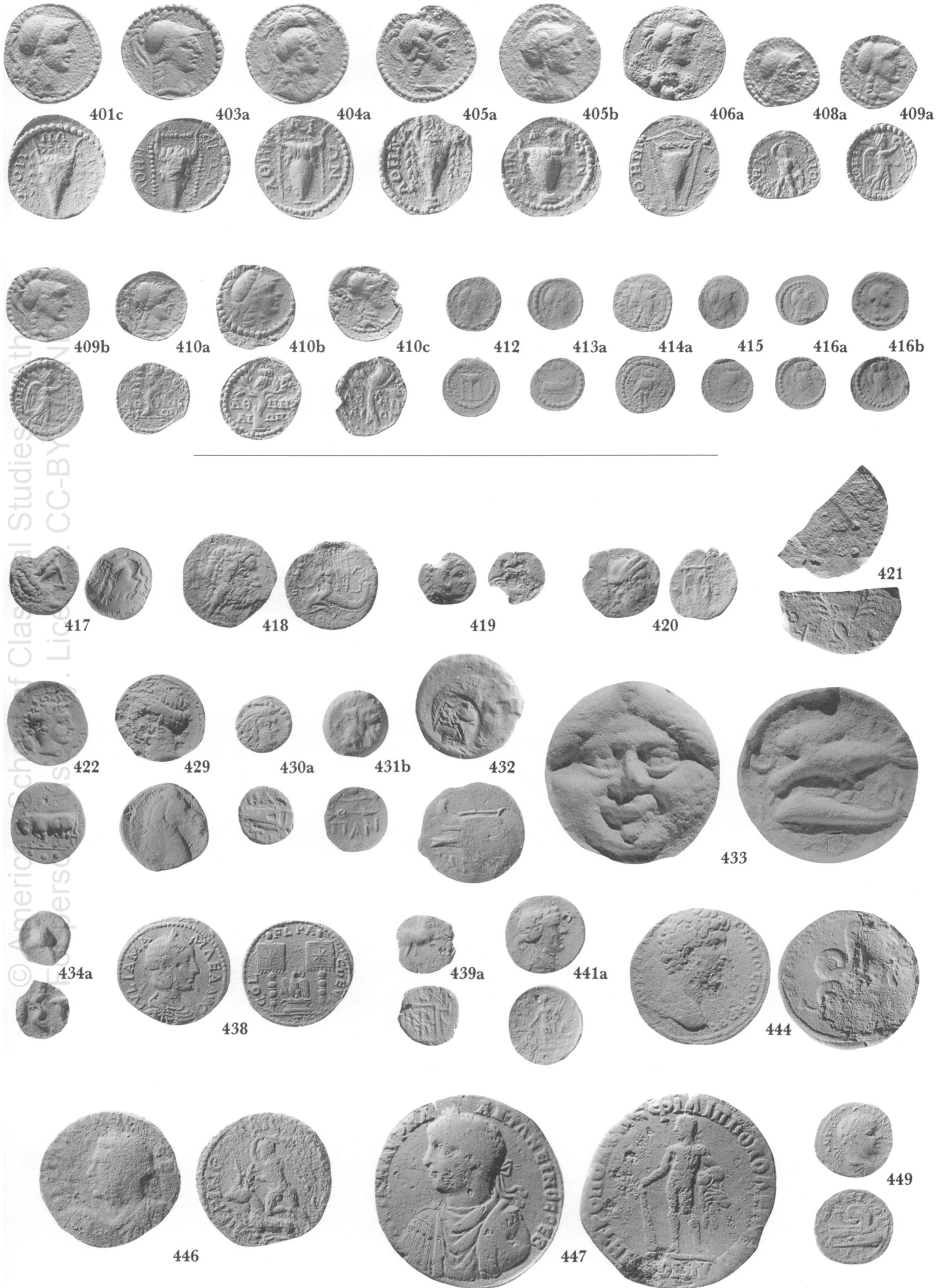


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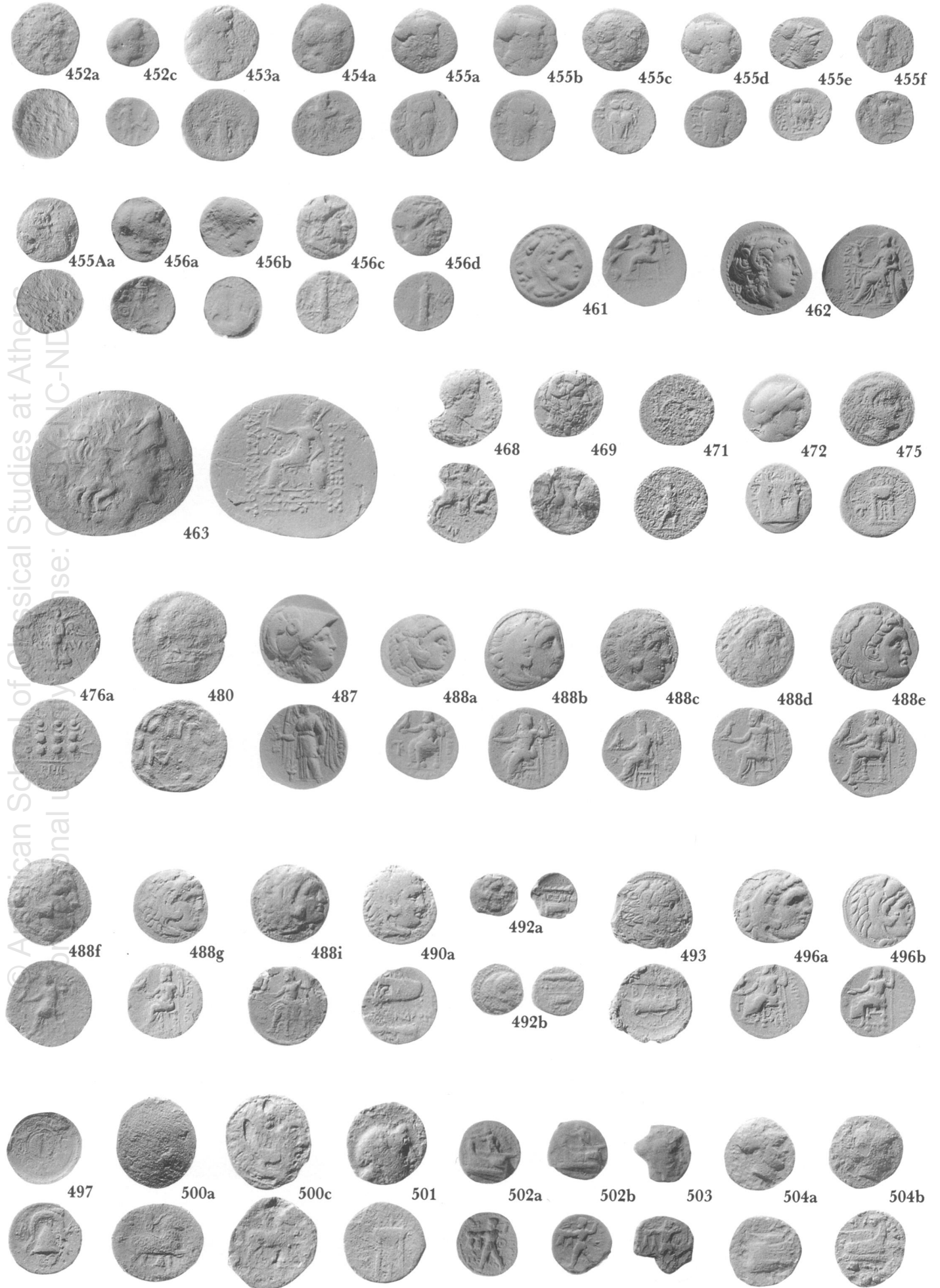


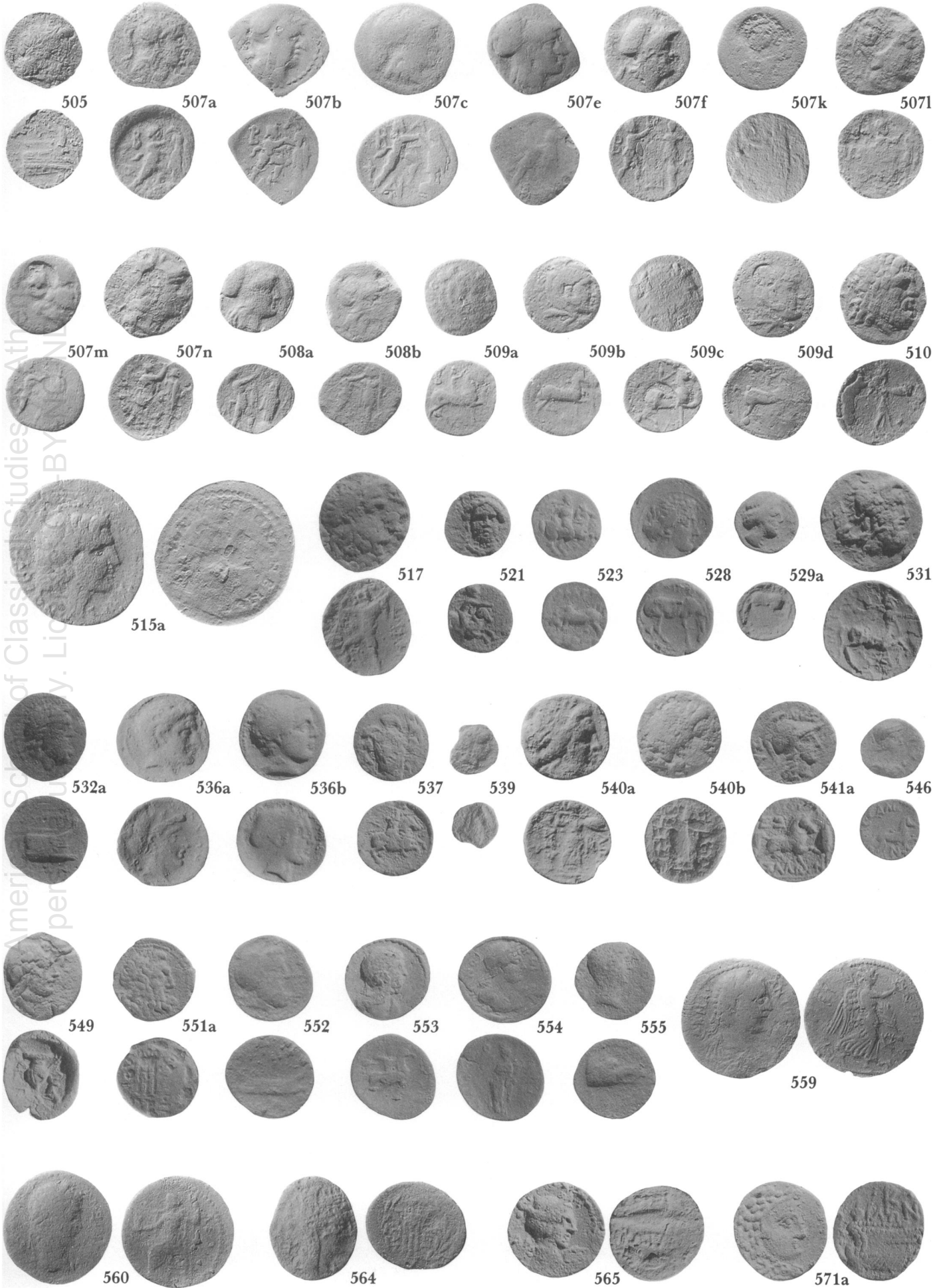


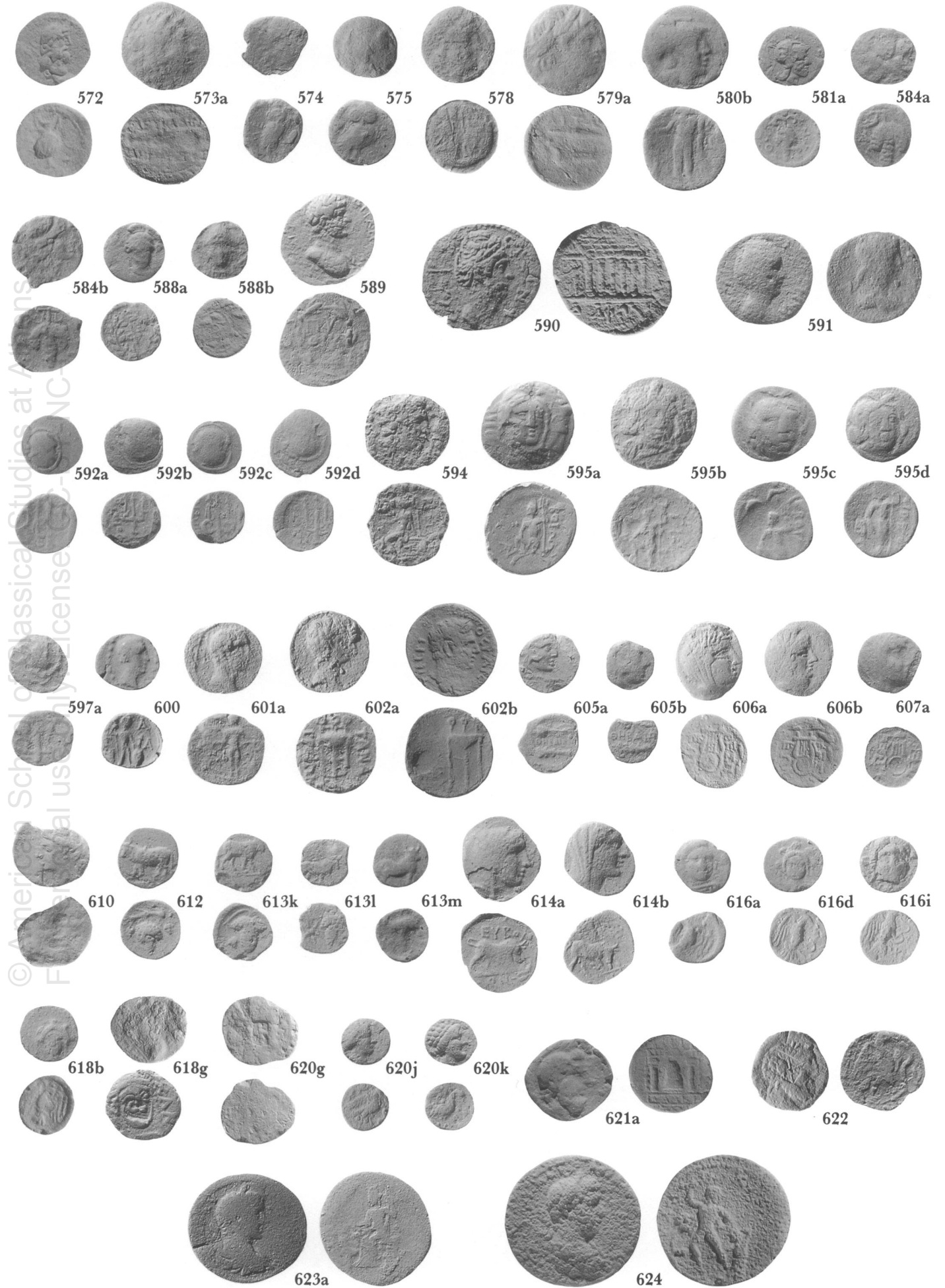




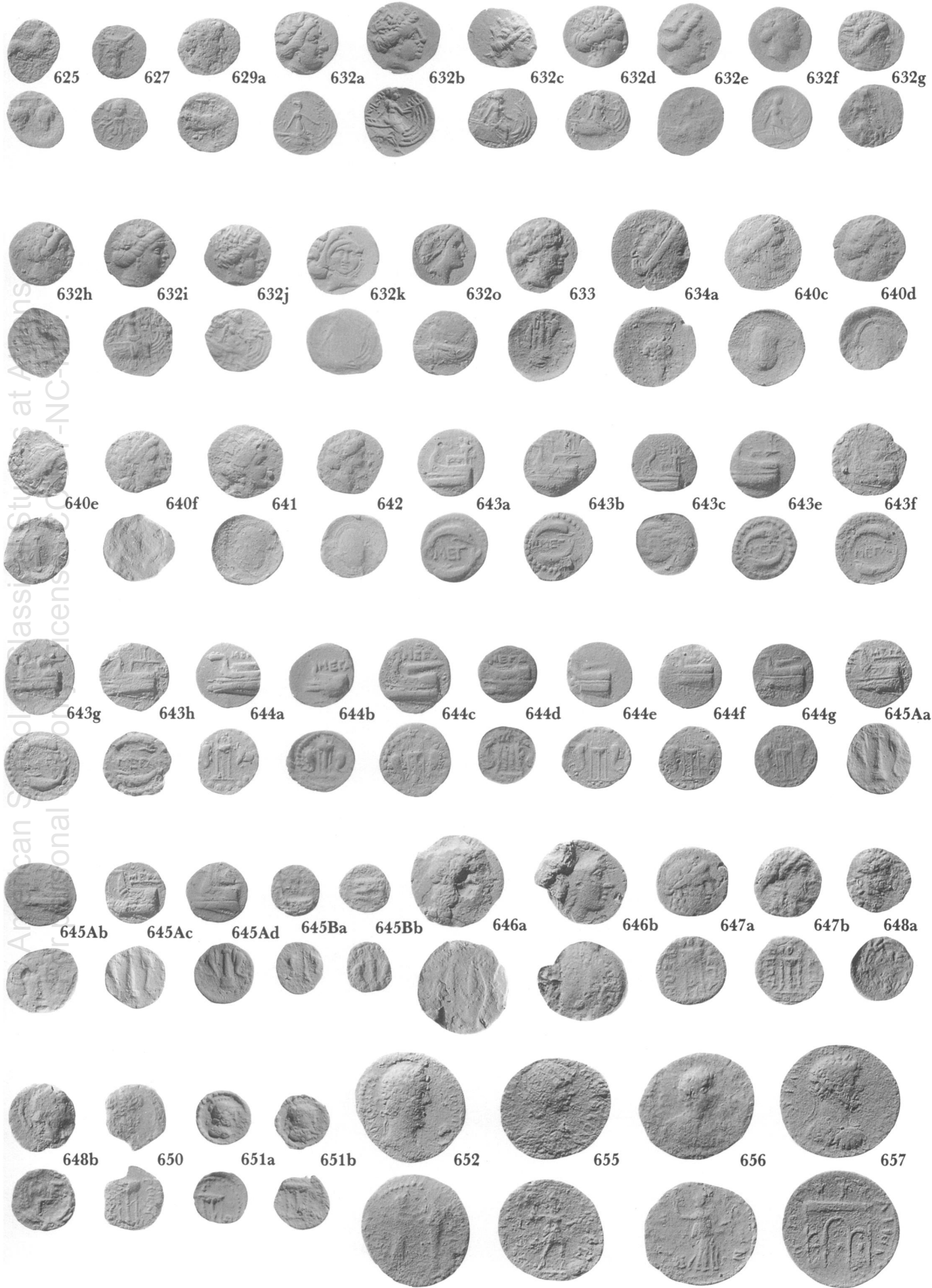
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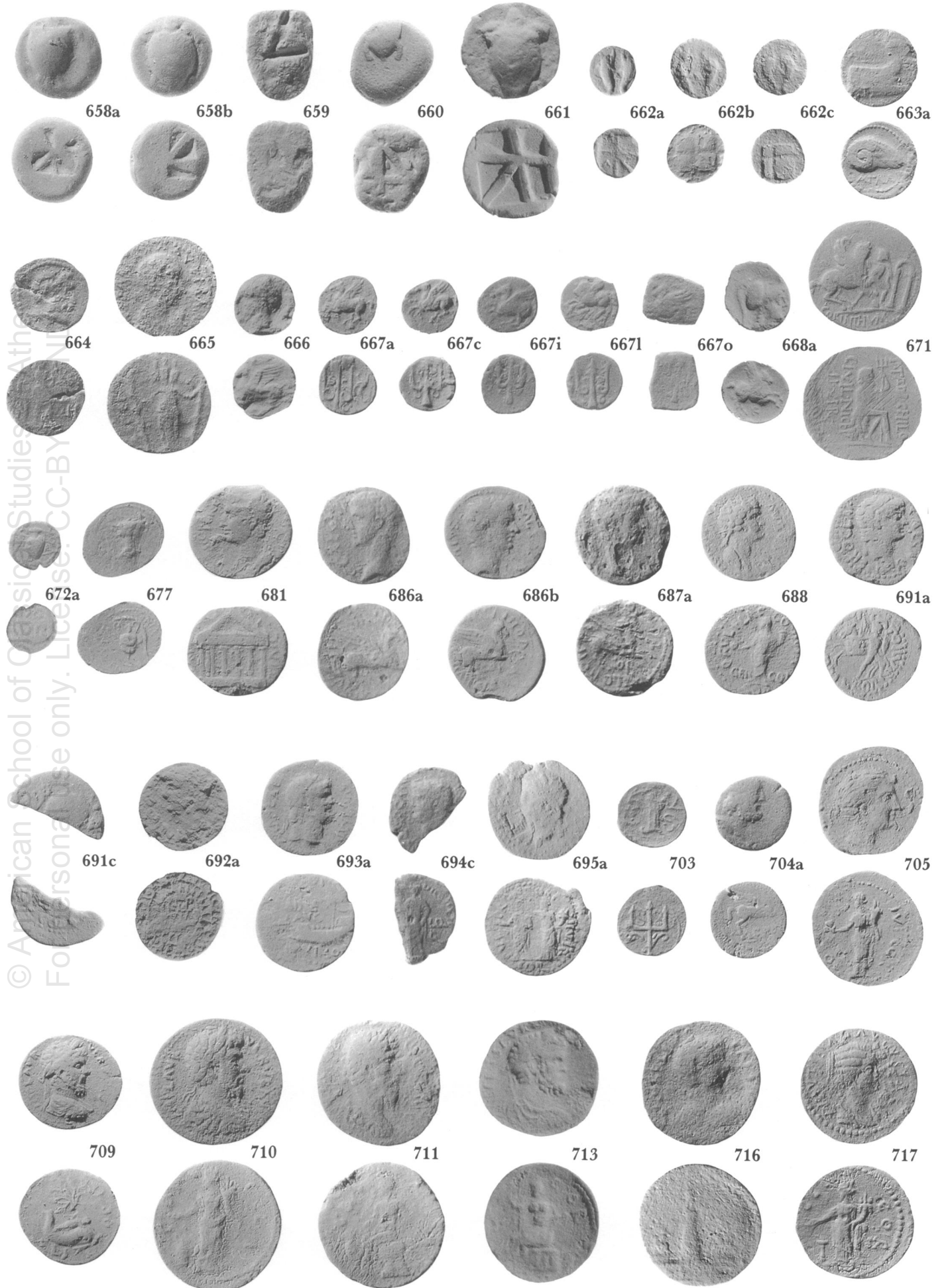






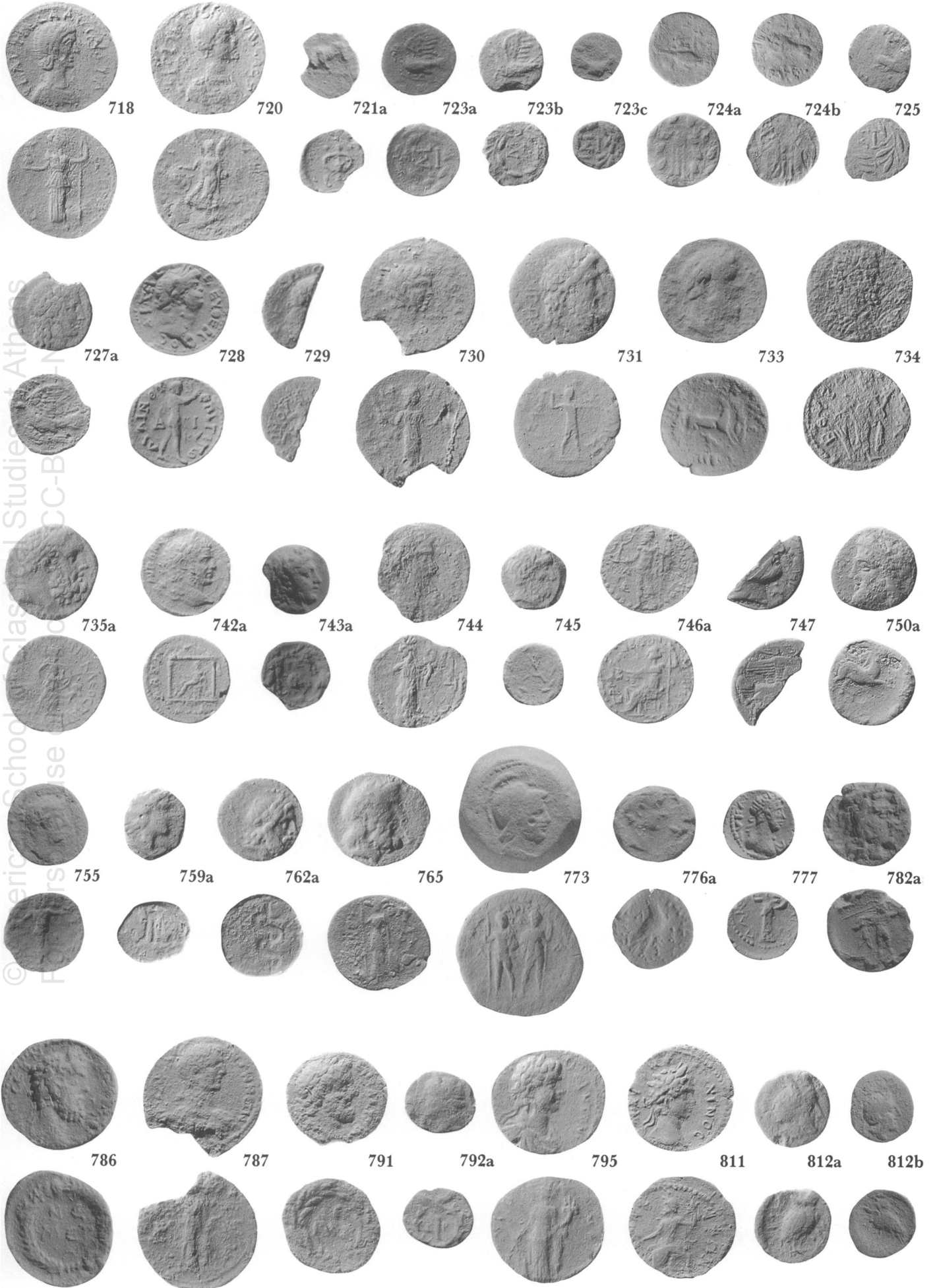
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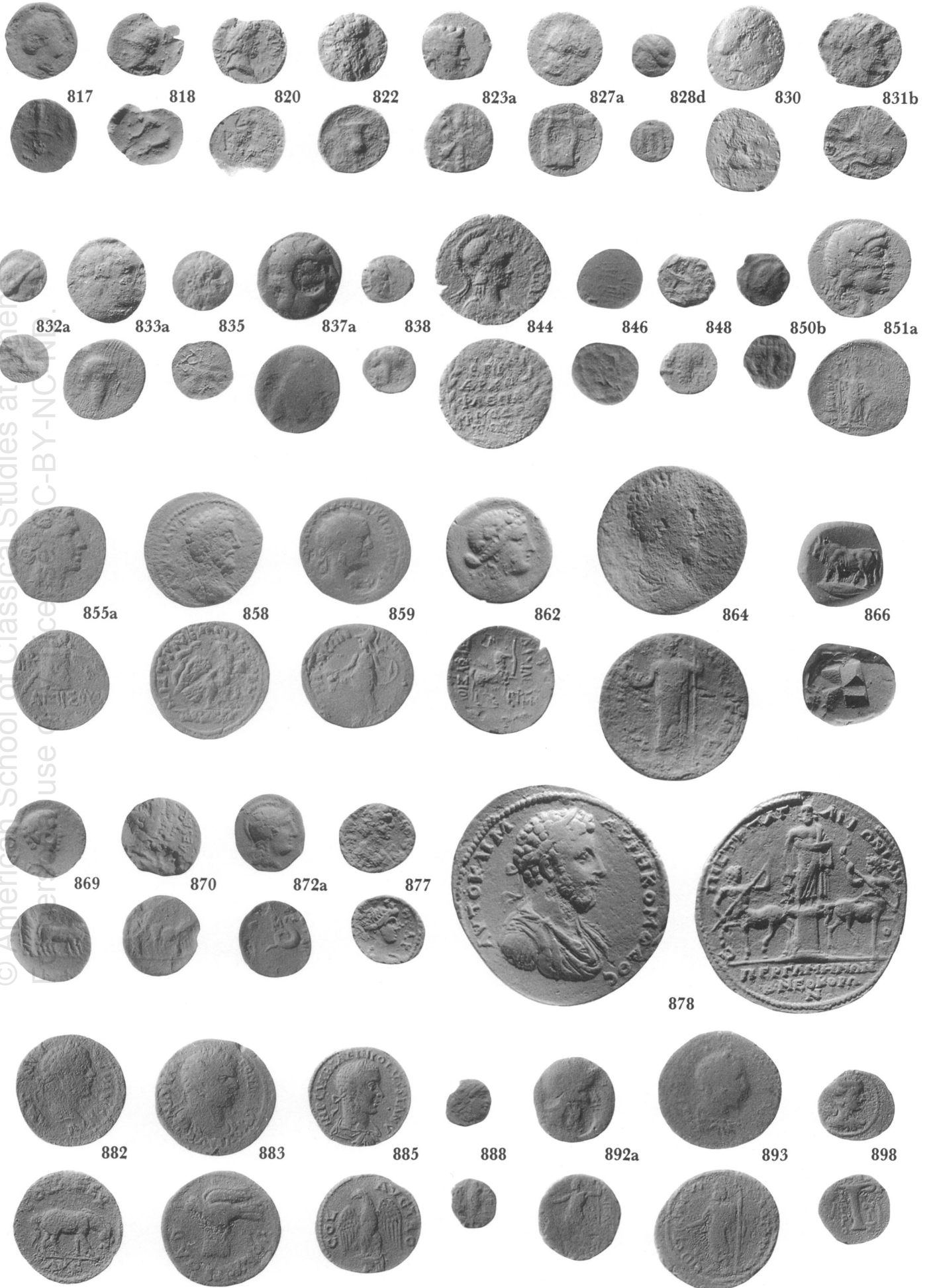




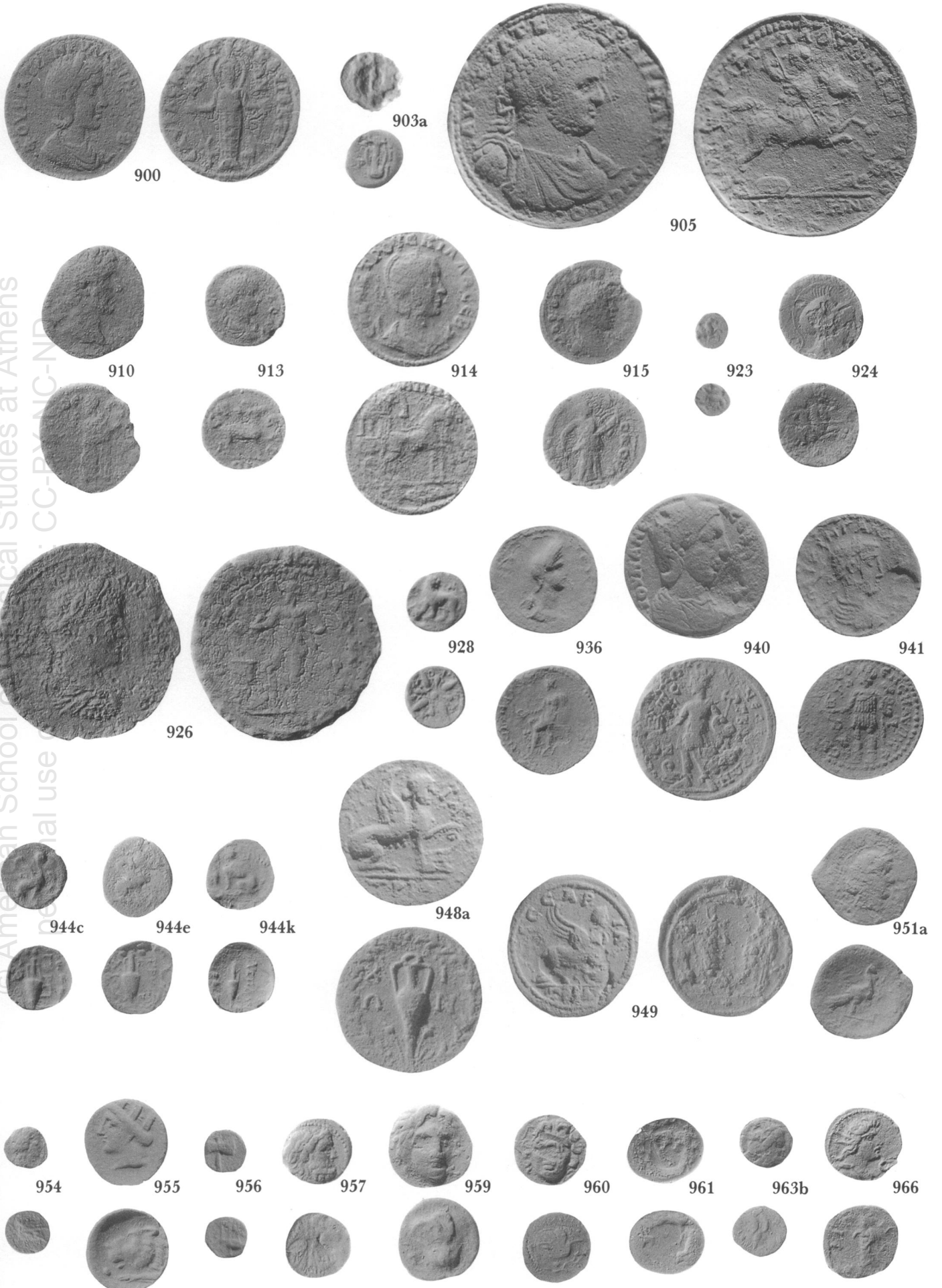
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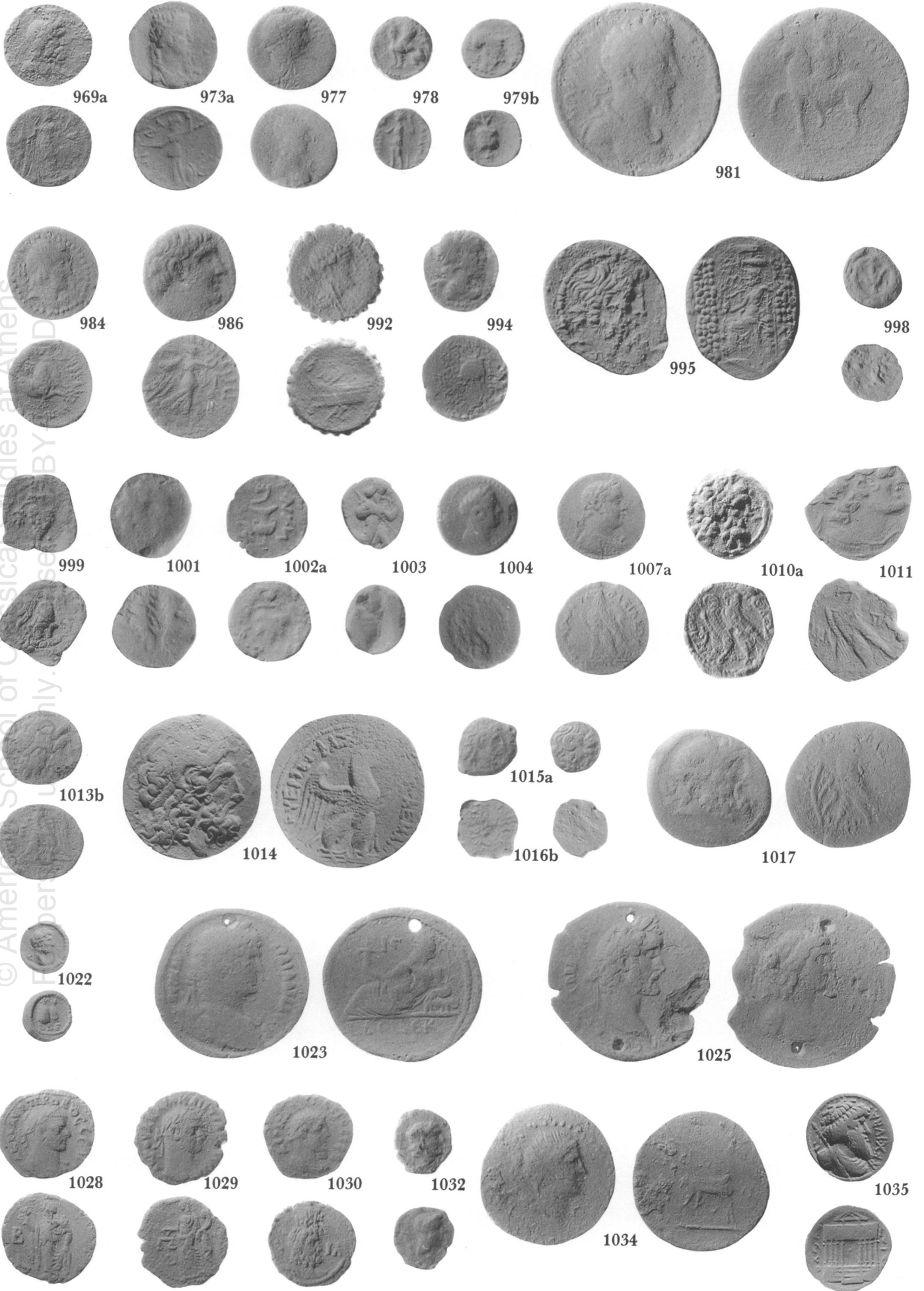




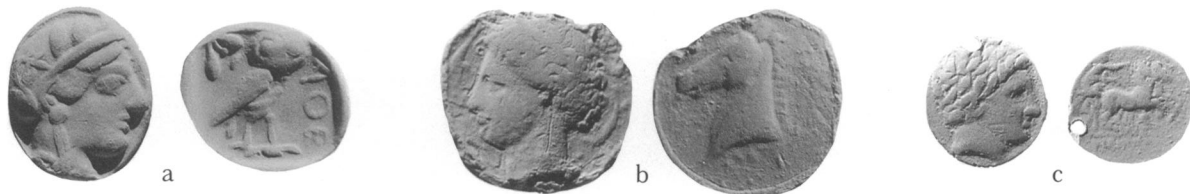
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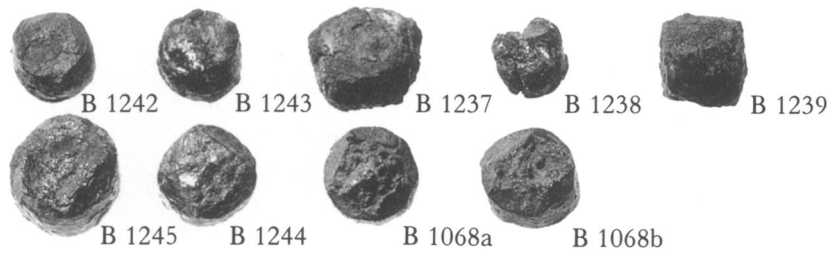
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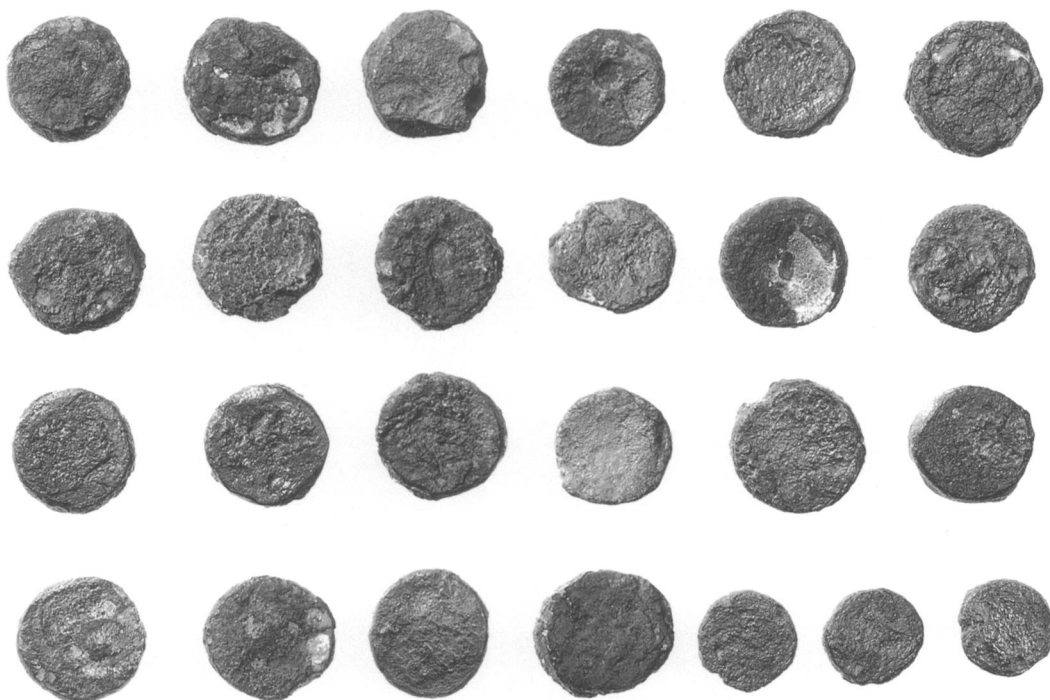
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d. Chopped coin blanks and rod segment from the "Mint": Group 1 (B 1046)



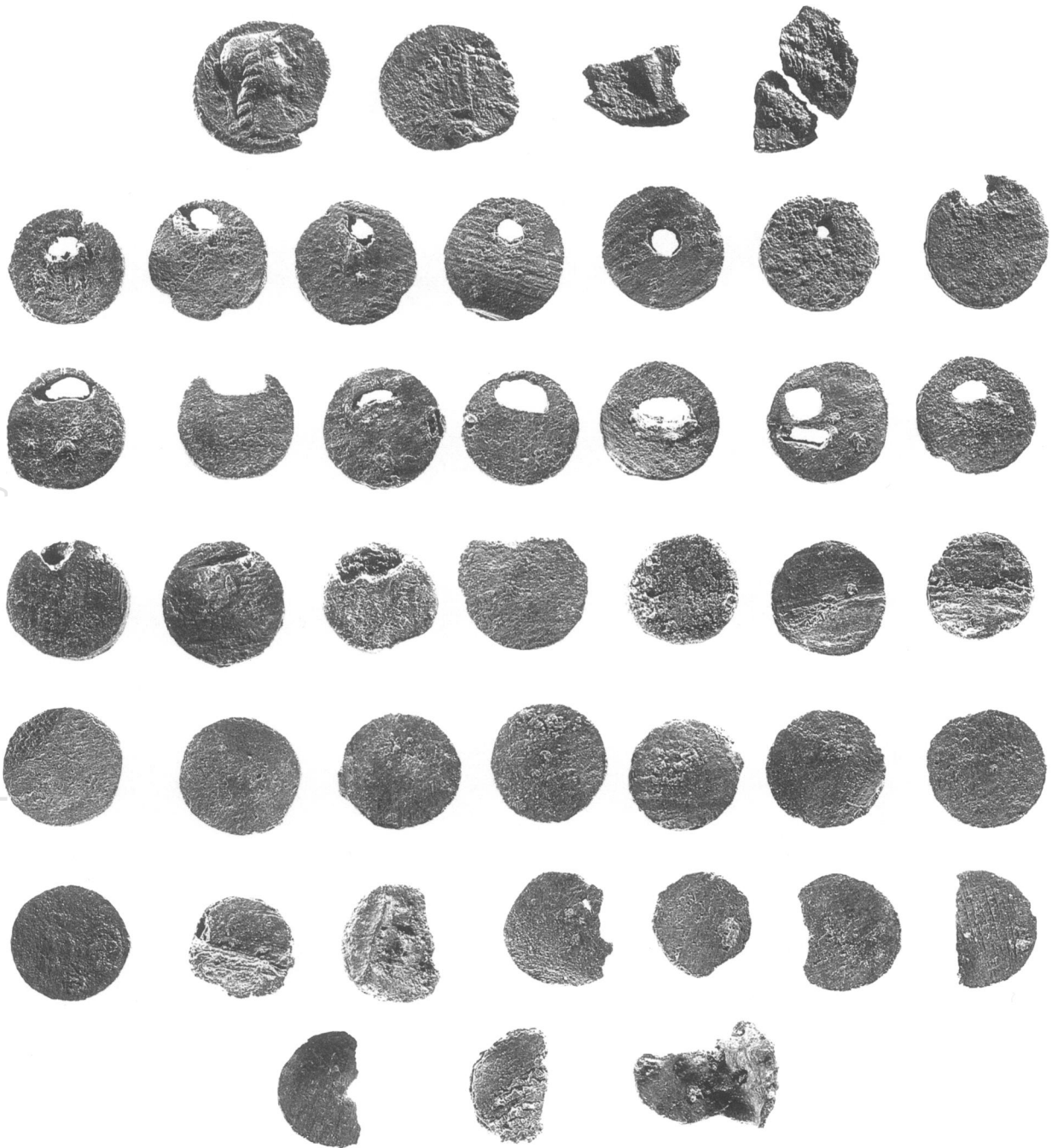
e. Chopped coin blanks from the "Mint": Group 2 and others



f. Finished coin blanks from Deposit H 12:4

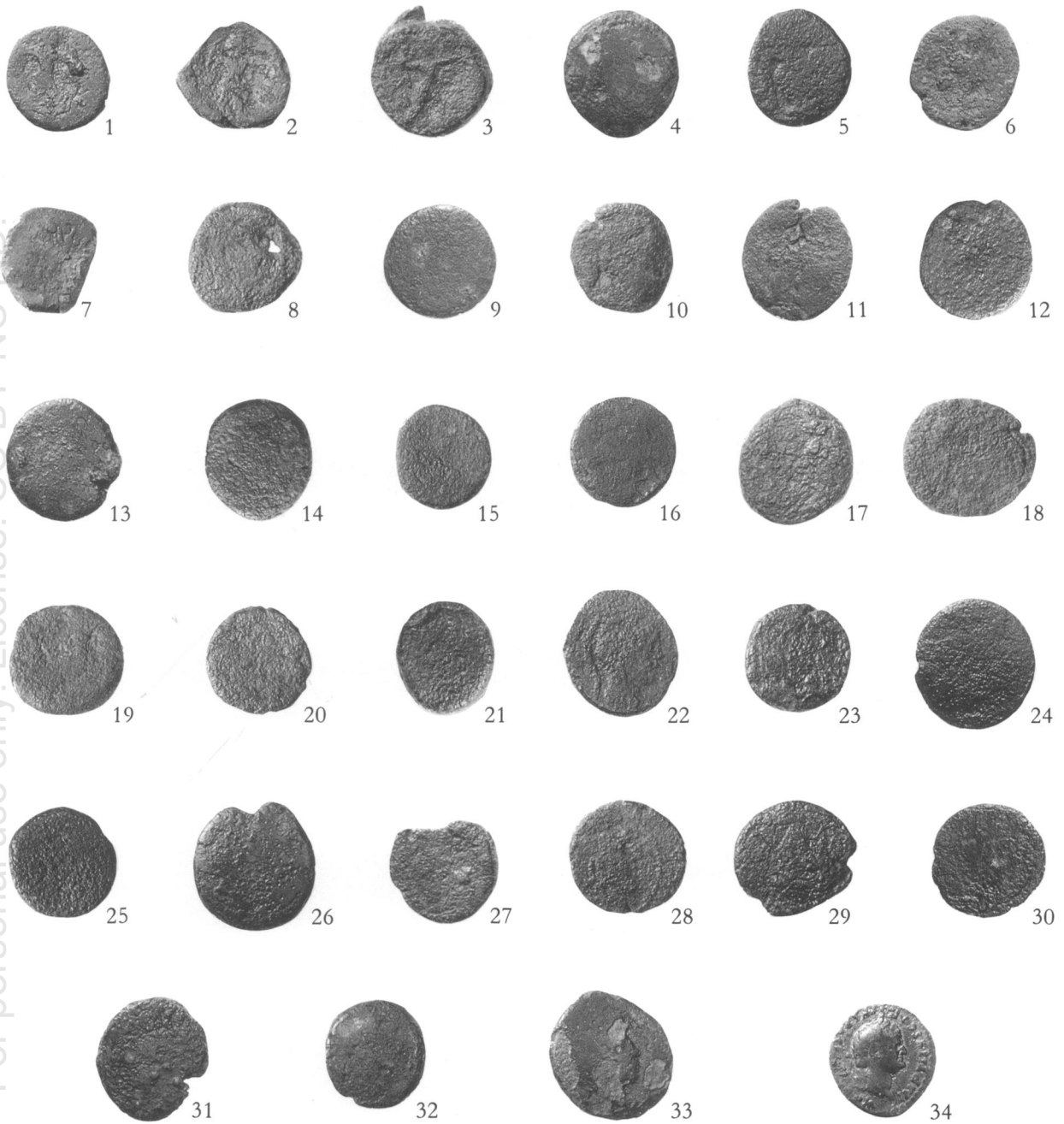


a. Period V B/C blank, with countermark: B 1641

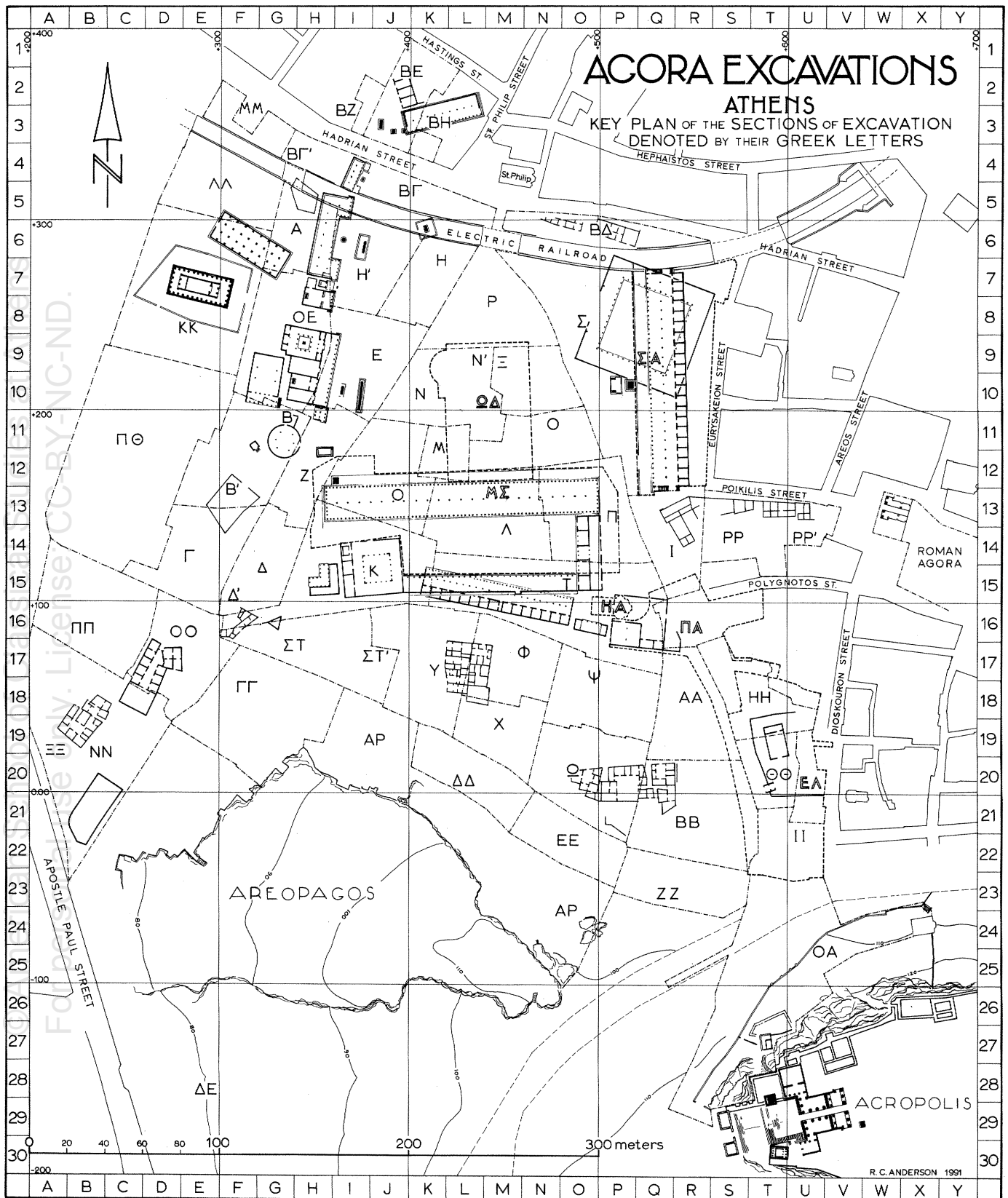


b. Period VI rejects and sawn coin blanks from the Rectangular Peribolos (Deposit I 1:3): B 1254

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Coins from the original floor packing of Room 7 (Deposit U 13:2a) *ca.* A.D. 100



Plan of the Athenian Agora, ca. 100 B.C., showing excavation sections and grid





The Athenian Agora in the 2nd century after Christ