

ARCHAEOLOGICAL EXPLORATION OF SARDIS

GREEK, ROMAN, AND ISLAMIC  
COINS FROM SARDIS

T. V. Buttrey  
Ann Johnston  
Kenneth M. MacKenzie  
Michael L. Bates







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OF SARDIS

*Fogg Art Museum of Harvard University  
Cornell University  
The Corning Museum of Glass  
Sponsored by the American Schools  
of Oriental Research*

**General Editors**

George M. A. Hanfmann  
Jane Ayer Scott

**Monograph 7**

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*Ann Johnston*  
*Kenneth M. MacKenzie*  
*Michael L. Bates*

with a contribution by  
*J. A. Charles*

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*In Memoriam*  
GEORGE C. MILES  
1904-1975



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# EDITORS' PREFACE

The Archaeological Exploration of Sardis began its work in 1958 as a joint effort of Harvard and Cornell Universities under the general sponsorship of the American Schools of Oriental Research; The Corning Museum of Glass joined in 1960. This, the seventh Monograph and ninth Volume in the Sardis series of final publications, is devoted to the ancient coins, Lydian, Greek, and Roman, found between 1958 and 1972 and the Islamic coins found between 1958 and 1978. Linking these major bodies of numismatic evidence is a chapter on Byzantine coins found since the publication of George E. Bates' *Sardis* M1 (1971), which enlarges the pictures he drew of the Byzantine period.

We take this opportunity to express our profound gratitude to the government of the Republic of Turkey for the privilege of working at Sardis. The Department of Antiquities and Museums, formerly under the Ministry of Culture, and the Directors General, their officers and representatives, have been unflinching in their help. We owe a special debt of thanks to the successive directors and staff of the Archaeological Museum in Manisa, especially to its present director, Kubilay Nâyır. A few specimens of intrinsic value are at that museum, while all others are currently stored in the depots of the Expedition camp at Sardis.

The Sardis Expedition is privileged to have four distinguished collaborators for this volume. Theodore V. Buttrey and Ann Johnston worked at Sardis in 1971 and 1973 to prepare the Greek and Roman coins for publication. Buttrey has acted as

general consultant, solving many problems in the ten years the study has been in progress. He has treated the Byzantine coins found between 1969 and 1972 and provides a comprehensive overview of Byzantine coins at Sardis that includes the work of H. W. Bell in *Sardis* XI (1916) on the coins found by the first Sardis expedition as well as the data published by George E. Bates. Complementing the Byzantine finds are the western issues found in material excavated at Sardis between 1958 and 1971.

George C. Miles began the study of the Islamic coins in 1970. Undisputed master of research in Islamic coinages and kindred materials, and a keen student of Turkey since his teaching days at Robert College, Miles generously let us draw on his expertise and contributed to our preliminary publications. Despite many strong claims on his time, he accepted the task of the final publication and studied the originals at Sardis in 1971 with his characteristic speed and vigor. He was at work on the catalogue when death took him in October 1975. A scholar of supreme integrity and vast knowledge, a man of sturdy good sense and stout loyalty, he inspired us and many others to try to live up to his example and to do justice to our evidence for Turkish Sardis. The Archaeological Exploration of Sardis and the authors gratefully dedicate this volume to his memory.

It was a stroke of good fortune that the study of Islamic coins left orphaned by George Miles was adopted by Michael L. Bates and Kenneth M.

MacKenzie, who have performed a difficult task with exemplary care. The catalogue was prepared by MacKenzie, who made the majority of attributions, using Miles' notes and photographs. Bates acted as consultant, reviewed the catalogue at a preliminary stage, and wrote the introduction. The drawings in the catalogue and the Arabic calligraphy are MacKenzie's. Through their joint effort the information for the Turkish period is available, and the role of coinage at Sardis can be followed from the seventh century B.C. into the late nineteenth century A.D.

For methodological and economic reasons it was not feasible to include any findspots in the present volume. However, some contexts of particular interest for historical and numismatic research are briefly listed in "Notes on Some Archaeological Contexts," *infra*. Concordances which will enable scholars to know the context of each recorded find have been prepared by K. Patricia Erhart, Stuart Fullerton, and Kenneth M. MacKenzie and will be made available on inquiry to the Sardis Research Office, Fogg Art Museum, Harvard University, Cambridge, Mass. 02138.

Much assistance has been rendered the authors and editors, and heartfelt thanks goes to many not listed below. The care with which Electra D. Yorsz did the first editorial review and listed corrections enabled us to keep track of ten years of revisions without disaster. Benedicte Gilman brought the efforts of all others to fruition by editing the final text, arranging plates and tables, and doing all necessary to see the book through the press. Casts were made of the Greek, Roman, and Medieval coins at Sardis by Theda Vann. That coins could be made available for study as long as twenty years after excavation is thanks to the careful recording system supervised from 1958 to 1971 by Ilse Hanfmann, and by the high standards of numismatic recording initiated by Catharine S. Detweiler and continued by several site numismatists, especially Barbara Burrell, K. Patricia Erhart, John H. Kroll, John G. Pedley, and Andrew Ramage. At the eleventh hour Jonathan Bloom and Wheeler Thackston of Harvard solved the final problems of listing Arabic names. The site plan and map of Islamic mints were prepared by Kathryn Gleason. Carol Stewart did the handwork for the

Greek, Roman, and Medieval sections. Finally, we are very grateful to Crawford H. Greenewalt, Jr. who became field director in 1976 and who has been extremely helpful and generous in expediting final checking in the field and the cleaning and photography of most of the Islamic coins.

Both the excavation and research programs have been made possible by grants and contributions extending over two decades from the Bollingen Foundation (1959-1965), the Old Dominion Foundation (1966-1968), the Loeb Classical Library Foundation (1965-1970), the Wenner-Gren Foundation for Anthropological Research (1967), the Charles E. Merrill Trust (1973), the Ford Foundation (1968-1972), and the Billy Rose Foundation (from 1970). Donations were received through the American Schools of Oriental Research, and Cornell University contributed university funds from 1957 through 1968. Much of the Harvard contribution came from the group of Supporters of Sardis, established in 1957, which includes both individuals and foundations. We owe the continuity of our work to their enthusiasm and generosity, and particularly to the advice and support of James R. Cherry, Landon T. Clay, Catharine S. Detweiler, John B. Elliott, Mrs. George C. Keiser, Thomas B. Lemann, Nanette B. Rodney, Norbert Schimmel, Richard Sherwood, and Edwin Weisl, Jr.

The excavation of the sectors which yielded the coin finds was aided by a grant in Turkish currency made by the Department of State to the President and Fellows of Harvard College for the years 1962-1965.<sup>1</sup>

The National Endowment for the Humanities, through a series of research grants, largely on a matching basis, has played a key role in sustaining the Sardis program.<sup>2</sup> This vital help is most gratefully acknowledged. Our special gratitude goes to the friends and foundations who enabled the project to receive the Endowment's support through their matching contributions. In accordance with a

1. No. SCC 29 543, under the Mutual Educational and Cultural Act, Public Law 87-256, and Agricultural Trade Development and Assistance Act, Public Law 480 as amended.

2. Division of research, grants nos. H67-0-56, H68-0-61, H69-0-23, RO-111-70-3966, RO-4999-71-171, RO-6435-72-264, RO-8359-73-217, RO-10405-74-319, RO-23511-76-541, RO-20047-81-0230.

request of the Endowment, we state that the findings and conclusions here do not necessarily represent the views of the Endowment.

This is the first volume in the Sardis series to benefit by a grant from the Publication Program, Division of Research Programs, National Endowment for the Humanities.<sup>3</sup> It is especially gratifying to have this assistance in responsibly presenting the results of an excavation which has been funded in part by the Endowment.

The award was made possible by matching funds contributed by the Jubilee Fund of the Numismatic Department of Bank Leu Ltd. to Further Numismatic Publication, Zurich, for which we express gratitude to Leo Mildenberg. Major

assistance toward the costs of publication was received from the Loeb Classical Library Foundation and the Horace H. Rackham School of Graduate Studies, the University of Michigan.

The problems of publishing scholarly research have multiplied in the present inflationary era. It is due to the generosity and sympathetic understanding of the members of those foundations and of an individual donor who wishes to remain anonymous that we are able to present this important material which exceeds the boundaries of numismatics and contributes to knowledge of history, economics and the visual arts.

George M. A. Hanfmann  
Jane Ayer Scott  
*Harvard University*

3. Grant no. RP-10050-80-0387.

## AUTHORS' PREFACE

This volume is the publication of the coins found at Sardis from the opening of the new excavations in 1958 through August 18, 1972. The Byzantine section includes only the coins from the 1969 season onward, as the coins from the 1958-1968 seasons have already been published by George E. Bates.

We worked at the site during the 1971 and 1972 seasons, preparing the original catalogues. Earlier Mrs. A. Henry Detweiler served as numismatist to the excavation; her hand can be seen in the listing in the coin books of literally thousands of pieces, in the preliminary attributions, and in the labeling of the countless envelopes of coins. This volume would have been impossible without her labor and that of other recorders of the finds.

Many individuals helped in the preparation of the material. Cleaning of the coins at the site, without which nothing further could have been done, was under the direction of L. J. Majewski. Elizabeth Gombosi photographed many of the coins, making possible their study outside Turkey. Theda Vann labored long and uncomplainingly at the ungratifying task of keying the coin books to the field books, numbering the coins in their thousands, and preparing quantities of casts for study and illustration. The cooperation of K. Z. Polatkan, Director of the Manisa Museum, in

allowing access to those find coins already on deposit there, as well as to the collection of other local finds, was most helpful, particularly in the compilation of the Greek Catalogue.

During the completion of the manuscript, study facilities have been provided by many helpful friends at the American Numismatic Society, New York; the British Museum, London; the Ashmolean Museum, Oxford; and the Fitzwilliam Museum, Cambridge, England; as well as at the collections in Berlin, Munich, Paris, and Vienna. The computerized indices to the Roman Catalogue were designed and prepared by Miss J. C. Tomlinson at the Cambridge University Computer Laboratory.

At the Sardis Publications Office the volume has been prepared by Jane Ayer Scott and other members of the editorial staff. To her, and to George M. A. Hanfmann, thanks are owing for their encouragement and their patience.

Finally a special word of grateful acknowledgement to M. and Mme. A. Hennequin and to the local police of Avignon. Their swift and intelligent assistance in the recovery of our papers, casts, and photographs after they had been stolen saved this project from an abrupt and painful miscarriage.

*Ann Johnston  
T. V. Buttrey*



Originally the Islamic coins of Sardis were to have been catalogued by George C. Miles, who visited the site briefly in 1971 to study the coins themselves. He brought back to New York a file of brief notes on many coins, and photographs of all those which appeared to be legible. After his death in October 1975 these notes and photographs were left among his papers, along with a very preliminary catalogue of the coins of the Beylik period. When Kenneth M. MacKenzie was asked to take up the catalogue, he reexamined every photograph. Although Miles's preliminary results were of great value, many of his tentative attributions were revised; most of the coins had not yet been identified by him. Thus, responsibility for the attribution and cataloguing of the coins is entirely MacKenzie's.

The difficulties of identification of excavation coins are notorious. To the problems presented by the coins themselves was added the difficulty of studying them entirely from photographs—not the ideal method for numismatic research, but the

only way possible in the circumstances. An effort has been made to note where uncertainty exists in the identifications.

After the catalogue was completed, Michael L. Bates undertook to revise it for publication. The introduction was entirely rewritten by him, based on MacKenzie's notes and on Bates's additional research, and the two of us made extensive editorial changes in the catalogue itself. We are grateful for the helpful suggestions that were made by T. V. Buttrey and Jane Scott for this revision.

The Sardis Islamic coins include a number of issues which are published here for the first time, or which confirm or correct previously published descriptions. It is hoped also that this publication of the numismatic evidence will be of value to historians and archaeologists, for Sardis is largely ignored by the literary sources of the Turkish period.

*Michael L. Bates*  
*Kenneth M. MacKenzie*

# NUMISMATIC SITE FIND PROCEDURES

Ann Johnston  
T. V. Buttrey

The experience of arranging and cataloguing the numismatic material at Sardis has suggested that future excavators might find useful a brief survey of operational techniques, both as followed at Sardis and as proposed by way of improvement. The preparation of excavation coins for publication begins at their discovery. It seems worthwhile therefore to outline some of the steps which can most usefully contribute to their efficient processing.

When found, each coin is described in the field book in the trench. The coin will commonly be incrustated with soil or corrosion, and frequently it will be quite illegible, so that description is often limited to size and shape, and locus on the site grid. Dimensions should be taken with calipers. The practice of outlining the piece in pencil on the field book page can be helpful in reducing the possibility of subsequent confusion of several pieces from the same locus. The dimensions will be exaggerated by 1 or 2 mm., but the relative size of different pieces will be evident. However, after treatment in the lab the cleaned coin may be not only smaller but of quite different shape. Each coin should be segregated in a 2 x 2 envelope with the minimally necessary information—e.g., field book page number. When several coins are found, each should be assigned its own envelope. If this is inconvenient on the site, when many coins appear at once, it should be done before inventory numbers are assigned.

When the coins are brought to the depository, the field book information is transferred to the coin book, in which a continuous record of numismatic finds is kept. For each coin the date of discovery, locus, special circumstances of context, and preliminary identification is entered, and an inventory number is assigned. The temptation to group coins found together by assigning several to the same number (or the same envelope) should be resisted, since later reference back to a particular specimen will be difficult or impossible.

Normally cleaning will be necessary before the coin can be properly identified. The techniques are several,<sup>1</sup> depending on the nature of the incrustation or corrosion and the lab materials available. The techniques are not peculiar to coins but appropriate to any objects of similar metal. The great majority of find pieces will usually have been struck in bronze.

Following cleaning comes identification. The excavation library should have been prepared beforehand with the basic catalogues appropriate to the area being dug and the range of periods of

1. For a typical cleaning method, see Charlotte B. Bellinger in her note on the cleaning of coins in Alfred R. Bellinger, *Catalogue of the Coins Found at Corinth*, 1925. New Haven 1930 p. 87. For cleaning and conservation of metals generally, though without particular reference to bronze coins, see H. J. Plenderleith, *The Conservation of Antiquities and Works of Art*. London 1956. Second edition London 1971.

the find material. For Greek coins, and particularly Greek Imperial, adequate catalogues are not available. Relevant volumes of the *British Museum Catalogues* are in print, but reference to them must usually be supplemented by wider library research or even visits to the larger public collections. Reproduction of the coins on the site, by casting or impression, is therefore of considerable importance. For Roman coins the situation is rather better since fairly full and accurate catalogues are available for most of the material: for Roman Republican coins, Sydenham's *Coins of the Roman Republic*; for Roman Imperial, the *British Museum Catalogue (BMCRE)*, or *Roman Imperial Coinage (RIC)* (the latter less accurate but more convenient in size and covering the wider span), supplemented by *Late Roman Bronze Coinage (LRBC)*<sup>2</sup>; for Byzantine, the *British Museum Catalogue (BM)* or the *Dumbarton Oaks catalogue*.<sup>3</sup> Preliminary identification of the coins from these volumes is often of great help to the trenchmaster as he goes, but it must not be taken as final. Find coins are notoriously poor in quality, having suffered through wear or corrosion, and their identification is often impossible, or worse, insecure. Frequently, problematical single pieces can be identified ultimately only within the context of a group of the same issues which emerge sporadically from the excavations.

In describing the individual coin in the coin book the essential physical dimensions which are worth recording are weight in g., planchet diameter in mm., and die position. Planchet thickness in mm. is sometimes of importance in the case of Greek and Greek Imperial coins. The weight can be taken on a jeweler's balance; if several hundred coins are to be weighed, it is convenient to use a balance with pre-set integer g. which can simply be dialed against the weights pan. It is not normally useful to take the weight both before and after

cleaning. Before, the coin will be enlarged by corrosion or just by adherent soil. After careful cleaning no appreciable amount of the coin itself need have been lost, and the weight now will provide at least a certain *terminus supra quem* for determination of the standard to which the coin was originally struck. For silver and bronze, weights are best taken to the second decimal (as a check on the first); for gold, to the third decimal. Actually only certain classes of coins are worth weighing at all: all gold; all Greek and Greek Imperial; Roman Republican bronze; all Byzantine; tokens and counterfeits. By contrast the weights standards of Roman Republican silver, and Roman Imperial silver and bronze are for the most part attested from well preserved museum specimens, and little can be added by adding the weights of ill preserved excavation coins.

The same reservations can be expressed about recording planchet diameter. In general, coins which are worth weighing are worth measuring, the others not. Roman Imperial planchets tended to be standard sizes, while Greek and Greek Imperial may vary considerably—and not necessarily in relation to weight, where thicker and thinner planchets may occur in the same diameter, or pieces of the same weight in different diameters. In these cases the thickness of the flan should be measured as well. Further, restriking of older coins is a common phenomenon in some issues, so that planchet dimensions can mislead. It is useful therefore, particularly in the Greek Imperial series, to take the diameter of the dies as well as of the planchet upon which the dies were impressed. Greek Imperial denominations are normally not marked on the coin and are often perceptible only from the diameter of the dies.

Die position is the relative heading of the two dies in relation to each other, indicated in printing by arrows. Current British coins are struck with the dies upright, that is if the obverse is turned on its vertical axis, the reverse will also be upright. This is printed ††, or more briefly †, since the obverse is always assumed to be upright. Coins of the United States are struck with the dies upset, that is the reverse is inverted when the coin is turned on the obverse vertical axis, †† or †. Ancient coins may have been struck with the dies coupled in any fixed position relative to each

2. Additional indices to *LRBC*, including obverse legends in alphabetical and reverse alphabetical order, and obverse legends by mint, have been computer prepared by Buttrey.

3. Ed. note: Michael L. Bates suggests that for Islamic coins in Anatolia the following works would be useful. Cüneyt Ölçer. *Nakışlı Osmanlı Mangırları*. [The Ornamental Copper Coinage of the Ottoman Empire]. Istanbul 1975; Pere Nuri. *Osmanlılarda Madeni Paralar*. Istanbul 1968; Stanley Lane-Poole. *Catalogue of Oriental Coins in the British Museum*, VIII: *The Coins of the Turks in the British Museum*. London 1883.

other—a curious example is the frequent Byzantine 1/ for the follis—or loose, without fixed relation. Often such information can be used as an indication of mint origin, but it is normally not worthwhile to take the die position of coins which are not also worth weighing and measuring.

Several techniques are helpful in the study of the coins and their types. Photographs of the fully legible pieces that can be studied anywhere are especially useful when the coins themselves cannot be made available. Enlargements are usually not necessary, and can actually mislead by exaggerating the faults of poorly preserved specimens. The production of a complete photographic file of the coins from a site may be of security value, but is often not worth the trouble and expense when intended to grace the excavation cards. Too many pieces cannot be read at all, and the identification of semi-legible coins will not be possible from the photographs. Details frequently emerge only when the coin is held in the hand, in a raking light, the face lightly covered with water, and examined under a magnifying glass.

For coins which do warrant reproduction for study or for future illustration, the preparation of plaster casts is essential. These can be made from impressions in plasticene, which has the advantage of reuse for other coins, or in silicone, which has the advantage of permanence should additional casts of the same coin be needed later. Latex should be avoided as potentially unstable. Where plasticene is used, it must first be smoothed, since any surface marks will be reproduced on the cast, and then dusted with a fine talcum to prevent the coins from sticking as the impression is made. The impression is then gently washed with a detergent solution, using a fine brush, to remove grease, and filled with a moderately thick solution of quick-setting dental plaster. The plaster is applied with a fine brush to avoid the formation of air bubbles. When the casts have set, they can be studied almost as easily as the coins, though they often lack the finest surface details as well as the color of the coins, which is sometimes useful in diagnosis. The lack of color is, however, a positive advantage in preparing the plates for the final publication. Casts made from a single grade of plaster will provide a unified tone, whereas direct photographs from the coins will vary in tone from

piece to piece. Before being photographed the casts should be pared back to the original outline of the coins. It is easier, but less accurate, to clip photographs of unpared casts.

An alternative method of reproduction, more suited to study than to illustration, is the foil impression.<sup>4</sup> Like casting it provides a reproduction which can be carried away from the site, to be studied at one's leisure with all the books at hand. Impressions are far less bulky than casts and with proper handling less likely to be damaged when carried about. The preparation of the materials and the making of impressions can be completed in a few seconds, and the impression automatically records diameter and die position. The coin is simply placed within a fold of tin foil, then inserted between a pair of thin rubber buffers and placed in the press. The pressure on the coin does not damage it, except potentially in the case of a specimen which has crystallized to fragility, an infrequent occurrence.

The minimum equipment and materials necessary for these procedures, aside from the cleaning solutions,<sup>5</sup> are: for measuring, calipers and a balance; for studying, a magnifying glass; for casting, plasticene or silicone, talcum powder, a fine

4. The preparation and use of foil impressions are discussed in detail by Paul Bedoukian "Aluminum Foil Impressions for Numismatic Studies," *ANS MN* 11 (1964) 333-335.

5. Ed. note: According to Henry Lie, conservator with the Fogg Art Museum, Harvard University, the materials needed for cleaning and conservation will depend on the condition of the coins. In many cases the best results with copper alloy coins are obtained working under magnification with a scalpel, dental picks, and a glass brittle brush. Treatment with chemical solutions is often appropriate but some treatments can result in a loss of information and aesthetic value. If possible, a conservator should be employed for this work. The following works provide a review of cleaning and preservation techniques. I. M. Allen and Anthony Wooton. "Notes on the Cleaning and Preservation of Ancient Coins." *Seaby's Coin and Medal Bulletin*, #513 Vol 2, February 1961; D. L. Hamilton. *Conservation of Metal Objects from Underwater Sites: A Study in Methods*. Austin, Texas 1976; R. M. Organ. "Aspects of Bronze Patina and Its Treatment." *Studies in Conservation*, Vol. 8 No. 1, February 1963; R. M. Organ. "The Examination of Treatment of Bronze Antiquities." In *Recent Advances in Conservation*, G. Thomson ed. London 1963; R. M. Organ. "The Current Status of Treatment of Corroded Metal Artifacts." In *Corrosion and Metal Artifacts*, B. F. Brown et al. eds. Washington, D. C. 1977; Piotr Rudniewski and Daniel Tworek. "A Review of the Present Methods of Conserving Metal Antiquities." *Conservation of Metal Antiquities*. Warsaw 1969; Todor Stambolov. *The Corrosion and Conservation of Metallic Antiquities and Works of Art*. Amsterdam n. d.

artist's brush, and dental plaster, preferably white or ivory in color; for impressions, tin foil, rubber buffers, and a press. The most portable and satisfactory press is a simple hand device, operated by squeezing, for embossing note paper, from which of course the embossing plate has been removed. For registration of the coins in general, in the coin book and on the envelopes, the judicious provision of rubber stamps for repetitive entries cannot be overemphasized.

In all this study the trenchmaster and the numismatist should be aware of their differing interests, which will cause them to approach the material differently. The trenchmaster finds coins useful primarily in dating the contexts in which they are found. Their advantages over all other kinds of ancient evidence, except certain epigraphical texts, is apparent. Some caveats must be applied: the context must clearly have included the coins, whose sad propensity for percolating into alien levels is only too well known. The condition of the coins must be taken into account: a badly worn dupondius of Galba is not likely to have been lost during Galba's short reign, but years or decades later. Here hoards help us to discover how long the material continued to circulate, and often a run of several centuries is possible. The date of the coin therefore offers at best a *terminus post quem* for its loss in context.

The trenchmaster will also be gratified at the appearance of hoards which will give some historical liveliness to his site or even reveal aspects of its occupation. A clear distinction should however be made between uncontrolled accumulations of coins, say in the debris of a shop floor, and the purposeful collection of coins to be set aside as savings or for security. Without the control of a discovered container or a clearly sealed deposit, only agglomerations of real internal consistency can be considered as possibly ancient hoards. This subject is dealt with below, under Hoards in the chapter on Roman coins.

The numismatist is as anxious to date his coins from the archaeological context, as the trenchmaster is for the reverse, and often neither is able to satisfy the other. Roman Imperial coins hardly need such refining except in certain cases—

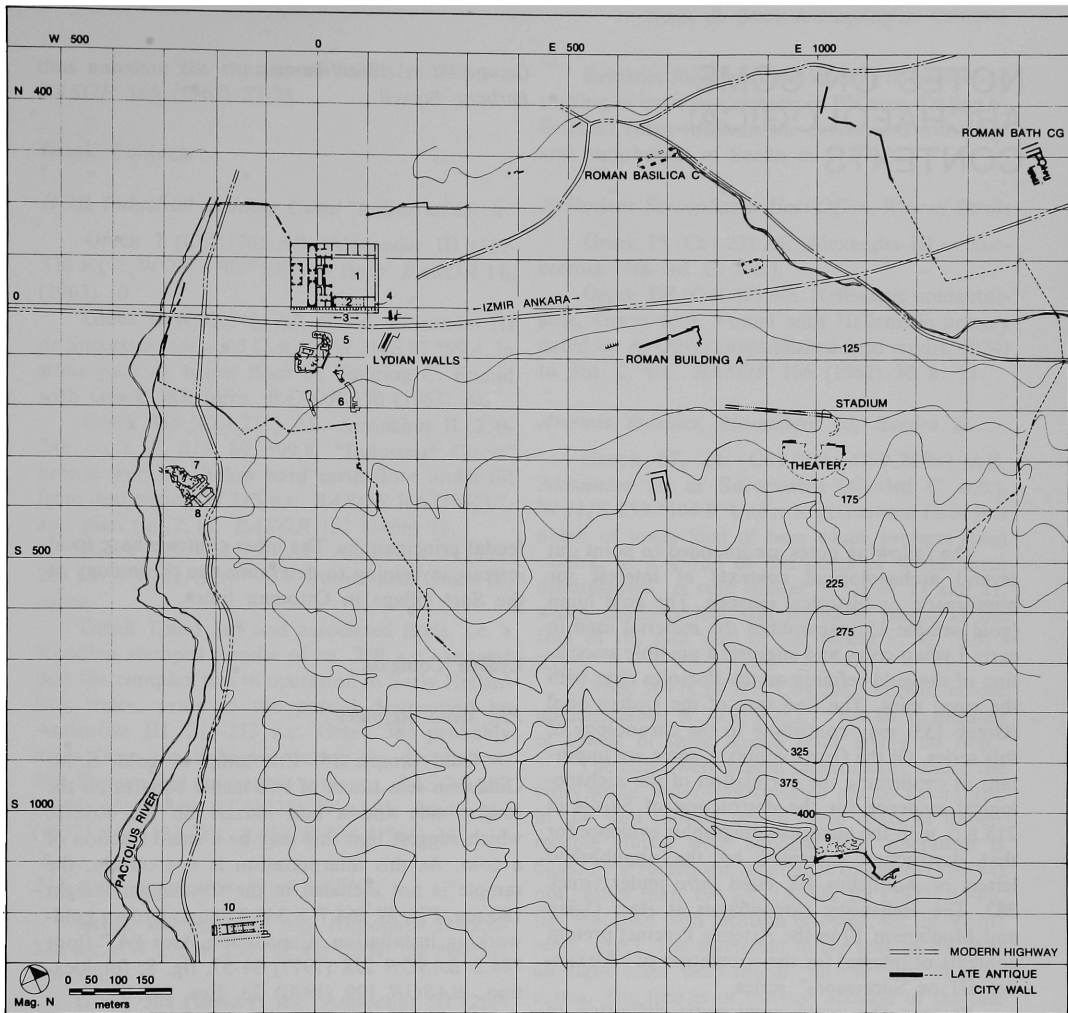
for example the COS III issues of Hadrian which continued over a number of years—but the chronology of Greek and Greek Imperial, and some Roman Republican coins, could be greatly aided by the archaeologist. A case in point are the Sicilian HISPANORVM issues which had been given on purely historical grounds to Sextus Pompey, until the Serra Orlando excavations showed that the contexts in which they occurred dated back well into the second century B.C., a discovery which required their complete reevaluation and indeed led to the identification of the site as the ancient Morgantina. On the other hand, quite apart from the immediate find context of the individual specimens, the numismatist can make a good deal of the total coin production of the site. If the site had been a mint city at least for the striking of bronze, one would expect a general excavation to produce a relatively large number of the local coins. Where coin was entirely imported, the distribution of finds by mint, period, and issue reveals something of the monetary (if not the economic) ties of the city. Of basic importance to these studies is that all the coin finds be reported, not just those which the trenchmaster feels to be of importance in the explanation of his area. Finally, the finds may produce important new or variant material to the ancient numismatic corpus, without regard to the site from which they derive.

The best approach to a fruitful collaboration of excavator and numismatist is the full registration and study of every coin. It is also necessary to be able to follow each coin through to its final publication, and conversely to locate each coin once it is published. It is not feasible in this volume to give the find spot of each coin, as G. E. Bates did (*Sardis M1*). However, the coin books of the excavation include assignation of each to find spot by inventory number. Indices have been prepared which make possible instant cross-reference from the coin by inventory number to the Catalogue, and *vice versa*. The index to the largest body of the material, the Roman coins, has been prepared by computer. Copies of the indices and print-outs are on deposit in the Sardis Expedition Office, Fogg Art Museum, Harvard University.

## *Technical Abbreviations and Symbols*

AE	bronze	M/m	mintmark
Ant.	Antoninianus	obv.	obverse
AR	silver	off.	officina(e)
AV	gold	ov.	overstruck (on flan of...)
avg.	average	r.	right, right hand
C.	century	rev.	reverse
ca.	circa	var.	variety
cuir.	cuirassed	wt.	weight
den.	denarius	* (preceding catalogue number)	illustrated
dr.	draped	* (preceding numeral)	
ex.	exergue	†	level
g.	gram	#	footnote
illeg.	illegible		coin bought by the Expedition
l.	left, left hand		or found outside the excavation proper
laur.	laureate	†/	die position
μ	micron (one millionth of a gram)		legend division
mg.	milligram		the portion of the legend in the exergue
mm.	millimeter		

Diameters are given in mm. and weights in g. throughout the volume.



**Excavated Areas with Significant Coin Finds**

1. B: Bath-Gymnasium Complex
2. Synagogue
3. BS: Byzantine Shops
4. PCA: Packed Columns Area
5. HoB: Early Byzantine "House of Bronzes" and Lydian Market Area
6. Middle and Upper Terraces: Roman-Early Byzantine residential area
7. PN: Lydian gold refining area. Turkish village was above
8. PN: Lascarid Church E and 4th C. Basilica EA; Roman bath to the N. Turkish houses covered the area to the W
9. AcT: Acropolis Top, within the Early Byzantine fortification
10. Temple and Precinct of Artemis

# NOTES ON SOME ARCHAEOLOGICAL CONTEXTS

George M. A. Hanfmann  
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The following notes are intended to point out several archaeological contexts of interest for numismatic or historical reasons. The gold lump (gold sample 15) exemplifies the material used in early Lydian coins and suggests a possible association of the gold refinery on the Pactolus river with the royal mint. The find spot of the Lydian obol (Greek 133) may contribute to the chronology of this series. Of the Greek contexts, some are important in confirming the correlation of the archaeological evidence for the destruction of Sardis in 213 B.C. with the historical-epigraphic evidence for that destruction indicated by the unpublished letters of Antiochus III, cited *infra* under Greek 383. The Hellenistic sarcophagus at Hacı Oğlan and Monument 10 in the Artemis Precinct present contexts of interest for the circulation of "Alexander III or Successors" series.

Because the usual numismatic definition of "hoards," as followed by T. V. Buttrey ("Hoards," Chapter II), is inapplicable to the material discussed under "Roman and Early Byzantine Contexts," we use the terms "group" and "concentration of coins."

Among the Islamic contexts, the find from the Acropolis of a small group of coins struck jointly by Junayd, Emir of Izmir, and Muhammad I Çelebi has clarified an interesting historical problem in the contest of the Ottoman dynasty with

feudal principalities. The other contexts have local interest in helping to determine the chronology of the Sart village in Ottoman times.

## Lydian Contexts

### *PN, Gold Refinery*

Gold sample 15. Cut lump of gold. S. M. Goldstein sees traces of two incuse squares on the reverse side and a lion muzzle on the obverse which suggest that this may be a small fraction of a coin. As this interpretation is not certain, the sample is not included in the Catalogue. Weight 180 mg. PN, W 264.7/S 343.3 \*86.1, Lydian gold-working installation, Cupellation Area "A," floor \*86.2 *BASOR* 228 (1977) 54-57, fig. 8; for location, *BASOR* 199 (1970) 23, figs. 8-9.

### *PN, Apsidal Building*

Greek 133 (C61.241) AR. Obol. 6th C. B.C. PN, W 255/S 375 \*87.95. Found in north Apsidal Building (fountain house?) above a burnt layer. In the preliminary report, the building was attributed to 547-499 B.C. and the layer equated with the Ionian destruction of 499. Andrew Ramage argues that the apsidal buildings were built before 547 B.C. (unpublished manuscript). The coin would



thus antedate the capture of Sardis in 547 B.C. *BASOR* 166 (1962) 23-24.

### Greek Contexts

#### *HOB, Industrial Building C and "Industrial Circle"*

Greek 7 (C62.178) AR. Alexander III (332-330 B.C.). W 25/S 90 \*100. On floor. *BASOR* 170 (1963) 10.

Greek 10 (C62.345) AR plated. Alexander III or Successors (4th-3rd C. B.C.). W 21/S 87 \*99.4. In stone packing below floor of Building C. Found with Greek 383, *infra*. *BASOR* 170 (1963) 10.

Greek 365 (C61.217) AE. Antiochus II (250-246 B.C.). E 0/S 89 \*99.8. "Industrial Circle" bronze working, below hard earth floor under fill from destruction of 213 B.C. *BASOR* 166 (1962) 7, and plan fig. 2; cf. *BASOR* 182 (1966) 15.

Greek 383 (C62.238) AE. Antiochus III (223-208 B.C.). W 21/S 87 \*99.4. Found with Greek 10, *supra*.

Greek 7 and 365 and associated finds, i.e. a Rhodian stamped handle of ca. 250 B.C., suggest that the complex was in operation in Early Hellenistic times, prior to the partial destruction by Antiochus III, 215-213 B.C. Greek 383 probably dates from the upheaval during the destruction. For literary and epigraphic evidence, *BASOR* 182 (1966) 15; *Sardis* R1 (1975) 29 n. 91; *Sardis* M2 (1972) nos. 192-210; *BASOR* 174 (1964) 34.

#### *213 B.C. Destruction Level in PN*

Greek 367 (C64.56) AE. Antiochus II (250-246 B.C.). W 275/S 350 \*87.91. Under the destruction fill.

Greek 381 (C64.97) AE. Antiochus III (226-190 B.C.). W 272/S 381 \*87.75. Above the destruction fill. *BASOR* 177 (1965) 4; according to T. V. Buttrey C64.75, also found there, is not a coin.

#### *Domestic Units in PN Abandoned in 213 B.C.*

Greek 81 (C65.58, C65.143, C65.146, C65.147) AE. Ephesus (305-288 B.C.). Unit XV A, W 275/S 325. On north wall of plate hearth. Units XIX, XX, W 294-304/S 263-330 \*85.5, 85.6. On floors with Hellenistic pottery. *BASOR* 182 (1966) 23-24.

Evidence for intentional leveling of houses and stuffing of wells was clearest in PN area. Dating by Seleucid coins confirms the correlation with siege and punishment of Sardis in 213 B.C.

#### *Hellenistic Sarcophagus Haci Ođlan, West of Sardis*

Greek 15 (C61.23) AE. Alexander III or Successors (4th-3rd C. B.C.).

Greek 399 (C61.22) AE. Hellenistic unidentifiable. Grave 61.3. Found with Hellenistic pottery dated by A. Oliver (unpublished field report, 1974) to 3rd C. B.C. *BASOR* 166 (1962) 30 n. 51.

#### *Artemis Precinct, Monument 10, Exedra D*

Greek 17, 21 (C69.209, C69.209a) AE. Alexander III or Successors (4th-3rd C. B.C.). W 71/S 253 \*104.8. Under lowest stucco floor just north of lower step of base which projects from exedra, in a group of five coins of which three disintegrated. A coin similar to Greek 17 and 21, which disintegrated, was sealed in stucco at the foot of the east wall of the exedra at W 70.5/S 253.5.

Greek 399 (C69.207, C69.208) AE. Hellenistic unidentifiable. W 70.9/S 253.7 \*104.86. In bedding of lowest of three stucco floor layers on step.

The coins were placed intentionally under the ivory-white water-impermeable stucco floors and in the wall footing before three coats of impermeable stucco were applied. This operation is dated by a Hellenistic relief ware fragment (P69.94) not earlier than 150 B.C. (*Sardis* R1 [1975] 65-66, fig. 88a, plan with location of coins; see fig. 92 for relief ware). The statement in the text (p. 66) that all eight coins were found "on the step" is erroneous. The find is of interest because of the late date it gives for the circulation of "pseudo-Alexanders."

### Roman and Early Byzantine Contexts

No attempt to list all coins by number will be made for most contexts of the Roman period. As the standard numismatic date of A.D. 491 dividing Roman and Byzantine coinages cuts across several find contexts, we have included, where relevant,

references to publication of Byzantine coins in *Sardis M1, Byzantine Coins* (1971) by George E. Bates (cited here as Ba.)

### PN, Roman Bath

Roman 415, 638, 780, 808, 841, 968, 1072. All AE. Constans (355-361) through Theodosius II (425-450). W 240-258/S 360-368 \*89.75. "Sealed" under extant mosaic (60.2) in Room C. For location and plan, see *BASOR* 170 (1963) 21, fig. 13.

Roman 113, 345, 413 (2), 415. All AE. Five coins of Maximian (295-305), four of Constantius II (355-361). W 255-258/S 366-373 \*89.7. "Sealed" under a preserved strip of mosaic (60.1) in Room B. *BASOR* 162 (1961) 25-26, n. 34.

The mosaic in Room B was laid earlier than that in Room C. As in the case of the Synagogue (*infra*), the coins seem to have been placed intentionally.

### PN, Late Unit Q

120 copper coins, a concentration in earth under an earth floor reported as a hoard of 115 coins plus five found earlier the same day. W 217-220/S 346-348, especially W 217.5. Location, *BASOR* 174 (1964) 24, fig. 11 (plan) "hoard." Composed of late walls, the unit may have served as an industrial installation. A gold solidus of Justin I (518-527) was intentionally placed in the wall between units Q and J during construction. Ba. no. 49; for "Hoard D" 151. The densely concentrated coins could have spread from a sack or other perishable container.

### Identified Coins:

Pre-491	13
Roman 702	Valentinian II (375-392)
Roman 705	Theodosius I (379-395)
Roman 812	Arcadius (393-408)
Roman 835	Arcadius (383)
Roman 919 (2)	Honorius (395-308)
Uncatalogued (3)	Late 4th to 5th C.
Roman 1085	Marcian (450-457)
Roman 1090, 1094, 1097	Leo (457-474)
Post-491	7
Ba. 28, 29, 32, 34, 36	Anastasius (491-518)

Ba. 70, 71  
Total

Justin I (518-527)  
20

G. E. Bates reported 69 disintegrated coins. The "Q Unit" concentration seems to date from ca. 390-520, with ca. two-thirds dating between 390 and 450.

### Byzantine Shops

W 59-E 116/S 0-6 \*96.75. Destroyed in A.D. 616, this commercial center with some thirty units (W 1-13/E 1-19) presented a rare opportunity to study circulation of small change at the time of destruction. G. E. Bates analyzed fifty-two identifiable Byzantine coins from Shop E 16 as a sample and listed Byzantine coins for the other units. He omitted the pre-491 coins. (Ba. 3, Table IV, and Appendices A and B). In a forthcoming *Sardis* monograph on the Byzantine Shops J. S. Crawford will list the entire chronological range of identified coins found in each unit, from before and after the reform of Diocletian. A precise and detailed analysis and evaluation is yet to be undertaken.

### Identified Coins

Pre-491, excluding Hellenistic	312
Post-491	498
Total	816

### Synagogue

E 20-110/N 0-20 \*96.75 and below. Main Hall and Forecourt, coins under the mosaics. For location, A. R. Seager, "The Building History of the Sardis Synagogue," *AJA* 76 (1972) 425-426, fig. 23 (plan). Main Hall: L. J. Majewski, *BASOR* 187 (1967) 32-46. Forecourt: *BASOR* 191 (1968) 30-31, fig. 23. Total: almost 500 coins. Based on Majewski's field work, A. R. Seager has studied and compiled the data for each mosaic panel. The majority of "sealed" coins (i.e. coins found below unbroken pavements) falls between 337 and 346-350 in the Main Hall and between 340 and 380 in the Forecourt. A group of coins was found under an earlier mosaic panel dating to 270-272, while others attest to 5th C. repairs of the mosaics. Main Hall: Total identified coins: 65; "sealed:" 27. Forecourt: total identified coins: ca. 400; "sealed:" 123. The evidence will be published in a forthcoming report of the Sardis Expedition.

## PCA

E 116.8-124.5/S 1-5 top of the columns \*97. The "Packed Columns Area" (PCA) is a "poorly defined rectangular area . . . a small makeshift room . . . paved with shafts of columns cemented together," *BASOR* 174 (1964) 46, fig. 15, best plan; *BASOR* 203 (1971) 14-15. The unit, aligned with the Byzantine Shops, is at the SE corner of (but not part of) the Synagogue.

All told there are more than 536 coins. About 150 were found in 1963; of those 116 were reported by G. E. Bates, (Ba. 150, 152-153, under Hoards "N, O, and T" and seventeen more under PCA). In his discussion of hoards (*infra*, Chapter II), T. V. Buttrey has analyzed the 420 coins reported from 1970 and has stated the reasons why they may not be considered a hoard. Hanfmann, *Letters*, 275-276, fig. 96, and Mitten, *BASOR* 174 (1964) 46; *BASOR* 203 (1971) 14-15, speculated that the concentration was deposited at the time of the latest coin.

After a careful architectural study of the PCA area, A. R. Seager states that there were three superposed layers of broken column shafts cemented together. He notes that the coins were in the cracks between the columns of the middle layer, apparently deposited there during construction. Seager proposes that the shafts were broken in an earthquake around the mid-fifth century and then used to consolidate the shaken PCA unit that served as a support for the tetrapylon which spanned the intersection at the southeast corner of the Synagogue. Seager analyzes 238 identified coins found in 1970 and dates the deposit to the second half of the 5th C., eliminating as intrusive the two early 3rd C. and the post-491 coins. G. M. A. Hanfmann, who excavated the area in 1963 with D. G. Mitten and supervised R. L. Vann in 1970, agrees with Seager that the twenty-four post-491 coins (including two coins of Leo [457-474]) do not belong with the sealed main concentration; they come from a floor level above the top row of columns, around A.D. 600. The sealed concentration belongs to the period from the House of Constantine through Theodosius II (324-450). Because the area is not sealed, intrusion and extrusion of coins happened easily.

As to the alleged metal container and "poor-box," Seager now interprets the ledge on which

traces of bronze were found as a drain and doubts that a "poorbox" could have stood for any length of time in a drain.

## Identified Coins from PCA:

## Pre-491 (1970 finds only. Cf. "Hoards" Chapter II)

Greek 101. 3rd C. Greek Imperial (244-246)	1
Roman 24. Gordian III (238-244)	1
Subtotal	2
House of Constantine (307-383)	53
Valentinian, Valens, Gratian (364-383)	21
Theodosius I, Arcadius, Honorius (379?-423)	134
Theodosius II (402-450)	26
Subtotal	236
Leo (457-474)	2
Subtotal	238

Post-491 (Buttrey, "Byzantine," Chapter III and Ba. 152-153, Hoards N, O, T, and all PCA finds [150 coins] from 1963).	
Ba. 704a-b. Pentanummi (498-602)	2
Ba. 51. Justin I (518-527)	1
Ba. 145, 146, 163, 180, 182, 237, 242. Justinian (527-565)	7
Ba. 334, 338, 377, 382, 395, 413. Justin II (565-578)	6
Ba. 548, 549, 576, 590, 674. Maurice (582-602)	5
Illegible, Heraclius, perhaps 614-615	1
Subtotal	22
Total	260

It is remarkable that there are now at least three finds of large concentrations of very small bronze cash from late antique (6th C.) synagogues. The Sardis PCA concentration was in a unit peripheral to the Synagogue. It may have been emptied amidst the columns at the time that they were laid down. The Gush Halav concentration of 1,943 coins was found in a vessel near the northwest entrance of that synagogue, in a location where it was not concealed (R. S. Hansen, "Report on the coins from Gush Halav," *BASOR* 233 [1979] 52-55). In Capernaum 2,920 coins, "some of them still embedded in a layer of mortar," were found under a stone just inside the entrance. The historic range mentioned is from Constantine (307-337) to Eudoxia (400-404). Mention is also

made of another hoard of 6,000 coins (S. Loffreda, "The Synagogue of Capharnaum: Archaeological Evidence for Its Late Chronology," *Liber Annuus* 22 [1972] 5-29; idem, "The Late Chronology of the Synagogue of Capernaum," *Israel Exploration Journal* 23 [1973] 37-42).

The explanation of these accumulations deserves the attention of historians concerned with the economy of the synagogues.

## Islamic Contexts

### *Acropolis*

Islamic 44, 49, 50, 51, 52 (C62.217-C62.221) AR. AcT, E 11/N 23 \*402.9 floor. At the west wall of a room south of the cistern under a layer showing traces of strong burning among collapsed stones from the wall of the room. A group of five silver coins, four struck jointly under Junayd (b. Ibrahim), Emir of Izmir, and Ottoman Sultan Muhammad I Çelebi (1402-1421), and one undated coin from the second rule (1402-1421) of Ilyas (b. Muhammad of Menteşe). In a detailed discussion G. C. Miles attributed the Junayd-Çelebi issue to 1411-1415. The coins provide a *terminus post quem* for the destruction of this unit, perhaps after the expulsion of Junayd in 1415. G. C. Miles, *BASOR* 170 (1963) 33-35, fig. 23; *Sardis* M4 (1976) 94-95.

### *Sarcophagus at Church E*

Islamic 2, 3 (C62.187, C62.186) AE. Sarukhan (Ishaq b. Ilyas [1374-1388]).

Islamic 221 (C62.188) AE. Murad I (b. Urkhan [1359-1390]).

Islamic 2, 3, and 221 all come from the bottom of a sarcophagus found at W 220/S 370 \*90.19, on the north side of Church E, Grave 62.1.

When the Lydian sarcophagus was reused for a Byzantine burial, it was put carefully in a place of honor next to the podium of Church E. The church was built between 1222 and 1254. The sarcophagus contained skulls of three individuals (one a woman, one a youth) and bronze beads from a necklace. *BASOR* 170 (1963) 17, fig. 13; *BASOR* 215 (1974) 34-35, figs. 3-4, location; Hans Buchwald, "Sardis Church E—a Preliminary Report," *Jahrbuch der Österreichischen Byzantinistik* 26 (1977) 296, for the date of the Church. As Michael L. Bates points out (by letter December 9, 1980), no coins would be placed with a Muslim burial; they must have dropped in accidentally, perhaps at the time when the church area was taken over by the Turks.

### *PN, Islamic Village*

Islamic 464, 466 (C65.28, C65.63) AE. Sulayman II (dated 1687). Above heavily burnt layer at PN, W 289.7/S 321 \*87.35. 466 was found on the pavement. *BASOR* 182 (1966) 25.

Islamic 6 (C65.62) AE. Ishaq (b. Ilyas [1374-1388]). From a lower level, under the heavily burnt layer, W 281.15/S 332.2 \*87.8. *BASOR* 182 (1966) 25.

Islamic 254 (C65.37) AE. Bayezid I (1389-1401). W 275.2/S 331.7 \*87.2. Same as above. *BASOR* 182 (1966) 25.

Islamic 452-462 (C64.67-C64.77) AE. Sulayman II (dated 1687-1688). From a group of thirteen copper akçes found in the Islamic Village at PN, W 259/S 345 \*88.25. These eleven are of Constantinople. *BASOR* 182 (1966) 25.

Islamic 471-472 (C64.78, C64.79) AE. Sulayman II (dated 1687-1688). From the same group as above. These two coins are of Serai. *BASOR* 182 (1966) 25.

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The reports of the first Sardis expedition were published under the general series title of *Sardis, Publications of the American Society for the Excavation of Sardis*. Seventeen volumes were planned by H. C. Butler, Director of Excavations (*Sardis* I [1922] viii); of these, nine were actually published. They are likewise listed under *Sardis*, below.

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AJA	<i>American Journal of Archaeology</i> .	ANS NS	<i>American Numismatic Society Numismatic Studies</i> . New York.
AM	<i>Mitteilungen des Deutschen Archäologischen Instituts, Athenische Abteilung</i> .	APAW	Abhandlung, Preussische Akademie der Wissenschaften.
ANS	American Numismatic Society, New York.	Artuk	Artuk, İbrahim and Cevriye. <i>İstanbul Arkeoloji Müzeleri Teşhirdeki İslami sikkeler kataloğu</i> . Vols. 1-2. Istanbul 1970-74.
ANS MN	<i>American Numismatic Society Museum Notes</i> . New York.		

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## THE PATTERN OF FINDS

Excavation finds are an important source of information about the circulation of coins and hence, potentially, about the workings of the ancient economy. The finds cannot, however, be analyzed in isolation. They must be seen first in the context of coin production, insofar as it is known. We cannot, of course, be entirely sure about the size of original output, but the body of material extant is usually large enough to make intelligent guesses on the basis of numbers of different types, of magistrates' names, of issues per emperor and sometimes of the number of dies used. Sardis itself probably issued coins throughout the period from Croesus to the end of the local bronze coinages in the mid-third century A.D., in various metals and under at least half a dozen different authorities; these issues could be expected to make up the bulk of the finds. The pattern elsewhere is quite varied. Most of the Ionian cities struck coins from the fourth to the first centuries B.C., whereas no other Lydian or Phrygian city had issues in its own name before the second century B.C., and few prior to the latter part of the first century A.D. The larger cities, like Pergamum, Ephesus, and Smyrna, seem to have maintained mints almost continuously. Pergamum had its heyday under the Attalids, then apparently struck no autonomous issues at all during the first century B.C., but produced fairly

steadily throughout the imperial period. There is abundant Hellenistic silver and bronze for Ephesus, and large quantities of bronze from Augustus to Gallienus, all with imperial portrait. Smyrna struck mostly bronze in the second and first centuries B.C., apparently in quantity to judge from the numbers of types and magistrates' names, and then struck both "autonomous" and portrait issues fairly consistently under the Empire. With some exceptions, most cities of Asia struck at least a handful of types and denominations in bronze for each emperor until the great expansion of the local coinages under Septimius Severus.

This pattern of output is only partially reflected in the finds. Distortions arise for several reasons, some of which may give a totally inaccurate bias to our picture of circulation. First there are historical factors. Sardis suffered several calamities in the period between the introduction of coinage and the end of local issues ca. A.D. 260. The destruction of 449 B.C. was too early to be significant numismatically, but the destruction during and after the siege of Antiochus III, ca. 214 B.C., and the earthquake of A.D. 17 might be expected to skew the finds, insofar as houses and shops were demolished with their contents intact, so that we would have disproportionately large quantities of coins of those periods. The geographical spread of coins would be affected by the succession of regimes in power at Sardis, each with its own sphere of

influence, perhaps bringing coins from distant mints into circulation. Another aspect of the distribution of finds derives from the commercial, financial, and administrative network of which the city was a part. Sardis was never a backwater. It was always on a major east-west road (though not, by Roman times, the most important) and hence had access to the sea; there was also a road to Pergamum via Thyatira and to the Maeander valley via Philadelphia. We know surprisingly little about trade and industry in imperial times, but presumably the city continued to export the products, such as cloth, for which it had always been famous. Considerable income must have been generated by the services provided in the city as a metropolis and as head of a *conventus*. One would expect to see these links reflected in the coins in circulation.

The most important accidental distortions arise from technical archaeological factors. Different parts of the city were occupied at different periods and inevitably the archaeologists have managed to excavate only a small part of an extensive site, with important consequences for the chronological distribution of the finds. Much of the area excavated is late Roman and Byzantine in date, so that the majority of coins found in those parts of the site, such as the Synagogue and Marble Court, are also Roman and Byzantine. The House of Bronzes and Pactolus North, on the other hand, have tended to throw up a higher proportion of Greek coins, having been inhabited from Lydian times through the Hellenistic period and then left largely undisturbed for several centuries, HoB as a stable commercial area and PN as a cemetery. Another problem is the fact that excavation finds tend not to reflect the full range of metal and denomination struck, but rather to consist of the smallest of small change, usually the smaller denominations of bronze, which are most easily lost. At Sardis most of the Greek coins found are less than 20 mm. in diameter, which, while it does not greatly distort the picture as regards Hellenistic and early Imperial coins which tend to be small in size, gives an increasingly inaccurate impression of production and circulation in the second and, more especially, in the third century A.D. when many cities struck 30, 35 and 40 mm. denominations. Finds of silver and gold are normally rare outside hoards, so that the incidence of hoards can alter the nature of the

finds radically. No Greek hoards were found in the course of the current excavations, whereas Butler was fortunate in finding the Basis Hoard of the Artemis Temple and also the so-called Pot Hoard, both of which contained large amounts of Hellenistic silver.<sup>1</sup>

If we turn now to the finds themselves, their geographical distribution is unexceptional. Predictably, the vast majority of identifiable coins are of Sardis itself or else of rulers who held the city. The rest of the coins, excluding those chance finds whose provenance is uncertain, are distributed according to proximity: most from Lydia (67 pieces) and Ionia (62 pieces), rather fewer from Phrygia (17) and Mysia (15), a handful from Caria, Aeolis and Troas, and an occasional piece from more distant districts.

The general chronological breakdown likewise presents few surprises, given that we are dealing almost exclusively with bronze coins. From the centuries of Lydian and Persian rule there is one Croesid coin (132) not found on the site, a Lydian silver fraction (133) and a siglos (389). In addition, there are several pieces of uncertain attribution with reverse punch (393-395) which are probably fourth century B.C. or earlier, a silver fraction of Miletus (104), bronzes of Mytilene (74) and Myus (107), besides the Macedonian issues of silver and bronze, some of which date from the end of the fourth century. The third century is more fully represented, with small bronze of Alexandria Troas (65), Aegae (68), Colophon (76-77), Ephesus (80-85), Erythrae (97), and Miletus (105), as well as bronze of Lysimachus and the Seleucid Kings which was probably struck at Sardis, and a Ptolemaic piece (390). After the battle of Magnesia Sardis passed into the Pergamene kingdom, as did much of the rest of Lydia and Ionia, and Attalid coinage must then have become the standard currency of the area. The Romans, on taking over the Attalid domain and establishing the province of Asia, permitted many of the cities to strike in their own names. At Sardis there was a sizeable output of small bronze which is well represented among the finds. The pieces from Nicomedia (27), Adramyteum (28-29), Alexandria Troas (66), Ephesus

1. *Sardis XI* (1916) v-vi.

(87), Magnesia (98), Smyrna (112-113), Teos (124), Rhodes (131), Blaundus (137), Caystriani (138), Magnesia ad Sipylum (161-162), Tralles (328), Apameia (335-336), Cibyra (337), and Synaus (348) also date from this period. So far the pattern is exactly what one would expect: the bulk of the finds pertain to the successive authorities in power in Sardis or to the city itself once it had gained the right of coinage in its own name after 133 B.C., with an admixture of coins from the coastal area in the earlier period in particular, and from the Lydian and Phrygian hinterland in the later period, on the whole from cities that had not previously struck coins.

The imperial period, however, does present some peculiarities. Looked at *en masse* the totals of the legible pieces are not out of the ordinary: approximately as many examples from the fifty years of the relatively more prolific third century as from the two full centuries preceding, when fewer cities were striking fewer issues. The addition of the pieces which are identifiable only within broad limits does not alter the results significantly. The oddities appear when the geographical breakdown for the period is considered in detail. The distortion arising from the absence of larger denominations is especially pertinent here: the declining figures from first to third century for Sardis itself might suggest falling production, where in fact, judging by numbers of dies and denominations, mint activity increased in the third century. The expansion took place almost entirely in the larger denominations, but since only three of the third century finds were larger than 25 mm., this increase is not apparent. Nonetheless there are remarkable gaps which cannot be adequately explained by the biasing factors mentioned above. While the numbers of pieces from other Lydian and Phrygian cities increased over the period, there is a decline in the finds from Ionia and Mysia in the first and second centuries as compared with the Hellenistic period. The change is all the greater when the finds are analyzed more closely. Of the seven first century pieces from Pergamum, six are Pergamum-Sardis alliance coins perhaps intended for distribution in Sardis, and all are from the reign of Augustus. Of the five Ionian first century pieces, four are of Augustus, and the sole second century piece is an alliance coin of Ephesus and Sardis. Both the Phrygian first century

pieces date from the time of Augustus and there is then an interval of more than a century for which there are no Phrygian finds at all. There are no Carian pieces between Hellenistic times and the third century A.D. The Lydian finds, on the other hand, are fairly evenly distributed over the centuries. These differences seem too great to be accidental.

As far as we know, production in these other areas was very similar to that in Lydia. If anything, more cities were striking coins in the first and second centuries A.D. than in the first century B.C., and mints like Ephesus and Smyrna had abundant early Imperial issues. Since the coins of these areas had circulated freely in the Hellenistic period and did so again after A.D. 200 there can have been no natural impediment to their movement and explanations must be sought elsewhere.

The most plausible reason for the phenomenon is that the whole area was so debilitated after the earthquake of A.D. 17, despite the generous aid given by Tiberius, that trade and commercial life generally was conducted on a smaller scale than before and was only gradually restored to its former level. Contacts beyond the immediately surrounding district would have been suddenly severed shortly after the death of Augustus, the point where the non-Lydian finds stop. Efforts thereafter would have been diverted to internal affairs and the rebuilding of the city. There is little positive evidence to corroborate this explanation; rather, the absence of any major public building work until the second century may be most telling.

Alternatively, one could hypothesize a cessation of the free convertibility that had obtained before the end of Augustus' reign and which presumably did so again for the greatly expanded system of the third century. The geographical limits within which convertibility continued to operate might give some clue as to the rationale for its withdrawal, but proximity (with the exception of Germe and Eucarpeia) seems the most plausible explanation. The *conventus* certainly does not seem to have been the significant unit, since there are as many finds from the cities outside the *conventus* as there are from those within it. The large number of apparent overstrikes among the first and second century coins of Sardis may be associated with the phenomenon. It is conceivable that the compulsory

Table 1 Chronological breakdown of finds from Sardis.

Period	1910-1914		1958-1972
	<i>Hoards</i>	<i>Others</i>	
Persian	-	2	1
Macedonian	72	30	63
Lysimachus	21	12	12
Seleucid	57	19	76
Pergamene	16	17	92
Sardis pre-imperial	-	25	200
Other pre-imperial	25	42	266
1st C. A.D.	-	16	115
2nd C. A.D.	-	24	89
3rd C. A.D.	1	36	105
Illegibles			
1st C. B.C.-1st C. A.D.	not known	not known	30
1st-2nd C. A.D.	not known	not known	80
3rd C. A.D.	not known	not known	31

exchange into local coinage provided not only a direct source of income for the authorities, since exchange would doubtless take place at a discount, but also a reserve of flans which could be struck with local types. Informal withdrawal from circulation merely to provide metal for restriking would hardly be so selective and so thorough; if the object is to put out coins with types of Sardis, why not use any "foreign" coins, since all had been equally acceptable hitherto. A formal system of compulsory exchange, on the other hand, is unlikely to have been encouraged by the Roman authorities, since the result would have been to discourage trade and reduce the usefulness of bronze coin by limiting its area of circulation. It is difficult to draw conclusions without having an adequate sample of overstruck coins with legible undertypes and without more information from other sites.

Unfortunately the comparative material from other cities of the province is very slight. The earlier excavations at Sardis are not entirely comparable. The main effort was directed at the Temple of Artemis but there was also some digging on the necropolis for several seasons, and more sporadic

attempts at various spots in the Pactolus and Hermus valleys. Bell recorded only legible finds,<sup>2</sup> and was not as well equipped as we are now with catalogues to help in the task of identification. Some, but not all, of the finds from the 1910-1914 excavations are available in the trays of the Istanbul Archaeological Museum, including some not identifiable at the time. The discrepancy between the numbers of Sardis "autonomous" Hellenistic pieces in the earlier and the current excavations may be the result of Bell's exclusion of all the Herakles/Apollo and Apollo/club specimens where the name or monogram was illegible. This suspicion cannot be corroborated as the find coins from 1910-1914 in Istanbul are neither complete nor uniformly labelled as to provenance.

Tables 1 and 2 note the comparative Greek coin finds from the earlier and the current excavations. The hoard finds have been separated from Bell's figures because of the problem of distortion

2. *Ibid.* ix: "... coins, the majority of which being illegible, are necessarily omitted from the Catalogue." No attempt was made to include estimates of numbers from each century.

Table 2 Geographical/chronological breakdown of Sardis finds of 1958-1972; 1910-1914 finds in parentheses.

District	Total	pre-imperial	1st C. A.D.	2nd C. A.D.	3rd C. A.D.
Bithynia	2 (-)	1 (-)	-	1 (-)	-
Mysia minus Pergamum	3 (1)	2 (1)	-	-	1 (-)
Pergamum	104 (18)	92 (17)	7 (1)	3 (-)	2 (-)
Troas	3 (-)	3 (-)	-	-	-
Aeolis	3 (2)	2 (1)	-	-	1 (-)
Lesbos	1 (-)	1 (-)	-	-	-
Ionia	62 (45)	36 (32)	5 (5)	1 (-)	20 (8)
Caria	5 (2)	2 (2)	-	-	3 (-)
Lydia minus Sardis	67 (20)	6 (1)	11 (3)	20 (4)	30 (12)
SARDIS	345 (63)	200 (25)	65 (6)	43 (20)	37 (12)
Phrygia	17 (6)	3 (1)	2 (2)	4 (-)	8 (3)
Pisidia	1 (-)	-	-	-	1 (-)
Cappadocia	1 (-)	-	-	-	1 (-)
Egypt	3 (2)	1 (1)	-	1 (-)	1 (1)

mentioned earlier. His coins are otherwise distributed in much the same manner as the present material.

There is as yet very little information to be had from other current excavations. The coin finds from Ephesus have not been analyzed over the years, though S. Karwiese is now engaged in a study of the Ephesian coins in particular. He reports that there seems to be no absence of "foreign" coins, though the overwhelming majority of the finds are from the mint of Ephesus itself. David MacDonald was kind enough to share the Aphrodisias finds with us prior to publication, but the pattern of Greek coins there is inevitably somewhat different, since Aphrodisias enjoyed far greater importance in the later imperial period than ever before, as the trade in its marbles extended over an ever increasing area.<sup>3</sup> Sardis, by contrast, never regained the position of importance that it had had prior to Roman rule. Priene is in some ways more similar, having enjoyed its greatest prosperity in Hellenistic times, though its decline was more

pronounced under the Empire and the city struck very few Imperials. The pattern of finds shows some resemblance to that at Sardis.<sup>4</sup> Here again, Priene itself provides most of the identifiable coins, 565 in all. The rest of Ionia, especially Miletus, Magnesia and Ephesus, is the source of the next largest group, 216; Caria (20), Lydia (14), and the other districts are far behind. Hellenistic finds far outnumber Imperials from each area, and within the imperial period the third century finds are the most numerous. The numbers are too few and the pattern is not sufficiently clear-cut for any major conclusions to be drawn.

### THE GREEK IMPERIALS

The local bronze coinages of the Greek cities struck under the Roman Empire are only now beginning to receive the attention that has long been lavished on their predecessors. The great diversity of types and denominations repelled rather than attracted all but a handful of scholars and the standard works on Greek coinage tend to dismiss

3. D.J. MacDonald, *Greek and Roman Coins from Aphrodisias* (Oxford 1976) BAR Supplementary Series 9.

4. K. Regling, *Die Münzen von Priene* (Berlin 1927).

the Imperials as briefly as possible. It has therefore seemed necessary to include two explanatory notes on matters constantly referred to in the catalogue notes for the benefit of those unfamiliar with the Imperials.

### Die-sharing in Asia Minor

The publication of K. Kraft's analysis of die-sharing in Asia Minor has added another dimension to the study of the Greek Imperials.<sup>5</sup> The sharing of obverse dies by two or more cities had been remarked in the past, but Kraft, on investigating the matter more thoroughly, revealed an extremely complex network of die linkage, further augmented by stylistic similarities. The network was most extensive in the third century A.D., when most of the cities of Asia Minor were involved, but its origins go back to the previous century, if not earlier. The earliest stages of cooperation from which the system developed are difficult to pinpoint, because initially there may have been no more than a sharing of engravers among a few mints, a practice which had been adopted intermittently for centuries all over the Greek world. Ultimately the system grew so that by the third century four main workshops, each at times employing several engravers, supplied most of the province of Asia with dies or coins. Kraft identified these workshops with the four major cities of Pergamum, Smyrna, Ephesus and Sardis, while recognizing that the mints may have been peripatetic and that these cities merely serve as convenient foci within the geographical area supplied. Similar networks developed in the north around Cyzicus and Nicomedia, in Phrygia, and in Pisidia-Pamphylia.

Kraft's book was meant to be a preliminary sketch of the whole phenomenon, outlining the main features and problems rather than reaching final conclusions. His early death prevented the completion of the task and leaves many puzzles to be investigated. The underlying organization and the reasons for the development of the system are not satisfactorily explained. Kraft was inclined to believe that private enterprise was largely respon-

sible for the production of issues on the initiative of the local authorities and prominent citizens. It seems more likely, however, that the Roman administration was in control, though the actual manufacture of the coins may have been privately subcontracted. The Romans had allowed coinage to continue when they inherited the Attalid kingdom and only withdrew the right of striking silver with the establishment of the Empire. Presumably they found it more convenient to continue to rely on local resources to provide the bulky small change of the monetary system than to go to the trouble of striking and exporting bronze from Rome. The Greek cities did not provide adequately for their own needs, to judge from the infrequent issues of many cities and the worn state of the surviving pieces of the first and second centuries. The new system may have been a response to a general shortage of small change.

There are many questions about the mechanics of production which remain unanswered, in addition to those about administration. What decided whether a city issued coins and when? Who selected the types? Did dies or engravers or workshops travel? What was the source of the metal and who was responsible for its control? These and other related matters are touched upon in the notes where relevant material illumines problems or raises interesting questions. Full solutions can only gradually evolve as the Greek Imperials are more thoroughly studied and understood.

### The Denomination System of Greek Imperial Bronze

The Roman coinage in all metals was struck to a well-defined, and often clearly marked, denomination system from the end of the third century B.C. Under the Empire the only confusion that could arise was between dupondius and as, which were close in size, but the introduction of the radiate crown for the double made that distinction clear. The Greek bronze coinages are rarely so neatly differentiated. The one exception is the coinage of Chios which is divided into fractions and multiples of the assarion and marked accordingly.<sup>6</sup> Elsewhere

5. K. Kraft, *Das System der kaiserzeitlichen Münzprägung in Kleinasien* (Berlin 1972). For earlier work on die-sharing, see the bibliography in Kraft chapter 1 and L. Robert, *Monnaies Grecques* 86-87 and notes.

6. J. Mavrogordato, "A Chronological Arrangement of the Coins of Chios," *NC* 4th ser. 17 (1917) 207.



the coins are not marked and it is often very difficult to discern any relationship between the coins of neighboring cities, or even between roughly contemporary issues of the same city. Furthermore it is virtually impossible to see how the motley Greek coinages fitted in with the Roman silver which circulated alongside them.

Very little can be hazarded in the way of general remarks on metrology because of the diversity of the coinages. In the first century A.D. especially, the output of most mints cannot be forced into any systematic arrangement, as there tends to be too little variation in size for obvious units and fractions and yet too much for every piece to be the same denomination. By the reign of Hadrian there appears to be slightly greater uniformity, and two basic characteristics begin to emerge which can then be traced through to the end of the Greek Imperial coinage:

(i) the diameters of the dies settle down to a 5 mm. interval between denominations (usually 45-40-35-30-25-20/22-18 mm.), and

(ii) certain types tend to become standard for a given size of die.

The *flan* diameters and the weights are not as regular, partly because of the prevalence of overstriking. In the third century, when there appears to be less obvious overstriking (but it may just be better done and hence less noticeable), the weights still fall within very wide and overlapping ranges between issues of the same city and between different cities supplied by the same workshop. The same obverse die can be used to strike different sizes of flan, occasionally for two issues of the same city but more often for different cities (e.g. the issues of Saitta and Thyatira for Gordian III, Kraft pl. 33:39). The implications of these variations remain to be explored since there must have been some standard of convertibility, especially when the great network of die-sharing was in operation.

The obverse types of the Greek Imperial coinage are normally uniform by denomination, which may have been intended to facilitate the recognition of denominations despite the diversity of flans. For example at Sardis, as at many cities, the imperial portraits appear in ordered hierarchy: the emperor on the largest denomination, the imperial women and children thereafter in descending and sometimes alternating order. (This for example explains

the large numbers of coins of empresses such as Tranquillina among the Imperials in comparison with the Roman coinage in their names — the smaller denominations deemed appropriate to them were needed in larger quantities than the largest pieces bearing the portrait of the emperor.) The radiate crown and the crescent under the bust seem not to be used as denomination marks on the Imperials. The uniform reverse types are not homogeneous between cities; rather, each city seems to have adopted one or two types for each common denomination and then used them fairly consistently, though not exclusively. To take Sardis as an example: Tyche and Zeus Lydios are standard types for the 25 mm. denomination and Mên and Demeter for the 22 mm. denomination throughout the third century A.D. Other examples are mentioned among the notes.

In the third century the denominations are remarkably regular until the reign of Valerian and Gallienus, though this does not mean that the purchasing power of the coins remained the same. The last issues of Sardis, for instance, are only 2 mm. smaller in diameter than the preceding issues.

## TYPES AND TITLES AT SARDIS

The exact nature of the cults of Artemis, Kore and Zeus is still the subject of study and debate.<sup>7</sup> A catalogue of excavation finds is not the place to analyze the problems in detail. Nevertheless, the references to these gods on the coins are so numerous that a short discussion, concentrating on the numismatic angle, is appropriate.

### Artemis and Kore

The frequent references to Artemis/Artimuk/Artimuλ in Lydian inscriptions show that there was a cult of Artemis at Sardis from the sixth century B.C. onwards. There may have been a close association with the cult at Ephesus: note Croesus' interest in and support of the Ephesian cult, and the references in a Hellenistic inscription to the Artemis

7. For fuller discussions on the subject of Artemis/Kore, see R. Fleischer, *Artemis von Ephesos und verwandte Kultstatuen* (Leiden 1973) 187-201; L. Lacroix, *Les reproductions des statues sur les monnaies grecques* (Liège 1949) 160-167, pl. 14; M.J. Price and B. Trell, *Coins and Their Cities* (Detroit 1976) 137-141.

sanctuary at Sardis "founded by the Ephesians."<sup>8</sup> The major goddess of the city in the sixth century, however, may rather have been Cybele: Herodotus' description of the destruction of the temple of Kybebe in 499 B.C. (5.102 ff.) suggests that hers was the major cult at the time. In addition, the site has yielded several sculptural representations of a goddess identifiable from her attributes as Cybele, and the name Kuvava appears repeatedly in Lydian inscriptions.<sup>9</sup>

The worship of Cybele appears to have diminished in importance in the course of the fifth century, since references to Cybele are few, while the cult of Artemis flourished and was clearly well established by the end of the century.<sup>10</sup> A relief found reused in the Synagogue and datable to the fifth-fourth centuries shows the two goddesses side by side: Cybele standing with lion and tympanum, and a Greek Artemis, draped and veiled, carrying a hind across her chest.<sup>11</sup> This is the only representation of Artemis at Sardis that we have prior to the second century B.C., but there is nothing to indicate whether this was her normal form. The Lydians were subject to both Persian and Greek influences in this period, and they may consequently have drawn on Anahita as well as on the Graeco-Ephesian Artemis tradition.<sup>12</sup>

The importance of the worship of Artemis in the fourth century is reflected in the scale of the temple dedicated to the goddess. Building activity apparently continued from the late fourth century into the second century B.C. Inscriptions such as the mortgage document of Mnesimachos testify to the wealth and status of the cult.<sup>13</sup>

From the second century B.C. to the second century A.D. the evidence for the cult is very sparse. There are occasional references in inscriptions to the priestesses of Artemis, but not such as to suggest the preeminence of the goddess.<sup>14</sup> At the

beginning of this period the city struck the first coins in its own name, but for the most part chose the male gods as types (see "Zeus Lydios," below); the single exception, 243-244, shows a bust of Artemis the Huntress with bow and quiver, a type derived from an Ephesian model of the third century B.C.<sup>15</sup> The symbols on the Hellenistic cistophori make no reference to Artemis in any form, although the chief deities are normally represented. The lack of any reference to the major goddess associated with Sardis is remarkable; in the comparable cases of Ephesus and Hypaepa, for instance, the coins bear types of Artemis Ephesia and Anaitis throughout. Even building activity on the temple seems to have come to an end for a period. Gruben argues from the absence of evidence to the contrary that major work stopped about 133 B.C. and did not recommence until the second century A.D.<sup>16</sup>

When references to a goddess resume in the second century A.D., she is identified as "Kore" and is wholly Asiatic in form. The shrouded figure is never directly named Kore, though the attributes (the statue is usually flanked by stalks of grain and poppy), the association with Demeter on coin types, and the appearance of the type on a base inscribed "Koraia Aktia" (see "Agonistic types," below) make the identification certain.

Kore appears frequently on both the normal city coinage and on alliance coins with other cities, where she stands as the representative of Sardis. The earliest coins to depict her, the Hadrianic cistophori, were probably struck in the name of Sardis rather than at Sardis, so that the choice of type is the more significant.<sup>17</sup> The first alliance coin on which the Kore personifies Sardis is an Ephesian issue of Marcus Aurelius, 90. It is not until the reign of Commodus that the Kore appears on the city coinage proper (*BMC* 145), but the statue then recurs throughout the third century, either alone, with other deities (usually Tyche or Demeter), or with temples or agonistic tables. Coins of Caracalla show the emperor crowning a statuette of Kore which is held by the Tyche of Sardis (Paris 1270). The references are not limited to the numismatic. Games were instituted in her honor (see "Agonistic

8. See the inscription from Ephesus regarding an assault on a sacred embassy from Ephesus to Sardis, D. Knibbe, "Ein religiöser Frevel und seine Sühne," *JOAI* 46 (1963) 176-178.

9. See *Sardis* R2 (1978), nos. 6, 7, 21.

10. See Xenophon, *Anabasis* 1.6.7 for the oath of Cyrus and Orotas sworn on the altar of Artemis before 401 B.C.

11. *Sardis* R2 (1978) no. 20, figs. 78-83.

12. Pausanias 7.6.6 refers to the setting up of a statue *πρὸ ἱεροῦ Περσικῆς Ἀρτέμιδος* ca. 323-322 B.C.

13. *Sardis* VII (1932) no. 1.

14. *Ibid.* nos. 50, 85, 87 and perhaps 88, 90-93.

15. Compare for example *SNG* VA 1841.

16. G. Gruben, *AM* 76 (1961) 155-196.

17. *BMCRE* III 390 no. 1075 and pl. 73:10.

types" below), and she also appears on gems.<sup>18</sup> A statue in Rome was dedicated to her by two freedmen of Sardis (*IG XIV.1008-1009*), and her figure was incorporated among the head capitals of the Marble Court.<sup>19</sup>

There seems to be no representation of the Kore prior to the reign of Hadrian. It is interesting that several other Lydian cities use the Kore as a coin type, but only from the mid-second century A.D. onwards (Daldis, Gordus-Julia, Maeonia, Silandus, and Tmolus-Aureliopolis); several of them had previously used Artemis Ephesia as a type, but then switched to Kore. There is no numismatic allusion at Sardis to Artemis in any form in the imperial period; by contrast the rape of Persephone and types showing Demeter are common.

This evidence is capable of interpretation in several ways and is not sufficient to permit a definitive conclusion. Were Artemis and Kore two totally separate deities? Did Kore develop out of Artemis, or were they two aspects of the same goddess? Had the oriental cult statue been the image of Artemis all along, or was it a revival, as Hanfmann and Balmuth suggest, one facet of a general Lydian renaissance? The numismatic evidence suggests that the Kore was the most important goddess at Sardis in the second and third centuries A.D.; at the very least, the cult of Artemis was subordinate. But the evidence for the two need not be read as incommensurate, and it can be surmised that the Kore cult developed from, if it had not always been identical with, that of Artemis.

Various difficulties inhere in this interpretation but none is insuperable. First, the form of the Kore statue is not consistent with the representations of Artemis of the Hellenistic period, which lead us to expect a Greek style goddess. The example of the Ephesian coinage, however, illustrates how disparate the representations of one goddess could be: the stylized cult statue, Artemis as Huntress, and Artemis as Hekate all appear as types. Furthermore there is no proof that the relief showing Artemis with Cybele and the Hellenistic coin type show Artemis in her customary, or her only, contemporary form. A Hellenistic bronze

coin of Magnesia ad Maeandrum (*BMC 42*) shows a thoroughly Phidian head of Artemis with bow and quiver on the obverse and the shrouded, stylized image of Artemis Leukophryene on the reverse. Hellenistic coins of Samos (*BMC pl. 36*) depict the head of Hera in Greek fashion as well as Hera Samia. In these instances, as at Ephesus, the form of the cult statue is known to have remained Asiatic.

The name "Artemis" of itself need not imply any particular physical form, since it was applied to many of the fertility goddesses of Asia Minor (e.g. the Artemis figures of Magnesia ad Maeandrum, Hypaepa, Perge, and Anemurium) and may itself be derived from a language earlier than Greek or Lydian.<sup>20</sup> "Kore," too, is not specific, although the name was used for Persephone. The difficulty may lie in the narrowness of our own conception of Artemis.

A more serious objection is that the concerns of Artemis and Kore are different. Both the Greek Artemis and Artemis Ephesia were responsible for the animal aspect of fertility, whereas the Kore is definitely a vegetation goddess, the province, in Greek myth, of Demeter and Persephone. Nonetheless the distinction need not have been rigid. It appears that the cult of Cybele, a goddess associated with animals — snakes, lions, etc. — merged with that of Meter and thence with Demeter.<sup>21</sup> An analogous connection between Artemis and Kore cannot, therefore, be ruled out.

A further dimension to the problem is added by the numismatic representations of the Kore statue in a temple. On coins of the reign of Elagabalus, for example, the Kore statue appears with the three neocorate temples (see "Neocorates" below), suggesting that she was at that time the city's major deity and her temple the major religious building. The Kore temple is shown as hexastyle or tetrastyle, with an arcuated lintel in every case. Variable columniation is common in coin types, and the arcuation could be an artistic convention used in order to show the statue more clearly.<sup>22</sup> The

20. Gusmani, *LW* 63-64.

21. "Le nom même qu'il convient d'appliquer à telle ou telle de ces divinités ne peut pas toujours être établi d'une façon certaine." Lacroix (*supra*, n. 7) 140.

22. T. Drew Bear, "Representations of Temples on the Greek Imperial Coinage," *ANS MN* 19 (1974) 32-37.

18. Fleischer (*supra*, n. 7) pl. 78:a-d.

19. *Sardis R2* (1978) no. 194 and fig. 344; G. M. A. Hanfmann and M. Balmuth, *Anadolu Araştırmaları 2* (1965) 261.

neorate temple for Elagabalus must be entirely fanciful since none was ever built. The other two neorate temples are shown as identical, with straight lintels. One at least is the Artemis temple, since we know that the neorate for Antoninus Pius involved only the addition of the imperial statues to the cellae of the existing temple. The Kore temple as shown cannot easily be reconciled with the Artemis temple. It could have been a shrine within the main temple, perhaps merely a canopy for the cult statue, since no traces of foundations around the basis have come to light.<sup>23</sup> There is evidence of considerable rearrangement of the Artemis precinct in the late second-early third century A.D.<sup>24</sup> No other building has been found of a date or size appropriate to the Kore cult.

The major evidence for the prominence of the Kore cult in imperial times is numismatic, but it complements rather than contradicts the other evidence which bears on Artemis. The resumption of work on the Artemis temple, an enormous endeavor, in the second century A.D. is coeval with the appearance, on coins and elsewhere, of the figure which we call "Kore" and which seems to have been the major deity of the city. At the same time the Graeco-Ephesian Artemis never appears, even fleetingly, as an Imperial coin type, and there is no hint of the existence of any other temple to Kore. The imperial inscriptions refer to priestesses of Artemis<sup>25</sup>, or of "the goddess,"<sup>26</sup> and to the children of Kore,<sup>27</sup> while considerable importance is given to the games first established in the second century, the Chrysanthina and the Koraiia Aktia, in agonistic inscriptions and coin legends. The concrete evidence for the supremacy of Artemis is extremely scarce unless we accept the fact that Artemis is Kore; if we do not, we must ignore the substantial body of material that we have accumulated and explain the absence of any major evidence for an alternative explanation.

### Zeus Lydios

The evidence for the cult of Zeus Lydios is

almost entirely numismatic. The Lydian form of the name, Lev or Lef, has been found on a dipinto of the sixth century B.C. and on stelai from the Necropolis and from the Cayster valley.<sup>28</sup> The Greek inscriptions refer to Zeus, but always with other epithets: Zeus Polieus or Zeus Megistos Polieus and Zeus Baradates.<sup>29</sup> In the first century B.C., according to *OGIS* 437, the city used the priesthood of Zeus for dating purposes, an indication of the importance of the cult. It appears from *Sardis* VII.8 that the sanctuary was adjacent to that of Artemis, or may have been part of the same precinct.

Zeus appears as a coin type from the third century B.C. onwards. The name "Zeus Lydios" is not used until ca. A.D. 90 when the legend accompanies a bearded head (*BMC* 77), which recurs as a type ca. A.D. 214-217 (*BMC* 85-88) and which resembles a head of Antonine date found by the Expedition.<sup>30</sup> The normal representation is a statue of a standing figure holding eagle and scepter, which is identified as Zeus Lydios only on coins of the third century A.D. It makes its first appearance, however, on the tetradrachm in the de Luynes collection which Seyrig has dated to 228-223 B.C.<sup>31</sup> The original treatment, with figure standing left, ethnic downwards at right and monogram below the extended right arm, is repeated for the pre-imperial bronze issue, 231-234, and for reverses of Nero (VA 3136) and Vespasian (*BMC* 65-66), though in the latter instances the monogram is that of the city rather than that of a magistrate as before. The same figure reappears as a standard type for the 25 mm. denomination in the third century (298, 303, 309, 312), and also on two larger denomination issues: one of Severus Alexander (*BMC* 178) showing the statue on a cylindrical base inscribed "Zeus Lydios" beside an elaborate altar and a tree; and one of Philip I in Boston which couples this scene with the type of Herakles dragging

28. Gusmani, *LW* 160, 251 no. 3, 267 no. 50; *Sardis* M3 (1975) 38-39, A III 2.

29. Zeus (Megistos) Polieus: *OGIS* 437 lines 90-91, ca. 94/93 B.C.; *Sardis* VII (1932) no. 8 lines 133-134, ca. 1 B.C., and no. 47, ca. A.D. 150. Zeus Baradates: *AJA* 79 (1975) 216, with full discussion by Robert, *CRAI* (1975) 306-330.

30. *AJA* 75 (1971) 155-159 pl. 35 and *Sardis* R2 (1978) no. 107 figs. 231-232.

31. De Luynes 2736; H. Seyrig, "Monnaies Hellénistiques," *RN* 6th ser. 5 (1963) 35-38.

23. *Ibid.* 49-57 cites several examples.

24. *Sardis* R1 (1975) 73.

25. *Sardis* VII (1932) nos. 52, 55.

26. *Ibid.* nos. 51, 53-54.

27. *BASOR* 211 (1973) 27, fig. 8.

a bull towards the same altar.<sup>32</sup> These types suggest that the sanctuary was open-air (cf. a coin of Philadelphia in Berlin showing the local version of Zeus Lydios, with eagle at feet, between a poplar and a cypress) and that, at least by this period, the cults of Herakles and Zeus were associated.

It is significant that the full statue appears as a symbol on the cistophori in the name of Sardis, both prior to 133 B.C. (VA 3123) and afterwards (*BMC* 77, 128 B.C.). In general, symbols for the cistophori were chosen as representative of the major cults of the named city: Artemis Ephesia for Ephesus, Kore for Nysa, Zeus and Helios for Tralles. For Sardis, the Zeus statue and the panther of Dionysus appear where one might expect symbols pertaining to the cult of Artemis.

Is it possible that the two names, Zeus Polieus and Zeus Lydios, refer to the same god? The numismatic representations of Zeus are consistent from the third century B.C. to the third century A.D., although the name is not used until the end of the first century A.D. The inscriptions are consistent over the same period in their reference to Zeus Polieus. One possible explanation would be that the cult of Zeus Lydios was hellenized during the period when the Lydian language and culture were abandoned, and that the cult then took on the Greek name, Zeus Polieus. The cult statue was preserved into the third century A.D. but the name reverted to Lydios under the Empire, perhaps as part of the antiquarian revival which may have restored the Kore image (see above). The name Lydios may imply a wider provincial affiliation, and yet the statue is used as a type by fewer than half the other Lydian cities, mostly those in the Hermus valley. Elsewhere other local cults of Zeus (e.g. Zeus Larasios at Tralles) or a seated Zeus Olympios seem to have taken precedence.

### Neocorates

In imperial times the title νεωκόρος which had previously been used for individuals, came to be applied to those cities which had a provincial temple of the imperial cult. The title could be bestowed by the Emperor himself (as for Philadelphia, *IGR* IV.1619), or it could be applied for (by

the provincial *koinon* on behalf of the city) and then granted by the Emperor, with ratification by the Senate in the case of a senatorial province like Asia.<sup>33</sup> The temple was constructed on behalf of the province, and initially it appears that there could be only one provincial temple for each emperor, although a city was free to have a purely municipal temple for which no title was bestowed. By the second century the rule limiting the number of temples for each emperor seems to have been relaxed, as both Ephesus and Smyrna had temples for Hadrian.<sup>34</sup> The possession and accumulation of neocorates became an area of intense rivalry between the cities, and neocorates were sometimes claimed for the temples of major local cults (e.g. the coin legends of Magnesia ad Maeandrum which read ΜΑΓΝΗΤΩΝ ΝΕΩΚΟΡΩΝ ΤΗΣ ΑΡΤΕΜΙΔΟΣ, *BMC* 73).

Pergamum was the first city in the province of Asia to have a neocorate temple. That of Roma and Augustus, and subsequently a second was built for Trajan. Sardis and Smyrna competed for the honor of having a temple to Tiberius (Tacitus, *Annals* 4.56), which was ultimately awarded to Smyrna. A coin of Caracalla's reign (*BMC* 402) shows the three neocorate temples of Smyrna at that date, identified by the letters ΤΙ, ΑΔ, and ΡΩ in the pediments and with the accompanying legend CMYPΝΑΙΩΝ ΠΡΩΤΩΝ ΑCΙΑC Γ' ΝΕΩΚΟΡΩΝ ΤΩΝ CΕΒΑ. Miletus had a temple for Caligula (see note to 106). Ephesus had two by the reign of Hadrian (*BMC* 227-228), the first apparently gained at the end of the first century; Keil suggested that the title had been granted for Domitian and then transferred back to Vespasian after Domitian's *damnatio*.<sup>35</sup>

The first mention of the title νεωκόρος at Sardis is on a coin of Antinous (Naples, Fiorelli 8571) with the legend CΑΡΔΙΑΝΩΝ ΝΕΩΚΟΡΩΝ.<sup>36</sup> It does not appear again until the A.D. 190's (Albinus, *BMC* 146), by which time the city had

33. For a helpful discussion of neocorates, see L. Robert, *Rev Phil* (1967) 44-64; V. Chapot, *La Province d'Asie* (Paris 1904) 439-453.

34. *CIG* 2968, 3148.

35. *NZ* (1919) 115-119.

36. The coins with portrait of Antinous stand apart from the normal output of the cities of Asia Minor; see G. Blum, "Numismatique d'Antinoos," *JAN* 16 (1914) 33-70. Many are of medallion proportions and there is a homogeneity of style and type which may

acquired two temples of the imperial cult. The temples, both hexastyle with straight lintels, are shown on coins of Septimius Severus and family (e.g. VA 3155). Coins of Elagabalus (*BMC* 171) show four temples: the two hexastyle neocorate temples, plus the temple for Elagabalus (see note to 301-307) which was presumably never built, and a temple with cult statue of Kore.

The identity of the emperors worshipped in the temples can only be surmised. One was almost certainly Antoninus Pius, since fragments of colossal statues of Antoninus and Faustina I were found in the cellae of the Artemis temple.<sup>37</sup> A lost inscription gives Antoninus the titles that he had in A.D. 139.<sup>38</sup> The issue of medallic size bronze coins under the magistrate Fronton (Munich 38181, VA 3154, 289) is perhaps associated with the bestowal of the neocorate. The reverse type of Faustina is a hexastyle temple with the statue of the emperor in military dress, and the obverse legend ΘΕΑ ΦΑΥΚΤΕΙΝΑ could also be a reference to the imperial cult. ΘΕΑ on Greek coinages is not equivalent to DIVA on the Roman and need not be posthumous. The temple can tentatively be identified with the Artemis temple. The fact that the Artemis temple is octastyle while that on the coins is consistently hexastyle can be explained by what Bluma Trell calls "numismatic abbreviation."<sup>39</sup> The supposition is that the statues of Antoninus and Faustina occupied the two halves of the cella and the Artemis temple was then claimed as a neocorate temple.

The other neocorate is more problematical. Head thought that there may have been one for Tiberius, but that seems unlikely since Sardis had failed in the competition with Smyrna.<sup>40</sup> If the rule that there could be only one provincial temple per emperor remained unchanged until the reign of Hadrian, the only candidates are Claudius, Nero and one or another of the Flavians (depending which was preempted by Ephesus), apart from the

very short lived emperors, none very plausible. The only conceivable reference is a temple type on coins of Vespasian (VA 3148, 3137; *BMC* 67-69, 247-248); a similar temple is shown on coins of the early second century, 254-255. There is no indication as to whether the type shows an existing temple, let alone one of the imperial cult. There is a parallel for the depiction of a neocorate temple without identifying legend in the coins of Miletus under Caligula (*BMC* 143), but the evidence at Sardis is at present too scanty for a certain identification to be made.

A third neocorate was granted by Elagabalus (see note to 301-307) but then lost after his *damnatio*. A further neocorate was bestowed under Valerian (*BMC* 206-211) but it seems unlikely that a temple was ever built.

### Agonistic Types

Games appear to have been one of the occasions for the striking of local bronze issues, although it is not until the third century A.D. that we find coin types alluding directly to them: agonistic tables, prize crowns, wreaths with appropriate legends, athletes with crowns, etc. Games, both sacred and pecuniary, had of course been held for centuries. Quite apart from the archaeological evidence of stadia and the other physical appurtenances of the games, there is a considerable body of epigraphic material relating to athletes and their victories.<sup>41</sup> Most large cities held major sacred games, usually every two or four years, and there were numerous lesser games with monetary prizes whose names are normally not recorded individually but which could be elevated to the sacred category. In addition special games might be held in honor of a specific event, such as a visit of the emperor.

At Sardis we know of three regular sacred events: the Chrysanthina and the Koraia Aktia, both peculiar to Sardis, and the games of the *koinon* of Asia, which rotated among the member cities.

The *koinon* games had been instituted by the province ca. 29 B.C. in honor of Augustus. There were two series: *ta megala*, which were held in Pergamum, Ephesus and Smyrna, and *ta alla*, held in Cyzicus, Philadelphia, Laodiceia, Miletus,

indicate that they were struck at a few mints on behalf of the named cities. This may help to explain why the title was not used again on the normal city coinage until the end of the century.

37. *Sardis* I (1922) 7, 63.

38. From a copy by Cyriacus of Ancona; *Sardis* VII (1932) no. 58.

39. B. Trell, *The Temple of Artemis at Ephesus* ANS *NNM* 107 (1945) 3.

40. *BMC* Lydia cvii.

41. See L. Moretti, *Iscrizioni Agonistiche Greche* (Rome 1953).

Tralles and Sardis (see Moretti p. 154). The major games were probably pentaeteric, with each city having a four year cycle of its own, while the frequency of the lesser games is uncertain, though Moretti 65 refers to κοινὸν Ἀσίας ἐν Σάρδεσιν πενταετηρικών in the time of Nero. There are direct references to these games on the Sardian coins of Caracalla and Elagabalus, as well as many epigraphic citations.

The Chrysanthina were connected with the cult of Persephone/Kore who, according to myth, was picking flowers in the environs of Sardis when she was carried off by Hades; the types of the rape of Persephone usually show her dropping her basket of flowers as she is whirled away. A fragmentary inscription from the reign of Septimius Severus honors the man who had been secretary and perhaps agonothete at the first Chrysanthina.<sup>42</sup> Buckler and Robinson make the bald statement that the games were "instituted under Septimius Severus at the beginning of the third century A.D.," whereas the evidence suggests that the games were introduced in the third quarter of the second century. There is no mention of them in agonistic inscriptions of the first or early second centuries, but there are several inscriptions pertaining to the last part of the second century that refer to the Chrysanthina. The earliest mention appears to be in an inscription honoring an unknown athlete in the pentathlon who won in the Chrysanthina twice as a child.<sup>43</sup> Since Hadrianeia at Ephesus but not Commodeia are mentioned among his victories as a young man, Moretti dates his activities to the third quarter of the century. The athlete in question died aged 24, so his victories as a child would have been roughly ten years earlier and the Chrysanthina would then fall in the 170's. The statue base in Rome to M. Aurelius Asklepiades (Moretti 79) is more narrowly datable. Asklepiades was an Alexandrian pancratiast whose career lasted only six years before he became so disgusted by the unsportsmanlike behavior of the other competitors that he retired, aged 25. His victories in the major games (Capitolia, Olympia, Aktia, Nemea, Pythia and Isthmia) can

be dated securely to A.D. 178-182. He also won several games in Asia Minor, including one victory in the Chrysanthina which must have fallen in the years 175-185 at the outside. Finally, the Sardian athlete M. Aurelius Demonstratos Damas, whose career fell in the years A.D. 176-190, won four times at the Chrysanthina.<sup>44</sup>

The first mention of the Chrysanthina on coins is ca. A.D. 200, with a legend in wreath on coins of Caracalla signed by the asiarch Vettienianus (Waddington 5262). The Chrysanthina appear regularly thereafter on coins of Caracalla's sole reign (294), Elagabalus (305), Severus Alexander, Maximinus, Gordian III and Philip. The games survived at least until the mid-third century, as there are inscriptions of that period from Delphi and Athens mentioning victories (Moretti 87, 90). It is just possible that the Chrysanthina had been in existence prior to the 170's, but as pecuniary games they would not merit either enumeration in the lists of victories or commemorative coins; it seems rather more probable, however, that they were instituted ca. A.D. 170 and hence could have been part of the general revival of the Kore cult.

The Koraia Aktia may also have been part of the Kore revival, and indeed it is not clear how they were differentiated from the Chrysanthina. There is one apparent reference in an inscription of ca. A.D. 213 recording the victories of a *diaulos*, including one at the KOPHA at Sardis;<sup>45</sup> otherwise the games are known only from the coins of Caracalla and Elagabalus. A type of Caracalla (Paris 1267) shows the cult statue of Kore on a base inscribed "Koraia Aktia." There are types for both Caracalla and Elagabalus with the legend "Koraia Aktia" in wreath (Hunter 23, 26), and the type of Elagabalus with cult statue between wreath and bucranium (Paris 1284) may also refer to the games. The Aktia proper were held on the anniversary of the battle of Actium, September 2nd, in Nicopolis in the same year as the Sebastia at Neapolis (i.e. even numbered years not divisible by four in the Christian calendar), but it is not certain that lesser Aktia were held in the same year everywhere.

42. Sardis VII (1932) no. 77 = IGR IV.1518 = Le Bas-Waddington 624.

43. Moretti (*supra* n. 41) 75 = Ephesus II.72.

44. Sardis VII (1932) no. 79 = IGR IV.1519; cf. L. Robert, *Rev Phil* 3d ser. 4 (1930) 44 and *Rev Arch* 6th ser. 3 (1934) 58-61.

45. Keil, *JOAI* 30 (1937) *Beiblatt* 214.

The only other games referred to on the coins of Sardis are the Elagabalia (prize crown on inscribed base, Paris 1285) which were presumably held only once, probably in connection with the granting of the third neocorate. The Panathenaia and Eumeneia established under Attalid rule (*OGIS* 305) probably did not long survive the dynasty, since there are no epigraphic or numismatic allusions to them in the imperial period.

A common agonistic type at Sardis and elsewhere shows a table with varying numbers and combinations of prize crowns, wreaths and purses, with amphora and palm (297). Elsewhere the crowns on the table are sometimes inscribed with the names of the games they represent, but not at Sardis. The type is an example of numismatic shorthand, so short that we cannot be certain whether the numbers indicate how many games the city supported, how many the magistrate claimed to have overseen, or simply how many were cur-

rently being celebrated. The individual games represented by crowns or wreaths, however, can often be identified from other coins of the same magistracy. For example, the reverse of 297 shows a table with three prize crowns, and the three games are named on smaller coins of the same magistrate, Rufus: Koraiia Aktia (Paris 1267 and Hunter 23); Chrysanthina (VA 3160); and Koinon Asias (Paris 1259). An earlier instance of the type from the magistracy of Vettienianus, ca. A.D. 200, shows only two crowns (*BMC* 153), which can be identified from the types for two games referred to on contemporary issues: the Chrysanthina (Waddington 5262) and the Koinon Asias (Vienna 19585). It is tempting to infer that the Koraiia Aktia had not yet been established at that date. Similarly, coins of Elagabalus show four crowns (Paris 1280, BM 1903), representing the three regular games plus the Elagabalia.



## CATALOGUE

\* Illustrated.

† Endnote.

# Coin found outside the excavation proper or bought by the Expedition.

Weights are given in grams. Where several pieces are grouped together because they are insufficiently legible the average weight is *italicized*, as is the total number of pieces in the group.

† / Die position. Where axes are missing, either they were not fixed as a group or the pieces were too worn to be legible.

Diameters are given in millimeters. When given for a group, they are approximate.

- Indicates missing information.

Legends run  $\cap$  unless noted to the contrary.

| Legend division.

|| The portion of the legend in the exergue, e.g. ||EΦECIQN||

All coins are AE unless otherwise noted.

— Indicates a piece that is not in any published collection.

Reference is given where possible to illustrated or readily accessible published examples in standard catalogues. The main references are to the appropriate volume of the British Museum *Catalogue of Greek Coins* (*BMC*) or of the *Sylloge Nummorum Graecorum*, Danish National Museum, Copenhagen (Cop); von Aulock collection (VA); or Fitzwilliam Museum, Cambridge (Fitz). Occasionally the only other known examples are in unpublished collections, which are identified by city (Oxford = Ashmolean Museum, Vienna = Kunsthistorisches Museum, etc.) or by institution (BM = British Museum, ANS = American Numismatic Society, New York). Descriptions of types follow the reference piece inasmuch as the excavation pieces are often not fully legible. Where possible, the identity or difference of the dies of the find piece with those of the reference piece is noted; where there is no note, the specimen is not in sufficiently good condition for comparison of the dies. "Same die" indicates that the die is identical with that of the reference piece. Any additional reference alongside the find specimen again shows die identity.

The coins are arranged in the traditional order: by geographical area, by city and/or reign, then chronologically but with the "autonomous" pieces listed in full before the pieces with imperial portraits.

## THRACE

*ca. 323-281 B.C. Lysimachus†*

	AE unit	Head of Athena r. wearing crested helmet	ΒΑΣΙΛΕΩΣ above ΛΥΣΙΜΑΧΟΥ below Lion bounding r., below, spearhead, caduceus and monogram	Cop 1149-1157
1	#4.55	↑ 20	⌘	
2	3.87	↑ 20	Monogram illegible 2 pieces	
	AE half	Similar	ΒΑΣΙΛΕΩΣ ΛΥΣΙΜΑΧΟΥ Forepart of lion r.; below, spearhead, caduceus and monogram	Cop 1159-1163
*3	2.3	↓ 14	⊗	
	1.4	↓ 14		
4	3.45	↑ 14	κ	
5	2.3	↘ 13	⊖	
6	2.09	- 14	Monogram illegible 6 pieces	

## MACEDON

*ca. 330-322 B.C. Alexander III†*

	AR drachm	Head of youthful Herakles r. wearing lion's skin	ΑΛΕΞΑΝΔΡΟΥ ↓ at r. Zeus seated l. holding eagle and scepter	
7	3.6	→ 17	♃ at 1., ♀ below throne (Lampsacus)	YCS (1955) p. 13, 8

*319 B.C. Philip III*

	AR drachm	Similar	ΦΙΛΙΠΠΟΥ ↓ at r. Similar	
8	3.8	- 17	Kithara at 1., B below throne (Colophon)	YCS (1955) p. 20, 7

*316 B.C. Antigonus*

	AR drachm	Similar	ΑΛΕΞΑΝΔΡΟΥ ↓ at r. Similar	
9	#3.8	↘ 16	♃ at 1. ♀ below throne (Colophon)	YCS (1955) p. 20, 10

		<i>4th-3rd C. B.C.</i>	<i>Alexander III or successors†</i>	
	AR drachm (plated)	Similar		Similar but legend and monograms illegible
†*10	3.0 ✓ 17			
	AE unit	Similar		ΑΛΕΞΑΝΔΡΟΥ Bow in case above, club below one-handed cup below
				Drama 89
11	6.9 ✓ 17			
12	5.9 ↓ 16			A below
				Drama 98
13	5.2 \ 16			ΤΑ? below
14	4.8 - 15	(Countermark: Gorgon's head)		Symbol and letters illegible
15	3.5 - 15			(Countermark: six pointed star)
16	5.7 - 16			Symbols and letters illegible <i>3 pieces</i>
17	4.3 - 16			Club above, bow in case below; symbols and letters illegible <i>9 pieces</i>
	AE fraction	Similar		Similar
18	1.5 - 11			<i>8 pieces</i>
	AE unit	Similar		Club above, quiver below
19	5.9 - 17			<i>2 pieces</i>
	AE unit	Similar		Horseman r.
20	#6.02 † 16			ΦΙ at l., BA below; symbol illegible
21	4.9 - 16			Legend and symbol illegible <i>8 pieces</i>
<i>Early 3rd C. B.C.</i>				
		Macedonian shield; boss decorated with symbol		BA to l. and r. of Macedonian helmet; symbol below
				Cop 1118-1137
22	3.68 - 17	Gorgoneion		Caduceus <i>12 pieces</i>
				Cop 1122

23	2.9	✓	16	Satyr head left	Labrys
24	3.5	-	16	Details illegible	12 pieces

**CORINTH***A.D. 138-161 Antoninus Pius*

ANTONINVS AVGV CO LI COR  
 IMP Head of Athena r.  
 Bust laur. cuir. r. wearing crested helmet  
 wearing paludamentum

Cop 315

25 #3.91 ↓ 17

**BITHYNIA****Nicaea***A.D. 138-161 Antoninus Pius*

AYT KAICAP | NEIKA|IEΩN  
 ANTΩNINOC Serpent  
 Head of Antoninus bare r.

VA 7019

26 3.2 ↓ 17

**Nicomedia***60-59 B.C. C. Papirius Carbo, proconsul*

NIKOMHΔEΩN EΠI ΓAIOY ΠAΠIPIOY  
 Head of Zeus laur. r. KAPBΩNOΣ||PΩMH||;  
 dated ΔKΣ below  
 Roma seated l. on pile  
 of shields, holding Nike  
 in r. and spear in l.

BMC 1-3

†27 6.2 † 22 Overstruck

**MYSIA****Adramyteum**See F. Imhoof-Blumer, *Die antiken Münzen Mysiens I* (Berlin 1913).*2nd C. B.C.*

Head of Zeus laur. l. AΔPAMY|T|HNΩN  
 Horseman r.

Cop 1-2  
Imhoof 12-23

28 1.5 \ 16

*1st C. B.C.*

Head of Apollo laur. l.,  
quiver at shoulder

ΑΔΡΑ|ΜΥ  
ΤΗ|ΝΩΝ  
Cornucopiae between  
two pilei surmounted  
by stars

*BMC* 7-8  
Imhoof 35

29 8.4 † 18

*ca. A.D. 198-200 Geta Caesar*

Λ ΣΕΠ ΓΕΤΑ|C  
ΚΑΙCΑΡ  
Bust of Geta bare r.

ΑΔΡΑΜΒ|ΤΗΝΩΝ  
Dionysos laur., wearing  
short chiton, standing  
l., holding kantharos  
and thyrsos

Cop 14  
Imhoof 151

†30 5.7 \ 20 Same die

**Lampsacus***4th-3rd C. B.C.*

Caduceus in wreath

ΛΑ|M|ΨΑ  
Forepart of winged  
horse r.

*BMC* 62-63

31 #1.09 † 12

**Pergamum†***mid-2nd C. B.C. Royal coinage*

Head of Athena r.  
wearing helmet decorated  
with griffin

ΦΙΛΕ|ΤΑΙΡΟΥ  
Ivy leaf

*BMC* 60

32 1.8 † 12  
1.0 † 12  
3.0 † 13

Similar

ΦΙΛΕ|ΤΑΙΡΟΥ  
Strung bow

*BMC* 54

33 2.0 † 12

Similar

ΦΙΛΕΤΑΙΡΟΥ  
Serpent coiled, head r.;  
monogram at l.

*BMC* 75-83

34 3.6 † 14

ΡΡ

35 3.05 † 15

Ω

36	3.15	†	17		○ (Countermark: bird)	
37	3.35	-	17		Μ 7 pieces	BMC 78-80
38	3.5	†	14		Δ	BMC 76-77
39	3.1	-	14		Monogram illegible (Countermark: owl) 3 pieces	
40	2.75	-	-		Monogram illegible 20 pieces	
<i>ca. 197-159 B.C. Municipal coinage</i>						
				Bust of Athena l. wearing helmet and aegis	ΠΕΡΓΑΜΗΝΩΝ Asklepios standing facing, snake staff in r.	BMC 129-134
41	7.3	/	25			
				Head of Asklepios laur. r.	ΠΕΡΓΑΜΗΝΩΝ Eagle standing l. on fulmen, looking back	BMC 144-149
42	7.9	†	19	(Countermark: owl)		
	7.8	†	18			
	6.8	†	18			
				Similar	ΑΣΚΛΗΠΙΟΥ   ΣΩΤΗΡΟΣ	
43	2.8	\	15	ΔΙΟΔΩΡΟΥ beneath	Staff of Asklepios	BMC 150-157 BMC 150
44	3.1	†	13		☉ at l.	
45	4.6	†	13		(Countermark: bird r.)	
46	3.15	-	13-19		Details illegible 25 pieces	
				Similar	ΑΣΚΛΗΠΙΟΥ   ΣΩΤΗΡΟΣ Serpent of Asklepios coiled r. round netted omphalos	BMC 158-162
47	4.0	†	19		Owl in l. field	BMC 160
48	7.9	†	19		☉	
49	8.8	†	20		(Countermark: owl) 3 pieces	BMC 161-162
50	7.3	\	17		Details illegible 2 pieces	
51	(2.5)	†	-	(Halved)		

ca. 159-133 B.C.

				Head of Athena r. wearing crested helmet decorated with star	ΑΘΗ ΝΑΣ ΝΙΚΗΦΟΡΟΥ Owl with wings spread standing facing on palm branch	<i>BMC</i> 190-204
52	3.4	†	17		Σ in l. field, κ ? in r. field	
	2.9	†	17			
53	2.2	\	17		ΠΕ at r.	
54	3.1	-	17		Details illegible <i>4 pieces</i>	
				Similar	ΑΘΗΝΑΣ ΝΙΚΗΦΟΡΟΥ Trophy consisting of helmet and cuirass	<i>BMC</i> 172-182 <i>BMC</i> 179
55	5.3	†	20		Δ in l. field	
56	5.9		17-21		Details illegible <i>8 pieces</i>	
				Similar	ΑΘΗΝΑΣ ΑΡΕΙΑΣ Owl standing facing	VA 7488
57	3.4	†	18			

2nd C. A.D.

58	2.0	↓	14	Bust of Athena r. wearing helmet and aegis	ΠΕΡΓΑ ΜΗΝΩΝ Telesphoros	<i>BMC</i> 231
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ca. A.D. 200-250

59	1.05	-	13	ΠΕΡΓΑ ΜΗΝΩΝ Coiled serpent	ΠΕΡΓΑΜΗΝΩΝ Telesphoros	Cop 457
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ca. A.D. 255

60	4.6	↓	19	ΙΕΡΑ CVN ΚΛΗΤΟΣ Bust of Senate bare r.	ΠΕΡΓΑΜΗ ΝΩΝ·Γ· ΝΕ ΩΚ ΟΡΩ Athena standing l. with patera in r., shield and spear in l. ΠΕΡΓΑΜ ΗΝΩΝ·Γ·  Ν ΕΩ Κ ΟΡ ΩΝ Similar but altar at l.	<i>BMC</i> 235
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## A.D. 4/5 Augustus

				ΣΕΒΑ ΣΤΟ Ν ΔΗΜΟΦΩΝ	ΣΙΛΒΑΝΟΝ	
				Tetrastyle temple with figure of Augustus in military dress	ΠΕΡΓΑΜΗΝΟΙ	
					Male figure (Demos?) in short chiton crowning the proconsul M. Plautius Silvanus, togate, with patera in r.	<i>BMC 242</i>
<b>61</b>	5.3	†	19			
	#4.66	†	19			
	5.00		20			

## 27 B.C.-A.D. 14 Alliance of Pergamum and Sardis

				ΠΕΡΓΑΜΗΝΩΝ ΚΑΙ	Σ ΕΒΑ ΣΤΟ Ν above	
				ΣΑΡΔΙΑΝΩΝ ∪	ΚΕ ΦΑ ΛΙ ΩΝ	
				Demos of Pergamum at r. crowning Demos of Sardis at l.	ΓΡΑ ΜΜΑ ΤΕΥ ΩΝ	
					Distyle temple with figure of Augustus in military dress	
					<i>6 pieces</i>	<i>BMC 360-363</i>
† <b>62</b>	4.45	†	20			

## A.D. 117-138 Hadrian

				ΑΥ ΚΑΙ   ΑΔΡΙΑΝΟ	ΠΕΡΓΑ ΣΤΡ Κ Λ	
				Bust of Hadrian laur. r.	ΚΕΦΑΛΙΩΝ   ΤΟ Β	
					Telesphoros	<i>BMC 270</i>
<b>63</b>	2.3	†	16	Same die	Same die	
				Die of <i>BMC 270</i>	ΠΕΡΓΑ ΕΠ Ι ΣΤΡ   ΚΛ	
					ΚΕΦΑΛΙΩΝ ΤΟ Β	
					Hermes standing l., naked but for chlamys over l. arm, holding ram's head in r.	<i>VA 7503</i>
<b>64</b>	2.6	\	18			

## TROAS

## Alexandria

ca. 300 B.C.

				Head of Apollo laur. r.	ΑΛΕΣ above	
					Horse feeding r.	<i>BMC 4-6</i>
<b>65</b>	3.3	\	18			



95-85 B.C.

			Similar	ΑΛΞΕΑΝΔ Horse feeding l., symbol and monogram below	VA 7549
66	3.6	†	16	Details illegible	

**Ilium?**

300-241 B.C.

			Head of Athena facing three-quarters l.	ΙΑΙ at l. Athena Ilios holding spear and distaff	Cop 358
67	2.4	†	12		

**AEOLIS****Aegae**

3rd C. B.C.

			Head of Apollo laur. r.	ΑΙΓΑΕ † at l. Head of goat r.	BMC 3-4
68	3.2	∖	17		

**Cyme**

350-250 B.C.

			Eagle standing r.	K Y Vase with one handle	BMC 16ff.
69	#- 0.8	†	11	Very worn, details missing	
			KY; magistrate's name. Forepart of horse r.	Vase with one handle	BMC 40-52
70	#-	-	18	Details illegible	

**Elaea**

3rd C. A.D.

			Head of Athena r.	ΕΛΑΙΤΩΝ Kalathos with poppy head and grain ears	Cop 187
71	1.0	/	13		

A.D. 161-169 *Lucius Verus*

				ΛΟΥΚΙΟΣ ΚΑΙΣΑΡ	ΕΛΛΑΙΤΩΝ	
				Head bare r.	Kalathos with poppy head and grain ears	<i>BMC 46</i>
<b>72</b>	2.8	†	15	Legend illegible		

**Neonteichos?***2nd C. B.C.*

				Head of Athena r.	NE Owl	<i>BMC 3</i>
<b>73</b>	2.3	\	13			

**LESBOS****Mytilene***4th C. B.C.*

				Head of Apollo laur. r.	Bull's head r., symbol behind	<i>BMC 17-27</i>
<b>74</b>	0.4	\	8		Symbol illegible	

**IONIA****Clazomenae***2nd-3rd C. A.D.*

				Bust of Athena r. wearing crested helmet and aegis	ΚΛΑΖΟΜΕΝΙΩΝ Winged boar running r.	<i>Cop 114</i>
<b>75</b>	1.5	†	16		ZOM	

**Colophon**See J. G. Milne, "Colophon and its Coinage," *A.N.S. NNM 96* (1941).*330-285 B.C.*

	Dichalkon			Head of Apollo laur. r., hair in loose locks	ΚΟΛ Forepart of horse galloping r.; Magistrate's name at l.	<i>Milne 101-121</i> <i>BMC 20-21</i>
<b>76</b>		2.0	\	14	ΔΙΟΦΑ?	
<b>77</b>		1.6	†	14	Name illegible <i>4 pieces</i>	
	Half obol			Head of Apollo r., hair bound with taenia	ΚΟ Lyre; magistrate's name below	<i>Milne 122-124</i>
<b>78</b>		#3.01	†	15	Name illegible	

A.D. 253-268

Gallienus

AVT K ΠO ΔI  
ΓΑΛΛΙΗΝΟCBust of Gallienus laur.  
r., wearing paludamentum  
Same dieΚΟΛΟ|Φ|ΩΝΙΩΝ  
Tyche

Same die

79 #4.5 † 20

Milne 272

## Ephesus

305-288 B.C.

EΦ  
BeeStag kneeling l. with  
head turned back80 1.8 † 12  
1.6 \ 12

BMC 63-67

Female head turreted l.

EΦ  
Bee

15 pieces

81 1.08 - 10

BMC 68-70

288-280 B.C.

Head of Arsinoë  
veiled r.ΑΡ ΣΙ  
Forepart of stag kneeling  
r., looking back; in field  
l., astragalus and  
magistrate's name  
Name illegible

82 1.9 † 15

BMC 74

280-258 B.C.

EΦ  
Bee; the whole in wreathStag feeding r., quiver  
above; magistrate's name  
in ex.  
||ΣΩΣΙ|ΚΡΑΤΗΣ||  
Name illegible

83 3.9 \ 11

BMC 83-85

84 # - † 11

BMC 85

258-202 B.C.

Head of Artemis r. with  
bow and quiver at  
shoulderEΦ  
Forepart of stag kneeling  
r., head turned back  
2 pieces

85 1.2 † 15

BMC 118-120

202-133 B.C.

EΦ  
Bee; the whole laurel  
wreathStag standing r. before a  
date palm tree;  
magistrate's name in ex.  
ΔΗΜΗΤΡΙΟΣ, Π at r.

86 2.6 † 19

BMC 134-142  
BMC 137

## 48-27 B.C.

				Bust of Artemis r. with bow and quiver at shoulder	EΦ Forepart of stag kneeling r., head turned back; behind, long torch	<i>BMC</i> 179-181
87	5.8	†	22			
				<i>27 B.C.-A.D. 14 Augustus</i>		
				Heads of Augustus, laur., and Livia, jugate r.	Stag standing r.; above, quiver	<i>BMC</i> 199-201
88	7.5	†	19			
				Similar	EΦΕ ΦΙΑΩΝ ΕΥΦΡΩΝ Forepart of stag kneeling r.; behind, long torch	<i>BMC</i> 202
89	10.40	†	22			
				<i>ca. A.D. 145-161 Marcus Aurelius Caesar</i>		
				M AV AN TΩNЄINOC A-K Bust laur. cuir. r. wearing paludamentum	Є ΦЄCIΩN K AI [CAPAIANΩN]   OMONOIA   Cult statues of Artemis Ephesia, between two stags, and Sardinian Kore	Paris
†*90	27.05	↓	34	Die of <i>SNG</i> Fitz 4443		
				<i>ca. A.D. 198-212 Caracalla—joint reign with Septimius Severus</i>		
				AV KAI M AVP  ANTΩNЄINOC Bust of Caracalla laur. r. wearing paludamentum Same die	ЄΦЄCIΩN   ΔIC N ЄΩK OPΩN Artemis Huntress riding r. in biga of stags Same die	VA 1898
†91	10.30	↓	31			
				<i>A.D. 218-222 Elagabalus</i>		
				AVT K M AVP ANTVNEINOC CЄB Bust laur. cuir. r. wearing paludamentum	Є ΦЄCIΩN Δ N ЄΩKOPΩN Galley with rowers	Cop 445
†92	#3.87	∖	22			
				<i>A.D. 238-244 Gordian III—alliance of Ephesus and Alexandria</i>		
				AVT K M AN T ΓOPAIANOC Bust laur. cuir. r. wearing paludamentum	EΦE□IΩ N A AEZANΔPEΩN OMONO  IA   Isis Phareia running r. holding inflated sail before her; behind, long torch or lighthouse	Cop 549
93	10.75	↓	30	Same die	Same die	

*A.D. 242-244 Tranquillina*

ΦΡΟV CABEΙ  
 TPANKVΛΛEΙNA  
 Bust r. wearing stephane

ΕΦΕCΙΩΝ Π|ΡΩΤΩΝ  
 ACIAC  
 Artemis Huntress standing  
 r. beside tree, stag at  
 feet, drawing arrow from  
 quiver

ANS

94 7.5 † 30 Same die (Weber 5888)

Same die

*A.D. 253-260 Valerian*

AVT K ΠO ΔIK  
 OVAΛEPIANOC  
 Bust laur. cuir. r.  
 wearing paludamentum

ΕΦΕCΙΩΝ TVXH  
 Tyche

Cop 508

95 3.8 † 19 Same die

ΕΦΕC|ΙΩΝ TVXH

*A.D. 253-260 Gallienus*

AVT K ΠO ΔIK  
 ΓAΛΛIHNOC  
 Bust laur. cuir. r.  
 wearing paludamentum

ΕΦΕCΙΩΝ|ΠPΩΤΩΝ  
 ACIAC  
 Artemis Huntress walking  
 r. with bow in l. and  
 long torch in r.

VA 1932

96 9.8 † 27 Same die

Same die

**Erythrae***3rd C. B.C.*

Head of young Dionysos  
 r. wearing ivy wreath

EPY AYTONO | MOΣ |  
 AYTONO|MOY  
 Bunch of grapes

No grapes

BMC 120

97 2.6 † 14

**Magnesia ad Maeandrum***2nd C. B.C.*

Head of Helios radiate r.,  
 bow and quiver at  
 shoulder

Cult statue of Artemis  
 Leukophryene

BMC 48

98 3.5 † 17 Legends illegible

*A.D. 222-235 Severus Alexander*

AVT K M AVP C|EV  
 AΛEΞANΔPOC  
 Bust laur. cuir. r.  
 wearing paludamentum

ΜAΓ|NHΤΩΝ  
 Dionysos standing l.  
 holding patera in r. and  
 resting with l. on thyrsos,  
 panther at feet

Oxford

99 3.7 † 20 Same die (Cop 885)

Same die

			M AVP ALEXANΔPOC Bust laur. r.	MAGN H TΩN Tyche	Cop 880
100	4.45	↓ 22			
			<i>A.D. 244-246</i>	<i>Philip II Caesar</i>	
			M IOV ΦΙΑΠΠOIC Bust bare dr. r.	MAG NHΤΩN Tyche	Cop 899
101	4.00	↓ 22	Same die	Details illegible	
			<b>Metropolis</b>		
			<i>A.D. 198-217</i>	<i>Caracalla</i>	
			AV K M AV ANTVNINOC Bust laur. cuir. r. wearing paludamentum	MHTPOΠOΛE ITΩN TΩN EN I  ΩNIA   Cybele seated l.	Fitz 4527
102	15.10	↓ 30	Same die	Same die	
			<i>A.D. 238-244</i>	<i>Gordian III</i>	
			AVT K M AN ΓOPΔIANOC Bust laur. cuir. r. wearing paludamentum	MHTPOΠ OΛ EITΩN Tyche	Cop 929
103	#4.7	↓ 20	Same die	Same die	
			<b>Miletus</b>		
			<i>6th-5th C. B.C.</i>		
	AR fraction		Lion head l.	Incuse floral punch	VA 2080
104	1.2	- 7			
			<i>250-190 B.C.</i>		
			Head of Apollo laur. facing three-quarters l.	Lion standing r. looking back at star; magistrate's name below	<i>BMC 108-111</i>
105	0.86	↑ 10		Name illegible	
			<i>A.D. 218-222</i>	<i>Julia Maesa</i>	
			IOVΛIA   MAICA CEB Bust dr. r.	MIAH CIΩN B NEOK OP Ω  Nike advancing l. with wreath and palm	
†*106	3.5	↓ 19	Same die as Oxford?		

**Myus***4th C. B.C.*

				Head of Poseidon bearded laur. r.	MY Dolphin r., trident below	VA 2114-2115
<b>107</b>	1.3	\	11			

**Phocaea***3rd-2nd C. B.C.*

				Head of Hermes l. wearing petasos	ΦΩΚΑΕΩΝ Forepart of griffin l.	BMC 101-102
<b>108</b>	#4.1 4.1	† -	19 18			

*ca. A.D. 244-249*

				ΦΩ ΚΕΑ Bust of City Goddess turreted r.	ΦΩΚΑΙΕ  Ω∩ Galley r.; above, pilei surmounted by stars	Hunter 6
† <b>109</b>	3.1	↓	18	Same die (VA 2142)	Same die	

**Priene?***2nd C. B.C.*

				Head of Athena r. wearing crested helmet	ΠΡΙΗ Owl standing r. on amphora	Weber 6113
<b>110</b>	1.35	-	17		Legend illegible	

**Smyrna**

See J. G. Milne, "The Autonomous Coinage of Smyrna," *NC* 5th ser. 3 (1923) 1-30  
and 7 (1927) 1-107.

*240-230 B.C.*

				Head of Tyche turreted r.	∩MVP at l. A at r. Palm tree	Milne 36
<b>111</b>	#0.9	→	10			

*ca. 85 B.C.*

				Head of Cybele turreted r.	∩MVPNAIΩΝ ↓ at r. Portable altar resting on three legs, with narrow waist, two handles and conical cover	Milne 357
<b>112</b>	2.0	†	13			

*ca. 75 B.C.*

				Head of Apollo laur. r., the whole in laurel wreath	ΙΜVΠNAIΩΝ ↓ at r. Homer seated l. holding volumen on knees and transverse staff over shoulder	Milne 359
<b>113</b>	8.6	†	18			
	6.5	†	21			

*ca. A.D. 200*

				OMH P OC Homer seated r., holding scroll in l.	CMVP NAI ΩΝ within oak wreath	VA 2189
<b>114</b>	4.5	†	21	Same die	Same die	

*ca. A.D. 238-244*

				ΙΕΡΑ CV NKΛHTOC Bust of Senate dr. r.	CMVP Γ ΝΕ ΕΠΙ ΤΕΡΤΙΟV ACI Homonoia with patera and cornucopiae	Cop 1318
† <b>115</b>	6.8	↘	25	Same die Similar	CMVPNAI ΩΝ·Γ· ΝΕΩΚ  ΟΡΩΝ   Tetrastyle temple with statue of Tyche	VA 2191
† <b>116</b>	7.0	↓	24	Same die	Same die	
	6.5	↓	23	Same die	CMVPNAI ΩΝ·Γ· ΝΕΩ  ΚΟΡΩΝ	Hunter 168
	6.7	↓	24	Same die	CMVPNAIΩ N·Γ· ΝΕΩΚ  ΟΡΩΝ	Hunter 169

*ca. A.D. 242-249**Smyrna?*

				ΙΕΡΑ CVN KΛHTOC Similar	ΕΠΙ C AVΠ ..O.P.H ΕΙΜΟV   [ ]   Two Nemeses standing facing each other, each with bridle and cubit rule	
†* <b>117</b>	4.69	↓	24	Die of Cop 1325		

*27 B.C.-A.D. 14**Augustus*

				ΣΕΒΑΣΤΟΣ  ΖΜΥΡΝΑΙΩΝ Head bare r.	ΔΙΟΝΥΣΙΟΣ ΚΟ ΔΛVΒΑΣ Nike advancing l. with wreath and palm	VA 2197
<b>118</b>	4.45	†	17	Same die	Same die	



ΣΜΥΡΝΑΙΟΙ ΣΕΒΑΣΤΟΙ  
 Heads of Augustus, laur.,  
 and Livia, jugate r.

ΔΙΟΝΥΣΙΟΣ ↓ at r.  
 ΚΟΛΛΥΒΑΣ at l.  
 Aphrodite veiled standing  
 facing, holding scepter in  
 r. and Nike statuette in  
 l., which rests on column

Cop 1333

119 4.1 † 20

A.D. 77 Titus

ΤΙΤΟΣ ΑΥΤΟΚΡΑΤΩΡ  
 ΚΑΙΣΑΡ  
 Head laur. r.

ΙΤΑΛΙΚΩ ΑΝΘΥ  
 ΙΟΥΛΙΑΣ ΑΓΡΩΝ ΖΜΥΡ  
 Herakles standing facing,  
 holding kantharos, club  
 and lion's skin

Cop 1356

†120 #2.72 † 25

A.D. 83/84 Julia, daughter of Titus

ΙΟΥΛΙΑ| ΣΕΒΑΣΤΗ  
 Bust dr. r.

ΕΠΙ ΦΛΩΡΟΥ ΑΝ|ΘΥ  
 ΖΜΥΡΝΑΙΩΝ  
 Cybele seated l.

BMC 313

†121 4.5 † 20

A.D. 242-244 Tranquillina

ΦΟΥΡ  
 ΤΡΑΝΚΥΛΛΕΙΝΑ·C  
 Bust r. wearing stephane

ΣΜΥΡΝΑΙΩΝ|·Γ·  
 ΝΕΩΚΟΡΩΝ  
 Herakles standing facing,  
 holding kantharos, club  
 and lion's skin

Cop 1403

122 5.6 † 21

Same die

Same die

A.D. 244-249 Otacilia

Μ ΩΤΑΚΙΑ·CΕΟΥΡΑ  
 Bust r. wearing stephane

ΣΜΥΡΝΑΙΩΝ  
 Γ|ΝΕΩΚΟΡΩΝ  
 Similar

Cop 1404

123 5.1 † 23

Same die

Same die

## Teos

2nd-1st C. B.C.

Griffin seated r. with  
 pointed wings spread

ΤΗ|ΙΩΝ  
 Kantharos; the whole in  
 linear square

BMC 36

124 1.7 - 13

## Chios

See J. Mavrogordato, "A Chronological Arrangement of the Coins of Chios," *NC* 4th ser. 16 (1916) 281-355.

ca. 84 B.C.-A.D. 14

Sphinx seated l. ACMENOC at r.  
XIOC at l.  
Amphora Mavrogordato 90

125 #3.0 — 17

## CARIA

## Antioch ad Meandrum

A.D. 161-169 Lucius Verus

AV KAI| Λ BHPOC ∪ ANTIQ|XEQN ∪  
Head laur. r. Winged Nemesis standing  
r. plucking chiton, cubit  
rule in r. BMC 41-42

126 3.2 \ 15

ca. A.D. 200

Bust of Athena r. AN|T·IO|XEQN  
wearing plumed helmet Hermes standing l. with  
and aegis chlamys over shoulder,  
holding purse and  
caduceus BMC 12

127 2.57 \ 18 Same die Same die

3rd C. A.D.

IEPA|CVNK·ΛHTOC ANTIQXEQN  
Bust of Senate laur. r. Tetrastyle temple with  
statue of Tyche BMC 24

\*128 5.0 ↓ 25 Die of Cop 42 AN|TI|O|XE||ΩN||

## Aphrodisias

3rd C. A.D.

IEPA|CVNKΛHTOC AΦPOΔEΙ|CIEQN ∪  
Bust of Senate dr. r. Asklepios VA 2450

129 5.0 / 18

**Halicarnassus***3rd-2nd C. B.C.*

			Head of Poseidon r.	ΑΛΙΚ at l.; magistrate's name at r. Trident	Cop 354
<b>130</b>	3.1	† 19		Name illegible	

**Rhodes***167-88 B.C.*

			Head of Helios radiate r.	PO Rose with branch on either side in incuse square	<i>BMC 327-333</i>
<b>131</b>	1.4	† 13			

**LYDIA***6th C. B.C. Lydian Royal Coinage*

			AV sixth stater	Foreparts of lion r. and bull l., face to face	Irregular incuse	<i>BMC pp. 5-6</i>
† <b>132</b>	#1.85	- 10				
			AR obol	Similar	Similar	<i>BMC p. 8, 53</i>
† <b>133</b>	0.95	- 7				

**Apollonis***1st-2nd C. A.D.*

			Bust of Artemis r. with quiver at shoulder	ΑΠΟΛΩ ΝΙ ΑΕΩΝ ∪ Altar	Weber 6781
<b>134</b>	1.2	† 13		Same die	

**Attalea***late 2nd-3rd C. A.D.*

			Head of Dionysos r., hair bound with taenia; in front, ivy berries	ΑΤΤΑΛΕΑΤΩΝ Pan, naked, dancing l. with pedum in l. and bunch of grapes in outstretched r.	<i>BMC 3-4</i>
<b>135</b>	2.2	↓ 17		ΑΤ ΤΑΛ ΕΑ ΤΩΝ	
	2.4	↓ 17		- ]ΑΤΩΝ	

**Bagis***ca. A.D. 98-117?*

				ΒΑΓ ΗΝΩΝ	ΕΠΙ ΓΑΙΟΥ [ΒΑΓΗΝΩΝ	
				Bust of Mên r.	Humped bull l.	
†136	1.09	†	14			

**Blaundus***2nd-1st C. B.C.*

				Head of Apollo laur. l.	ΜΛΑΥΝΔ ΑΠΟΛΛΩ	
					Quiver with strap, bow and laurel branch	<i>BMC 14-17</i>
137	3.5	-	19			

**Caystriani***1st C. B.C.*

				ΣΩΣΙΚΡΑΤΟΥΣ	ΚΑΥΣΤΡΙΑΝΩΝ	
				Head of Apollo laur. r.	and monogram ⋆	
					Winged caduceus	<i>BMC 3-4</i>
138	3.0	†	13	(Square countermark: ΕΦ)	-  ΑΝΩΝ, monogram illegible	

**Cilbiani Inferiores***ca. A.D. 2 Caius and Lucius Caesars*

				ΓΑΙΟΣ at l. ΛΕΥΚΙΟΣ at r.	ΑΡΑΤΟΣ ΓΡΑΜΜΑΤΕΥΣ ΚΙΛΒΙΑΝΩΝ ΝΕΙΚΕΙΑΣ	
					Demos standing l. with r. hand extended	<i>Cop 105-106</i>
†139	4.9	†	17			

**Daldis***ca. A.D. 70-100*

				ΘΕΟΝ ΣΥΝΚΛΗΤΟΝ	ΕΠΙ ΤΙ ΦΛΑ ΒΛΑ	
				Bust of Senate dr. r.	ΦΛΑΒ ΚΑΙΣΑΡ ΔΑΛΔΙ	
					in field	
					Zeus Lydios	<i>BMC 2</i>
140	3.2	-	20			

**Germe†***A.D. 117-138 Hadrian*

141	#1.27	↓	19	Busts of Hadrian r., and Sabina l. (Halved)	ΓΕΡΜΗ ΝΩΝ Apollo Kitharoidos	VA 7222
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*A.D. 180-193 Crispina*

142	7.1	↑	24	ΚΡΙϚ ΠΙΝ Α ϚΕΒΑϚ Bust dr. r.  Same die	ΓΕΡ ΜΗ Ν  ΩΝ   Two Nymphs standing facing each other, each supporting jug on column with outer hand and touching an amphora with a short staff in other hand	VA 1112
					ΓΕ ΡΜ ΗΝ  ΩΝ	

*A.D. 238-244 Gordian III*

143	#7.1	/	25	ΑΥΤ Κ Μ ΑΝΤ ΓΟΡΔΙΑΝΟϚ Bust laur. cuir. dr. l.	ΓΕΡΜΗ ΝΩΝ Tyche	Cop 153
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**Gordus Julia***ca. A.D. 200*

†144	1.6	↓	13	Head of Herakles bearded r., lion's skin tied round neck  Same die	ΓΟΡΔΗΝΩΝ  ΙΟΥΑΙ   Lion walking r.  Same die	BMC 15
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*ca. A.D. 193-211 Julia Domna*

†145	4.15	↓	18	ΙΟΥΑΙΑ ϚΕΒΑϚΘΗ Bust dr. r.  Same die	ΓΟΡΔΗΝΩΝ   ΙΟΥΑΙΕ ΩΝ   River god Phrygios	Weber 6819
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**Hermocapelia***A.D. 117-138*

146	#2.75	-	18	ΙΕΡΑ CVN ΚΛΗΤΟϚ Bust of Senate r.	ΕΡΜΟΚΑΠΗΛΙΤΩ ΤΡ Bust of Roma turreted r. 2 pieces	BMC 9
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**Hierocaesarea***A.D. 54-68*

				ΙΕΡΟΚΕΣΑΡΕΩΝ Ὡ Bust of Artemis Persica r., bow and quiver at shoulder	ΕΠΙ ΚΑΠΙΤΩΝΟC Ὡ ΑΡΧΙΕΡΕΩC Forepart of stag kneeling r.; above, ΙΕ	<i>BMC 2</i>
<b>147</b>	#2.3	↓	16			

*ca. A.D. 70-140*

				ΠΕΡΣΙΚΗ Similar	ΙΕΡΟΚΑΙΣΑΡΕΩΝ Lighted altar	<i>BMC 7-9</i>
<b>148</b>	2.05	↓	15			

**Hyraera***A.D. 54-68**Nero*

				ΝΕΡΩΝ ΚΑΙΣΑΡC Ὡ Head laur. r.	ΙΟΒΑ ΗΓΗC ΙΠΠΟC at l. ΥΠΑΙΠΗ at r. Dionysos standing l. with kantharos and thyrsos ΥΠ at l., ΗΓΗC ΙΠΠΟC at r.	<i>VA 2961</i>
<b>149</b>	4.5	↑	19			
				Similar	ΥΠΑΙΠΗΝΩΝ  ΜΗΤΡΟΔΩΡΟC ΚΟΝ Naked god standing l. holding labrys in r.	<i>BMC 16-18</i>
<b>150</b>	3.0	↗	16			

*A.D. 193-217**Julia Domna*

				ΙΟΥΛΙΑ  CΕΒΑCΤΗ Bust dr. r.	ΥΠΑΙ ΠΗ  ΝΩΝ   Tetrastyle temple with statue of Artemis Anaitis	<i>BMC 36</i>
<b>151</b>	5.9	↓	22	Same die (Illegible countermark)	Same die	

*A.D. 253-260**Salonina*

				CΑΛΩΝ·ΧΡΥCΟΓΟΝΗ· CΕΒ Bust dr. r., wearing stephane and with crescent at shoulders	ΥΠΑΙΠΗΝΩΝ·ΕΠΙ· CΤΡ· ΚΟΝΔΙΑΝΟV Cult statue of Artemis Anaitis	<i>BMC 71</i>
<b>152</b>	5.91	↓	27	Same die	Same die	

**Maeonia***2nd C. A.D.†*

				Bust of young Herakles r.	MAIONΩN Bow in case below, club and bee above  Club and bee below	<i>BMC 3-4</i>
†*153	3.0	\	14			
				ZĒVC OΛVMΠIIOC Bust of Zeus l.		
†154	6.85	-	25		Worn smooth	
				Head of Herakles bare l.	MAIONΩN Omphale, naked but for lion's skin over shoulders, walking r., carrying club over l. shoulder	<i>BMC 17-19</i>
†155	3.5 3.2	↓	19 19		MAIO NΩN ◊ MAIO NΩN ◊	
				Similar	AΠΠA CTP TO Γ Similar	<i>BMC 20</i>
156	5.0	↓	18		<i>2 pieces</i>	

*ca. A.D. 250*

				MAIO NIA Bust of City turreted and veiled l.	MAIO NΩN Tyche	<i>Cop 230</i>
†157	5.5	↓	20	Same die	Same die	

*A.D. 54-68**Nero*

				NEPΩN  KAISAP ◊ Head laur. r.	MENEKPATOVC MAIONΩN ◊ in field: € Π T KA Hestia Boule veiled standing r. with scepter over l. shoulder	<i>Cop 231</i>
158	5.35	↓	18	Same die	Same die	

A.D. 117-138 *Hadrian?*...|CΕ ΓΕ Δ Π ΑΥ|υ  
Bust laur. dr. r.ΕΠΙ ΚΛΑΥΔΙ|ΑΝΟΥ|  
ΜΑΙΟΝΩΝ  
Two draped figures  
clasping hands: female  
figure at l. wearing long  
chiton and holding grain  
in l.; male figure, veiled and  
togate, at r. with scepter  
in l.

†\*159 14.70 † 30

A.D. 222-235 *Severus Alexander*ΑΥΤ·Κ·CΕ·|  
ΑΛΕΞΑΝΔΡ|OC  
Bust laur. cuir. r.  
wearing paludamentumΕΠΙ ΣΗΝΩΝOC|ΑΡ·  
ΜΑΙΟΝΩΝ  
Zeus Lydios standing l.  
holding Nike in r.,  
scepter and folds of  
himation in l.*BMC 52*

†160 6.5 † 27

Same die

Same die

**Magnesia Ad Sipyllum***2nd C. B.C.*

Head of Zeus laur. r.

ΜΑ|ΣΠΠΥ and  
monogram Ϙ  
Bunch of grapes*BMC 2-3*

161 1.1 † 10

Head of Herakles laur. r.

ΜΑΓΝΗΤΩΝ at r.  
ΣΠΠΥΑΟΥ at l.  
Athena standing l.,  
holding Nike in extended  
r. and resting l.  
on shield; monogram at l.  
Monogram illegible*BMC 8-10*

162 7.7 \ 22

*2nd C. A.D.*ΜΑΓΝΗΤΩΝ ΣΙΠΥΛΟΥ  
Head of Mt. Sipylos  
bearded r.ΕΡΜΟC  
River god Hermus*BMC 19*163 2.6 † 17  
1.9 † 17

Same die



*A.D. 139-161 Marcus Aurelius Caesar*

ΑΡΦΛΑΙΟC | ΚΑΙ ∪ ΜΑΓΝΗΤΩΝ | ΚΙΠΛΑΟV  
 Bust bare dr. r. Child (Ploutos?) standing  
 l. holding fruit in folds  
 of chiton before him *BMC 59*

164 1.7 ↓ 16

*A.D. 238-244 Gordian III*

Α Κ Μ ΑΝΤ ΜΑΓΝΗΤΩΝ  
 ΓΟΡΔΙΑΝΟC ΚΙ||ΠΙΛΑΟV||  
 Bust laur. cuir. r. Bull advancing l. *BMC 77*  
 wearing paludamentum

165 4.32 † 21 Same die (overstruck) Same die

**Mostene***A.D. 41-54 Claudius*

ΤΙ ΚΛΑΥΔΙΟΝ ΚΑΙCΑΡΑ ΕΠΙ ΠΕΔΑΝΙΟΥ  
 ΘΕΑΝ ΑΓΡΙΠΠΙΑΝ ΚΑΙCΑΡΕΩΝ  
 Heads of Claudius, laur., ||ΜΟCΤΗΝΩΝ||  
 and Agrippina, jugate r. Male figure on horseback  
 riding r., labrys over  
 shoulder *Weber 6852*

166 5.8 † 20  
 4.8 † 20

*A.D. 253-268 Gallienus*

ΛΙΚΙΝ-ΓΑΛΛΙΗΝΟC ΕΠΙ CΤΡ ΑΥΡ ΣΕΒΕΙΔΟC  
 Bust laur. cuir. r. ΠΛΟΥΤΙΑΔΟV ΜΟCΤΗ  
 wearing paludamentum Radiate horseman r. with  
 labrys over shoulder;  
 in front, cypress tree;  
 beneath foreleg, lighted  
 altar *BMC 16-17*

167 (6.65) ↓ 26 (Broken) Same die ||ΜΟCΤΗΝΩΝ||  
 above ΔΟC|ΠΙΛΟ  
 VT

**Nacrasa***2nd C. A.D.*

ΘΕΟΝ CΥΝ|ΚΑΗΤΟΝ ∪ ΘΕΑΝ ΡΩ | ΝΑΚΡΑ ∪  
 Bust of Senate dr. r. Bust of Roma turreted r. *BMC 11-12*

†168 3.2 † 16

A.D. 98-117 *Trajan*

				AY NEP TPAI ANON CΕ ΓEP∪ Head laur. r.	NAKPA CITΩN ∪ Tetrastyle temple with statue of Artemis Huntress	VA 3035
169	2.6	†	18	Same die		

**Philadelphia***1st C. B.C.*

				Macedonian shield, star in center	ΦΙΛΑΔΕΛ ΦΕΩΝ Thunderbolt on wreath; monogram above NK	BMC 1-4 BMC 1
170	#4.2	-	13			

*ca. A.D. 200*

				ΔΗ MOC Head of Demos r.	ΦΙΛΑ ΔΕΛΦΕ ΩΝ Nike standing on globe r. holding wreath and palm	Cop 362
171	4.2	↓	23	Same die (countermark: head r.)	Same die	

*A.D. 212-250†*

				ΙΕΡΑ CV NKΛHTOC Bust of Senate r.	ΦΛ ΦΙΛΑΔΕΛΦ ΕΩΝ ΝΕΩΚΟΡΩ Ν Aphrodite standing r. clad in long chiton, holding apple in l. and draping herself with peplos	BMC 38
172	6.46	↓	24			
				ΔΗ MOC Head of Demos r., long hair bound with taenia	ΦΛ ΦΙΛΑΔΕΛΦΕΩΝ N  ΕΩΚΟΡΩ N   Lion walking r.	—
173	5.3	↓	23	Die of Cop 359		
				ΦΛ ΦΙΛΑ ΔΕΛΦΕΩΝ Bust of City turreted r.	ΝΕΩΚΟΡΩΝ Nike running r. holding wreath or fillet in both hands	BMC 37
174	3.6	↓	19		ΝΕΩΚ Ο ΡΩΝ	
	3.4	↓	20		ΝΕΩΚ ΟΡ ΩΝ	

## A.D. 81-96 Domitia

				ΔΟΜΙΤΙΑ ΑΥΓΟΝCΤΑ	ΦΙΛΑΔ ΔΕΛΦ ΕΩ Ν in	
				Head r.	wreath	VA 3075
175	#3.69	↓	20			
				ΔΟΜΙΤΙΑ ΑΥΓΟΝC	ΦΙΛΑΔΕΛΚΕ Ω ΕΠΙ	
				Head r.	ΛΑΓΕΤ	
					Bunch of grapes	Imhoof, <i>RSN</i>
						6 (1896) 274
						no. 33
176	3.35	↓	17	(Heavily corroded)		

## A.D. 193-211 Septimius Severus

				ΑΥ·Κ ΑΙ · CΕΟVHP OC	ΦΙΛΑΔ ΕΛΦΕΩΝ	
				Head laur. r.	Wolf r. suckling twins	<i>BMC</i> 77
177	3.5	↓	22	Same die (countermark: radiate head r.)	Same die	

## A.D. 212-217 Caracalla

				ΑΥΤ Κ Μ ΑΥΡ CΕVH	ΕΠ Ι ΚΑ  ΚΑΠΙΤΩ Ν OC	
				ΑΝΤΩΝΕΙΝOC	ΑΡΧ Α  ΦΛ	
				Bust laur. cuir. r.	ΦΙΛΑΔΕΛΦΕΩΝ	
				wearing paludamentum	ΝΕΩΚΟΡΩΝ	
					Emperor standing in quadriga facing, r. hand raised, eagle-tipped scepter in l.; two of the horses turn their heads towards him	—
†*178	39.00	\	41			

## Saitta

## 2nd C. A.D.

				Head of Asklepios bearded r.	CAIT THNΩΝ	
					Herakles standing facing, with club and lion's skin	Cop 395
179	-	↓	20			

## Sala

## ca. A.D. 140-180 Marcus Aurelius or Commodus Caesar

				ΑΝΤΩΝ Κ	CA ΔΗ ΝΩΝ	
				Head bare r.	Dionysos standing r. with legs crossed, leaning with l. on thyrsos	—
†*180	3.7	/	17			

A.D. 200-209 *Geta Caesar*

Π ΣΕΠΤΙ| ΓΕΤΑΚ ΚΑ      ΕΠΙ ΚΥΛΛΑΑ·  
 Bust bare cuir. r.      Γ| ΚΑΛΗΝΩΝ ∪  
 wearing paludamentum      Zeus Lydios      VA 8252

181    8.8    ↓ 24

## Sardis†

after 133 B.C.

Head of young Herakles      ΣΑΡΔΙΑΝΩΝ  
 r. wearing lion's skin      Lion walking r.; above,  
 headdress      insect;  
    below, ΜΕΝΕ|ΜΑΧΟΣ      BMC 37

†182    8.8    - 16

(Countermark: Ⓜ )

Head of Apollo laur. r.†      ΣΑΡΔΙ  
    ΑΝΩΝ      Monogram  
    below.  
    Club; the whole in  
    oak wreath      BMC 10-21

\*183    3.5    / 14

Ⓜ

—

\*184    4.0    / 13

✱

—

185    2.75   / 14

ⓂN

—

\*186    4.1    \ 14

ⓂE      3 pieces

Berlin

187    3.0    \ 14

Ⓜ

Cop 477

188    4.4    / 13

Ⓜ

BMC 20

189    4.3    / 13

NE

BM

3.2    \ 15

NE

\*190    4.0    / 15

ⓂE

ANS

191    4.0    / 14

ⓂE

McClellan 8709

4.7    / 14

ⓂP

5.1    \ 13

192    4.5    ↓ 14

ⓂP

BM

3.6    / 14

ⓂP

4.5    / 14

ⓂP

193    4.0    / 14

ⓂE

VA 3136

4.0    \ 14

Berlin

\*194    3.8    / 15

Ⓜ

195    3.1    ↓ 14

Ⓜ

VA 3126

196    3.0    \ 15

ⓂE

Cop 481

3.0    / 15

197    3.9    \ 15

R

No monogram

—

198    2.0    - 5.7

Details illegible  
 43 pieces

				Head of young Herakles r. with lion's skin tied round neck†	ΣΑΡΔΙΑΝΩΝ at r. Apollo naked standing l. holding crow in outstretched r. and laurel branch in l.; monogram in l. field	
<b>*199</b>	5.7	↑	17		Ⲡ	<i>BMC</i> 22-31 Berlin
<b>200</b>	6.9	↑	15		Ⲕ	Cop 487
<b>201</b>	6.4	↑	15		Ⲙ	<i>BMC</i> 29
	4.2	↑	15			
	5.5	/	15			
<b>202</b>	5.8	↑	17		Ⲛ	Hunter 4
<b>203</b>	5.8	↑	16		Ⲟ	VA 3132
<b>204</b>	6.5	\	16		Ⲟ	<i>BMC</i> 26
<b>205</b>	4.8	↑	16		Ⲡ	<i>BMC</i> 25
<b>206</b>	6.4	↑	15		Ⲟ	<i>BMC</i> 23
<b>207</b>	6.7	\	15		Ⲟ	Berlin
<b>208</b>	4.2	↑	15	(Illegible countermark)	Ⲟ	ANS
<b>209</b>	6.5	↑	16		Ⲡ	Cop 488
<b>210</b>	4.7	\	15		Ⲟ	<i>BMC</i> 28
<b>211</b>	5.25	↑	17		Ⲟ	Vienna
<b>212</b>	4.91	/	15		c a	<i>BMC</i> 22
<b>213</b>	5.0	↑	18		Ⲡ	Munich
<b>214</b>	5.4	/	15		Ⲟ	—
	6.4	/	14			
<b>215</b>	3.2-7.7	-	15-16		Details illegible <i>80 pieces</i>	
<b>216</b>	3.2-6.1	-	15-17	(Countermark: club? in rectangular punch) Similar	<i>6 pieces</i> Similar, but full name in place of monogram†	<i>BMC</i> 32-36
<b>217</b>	6.8	/	16		MENE ITΑΣ	—
<b>218</b>	4.5	↑	18		HΦAI CTIQN ZH NAΣ	Vienna
<b>219</b>	6.0	↑	15		MOΣ XIQN	Cop 497
<b>220</b>	6.7	/	17		ME above, KPA below	
	5.9	/	17		⊙A	Berlin
<b>221</b>	6.5	↑	17		MHT POΔΩP  OC	ANS
<b>222</b>	5.6	↑	15		ΣΩ KP	Munich

223	5.15	†	15		ΣΩ ΚΡΑ	Cop 491
224	6.5	/	14		ΤΑ ΟΥ	Oxford
225	6.1	†	16		ΠΑ ΤΡΩΚΛΗΣ	Cop 498
226	6.8	/	14		ΜΗΝ ΟΙΤΟΣ	Brussels
227	4.5-6.8	-	-		Illegible traces of name <i>7 pieces</i>	
				Head of Herakles, beardless, r. wearing lion's skin headdress†	ΣΑΡΔ ΑΝΩΝ Kantharos with monogram(s) at base	<i>BMC 45-46</i>
228	3.5	†	15		Σ at r.	<i>BMC 45</i>
*229	2.9	†	15		⊠ at l. ⊠ at r.	Berlin
230	4.0	/	14		Details illegible	
				Bust of Tyche, turreted, veiled r.†	ΣΑΡΔΙΑΝΩΝ ↓ at r., monogram in l. field Zeus Lydios	<i>BMC 49-52</i>
*231	7.6	\	21		⊠	Paris
	6.2	\	21		-	
232	(3.15)	\	20	(Halved)	Details illegible	
233	6.95	†	19	(Countermark: club? in rectangular punch)	<i>2 pieces</i>	
234	6.84	†	20		Details illegible <i>9 pieces</i>	
				Head of Dionysos r. wearing ivy wreath†	ΣΑΡΔΙΑΝΩΝ above, monogram at l. and below Horned panther standing l. holding in r. forepaw a spear which it breaks with its teeth	<i>BMC 40-44</i>
235	4.5	†	16		○ at l. ⊠ below	Hunter 6
236	4.1	\	15		⊠ below	—
	5.7	\	15			
237	4.63	†/\	16		Details illegible <i>8 pieces</i>	
				Similar	ΣΑΡΔΙΑΝΩΝ; monogram at l. Forepart of lion pouncing r.†	<i>BMC 47-48</i>
238	4.1	†	16		⊠	VA 8255
	5.0	†	16			

239	2.05	/	16	☉		Paris	
240	5.3	↑	17	☉		—	
241	3.4	/	16	☉		<i>BMC 47</i>	
242	3.56	↑	16		Details illegible <i>4 pieces</i>		
					Bust of Artemis r. wearing stephane; bow and quiver at shoulder†	ΣΑΡΔΙΑΝΩΝ ↓ at l. Athena standing l. with Nike in r. and with l. resting on shield on ground beside her	<i>BMC 53-59</i>
243	6.9	↑	24			ΔΗΜΗΤΡΙΟΣ ΜΗΝΟΓΕΝΟΥ	Berlin
244	9.6	↑	23			ΞΕΝΟΚ[ΠΑΤΗΣ] ΗΡΑΚΛ[ ]	Berlin
<i>A.D. 14-37</i>							
					ΟΠΙΝΑΣ  ΑΚΙΑΜΟΣ ☉ Head of young Herakles r. with lion's skin tied round neck	ΣΑΡΔΙΑΝΩΝ ☉ Apollo naked standing l. holding crow in outstretched r. and laurel branch in l.; the whole in wreath	VA 3135
†245	6.1	↑	17				
<i>A.D. 54-68</i>							
					ΘΕΟΝ CVNKΛΗΤΟΝ ☉ Bust of Senate dr. r.	ΕΠΙ ΤΙ ΜΝΑCΕΟΥ  CΑΡΔΙΑΝΩΝ ☉ Zeus Lydios <i>10 pieces</i>	VA 3136
246	3.57	↑	18				
<i>A.D. 70-73 T. Clodius M. F. Eprius Marcellus, proconsul</i>							
					ΕΠΙ ΤΙ ΚΛΑΥ ΦΙΛΙΝΟΥ CΤΡΑ ☉ Bust of Athena r. wearing Corinthian helmet and aegis	ΕΠΙ  ΜΑΡΚΕΛΛΟΥ †B  CΑΡΔΙΑΝΩΝ ☉ Tetrastyle temple with seven stars in pediment	VA 3137
†247	2.70	/	20		(Overstruck on Apollonos Hieron, <i>BMC 8</i> ) (ΝΕΡΩΝ ΚΑΙ[ ΑΡ [ΕΒΑ[ΤΟ]) (Head of Nero r.) Similar but head l.	(ΑΠΟΛΛΩΝΙ ΕΡΕΙΤΩΝ) (Apollo with lyre and phiale) Similar but nothing in pediment	Cop 505
*248	4.05	↑	20		(Overstruck on head of Nero r.)		
	2.5	↓	20				

ca. A.D. 75†

				CAPΔIA NΩN ∘ Head of Herakles r. with lion's skin tied round neck	CAPΔI ANΩN ∘ Herakles naked standing r., head l., holding club in r.	BMC 82
249	3.1	† 15		Same die	Same die	
*250	2.9	/ 14		"	Whole in wreath	—

ca. A.D. 80-100

				ΙΕΡΑ CVN ΚΛΗΤΟC ∘ Bust of Senate dr. r.	CAPΔI ANΩN ∘ Demeter, veiled, standing l., holding stalks of grain and poppy in r. and scepter in l. <i>6 pieces</i>	Cop 506
†*251	8.6	† 25		Similar but legend ∘	CAPΔI ANΩN ∘ Hexastyle temple <i>2 pieces</i>	—
†*252	3.1	\ 17				

ca. A.D. 90-100

				Head of Herakles bearded l.	CAPΔI ANΩN Omphale advancing r. with lion's skin draped over shoulders and carrying club over l. shoulder	BMC 79-80
†253	3.56	†/↓ 18			<i>4 pieces</i>	

ca. A.D. 100-120

				ΙΕΡΑ  CVNKAHTOC ∘ Bust of Senate dr. r.	CAPΔI  A  NΩN ∘ Tetrastyle temple with disc in pediment	BMC 70
†254	3.8	/ 17		Same die	Same die	
	4.5	/ 17		"	"	
	3.15	† 15		"	CAPΔ  - Dot in pediment	—
	2.93	/ 17		"	Nothing in pediment	—
				ΙΕΡΑ CVNKA HTOC ∘ Similar	CAPΔI ANΩN ∘ Hexastyle temple with disc in pediment	Waddington 5224
†*255	3.9	†/↓ 18		Same die	<i>4 pieces</i>	
	2.9	†/↓ 18		ΙΕΡΑ CVN ΚΛΗΤΟC ∘	<i>5 pieces</i>	
*	3.8	\ 18		Similar	CAPΔI  A  NΩN ∘	ANS



			CAPΔIA NΩN ◊ Bust of young Dionysos r. wearing ivy wreath	CTP ΛOIO ΔIBΩNIANOV ◊ Thyrso bound with taenia; in r. field, bee	<i>BMC 75-76</i>
†256	2.35	↓ 16	Same die		
<i>ca. A.D. 100-140</i>					
			Head of young Herakles laur. r. with lion's skin tied round neck	CAPΔIANΩN between club and bow in case; above, insect	Cop 510
†257	2.8 2.1	↑ 15 ↑ 15	Same die	Same die Details illegible <i>4 pieces</i>	
<i>ca. A.D. 140-160†</i>					
			ΕΠΙ Δ ΑΠΙΟΥ Head of Dionysos r. wearing ivy wreath	CAP· ·Δ IAN ΩN Two thyrsi crossed and bound with taenia	<i>Sardis XI (1916) 273</i>
258	3.08	↑ 19	Same die	Same die	
			Die of <i>Sardis XI</i> (1916) 273	CAPΔI ANΩN Torch	VA 3139
259	1.54 2.1	↑ 20 ↑ 20		Same die "	
<i>ca. A.D. 200</i>					
			ΙΕΡΑ CVN ΚΛΗΤΟC Bust of Senate dr. r.	CAPΔIANΩN·B·  NΕΩΚΟΡΩN Zeus Lydios	Oxford
†260	3.65	↘ 25	(Broken) Same die	Same die	
<i>A.D. 200-220</i>					
			CAPΔIC Bust of City turreted, veiled r.	CAPΔIANΩN·B· NΕΩΚΟΡΩN Cult statue of Kore between stalks of grain and poppy	Cop 513
†261	4.26	↓ 17	·CAP· ·ΔIC· ◊ Same die	<i>10 pieces</i>	
	2.59	↓ 17	CAPΔI C ◊ Same die	CAPΔIANΩN· B· NΕΩΚΟΡΩN Same die	Hunter 16
	3.3	↓ 19	CAP ΔIC ◊ Same die	"	<i>BMC 91</i>
	3.9	/ 17	CAP ΔIC ◊ Same die		Paris 1165

*ca. A.D. 212-217*

				ΣΕΥC   ΛVΔΙOC Bust of Zeus laur. r.†	CAPΔI ANΩN Young Herakles standing facing, head l., holding club and lion's skin	<i>BMC 86</i>
<b>262</b>	1.85	↓	16	Same die Similar	Same die CAPΔI IA N ΩN KOPAI O C Dionysos bearded, wearing fawn's skin, advancing l., holding kantharos and thyrsos	<i>Sardis XI (1916) 274</i>
<b>263</b>	0.66	↓	15	(Corroded) Same die	Same die	

*ca. A.D. 220-230*

				MHN   ACKHNOC Bust of Mên r. wearing Phrygian cap and with narrow crescent at shoulders	CAPΔIANΩN·B· NΕΩΚΟΡΩN  ΕΡΜOC   River god reclining l.	<i>Cop 511</i>
† <b>264</b>	5.5	/	23	Same die		

*ca. A.D. 235*

				ΙΕΡΑ CVN KΛHTOC Bust of Senate laur. r.	CAPΔIANΩN B  NΕΩΚΟΡΩN Mên standing l. with pinecone and scepter	<i>BMC 84</i>
<b>265</b>	3.94	/	20	Same die	Same die	

*ca. A.D. 245*

				MHN   ACKH NOC Similar	CAPΔIANΩN·B· NΕΩΚΟΡΩN Rudder and cornucopiae crossed	<i>Sardis XI (1916) 277</i>
† <b>*266</b>	4.6 (2.7)	/ ↓	22 -	Same die (Cop 512) (Broken)	Same die	

*27 B.C.-A.D. 14**Augustus*

				ΣΕΒΑΣΤOC ↓ at l. Head bare r.	ΔΙΟΔΩΡOC ΕΡΜΟΦΙΛOC ↓ at r. ΣΑΡΔΙΑΝΩN ↓ at l. Zeus Lydios	<i>VA 3142</i>
<b>267</b>	3.59	\ /	19		<i>4 pieces</i>	

268	5.14	† 19	ΣΕΒΑΣΤΟΥ † Similar	ΣΑΡΔΙ ΑΝΩΝ   ΔΑΜΑΣ in wreath	Hunter 18
<i>Alliance of Sardis and Pergamum</i>					
†269	6.6	† 20	ΣΕΒΑΣΤΟΥ at l. Similar  (Overstruck)	ΣΑΡΔΙΑΝΩΝ   ΚΑΙ ΠΕΡΓΑΜΗΝΩΝ ΜΟΥΣΑΙΟΣ between figures Demoi of Sardis and Pergamum, each with scepter in l., clasping hands	Cop 545
<i>A.D. 14-37 Tiberius</i>					
†270	4.8 3.9 3.7 4.01	† 19 † 8 \ 18 † 18	ΣΕΒΑ ΣΤΟΣ ΚΑΙΣΑΡΕΩΝ ΣΑ ΡΔΙΑΝΩΝ Tiberius togate standing l., his r. extended toward Sardis, kneeling before him and offering him ears of grain	ΣΕΒΑΣΤΗ ΙΟΥΔΙ ΟΣ ΚΛΕΩΝ ΚΑΙ ΜΕΜΝΩΝ ∪ Livia seated r., holding scepter in r. and three stalks of grain in extended l.	BMC 98-100
			(Overstruck)	No grain 6 pieces	
271	7.2	† 22	ΚΑΙΣΑΡ   ΣΕΒΑΣΤΟΥ ΥΙΟΣ Head bare r.	ΣΑΡ ΔΙΑΝΩΝ  ΟΠΙΝΑΣ   ΑΚΙΑΜΟΣ in wreath	BMC 102-103
				2 pieces	
<i>Drusus (d. A.D. 22) and Germanicus (d. A.D. 19)†</i>					
272	2.9	† 16	ΓΕΡΜΑΝΙΚΟΣ  ΚΑΙΣΑΡΕΩΝ ∪ Head of Germanicus bare r.	ΔΡΟΥΣΟΣ  ΣΑΡΔΙΑΝΩΝ ∪ Head of Drusus bare r.	BMC 110-112
				2 pieces	
			ΓΕΡΜΑΝΙΚΟΣ ΚΑΙΣΑΡ ∪ Head bare l.	ΣΑΡΔΙΑΝΩΝ ↓ at r. ΜΝΑ ΣΕΑΣ ↓ at l. Athena standing l. with patera in r. and l. resting on shield	BMC 113
†273	3.01	/ 15		11 pieces	

				<p>ΔΡΟΥΣΟΣ ΚΑΙ ΓΕΡΜΑΝΙΚΟΣ ΚΑΙΣΑΡΕΣ ΝΕΟΙ ΘΕΟΙ ΦΙΛΑΔΕΛΦΟΙ Drusus and Germanicus, togate, seated side by side l. on curule chairs</p>	<p>ΚΟΙΝΟΥ ΑΣΙΑΣ in wreath of oak and laurel (Overstruck on outer rim: ΓΑΙΩ ΑΞΙΝΝΙΩ ΠΩΛΛΙΩΝΙ ΑΝΘΥΠΙΑΤΩ)</p>	Cop 518
†274	9.8	-	27		6 pieces	
				<i>A.D. 41-54 Claudius</i>		
				<p>ΤΙ ΚΛΑΥΔΙΟΣ ΚΑΙΣΑΡ Head bare l.</p>	<p>ΣΑΡΔΙΑΝΩΝ Head of Herakles bearded l.</p>	BMC 114-115
275	3.65	↓	15			
				<i>A.D. 54-68 Nero</i>		
				<p>ΝΕΡΩΝ  ΚΑΙΣΑΡ ∘ Head laur. r.</p>	<p>ΕΠΙ ΤΙ ΜΝΑCΕΑ CΑΡΔΙΑΝΩΝ ∘ Zeus Lydios</p>	Waddington 5242
†276	4.6	\	19			
	6.05	\	19			
				<i>A.D. 69-79 Vespasian†</i>		
				<p>ΑΥΤΟΚ ΚΑΙC ΟΥΕCΠΑCΙΑΝΩ ∘ Head laur. r.</p>	<p>ΕΠΙ ΦΛ ΕΙCΙΓΟΝΟΥ CΑΡΔΙΑΝΩΝ ∘ Rape of Persephone</p>	Cop 525
277	12.0	/	28			
	10.7	↓	28			
				<p>ΑΥΤΟΚ ΚΑΙC ΟΥΕCΠΑCΙΑ ΝΩ ∘ Head laur. r.</p>	<p>ΕΠΙ Τ ΦΛ ΕΙCΙΓΟΝΟΥ CΑΡΔΙΑΝΩΝ ∘ Mên standing l. holding scepter and pinecone; at l., altar</p>	VA 3147
278	3.75	↓	20			
				<i>A.D. 81-96 Domitian</i>		
				<p>ΔΟΜΙΤΙΑΝΟC ΚΑΙCΑΡ CΕΒΑCΤΟC ΓΕΡΜΑΝΙΚΟC Head laur. r.</p>	<p>ΕΠΙ Τ ΦΛ ΜΗΤΡΟΔΩΡΟΥ †Β CΑΡΔΙΑΝΩΝ Athena seated l., shield beside seat, holding Nike and spear</p>	Sardis XI (1916) 282
†279	9.7	-	30			
	#11.57	/	30			

ΔΟΜΙΤΙΑ ΣΕΒΑΧΘΗ  
Bust r.

ΕΠΙ Τ ΦΛ  
ΜΗΤΡΟΔΩΡΟΥ † Β  
ΣΑΡΔΙΑΝ||ΩΝ||  
Boule and Nemesis  
standing face to face;  
Boule veiled standing r.  
with transverse scepter in  
l.; Nemesis standing l.  
with cubit rule

Weber 6910

280 3.46 / 22  
3.6 † 22  
3.6 - 21  
#5.1 † 20

Same die

Same die

*Alliance of Sardis and Smyrna*

ΔΟΜΙΤΙΑΝΟΣ ΚΑΙ ΣΑΡ  
ΣΕΒΑΧΘΟΣ  
ΓΕΡΜΑΝΙΚΟΣ  
Head laur. r.

ΔΗΜΟΣ ΣΑΡΔΙΑΝΩΝ  
ΔΗΜΟΣ ΣΜΥΡΝΑΙΩΝ  
Demos of Sardis and  
Smyrna, wearing short  
chitons and carrying  
scepters, clasping hands

BMC 217

†281 6.7 / 25

*A.D. 98-117 Trajan*

ΑΥ ΚΑΙ ΝΕΡ  
ΤΡΑΙΑ|ΝΟΣ ΣΕΒ  
ΓΕΡ ΔΑΚΙΚΟΣ ∪  
Bust laur. cuir. r.  
wearing paludamentum

ΕΠΙ ΛΟΥ ΒΑΙ  
ΤΟΥΛΛΟΥ  
ΑΝΘΥΠΙΑΤΟΥ  
ΣΑΡΔΙΑΝΩΝ  
Two bound captives  
kneeling at foot of  
trophy

Sardis XI  
(1916) 283

†282 8.9 ↓ 25 Same die  
11.6 ↓ 23/27 (Overstruck)  
8.85 ↓ 23/27 (Overstruck)  
7.5 † 25/28 Same die

Sardis XI  
(1916) 284

*ca. A.D. 112 Marciana, sister of Trajan*

ΜΑΡΚΙΑ|  
ΣΕΒΑΧΘΗ ∪  
Bust r. wearing  
stephane

ΣΑΡ|ΔΙΑΝΩΝ | ΠΕΛΟΥΣ  
Pelops galloping r.,  
whip raised in r.

BMC 132-133

†283 (2.9) ↓ 20 (Broken) Same die

*Plotina*

				ΠΑΩΤΕΙ ΝΑ CЄBACTH ∪ Bust r. wearing stephane	CAPΔI ANΩN ∪ Similar		BM
†284	3.8 4.9	↑ \	20 20	Same die Same die	CAPΔIA NΩN ∪ CAPΔ IANΩN ∪		— —

*A.D. 117-138**Hadrian*

				AV KAI TPAINOC  AΔPIANOC ∪ Bust laur. r. with drapery on l. shoulder	ΠΑΦΙΗ CAPΔIANΩN ∪ Shrine of Aphrodite Paphia †		McClellan 8714
285	9.2	↓	23	Same die Similar but bust l. and legend ∪	Similar		BMC 135
286	6.2	↓	23	Same die			

*Sabina*

				CABEINA   CЄBACTH Bust r., hair piled up in three-tiered diadem	CAPΔIANΩN   ЄPMOC   River god l.		BMC 136
287	5.58	↑	21				

*A.D. 138-161**Faustina I*

				ΦAVCTINA   CЄBACTH ∪ Bust dr. r.	CAPΔI ANΩN ∪ Aphrodite dr. standing l. holding apple and scepter		VA 3153
†288	6.05	\	20	Same die ΘEA ΦAVC TEINA ∪ Similar	ЄΠI KΑ ΦPO NTΩN OC ACIAPX CTPATHTΓO A   CAPΔIANΩN   Hexastyle temple with statue of emperor in military dress within		VA 3154
†289	22.2 25.2	↓ ↓	35 35	Same die (Doublestruck) (Worn)	Same die		

*Marcus Aurelius Caesar*†

				M AVPHAI OC KAICAP·VII Bust bare dr. r.	CAPAI ANON €ΠΙ ΔΑΡ ΕΙΟΥ in laurel wreath	Waddington 5256
*290	4.0	↓ 22		Same die	Same die	
	4.6	↑ 21		"		
	2.4	↓ 20		"		
	1.5	- 20		"		
				Die of Waddington 5256	ΕΠΙ ΔΑΡΙΟΥ  CΑΡΔΙΑΝΩΝ ∪ Cornucopiae	BMC 142
291	4.0	↑ 18			Same die	
				M AVPHAI OC KAICAP VIIA Similar	ΕΠΙ ΝΕΙΚΟΜΑΧΟΥ CΑΡΔΙΑΝΩΝ Winged caduceus	Cop 528
292	2.9	↓ 18		Same die		
	4.0	↑ 20		"		

*ca. A.D. 200-217**Julia Domna*

				ΙΟΥΛΙΑ CЄBACTH ∪ Bust dr. r.	CΑΡΔΙΑΝΩΝ B· NЄΩKOPΩN Cult statue of Kore between grain and poppy	BMC 149
†293	#3.26	∖ 19		Same die		
	5.32	↓ 20		"		

*A.D. 212-217*†

				ΙΟΥΛΙΑ·CЄ BACTH Bust l. as Tyche, wearing modius and with cornucopiae at shoulder	ΕΠΙ·Γ·ΚΛ·ΜΙ ΘΡΟΥ·ΑΡΧ· Α· CΑΡΔΙΑΝΩΝ·B·  NЄΩKOPΩN   Prize crown containing palm on base inscribed: XPVCANΘINA	BMC 150
†*294	11.10	/ 30		Same die	Same die	
				ΙΟΥΛΙΑ  CЄBACTH ∪ Bust dr. r.	CΑΡΔΙΑΝΩΝ·B·  NЄΩKOPΩN Demeter veiled standing l. holding stalks of grain in r. and long torch in l.; serpent issues from ground at her feet	—
†295	7.5	↓ 24				
	4.93	∖ 22				

			Die of 295	CAPΔΙΑΝΩΝ·Β· ΝΕΩΚΟΡΩΝ Mên standing l. with pine cone and scepter	Paris 1255
296	3.52	↓ 22		Same die	
<i>A.D. 212-217 Caracalla—sole reign</i>					
			ΑΥΤ·Κ·Μ·ΑΥΡ·CΕΥ Η · ΑΝΤΩΝΕΙΝΟC Bust bearded laur. cuir. r. wearing paludamentum	ΕΠΙ ΑΝ ΡΟΥΦΟΥ ΑΡΧ Α ↑ Γ   CAPΔΙΑΝΩΝ·Β· ΝΕΩΚΟΡΩΝ   Agonistic table with three prize crowns, each containing palm, and two purses; below, amphora and two palms	<i>BMC</i> 166
†*297	33.00	↓ 38	(Overstruck) Same die	As above but   CAPΔΙΑΝΩΝ  ΔΙC ΝΕΩΚΟ ΡΩΝ	
			·ΑΥΤ· ΚΑΙ·Μ·ΑΥΡ·  ΑΝΤΩΝΕΙΝΟ C Head radiate r.	CAPΔΙΑΝΩΝ·Β·  ΝΕΩΚΟΡΩΝ Zeus Lydios	Cop 533
298	7.1	↓ 27	Same die Die of Cop 533	Same die CAPΔΙΑΝΩΝ·Β· ΝΕΩ ΚΟΡΩΝ Tyche-Euposia	<i>BMC</i> 162
299	5.08	↓ 25	"	Same die	
	7.8	↓ 25	"	"	
	#7.9	↓ 25	"	CAPΔΙ ΑΝΩΝ ·Β· ΝΕΩΚΟΡΩΝ	Cop 534
	5.5	↓ 25	"		
	7.0	↓ 25	"		
<i>A.D. 217-218 Macrinus</i>					
			·ΑΥΤ·Κ·Μ·ΟΠΕΛ·CΕ ΟΥ· ΜΑΚΡΕΙΝΟC Bust laur. cuir. r., cloak clasped over l. shoulder, star on cuirass	·CΑΡΔΙΑ ΝΩ Ν·Β· ΝΕΩΚΟΡΩΝ Nike advancing l. with wreath and palm	Paris
†300	4.61	↓ 26	Same die	Same die	



*ca. A.D. 218-220**Elagabalus*†

			AV K M AV AN TΩNЄINOC Bust laur. r. wearing aegis	ЄΠI·Γ· CAΛ KAAVΔ IA  N O V APX  † B    CAPΔIANΩN·B·  NЄΩKOPΩN   Lion crouching l. before city walls with six towers; below jaws at l., insect	Boston
†*301	12.17	↓ 17	Same die (Overstruck)	Same die	
			AV K M  A  ANTΩNЄINOC Bust radiate cuir. r. wearing paludamentum	CAPΔI ANΩN·B· NЄΩKO  PΩN   Athena standing facing, head l., holding Nike in r. and shield and spear in l.; lighted altar before her	BMC 161
†302	7.14	/ 25	Same die	Same die	
			AV K M AV ANTΩNЄINOC Bust radiate cuir. r. wearing paludamentum	CAPΔI ANΩN  B·NЄΩKOPΩ  N   Zeus Lydios	Vienna
*303	7.0	↓ 25	Same die	Same die	
	6.4	↓ 25			
			AVT K M AVP  A NTΩNЄINOC CЄB Bust radiate cuir. r. wearing paludamentum	CAPΔIANΩN·B·  NЄΩKOPΩN* Apollo Lykios standing facing holding crow in r. and with l. on head of lion, which stands r. beside him; at l., altar with A above	Berlin
†304	†6.07	↓ 25	Same die	Same die	

*ca. A.D. 220-222*

			AVT K M AVP  ANTΩNЄINOC Bust laur. cuir. r. wearing paludamentum	ЄΠI ЄPMOΦI ΔOY APX A· † ·B   CAPΔIANΩN TPIC  NЄΩKOPΩN   Prize crown containing palm on base inscribed: XPVCANΘINA	Boston
†305	12.4	↓ 30	Same die	Same die	

				ΑΥΤ Κ Μ ΑΥΡ  ΑΝΤΩΝΕΙΝΟC Bust laur. cuir. r. wearing paludamentum	ΚΑΡΔΙΑΝΩ Ν  Γ ΝΕΩ ΚΟΡΩΝ Helios running r. with r. hand raised in blessing, whip in l.	Vienna
†*306	5.4	↓ 23	Same die	Same die	Same die	
<i>Julia Maesa</i>						
				ΙΟΥΑΙΑ ΜΑΙCΑ CΕ Bust dr. r.	ΚΑΡΔΙΑΝΩΝ ΤΡΙC  ΝΕΩΚΟΡΩΝ Demeter veiled standing l., holding two stalks of grain in r. and long torch in l., coiled serpent at feet	Oxford
307	4.7	↓ 23	Die of <i>BMC</i> 174	Die of <i>BMC</i> 174	(Julia Soaemias)	
<i>A.D. 222-235 Severus Alexander†</i>						
				ΑΝΤ·Κ·Μ·ΑΥΡ·CΕ·  ΑΛΕΞΑΝΔΡΟC Bust laur. cuir. r. wearing paludamentum	ΕΠΙ ΤΡΥ ΔΑΜΙΑΝΟV  ΚΑΡΔΙΑΝΩΝ Β ΝΕΩΚΟΡΩΝ Tyche-Euposia	<i>BMC</i> 176
308	6.2	↓ 25	Same die	Same die	Same die	
	4.45	↓ 25	"	"	"	
			Die of <i>BMC</i> 176	Die of <i>BMC</i> 176	ΕΠΙ ΤΡΥ ΔΑΜΙΑΝΟV  ΚΑΡΔΙΑΝΩΝ·Β· ΝΕΩΚΟ  ΡΩΝ   Zeus Lydios	—
*309	6.07	↓ 24				
<i>A.D. 238-242 Gordian III</i>						
				ΑΥΤ·Κ·Μ·ΑΝΤ· ΓΟΡΔΙΑΝΟC Bust laur. cuir. r. wearing paludamentum	ΕΠΙ ΡΟΥΦΕΙΝΟV ΚΑΡΔΙΑΝΩΝ Β ΝΕΩΚΟ Wreath within which bucranium at l., torch at r.	Cop 537
†310	3.54	↓ 24	Same die	Same die	Same die	
	5.10	↓ 25				
<i>A.D. 242-244</i>						
				ΑΥΤ Κ Μ ΑΝΤ  ΓΟΡΔΙΑΝΟC ∪ Bust radiate cuir. l. with shield and spear	ΕΠΙ ΕΡΜΟΦΙΛΟΥ ΚΑΡΔΙΑΝΩΝ Β ΝΕΩΚ ΠΑΦΙΗ ∪ Shrine of Aphrodite Paphia	Paris
†311	4.74	↑ 24	Same die	Same die	Same die	

*A.D. 244-246 Philip II Caesar †*

				M·IOYΛ·ΦΙΛΙΠΠΙΟC Bust bare cuir. r. wearing paludamentum	CAPΔΙΑΝΩΝ·B· NEΩKOPΩN Zeus Lydios	Cop 542
312	5.1	↓	25	Same die Die of Cop 542	Same die CAPΔΙΑΝΩΝ·B· NEΩKOPΩN Tyche	<i>BMC</i> 204-205
313	#7.25	↓	25		CAPΔΙΑΝΩΝ·B· NEΩKOPΩN CAPΔΙΑΝΩΝ·B· NEΩKOPΩN	<i>BMC</i> 204
	#7.0	↓	25		NEΩKOPΩN	<i>BMC</i> 205

*ca. A.D. 253-256**Salonina*

				CAΛΩΝ·XPV COΓONH·C Bust dr. r. wearing stephane	ΕΠ ΔΟΜ·ΡΟΝΦΟY· ACIAPX·CAPΔΙΑΝΩΝ Γ·NEΩKO PΩN Cybele seated l. with lion at feet	<i>BMC</i> 210
†314	9.6	✓	26	Same die	Same die	

**Stratonicea***ca. A.D. 240-260*

				CTPA TONEIKIA Bust of City turreted r.	KAIKOC CTPATONI  KEΩN   River god Caicus	VA 3184
†315	7.36	↘	24	Same die	Same die	

*A.D. 117-138 Hadrian*

				AVTO TPAIA  AΔPIANO Bust laur. cuir. r. wearing paludamentum	CVNKΛHTOC INΔI CTPA Bust of Senate r.	VA 3186
†316	2.0	↓	15	Same die (illegible countermark)	CTP INΔI  MAKΕΔ	

**Thyatira***Early 2nd C. A.D.*

				ΘΕΑΝ CVN KAHTON ∪ Bust of female Senate r.	TVP IMNOC ΘVA   Tyrimnos naked riding r., labrys over shoulder	<i>BMC</i> 15
317	2.9	↓	18	Same die	Same die	

*ca. A.D. 180-193*

				BOPEI THNH Bust of Artemis l. with quiver at shoulder†	ΘVATEIPH  NΩN   River god Lykos	VA 3212
<b>318</b>	5.9	↓	24	Similar	ΘVATEI PHNΩN Eagle standing facing, head l.	Cop 578
<b>319</b>	4.6 #4.9	/ ↑	24 22			

*ca. A.D. 200*

				Bust of Athena r. wearing helmet and aegis, spear over shoulder	ΘVATEI P HNΩN Tyche	<i>BMC 34</i>
<b>320</b>	4.65 3.1	↑ ↓	19 19			
				Head of Herakles bearded r.	ΘVAT €IP HNΩN Lion walking r.	VA 3208
<b>321</b>	#1.47	↓	15			

*3rd C. A.D.*

				Head of young Dionysos r. wearing ivy wreath	ΘVATEIP HNΩN Nike advancing l. with wreath and palm	<i>BMC 46</i>
<b>*322</b>	2.4	↑	17		ΘVATE IPHNΩN; Nike r.	

*ca. A.D. 212-217**Caracalla*

				ANTΩ N€INOC Bust laur. cuir. r. wearing paludamentum	ΘVAT €IP HNΩN Athena standing l. holding patera in r., shield and spear in l.	Waddington 5369
<b>323</b>	4.2	↓	20	Same die (Cop 609)	Same die	
				Similar	ΘVATEIPHNΩN Tyche	<i>BMC 104-106</i>
<b>324</b>	#2.87	↓	20			

*ca. A.D. 222**Severus Alexander Caesar*

				ΑΛ€Ξ ΑΝΔΡΟC Bust bare dr. r.	ΘVATEIPHNΩN Nike advancing l. with wreath and palm	Cop 629
<b>325</b>	1.17	↓	15			

*A.D. 222-235 Severus Alexander*

				AVT·K·CЄ·  ΑΛΕΞΑΝΔΡΟC Bust laur. cuir. r. wearing paludamentum	ΘVAT ЄIP HNΩN Athena standing l. holding patera in r., shield and spear in l.	<i>BMC</i> 130
326	6.75	↓	24	Same die	Same die	

**Tmolus***2nd C. A.D.*

				Head of Dionysos r. wearing ivy wreath	TMΩAI TΩN ∪ Bunch of grapes	<i>Sardis</i> XI (1916) 309
327	2.1	↑	15	Same die	Same die	

**Tralles***2nd-1st C. B.C.*

				Head of Zeus laur. r.	TPAAAI   ANΩN   monogram in l. field Humped bull l.	<i>BMC</i> 63-65
328	3.1	↑	13		Monogram illegible	

*ca. A.D. 253-260*

				IEPOC   ΔHMOC Bust of Senate laur. dr. r.	EPI ΓP AVA TAN KO PINΘOY TPAAAI IAN ΩN Athena standing l., holding spear in l. and resting r. on shield	
329	7.5	↓	30	Die of Cop 682	Die of <i>BMC</i> 193 (Gallienus)	

**Tripolis***ca. A.D. 200?*

				Bust of Athena r. wearing helmet and aegis	TPIPOΛEITΩN ∪ Winged Nemesis standing l. with bridle in l. and plucking chiton with r.	<i>BMC</i> 20-21
330	2.52	↓	13	Smaller denomination than <i>BMC</i>	Legend ∪	

A.D. 14-37 *Tiberius*

				TIBEPION KAISAPA ΤΡΙΠΟΛΕΙΤΑΙ Bust dr. r.	MENANΔΡΟΣ ΦΙΛΟΚΑΙΣΑΡ ΤΟ Δ Head of Helios radiate r.	Cop 743
331	4.7	†	18			

## PHRYGIA

Aezanis

ca. A.D. 200

				Bust of Sarapis r.	AIZAN ITΩN Eagle	Cop 60
332	1.23	/	15			

Ancyra

3rd C. A.D.

				ΙΕΡΑ CVN ΚΛΗΤΟC Bust of Senate dr. r. (Countermark: head r.?)	AN KYPA NΩN in wreath	BMC 11-14
333	#5.65	/	23			

A.D. 161-176 *Faustina II*

				ΦΑΥCΤΙΝΑ CЄ BACTH ∪ Bust dr. r.	ANKV PANΩN ∪ Cult statue of Artemis Ephesia between two stags	Cop 143
334	6.0	/	18	Φ]AVC TEIN[A ∪	Legend ∪	

Apameia

1st C. B.C.

				Head of Artemis turreted	ΑΠΑΜ; magistrate's name Marsyas, naked, advancing r. playing double flute	BMC 33-110 type iii
335	3.7	†	14		ΑΤΤΑ	BMC 64
336	3.6	\	17		ΚΗΦΙΣ	

**Cibyra***1st C. B.C.*

- |            |      |      |   |  |                  |
|------------|------|------|---|--|------------------|
|            |      |      | Young male bust r.<br>wearing crested helmet† | K I<br>Eagle standing r. on<br>fulmen with wings closed                | <i>BMC 16</i>    |
| <b>337</b> | 0.95 | † 11 |   |  |                  |
|            |      |      | Similar                                       | KIBYPATΩN  <br>Incuse square within<br>which humped bull<br>butting r. | <i>BMC 17-20</i> |
| <b>338</b> | #1.4 | † 12 |   |  |                  |

**Eucarpeia***ca. A.D. 160-180*

- |             |     |      |  |  |                |
|-------------|-----|------|--|--|----------------|
|             |     |      | ΕΥΚΑΡΠΙΕ ΩΝ ∪<br>Bust of Dionysos r.<br>wearing ivy wreath and<br>band across forehead | ΕΠΙ Γ ΚΑ ΦΛΑ ΚΚΟΝ ∪<br>Poseidon, naked, standing<br>facing with dolphin in r.<br>and trident in l. round<br>which a dolphin twists | <i>BMC 7-8</i> |
| <b>*339</b> | 2.7 | \ 17 |  |  |                |

**Eumeneia***3rd C. A.D.*

- |            |     |      |                      |   |                  |
|------------|-----|------|----------------------|---|------------------|
|            |     |      | Bearded head bare r. | ΕΥΜ Ε ΝΕΩΝ<br>Hermes standing l.<br>holding purse and<br>caduceus | <i>BMC 32-33</i> |
| <b>340</b> | 1.5 | † 15 |                      |   |                  |

**Laodiceia***ca. A.D. 140-160*

- |            |     |      |                           |                          |                |
|------------|-----|------|---------------------------|--------------------------|----------------|
|            |     |      | Head of Helios radiate r. | ΛΑΟ  ΔΙΚΕ  ΩΝ ∪<br>Altar | <i>Cop 536</i> |
| <b>341</b> | 2.5 | \ 15 |                           |                          |                |

*27 B.C.-A.D. 14 Augustus*

- |            |     |      |                          |  |                |
|------------|-----|------|--------------------------|--|----------------|
|            |     |      | ΣΕΒΑΣΤΟΣ<br>Head bare r. | ΛΑΟΔΙΚΕΩΝ<br>ΣΩΣΘΕΝΗΣ<br>Zeus Laodikeus standing<br>l. with eagle and scepter;<br>Wreath in l. field | <i>VA 3834</i> |
| <b>342</b> | 3.0 | † 16 |                          | Name illegible   |                |

				<i>ca. A.D. 212-217</i>	<i>Caracalla</i>	
				AVT K M AVP  ANTΩNEINOC Bust laur. cuir. r. wearing paludamentum	ΛΑΟΔΙΚΕΩ N NΕΩΚΟΡΩN Tyche Pantheia, winged	VA 3859
343	7.8	/	25	Same die (Countermark: griffin?)	ΛΑΟΔΙΚΕΩN N ΕΩΚΟΡΩN Tyche, wingless	
				<i>A.D. 218-222</i>	<i>Elagabalus</i>	
				AVT K M AVP  ANTΩNEINOC Bust laur. cuir. r. wearing paludamentum	ΛΑΟΔΙΚΕΩN NΕΩΚΟΡΩN ΔΟΓΜΑΤI  CVNΚΛΗ TOV Two right hands clasped	BMC 238
344	10.5	↓	30	Same die	Same die (Countermark: P  = year 108, i.e. A.D. 231/232)	
				<b>Ococleia</b>		
				<i>A.D. 238-244</i>	<i>Gordian III</i>	
				AVT K M AN  ΓΟΡΔΙΑΝOC Bust laur. cuir. r. wearing paludamentum	OKO KΛIΕΩN Tyche	
345	4.3	↓	24	Same die	Same die	Cop 627
				<b>Sebaste</b>		
				<i>3rd C. A.D.</i>		
				ΙΕΡΑ CYNΚΛΗΤ ε Bust of Senate r., hair bound with taenia	CEBAC TH NΩN Mên standing r. with one foot on bucranium, holding spear in r. and pinecone in l.	VA 3949
346	8.3	/	25	Same die	Same die	
				<i>27 B.C.-A.D. 14</i>	<i>Augustus</i>	
				ΣΕΒΑΣΤOC Head bare r.	ΣΕΒΑΣΤΗΝΩN ΣΩΣΘΕΝΗΣ ΑΓΝOC Zeus enthroned l. with feet on footstool, holding eagle and scepter	BMC 21-22
347	4.86	/	18			



## Synaus

2nd C. A.D.

				ΙΕΡΑ  CYNKAHTOC	CYNAΕΙ ΤΩΝ	
				Bust of Senate dr. r.	Two Nemeses standing facing each other	BMC 9
348	6.65	↓	21	Same die	Same die	

ca. A.D. 200

				Head of Herakles bearded r. with lion's skin tied round neck	CVNA ΕΙ  ΤΩΝ	
					Lion walking r.	BMC 12
349	1.2	↓	15	Same die	Same die?	

## Temenothyrae

A.D. 244-249

				Bust of Athena r. wearing helmet and aegis	ΝΕΙΚΟΜΑΧΟC·ΑΡΧ·  ΤΗΜΕΝΟΘV  ΡΕVCI	
					Lion walking r.	Cop 740
350	4.0	↙	20			

## PISIDIA

## Conana

A.D. 222-235 Severus Alexander

				ΑVΤ Κ Μ ΑV CΕ  ΑΛΕΞΑΝΔΡΟC CΕ	KONA ΝΕΩΝ	
				Bust laur. cuir. r.	Mên standing l. with spear in l. sacrificing over altar	—
†*351	12.3	↓	30	Die of VA 5071		

## CAPPADOCIA

## Caesarea

A.D. 222-235 Severus Alexander

				ΑV Κ CΕOV  ΑΛΕΞΑΝΔ	ΜΗΤΡΟ ΚΑΙCΑ ΕΤ	
				Head laur. r.	Three ears of grain	VA 6519
352	4.2	↑	17	Same die	Year illegible	

## SYRIA†

See E. T. Newell, *Coinage of the Western Seleucid Mints from Seleucus I to Antiochus III*,  
ANS NS 4 (1941)

## Seleucus I

312-280 B.C.

AE double	Winged head of Medusa r.	ΒΑΣΙΛΕΩΣ above ΣΕΛΕΥΚΟΥ below Bull butting r.; between hind legs: ΣΙ
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*Antioch ad Orontem* 286-281 B.C.

353	5.7 - 21 #6.2 / 21 #5.4 † 21		<i>WSM</i> 924-925
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AE unit	Similar	Similar
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*Sardis* 282-280 B.C.

354	2.3 † 13	4 pieces	<i>WSM</i> 1357
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AE half	Similar	Similar
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*Antioch ad Orontem* 286-281 B.C.

355	1.15 - 12		<i>WSM</i> 928
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## Antiochus I

280-261 B.C.

AE double	Macedonian shield with anchor on boss	ΒΑΣΙΛΕΩΣ above ΑΝΤΙΟΧΟΥ below Horned elephant r.
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*Antioch ad Orontem*

356	5.2 - 18		<i>WSM</i> 942-944
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AE unit	Bust of Athena dr. facing wearing triple- crested Attic helmet	ΒΑΣΙΛΕΩΣ at r. ΑΝΤΙΟΧΟΥ at l. Winged Nike advancing l. with wreath and palm; monogram in l. field
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*Sardis 277-272 B.C.*

357	2.5	/	13	⊗	WSM 1369
	1.4	†	13		
358	2.95	†	14	Monogram illegible	WSM 1369-1371
	3.63	-	16		

*Magnesia ad Sipylum 263-261 B.C.*

359	#2.2	†	13	⊕	WSM 1458
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**Antiochus II***261-246 B.C.*

AE unit	Head of Apollo laur. r.	ΒΑΣΙΛΕΩΣ at r. ANTIOXOY at l. Tripod; in ex., anchor; monograms at l. and r.
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*Sardis 261-250 B.C.*

360	4.2	†	17	Σ at l. ΔI at r.	WSM 1391
	3.63	†	17		
	3.9	†	17		
361	3.7	\	14	Υ at l.	WSM 1393
362	3.3	-	17	(Overstruck) E at l. Ν at r.	WSM 1402

*Sardis 250-246 B.C.*

363	4.2	\	16	Σ at l. ϞP at r.	WSM 1407
	3.6	\	17		
	3.4	†	17		
364	4.6	\	17	Ϟ at l.	WSM 1410
365	3.2	†	17	Δ at l.	WSM 1412
	4.2	†	17		

*Uncertain mint*

366	2.85	†	18	□ at r.	
367	4.16	†	17	M at l. L at r.	
368	3.18	†	15	⊥ at r.	
	AE half	Head of Apollo laur. r.	ΒΑΣΙΛΕΩΣ at r. ANTIOXOY at l. Lyre; below, anchor		

*Sardis 250-246 B.C.*

369 1.24 † 13

Monograms illegible

WSM 1408

**Seleucus II***246-241 B.C.*

AE unit

Head of young Herakles  
r. wearing lion's skinΒΑΣΙΛΕΩΣ at r.  
ΣΕΛΕΥΚΟΥ at l.  
Apollo naked seated l.  
on omphalos, l. hand on  
bow beside him, arrow  
in r.*Sardis 246-241 B.C.*

370 #4.0 † 16

AK at l.

WSM 1427

371 #3.5 \ 16

Δ at l.

WSM 1426

AE unit

Head of Athena r.  
wearing crested Attic  
helmetΒΑΣΙΛΕΩΣ at r.  
ΣΕΛΕΥΚΟΥ at l.  
Apollo naked standing l.,  
resting l. hand on bow  
behind him and holding  
arrow in extended r.

372 3.2 † 15

M? at r.

WSM 1655-  
1661

373 #3.74 † 15

(Countermark: horse's  
head)

Ζ? at r.

374 2.69 † 15

Details illegible  
*3 pieces*

AE quarter

Head of Athena r.  
wearing crested Attic  
helmetΒΑΣΙΛΕΩΣ at r.  
ΣΕΛΕΥΚΟΥ at l.  
Inverted anchor*Uncertain mint*

375 1.05 † 9

ΣΑ at l.

WSM 1663

## Antiochus Hierax

241-228 B.C.

AE unit	Head of Apollo laur. r., hair in formal curls	ΒΑΣΙΛΕΩΣ at r. ANTIOXOY at l. Apollo naked standing l., resting l. elbow on tripod, arrow in r.
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Sardis ca. 230 B.C.

376	4.1 ↑/\ 16	Same obverse and reverse dies, monograms illegible	4 pieces	WSM 1438
377	2.0- ↑/\ 14-18 4.1	Details illegible	12 pieces	
	AE half?	Similar	Similar	
378	1.65 / 10			Not in WSM

## Achaeus

220-214 B.C.

AR tetra- drachm	Bust of Achaeus bearded r., diademed and draped	ΒΑΣΙΛΕΩΣ at r. ΑΧΑΙΟΥ at l. Helmeted, draped Athena with shield and spear, in fighting attitude to l.; in inner l. field, horse's head
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Sardis

*379	#14.7 ↑ 27		WSM 1440
	AE unit	Head of Apollo laur. r., hair in formal curls	ΒΑΣΙΛΕΩΣ at r. ΑΧΑΙΟΥ at l. Eagle with wreath in claws standing r.; monogram in r. field

Sardis

380	3.3 ↑ 20	(Overstruck)	(Countermark: horse's head)	WSM 1446, 1450
	2.9 ↑ 20			
	#2.3 ↑ 16			
	3.5 ↑ 17			

**Antiochus III**

226-190 B.C.

AE unit?      Head of Apollo laur. r.      ΒΑΣΙΛΕΩΣ above  
ANTIOXOY below  
Elephant l.

*Antioch ad Orontem?*

**381**    1.8    -    12      7 pieces      WSM 1112-1113

AE half      Head of Antiochus r.  
diademed      Similar

**382**    1.85    †    11

AE double/  
quadruple      Head of Apollo laur. r.      ΒΑΣΙΛΕΩΣ at r.  
ANTIOXOY at l.  
Tripod

*Apamea    223-208 B.C.*

**383**    9.1    †    20      ⱮP at l. ♂ ? at r.      WSM 1192-1193

**384**    6.15    †    23      (Overstruck)      Details illegible      WSM 1187  
8.9    †    27      "      "      BJAΣIΛEΩΣ in tiny let-  
ters legible in undertype)

AE unit      Head of Apollo laur. r.,  
hair tied in knot behind      ΒΑΣΙΛΕΩΣ at r.  
ANTIOXOY at l.  
Apollo naked seated l.  
on omphalos with l.  
hand on bow and  
holding arrow in  
extended r.

*Sardis*

**385**    #2.3    †    13      Details illegible      WSM 1455

AE half      Diademed head r.      ΒΑΣΙΛΕΩΣ at r.  
ANTIOXOY at l.  
Apollo naked standing l.,  
resting l. hand on bow  
behind him and holding  
arrow in r.

*Uncertain mint*

**386**    1.5    /    9

**Demetrius II***146-139 B.C.*

AE double

Head of Demetrius  
diademed r.

ΒΑΣΙΛΕΩΣ  
ΔΗΜΗΤΡΙΟΥ at r.  
ΘΕΟΥ ΦΙΛΑΔΕΛΦΟΥ  
ΝΙΚΑΤΟΡΟΣ at l.  
Apollo seated l. on  
omphalos holding arrow,  
bow beside him

Cop 283

*Antioch ad Orontem*

387 #12.18 † 25

**PHOENICIA****Aradus***4th C. B.C.*

AR?

Marine deity r., human  
to waist, with r.  
extended

Prow r.

Cop 6-7

388 1.8 \ 11

(Legend illegible)

**PERSIA***5th-4th C. B.C.*

AR siglos

Persian king running r.  
wearing kidaris and  
kandys, with bow in r.,  
transverse spear in l.,  
quiver on his back

Irregular incuse

†389 4.9 - -

**EGYPT***285-246 B.C. Ptolemy II*Head of Alexander the  
Great r. wearing  
elephant's skin

ΠΤΟΛΕΜΑΙΟΥ  
ΒΑΣΙΛΕΩΣ  
Eagle, standing on  
thunderbolt, l.

Svoronos 69,  
439; 70, 450*267-266 B.C.*

†390 7.9 † 21

## Alexandria

See J. G. Milne, *Catalogue of the Alexandrian Coins in the Ashmolean Museum* (London 1933).

*A.D. 180-192 Commodus*

	billon	M A KOM ANTΩ CEB ΕVCΕΒ Head laur. r.	Κ Η Emperor laur. togate standing l. holding olive branch and scepter; behind him, Alexandria, turreted, standing facing, head l., crowns Emperor with r. and holds grain in l.	Milne 2676
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391 9.25 † 24

*A.D. 286-305 Maximian*

	billon	A K MA OVA MAIIMIANOC CEB	L B Elpis standing l.	Milne 4814
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392 6.7 - 19

## UNCERTAIN

	base AR	Lion l.	Swastika	Weber 8564
393	1.7 † 14			
	base AR?	Lion mask facing	Quadripartite incuse	Cop vol. 34, 341
†394	0.35 7			
	AR	(Illegible)	Quadripartite incuse	
†395	1.2 - 10			

*A.D. 69-79 Vespasian*

		Illegible Bust laur. r. wearing cuirass?	Illegible except   ·TT·   Two figures with altar between: at l. Demos (?) in long chiton, at r. Emperor (?) in short chiton or military dress, perhaps sacrificing	
396	9.4 / 24			



*A.D. 117-138 Hadrian*

ΑΔΡΙΑ | ΚΑΙ ∪

Bust laur. r. with  
drapery on l. shoulder

ΚΟ

Humped bull r.

†\*397 1.9 † 13

*A.D. 193-211 Septimius Severus*

SEVERUS| PIVS

ΑΒΓΥ ∪

Bust laur. cuir. l.  
wearing paludamentum

Illegible

Goddess, draped, with  
polos, standing facing,  
cornucopiae in l. (?) and  
with r. raised†\*398 9.65 / 25 (Countermark: <sup>CP</sup>)*Unidentifiable*

399	Hellenistic	213 pieces
400	Seleucid	16 pieces
401	1st C. B.C.-1st C. A.D.	39 pieces
402	Julio-Claudian	13 pieces
403	Augustus	1 piece
404	Nero	3 pieces
405	Flavian	9 pieces
406	1st-2nd C. A.D.	86 pieces
407	2nd C. A.D.	7 pieces
408	Trajan/Hadrian	5 pieces
409	Faustina I/ Antoninus Pius	4 pieces
410	3rd C. A.D.	25 pieces
411	Septimius Severus	3 pieces
412	Severus Alexander	2 pieces
413	Valerian/Gallienus	2 pieces
414	1st-3rd C. A.D.	18 pieces

## COUNTERMARKS

The countermarks gathered together here are not otherwise to be found in the catalogue, since without exception the flans lack legible types. A list of the inventory numbers of countermarked pieces is appended.

Countermarks served several purposes. Some, usually in the form of letters, were marks of value, either revalidations of worn or foreign coins, or revaluations of full weight pieces. Some were apparently indications that the coins had passed through the hands of the marking authority, perhaps in payment of wages or taxes, or as contributions of some kind. Countermarks showing dates (e.g. 344) may be of this type, as are many with symbols, such as the countermark of Artemis Anaitis stamped on coins of Hypaepa of the early third century (s, presumably Hypaepa).

Countermarking with letters was common in the mid-third century A.D., and the phenomenon has been the subject of considerable discussion: see, for example, T. B. Jones, "A Numismatic Riddle, The So-Called Greek Imperials," in *Proceedings of the American Philosophical Society* 107 (1963) 308-347; J. P. Callu, *La Politique monétaire des Empereurs romains de 238-311* (Paris 1969); L. C. West, "The Relation of Subsidiary Coinage to Gold under Valerian and Gallienus," in *ANS Museum Notes* 7 (1957) 95ff. Only one example (v) from the excavations bears a single letter, but several pieces with the peculiar countermarks with CAP and a letter appeared. These last are already known on legible pieces (see Callu pl. 3) but the majority of the find coins are worn smooth. The values given to the letters initially are clear from I and m, where the punch with A and head r. is used on the 20 mm. denomination, and that with B on a 25 mm. flan. No other examples of these countermarks are published, but the flans are probably second century. Some of the other Sardis marks can be dated from the legible coins on which they appear. CAP Δ, which is not represented among the finds, occurs on flans of 28-32 mm. diameter and must date from ca. A.D. 255, since the legible types are of Philip to Valerian (Callu pl. 3: 49). CAP B and CAP Γ must be slightly earlier, since the latest marked coins are of Trajan Decius and Philip II respectively (Callu pl. 3: 50-51). CAP Γ seems to be found on only marginally larger flans than CAP B, a narrowing of the interval between denominations which also appears in the coinage of Sardis under Philip, where many of the traditionally 25 mm. types are struck on flans as small as 22 mm. at the same time as coins of the 20-22 mm. size and types.

The Sardis countermarks are found on coins of Lydia, Phrygia, Ionia, Aeolis and Mysia, indicating the geographical diversity of coins circulating in Lydia in the 240's.

<i>diameter</i>	<i>countermark</i>	<i>remarks, and date of coin</i>	<i>inventory number</i>
a 15/16	Owl r.	Pergamene?	C64.395
b 16/17	Similar	Reverse slashed	C63.689
c 14/16	Lion mask facing	Pergamene?	C63.433
d 19/22	☞ and eagle head l. in round punch	Hellenistic-1st C. A.D.	C61.80
e 18/21	☞ in round punch	Flan scored; 1st C. B.C./A.D.	C61.436
f 20	Lion head l. in circular beaded border	1st-2nd C. A.D.	C63.111
g 20	Similar		C61.46
h 20	Similar		C60.212

*i 18/21	YN *Γ and head r. in large round punch	1st-2nd C. A.D.	C67.834
j 32	ΓΔ in elliptical punch	1st-2nd C. A.D.	C60.230
k 16	Griffin r. (?)	1st-3rd C. A.D.	C65.103
*l 21	CAP   A and head r. in round punch	1st-2nd C. A.D.	C63.941
*m 24/26	CAP   B, as preceding	1st-2nd C. A.D.	C67.248
n 25	CAP B in keyhole punch	2nd-3rd C. A.D.	C59.199
o 23	<del>Δ</del>	1st-2nd C. A.D.	C59.274
*p 23	<del>Δ</del>	1st-2nd C. A.D.	C69.230
q 21/23	CAP [B]	1st-2nd C. A.D.	C64.596
r 24/25	CAP B	3rd C. A.D.	C67.478
*s 23	CAP B and Artemis Anaitis in oval punch	3rd C. A.D.	C68.83
*t 26	<sup>CAP</sup> in round punch	3rd C. A.D.	C67.189
*u 28	<sup>CAP</sup> <sub>S</sub>	Traces of portrait of Faustina I	C65.52
v 24	Δ	Traces of head of Caracalla/ temple	C64.12
w 29	Γ	Caracalla?	C64.710

Other examples of countermarked pieces can be found under the following catalogue numbers: 14, 15, 36, 42, 45, 49, 138, 151, 171, 177, 182, 208, 215, 233, 316, 333, 343, 344, 373, 380, 398.

## NOTES TO GREEK CATALOGUE

1-6 See M. Thompson, "The Mints of Lysimachus," in *Essays in Greek Coinage Presented to Stanley Robinson*, ed. C. M. Kraay, G. K. Jenkins (Oxford 1968) 172-173.

Lysimachus ruled at Sardis ca. 301-286 B.C. and established both his treasury and a mint in the city. In the upheavals of the 280's Sardis was captured by Demetrius in 287, retaken by Lysimachus, and finally recaptured by Seleucus I in 282, though Margaret Thompson thinks that coinage for Lysimachus had already ceased in 286. Tetradrachms, staters and two sizes of bronze were struck. The bronze shares the same monograms as some of the silver: those of 1 and 3 occur on silver of Sardis. A very similar type of lion protome r. was later used as a reverse type for the autonomous bronze of Sardis in the first century B.C., 238-242.

7-9 See M. Thompson and A. Bellinger, "Greek Coins in the Yale Collection IV. A Hoard of Alexander Drachms," *Yale Classical Studies* 14

(1955) 1-45, for the attributions to the mints of Lampsacus and Colophon. It is not certain whether there was a mint at Sardis, as Thompson and Bellinger suppose, but the absence in the finds of monograms given to Sardis cannot be taken to be significant in view of the small number of examples.

10 See L. H. Cope. "Surface-silvered Ancient Coins," in *Methods of Chemical and Metallurgical Investigation of Ancient Coinage*, ed. E. T. Hall, D. M. Metcalf (London 1972) 262-265, for a brief discussion of the phenomenon in general. A similar piece was bought by the expedition in 1973, but I have only seen it in a photograph. Copper cores were clad with silver sheets which fused when heated, and the flans were then struck, producing a more convincing "silver" piece than the technique of "washing." The surface of our examples is pitted and flaked, as the regular drachms are not, and the style is somewhat crude, suggesting that they are probably ancient counterfeits, although it is possible that some of the plated coins may have been uttered officially.

**11-21** See A. R. Bellinger, "Philippi in Macedonia," in *ANS MN* 11 (1964) 37-52, for references to the Drama Hoard.

Attribution to mint and reign is only possible where the reverse symbols are legible, which is unfortunately rarely the case for the Sardis finds. Many of the pieces are badly corroded in a manner so closely resembling that of many of the "illegible Hellenistic" category, **399**, that it is likely that a large part of that group may belong here. The alloy used here has reacted, probably to water, by expanding like *pâte feuilleté* into many thin layers, held together only at the core, so that the flan becomes more than twice as thick as it had been originally.

**27** See Magie, 1254 n. 68 for a list of cities striking for C. Papirius Carbo with similar types.

**30** Imhoof-Blumer, *Die Antiken Münzen Mysiens* I (Berlin 1913), no. 151, incorrectly gives the obverse legend as Π CEII. This issue must date from the years after Geta had been made Caesar, but before he adopted his uncle's praenomen, Publius.

See also Kraft 50-51 and pl. 66: 25. According to Kraft, Adramyteum had been supplied by Pergamum during the reign of Commodus but switched to Cyzicus shortly after A.D. 200.

**32-57** See H. von Fritze, *Die Münzen von Pergamum* = *APAW* (1910) *Anhang, Abh.* 1, and E. V. Hansen, *The Attalids of Pergamum* (Ithaca 1971) 475-484.

The monograms seem to represent both magistrates and cities (Ⲁ: Thyatira; Ⲁ: Pergamum; Δ: Dionysopolis), though von Fritze thought that the coins might have been struck for, rather than at, the cities named, since examples of all the city monograms had been found at Pergamum. The monograms would then perhaps mark the contributions that the city in question had made to a festival honoring Athena or Asklepios.

There are 92 Attalid bronzes from the excavation, by far the largest category of identifiable second century material and presumably the standard currency of the period in Sardis. While the Pergamene issues were so abundant, it seems improbable that Sardis would have struck its own autonomous bronze. Von Fritze felt that both the royal and the municipal coinages of Pergamum

ceased with the creation of the province of Asia, though the issues must have continued to circulate in the first century B.C. Consequently I prefer to date the coinage in the name of Sardis after 133 B.C.

**62** This is one of the earliest Greek Imperial alliance issues. There had been earlier alliance coins but the parties to the alliance were not usually named and the alliance could only be inferred from the conjunction of types. In the first century A.D. the cities are usually represented by figures of the *demoi* rather than by their patron deities, and it is only later that the word OMONOIA occurs in the legend. This issue must be contemporary with that of the Sardis-Pergamene alliance, **269**. Perhaps each was intended for distribution in the other city, since six examples of the Pergamene (i.e. "foreign") issue and only a single example of the "domestic" issue were found at Sardis. The nature of the alliance is not known. The temple of Roma and Augustus, the reverse type of the Pergamene issue, was a provincial cult in which Sardis shared, so that the coins might celebrate some religious collaboration, although it is equally possible that the alliance was commercial or agonistic.

**90** The alliance must date from about A.D. 160 since the British Museum has an example with the same types but different obverse and reverse dies, the obverse legend giving Marcus Aurelius the title of Augustus (*BMC* 416). The placing of A·K after the personal name on the die of the find coin suggests that Marcus Aurelius was still Caesar at the time of the issue, with A = *autokrator* used in the Roman sense of *imperator*. The laurel wreath is not restricted to the emperor, since both Marcus Aurelius and Lucius Verus Caesar appear laureate on the coins of Ephesus (e.g. VA 1890). The obverse die was also used with two "domestic" reverses of Ephesus: a) ΕΦΕCΙΩΝ ΘΕΑ ΡΩΜΑΙΩΝ NEIKH Nike standing r. inscribing shield on palm tree (SNG Fitzwilliam 4443—obverse legend incomplete and reverse apparently tooled; Paris 739 = Waddington 1633, Paris 745); and b) ΦΑΥCΤΕΙΝΑ·CΕ·ΕΦΕCΙΩΝ·Β·ΝΕ·ΠΙΡ Bust of Faustina II draped r. (*Paris* 740), which gives a certain *terminus post quem* of A.D. 145, the marriage of Marcus and Faustina, for the issue.

Ephesus struck other alliance coins at the same period, with Hierapolis (Marcus Aurelius Caesar,

ex Hecht collection, and Augustus, Paris 726), and Tralles (Paris 730, obverse die shared with *BMC* 416). There is nothing to indicate what the reason for the alliances might have been, nor whether the three were associated in any way. If there were reciprocal issues by the other cities, they seem not to have survived.

Ephesus and Sardis struck other alliance coins under Commodus (Weber 5906) and Caracalla (Paris 823); in the latter instance we also have the reciprocal issues by Sardis (*BMC* 215-216, VA 8258). All show Artemis Ephesia and the Kore of Sardis as the representatives of the cities, even though the Kore had not yet appeared on the coinage of Sardis itself at the time of the Marcus Aurelius issue. Ephesus and Sardis had had very close relations since the time of Croesus and the cults of Artemis in the two cities were associated.

**91** For the third neorate of Ephesus, see J. Keil, *NZ* (1915) 125-128 and L. Robert, *Rev Phil* (1967) 44-64. The neorate was originally intended for Caracalla and Geta (see the coins of Caracalla and of both brothers with reverse type of two horsemen saluting a statue of Artemis Ephesia, VA 7871 and 1904, and reverse legend ΤΡΙΚ ΝΕΩΚΟΡΩΝ ΚΑΙ ΤΗC ΑΡΤΕΜΙΔΙΟC), but after Geta's murder Caracalla granted the title to the Artemis temple. In the absence of magistrates' names the titles provide one of the few clues for dating the Severan family issues: δις νεωκόρος up to 211-212 A.D. and either τρίς or τρίς καὶ τῆς Ἀρτέμιδος thereafter

**92** An additional imperial neorate was granted to Ephesus, Sardis, and Nicomedia by Elagabalus ca. A.D. 219-220; perhaps only an expressed intent to honor the emperor was required for the title, since no trace of a temple has been found at Ephesus or Sardis. At both cities, however, games were held in honor of the emperor or his god, and coins were struck to commemorate the occasion (Elagabalia at Sardis, Paris 1285; Olympia at Ephesus, Paris 892, with head of Elagabalus in wreath). Both cities reverted to their former titulature with the *damnatio* of the emperor.

**106** The neorate titles of Miletus are something of a puzzle. The obverse die also occurs with a reverse of Tyche and the magistrate Aur. Aelianus but no mention of the neorates (Oxford). A reverse of Julia Soemias (Waddington 1877) is

more explicit, referring to Β νεωκόρων τῶν σεβαστῶν, which suggests that both neorates were full imperial titles and had not been awarded for the local cult of Apollo. Presumably the second neorate had been granted by Elagabalus and was dropped after his death, since the coins of Balbinus and Pupienus, the first issues subsequent to Elagabalus' *damnatio*, bear the legend Μιλησιῶν νεωκόρων. For a brief discussion of the first neorate under Caligula, see Magie 1366-1367, note 46. The sources are Cassius Dio (59.28.1) and an inscription recording the priestly hierarchy for the temple (Robert *Hellenica* 7 (1949) 206 ff.). Coins of Miletus of Caligula's reign show a hexastyle temple (*BMC* 143) but neither they nor any other coins of the city prior to Elagabalus make any mention of the neorate. Titles did not usually survive the *damnatio* of an emperor for whom they had been granted. It seems curious that Miletus should retain the title for Caligula but not for Elagabalus.

Miletus chose to employ its own engravers most of the time, but occasionally dies were drawn from the "Ephesus" workshop, as appears to have been the case in the reign of Elagabalus. Issues were struck with portraits of the emperor, Julia Maesa (grandmother of Elagabalus and Severus Alexander), Julia Soemias (mother of Elagabalus), and Severus Alexander Caesar. While there are no actual die links, the style of the obverses is very close to the contemporary dies of Ephesus (see Kraft pl. 13; the engraving of VA 1907, Julia Paula, is especially reminiscent of the Maesa obverse). The Nike reverse, which is otherwise known at Miletus only for Plautilla (*BMC* 162), was used quite commonly at Ephesus and occurs with obverses of Annia Faustina and Julia Paula in the reign of Elagabalus.

**109** For the dating to the reign of Philip, see Kraft 26-27.

**115** For the dating to the reign of Gordian, see Kraft 28 (035) and pl. 10:72.

**116** Although this particular obverse die was not used elsewhere than at Sardis it can be dated on the basis of the similarity with the dies of Kraft pl. 9-10, nos. 68-73.

**117** Uncertain city, though a product of the "Smyrna" workshop; see Kraft pl. 10:75. The

obverse die was used at Cyne, Hyrcanis, Temnus and Smyrna, all with similar reverse types, including the Nemeses, who were proper to Smyrna. The ethnic in the exergue is wholly illegible and the rest of the legend is very indistinct.

**120** Struck under Ti. Catus Silius Italicus, the epic poet, proconsul of Asia ca. A.D. 77.

**121** Struck under L. Mestrius Florus, proconsul A.D. 83/84.

**132** According to the finder, this coin came from the vicinity of the sulphur baths Sart Camur Hamam, ca. 3.5 km. S of Sardis: Hanfmann, *Letters* 126 fig. 91.

**133** From Sector PN W245/S375 \*87.90-15, the floor of an apsidal structure; see *BASOR* 166 (1962) 22 figs. 14-15, and note on contexts, *supra*.

**136** No exact parallel appears in any published collection, the closest being *BMC* 1 (time of Nero?). The magistrate's name occurs with obverses of both Trajan and Septimius, but what remains of the fabric suggests that the coin is earlier rather than later and could be first century.

**139** Several cities honored Gaius, as well as his younger brother Lucius, after his appointment as emissary extraordinary to the East in 1 B.C. (see Magie 1343, n. 41). The Cilbiani had not struck coins before and did not do so again until Nero (Superiores) and Domitian (Inferiores).

**141-143** For the location of the city in Mysia, see L. Robert, *Villes d'Asie Mineure*, 2nd ed. (Paris 1962) 171-201 and 377-379.

**144** See F. Imhoof-Blumer, *Lydische Stadtmünzen* (Geneva 1897) 166; L. Robert, *loc. cit.* 177-178 and pl. 6; Kraft 88 and pl. 115, for comments on the apparently homogeneous series of small bronzes from numerous cities with types of Herakles and lion. Kraft briefly mentions the existence of other reverses with the Herakles head obverse, and considers that there are other series which may be contemporary, for example those with Sarapis and Athena obverses. Robert and the earlier writers consider the Herakles series to be an indication of some kind of monetary union, whereas Kraft, seeing the series in the context of the vast network of die-linkage that he has pieced together, feels that

there need be no special political or financial significance.

The Herakles obverse occurs most frequently with the reverse of lion walking r., but there are at least seven other reverses: Telesphorus, bee, stag, ram, bull, eagle and bunch of grapes. The series with Athena obverse comes in two sizes, one apparently the same as the Herakles (14 mm. in diameter, weight range 1.4-2.8 g.), and one larger (19 mm., 3.2-4.5 g.), approximately the size of the Sarapis/Isis pieces. The small Athena most often has Telesphorus as the reverse type but also has reverses of kalathos and Tyche and shares the lion, bee, stag and grapes with the Herakles series. The larger Athena series is less homogeneous in style and in choice of reverse types and may be slightly later. As Robert has pointed out, the coins were not struck south of the river Hermus, so that Sardis is not included. Kraft identifies the area as coincident with the "supply area" of the "Pergamum" workshop in the late 190's and early 200's. A similar homogeneity can be seen in the small Septimius/Asklepios pieces struck in roughly the same area, Kraft pl. 65. The larger Athena series overlaps in size with the smaller denominations bearing an imperial portrait, but the Herakles and the small Athena were the smallest denomination issued in the third century and the types may have been chosen as a readily identifiable denomination mark. Several examples of both the Herakles and the Athena groups were found at Sardis (Elaea 71, Gordus 144, Thyatira 318-319, Tripolis 330, Synaus 349, and Temenothyræ 350), so that it is clear that, whatever their initial purpose, the coins circulated beyond the area in which they were struck.

**145** The issue was probably struck in the early 200's and belongs with the main output of the period, part of Kraft's Group C (map 11), though the obverse is not die-linked with any other city. There appears to be only one die pair of Caracalla as sole ruler (Cop 161) and that rather crude.

**153-155** In the early second century A.D. Maconia seems to have taken several issues of Sardis, datable to the 90's and 100's, as models for the smaller denominations of its own coinage, perhaps using the same engraver initially. See individual notes to 153-155 below.

**153** Obverse and reverse perhaps imitated from Sardis **257**. For the reverse type see note to **301** below.

**154** Even though the reverse type and ethnic have been completely eroded, the piece is nonetheless assignable to Maeonia on the basis of the obverse type. Zeus is the standard type at Maeonia for the 25 mm. denomination, usually with Roma reverse (see Kraft pl. 96:48-50), and with magistrates who can be dated from Hadrian to Marcus Aurelius.

**155** Obverse and reverse as Sardis **253**. The myth of Herakles and Omphale was appropriate to both cities since it pertained to the far distant past when Lydia was called "Maeonia" (Pliny *NH* 5.30.14). Both types are standard for the 20 mm. denomination from Trajan to Septimius Severus at Maeonia.

**157, 160** The pattern of production for Maeonia in the third century illustrates clearly the problem of discovering what determined the striking of local issues. Output in the second century appears to have been fairly steady, with a predictable flow of types and denominations for Trajan, Hadrian, Antoninus Pius and Marcus Aurelius. The city did not join in the general expansion of coinage in the third century, and after a short period of activity ca. 200 when dies were supplied by "Sardis," coinage ceased. There is one crude issue for Caracalla's sole reign, consisting of one die pair for 36 mm. and 30 mm. sizes (*BMC* 48 and Boston), and then dies were again drawn from "Sardis" for a tiny issue for Julia Mamaea (30 mm., Kraft pl. 32:30) and Severus Alexander (25 mm., **160**). Finally, after a twenty year interval without coinage and at a time when virtually every other city had abandoned local issues, Maeonia joined the "Ephesus" supply area and struck coins in four denominations. Some of the dies are shared with Philadelphia, a more habitual client of "Ephesus"; the supply area had not reached so far to the northeast since the reign of Septimius Severus.

Unlike the other third century issues, which comprised only two denominations with one die pair each, the issue for Trajan Decius and family consists of several dies for each denomination:

35 mm. Trajan Decius two obverses, (*BMC* 53,  
two reverses           ANS)

30 mm. Etruscilla	three obverses, ( <i>BMC</i> three reverses   54-57)
25 mm. Senate	one obverse, ( <i>BMC</i> three reverses   26-29)
20 mm. H. Etruscus	one obverse, (Prowe two reverses   1486)
20 mm. City	one obverse, (Cop 230, one reverse   157)

This issue is larger than any struck for more than fifty years in the name of the city. Since the issues at Hypaepa and Philadelphia for Trajan Decius, also from the "Ephesus" workshop, comprise a full range of denominations with more than one die pair, one wonders whether the format of the issue in this instance were dictated by the workshop rather than by the issuing city. On the other hand, the inclusion of the Senate type is interesting because Ephesus itself struck no "autonomous" coins in the imperial period and there was no third century precedent at Maeonia. Philadelphia, however, had had frequent "autonomous" issues and has a Demos as the equivalent type for the Trajan Decius series. It appears that the workshop had followed the types traditional to Philadelphia, and then provided an equivalent for Maeonia.

The peculiar pattern of issues raises many unanswerable questions. If there had been no need for coinage for twenty years, what precipitated the issue for Trajan Decius? Was the impetus internal or external? It is not as if Maeonia were in the depths of the Phrygian mountains, remote from events in the rest of the province. Had the city earlier suffered a political or economic setback? Or did the local authorities merely prefer not to have the trouble and expense of a coinage in the city's name? Who provided the metal for the late issue amid the upheavals of 249-251? The obverse and reverse dies all seem to be from the same hand, but there is more than one die for some of the reverse types, which suggests that a given quantity had to be struck, whether at Maeonia or Ephesus, and the dies were replaced as they broke. Was the supply of metal then part of the responsibility of the workshop? Why did Maeonia choose to deal with "Ephesus," rather than with the workshop operating in the western Hermus valley, supplying Gordus and Magnesia?

159 There are no parallels for either obverse or reverse types, and the reverse legend is unfortunately very distorted so that the reading is tentative.

The obverse portrait is definitely of Hadrian, though the titles are more typical of Trajan. Münsterberg gives similar legends but not this particular one.

The reverse type has no obvious parallels and appears to be a reference to Hadrian's initiation into the Eleusinian Mysteries. There is little problem with the identity of the female figure at the left, holding stalks of grain in her hand, who must be Demeter or Persephone. The figure at the right is more ambiguous, but the possibilities can be narrowed down: the figure is male and togate, since a female would have the chiton gathered slightly at the waist as the toga is not; he is veiled, which suggests a religious occasion and rules out the likelihood of the figure being a personification of the city or Demos, or a deity. It is possible that this might be a local dignitary, as the proconsul did sometimes appear on the local coinages, but it is rather more likely to be the emperor. The type bears a superficial resemblance to the 'Adventus' types on the Roman coinage proper, which show the emperor together with an appropriate province sacrificing at an altar. The emperor on the Sardis piece is veiled, whereas he is bareheaded on the Roman, and the female figure is unlike any of the provinces (Africa, who does carry ears of corn, wears a very distinctive elephant skin headdress).

Hadrian visited Greece twice, passing the first grade of initiation at Eleusis in the autumn of A.D. 125 and the second on his return in 128-129. The secrets of the ceremonial were never revealed, so the scene can be taken as merely symbolic of the meeting of emperor and goddess. It is perhaps surprising that Hadrian's initiation was not a more common subject for pictorial representation, since one would suppose that the Greek population of the Empire must have been touched by the gesture, as they were by Hadrian's other philhellenic enthusiasms. I am most grateful to William Metcalf for pointing out to me the article of D. Kienast, "Hadrian, Augustus und die eleusinischen Mysterien," in *JNG* 10 (1960) 61-69, in which he associates the reverse type of a cistophorus of Hadrian with the initiation at Eleusis. The reverse there shows a togate, but not veiled, figure holding a bunch of

grain. The legend reads HADRIANUS AVG PP REN, which Kienast interprets as "... *renatus*" and supposes to refer back to Augustus' initiation at Eleusis. Kienast dismisses the possibility that the type might refer only to imperial donations of grain or to the maintenance of the Egyptian grain supply, on the grounds that the standard types of Annona and Liberalitas would have been used. There is, however, no indication that the occasion is religious since the figure is not veiled, and the interpretation of REN is not certain. There seems to be no other numismatic reference to the initiation.

A city with its own cult of Demeter might identify with the Eleusinian cult and wish to commemorate the event on its coins. Demeter was regularly used as a type at Maeonia but nothing is otherwise known of her cult.

160 See *supra* note 157.

168 The type is a common second century one at many Lydian cities; the style in this case is rather closer to the coins of Trajan (VA 3035-3036) than to the spiky style of the Hadrianic portraits (VA 3037) and the Hadrianic issues with these types (*BMC* 11-12).

172-174 Caracalla granted the title of *neokoros* to Philadelphia in A.D. 212 (*JGR* IV.1619), after which it is invariably included in the legends on the coins and provides a clue in dating the autonomous third century pieces.

178 This handsome piece appears to be unique. The magistrate is already known from several other pieces of Caracalla and Julia Domna, probably dating from the latter part of the sole reign since the portraits all show Caracalla at his most brutish.

- |        |           |      |   |
|--------|-----------|------|---|
| 35 mm. |           |      |   |
|        | Caracalla | obv. | = Sardis (Cop 532) and Hypaepa (Coll. Naegeli)                            |
|        |           | rev. | Emperor spearing foe (Paris 1008 = Kraft pl. 29:6)                        |
| 30 mm. |           |      |   |
|        | Caracalla | obv. | = Sardis ( <i>BMC</i> 167)  |
|        |           | rev. | a) laurel wreath, ΔΕΙΑ ΑΔΕΙΑ ( <i>BMC</i> 87)                             |
|        |           |      | b) tetrastyle temple with cult statue of Helios ( <i>BMC</i> 86, VA 3081) |
|        |           |      | c) table with two prize   |



crowns (Berlin = Kraft  
pl. 29:5)

Julia Domna

table with two prize  
crowns (*BMC* 79-82)

There are no smaller denominations with this magistrate's name. The 18-25 mm. coins of Caracalla and Domna with the legend ΦΙΛΑΔΕΛΦΕΩΝ ΝΕΩΚΟΡΩΝ are of very different style. Our piece provides the largest denomination and probably was intended as a coin, though of medallic proportions. A similarly large piece was struck for Caracalla and Geta (*BMC* 88), while 38-40 mm. dies were not unusual at Sardis, which was supplied by the same workshop at this period. The engraver of the Philadelphia dies was one of at least two employed by the workshop at the time; the small neat letters and the angle of the sleeve on the obverse are characteristic.

The reverse is magnificent in conception but less successful in execution. Caracalla had appeared as Sol in quadriga on the gold and silver of the Rome mint in the early 200's (*BMC* RE V pl. 40: 4-5), and the type is found elsewhere in Asia (e.g., Cilbiani Inferiores, *BMC* 16). The equation of Caracalla with Helios would have been particularly appropriate at Philadelphia, which had a shrine of Helios (for the temple: Marcus Aurelius, *BMC* 73; Caracalla, *BMC* 86; Severus Alexander, VA 3083; for Helios running: Commodus, *BMC* 74; Julia Domna, Paris 1007; Trajan Decius, VA 3085). Perhaps the grant of the neocorate was associated with the amalgamation of the cult of Caracalla with that of Helios. Barbara Levick, "Caracalla's Path," in *Hommages à M. Renard II Collection Latomus* 102 (1969) 426-446, discusses the possibility of Caracalla's having visited Philadelphia on his way through Asia Minor in A.D. 214-215, but discounts the neocorate as too early to be associated with the imperial progress and hence as evidence of his visit. She suggests that Caracalla, like his hero Alexander the Great, turned west from Sardis to Ephesus, instead of continuing through Philadelphia to Hierapolis. Levick's detailed analysis leaves much to be desired,<sup>1</sup> but her general thesis, that Caracalla

would have followed Alexander as closely as possible, is persuasive. The city had not existed in the days of Alexander and hence would not have attracted Caracalla in his obsessive emulation of his hero.

**180** The reverse legend is not clearly legible but the pose of Dionysos with legs crossed, usually leaning on a short column, is peculiar to Sala, so that the attribution is fairly certain.

**182-314** The coins of the mint of Sardis have proved too numerous and too varied for the inclusion of a complete mint study in the excavation volume in the manner of Regling's *Priene*. A monograph on the coins of the imperial period is in preparation and will give fuller treatment to many of the points touched on in the following notes.

A mint probably existed at Sardis intermittently from the seventh century B.C., normally producing coinage for an area wider than the city: for the Lydian kingdom, for the Persians and the subsequent Greek conquerors. The city probably did not strike coins in its own name until it achieved a certain measure of autonomy under Roman rule, after 133 B.C., apart from a small issue of tetradrachms which H. Seyrig dates in the 220's (see introduction *supra*, n. 31). There is no obvious overlap between the Pergamene coinage of the earlier part of the second century and the pre-imperial bronze of Sardis in fabric, style or type to provide an established starting point for the latter. The coins of the other Lydian cities that struck issues before the reign of Augustus are equally difficult to date and comparisons with the coins of Sardis reveal little.

Originally it appeared feasible to arrange the coins in at least a relative chronological sequence, using the material in museum collections as well as from the excavations. Unfortunately the coins were too poorly struck in the first instance and are now not sufficiently well preserved to permit a die study. There is almost nothing to be relied upon as a basis for arrangement beyond the subjective apprehension of style. The archaeological contexts at Sardis have not clarified the chronology since none of the

1. See her remark on Sardis, "Magie attributes the second neocore of Sardes to a grant of Elagabalus, but coins of Caracalla already seem to claim it (*SNG* Cop 529ff.)." A more careful examination of the material, and a more careful reading of Magie, would have revealed that the *second* neocorate goes back to Albinus (*BMC* 146) and that

Magie is referring to the *third* neocorate. Furthermore, the coin which she cites in support of her argument for the visit of Caracalla to Sardis, VA 3159, is signed by the asiarh Vettienianus, and a glance at VA 3162 would have indicated that Vettienianus must be pre-A.D. 209 as he also signed coins of Geta Caesar.

local bronze was found in sealed deposits and none of the associated finds could be closely dated. The following discussion is therefore tentative in its conclusions and the observations are the fruits of familiarity, in the absence of more solid evidence.

The difficulties of establishing relationships between issues can be revealed by an examination of the two major series of Hellenistic bronze, with types of Apollo/club, **183-198**, and Herakles/Apollo, **199-227**. Both have monograms, presumably of the responsible magistrate, but in the few instances where these are shared by both series one cannot be sure that they indicate the same person, rather than a common name or a common monogram form of different names. Denomination is another problem: one would like the Herakles/Apollo to be the larger and the Apollo/club the smaller denomination, but both vary considerably in weight and fabric and no consistent distinction can be made. Both were presumably struck over a period of years since there are over sixty monograms for the Apollo/club series and over seventy monograms and names for the Herakles/Apollo. The changes in weight and fabric could have occurred over fifty years, but the direction of change can only be conjectured. Both series seem to progress from a cramped to a freer style, from a small head to a larger, from a thick dumpy flan to a broader thinner flan. This progression is supported by the resemblance of the coins of Augustus and Tiberius to the broad flan, freer style pre-imperials, and by the use of a type almost identical to the Herakles/Apollo under Tiberius, **245**, suggesting that the series was still remembered, if not actually in circulation, at that time. There is not much apparent connection between the Herakles/Apollo and the Apollo/club on the one hand and the rest of the pre-imperial bronze on the other, nor among these last.

**182** Coins of this type are struck on unusually thick and dumpy flans, which might logically be taken to be the earliest independent issue by analogy with the Herakles/Apollo. The fabric is totally unlike the Pergamene, however, so that it seems unlikely that this series followed on immediately. There appears to be only one die-pair, which suggests a small issue. The issue may have been an isolated one and the countermarking of most surviving examples may indicate revalidation when a differ-

ent system was introduced.

For the reverse type, see note to **301**.

**183-198** The type in wreath may be an echo of the cistophorus and its fractions; several Lydian cities (Blaundus, Philadelphia, Thyatira and Tralles) struck similar bronze in the second-first century B.C. The combination of types referring to Apollo and to Herakles suggests that the Apollo/club and the Herakles/Apollo series belong together, perhaps with the former beginning slightly earlier since the Herakles/Apollo never exhibits the same degree of dumpiness of flan.

There are variations in style, from a small head with hair tightly rolled, to a larger full-cheeked head with loose locks of hair escaping from the laurel wreath, from large wreaths and monograms on the reverse to tiny neat ones. There are variations in fabric from 13 mm. flans weighing 5 g. to 15 mm. flans weighing 3 g. As noted above, these variations coupled with the large number of different monograms suggest that the series extends over a lengthy period. Amongst the find coins there are three new reverse monograms, **183-185**, and one new obverse monogram, **197**.

**199-216** There is less variation in the fabric than in the Apollo/club series, though weights range from 3.2 g. to 7.7 g. and the diameters from 14 to 17 mm. Die positions are more consistent than for the Apollo/club, all † or / or \. The scale of the reverse makes style difficult to assess, but on the obverse there is a change from small heads contained within a beaded border to large heads that fill and overflow from the flan, with no visible border except when the die failed to strike squarely. Several examples are countermarked on the obverse with a rectangular punch containing a club which is also found on museum examples of the full name series, **217-227**, and on the Tyche/Zeus Lydios series, **231-234**.

The reverse type also occurs as a symbol on the cistophori (ANS).

**217-227** There is comparatively little variation in fabric and the heads are all of the "later" generous proportions.

Several of the names are known from inscriptions datable to the first century B.C.: Moschion (**219**, *Sardis* VII (1932) 8 XI, *strategos*), Metrodorus (**221**, *Sardis* VII 8, 24, 118, the last a priest of

Rome ca. 75 B.C.), Socrates (222-223 *Sardis* VII 22, ca. 98 B.C., and IN 69.48, epitaph of 39-29 B.C.), Menoitos (226 *Sardis* VII 116, epitaph ca. 100 B.C.), Menogenes (Berlin, *Sardis* VII 8), Apollonios (Vienna, *Sardis* VII 5), Lysimachos, son of Menophilos (SNG Fitzwilliam 4883, *Sardis* VII 123), and Menodotos (Waddington 5204, *Sardis* VII 5). Meneitas, 217, is the only addition to the list of names. There is a possible overlap with the magistrates of the Artemis/Athena series, 243-244. The names Demetrios and Polemaios are found on both (Waddington 5201; Berlin; ANS; *BMC* 54-56), and the monogram  $\beta\epsilon$  with Heraios on *BMC* 36 may stand for  $\text{NE}\Omega\text{T}$  (*BMC* 53).

228-230 The fabric resembles that of the dumpy flan Apollo/club with which some of the monograms overlap:  $\Delta\Upsilon$  (226, McClean 8708),  $\text{HP}$  and  $\text{PH}$  (229 individually on *BMC* 12 and 18, and together on one die with Dionysos/panther type in Berlin),  $\text{H}$  (ANS, Oxford),  $\text{H}$  (Berlin, 2 pieces). The series may have been a slightly smaller denomination than the Apollo/club.

231-234 Although veiled heads of Tyche abound in western Asia Minor, the veiled and turreted head of Tyche is a type peculiar to Sardis. It may have been adapted from a statue. A very similar head is found on a third century A.D. version of the type, 261.

For the reverse type, see Zeus Lydios, *supra*.

There are relatively few monograms or monogram combinations for this series, only eleven being represented in the major collections as against more than seventy for the Herakles/Apollo. Several of the monograms are found on other types:  $\text{HP}$   $\Sigma$  (Paris, and Dionysos/panther, Brussels), and  $\text{H}$  (Berlin, and Dionysos/lion, Hunter 7). If the latter stands for the name Sinnaros there is an overlap with the Herakles/Apollo series (*BMC* 34). The countermarks, 233, are also found on coins of the Herakles/Apollo series of which this could be the double. Several dies carry two monograms but whether this indicates two magistrates (cf. the dating by both priest of Rome and of Zeus Polieus in the first century B.C. *OGIS* 437) or name with patronymic, as on the Artemis/Athena series, is not clear.

235-237 Dionysos is highly appropriate as a type in his native district. The panther, his habitual companion, is found as a symbol on the cistophori in

the name of Sardis (VA 3124, Cop 462), horned and breaking a spear in his mouth as here. The alleged coin of Nysa with the same types (*BMC* 18) is rather worn and is probably a piece from Sardis.

The flans and weights vary considerably (weight range 3.83-6.16 g.) and could represent issues over several years. There are at least two monogram combinations known from other series:  $\text{HP}$  and  $\text{PH}$  (see note to 228-230), and  $\text{HP}$   $\Sigma$  (see note to 231-234).

238-242 The reverse type is an echo of the bronze of Lysimachus, 3-6.

The issue may be roughly contemporary with 231-234 since some of the monograms are common to both types, as well as to the Herakles/Apollo series.

243-244 For the type of Artemis, see Artemis and Kore, *supra*.

The cult of Athena had been strong under the Attalids, when Panathenaia games were established at Sardis (*OGIS* 305), but there is little mention of Athena from the beginning of the Empire.

L. Robert, "Recherches Épigraphiques," in *Revue des Études Anciennes* 62 (1960) 342-346, has linked one of the magistrates of the series, Alcaeus son of Alcaeus (*BMC* 57-58), with the man of the same name who was poisoned on the orders of Mithradates ca. 88-85 B.C. and who had been priest of Zeus Polieus in 98 B.C. See note 217-227 for the names common to the Herakles/Apollo and Artemis/Athena series.

245 This issue has been mentioned in the notes above as a possible continuation of the Herakles/Apollo series, since both obverse and reverse types copy the earlier issue with only slight variation, and since the module is close to that of the later examples with full name.

247 This is one of the few examples of an overstruck piece where the undertype is legible. Two other examples of this type (*BMC* 69, Berlin 503/1896) are overstruck on the same issue of Apollonos Hieron, and most specimens show traces of overstriking. The withdrawal and overstriking of coins with the portrait of Nero is explicable in terms of his *damnatio*, but it is odd to find such a high proportion overstruck at Sardis, a considerable

distance from Apollonos Hieron although within the same *conventus*.

After Nero, the mint at Apollonos Hieron was not active again until the reign of Hadrian, if indeed its coins had been struck there in the first place. There are stylistic similarities with Hypaepa in the treatment of the obverse portrait of Nero (compare Hypaepa VA 2961), and with Sardis in the legends with squared letters (compare coins of the magistrate Mindios, *BMC* 116-120). It is not inconceivable that a small place like Apollonos Hieron, producing issues intermittently, should have used engravers from other cities and might even have had the coins struck elsewhere and brought in.

The portrait of the undertype is of a mature, thick-necked Nero, and must belong to the latter part of his reign. If the Marcellus of the Sardis overtype is T. Clodius Eprius Marcellus, ex-governor of Lycia and proconsul of Asia from A.D. 70-73, there would have been a lapse of three or four years between the two issues. We know very little about the procedure for dealing with coins in the circumstances of *damnatio*. Inscriptions were obvious and easily altered but coins very often escaped erasure, to judge by the large numbers that have survived. Systematic recall does not seem to have been attempted, but there may have been partial withdrawal as coins passed through official hands. Where there were double portraits (e.g. of Domitian and Domitia, or Caracalla and Geta) the offending one was often chiseled off, but whether officially or as an act of private zeal we cannot know. On the other hand there are coins of Elagabalus, such as 344, which were subsequently countermarked without being defaced or withdrawn.

There is another issue in the name of the magistrate of the obverse, T. Claudius Philinos, at Sardis:

17 mm. CAPΔIANΩN in wreath  
Mên, legend as 247 (Imhoof, *RSN* 6 (1896)  
289 no. 9, Gotha, now  
Munich; *RSN* 14 (1908)  
18 no. 3)

The Munich piece appears to be overstruck, and Imhoof describes the other piece as overstruck on

the Nero/Herakles type of Sardis, *BMC* 120, which perhaps suggests a policy of withdrawal and overstriking.

For the temple on the reverse, see Neocorates, *supra*.

**249-250** It is characteristic of the coins of Nero and of Vespasian at Sardis to have legends of both obverse and reverse running counterclockwise and reading outwards. The style and lettering are quite unlike those characteristic of Neronian types, whence the date suggested for this anonymous issue.

**251** The Demeter reverse is certainly prior to A.D. 96 since several examples are stamped ΔOMITI on the reverse and one reverse die (*BMC* 73) was also used as the reverse for Nerva (*BMC* 130). The countermark must have been meant to equate Domitia with Demeter. Mattingly (*BMC* RE II xcvi) asserts that Domitia appears as Ceres on Roman bronze, but the only citation in the catalogue (p. 414, obverse bust of Domitia wearing wreath of corn ears) is questionable. Domitia does seem to be associated with Demeter on a coin of Smyrna (*BMC* 305, pl. 29:1), where the reverse type of Demeter Horia is accompanied by the legend ΔOMITIA ΘEA.

The standard of engraving for the coins of the reign of Domitian (251-253) is unusually high, the heads are finely detailed and the figures are elegant and well proportioned. The large serifs in the lettering seem to have been sketched in with compasses.

**252** See note on Neocorates, *supra*.

**253** For the first time Herakles is shown as bearded and mature on the coinage of Sardis, perhaps undeniably masculine in contrast to the myths associating him with Omphale in a very feminine capacity, spinning and wearing women's clothes. For the identical treatment of the same types, see Maeonia 155-156.

**254-255** See Neocorates, *supra*, for the temple. The dating is based partly on style and partly on the run of the legends, which is fairly consistent on the coins with imperial portrait of this date. The A with broken crossbar is found on the coins of Marciana and Plotina, 283-284.

**256** The magistrate is known from an inscription now lost (*Sardis* VII. 47), and from portrait coins of Trajan (Paris 1229) at Sardis.

The obverse and reverse types are straightforwardly Dionysiac but the inclusion of the bee may be another reference to a local myth (see note to **301**).

**257** The obverse head of Herakles is similar to *BMC* 81 but the engraving is rather cruder than that of the Domitianic version of the type. See note **301** below for the reverse type. Both obverse and reverse were copied at Maconia, **153**, in the early second century.

**258-259** The magistrate Darius signed three sizes of bronze:

30 mm. Antoninus Pius	Demeter ( <i>BMC</i> 138)
22 mm. Marcus Aurelius Caesar	cornucopiae ( <b>291</b> , <i>BMC</i> 142)
20 mm. Dionysos	wreath ( <b>290</b> , <i>BMC</i> 141) crossed thyrsos ( <b>258</b> ) torch ( <b>259</b> )

The absence of types for either Faustina may indicate a date in the early 140's.

**260** In the third century the 25 mm. and smaller coins frequently lack a magistrate's name and consequently are difficult to date with certainty. The head of the Senate closely resembles that of Caracalla on the coins signed by Cornelius Vettianus (Kraft pl. 70:59), an issue which lacks a 25 mm. denomination. There are also affinities of style with Gordus Julia (Cop 156) and Tabala (Weber 6917), which would fit in with Kraft's "group C" (map 11, A.D. 202-204).

**261** This series seems to have been the standard 17-19 mm. type throughout the period from Septimius Severus to Elagabalus. There are two dies with  $\Gamma$   $\text{NE}\Omega\text{KOP}\Omega\text{N}$  which must date from the third neocorate of Elagabalus; the coins of Maesa and Soaemias presumably mark the end of the series. The Kore reverse type is struck with Julia Domna obverse (*BMC* 149), probably datable to the early 200's by analogy with the small pieces of Attuda, etc. (Kraft pl. 80:27-29). Eleven obverse and thirteen reverse dies are known so far, struck on a variety of flans (17-22 mm., 2.6-5.4 g.) and cut by

several different hands.

For the Kore, see Artemis and Kore, *supra*.

**262-263** There are four reverse types of this denomination with Zeus Lydios obverse, one of the dies being signed by the magistrate Rufus (*BMC* 88). The heavy serifs and the generally neat engraving rules out the possibility of this being the Rufus who signed dies of Valerian and Gallienus, by which time the standard of engraving was very crude, and suggests a date in the latter part of Caracalla's sole reign. The obverse is reminiscent of the Zeus Aseis type at Laodiceia (*BMC* 133-137).

The only other known example of **263** was found in the Princeton excavations in very poor condition. Bell thought that the legend might read  $\Theta\text{O}\text{P}\text{A}\text{I}\text{O}\text{C}$ , normally an epithet of Apollo in his capacity of fertility god, or else  $\text{K}\text{O}\text{P}\text{A}\text{I}\text{O}\text{C}$ , pertaining to Kore. The latter reading now seems certain, although **263** is also very corroded, by analogy with the obverse of another issue not known to Bell (Paris 1174, Berlin) with bust of Dionysos r. and the legend  $\Delta\text{I}\text{O}\text{N}\text{Y}\text{C}\text{O}\text{C}$   $\text{K}\text{O}\text{P}\text{A}\text{I}\text{O}\text{C}$ .

**264** There are in all three reverse dies with a single obverse, two reading  $\text{B}$   $\text{N}\text{E}\Omega\text{K}\text{O}\text{P}\Omega\text{N}$  and one with  $\Gamma$   $\text{N}\text{E}\Omega\text{K}\text{O}\text{P}\Omega\text{N}$ . The condition of the coins is too poor for any progression of die wear to be discernable and consequently the date is uncertain, either Elagabalus or Elagabalus/Severus Alexander. There are similarities with Saitta, which drew dies from the same source in the 220's. The river god type is much more common at Saitta, and the obverse resembles the Saitta type of Men Aziotenos (*BMC* 23-24).

**266** The style of the obverse suggests that this issue belongs with the Herakleidianos pieces of Philip (*BMC* 200-201), in company with the 25 mm. pieces of Philip II, **312-313**.

**269** For the reciprocal issue of Pergamum and Sardis, see **62**.

**270** The types refer to the generosity of Tiberius after the earthquake of A.D. 17 (Tacitus, *Annals*, 2.47). The city received a grant of ten million sesterces and was allowed a remission of taxes for five years. *Sardis* VII no. 9 appears to be part of a resolution from the cities that had suffered in the

disaster, including Sardis, thanking the emperor for his help. Sardis took the name "Caesarea" in gratitude, hence the obverse legend. The examples of this type are struck on thinner flans weighing slightly more than half the usual weight of the other types of Tiberius, which may indicate straitened circumstances or else a desire to commemorate the emperor's bounty with as large an issue as possible.

**272-274** Any or all of the issues may be posthumous since coins for both Drusus and Germanicus struck at Rome after their deaths by Tiberius, and Caligula struck in the name of his father, Germanicus.

**273** *BMC* incorrectly reads "head r."

**274** The issue is traditionally attributed to Sardis but almost certainly belongs elsewhere. The original reverse legend reads ΕΠΙ ΑΡΧΙΕΡΕΩΣ ΑΛΕΞΑΝΔΡΟΥ ΚΛΕΩΝΟΣ ΣΑΡΔΙΑΝΟΥ, referring to the magistrate rather than the people of Sardis. The reverse type must be a reference to the games of the koinon (see *Agonistic Types, supra*) and would be appropriate to Pergamum, Ephesus or Smyrna, as cities where the major games were held.

Many of the known examples, including all the find pieces, are overstruck on the outer rim, cancelling the earlier reverse legend. C. Asinius Pollio was proconsul in A.D. 37-38, which provides a *terminus ante quem* for the original issue, which could date back to the appointment of Germanicus as supreme authority in the East in A.D. 17. There is no indication of the reason for the partial restrike, which may simply have been intended to honor Drusus and Germanicus on the occasion of Caligula's accession. An elaborate restriking seems an unlikely response to the downfall of the original magistrate, Alexander. The high proportion of restriking pieces shows that a mint could call in a given type if necessary; see note to **245** above.

**276** There are two issues for Nero, one apparently early in the reign with the magistrate Mindios and a youthful portrait of the emperor, the other with the name Mnaseas and a more mature portrait.

**277-278** The issues for Vespasian are the first to exhibit any variety of types in addition to the perennial ones of Herakles, Dionysos and Zeus

Lydios. The 25 mm. size is also an innovation, if **274** was not struck at Sardis.

**279** The excellence of the engraving on the dies of Domitian has been mentioned in connection with the "autonomous" pieces (see note to **251**). The similarity of the portraits with those of Domitian on the coins of Ephesus and Smyrna suggests that the engraver may have served all three cities (*Kraft* pl. 95:35-36).

The reverse types have little local significance. Minerva was Domitian's particular patron and appears on the coins at Rome from early in the reign. The aegis that Domitian wears in some of the portraits (VA 3149) is Athena's.

**281** It is normally the case with alliance coins that the issuing city puts its name first, at the left, on the reverse. Hence the coins are attributed to Sardis since the legends all read ΔΗΜΟC CΑΡΔΙΑΝΩΝ ΔΗΜΟC ΣΜΥΡΝΑΙΩΝ.

There are very similar issues for an alliance of Smyrna and Ephesus (Hunter 341, nos. 94-98), the dies all apparently cut by a single engraver, and given to Ephesus in the catalogues:

under L. Caesennius Paetus

- |                 |  |
|-----------------|--|
| 32 mm. Domitian | Cult statue of Artemis Ephesia between two Nemeses ( <i>BMC</i> 407)<br>Two Amazons clasping hands ( <i>BMC</i> 408) |
| 20 mm. Domitia  | Cult statue of Artemis ( <i>BMC</i> 414-415)<br>Two Nemeses with attributes ( <i>BMC</i> 411-413)                    |

under P. Calvisius Ruso (perhaps during Domitia's disgrace)

- |                 |  |
|-----------------|--|
| 36 mm. Domitian | Two Amazons (Hunter 95)  |
| 30 mm.          | Cult statue of Artemis between two Nemeses ( <i>BMC</i> 405-406) |
| 25 mm.          | Cult statue of Artemis (Oxford)<br>Two Nemeses (BM 1895)         |

On most dies the ethnic appears in the inner field to l. and r. The careful balance of types suggests that we have here both "sides" of the alliance issue, the dies cut by the same hand and the coins perhaps struck at the same mint but intended for distribution

in both cities. The same may be true of the Sardis-Smyrna alliance. The five obverse dies are very similar to the Ephesus-Smyrna portraits and the reverse dies (at least six in number) bear a type equally suitable for both cities, so that it seems likely that the dies were engraved in Smyrna, if the coins were not actually struck there. A further clue is the use of  $\Sigma$  in  $\Sigma$ MYPNAIQN, a usage peculiar to Smyrna. The choice of Nemesis as a type for **280** may also be the notion of an engraver from Smyrna, where the two Nemeses are the city representatives.

**282** The magistrate, the proconsul L. Baebius Tullus is also known from inscriptions (*IGR* IV. 412). The reverse type of the bound captives probably refers to Trajan's Parthian victories (cf. gold at Rome, *BMCRE* III pl. 20:6-7) and dates from the end of the reign.

**283-284** The coinages for Marciana and Plotina are dated after A.D. 112 at Rome, after the death of Marciana. The portraits closely resemble those of the Roman coinage and may be contemporary with them.

Pelops traditionally was associated with the area, in some versions being the grandson of Tmolus (Pausanias 2.22.4; Pliny *NH* 5.30; Ovid *Met.* 2.156). He appears again as a type at Sardis in the third century (Waddington 5222).

**285-286** The Paphia shrine is the only reverse type for Hadrian at Sardis, but there are several obverse and reverse dies, so coins may have been struck on more than one occasion. The shrine is a common type in the third century, when it became standard for the 25 mm. denomination, and there are examples for Severus Alexander (Munich), Maximinus (Paris 1298), Gordian III (Paris 1307) and Philip II Augustus (*BMC* 197). As at Pergamum, where the same type is found (Von Fritze, *Die Münzen von Pergamon* pl. 111:15), it is not certain whether there was any manifestation of the cult beyond the coins. The form of the temple, with its towers and semicircular forecourt, is very distinctive and could not be mistaken for anything else; no traces have been found of anything similar, nor are there any other references to the cult, so it seems improbable that there should have been a replica of the Paphian temple at Sardis. The only other

appearance of Aphrodite on the coins, **288**, is entirely classical in form.

**288** Venus was one of several goddesses identified with Faustina I on her coinage at Rome, both during and after her lifetime (e.g. *BMCRE* IV.172. 1120). The type here probably refers to her, rather than to any local cult.

**289** See Neocorates, *supra*.

**290-292** Given the obverse legend VII(ATOΣ), the coins must date after Marcus Aurelius' first consulship in A.D. 140, but are probably from the early years of the decade since the portrait shows a beardless youth. These pieces are among the most beautiful of the coins of Sardis, the dies much smaller than the flans so that the delicately engraved portrait is set off by the frame of the beaded border. The reverse types seem to be copied from the Roman quadrans (cf. *BMCRE* IV.224. § and 225.1394, quadrantes of Antoninus Pius dated to 140-144).

**293** Kraft does not include Sardis in his group of small pieces of Julia Domna from various Lydian and Phrygian cities (pl. 80:27-29 and 39), but the style is very similar, both with respect to the portrait and the use of the major local deity as the reverse type. Sardis and the other cities would have belonged to the same supply area in the early 200's. The appropriate obverse type was subsequently changed to that of the City, see **261**.

**294-299** The issues signed by Mithres and Rufus (**294**, **297**) have portraits of Caracalla and Julia Domna only, and consequently their magistracies must date from the sole reign of Caracalla, A.D. 212-217. Since there are references on the coins of both magistrates to the Chrysanthina games, which were pentaeteric, the issues should be four years apart. The portraits of Caracalla are more mature and pugilistic on the coins of Rufus, who claims to be first archon for the third time, and hence the coins could date from four years after Mithres, if the magistracies ran consecutively.

**294** The obverse type of Julia as Tyche resembles a similar treatment on Roman medallions (J. M. C. Toynbee, *Roman Medallions*, *ANS Numismatic Studies* 5 [New York 1944], pl. 44:1) where Julia is

shown facing left, holding cornucopiae and a statue of Concordia. The Roman bust is diademed, whereas the Sardis bust wears the modius of the goddess of plenty.

For the reverse, see Agonistic Types, *supra*.

**295** Mên and Demeter were adopted as the standard 20-22 mm. types, with the *Augusta(e)* on the obverse, from Julia Domna to Tranquillina. There are two separate issues for Domna, each with a single obverse and several reverse dies, corresponding with the larger pieces signed by Mithres and Rufus. The reverse die of **295** is not otherwise known and fills out the pairing of reverse types in line with the other Domna pair (*BMC* 154, Fitzwilliam 4886), Soaemias and Maesa (*BMC* 173-174), Mamaea (Paris 1293, 1295) and Tranquillina (*BMC* 193-194).

**297** See Agonistic Types, *supra*.

**300** For an elaborate working out of the hypothesis that Macrinus and Diadumenian made a journey back to the Danube by way of Sardis in the winter of A.D. 217/218 see H. J. Bassett, *Macrinus and Diadumenian* (Ann Arbor 1920) and H. Gaebler, "Zur Münzkunde Makedoniens," in *ZfN* 24 (1904) 294-96. The route is based on the occurrence of coins with the title of *autokrator* for Diadumenian, and on milestones and inscriptions from Moesia and Pannonia. The idea is interesting but improbable.

There was a small issue for Macrinus and Diadumenian at Sardis:

- 30 mm. Diadumenian Agonistic table (*BMC* 169) — one die pair
- 25 mm. Macrinus Nike (Paris 1279)  
Lion (Boston)—one obverse and two reverses, the lion die reused with an obverse of Elagabalus

Diadumenian is laureate and is given the title *autokrator* but it is unlikely that the coins were struck in the six weeks that separated the official proclamation and the death of Diadumenian in the summer of 218. Macrinus, as has been pointed out by Bassett and others, would have felt his position strengthened by the acceptance of Diadumenian as his established successor. The cities of Asia Minor

may have been warned in advance that it would be politic to be prepared for the triumphal progress of the Emperors to Rome and produced coins accordingly. The Nike would be an appropriate type to greet the pacifier of the Parthians and Armenians.

**301-307** The frequent confusion of the portraits of Caracalla and Elagabalus has led to the misunderstanding of their issues and in particular of the third neocorate. The only possible confusion with Caracalla is with his youthful portraits, prior to 209; nobody could mistake the rather attractive features of Elagabalus with the thuggish looks that Caracalla seems to have prided himself on in his sole reign. Elagabalus is never bearded and has distinctively protruberant eyes and a large nose. He seems to have preferred the model of full cuirassed bust in paludamentum, with laureate or radiate crown, whereas Caracalla in his later years liked the divine connotations of the radiate head. Elagabalus is sometimes shown, as on **301**, wearing an aegis with snakes, a model which is also found for the young Caracalla (e.g. Thyatira, VA 8278).

As to the third neocorate, even so reliable a scholar as B. V. Head writes in the introduction to *BMC* Lydia, p. cvii, that "from the time of Elagabalus Sardes calls itself on its coins indiscriminately δις or τρις νεωκόρος" and the mistake is repeated elsewhere.<sup>2</sup> The error seems to arise from the fact that there are two distinct issues for Elagabalus at Sardis, the first still with Β ΝΕΩΚΟΡΩΝ and the magistrate Claudianus, and the second with Γ ΝΕΩΚΟΡΩΝ and the magistrate Hermophilus. There are also sundry "autonomous" issues that date from, or overlap into, the period of the third neocorate. After the *damnatio* of Elagabalus the city reverted to Β ΝΕΩΚΟΡΩΝ until the reign of Valerian and Gallienus, when a third neocorate was again bestowed and was recorded on both the imperial portrait series and an autonomous piece. Use of the title was certainly not indiscriminate and the city never claimed a neocorate on the basis of the local cult. Elagabalus is known to have granted an additional neocorate to Sardis, Ephesus and Nicomedia, probably while wintering in Nicomedia on his way to Rome in A.D. 218/219. The title, however, may not have been granted or taken up

2. Chapot, p. 449, ". . . sur les monnaies de Sardes on grava tantôt δις tantôt τρις νεωκόρ sans raison apparente."



until 220, since Claudianus is archon for the second time on coins with the second neocorate only and he must have succeeded Alkimachos, the magistrate for the coins of Diadumenian, in 217-18.

**301** The lion before city walls reminds one initially of the silver coins of Tarsus of the fourth century B.C. with a lion and a bull struggling above a double city wall (*BMC* 48, pl. 30:9, and *BMC* 65-66, pl. 31:7). The reference at Sardis seems to be an obscure local myth which is repeatedly alluded to on the coins. The types show some combination of lion with insect (either a bee or a fly) or bow in case and club with insect, often with a Herakles obverse (**182**, **257**, **301**). None of the Greek legends of Herakles makes any mention of insects, and certainly not in connection with the Nemean lion. The type of bow and club with insect, accompanied by a Herakles obverse, is otherwise found at Maeonia, **153**, which suggests that this may be a purely local Lydian myth. Herakles after all has many Eastern antecedents, and there are innumerable possible variations on the theme of "the strongest man versus the strongest beast" which could be assimilated with the Herakles myths as Lydia was hellenized. The type of **301** is an elaboration of a type of Caracalla (*BMC* 165), Macrinus (Boston) and Elagabalus (*BMC* 172) which shows a lion walking r. along a club which doubles as the exergual line. The city walls merely add to the mystery. This cannot be an allusion to the story of the lion cub which was carried round the city walls to ensure their impregnability (Herodotus 1.84), since the types all show a full-grown beast.

**302** If there were any doubt as to the identity of the obverse portrait in this case, the reverse type of Athena would make Caracalla highly unlikely since Minerva was the particular patron of Geta and his predilection was apparently known locally (Kraft pl. 73:74).

**304** Apollo Lykios appears on one other reverse of Sardis (Imhoof *RSN* 14 (1908) 19 no. 4) where he is identified by the legend  $\Lambda\text{VKI}\text{OC}$  in the left field. For the solar connections of Apollo and a collection of the relevant material see H. Cahn, "Die Löwen des Apollon," in *Mus Helv* 7 (1950) 185-199.

**305** The magistracy of Hermophilus can be dated closely since coins for Severus Alexander Caesar

are included among the issues (Hunter 26, Oxford, Vienna 37380). Severus Alexander was proclaimed Caesar on July 10, 221 which provides a *terminus post quem* for the coins of Hermophilus, who probably entered on his second magistracy in September 221. Elagabalus died in March, A.D. 222.

For the games see Agonistic Types, *supra*.

**306** The Helios type refers to the emperor's own cult as priest of Sol and is very similar to types of Helios with whip at Rome (cf. *BMCRE* V pl. 88:17).

**308-309** The issues for Severus Alexander are unusually small, comprising one obverse and two reverse dies for each denomination. All the obverse dies of Damianos are linked with Saitta, but are the work of two engravers.

The types of Tyche and Zeus Lydios are both standard for the 25 mm. denomination.

L. Robert, "Notes de Numismatique et d'Épigraphie grecques," in *Rev Arch*<sup>6</sup> 3 (1934) 58-61, argues that the magistrate may be the youngest son of the athlete M. Aurelius Demonstratos Damas.

**310** Rufinus was probably magistrate prior to Gordian's marriage in A.D. 242, since Gordian appears on all the denominations and there is no mention of Tranquillina. The reverse type may be associated with the type of the larger denomination of the same magistrate showing Pelops and Hippodameia and inscribed  $\text{NEQ IIPPO}\Delta\text{AMEIA}$  (Hunter 27).

**311** Hermophilus can be dated after A.D. 242 since the 30 mm. and 22 mm. denominations bear the portrait of Tranquillina. The obverse type, emperor facing l. with shield and spear, is similar to dies of Germe (Cop 153) and seems to be derived from an Antiochean model (cf. A. R. Bellingier, *The Excavations at Dura-Europos. Final Report VI: The Coins* (New Haven 1949) pls. 35:1721, 12:380).

For the shrine see note to **285-286**.

**312-313** The reign of Philip was the highpoint of the "Sardis" workshop which served at that time a network of cities from Germe to Carallia (Kraft, map 6). This peak was also the point of collapse of the system: the dies of the first magistrate for Philip, Herakleidianos, were shared directly with seven other cities and linked by the same engravers to a dozen more, but for the second magistrate,

Akula, and for the issues of Valerian and Gallienus the dies are extremely crude and are shared at most with Gordus, Daldis and Saitta.

The obverse of Philip as Caesar belongs with the first group and is shared with Thyatira. At this period Thyatira drew all its larger dies from Smyrna, which raises questions about the organization of the supply areas. Thyatira, being geographically on the fringe of three major supply areas (Pergamum, Smyrna and Sardis) switched between all three during the third century, but there is otherwise no instance of only one die being drawn from workshop A and the rest from workshop B. Smyrna had no Philip II coins itself and usually produced a Senate obverse for the 25 mm. denomination (Kraft pl. 9-10), which was not normally a type at Thyatira. An exception was made for Hyrcanis, for which the workshop produced both 30 mm. and 25 mm. dies with Philip II Caesar as obverse (Kraft pl. 7:45A and pl. 6:41); why not for Thyatira? The issue must have been small at Thyatira, where the obverse was used with one reverse while the same obverse at Sardis survived nine reverse dies with five types.

**314** The local coinage at Sardis ends with a large, if crude, issue for Valerian and Gallienus under the magistrate Domitius Rufus. Kraft supposed that Saitta had become the dominant partner in the "Sardis" workshop by this juncture and dated the end of the activities of the workshop to ca. A.D. 255 when both Saitta and "Smyrna" switched to "Pergamum" for their dies (pp. 37-38). The choice of Cybele as a reverse type may have been the personal whim of the engraver since there is no other instance of the type at Sardis, perhaps surprisingly, although the type is a common one at Saitta. The three reverse types for Salonina are the Sardinian Kore (*BMC* 209), Cybele (*BMC* 210) and the Mother Goddess with two children (*BMC* 211). It would be interesting to know what the relationship between the three was thought to be in A.D. 255.

**315** The obverse type was used more than once in the third century. This example appears to be later than VA 3183 (Gordian III) and perhaps belongs with the issue in the name of Gallienus and Salonina, the next imperial portrait issue after Gordian.

**316** See F. Imhoof-Blumer in *RSN* 6 (1896) 11-20 for a discussion of the distinction between the Lydian and Carian cities of the same name, and a list of the coins of Stratonicea Lydiae. The neighboring cities of Apollonis, Nacrasa, Thyatira and Hyrcanis were all Macedonian garrison towns and sometimes included MAKE or MAKEA in their coin legends in imperial times. The legend does not otherwise occur at Stratonicea. The city was dependent on Thyatira for many years but recommenced coinage in the early second century. Hadrian visited the city in A.D. 123, after which it took the name Hadrianopolis and gave Hadrian the title of *ktistes*. If all the coins without "Hadrianopolis" are prior to Hadrian's visit, **316** belongs with an "autonomous" issue of the same size with types of Senate/Rome (Imhoof 13, 2-3). See Robert, *Hellenica* VI (1948) 80-84 for letters from Hadrian to Stratonicea.

**318-319** The type of Artemis Boreitene is a common one at Thyatira but the issues can be readily distinguished by differences in the hair style. These examples belong with the very large output for Commodus at Thyatira (five magistrates, and denominations as large as 45 mm.) at a time when many dies were shared with Attalaea, and both cities are thought by Kraft to have been in the orbit of the "Pergamum" workshop (Kraft map 14).

**337-338** See L. and J. Robert, *La Carie* II 135-136. Tabae and Cibyra both issued coins with male helmeted head as obverse type, perhaps to be identified as the brothers Marsyas and Kibyras, the founding heroes of the two cities.

**351** The obverse die was also used with Herakles reverse at Conana (VA 5071) and at Prostanna and Seleuceia Sidera (Kraft 81, pl. 108:11). Mên is a common Pisidian type and had been a reverse type for Caracalla (VA 5070) at Conana. The 20 mm. piece with reverse Tyche (McClellan 8978) must be contemporary.

**353-387** The arrangement of the catalogue entries by monarch rather than mint follows E. T. Newell, *Western Seleucid Mints*. The finds in general corroborate Newell's attributions; the occasional piece from Antioch is not remarkable and otherwise the

only non-Sardis pieces are **383-384** from Apamea.

No Seleucid silver was found in the current excavations. The fine tetradrachm of Achaeus was found "on the old road to Salihli, where it crosses the city wall." The dies seem to be as *WSM* 1440, but more of the armor is visible on the obverse.

**389** From sector HoB W27/S116, \*102.50. This is the Lydian Market area, but in mixed fill on the edge of an excavation ramp, high above the Lydian-Persian levels.

**390** The Ptolemies gained a foothold on the coast of Asia Minor in the third century B.C.; Ptolemy II held the Carian coast and Samos, and Ptolemy III controlled Ephesus for a while, maintaining their position with strong naval support, and presumably at considerable expense. A Ptolemaic bronze coin was also found in the Princeton excavations (*Sardis* IX 418).

**394** The type is Samian but the piece may be an imitation. It is not included in J. P. Barron, *The Silver Coins of Samos* (London 1966), and is catalogued with the uncertain pieces in the Copenhagen *Sylloge*.

**395** The reverse punch suggests a pre-fourth century B.C. date.

**397** The obverse is too common to provide any clue as to mint. KO may not be the full reverse legend, as the flan is split and worn.

**398** There is no trace of the reverse legend but it seems likely that the piece belongs to a colony, since the goddess is distinctly Eastern while the obverse legend is in Latin. The imperial bust I. is unusual, though there is an example at Antioch Pisidia (*SNG* Fitzwilliam 5122) which is not dissimilar. However neither the late Henri Seyrig nor Miss Krzyzanowska could identify the piece.

## II THE ROMAN COINS

*T. V. Buttrey*

*with a contribution by Dr. J. A. Charles*

Under the rubric "Roman" are included those coins struck at Rome, or at provincial mints in accordance with the system of types and denominations used at Rome. The so-called "Greek Imperial" coins, struck largely at eastern mints under Roman rule during the first, second and third centuries A.D., with local types and usually with Greek legends, have, as is traditional, been included above with the Greek coins. Neither the Greek nor the Roman catalogue therefore accurately indicates the total composition of small change monetary circulation at Sardis during these centuries, for there as elsewhere it was a varying mix of imperial and local coins, until a new system of coordinated issues from a limited number of mints all under imperial control emerged with the reform of Diocletian. The Sardis finds of Roman coins stretch in time from the late Republic through the reign of the emperor Zeno (d. 491). The monetary reform of his successor, Anastasius, has, again, traditionally been taken as the beginning of the Byzantine coinage, and this dividing line has been recognized by George Bates in his publication of the Sardis finds of Byzantine coins.

The strictures on the interpretation of site finds which have been noted above must be kept in mind. The patterns of excavation will inevitably affect the pattern of surviving coins. Each building or area will produce coins appropriate to the period and intensity of its use or habitation, and only a site completely dug over all its surface and

through every level can reveal the complete picture. Additionally the picture derived from random finds will be incomplete with respect to metal and denomination: in Roman times as in Greek greater care was shown for gold and silver than for bronze, so that random finds of the former are relatively uncommon, and even large module bronze coins will have been more difficult to mislay and therefore are now less likely to be found. Thus comments below on monetary circulation at Sardis under the Romans must be understood as having to do mainly with smaller denomination bronze. These at least were likely the most plentiful coins, even if of small total value.

A third stricture on interpretation arises from the fact that mint production is always irregular, so that the recognition of quite varying quantities of coin surviving at Sardis from different periods does not of itself lead to conclusions specifically about Sardis' commercial activity during those periods. Comparable excavation finds elsewhere in Asia Minor or even in the West may indicate that the same irregularity of finds is widespread, and that they reveal general patterns of mint activity rather than a specifically Sardinian situation. Further, we usually cannot argue that the discovery of coins of a given date at a site proves them to have been in use at the site at that date. On the contrary, except when revaluation (official or unofficial) or administrative reform specifically alters the profile of a currency, it must be assumed that new issues

of coins spread through the existing circulation sometimes rapidly, as in the case of a sizeable *largitio*, but sometimes slowly and irregularly.

The above having been said, it is nonetheless likely that the Sardis finds of fourth and fifth century Roman coins provide a fair glimpse of the base metal monetary circulation. This can be assumed on the basis of the sheer mass of material at hand — over 8000 pieces — and from the fact that hoards of Roman coins have not been found which might, by an idiosyncratic composition, skew the overall distribution. Through the years of the excavation the archaeologists have designated certain groups of coins as “hoards” which appeared to belong together contextually. None of these groups, however, has been found in any kind of container, and the assignment of such groups to single, purposeful occultations, with all the historical possibilities thereby implied, is perhaps to be avoided. Still, two possible hoards will be alluded to below. In any case, the absence or scarcity of hoard material in the totals encourages the conclusion that the Roman coins found do represent Sardinian monetary circulation within the limits aforementioned.

The catalogue follows the same arrangement as that of Bell's publication of the Roman coins found in 1910-1914 (*Sardis XI* [1916]). The finds are in general similar, the more recent ones much more abundant. They do differ in some details, and it is worth remarking where the earlier provide different material, and where Bell's catalogue fails to note coins which must have appeared. Roman issues from the 1910-1914 excavations which are not represented in the catalogue below include a Republican as and denarius, cistophoric tetradrachms of Augustus and Claudius, denarii of Titus and Domitian, and antoniniani of Aemilian and Postumus. The Republican and Julio-Claudian coins provide a broadening of the material, the Imperial denarii and antoniniani fill in gaps in the series of emperors. For the period following the reform of Diocletian, the finds of the later excavations have included coins of all the periods and types noted in the earlier.

Bell's catalogue differs from ours not so much in what it includes as in what it excludes. His total of 214 Roman coins represents only a selection of the material available to him, although he does

not say so. As is noted below in the introduction to the Byzantine coins, it is quite certain that he deliberately omitted most pieces which were not fully legible.<sup>1</sup> He gives relatively few pieces which are unassignable to mint, none at all of legible type but unassignable to emperor. Such semi-attributable coins abound at Sardis, and their exclusion distorts both the quantity and distribution of the finds. The most extreme instance is the almost complete suppression of the fifth and sixth century nummi: the 1910-1914 catalogue includes only one AE 4 Cross in Wreath of Theodosius II, and one nummus of Leo. The distortion in these results was remarked several years ago by Grierson, who questioned the finds as they were then published: “The virtual absence of nummi from the Sardis excavations must surely mean that these tiny coins were ignored, not that they were absent.”<sup>2</sup> In the current excavations more than 1500 nummi have surfaced, to balance the picture and to confirm that small denomination circulation at Sardis continued active during the fifth century.

## ROMAN REPUBLIC

A single cistophoric tetradrachm of Marc Antony comprises this category. The piece is conventionally classed as a Roman coin, given its Latin legend and the issuing authority, although the denomination is characteristically Asian. Antony struck great quantities of cistophori at two mints: that only one piece has been found at Sardis accords with the usual scarcity of silver in random site finds. It is in fact likely that Republican aurei and silver denarii reached Asia Minor in some quantity in the first century B.C., and were indeed on occasion struck there. Republican bronze is less likely to have traveled so far to the East, although Bell (p. 46) notes that a pierced Roman Republican as was found during the earlier Sardis excavation, a piece about whose circulating value as money he expresses undue skepticism.<sup>3</sup>

1. Only in the case of the egg-cup coins, “the majority of which, being illegible, are necessarily omitted from the Catalogue” (ix), does he mention the problem.

2. Philip Grierson, “The President's Address: The Interpretation of Coin Finds,” *NC* 7th ser. 5 (1965) xi.

3. An even more peculiar Republican find is the *aes grave* triens found at Priene, noted in Kurt Regling, *Die Münzen von Priene*

## ROMAN EMPIRE

The earliest excavation coins of the Empire date from the late *first century B.C.*: numerous asses and one sesterce struck in the East, of uncertain mint and date but necessarily post-27 B.C. since they bear the name Augustus. Portrait style appears to link them with some of the cistophoric issues of Augustus from Ephesus and Pergamum, and the frequency with which these issues have survived suggests that they might have been intended as small change for the silver.<sup>4</sup> The majority of the Sardis pieces have been deliberately halved; to what purpose, at what time and under whose authority is uncertain. Halving in the West can be discerned at two periods: probably late in the 20's B.C., when Republican bronze asses still in circulation were divided in order to accommodate them to Augustus' new and smaller copper asses; and certainly under Tiberius, when Augustan and Tiberian asses from Rome and the Gallic mints were cut in the Rhine valley, probably to provide small change for the Roman camps.<sup>5</sup> In the future, the Sardis pieces may be proved to be eastern instances of the earlier event which is so widely attested in the West. (Halving is otherwise very rare at Sardis: see the Greek Catalogue 51 and 141 for two pieces widely separated in time, and below for some sporadic late Roman halving beginning with Diocletian.)<sup>6</sup>

These pieces aside, there was found but a single properly Roman coin dating from the first century B.C., one of the common asses of Augustus' moneyers. The finds from the *first century A.D.* are no more encouraging: four pieces, of which three are Imperial denarii. Note however that the attribution of Tiberius' denarius to Lugdunum is conventional. The type was struck in very large quantities, presumably over most of his reign, and it may well be that a number of mints, perhaps

even some in the East, were responsible for its issue.

The finds of the *second century* number only ten pieces, and all are silver denarii, again emphasizing the division between the precious metal coinage, which would have been imported, and the base metal, which was largely local or drawn from cities nearby. There is nothing to reflect any especial expenditure of money such as would have been likely on the building of the Marble Court. The finds of the *third century* are, to begin with, slightly more encouraging in quantity: ten pieces for the first fifty years, but scattered among the emperors and issues. The coins are all silver denarii or antoniniani, save for one curiosity, an as of Caracalla from the mint of Rome, the only Roman bronze coin of the third century to be found at Sardis before the reform of Diocletian. Its date of issue, A.D. 213, was that of Caracalla's setting out for his eastern journey, during part of which he may have touched at Sardis while following the route of Alexander.<sup>7</sup> It is tempting to associate the coin with that journey, and to see it as having been left at Sardis by a member of Caracalla's entourage.

The coins of the second half of the third century are at first only slightly more common than those which just precede. But with the sole reign of Gallienus there is an explosion. His base antoniniani abound, in many types, deriving largely from the western mints of Rome and Milan. It is in this period that the Greek Imperial coinage ceased to be struck — the latest examples identified in the excavations appear to be of the joint reign of Valerian and Gallienus, so that the relatively plentiful antoniniani of Gallienus in his sole reign, and after him of Claudius Gothicus, might indicate a fundamental change in the constitution of the currency. One cannot be certain, however. The Greek Imperial bronze continued to circulate, and the antoniniani of Gallienus are common in any case, while the posthumous *consecratio* issues for Claudius were struck in enormous quantities.

(Berlin 1927) 183. He also reports two Republican denarii and two uncial asses.

4. C. H. V. Sutherland, *The Cistophori of Augustus* (London 1970).

5. T. V. Buttrey, "Halved Coins, the Augustan Reform, and Horace *Odes* 1.3," in *AJA* 76 (1972) 31-48.

6. Catalogue 110 (Diocletian), 187 (Constantine), 405 (Constantius II), 861 (Arcadius) and 557 (House of Constantine). The British Museum has deliberately cut *aes* of Gratian, *Concordia Auggg*, and Honorius, *Salus Reipublicae*.

7. Barbara Levick, "Caracalla's Path," in *Hommages à Marcel Renard* II (*Collection Latomus* 102) esp. 432, 444. It can hardly be coincidence that the only bronze coin cited by Bell between Augustus and Diocletian's reform is a sesterce of Caracalla, of the same date as the *as*.

Table 1. Comparison of late third century site finds from Sardis and from Aphrodisias, distributed according to emperor and mint (Aphrodisias totals in parentheses).

	Rome	Mediolanum	Ticinum	West in general	Siscia	Heraclea	Cyzicus	Antioch	Alexandria	Asia in general	Uncertain	Totals
Antoniniani and Denarii:												
Gallienus and Salonina, sole reign	42(46)	6(8)			3(5)		(1)		2	6(1)		59(61)
Macrianus II							(1)					(1)
Claudius II	13(19)	1(1)			2(5)		6(3)			7		29(28)
Divus Claudius II	(39)	(2)								74(3)		74(44)
Quintillus	(1)	(1)			1							1(2)
Aurelian and Severina	(1)	1			1(3)		(3)			1		3(7)
Tetricus I and II				(2)								(2)
Gallic Imitations				26(63)								26(63)
Probus			1		1		2					4
Carus, Numerian and Carinus	(1)	1					(1)					1(2)
Tetrarchy, pre-reform	(1)						(1)					(2)
<b>Totals</b>	<b>55(108)</b>	<b>8(12)</b>	<b>2</b>	<b>26(65)</b>	<b>8(13)</b>		<b>8(10)</b>		<b>2</b>	<b>88(4)</b>		<b>197(212)</b>
Diocletian and colleagues, post-reform:												
Radiate Fractions						12(13)	21(24)	1	1(3)		4(6)	39(46)

These latter were also extensively imitated, and we can see that examples of the copies reached Sardis in some number, although it is not always possible to distinguish the originals from the imitations given their corruption by wear and corrosion. All of these issues continued to circulate for decades, and into the fourth century. The antoniniani could have gradually percolated into the Sardian circulation, their commonness in the end merely reflecting their general availability, so that we should not conclude simply from their number that the A.D. 260's was a time of both innovation in the currency and extraordinary prosperity in Sardis. Certainly the next fifteen years have left us few coins, apart from the *consecratio* issues for Claudius.

It is instructive to compare the Sardis finds from the second half of the third century with

those from Aphrodisias published by MacDonald.<sup>8</sup> His distribution of the excavation coins covering this period is remarkably similar to that which the Sardis find coins assume. In Table 1 the Sardis totals are given openly, the Aphrodisias totals in parentheses. The overall sum of pieces found is almost identical, a coincidence on which no weight can be placed; it is the distribution of the sum which is so striking, both by mint and by reign. There are only two points of divergence of any consequence, in the issues of Divus Claudius and the Gallic imitations, and these are only apparent, arising from differences in cataloguing. At Aphrodisias imitations of the former type are included

8. D. J. MacDonald, "Aphrodisias and Currency in the East, A.D. 259-305," *AJA* 78 (1974) 279-286.

with the latter, whereas at Sardis it has proved so unrewarding to attempt the separation of the genuine from the counterfeit Divus Claudius pieces that they have been lumped together, and listed without mint designation. The total of the Divus Claudius and the Gallic imitations found at the two sites is again almost the same, 100 and 107 pieces respectively.

MacDonald has investigated the significance of this pattern in the monetary circulation of the latter half of the third century A.D., demonstrating that western Anatolia, primarily dependent on Rome, Mediolanum and Siscia, suffered a dearth of new coinage after Aurelian which was partly filled by imitations from the western end of the Empire; whereas eastern Anatolia drew on the eastern mints which produced coinage for it in abundance. The Sardis finds widen the evidence slightly but not in any significant way (e.g. the four antoniniani of Probus show his coinage to have been circulating in this area, where MacDonald knew of none). On the contrary the significance of the finds lies in confirming MacDonald's argument that the Aphrodisias pattern holds more generally for western Anatolia.

To return to Sardis, with the reform of Diocletian there is an abrupt increase in the finds. The coins of the thirty years A.D. 294-324 tend to accumulate in the late 290's, late 310's and early 320's, but taken together they produce an average of over fifty coins per decade. Then, in a sharp rise beginning in 330, the average number of identifiable pieces per decade shoots up to over 450 for the rest of the century, with a maximum equivalent of 1280 per decade in the early reign of Valentinian I. These averages do not include the unidentifiable coins only generally assignable to the century, whose large numbers, if proportionately distributed, would bring the figures up by about another hundred pieces per decade. The last half of the century is by far the period most productive of identifiable coins at Sardis.

After the death of Arcadius in 408 the fifth century coins drop off to comparatively lower levels, the average running to ca. 110 pieces per decade until mid-century. Thereafter there is once again a notable increase, as the *minimi* begin to appear in very large numbers. Their quantity cannot be appreciated from the totals given to

Marcian, Leo and Zeno in the catalogue, for their poor striking and wretched condition has compelled relegation of hundreds of them to catalogue no. 1117, "unidentifiable." There the rubric "5th/6th century" is intended to include possible *minimi* of Anastasius, but most of the 1719 pieces in this category are doubtless coins of Marcian-Zeno. If they be included in the totals for the years 450-491, the decadal averages for that period rise to over 475 coins. As a reflection of circulation at Sardis that figure is if anything modest, given the likelihood that the *minimi* will escape the excavator's attention because of their size.

In sum, Roman monetary circulation at Sardis was, in the smaller denominations, exiguous prior to Diocletian's reform. Leaving aside the eastern bronze of Augustus, which might well have been classified as Greek Imperial, only three Roman *aes* coins have been discovered from the three centuries preceding A.D. 294 (4, 6, 19). This level of the circulation was of course provided by the Greek Imperial and the still circulating Hellenistic coins. All the other Roman finds of this period are of silver, including relatively large quantities of base antoniniani of Gallienus and of Claudius Gothicus. The fourth and fifth century finds, on the other hand, are entirely bronze save for one gold *solidus*, and occur by the thousands, providing over 95% of the Roman coins from the site.

The great bulk of the Roman coins found at Sardis which were struck after the reform of Diocletian in A.D. 294 derives from the six easternmost mints of the Empire: Heraclea, Constantinople, Nicomedia, Cyzicus, Antioch and Alexandria. Of the mint-identifiable pieces of 294-491 fully 91% were struck at one or another of these cities. From A.D. 330 on, the excavation coins are sufficiently numerous to allow some conclusions to be drawn about relative quantity of production at the various mints and in the various issues, as well as the pattern of circulation at Sardis. Table 2 presents the breakdown of reverse types in bronze struck at the six mints from 330 to 491, without regard to the emperor of the obverse or the variety of mint-mark of the reverse. A glance reveals where the find material is weakest: in the larger denomination AE 1 and AE 2, outside the period A.D. 383-408; in the more distant mints of Heraclea and



Alexandria; in the limited issues of Julian, Jovian and Procopius; and in the types (no doubt struck in small numbers) issued for the women of the imperial family, indicated by an asterisk on the table. On the other hand, of the approximately 50 types of reduced folles and AE 3 and 4 struck in the East from 330-425, all but seven rarities — of Hanniballianus, Jovian, *Populus Romanus* (2), and three empress types — have been found from one period and mint or another, in some cases by the hundreds. There can be little doubt that the sum of material of these modules fully represents the smaller denomination circulation at Sardis during these years and well on into the fifth century A. D.

### THE FINDS AND THE LOCAL CURRENCY OF SARDIS: THE FOURTH AND FIFTH CENTURIES A.D.

The finds of Imperial coins of the first three centuries at Sardis are sparse and scattered, while the bronzes introduced with the reform of Diocletian derive from a consistent monetary policy and appear in quantity. It is here that we can expect to perceive the growth and development of the currency over a period of about two hundred years, from the reform in 294 to the end of our period in A.D. 491.

In principle, the distribution of the coins by reign, mint, date and denomination ought to provide a continuous cross-section of the currency, and thus evidence of monetary activity, provided only that the material is sufficiently full. It never is in some parts, for reasons which have already been stated above. Even within the limits imposed by finds almost entirely of small denomination bronze, the information obtainable from the relative quantities of the various issues can be ambiguous. *Prima facie* it is not possible to say whether the predominance in an issue of one mint over another is owing to the vigor of production, or to its relative propinquity to Sardis. Also, a given issue might be plentiful at the site for reasons of military or commercial activity unrelated to the capacities of the mint. A general picture does begin to emerge, however, as successive issues are studied, and an outside check is at hand in the comparison of the Sardis material with that published in some detail from the excavations at Athens,

Corinth and Antioch.<sup>9</sup> Each of those volumes covers the period of our finds, though the two Greek sites have produced proportionately rather more first and second century coins. Each site differs from the others in major dependence on mint sources: where the mint most largely represented at Sardis is Cyzicus, Athens depends upon Constantinople and Thessalonica, Corinth on Nicomedia and Thessalonica, and Antioch on the mint of Antioch. When the picture which they sketch tends to be the same, we can conclude that the circulation which they describe, and which is shared at Sardis, depends upon general mint policy and activity, rather than on individual mint aberrations or local currency conditions.

Table 3 provides a breakdown of the bronze coins of 294-491 from the excavation as identified by issue and mint. Within these categories further refinements, not here attempted, would be possible, for example the distribution of each issue by emperor. Thus the 13 pieces of *Concordia Militum* radiate struck at Heraclea in A.D. 294-299 include seven for Diocletian, three for Maximian Herculeus, two for Galerius Maximian, and one of uncertain emperor; the proportions may be significant. Similarly, the issue of a type within a period was often articulated by a series of mintmarks, noted in the catalogue as they occur, which can usefully indicate sequence and intensity of issue. The table does indicate the mint source of all coins of each period, and thus the major directions of monetary circulation so far as Sardis was concerned. Note for example not simply the predominance of the Propontis mints, as was to be expected, but the subtle ways in which their representation varies. Thus in the issues of 383-395 some mints appear to be represented differentially with respect to denomination; in the total of pieces from the six easternmost mints, Heraclea supplies 22% of the AE 2, 12% of the AE 3, and 4% of the AE 4, the whole sequence being just the opposite of our expectations. Did Heraclea produce more of the larger denominations than the smaller, or did the

9. Margaret Thompson, *The Athenian Agora II: Coins from the Roman through the Venetian Period* (Princeton 1954); K. M. Edwards, *Corinth VI: Coins, 1896-1929* (Cambridge, Mass. 1933); D. B. Waagø, *Antioch on the Orontes 4.2: Greek, Roman, Byzantine and Crusaders' Coins* (Princeton 1952).

Table 2. Issues of the six easternmost mints of the Empire as represented at Sardis. Mint/type combinations indicated by an X were found in the excavations; three indicated by ☒ are additions to *LRBC*; two indicated by [X] are not among recent excavation coins but are attested by Bell; other combinations, indicated by (x), are given in *LRBC* but have not yet been found at Sardis. Types preceded by an asterisk were issued for women of the Imperial family.

Period	Reverse Type	Heraclea	Constantinople	Nicomedia	Cyzicus	Antioch	Alexandria
330-335	GLORIA EXERCITVS (2 standards)	X	X	X	X	X	X
	Wolf and Twins	X	X	X	(x)	(x)	(x)
	Victory on Prow	X	X	(x)	X	(x)	(x)
335-337	GLORIA EXERCITVS (1 standard)	X	X	X	X	X	(x)
	Wolf and Twins					X	(x)
	Victory on Prow		(x)			X	(x)
337-341	SECVRITAS PVBLICA	X	X	X	X	X	X
	GLORIA EXERCITVS (1 standard)	X	X	X	X	X	X
	Quadrigrā	X	X	X	X	X	X
341-346	*PAX PVBLICA						
	*PIETAS ROMANA						
	Wolf and Twins						(x)
	Victory on Prow						(x)
	IVST VEN MEN	(x)	X	X	(x)	(x)	(x)
	VICT AVG	(x)	X	(x)	X	(x)	(x)
	VN MR	X	X	X	X	X	X
	VOT XX MVLT XXX	X	X	X	X	X	X
	Bridge over River		(x)				
	Star in Wreath		(x)				
VOT XV MVLT XX							
346-351	AE 2 FTR E & 2C	(x)	X	(x)	X	X	(x)
	Hut	X	X	(x)	(x)	X	(x)
	FH 4	(x)	X	(x)	X	(x)	(x)



Period	Reverse Type	Alexandria	Antioch	Cyzicus	Nicomedia	Constantinople	Heraclea
383-392	VOT X MVL T XX VOT V *SALVS REIPVBLICAE AE 2 GLORIA ROMANORVM 15 GLORIA ROMANORVM 16/17 *SALVS REIPVBLICAE 3/4 VIRTVS EXERCITI	X (x) (x) (x) (x) (x) (x) (x) (x) (x)	X (x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X	X (x) (x) (x) (x) (x) (x) (x) (x) (x)	X (x) (x) (x) (x) (x) (x) (x) (x) (x)	X X (x) (x) (x) (x) (x) (x) (x) (x) (x)
393-395	AE 4 SALVS REIPVBLICAE AE 2 GLORIA ROMANORVM 18 AE 3 GLORIA ROMANORVM 19 AE 4 SALVS REIPVBLICAE	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X
395-408	AE 2 GLORIA ROMANORVM 18 AE 3 VIRTVS EXERCITI CONCORDIA AVGG *SALVS REIPVBLICAE GLORIA ROMANORVM 21 *GLORIA ROMANORVM 24 AE 4 CONCORDIA AVG 3 Cross CONCORDIA AVGG Cross CONCORDIA AVG 1 Victory	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X
408-423	AE 3 GLORIA ROMANORVM 22 GLORIA ROMANORVM 23 AE 4 *SALVS REIPVBLICAE AE 3 GLOR ORVIS TERRAR *CONCORDIA AVG	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X
423-425	AE 2 CONCORDIA AVG AE 4 CONCORDIA AVG 1 Victory *CONCORDIA AVG Cross in Wreath	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X	(x) (x) (x) (x) (x) (x) (x) (x) (x)	(x) (x) (x) (x) (x) (x) (x) (x) (x)	X X X X X X X X X X
425-455							

Table 2 (continued).

450-457	VOT X MVL T XX	(x)		
	VOT XXX	(x)		
	VT XXX V	X	(x)	
	Monogram	(x)		
457-474	AE 4 Monogram	X	X	(x)
	AE 2 VIRTUS EXRCITI	(x)		
	*SALVS REIPVBLICAE	(x)		
	SALVS RPVRLICA	(x)		
	SALVS RPVRLCA	(x)		
	AE 4 Lion Standing	(x)	(x)	(x)
	Lion in Wreath	(x)		(x) (no wreath)
	Monogram	X	(x)	
	Emperor and captive	X		
	Empress	X		
	Two Emperors	X		
474-475/ 476-491	AE 2 CONC..DA RO	(x)		
	AE 4 ZENO	X		
	Monogram	X		
	Victory	X		
475-476	AE 4 Monogram	X		

Table 3. Issues and mints of fourth and fifth century bronze coins from Sardis.

	The Roman Coins					100
294-299	CONCORDIA MILITVM	13	21	1	1	41
300-306	GENIO POPVLI ROMANI			1		1
	(294-306)				1	1
	(GENIO POPVLI ROMANI)					
307-311	CONSERVATORES KART SVAE	1				1
	CONSERV VRB SVAE			1		1
	GENIO IMPERATORIS	2				2
	VENERI VICTRICI	1				1
	(300-311)					
	(GENIO POPVLI ROMANI)					1
312-320	GENIO AVGVSTI		1			1
	IOVI CONSERVATORI (AVGG)	3	4	3		19
	IOVI CONSERVATORI (CAESS)		1			1
	PROVIDENTIAE AVGG	5				5
	PROVIDENTIAE CAESS	2		1		3
	REQUIES OPT MER					1
	SOLI INVICTO COMITI	3				6
	VICTORIAE LAETAE	1				2
	VIRTVS AVGG					1

VIRTUS EXERCIT	1				1
VOTIS V MVLTIIS X					1
<i>(307-320)</i>					
GENIO AVGVSTI					1
IOVI CONSERVATORI (AVGG)		1			2
SOLI INVICTO COMITI					1

321-324						
BEATA TRANQVILLITAS	1					1
CAESARVM NOSTRORVM VOT V		2				2
CAESARVM NOSTRORVM VOT X			1			3
IOVI CONSERVATORI				1		42
<i>(312-324)</i>						
CAESARVM NOSTRORVM VOT V				1		1
DN CONSTANTINI MAX AVG VOT XX				2		3
IOVI CONSERVATORI (AVGG)						5
IOVI CONSERVATORI (CAESS)						3

324-330						
DN CONSTANTINI MAX AVG VOT XXX				2		2
GLORIA ROMANORVM				2		2
PROVIDENTIAE AVGG			2	4	1	7
PROVIDENTIAE CAESS			4	4	2	13
SALVS REIPVBLICAE				2		2

330-335						
GLORIA EXERCITVS (2 Standards)				2	5	16
Wolf and Twins				5	2	1
Victory on Prow				1	4	5
335-337						
GLORIA EXERCITVS (1 standard)				2	2	10
Wolf and Twins				1	11	11
Victory on Prow				1	1	8
						56
						1
						3





FEL TEMP REPARATIO 1 1 2  
 Falling Horseman (4)  
 AE 3 FEL TEMP REPARATIO 2 13 6 21  
 Phoenix

351-354

AE 1 SALVS DD NN 1 1  
 AE 2 FEL TEMP REPARATIO 1 2 13 16  
 Falling Horseman (3)  
 FEL TEMP REPARATIO 9 1 1 11  
 Falling Horseman (4)  
 AE 2 & 3 FEL TEMP REPARATIO 7 7  
 Falling Horseman (3)  
 AE 3 FEL TEMP REPARATIO 1 1 8 9 15 3 3 4 1 45  
 Falling Horseman (3)  
 FEL TEMP REPARATIO 1 1 1  
 Falling Horseman (?)

103

(346-354

AE 2 FEL TEMP REPARATIO 2 2  
*Falling Horseman (3)*

355-361

AE 3 FEL TEMP REPARATIO 2 1 1 4 20 6 17 4 8 63  
 Falling Horseman (3)  
 FEL TEMP REPARATIO 3 1 1 5  
 Falling Horseman (4)  
 FEL TEMP REPARATIO 4 4  
 Falling Horseman (?)  
 AE 4 SPES REIPVBLICE 1 1 2 7 5 11 5 27 2 3 150 214

Fourth and Fifth Centuries A.D.

Table 3 (continued).

The Roman Coins		104
Total	3 3	89 89
Uncertain Mints	3 3	89 89
Alexandria		1 1
Antioch		1 1
Cyzicus		1 1
Nicomedia		1 1
Constantinople		1 1
Heraclea		1 1
Thessalonica		1 1
Sirmium		1 1
Siscia		1 1
Aquileia		1 1
Rome		1 1
Carthage		1 1
Arles		1 1
Trier		1 1
London		1 1
(346-361)	AE 2 & 3 FEL TEMP REPARATIO <i>Falling Horseman</i> (4)	
	FEL TEMP REPARATIO <i>Falling Horseman</i> (?)	
	FEL TEMP REPARATIO <i>Falling Horseman</i> (3)	
(351-361)	AE 3 FEL TEMP REPARATIO <i>Falling Horseman</i> (3)	
	FEL TEMP REPARATIO <i>Falling Horseman</i> (4)	
	FEL TEMP REPARATIO <i>Falling Horseman</i> (?)	
361-364	AE 1 SECVRITAS REIPVB AE 3 VOT X MVLT XX VOT V	
	AE 4 SPES REIPVBlicAE	
364-367	AE 3 RESTITVTOR REIP GLORIA ROMANORVM Emperor and captive	
	SECVRITAS REIPVBlicAE REPARATIO FEL TEMP	

367-375

GLORIA ROMANORVM  
 Emperor and captive  
 SECVRITAS REIPVBLICAE  
 (364-375)

2	2	9	13
3	2	3 1 4	1 1 16

GLORIA ROMANORVM  
*Emperor and captive*  
 SECVRITAS REIPVBLICAE

1	4	8 24	5 40 82
1	1	4 2 39	2 3 89 141

375-378

GLORIA ROMANORVM  
 Emperor and captive  
 SECVRITAS REIPVBLICAE  
 (364-378)

1	1		1
1	1		1

GLORIA ROMANORVM  
*Emperor and captive*  
 SECVRITAS REIPVBLICAE

81	81
2	1 3 1 6 4 3 85 105

105

378-383

AE 2 REPARATIO REIPVB  
 AE 3 CONCORDIA AVGG  
 Roma  
 CONCORDIA AVGG  
 Constantinopolis  
 CONCORDIA AVGG  
 (figure uncertain)  
 VIRTVS ROMANORVM  
 VRBS ROMA  
 AE 4 VOT XV MVLT XX  
 VOT V MVLT X

1	1	4 2 6 1	6 21
1	1 16 2 2	4 26	
		1	3 4
1	1	1 1	2 2
1	1	1	1 3
1			1 2

Fourth and Fifth Centuries A.D.

383

AE 2 GLORIA ROMANORVM  
 Emperor in Galley

1	4	10 1	16
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VOT — MVL T —

393-395

AE 2 GLORIA ROMANORVM  
Emperor

AE 3 GLORIA ROMANORVM  
Emperor ahorse

AE 4 SALVS REIPVBLICAE  
(383-395)

AE 4 SALVS REIPVBLICAE

395-408

AE 3 CONCORDIA AVGG

GLORIA ROMANORVM  
Three Emperors

GLORIA ROMANORVM  
Empress

SALVS REIPVBLICAE  
Victory seated

VIRTVS EXERCITI

VRBS ROMA FELIX

AE 4 CONCORDIA AVG  
Cross

CONCORDIA AVGGG  
Cross

CONCORDIA [ ]  
Cross

CONCORDIA AVG  
Victory

(383-408

AE 2-4 SALVS REIPVBLICAE  
Victory seated

AE 4 SALVS REIPVBLICAE

1 1

16 13 8 21 6 2 66

7 22 7 17 53

4 2 2 6 14

22 7 55 11 2 264 361

10 4 12 56 82

5 7 42 5 6 117 182

2 1 1 3 7

3 8 1 7 19

107

11 77 28 87 25 3 236 467

6

4 1 2 7

2 2 1 1 6 12

1 5 25 31

2 2

Fourth and Fifth Centuries A.D.

1

6 6

1



425-455

AE 4 CONCORDIA AVG

Victory

1 3 3 7

VICTORIA AVGG

4

1 5

VOT PVB

2

2

VT XXX V

10 16

Cross in Wreath

6

10 16

(402-455

1 11 3 16 1

205 237

CONCORDIA AVG

Victory

4 5

VICTORIA AVG(GG)

24

63 87

450-457

Monogram

7 4 1

71 83

457-474

Emperor and captive

1

19 20

Empress

36

36

Lion

1

16 17

Lion in Wreath

7

7

Monogram

1 3 2

39 45

Two Emperors

3

3

474-491

ZENO

1

1

Monogram

72

72

Victory

4

4

(425-578

Monogram

9 9

larger for some reason tend to make their way to Sardis? In the same issues the comparable proportions of Constantinople pieces per module are very regular, 21%, 20% and 34% respectively. Again, the coins of Cyzicus occur about twice as frequently as those of Nicomedia in the AE 2 of these issues, but eight times as frequently in the AE 3. The Table documents the shifting sources of Sardis' coin by issue, and the variations in quantitative distribution.

*Diocletian, Maximian Herculeus, Galerius Maximian and Constantius I — 294-299*

The reform of Diocletian included the introduction of a new bronze coin, the follis. In fact none was found at Sardis which can with certainty be dated to the earliest period; the 41 pieces under these dates are all radiate fractions, intended to circulate along with, and presumably at par with, the debased third century antoniniani. The alloy of the follis contained a minute quantity of silver in support of its value. The relation of the value to the sound silver and gold coins of the reform is a matter of dispute, but the absence of the early folles in the finds is unlikely to have any connection with their precious metal content. For almost three-quarters of a century, the succeeding issues of small change also contained a tiny amount of silver, until the practice was suspended by Valentinian I; these occur abundantly at Sardis. The relatively large size of the follis, averaging in weight ca. 10.5 g., probably protected it against random loss, for as a hoarded denomination the coin is not rare.

No example was found of the smallest piece of the reform, the laureate fraction, which is scarce everywhere.

Cyzicus and Heraclea account for almost all the mint-identified coins of the period.

*Diocletian and Maximian Herculeus — 300-306*

The radiate fraction was no longer struck; only two or three random folles at most can be attributed to this period.

*Maximian Herculeus and Maxentius — 307-311*

A slight resurgence is visible in this period after the almost complete vacuity of the last, and this is also a period which begins with the reduction of the follis weight (and therefore of the module) to ca. 7 g. There is no determining from the find coins alone whether the reduced folles were more plentiful, or simply more losable. This problem will arise repeatedly as the follis declines in size: there is a clear correlation between the depreciations and the growing number of pieces in the finds.

*Licinius I, Licinius II, Maximinus II, Constantine I and Constantine II — 312-320*

The further reduction of the follis to perhaps 5.2 g. in 310 seems to have had no immediate effect on the currency at Sardis, but the subsequent reduction to 4.5 g. in 312 signals the next expansion in the catalogue. Here the finds are spread over an unusually large number of mints, suggesting that these issues reached Sardis piecemeal over some years, and that they must have been plentiful to have interpenetrated the currency in this manner.<sup>10</sup> Heraclea provides the most examples, but no mint clearly predominates. For the first time since the reform the mint of Nicomedia appears. Note that in the joint issues of Licinius I and II, beginning in 317, from a number of mints in this period and the next, the father occupies about twice as many coins as the son.

*Licinius I, Licinius II, Constantine I, Crispus and Constantine II — 321-324*

The introduction of the *Iovi Conservatori* follis at ca. 3 g. coincides with an almost threefold rise in the coin finds. While the totals are still small compared to what the fourth century was to bring, they do reflect a growing penetration of the

10. For the mint distribution of folles in Asia Minor up to A.D. 313 see D. Kienast, "Der Münzfund von Ankara," *JNG* 12 (1962) 63-112.



currency by bronze of ever smaller module. Again a smattering of western mints appears, almost the last until the substantial issues of 341-346. Nicomedia emerges as the major mint of the decade for Sardis.

*Constantine I, Crispus, Constantine II and Constantius II — 324-330*

The issues of the years immediately following the defeat of Licinius, corresponding to Period I of *LRBC*, are represented by remarkably few coins at Sardis. For these Nicomedia is the major mint, but the totals are so small as to make these results unimpressive. Constantinople opens later in this period, in 326, and seems not to have struck in large quantity early on in its career; Cyzicus provides little.

*Constantine I, Constantine II, Constantius II and Constans — 330-335*

The introduction of the *Gloria Exercitus* type at ca. 2.5 g. brought considerably more coin to Sardis, but the number of mints represented shrinks. Where some 25% of the issues of 312-324 were coins of Thessalonica and the western mints, here these are almost entirely unrepresented; the dozen years 330-341 produce a total of 393 pieces including just nine of Thessalonica, two of Rome, one of Siscia. The western issues of these types seem never to have made their way to Asia Minor.

Every mint represented in the finds of 330-335 provides from two to eight times the number of coins provided in the preceding period. Cyzicus and Constantinople have now pushed ahead of Nicomedia in quantity, and Nicomedia never again achieves first rank at Sardis in any subsequent period, save amid the very few coins of Julian Augustus and Jovian, 361-364. Several of the mint/type totals are apparently askew, notably the five pieces of Victory on Prow from Cyzicus, where there are none of the parallel Wolf and Twins issues at all. Both are noted as common in *RIC*. Here and elsewhere we may have evidence of importation of specific issues by special order or in

pursuit of some official expenditure, rather than by slow and random percolation into the general circulation.

*Constantine I, Constantine II, Constantius II, Constans and Delmatius — 335-337*

The types of this period continue those of the last, with the alteration of *Gloria Exercitus* from two standards to one and the reduction in weight to ca. 2 g. While the total number of pieces found is lower, production or importation of the *Gloria Exercitus* type has in fact risen; this period is confined to the year and eight months between the elevation of Delmatius to Caesar and the death of Constantine, and the average of coins found per year is more than double that of the preceding period. The subsidiary reverse types of Wolf and Twins, and Victory on Prow are by contrast poorly represented. Their production must have ceased early in the period, and in fact they are attested only for Thessalonica, Antioch and Alexandria, although their obverses of Roma and Constantinopolis were mated to the *Gloria Exercitus* reverse. It may be that the new coupling of types was undertaken after it was realized that the Wolf reverses and Victory reverses of two different weights could not be easily distinguished, whereas the change in *Gloria Exercitus* type made the distinction obvious.

*Constantine II, Constantius II and Constans — 337-341*

If the average of coins per year is a credible guide, the infusion of *Gloria Exercitus* pieces to Sardis continued at the same rate as during the previous period. No examples at all of the Wolf and Twins or Victory on Prow types have been found; among the eastern mints, they were continued into this period only at Alexandria, which is scarce in the Sardis finds in any case, and at Thessalonica, which for this period is not represented at all. The major innovation is the appearance in quantity of the first of the posthumous issues of Constantine I, with *Quadrige* reverse.

Constantinople and Cyzicus are the major mints of the period.

#### *Constantius II and Constans — 341-346*

The last period before the reform of 346 saw the highest *per annum* average of coins found thus far in the fourth century. The new *Vot XX Mult XXX* is the largest issue found for any single period during the years 294-361, even including the later reformed coinage. *Vot XX Mult XXX* was struck only by the eastern mints, all of which are well represented, with Cyzicus clearly predominating. By contrast the reverse *Vot XV Mult XX* was struck only at Antioch and only for Constans; its relative rarity is confirmed by the Antioch finds, where less than a quarter as many *Vot XV* were discovered as Constantius' *Vot XX*.

The Sardis finds are further enlarged by the second and third posthumous issues for Constantine I. The earlier of these, *Iust Ven Mem*, is very scarce indeed, the later, *Vn Mr*, quite common. The site finds at Athens, Corinth and Antioch produce if anything an even greater divergence between the two, examples totaling 12 and 319 pieces respectively.<sup>11</sup>

#### *Constantius II and Constans — 346-350*

The reform of 346 introduced several novelties into the bronze currency.<sup>12</sup> The legend *Fel Temp Reparatio* ultimately occurs with five types, in two modules of ca. 5 and 2.5 g. It has been argued that the previously struck bronze then circulating was legally demonetized on the introduction of the *Fel Temp Reparatio* issues; whatever the law, the fact

11. *LRBC* I p. 23 ends its discussion of the coinages preceding Constantius' reform with the curious statement, "In the final period . . . the most common issues...are the two commemorative types of *Pop. Romanus*, which are by no means as scarce as is often thought." No example of either has been found at Sardis in the 23 pieces from Constantinople, their only mint. At Athens one example was found among 66, at Corinth none in 7.

12. The date 346 has been followed in both catalogue and discussion as the year of Constantius' reform, consonant with *LRBC*. Subsequent to its publication Kent reverted to the chronology which had earlier been proposed by Mattingly, A.D. 348: J. P. C. Kent, "Fel. Temp. Reparatio," *NC* 7th ser. 7 (1967) 83-90.

is that the earlier coinage continued to circulate, as the hoards show. For that matter, the new coinage is not plentiful, and could hardly have taken the place of the mass of bronze then in circulation. Finds of the new AE 2 are decidedly scarce, though again this may be the result of their larger module, but the AE 3 Phoenix is only slightly more common, and no example of Gallus' Galley type was found at all. Note that while all the *Fel Temp Reparatio* types of both modules are known from the six easternmost mints (save Phoenix at Heraclea), only two of the mints, Cyzicus and Constantinople, are represented to any extent at Sardis. Their pieces may represent issues specifically requested by or directed to the city as part of the program to reform the bronze coinage.

#### *Constantius II and Gallus — 351-354*

AE 1 is introduced in the West for Magnentius and Decentius. The longinquity of their mints and the large module of the coin make it surprising that even one example was found at Sardis. Otherwise the coins of the period are solely *Fel Temp Reparatio* Falling Horseman in AE 2 and AE 3 modules, the latter the more common. Each is considerably more common than the corresponding module of the preceding period, evidence that the reform of A.D. 346 was finally beginning to have a large effect, doubtless because of greatly increased production of the new coinage. The mint spread of the finds is good, but the origin of the coins appears to be differential with respect to denomination: Cyzicus provides the largest number of AE 2 from any mint, while Constantinople leads in AE 3 with Cyzicus far behind.

#### *Constantius II and Julian — 355-361*

The penultimate period of coinage by the house of Constantine saw a huge outpouring of the *Fel Temp Reparatio* Falling Horseman in AE 3, followed by a new type and module, *Spes Reipublice* in AE 4. Both are exceedingly common everywhere and must have been struck in enormous quantities. The find rate at Sardis reaches eighty per year. The metal for these issues may well have

been provided by the retirement of earlier coins, if Pearce is correct in his interpretation of the Edict of 356, under which continued circulation of the *Vot XX Mult XXX* and the earlier issues of *Fel Temp Reparatio* appear to have been forbidden.<sup>13</sup>

Two curious phenomena which have yet to be fully explained have been associated with the Edict and with this period. The one is the private imitation of the latest *Fel Temp Reparatio* Falling Horseman, on flans which at Sardis measure in some cases no more than 10 mm. in diameter. A few dozen have been found on the site, not enough to indicate that they had much bearing on the currency; compare the finds at the other end of the Empire, in Britain, where they have turned up in unnumbered thousands, vastly overshadowing the coinage which they imitate.<sup>14</sup> This counterfeiting must, however, have occurred in the East as well as the West, for the Sardis examples imitate eastern mintmarks, e.g. 397, C65.442. It is generally argued that, whatever the circulating value of these tiny pieces, the imitations date from this period, for they bear decaying versions of the types of the last *Fel Temp Reparatio* issues, not of the types of Valentinian or his successors; again there is a certain amount of hoard evidence from Britain to support this chronology. Imitations, however, frequently derive from other imitations, so that the *Fel Temp Reparatio* types could have continued to be privately manufactured even after the originals had ceased to be struck, as long as they passed as coin. Out of context they would seem far more appropriate to the late fourth and early fifth centuries, when their module approaches that of the voluminous AE 4 coinages which began to be issued in A.D. 383 and which were especially small and nasty under Theodosius II. Sardis offers no guidance here, but a curious detail emerges from the study of the British analogue. Ravetz supports a date in the 350's for the small imitations, but her graphs appear to show an inverse

correlation between the frequency of their occurrence at a number of sites and the frequency of the issues of 388-402+.<sup>15</sup> Since the modules of the two groups are much the same they could easily have circulated together, in which case the absence of coins of 388-402+ at a given site may only indicate that they were not needed because of the presence of the *Fel Temp Reparatio* imitations. It may be that some of the imitations used toward the end of the century were manufactured then rather than earlier.

A second aberration which seems to have resulted from the Edict was the private production of usable coin by the overstriking with counterfeit dies of good pieces which had been decried. Again the phenomenon is already attested far to the West.<sup>16</sup> At Sardis one piece was found, nominally of Gallus but actually a forgery of this period struck upon a genuine AE 3 also of Gallus, both of Falling Horseman type. Again, while the examples known are largely western, the imitation die with which this piece was restruck bears an attempt at the Constantinople mark, and must have been manufactured in the East (480).

The *Fel Temp Reparatio* issues ceased ca. A.D. 357, to be followed by the smaller *Spes Reipublice*. The two types appear not to have overlapped, since the differentiated mintmarks never coincide. In spite of the large numbers of both types which come to hand, the issues for Julian are proportionately very scarce, those for Constantius very common. Thus of the *Spes Reipublice* coins Julian appears on 30, Constantius on 159, more than five times as many.

#### *Julian — 361-363; Jovian — 363-364*

Julian was proclaimed emperor by his troops early in A.D. 360, but was not recognized as such by Constantius until late 361 (if at all). Two Gallic mints under Julian's control, Lugdunum and

13. J. W. E. Pearce, "Barbarous Overstrikes found in Fourth Century Hoards," *NC* 5th ser. 19 (1939) 266-283.

14. The material is usefully collected in Alison Ravetz, "Roman Coinage of the Fourth Century in Britain" (diss. University of Leeds, 1963).

15. *Ibid.*; compare her p. 222, on the date of the *Fel Temp Reparatio* imitations, and 220, illustrating the relative distribution in time of the imitations and the later AE 4.

16. *Supra* nn. 12 and 13.

Arelate, struck bronze for the two Augusti simultaneously from 360. Rome and the mints to the East, by contrast, generally ignored Julian's accession. Either the bulk of the *Fel Temp Reparatio* (certainly) and *Spes Reipublice* (probably) had already been struck, or Julian continued to appear on the coins only as Caesar, for in general the mintmarks show parallel striking for Constantius and Julian throughout. One possible eastern exception is LRBC 2852, *Spes Reipublice* of Julian Augustus struck at Alexandria, described however as "the only Eastern mint recorded as striking bronze coinage for Julian as sole Augustus in the early part of his reign" (p. 42). The attribution to Julian's sole reign, after the death of Constantius in November 361, is probably correct, although the coin itself is of little help since it bears the same mintmark as that on Constantius' own issue of *Spes Reipublice*. The Sardis finds helpfully expand on LRBC, for *Spes Reipublice* of Julian Augustus can now be attributed to both Nicomedia and Cyzicus. It is highly unlikely that these eastern mints struck for Julian Augustus with Constantius' blessing. The coins ought rather to be attributed to the very end of 361, the first issues of the sole reign and the last gasp of the *Spes Reipublice* type.

Julian's coinage as Augustus, after this brief beginning, is followed by a cessation in the bronze issues for more than a year. The catalogue follows the convention of attributing the Augustan coins simply to the full reign, but LRBC has established that Julian's other issues, AE 1 *Securitas Reipub* and AE 3 *Vot X Mult XX* (a curious module for the type), cannot have been struck before 363, when their new obverse legend was introduced. These seemed to have been coined in limited quantities, in spite of their occurring at most mints and often with several mint marks, for in site finds they are never very common, as we might expect at least the *Vot X* to be. Julian was dead by the end of June, but even if these issues were limited to six months their *per annum* average at Sardis is only six, as against the eighty which obtained for the immediately preceding period with its joint coinages of Constantius and Julian Caesar.

A single coin of Jovian closes the pre-Valentinian issues.

The find specimens from this period are too few to convey any impression of relative mint importance, but hereafter in almost every issue either Cyzicus (especially in the fourth century) or Constantinople (especially in the fifth) is the major source of coin for Sardis.

#### *Valentinian, Valens and Gratian — 364-378*

It is certain that the earliest AE 3 issue of Valentinian is the *Restitutor Reip*, struck for Valens as well. It is also the scarcest by far of the three Valentinian issues in the East. The rarity of some varieties of the type is most strikingly shown in the Antioch finds, where not a single example of Valens' *Restitutor Reip* was identified among the 136 coins in his name from the Antioch mint. Pearce believes the type to have begun during the month which preceded the selection of Valens as co-emperor, which could account for the regular predominance of Valentinian in the issue at all mints.<sup>17</sup> But one might equally postulate that the primacy of Valentinian in the power was recognized at the mints, and that they deliberately struck the larger part of the issue in his name. The total of Sardis pieces is small (Valentinian 18, Valens 10), but the ratio of roughly 2:1 is the same as that of the finds from Athens, Corinth and Antioch. The whole issue should be dated to 364, during the first months of Valentinian's rule.

Of the other two types of AE 3, *Gloria Romanorum* and *Securitas Reipublicae*, neither is abundantly represented at Sardis from mints such as Thessalonica and Constantinople whose marks can be differentiated by period. Many of the find pieces are simply attributed to the full reign of Valentinian, 364-375. Pearce, however, believes that coinage of AE 3 at the eastern mints did not continue much after the accession of Gratian in 367, for his obverses are uncommon with these types, indeed at the Antioch mint excessively rare. The Antioch finds of that mint produced: *Gloria* Valentinian 18, Valens 99, Gratian 1; *Securitas* Valentinian 8, Valens 37, Gratian 1. In the West

17. See J. W. E. Pearce, "Aes Coinage of Valentinian I: The Evidence from Hoards," *NC* 6th ser. 8 (1948) 66-77; and his remarks throughout *RIC* IX.

the same types are predominantly much more abundant for Gratian, and indeed are subsequently found for Valentinian II who was acclaimed in 375. Coinage there must have been continuous.

The Italian mints, on the hoard evidence, show three processive phenomena in these types. At both Rome and Aquileia, (1) the total number of both *Gloria* and *Securitas* per mint mark falls as the series progress, though that may reflect the composition of the hoards; (2) *Securitas* is always the more common type but becomes progressively more so; (3) Valens at Rome is more common than Valentinian and his proportion grows, whereas an early predominance at Aquileia is reduced in the later mintmarks to about equal status. The Roman phenomenon is taken by Pearce to be political, a deliberate snubbing of Valentinian. In any case, Valens' primacy appears to be asserted by the mints of the East, and here the Sardis finds and the other excavations can enlarge and control the very limited evidence available to Pearce.

*Thessalonica.* A single known example of *Securitas* for Valentinian II suggested to Pearce that the types were struck into 375. No further specimen of this variety was found at any of the four sites, and in fact the pattern of survival resembles that of the other mints to the East. Finds at Sardis were: *Gloria* Valentinian 5, Valens 5; *Securitas* Valentinian 2, Valens 5, Gratian 1. The finds at Athens and Corinth, where Thessalonica is represented in much greater numbers, provide a similarly meager total for Gratian. The two sites total: *Gloria* Valentinian 56, Valens 95, Gratian 14; *Securitas* Valentinian 34, Valens 88, Gratian 8. The problem then is whether the scarcity of the coins of Gratian is an essentially political phenomenon, or whether *contra* Pearce (and as seems more likely) the Thessalonica mint did not strike these types any later than did the other mints to the East.

*Heraclea.* The few coins noted by Pearce are not much enlarged by the site finds. At Sardis only nine pieces are attributable to Valentinian, Valens or Gratian, at the other sites only eighteen. What is notable is a sharp drop at all sites in the proportionate numbers of coins struck at Heraclea. Where for example that mint provided 10.4% of the mint-identifiable pieces from Licinius to Julian,

for Jovian-Gratian the rate has dropped to 5.8%. At Athens and Corinth the fall is from 7.5% to 2.2%, at Antioch 2.7% to 0.2%. Here then the evidence is so slim that the question of the proportion of types and of emperors cannot be usefully approached, but another point can be made instead: the total output of AE 3 at Heraclea must have fallen off radically, and was never to be much revived. The find evidence then supports Pearce's contention, based on the limited number of mintmarks at Heraclea, that the issue of the two types was limited and that the mint was probably inoperative for a number of years.

*Constantinople.* Pearce's figures give predominance to the *Gloria* type during 364-367, more prominently to *Securitas* thereafter to the cessation of the types ca. 369; and to Valens over Valentinian in both types. The Sardis and Athens finds do not support the first point; during the first period *Securitas* is about a third again as frequent as *Gloria*, but scarcer than *Gloria* after 367. Further, Pearce's figures for the two periods show a drop in *Gloria* from 35 pieces to 11, while *Securitas* rises from 23 to 50; whereas the two site finds illustrate a sharp drop in both, *Gloria* falling from 47 to 21, *Securitas* from 63 to 16. The discrepancy between the two sets of evidence must depend from their differing nature. Pearce's figures derive from hoards and reflect the skewness of their composition, whereas the site finds allow for the gradual percolation into circulation of the issues in proportion to their original size. The site finds are therefore to be preferred as illustrating the progress of the two types at Constantinople.

*Nicomedia.* Here the site finds confirm the hoards, which showed a predominance in the *Gloria* issue on the basis of very few specimens. At Sardis, and at each of the other sites, *Gloria* surpasses *Securitas* in every case. The issues must have been early, for the types with Gratian are very uncommon and do not occur in the other site finds.

*Cyzicus.* By far the largest representation of the two types at Sardis are from this mint. *Securitas* outnumbered *Gloria* almost two to one, as against the hoards where their numbers are nearly equal. The other site finds reduce the proportion somewhat, but *Securitas* is still half again as common

as *Gloria*. As usual Valens outnumbers Valentinian, by about 4.5 to 1. Gratian is represented by only one piece, proportionately even scarcer than in the hoards.

*Antioch*. The finds at Antioch are the best evidence for the activity of the mint, and prove quite conclusively that the *Gloria* issue was more than twice as common as *Securitas*, with Valens predominating over Valentinian by about 5 to 1, while the coins of Gratian are virtually unknown — two pieces in the Antioch finds.

*Alexandria*. Here Sardis produces one example of the *Gloria* type and seven of *Securitas*, and it is clear from the hoards and site finds that *Securitas* was proportionately much more common. (The El Kab hoard which might be skewed, had *Gloria* 39 and *Securitas* 453.)

The sum of the site find evidence supports Pearce in general but not in every detail. Generally the eastern mints seem not to have struck AE 3 (or in the years 375-378, any coins at all) continuously through the reigns of Valentinian and Valens. With the possible exception of Thessalonica the mints appear to have cut off the *Gloria* and *Securitas* issues shortly after the accession of Gratian, although we should not underestimate the possibility of their slighting a western emperor by deliberately striking very little coin in his name. Valens is predominant throughout in number of pieces bearing his portrait as against those of his colleagues. If the mints agree in these tendencies, they diverge sharply in their proportionate issue of the two types: at one mint *Gloria* will predominate, at another *Securitas*, while at Thessalonica they seem almost exactly balanced. Since the two types appear to have been struck everywhere simultaneously there will have been a conscious choice between them in each case. The answer to the problem is not likely to be simply technical, i.e. the random assignment of a type to an active or a sluggish officina, since in general the same officinae struck both. Perhaps rather a nice sense of the political significance of the types and legends resulted in the decision locally that one or the other should predominate, even while the central administration was requiring the production of both.

### *Gratian, Valentinian II and Theodosius — 378-383*

The new AE 2 with *Reparatio Reipub* is hardly found at Sardis, though a good many have been published from Athens and Corinth. Among the AE 3 the *Concordia Auggg* with Roma or Constantinopolis is the commonest, indeed at most eastern mints the only issue. In general the former reverse is struck for Gratian and Valentinian, the latter for Theodosius; while exceptions are attested, they are not frequent in the site finds. At Nicomedia and Antioch the western AE 3 types of *Virtus Romanorum* and *Urbs Roma* were struck in addition. Pearce is impressed by the political significance: "Gratian intended that the East and its new Augustus Theodosius should know where the leadership lay" (xviii). If so, the East took the last trick, for the types are admittedly rare at Nicomedia, and while Pearce rates the Antioch issues as "common" the site finds there have produced only four examples of each, as against more than fifty of the *Concordia Auggg* issue. One example of Antioch's *Urbs Roma* was found at Sardis, none of *Virtus*, and neither type in the Athens or Corinth finds.

### *Gratian, Valentinian II, Theodosius and Arcadius — 383*

Only at the eastern mints can issues for this year be isolated, for only there is an overlap found in the coinage of Gratian and Arcadius: in the new AE 2 *Gloria Romanorum* types (one reserved for Arcadius on his accession), and the AE 4 *Vota* struck for Gratian, who died before the year was out. Some of these types persist for years at mints in both the West and the East, and it is not always possible to construct a precise chronology for them. What does stand out is the appearance in quantity of these two modules, which had barely been seen at Sardis for several decades preceding. The AE 2 of Constantius II and Gallus and the AE 4 of Constantius and Julian had been the last to occur regularly in the finds. The new types are here in quantity: *Gloria Romanorum* 19, *Vota* 92. The predominance of Theodosius and his son over the western emperors is emphasized: *Gloria* Theodosius 10, Arcadius 3, Gratian 2, Valentinian II 4;

*Vota* Theodosius 37, Arcadius 24, Gratian 12, Valentinian II 10. In addition a *Salus Reipublicae* type was struck for Flaccilla, Theodosius' wife, in both AE 2 and AE 4; the latter is not found at Sardis for any mint, though Pearce considers some varieties common.

*Valentinian II, Theodosius I and Arcadius — 383-392*

At the eastern mints the types of 383 continue along with (or are followed by?) a new AE 3 *Virtus Exerciti* struck in somewhat greater quantity than the AE 2 *Gloria Romanorum* Emperor in Galley. These then are augmented by the addition of a new AE 4 *Salus Reipublicae* in enormous numbers. It abounds at all sites: Sardis ultimately produces 175 from identifiable mints, and another 296 which cannot be assigned a mint. It is possible that a few whose emperor is illegible were struck for Honorius as late as A.D. 402-408. The totals per emperor at Sardis, however, are Valentinian II 62, Theodosius 120, Arcadius 104 and Honorius 8, which suggests that coinage of the type at most mints was about to cease at the time of Honorius' accession in 393. Certainly his pieces are very uncommon, even though LRBC confirms their existence for every mint from Constantinople through Alexandria. Thus the Antioch finds produced just one *Salus Reipublicae* of Honorius struck at Antioch.

The four sites together brought forth more than 2800 examples of this type. Theodosius predominates, as is to be expected, save that the Sardis finds show that Arcadius had the larger coinage at Constantinople, which is confirmed by the Athens and Antioch finds.

*Theodosius, Arcadius and Honorius — 393-395*

Ten years after the introduction of the AE 2 *Gloria Romanorum* types for Arcadius' accession and Gratian's fifteenth anniversary, the same legend appears in 393 with two new types of AE 2 and AE 3 to celebrate Honorius' accession. The AE 2 types were struck in even greater abundance than those of 383; all three emperors and all mints from Heraclea to Antioch are represented at Sar-

dis, for a total of 86 pieces. The denomination was not thitherto so commonly found at Sardis. The AE 3 *Gloria* is less common, deriving from only three mints in 53 examples. Some of its varieties are rated Rare-Rare<sup>3</sup> by Pearce, who is supported e.g. by the Antioch finds, which produced only 34 AE 2 and 8 AE 3 from the mint of Antioch. The predominance of Theodosius which was noted earlier no longer holds. He leads at Constantinople and Antioch, Arcadius at Heraclea and Nicomedia, and Honorius at Cyzicus; the differences are small in any case. With the death of Valentinian II and the imposition of Honorius on the West there was no longer the need for tendentious manipulation of the relative quantities of coins struck for each emperor.

The new types may well have been intended for circulation specifically in Asia Minor. Against the larger number of the AE 2 from Sardis, only one piece was found at Corinth (no. 692) and none at all at Athens, whereas more than forty were identified at Antioch. The AE 3 circulated more widely, for a few pieces are noted from the Greek sites.

*Arcadius and Honorius — 395-402*

After the death of Theodosius, AE 2 is hardly struck again, save for the possible continuation of the *Gloria Romanorum* Emperor type at Constantinople. But a new AE 3 *Virtus Exerciti* pours from the mints; 467 pieces were found at Sardis, 994 from the four sites taken together.<sup>18</sup> Again circulation seems very much directed to the East; of the above total only 61, or about 6%, derive from Athens and Corinth together. Arcadius predominates at all mints save Antioch, where Honorius' pieces have been found in slightly larger quantity; overall the examples of Arcadius are half again as common as those of Honorius.

There appears to have been another attempt to outlaw the circulation of earlier coinages in 395, perhaps in an effort to protect the Theodosian AE 4.<sup>19</sup> If so the effort was not successful, as is shown

18. A. H. M. Jones' remark, "After the death of Theodosius the Great in 395 issues of copper almost cease" (*The Roman Economy* [Oxford 1974] 216) may hold for Gaul, but is not true of Rome or the eastern mints.

19. So Ravetz, *op. cit.* 42.

by the hoards.<sup>20</sup> Sardis contributes the so-called Church hoard, discovered outside the chapel in the south-east angle of the peristyle of the Temple of Artemis (*Sardis* XI [1916] viii). The hoard is largely of AE 4 *Salus Reipublicae* — 17 of 25 pieces — dating A.D. 383-395, but it goes back to two pre-reform reduced folles of Constantius II, 341-346, and one piece of Valens. The earliest pieces had continued in circulation for half a century, and after the utterance of the edict if Bell's date of burial, ca. A.D. 400, is accepted.

#### *Arcadius, Honorius and Theodosius II — 402-408*

The accession of Theodosius II brought with it two new AE 3 types at Constantinople and the Asian mints, *Concordia Augg* and *Gloria Romanorum* Three Emperors. The former is decidedly scarcer, 121 pieces at the four sites as against 808. Of these only 5% and 10% respectively were found at Athens and Corinth, again suggesting that circulation of AE 3 was directed to the East. In that regard it is instructive to compare the Sardis finds with those of the two Greek sites in respect to the module of the coins from roughly the last two decades of the fourth century and the first two of the fifth, namely those of Arcadius, Honorius and Theodosius II through A.D. 408. The global total of these three emperors, when broken down by module, gives these percentages (adjusted to chronology and modules of *LRBC*):

	Sardis	Athens	Corinth
AE 2	59 8.1%	2 0.1%	1 0.4%
AE 3	501 68.9%	230 18.3%	63 25.0%
AE 4	167 23.0%	1023 81.6%	188 74.6%

A purely archaeological explanation for the great predominance of AE 4 at Athens is at hand: the coins derive exclusively from the Agora, where the smallest denomination would have been constantly in use. Such is not the case with the statistics from Corinth, however, where the Roman agora had not

been dug at the time of the publication of the coin volume, and these figures show that those of Athens have a wider significance.<sup>21</sup> It is clear that in the Greek cities the larger AE 2 and AE 3 coins were much less common than at Sardis, both proportionately and in terms of the gross number actually available.

In this period, perhaps as well as in the preceding, production of AE 4 continued, but in very reduced quantities. The reverse type Cross with legend *Concordia Aug* or *Auggg* was struck at all eastern mints (save *Aug* at Heraclea); each mint is represented in the Athens finds, and all but Alexandria at Sardis. The striking characteristic is that at both sites the AE 4 is scarce in comparison with the vast issues of *Salus Reipublicae* which preceded. In each case the *Concordia* issues total just 11% of the *Salus*. Given the tendency of AE 4 to move toward Athens rather than Sardis, the coincidence of these figures shows that the totals are not simply a site peculiarity but evidence that after 395 the production of AE 4 dropped to about one-eighth of its previous level.

#### *Honorius and Theodosius II — 408-423*

Through the remainder of the reign of Honorius no AE 4 was struck at the eastern mints. The AE 3 appears in two new *Gloria Romanorum* types, Two Emperors with shields and spears, or holding a globe between them. Production probably falls; the types appear to be entirely unknown at Antioch and are very rare at Alexandria, and the total found at Sardis for the two types is only slightly larger than for the single *Gloria Romanorum* Three Emperors of 402-408. Not so at Athens, where the Two Emperor types are about 2.5 times as common as the Three Emperor. Can this have to do with the unavailability of eastern AE 4, coin now being imported necessarily in the AE 3 module?

20. See, e.g., J. Lallemand, "Trésor de petits bronzes romains découvert en Égypte," *Cd'É* 48 no. 95 (Jan. 1973) 157-178. In the hoard, buried A.D. 402+, the coins run back to Constantius II.

21. K. M. Edwards, "Report on the Coins found in the Excavations at Corinth during the Years 1930-1935," *Hesperia* 6 (1937) 241-256, includes coins from the Roman Agora. Unfortunately the Imperial finds are unusable, since they are listed by global total per emperor, without regard to issue, date or mint. So also the subsequent report by J. M. Harris, "Coins found at Corinth (1936-1939)," *Hesperia* 10 (1941) 143-162.



The total of the Two Emperor types at Athens, 139 pieces, is still smaller than that at Sardis, 176, in spite of the much larger total body of Roman Imperial coins at Athens.

#### *Theodosius II and Valentinian III — 423-455*

The influx of bronze coinage was reduced to AE 4 exclusively, that module being almost the only product of the mints in *aes*. The uncommon AE 3 has left no trace at Sardis beyond single examples of *Glor Orvis Terrar* of Theodosius II and *Concordia Aug* of Eudocia, although the earlier issues of this module were doubtless still in circulation. The eastern mints continue to supply the coins of Theodosius, while the very few of Valentinian derive exclusively from Rome insofar as the mint can be ascertained, though one piece of Cross in Wreath may be eastern.

*Marcian — 450-457; Leo — 457-474; Zeno — 474-491*

The last half of the century saw a plentiful influx of AE 4 in the smallest module, the so-called *minimi*. As the catalogue of finds stands, there appears to have been a diminishing impact of new coinage: the *per annum* average falls from Marcian, 11.7 coins per year; to Leo, 7.2; to Zeno, 4.5. There is no reason to doubt this figuration, but the gross totals on which it is based are certainly much understated in each case. The *minimi* are difficult to find in the soil, and when found are difficult (or more usually, impossible) to read, whether because of poor striking originally, wear in circulation, or corruption in the soil. The totals for these emperors must therefore be enlarged by the addition of most of the 1719 pieces catalogued as 5th/6th century A.D. unidentifiable. Of these a few are not *minimi*, and a few others could be *minimi* conventionally treated as Byzantine, the nummi of Anastasius and Justinian. But the bulk are likely coins of the latter half of the fifth century, and indicate how plentiful was this execrable coinage. If at an estimate 1500 of the 5th/6th century unidentifiables were to be added to the issues of Marcian, Leo and Zeno and in proportion to those identified, the catalogue totals

would be enlarged remarkably: Marcian from 83 pieces to 517, Leo from 128 to 797, Zeno from 76 to 473.

#### **Issues and Mints, 294-491**

Table 4, a summary version of the data broken down by issue in Table 3, provides a conspectus of mint totals for the years 294-491. Where the condition of the coins, or our limited knowledge of their chronology, does not allow a more precise dating, their number is bracketed between the periods which they embrace. For convenience the chronology of *LRBC* after A.D. 324 has been followed in preference to that of *RIC*, with the practical consequence that all *Gloria Exercitus* Two Standards are given to 330-335, all *Gloria Exercitus* One Standard to the two periods following. The unidentifiable coins assignable only roughly to century are omitted. It may be supposed that the pieces which cannot be included reflect the distribution of those which can. But there is one important exception: the totals for the last three periods, A.D. 450-491, must be understood as given *exempli gratia* only. These are the catalogue totals for Marcian, Leo and Zeno, and are probably a just illustration of the relative distribution of their coins by emperor and mint. But the unidentified tiny fifth and sixth century AE 4, 1719 pieces in the catalogue, must mostly belong here, so that the sum of examples given for the three emperors may be only 15-20% of the actual number of their coins found.

Table 5 indicates the proportion of find coins per year for the periods 294-491. The totals are derived from the catalogue and include those coins which cannot be assigned to a single period with certainty. They are here divided in proportion to the division of those whose period is certain; e.g., the 70 pieces attributable to A.D. 335-341 are included in the two periods 335-337 and 337-341 as 20 and 50 pieces respectively, following the proportion of certainly attributed examples, 60:154. The totals do not include the unidentifiable coins which can only be attributed roughly by century, nor a few dozen attributable only to emperor but not to type, mint or issue.

Table 4. Mint totals of coins from Sardis, 294-491. Numbers are bracketed between periods where poor condition of the coins or limited knowledge of their precise chronology do not allow closer dating.

Period	London	Trier	Arles	Carthage	Rome	Aquileia	Siscia	Sirmium	Thessalonica	Heraclea	Constantinople	Nicomedia	Cyzicus	Antioch	Alexandria	Uncertain Mint	Total
294-299																	41
300-306																5	46
307-311		1								3						1	4
312-320	1		3		5	1	2		1	10		8	6	3		4	26
321-324																4	26
324-330										6	4	10	3	1		4	26
330-335									2	12	22	13	18	5	1	16	89
335-337																11	100
337-341									2	2	10	11	13	15		8	115
341-346																2	117
																53	170
																64	234
																166	400
Total	1	3	6	1	15	3	6	6	17	74	94	100	163	60	11	344	898

346-350			2	6	2	15	2	2	9	34
351-354	1	1	1	8	10	24	5	5	9	116
355-361		3	1	3	8	9	34	11	163	199
361-364							2	3	1	9
<b>Total</b>	<b>1</b>	<b>4</b>	<b>3</b>	<b>1</b>	<b>3</b>	<b>16</b>	<b>21</b>	<b>29</b>	<b>456</b>	<b>729</b>
364-367	1	2	1				31	9	6	79
367-375	3	3	4				8	10	129	223
375-378		1	1				13	1	166	29
378-383	1	1	1	5	1	5	20	6	15	61
383					8		11	5	16	113
383-392	2	3	2	25	15	40	40	27	58	198
393-395							22	7	264	361
395-408	6			13	104	10	104	47	452	815
408-423	3	1	1	1	6	17	17	9	141	188
423-425							10	32	6	20
425-455							7	9	2	7
450-457							4	19	2	65
457-474							7	4	2	24
474-491							43	1	219	267
<b>Total</b>	<b>2</b>	<b>47</b>	<b>8</b>	<b>6</b>	<b>53</b>	<b>75</b>	<b>449</b>	<b>139</b>	<b>1777</b>	<b>3114</b>

Table 5. Per annum proportions of coins from Sardis from 294 to 491. Where exact period is uncertain, coins have been assigned according to the proportions of more securely dated issues.

Period	Total of coins	Number of years	Number of coins per year
294-299	42	5½	7.6
300-306	1	7	.1
307-311	7	5	1.4
312-320	54	9	6.0
321-324	54	3½	15.4
324-330	26	6	4.3
330-335	100	5	20.0
335-337	87	2	43.5
337-341	206	4	51.5
341-346	321	5	64.2
346-350	45	4½	10.0
351-354	150	4	37.5
355-361	525	6½	80.8
361-364	9	3	3.0
364-367	376	3	125.3
367-375	138	8	17.3
375-378	5	3	1.7
378-383	68	4½	15.1
383	126	1	126.0
383-392	437	9	48.6
393-395	282	2½	112.8
395-408	903	13	69.5
408-423	203	15	13.5
423-425	2	2	1.0
425-455	290	30	9.5
450-457	84	7	11.2
457-474	130	17	7.4
474-491	78	17	4.5

## HOARDS

A hoard, according to the usual definition, is a sum of money or other valuables set aside for security or as savings, normally by burial in a container. In the course of the excavations coins have frequently come to light in apparently coherent groups, restricted by their immediate archaeological context. The excavators have for convenience designated these groups as hoards, although none of Roman times has been discovered contained by a purse or vessel.

One large lot of coins found in 1970 southeast of the entrance to the Synagogue "may have come from metal containers, traces of which are still visible."<sup>22</sup> The coins themselves were found strewn about, and some were only later recovered by sifting. The difficulty here is that which frequently attends: if the coins are not held within a container at the time of discovery, or if the deposit is not sealed, it is not possible to be certain that there ever was an original nucleus, or if there was that it has not been contaminated by elements earlier or later. In such circumstances one can only argue from the numismatic likelihood. The coins from the Synagogue area PCA are a case in point. They number about 420, including many fourth and fifth century A.D. pieces of uncertain attribution. Of those attributable, most are distributed thus: House of Constantine, 53; Valentinian, Valens and Gratian, 21; Theodosius, Arcadius and Honorius, 134; Theodosius II, 26; Leo, 2. The proportions are very odd. Were these the constituents of a proper hoard buried in the reign of Leo it would be astonishing to find so many Constantinian issues. Contrarily, the issues of Valentinian and Valens, whose coins are so numerous on the site, are here unexpectedly few. A *Salus Republicae* of Arcadius is in almost uncirculated condition, as if struck shortly before the terminal date of the hoard, yet it is followed by coins of Theodosius II and even of Leo, the last struck half a century after Arcadius' death. In any case the extreme limits of the coin finds from Synagogue PCA are an antoninianus of Gordian III (24) dating to A.D.

241-243 and a decanummium of Justinian I (Byzantine Cat. 62), struck in A.D. 562-565. It is not possible that these coins formed part of a single hoard. The finds from Synagogue PCA are a mélange of issues struck and used at different periods. If some are to be associated with the containers whose traces remain, it is not possible to say which, nor now to separate out the random coins from those which may once have formed a coherent group reflective of the circulation of their time.

The same difficulty arises elsewhere. The group of coins designated as the Synagogue Second Hoard includes at the extremes both a Seleucid bronze and a dump of the fifth century A.D. Here too, without the control of sealing, an apparently coherent archaeological context is not enough to guarantee the unity of the numismatic material.

In two cases, however, the coins themselves are unexpectedly coherent, suggesting the possibility of a hoard; a third find of contemporary material was made off the site; and a large hoard of the same material is known from Priene. Together they suggest hoarding of large denomination bronze in the last decade or two of the fourth century. In 1966 there were found together six examples of the AE 2 *Gloria Romanorum* Emperor r., struck A.D. 393-408 (C66.394-396). The range of these few pieces is broad: they were struck for Theodosius, Arcadius and Honorius, at the mints of Heraclea, Constantinople, Nicomedia and Cyzicus. They must therefore have come to Sardis sporadically. But their purposeful collection is suggested by the absence of any other types or denominations, as well as the splendid condition of them all. In 1967 a second lot of the same type appeared (C67.41) and was designated a hoard at the time of discovery. Again all three emperors are represented, and the mints of Constantinople, Nicomedia and Cyzicus. Of particular interest is one piece which is certainly an ancient counterfeit of the type, of good fabric and weight. Since counterfeits would come into circulation only after the original type was known, the lot cannot have been put together when first this *Gloria Romanorum* type was uttered. The coins represent rather a selection from circulation which must have been deliberate, and their designation as a hoard is doubtless correct.

22. SYN E118-122/S1-3 \*97.7-96.34 (the "Packed Columns Area" or PCA); see *BASOR* 203 14-15, fig. 9; Hanfmann, *Letters* 275-276.

A comparable hoard of 186 pieces of the same type covering all three emperors and all six eastern mints, was discovered at Priene.<sup>23</sup> The circumstances of the find which allow the definition "hoard" are not given, but it is a reasonable assumption that the term fits, since the coins did not occur with any other types or denominations.

In addition to the two late fourth century hoards from the Sardis site finds, a third may be represented by three pieces brought to the excavation by local residents late in the season of 1968. They are said to have been found on the west side of the Pactolus. These are all examples of the AE 2 *Gloria Romanorum* Emperor on Galley, struck A.D. 383-392 (C69.157), all issued at Cyzicus in the name of Theodosius I (752, 757). Their condition is uniformly of moderate wear. Given the relative scarcity of the type at Sardis; their condition, which shows that they must have been taken from circulation; and the fact that the three coins represent two issues, they may well have been a deliberate deposit.

## BRONZE MINIMI

Of the 8720 Roman coins from the site, over 1500 are the so-called *minimi*, tiny bronzes of the last half of the fourth and the early fifth century A.D. Most of these execrable pieces are completely illegible, and one might posit that many never bore any type or legend at all but circulated simply by module, so distinct are they from most of the coinage which had preceded. Their proportion among the catalogued coins if anything understates their frequency at Sardis, for before cleaning they appear to be tiny pebbles or bits of mud, and it is quite possible that quantities of them escaped the eyes of the workmen who did discover so many others.

Beyond the difficulty of recognizing them in the first place, and in recovering some type or legend from them, another problem frequently arises. The corrosion which, expectedly, has corrupted many of the bronze coins of all periods at Sardis, has in this case operated with particularly peculiar results.

It is very common to find *minimi* corroded in the middle of one or both faces, so that the surface extrudes; or in a later state eaten away through the whole flan, so that the remains are in the shape of a doughnut. This differential corrosion suggests that the coins were not composed of an alloy consistent throughout, but that the centers of the planchets were of a metal more easily destroyed than that of the surrounding edges, likely of lead. R. Turcan, "Trésors monétaires trouvés à Tipasa," in *Libyca* 9 (1961) 215, takes the central hole in such coins to have been deliberate perforation, i.e. for stringing the pieces together; but it is the result of corrosion, as was independently noted earlier by J. W. E. Pearce, "More Late *Aes* from Egypt," in *NC* 5th ser. 18 (1938) 119: ". . . dumpy coins often holed or showing a whitish patch of corroded metal, presumably lead — a preliminary stage of the hole."

To determine the answer to this problem, as well as to investigate the probable process of planchet manufacture, two typical examples of early fifth century *minimi* were subjected to chemical analysis by Dr. J. A. Charles, of the Department of Metallurgy and Materials Science, Cambridge University; the results are to be found below.

## METALLURGICAL EXAMINATION OF FIFTH CENTURY MINIMI

by J.A. Charles

The strange features of these small Roman copper coins (approximately 7.5 mm. in diameter, 1 mm. thick), exhibiting lead-rich areas with the appearance of surface excrescences, prompted a metallurgical examination, with the particular purpose of determining whether the lead was in some way inserted as a separate operation, or whether it arose from the constitution of the alloy employed.

### *Analysis*

Because of the marked heterogeneity of lead occurrence observed within the structure of a coin section, there was clearly no possibility of effecting a worthwhile analysis from a small separate sample of the same coin. It was considered better, therefore, to obtain an analysis by dissolving another

23. Kurt Regling, *Die Münzen von Priene* (Berlin 1927) 177-179. There were otherwise only a few hundred pieces for the entire Empire.

complete coin of the same type as that investigated by sectioning. Before dissolution the coin was pickled in dilute hydrochloric acid to remove surface oxides, the weight reducing from 441.1 mg. to 438.8 mg. The analysis results, obtained by chemical and atomic absorption spectroscopy techniques, was as follows:

Copper	50.2%
Lead	46.9%
Tin	1.0%
Iron	0.64%
Nickel	0.05%
Zinc	0.05%

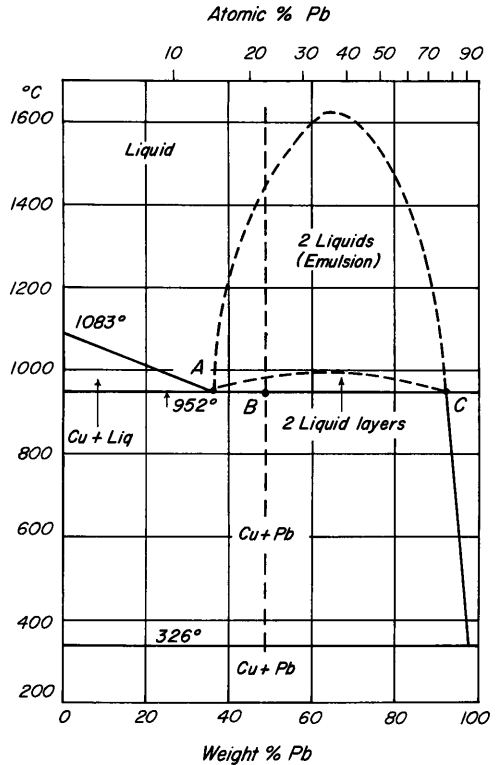
The analysis of individual phases in the microstructure of this section was achieved by electron probe-microanalysis.

### Metallographic Investigation

The coin was carefully sectioned, cutting across the maximum dimension of the lead excrement as closely as possible, and the section mounted in plastic for polishing to a .25  $\mu$  diamond finish. A microphotograph of the section is shown in Fig. 1. The structure essentially consists of two areas: an area of copper saturated with lead, in which lead has separated as an immiscible phase; and an area of lead saturated with copper, in which copper has separated during the process of solidification of the lead. The "top" surface of the coin is flat and relates to what was initially a free liquid surface. The top edge is rounded by the meniscus effect from surface tension in the liquid state, while the lower surface is rougher but generally rounded, in conformity with a mold surface and with a protuberance at the point of the lead phase. The attack of lead at high temperature (in the neighborhood of the melting point of copper) on clay materials through the fluxing action of its oxide could be expected to give this penetration into the mold.

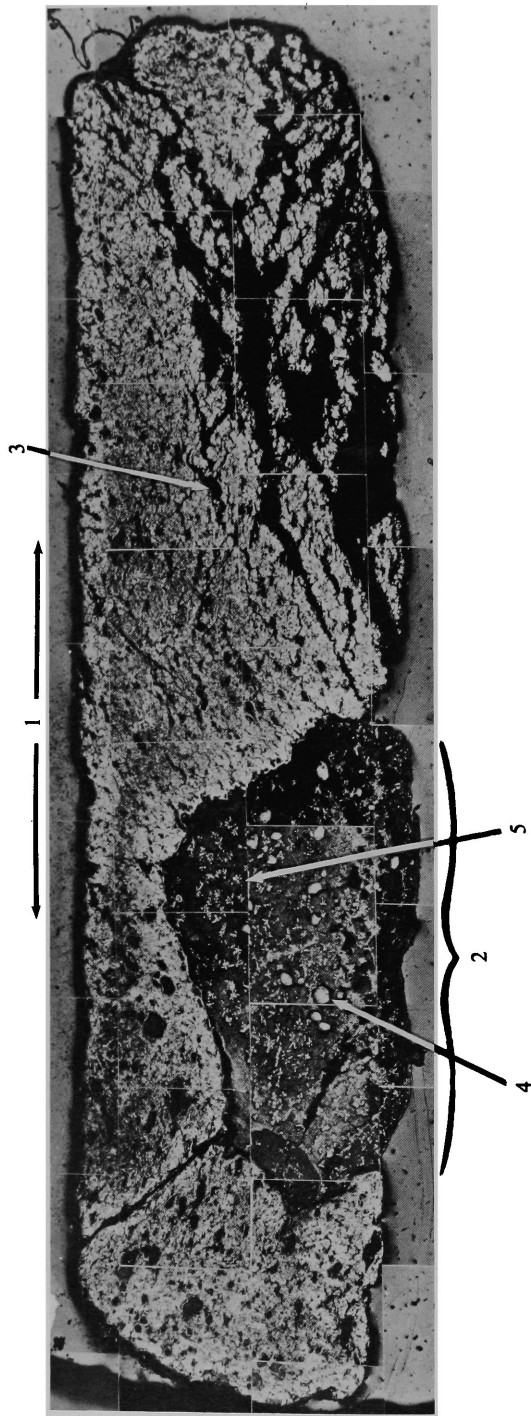
In understanding the way in which the coin was made and the structure produced, it is helpful to consider from the copper-lead (Cu-Pb) phase diagram (Graph 1) the way in which an approximately 50/50 alloy will solidify from the fully molten condition. At high temperatures in a furnace, say 1200° C, the system will consist of an emulsion of two immiscible liquids, one Cu-rich at approxi-

Graph 1. Copper/lead phase diagram. Adapted from C. J. Smithells, *Metals Reference Book*, 4th ed. (London: Butterworths 1967).



mately 40% Cu and the other Pb-rich at approximately 90% Pb. With temperature falling near to the monotectic temperature of 952° C, the emulsion will break down into a two-layer system of molten lead underlying molten copper. At the monotectic temperature, the system will consist of 75% of one liquid containing 36% Pb overlying 25% of another containing 92.5% Pb (by the Lever Rule, the proportion of liquids is  $BC/AB = 3/1$ ). The monotectic reaction will then occur, by which the former will change at constant temperature to pure metallic copper and further liquid containing 92.5% Pb. On continued cooling, the stillliquid lead-rich

Fig. 1. Microphotograph of Roman minimus, Magnification 33x. Shown at full width of coin.



1. Free liquid surface.
2. Isolated lead area mainly produced by the miscibility gap in the fully molten condition.
3. Lead separating from copper during solidification at the monotectic temperature.
4. Spherical copper particles from some original copper-rich liquid at the miscibility gap not achieving separation.
5. Copper separating as "star"-shaped particles from the lead-rich liquid phase, after the monotectic reaction, down to the solidification temperature of lead.



phase will reject virtually all the remaining copper in solution, which will then appear as dendrites within the lead (the "star" shaped light-colored particles in the dark lead phase of Fig. 1) or on the previously solidified copper from the monotectic reaction surrounding the lead. This would result in a lower incidence of dendritic copper in the lead in contact with the main copper mass. The degree to which the lead-rich liquid produced from the monotectic reaction and the previously existing lead-rich liquid from the two-liquid state will combine will depend on the solidification conditions in terms of the rate and direction of cooling. Thus there may be some original lead-rich liquid trapped in the copper, and similarly there are some spherical particles of copper in the lead phase area where presumably separation of the two initial liquids was not achieved.

An area analysis of the section indicated that the isolated lead area constituted approximately 20% of the total and that all major lead areas constituted 24% of the total. For a symmetrical or uniform system, the area fraction on a section will equal the volume fraction, and, making this assumption, there are reasonable grounds for deducing that the isolated lead area constituted the major part of the lead separated by the miscibility gap in the fully molten condition.

From this evidence it was concluded that the coin was produced by melting copper and lead together in a depression on a clay tile, reaching a temperature in excess of the melting point of copper. The coin, probably one of a number cast simultaneously, solidified on withdrawal of the tile from the furnace from the top where direct cooling would give steeper temperature gradients than through the tile. With the separation of the liquid phases as cooling from this top surface and sides progressed, the lead phase would sink and coalesce to a central position. A little of the original copper-rich liquid of eventual composition A on Table 6 was trapped in the descending lead-rich liquid C and is now evident as globules. Both these and the

main zone of top liquid would then undergo the monotectic reaction, with copper dendrites growing with a directionality from the top surface and sides towards the bottom center. Thus the lead-rich liquid rejected in the monotectic would occupy interdendritic positions indicating this directionality. This feature appears quite clearly in Fig. 1. It is also clear that cooling was stronger from one side, giving an off-center position to the rejected lead.

Finally, all the molten lead in the system, now of composition C, would cool down to the melting point of lead, rejecting copper, which in the isolated lead areas would partly appear as separate dendrites and partly as further growth on the previously-existing copper.

There is thus complete agreement between all the microstructural features discernible and what the metallurgist would expect to find in a small casting in this material. There is clearly no evidence of working. It is extremely difficult to cast individual amounts of this size into depressions; the coins could have been joined by a sprue and runner system but there is no evidence to suggest that this was the case. The simplest technique would seem to have been to put weighed amounts of the two metals into individual depressions on a tile and then place in a furnace for melting to the required shape. With such small amounts of metal of high specific surface area the tendency to oxidation in melting would be most marked and either a cover must have been provided for the mold and/or a strongly reducing atmosphere developed in the furnace with charcoal. It is very difficult, however, to achieve these high temperatures of approximately 1200° C without creating oxidizing conditions, since the carbon solution reaction  $\text{CO}_2 + \text{C} \rightarrow 2\text{CO}$  is endothermic (heat absorbing). In all probability the mold itself was closed or placed in a closed vessel together with charcoal, the vessel then being placed in a strongly-drafted fire or furnace.

## CATALOGUE

The Roman coins are arranged chronologically by emperor throughout, rather than by mint as is the usage of *RIC* from the reform of Diocletian. References are to *RIC* I-VII through the reign of Constantine I, thereafter to *LRBC*. One later volume of *RIC* was published out of series, Pearce's volume IX, Valentinian I to Theodosius I; it has seemed best for consistency to follow *LRBC*, which in any case is founded on Pearce, for this period.

The catalogue references carry with them the attributions to date and mint of *RIC* and *LRBC*. In a few cases these no longer hold. *RIC*'s continuation of the *Gloria Exercitus* (2 Standards) past A.D. 335 is not accepted in *LRBC*; *LRBC*'s opening date for the *Fel Temp Reparatio* issues of Constantius II, A.D. 346, has since been abandoned for 348 (see notes 12 and 14 in the Introduction above); and the conventional date of 367-375 for the *Gloria* and *Securitas* types of Valentinian I, Valens and Gratian probably obscures at the eastern mints a suspension shortly after Gratian's accession of what had been an intensive coinage in the preceding period, 364-367. Nothing would be gained by argumentative emendation of such details in the catalogue; where significant they are mentioned in the introduction or the notes, while the catalogue entry from *RIC* or *LRBC* is left to stand. Similarly no denomination is given with *LRBC* I references. Today it would probably be agreed that "follis" continued to serve during the successive Constantinian reductions, but when *LRBC* I was published the term was avoided, and this catalogue complies.

Imitations are included under the original type, and mention is made of them in the notes, except when a special description in the catalogue seems warranted.

Each catalogue entry is followed by the number of specimens included within it. The total number of specimens is given after the main heading.

Illustration of selected pieces is indicated by an asterisk (\*), reference to a footnote by a dagger (†). Unless otherwise indicated, all dates are A.D.

*RIC* references are to page numbers. *LRBC* references are to coin numbers.

## ROMAN REPUBLICAN

## Marcus Antonius (1)

1	Cistophoric tetradrachm	<i>Ephesus</i> 39 B.C.	M ANTONIVS IMP COS DESIG ITER ET TERT Busts of Antony and Octavia r. / III VIR RPC Dionysus I. on cista mystica	<i>BMCRR</i> II p. 503, 135	1
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## ROMAN IMPERIAL

## Augustus 31 B.C.-A.D. 14 (29)

*2	Sestertius	<i>Asia</i> 19-15 B.C.	C.A in wreath	<i>RIC</i> I p. 64, 50	1
†*3	As	"	AVGVSTVS in wreath	<i>RIC</i> I p. 64, 53	27
†4	As	<i>Rome</i> ca. 7 B.C.	M.MAECILIVS.TVLLVS.III. VIR.A.A.A.F.F./S.C.	<i>RIC</i> I p. 79, 193	1

## Tiberius 14-37 (1)

5	Den.	<i>Lugdunum</i> 14-37	PONTIF MAXIM Female seated r.	<i>RIC</i> I p. 103, 3	1
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## Claudius 41-54 (1)

6	Quadrans	<i>Rome</i> 41	Modius; PON.M.TR.P.IMP.COS. DES.IT/S.C.	<i>RIC</i> I p. 130, 72	1
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## Nero 54-68 (1)

7	Den.	63-68	IVPPITER CVSTOS Jupiter seated l.	<i>RIC</i> I p. 148, 46	1
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## Vespasian 69-79 (1)

8	Den.	75	PON.MAX.TR.P.COS.VI. Victory l. on prow	<i>RIC</i> II p. 25, 93	1
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3 Twenty of these pieces are deliberately cut halves. In addition C62.488 is whole, but bent along an indentation at the middle of the edge, probably an indication of an aborted cutting. Most of these, whole and halved, are very badly worn and often can be identified only from fabric, the types having been entirely effaced. Presumably they circulated on into the third century along with the Greek Imperial bronze. Their weights, reduced by wear from the weight of issue, run:

whole ( 7 pieces) 9.9-8.4 g., avg. 9.16 g.  
halved (19 pieces) 6.0-2.0 g., avg. 3.89 g.

C61.72, halved, is counterstamped with what appears to be a mono-

gram,  $\text{†}$ .

For halving as an Augustan phenomenon, see T. V. Buttrey, "Halved Coins, the Augustan Reform, and Horace *Odes* 1.3," *AJA* 76 (1972) 31-48, which deals with halving in the West. For other instances of the halving of Eastern AVGVSTVS, CA, and SC issues, see D. B. Waagé, *Antioch on the Orontes* 4:2 (Princeton 1952) 30-31, 35-36. A halved Augustan moneyer's *as* from Rome was also found there.

4 The date is *RIC*'s. The chronology of the Augustan moneyers' *aes* issues is notoriously difficult, and "ca. 7 B.C." must be taken as only approximate.

**Trajan 98-117 (4)**

†9	Den.	103-111	COS.V.P.P.SPQR.OPTIMO.PRINC Aequitas l.	<i>RIC</i> II p. 252, 118
10	Den.	"	Same legend Felicitas l.	<i>RIC</i> II p. 252, 120
†11	Den.	114-117	PROVID PARTHICO.PM.TR.P. COS.VI.P.P. SPQR Providentia l.	cf. <i>RIC</i> II p. 269, 363

**Hadrian 117-138 (2)**

12	Den.	134-138	COS.III Pudicitia seated l.	<i>RIC</i> II p. 380, 343(d)
13	Den.	"	SALVS.AVG Salus l.	<i>RIC</i> II p. 371, 268(a)

**Antoninus Pius 138-161 (1)***Posthumous*

14	Den.	161	CONSECRATIO Pyre	<i>RIC</i> III p. 247, 438
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**Lucius Verus 161-169 (1)**

15	Den.	165-166	PAX AVG TR P VI COS II Pax l.	<i>RIC</i> III p. 258, 555
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**Commodus 180-192 (1)**

16	Den.	181-182	TR P VII IMP IIII COS III PP Mars r.	<i>RIC</i> III p. 369, 25(A)
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**Septimius Severus 193-211 (1)**

17	Den.	195	PART ARAB PART ADIAB COS II PP Trophy and captives	<i>RIC</i> IV <sub>1</sub> p. 98, 63
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**Caracalla 198-217 (2)**

18	Den.	210	PONTIF TR P XIII COS III Concordia seated l.	<i>RIC</i> IV <sub>1</sub> p. 230, 116(a)
19	As	213	PM TR P XVI COS IIII PP SC Sarapis l.	<i>RIC</i> IV <sub>1</sub> p. 295, 505

**Elagabalus 218-222 (2)**

20	Den.	218-222	MARS VICTOR Mars r.	<i>RIC</i> IV <sub>2</sub> p. 36, 121(b)
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†21	Den.	218-222	PM TR P XV COS III PP Hercules		obv. <i>RIC</i> IV <sub>2</sub> p. 29, 16 etc. rev. <i>RIC</i> IV <sub>1</sub> p. 239, 192	1
<b>Julia Mamaea (1)</b>						
22	Den.	222-235	FELICITAS PVBLICA	Felicitas l.	<i>RIC</i> IV <sub>2</sub> p. 98, 335	1
<b>Gordian III 238-244 (2)</b>						
23	Ant.	241-243	PM TR P IIII COS II PP	Emperor r.	<i>RIC</i> IV <sub>3</sub> p. 25, 92	1
24	Ant.	"	VIRTVTI AVGVSTI	Hercules r.	<i>RIC</i> IV <sub>3</sub> p. 25, 95	1
<b>Philip I 244-249 (1)</b>						
*25	Ant.	<i>Antioch</i> 248-249	SAECVLVM NOVVM	Temple	<i>RIC</i> IV <sub>3</sub> p. 79, 86(a)	1
<b>Trajan Decius 249-251 (2)</b>						
26	Ant.	<i>Rome</i> 249-251	DACIA	Dacia l.	<i>RIC</i> IV <sub>3</sub> p. 121, 12(b)	1
27	Ant.	<i>Uncertain</i> <i>Mint</i> 249-251	VICTORIA AVG	Victory l.	e.g. <i>RIC</i> IV <sub>3</sub> p. 123, 29(c)	1
<b>Trebonianus Gallus 251-253 (4)</b>						
28	Ant.	<i>Rome</i> 251-253	FELICITAS PVBLICA	Felicitas l.	<i>RIC</i> IV <sub>3</sub> p. 162, 34(A)	1
*29	Ant.	"	LIBERTAS AVGG	Libertas l.	<i>RIC</i> IV <sub>3</sub> p. 163, 37	1
30	Ant.	"	VICTORIA AVGG	Victory l.	<i>RIC</i> IV <sub>3</sub> p. 163, 48(a)	1
31	Ant.	"	LIBERTAS PVBLICA	Libertas l.	<i>RIC</i> IV <sub>3</sub> p. 163, 50	1

21 C61.499. The piece is an ancient hybrid counterfeit of base metal.  
The reverse is appropriate to Caracalla, A.D. 212.

## Gallienus 253-268 (52)

## Joint Reign

		<i>Milan</i>				
†*32	Ant.	253-260	SALVS PVBLICA	Salus l.	cf. <i>RIC</i> V <sub>1</sub> p. 99, 401	1

## Sole Reign

		<i>Rome</i>				
33	Ant.	260-268	ABUNDANTIA AVG	Abundantia r.	<i>RIC</i> V <sub>1</sub> p. 144, 157(8K)	2
†*34	Ant.	"	AEQVITAS AVG	Aequitas l.	cf. <i>RIC</i> V <sub>1</sub> p. 144, 159(8C[1])	2
			<i>M/m:</i> $\frac{\text{VI}}{\text{—}}$ (1)			
35	Ant.	"	AETERNITAS AVG	Sol l.	<i>RIC</i> V <sub>1</sub> p. 144, 160	4
36	Ant.	"	APOLLINI CONS AVG	Centaur r.	<i>RIC</i> V <sub>1</sub> p. 145, 163	1
37	Ant.	"	APOLLINI CONS AVG	Centaur l.	<i>RIC</i> V <sub>1</sub> p. 145, 164(K)	2
			<i>M/m:</i> $\frac{\text{H}}{\text{—}}$ (2)			
38	Ant.	"	APOLLINI CONS AVG	Griffin l.	<i>RIC</i> V <sub>1</sub> p. 145, 165	1
†*39	Ant.	"	CONSERVAT PIETAT	Emperor l. with suppliant	cf. <i>RIC</i> V <sub>1</sub> p. 145, 171a(8c)	1
†40	Ant.	"	DIANAE CONS AVG	Stag l. (1) or r. (2)	<i>RIC</i> V <sub>1</sub> p. 146, 179(8A, 8K[2])	3
			<i>M/m:</i> $\frac{\text{XI}}{\text{—}}$ (1)			
41	Ant.	"	DIANAE CONS AVG	Antelope l.	<i>RIC</i> V <sub>1</sub> p. 146, 180	2
			<i>M/m:</i> $\frac{\text{—}}{\text{—}} \frac{\text{—}}{\text{—}}$			
42	Ant.	"	Same	<i>M/m:</i> $\frac{\text{—}}{\text{XII}}$	<i>RIC</i> V <sub>1</sub> p. 146, 181(8K)	1
43	Ant.	"	FECVNDITAS AVG	Fecunditas l.	<i>RIC</i> V <sub>1</sub> p. 147, 184	1
44	Ant.	"	IOVIS STATOR	Jupiter r.	<i>RIC</i> V <sub>1</sub> p. 149, 216	1
			<i>M/m:</i> $\frac{\text{—}}{\text{—}}$			
45	Ant.	"	IOVI VLTORI	Jupiter r.	<i>RIC</i> V <sub>1</sub> p. 150, 221(8K)	1
			<i>M/m:</i> $\frac{\text{s}}{\text{—}}$			
46	Ant.	"	LIBERAL AVG	Liberalitas l.	<i>RIC</i> V <sub>1</sub> p. 151, 227(8F)	1
			<i>M/m:</i> $\frac{\text{—}}{\text{s}}$			
†47	Ant.	"	MARTI PACIFERO	Mars l.	<i>RIC</i> V <sub>1</sub> p. 151, 236(8K)	2
			<i>M/m:</i> $\frac{\text{H}}{\text{—}}$ , $\frac{\text{—}}{\text{—}}$			

32 C62.1086. Salus holds a scepter, a detail omitted in *RIC* but reported in the proto-reference, Cohen 944. The obverse legend of this example, IMP C A (*sic* — for P) LIC GALL [IENV S PF AVG], is not given to Milan for gold or silver by *RIC*.

34 One example, C68.102, can be clearly read; the obverse and reverse of the second are obscure. The mintmark VI is not in *RIC* for this type but is found on other issues assigned to the mint of Rome,

cf. *RIC* V<sub>1</sub> p. 148, 197-198.

39 C68.6. *RIC* gives obverse 8K only; the Sardis example bears 8C.

40 C70.3 with mintmark bears obverse K.

47 C66.408, the example with mintmark  $\frac{\text{—}}{\text{—}}$ , reverse legend MARTI PACIF, could also be assigned to Milan, *RIC* V<sub>1</sub> p. 174, 492, no. 57 below.

48	Ant.	260-268	NEPTVNO CONS AVG Hippo- camp r. <i>M/m:</i> <u>              N</u>	<i>RIC</i> V <sub>1</sub> p. 152, 245(8K)	1
49	Ant.	"	PAX AETERNA AVG Pax l. <i>M/m:</i> <u>              Δ</u>	<i>RIC</i> V <sub>1</sub> p. 153, 252	1
50	Ant.	"	SECVRIT PERPET Securitas l. <i>M/m:</i> <u>              H</u> (3)	<i>RIC</i> V <sub>1</sub> p. 155, 280(8K)	3
51	Ant.	"	SOLI CONS AVG Pegasus r.	<i>RIC</i> V <sub>1</sub> p. 155, 282	1
52	Ant.	"	SOLI CONS AVG Bull r.	<i>RIC</i> V <sub>1</sub> p. 156, 285	1
†*53	Ant.	"	VBERITAS AVG Uberitas l. <i>M/m:</i> <u>              ε</u> (2), <u>              </u> (2)	cf. <i>RIC</i> V <sub>1</sub> p. 156, 287(8K)	4
54	Ant.	"	VICTORIA AET Victory l. <i>M/m:</i> <u>              z</u>	<i>RIC</i> V <sub>1</sub> p. 157, 297(8K)	1
†*55	Ant.	"	AEQVITAS AVGG Aequitas l. <i>M/m:</i> <u>              v</u>	cf. <i>RIC</i> V <sub>1</sub> p. 160	1
<i>Milan</i>					
56	Ant.	260-268	FIDES MILIT Fides l.	<i>RIC</i> V <sub>1</sub> p. 173, 481	1
57	Ant.	"	MARTI PACIFERO Mars l. <i>M/m:</i> <u>              p</u>	<i>RIC</i> V <sub>1</sub> p. 174, 492(8K)	1
58	Ant.	"	ORIENS AVG Sol l. <i>M/m:</i> <u>              </u>	<i>RIC</i> V <sub>1</sub> p. 174, 495(8K)	1
59	Ant.	"	VICTORIA AVG Victory l.	<i>RIC</i> V <sub>1</sub> p. 176, 523(8K)	1
<i>Siscia</i>					
†*60	Ant.	260-268	CONCORDIA AVG Concordia l. with one cornucopia <i>M/m:</i> <u>              s</u>	cf. <i>RIC</i> V <sub>1</sub> p. 180, 563	1
61	Ant.	"	FORTVNA REDVX Fortuna l. <i>M/m:</i> <u>              *s</u>	<i>RIC</i> V <sub>1</sub> p. 181, 572(8A)	1
<i>Asia</i>					
62	Ant.	267	AETERNITAS AVG Saturn r.	<i>RIC</i> V <sub>1</sub> p. 184, 606	1
63	Ant.	260-268	VENERI VICTRICI Venus l.	<i>RIC</i> V <sub>1</sub> p. 189, 660	1
<i>Uncertain</i>					
<i>Mints</i>					
†64	Ant.	260-268	VIRTVS AVG Mars l.	cf. <i>RIC</i> V <sub>1</sub> p. 158, 320	1

53 C61.399, C64.168, C69.141, C71.18. The attribution follows *RIC* which gives to Rome the type of Uberitas holding purse and cornucopia, and other types with the mintmark ε. The obverse 8K of our examples, however, occurs with Uberitas in *RIC* V<sub>1</sub> p. 183, 585 only, at Siscia.

55 C65.72. This piece is a hybrid, an addition to the list given in *RIC* V<sub>1</sub> p. 160, 336-344. The 8K obverse of Gallienus' sole reign is mated

with a reverse appropriate to the earlier joint reign with Valerian. 60 C58.3. *RIC* describes the type as with double cornucopia, and no mint letter in field. The Sardis piece shows a single cornucopia, and S in right field.

64 C63.1122. The details of the reverse type are obscure, and the *RIC* reference given only *exempli gratia*.

65 Ant. 260-268 Uncertain type 4

**Salonina (7)**

		<i>Rome</i>				
66	Ant.	260-268	IVNONI CONS AVG	Doe 1.	<i>RIC</i> V <sub>1</sub> p. 193, 15	1
			<i>M/m:</i> <u>   </u> <u>  A</u>			
†67	Ant.	"	Same		<i>RIC</i> V <sub>1</sub> p. 193, 16	1
68	Ant.	"	PVDICITIA Pudicitia 1.		<i>RIC</i> V <sub>1</sub> p. 194, 24	1
			<i>M/m:</i> <u>   </u> <u>  Q</u>			
69	Ant.	"	SECVRIT PERPET Securitas 1.		<i>RIC</i> V <sub>1</sub> p. 194, 27	1
			<i>M/m:</i> <u>   </u> <u>   </u>			
		<i>Milan</i>				
70	Ant.	260-268	AVG IN PACE	Empress seated 1.	<i>RIC</i> V <sub>1</sub> p. 197, 58	1
		<i>Siscia</i>				
71	Ant.	260-268	IVNO REGINA	Juno 1.	<i>RIC</i> V <sub>1</sub> p. 199, 76	1
			<i>M/m:</i> <u>   </u> <u>  SI</u>			
		<i>Uncertain Mint</i>				
†72	Ant.	260-268	Uncertain type			1

**Claudius Gothicus 268-270 (103)**

		<i>Rome</i>				
73	Ant.	269	PM TR P II COS PP	Emperor 1.	<i>RIC</i> V <sub>1</sub> p. 212, 10(3F)	1
			<i>M/m:</i> <u>   </u> <u>  A</u>			
74	Ant.	268-270	AEQVITAS AVG	Aequitas 1.	<i>RIC</i> V <sub>1</sub> p. 212, 14(3K)	1
			<i>M/m:</i> <u>   </u> <u>  S</u>			
75	Ant.	"	APOLLINI CONS	Apollo 1.	<i>RIC</i> V <sub>1</sub> p. 213, 22	1
76	Ant.	"	CONCORDIA AVG	Concordia 1.	<i>RIC</i> V <sub>1</sub> p. 213, 27	1
77	Ant.	"	GENIVS AVG	Genius 1.	<i>RIC</i> V <sub>1</sub> p. 214, 44	1
78	Ant.	"	Same	<i>M/m:</i> <u>   </u> <u>   </u>	<i>RIC</i> V <sub>1</sub> p. 215, 45(3F)	1
79	Ant.	"	GENIVS EXERCI	Genius 1.	<i>RIC</i> V <sub>1</sub> p. 215, 48	1
†*80	Ant.	"	LIBERT AVG	Libertas 1. with pileus and scepter	cf. <i>RIC</i> V <sub>1</sub> p. 216, 62(K)	1
81	Ant.	"	PROVIDEN AVG	Providentia 1.	<i>RIC</i> V <sub>1</sub> p. 218, 90	1

67 C64.22. Obverse legend COR SALONINA AVG.  
72 C62.255. Mintmark under obverse bust, .... No dotted obverses for either Gallienus or Salonina are cited in *RIC*, where the first occurrence of the phenomenon is said to have been under Claudius Gothicus (*RIC* V<sub>1</sub> p. 207). Dotted coins of both Claudius and

Aurelian are given to Cyzicus, but in no case do as many as four dots appear (pp. 231-233, 301-303).

80 C59.225. *RIC* gives the reverse type as Libertas with pileus and cornucopia, and obverse F. The Sardis specimen shows Libertas with pileus and scepter, and obverse K.



82	Ant.	268-270	VICTORIA AVG	Victory l.	RIC V <sub>1</sub> p. 219, 104(3F)	1
83	Ant.	"	VIRTVS AVG	Soldier l.	RIC V <sub>1</sub> p. 219, 109(3A)	3
		<i>Milan</i>				
84	Ant.	268-270	PAX AVG	Pax l.	RIC V <sub>1</sub> p. 223, 157	1
		<i>Siscia</i>				
85	Ant.	268-270	LAETITIA AVG	Laetitia l.	RIC V <sub>1</sub> p. 226, 181(4K)	1
			<i>M/m: —</i>			
86	Ant.	"	TEMPORVM FELI	Felicitas l.	RIC V <sub>1</sub> p. 227, 192	1
		<i>Cyzicus</i>				
87	Ant.	268-270	PAX AETERNA	Pax l.	RIC V <sub>1</sub> p. 231, 238	1
88	Ant.	"	VICTOR GERMAN	Trophy and captives	RIC V <sub>1</sub> p. 232, 247(2A)	1
†*89	Ant.	"	VICTORIAE GOTHIC	Trophy and captives	RIC V <sub>1</sub> p. 232-3, 251-2	4
			<i>M/m: —</i>	(3)		
		<i>Uncertain</i>				
		<i>Mints</i>				
90	Ant.	268-270	Uncertain type			7
			<i>Posthumous</i>			
		<i>Uncertain</i>				
		<i>Mints</i>				
91	Ant.	270-	CONSECR AVG	Jupiter & Juno	RIC V <sub>1</sub> p. 233, 258	1
92	Ant.	"	CONSECRATIO	Altar	RIC V <sub>1</sub> p. 233, 259	1
†**93	Ant.	"	Same		RIC V <sub>1</sub> p. 233, 261	43
94	Ant.	"	CONSECRATIO	Eagle r. (23) or l. (3)	RIC V <sub>1</sub> p. 234, 266	27
95	Ant.	"	PROVIDENTIA AVG	Providentia l.	RIC V <sub>1</sub> p. 236, 287	1
96	Ant.	"	Uncertain type			1

89 The three examples which can be clearly read, C64.37, C68.53, C68.141c, combine the mintmark — of RIC 251 with the obverse 2A of 252.

93 None of the Sardis examples bears a legible mintmark. Many,

perhaps most, are likely contemporary imitations, of which the worst show both diminution of module and corruption of type and legend, so that the year of Claudius' death, A.D. 270, provides only a *terminus post quem* for their manufacture.

**Quintillus 270 (1)**

†*97	Ant.	<i>Siscia</i> (?) 270	GENIVS AVG <i>M/m:</i> $\frac{\quad}{\quad}$	Genius at altar	cf. <i>RIC</i> V <sub>1</sub> p. 244, 55	1
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**Tetricus 270-273 (2)**

†*98	Ant.	<i>Uncertain</i> <i>Mints</i> 270-	PIETAS AVG instruments	Pontifical	cf. <i>RIC</i> V <sub>2</sub> p. 409, 110	1
†*99	Ant.	"	Diana l. with torch			1

**Aurelian 270-275 (3)**

100	Ant.	<i>Milan</i> 270-275	FORTVNA REDVX seated l. <i>M/m:</i> $\frac{\quad}{\text{P}}$	Fortuna	<i>RIC</i> V <sub>1</sub> p. 279, 128(4F)	1
101	Ant.	<i>Siscia</i> 270-275	IOVI CONSER Emperor <i>M/m:</i> $\frac{\quad}{*\text{S}}$	Jupiter and	<i>RIC</i> V <sub>1</sub> p. 289, 225(4F)	1
*102	Ant.	<i>Uncertain</i> <i>Mint</i> 270-275	CONCORD•MILIT and Emperor <i>M/m:</i> $\frac{\quad}{\text{I}}$	Concordia	<i>RIC</i> V <sub>1</sub> p. 309, 391(4C)	1

**Probus 276-282 (4)**

103	Ant.	<i>Ticinum</i> 276-282	PAX AVGVSTI <i>M/m:</i> $\frac{\text{T}}{\text{VXXI}}$	Pax l.	<i>RIC</i> V <sub>2</sub> p. 72, 516	1
104	Ant.	<i>Siscia</i> 276-282	PAX AVG <i>M/m:</i> $\frac{\quad}{\text{I Q}}$	Pax l.	<i>RIC</i> V <sub>2</sub> p. 92, 706(F)	1

97 C71.538. The type is given in *RIC* only to Milan, but the obverse legend I and the lack of a mintmark indicates rather Siscia as mint. 98-99 C65.69 and C64.36, respectively. Both pieces are imitations. On the obverse of the first can be read ]TETR[ $\bar{\text{I}}$ , on the reverse, POEVA[ $\bar{\text{I}}$ ,

an attempt at the original PIETAS. The second bears a reverse type unattested in *RIC* for Tetricus. The excavation produced as well a small number of barbarous radiates, some possible imitations of Tetricus, which have been collected below under no. 1114.

105	Ant.	<i>Cyzicus</i> 276-282	SOLI INVICTO Sol in facing quadriga $M/m: \frac{CM}{XXII}$	<i>RIC</i> V <sub>2</sub> p. 118, 911	1
106	Ant.	"	VIRTVS PROBI AVG Emperor riding l. $M/m: \frac{V}{XXIMC}$	<i>RIC</i> V <sub>2</sub> p. 118, 913	1
<b>Carus 282-283 (1)</b>					
†*107	Ant.	<i>Ticinum</i> 282-283	SPES PVBLICA Spes l. $M/m: \frac{I}{SXXI}$	cf. <i>RIC</i> V <sub>2</sub> p. 144, 82(C)	1
<b>Diocletian 284-305 (12)</b>					
108	AE fraction	<i>Heraclea</i> 295-296	CONCORDIA MILITVM Jupiter and Emperor <i>off:</i> A, B (2), Γ (2), Δ, €	<i>RIC</i> VI p. 531, 13	7
*109	AE fraction	<i>Cyzicus</i> 295-296	Same <i>off:</i> Γ (2)	<i>RIC</i> VI p. 581, 16a	3
		<i>Uncertain</i> <i>Mints</i>			
†110	AE Follis	294-305	GENIO POPVLI ROMANI Genius l.		1
111	AE fraction	295-296	CONCORDIA MILITVM Jupiter and Emperor		1
<b>Maximian Herculius 285-305 (22)</b>					
112	AE Follis	<i>Carthage</i> 307	CONSERVATORES KART SVAE Carthago l. <i>off:</i> A	<i>RIC</i> VI p. 432, 59	1
†*113	AE fraction	<i>Heraclea</i> 295-296	CONCORDIA MILITVM Jupiter and Emperor <i>off:</i> B (1)	<i>RIC</i> VI p. 531, 14	3
†*114	AE Follis	308-309	GENIO IMPERATORIS Genius l. <i>off:</i> A, Γ	<i>RIC</i> VI p. 535, 37a	2

107 C62.263. *RIC* gives obverses A and F for the type; the Sardis piece bears obverse C.

110 C67.661. The piece is a deliberately cut half, with a diameter of 28 mm.

113 C61.204, C63.115, C67.753. The description in *RIC* should be

corrected. The obverse legend of the Sardis examples does not include VAL, nor does the piece illustrated in *RIC*. The reverse mintmark should read  $\overline{HA}$  rather than  $\overline{HA}$ .

114 On the example of officina Γ, C64.207, two dots occur on the obverse bust above the truncation.

115	AE fraction	<i>Cyzicus</i> 295-299	CONCORDIA MILITVM and Emperor	Jupiter <i>off:</i> B, € (2)	<i>RIC</i> VI p. 581, 15b	4
116	AE fraction	"	Same	<i>off:</i> Γ, Δ (3), € (3)	<i>RIC</i> VI p. 581, 16b	7
117	AE Follis	<i>Antioch</i> 300-301	GENIO POPVLI ROMANI <i>off:</i> S	Genius l.	<i>RIC</i> VI p. 620, 54b	1
118	AE fraction	296	CONCORDIA MILITVM and Emperor <i>off:</i> B	Jupiter	<i>RIC</i> VI p. 621, 60b	1
119	AE fraction	<i>Alexandria</i> 296-297	Same	<i>off:</i> A	<i>RIC</i> VI p. 667, 46b	1
120	AE fraction	<i>Uncertain Mint</i> 295-299	Same			2
<b>Galerius Maximian (7)</b>						
<i>Caesar 293-305</i>						
†*121	AE fraction	<i>Heraclea</i> 295-296	CONCORDIA MILITVM and Caesar <i>off:</i> Δ, €	Jupiter	<i>RIC</i> VI p. 531, 16	2
122	AE fraction	<i>Cyzicus</i> 295-299	Same	<i>off:</i> A (2)	<i>RIC</i> VI p. 581, 18b	2
123	AE fraction	"	Same	<i>off:</i> A (2)	<i>RIC</i> VI p. 581, 19b	2
124	AE fraction	<i>Uncertain</i> 295-299	Same			1
<b>Galeria Valeria (1)</b>						
*125	AE Follis	<i>Heraclea</i> 309-310	VENERI VICTRICI <i>off:</i> B	Venus l.	<i>RIC</i> VI p. 536, 43	1
<b>Constantius I (4)</b>						
<i>Caesar 293-305</i>						
126	AE fraction	<i>Cyzicus</i> 295-299	CONCORDIA MILITVM and Caesar <i>off:</i> B	Jupiter	<i>RIC</i> VI p. 581, 18a	1
127	AE fraction	"	Same	<i>off:</i> B (2)	<i>RIC</i> VI p. 581, 19a	2

*Posthumous*

		<i>Rome</i>				
128	AE Follis	317-318	REQVIES OPTIMOR MERIT Emperor seated l. <i>off</i> : T		<i>RIC</i> VII p. 310, 105	1
			<b>Maxentius 306-312 (1)</b>			
		<i>Aquileia</i>				
129	AE Follis	307	CONSERV VRB SVAE seated <i>off</i> : P	Roma	<i>RIC</i> VI p. 325, 116	1
			<b>Maximinus II 308-313 (1)</b>			
		<i>Cyzicus</i>				
130	AE Follis	312-313	GENIO AVGVSTI <i>off</i> : Z	Genius l.	<i>RIC</i> VI p. 594, 101a	1
			<b>Licinius I 308-324 (50)</b>			
		<i>Arles</i>				
131	AE Follis	319	IOVI CONSERVATORI AVG Emperor on eagle <i>off</i> : S		<i>RIC</i> VII p. 255, 196	1
		<i>Rome</i>				
132	AE Follis	312-313	SOLI INVICTO COMITI <i>off</i> : T	Sol l.	<i>RIC</i> VI p. 389, 338c	1
133	AE Follis	314	Same	<i>off</i> : Q	<i>RIC</i> VII p. 298, 23	1
		<i>Aquileia</i>				
†*134	AE Follis	320	VIRTVS EXERCIT / VOT XX Trophy and captives <i>off</i> : S		<i>RIC</i> VII p. 399, 50	1
		<i>Heraclea</i>				
135	AE Follis	313-314	IOVI CONSERVATORI AVGG Jupiter l. <i>off</i> : A, Γ		<i>RIC</i> VII p. 542, 6	2
136	AE Follis	315-316	IOVI CONSERVATORI AVG Jupiter l. <i>off</i> : A		<i>RIC</i> VII p. 543, 13	1
137	AE Follis	316-317	PROVIDENTIAE AVGG <i>off</i> : Γ	Camp gate	<i>RIC</i> VII p. 544, 15	2

134 There is some confusion in *RIC* at this point. The obverse legend IMP LICINIVS PF AVG is specified for Licinius in this group of folles (pp. 398-400, 39-57A), with a shorter legend IMP LICINIVS AVG suggested as a possible variant of no. 50 (p. 399 n. 50). The

short legend is in fact confirmed by *RIC* pl. 11, the illustration wrongly assigned to no. 39 (VOT X): it is properly no. 50 (VOT XX) and bears the short legend, as does the Sardis example, C59.494.

138	AE Follis	316-320	Same		Uncertain variety	1
139	AE Follis	318-320	Same	<i>off</i> : B	<i>RIC</i> VII p. 547, 48	1
†*140	AE Follis	"	Same		<i>RIC</i> VII p. 547, 48 var.	1
141	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A, Γ	Jupiter	<i>RIC</i> VII p. 548, 52	2
		<i>Nicomedia</i>				
142	AE Follis	313-317	IOVI CONSERVATORI <i>off</i> : € , Z	Jupiter I.	<i>RIC</i> VII p. 601, 13	2
143	AE Follis	"	Same	<i>off</i> : A	<i>RIC</i> VII p. 601, 15	1
144	AE Follis	317-320	IOVI CONSERVATORI Jupiter I.	AVGG	<i>RIC</i> VII p. 604, 24	1
145	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A (7), B (5), Γ, Δ (2)	Jupiter	<i>RIC</i> VII p. 607, 44	15
		<i>Cyzicus</i>				
146	AE Follis	313-315	IOVI CONSERVATORI <i>off</i> : B, €	Jupiter I.	<i>RIC</i> VII p. 643, 4	2
*147	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A (3), B, Γ (2), Δ (2)	Jupiter	<i>RIC</i> VII p. 645, 15	8
		<i>Antioch</i>				
148	AE Follis	314-315	IOVI CONSERVATORI Jupiter I. <i>off</i> : S	AVGG	<i>RIC</i> VII p. 677, 12	1
		<i>Uncertain Mints</i>				
†*149	AE Follis	313	VOTIS V MVLTVS X	Wreath	<i>RIC</i> not	1
150	AE Follis	313-324	IOVI CONSERVATORI Jupiter, with or without captive	[AVGG]		5
			<b>Licinius II 317-324 (18)</b>			
		<i>Arles</i>				
151	AE Follis	321	CAESARVM NOSTRORVM / VOT V <i>off</i> : Q	Wreath	<i>RIC</i> VII p. 259, 231	1

140 C60.106. Variety with head right, mintmark  $\frac{1A}{SMJ}$ .  
149 C64.93.

Obv. IMP C VAL LICIN LICINIVS PF AVG  
Rev. VOTIS / V / MVLTVS / X  
within threefold wreath, medallion clasp above.  
No mintmark. 18 mm., 3.41 g.

The type is not in *RIC* (but is given by Cohen<sup>2</sup> 207); the mint remains unknown. A possible attribution is suggested by the fact that the reverse legend appears with a Victory type in gold at Heraclea in 313, while the obverse legend is found there on *aes* simultaneously (*RIC* VII pp. 541-542).

		<i>Rome</i>				
152	AE Follis	318-319	VIRTVS AVGG Camp gate <i>off:</i> P		RIC VII p. 316, 172	1
		<i>Heraclea</i>				
153	AE Follis	317	PROVIDENTIAE CAESS Camp gate <i>off:</i> Δ		RIC VII p. 545, 19	1
154	AE Follis	318-320	Same		RIC VII p. 547, 49	1
155	AE Follis	321-324	IOVI CONSERVATORI Jupiter and captive <i>off:</i> B, Γ (3)		RIC VII p. 548, 54	4
		<i>Nicomedia</i>				
156	AE Follis	321-324	Same <i>off:</i> B (2)		RIC VII p. 608, 49	2
		<i>Cyzicus</i>				
157	AE Follis	317-320	IOVI CONSERVATORI CAESS Jupiter l. <i>off:</i> Δ		RIC VII p. 644, 11	1
158	AE Follis	321-324	IOVI CONSERVATORI Jupiter and captive <i>off:</i> Γ (2), Δ (2)		RIC VII p. 646, 18	4
		<i>Uncertain Mints</i>				
159	AE Follis	317-324	IOVI CONSERVATORI [CAESS] Jupiter with or without captive			3

**Constantine I 307-337 (195)**

		<i>London</i>				
*160	AE Follis	316-317	SOLI INVICTO COMITI Sol l.		RIC VII p. 102, 89	1
		<i>Arles</i>				
161	AE Follis	313-315	SOLI INVICTO COMITI Sol r. <i>off:</i> Q		RIC VII p. 237, 44	1
162	AE Follis	319	VICTORIAE LAETAE PRINC PERP Two Victories <i>off:</i> T		RIC VII p. 254, 185	1
163	AE Follis	314-315	SOLI INVICTO COMITI Sol l. <i>off:</i> T		RIC VII p. 299, 27	1
		<i>Siscia</i>				
164	AE Follis	318	VICTORIAE LAETAE PRINC PERP Two Victories <i>off:</i> B		RIC VII p. 431, 49	1
165	AE Follis	318-319	Same		RIC VII p. 431, 53	1
166	AE Follis	320-321	D N CONSTANTINI MAX AVG / VOT XX Wreath <i>off:</i> A		RIC VII p. 444, 159	1

167	AE Follis	335-336	GLORIA EXERCITVS soldiers and standard <i>off</i> : A	Two	<i>RIC</i> VII p. 458, 252	1
		<i>Thessalonica</i>				
†*168	AE Follis	313-316	IOVI CONSERVATORI AVGG Jupiter I. <i>off</i> : B		<i>RIC</i> VII p. 498, 1	1
169	AE Follis	320-324	D N CONSTANTINI MAX AVG / VOT XX Wreath <i>off</i> : Γ, €		<i>RIC</i> VII p. 510, 101; p. 513, 123	2
170	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard <i>off</i> : A	Two	<i>RIC</i> VII p. 529, 222	1
		<i>Heraclea</i>				
171	AE Follis	325-326	D N CONSTANTINI MAX AVG / VOT XXX Wreath <i>off</i> : A		<i>RIC</i> VII p. 550, 70	1
172	AE Follis	327-329	Same		<i>RIC</i> VII p. 553, 90	1
173	AE Follis	330-333	GLORIA EXERCITVS soldiers and standards <i>off</i> : A, B	Two	<i>RIC</i> VII p. 557, 111	2
174	AE Follis	333-336	Same <i>off</i> : Γ		<i>RIC</i> VII p. 559, 136	1
		<i>Constantinople</i>				
175	AE Follis	326-327	PROVIDENTIAE AVGG gate <i>off</i> : B (1)	Camp	<i>RIC</i> VII p. 571, 7	2
*176	AE Follis	327-328	GLORIA ROMANORVM seated I. <i>off</i> : A (2)	Roma	<i>RIC</i> VII p. 573, 23	2
177	AE Follis	330-333	GLORIA EXERCITVS soldiers and standards <i>off</i> : A (2)	Two	<i>RIC</i> VII p. 579, 59	2
178	AE Follis	333-335	Same <i>off</i> : A, H (2)		<i>RIC</i> VII, p. 581, 73	3
179	AE Follis	"	Same <i>off</i> : A		<i>RIC</i> VII p. 582, 80	1
180	AE Follis	336-337	GLORIA EXERCITVS and standard <i>off</i> : A (1), Δ (1)	Two soldiers	<i>RIC</i> VII p. 589, 137	4



181	AE Follis	336-337	Same	<i>off</i> : H		<i>RIC</i> VII p. 590, 149	1
		<i>Nicomedia</i>					
*182	AE Follis	313-317	IOVI CONSERVATORI	Jupiter I.		<i>RIC</i> VII p. 601, 12	2
			<i>off</i> : B, S				
183	AE Follis	317-320	IOVI CONSERVATORI AVGG	Jupiter I.		<i>RIC</i> VII p. 603, 23	1
184	AE Follis	321-324	IOVI CONSERVATORI	Jupiter I.		<i>RIC</i> VII p. 607, 43	1
			<i>off</i> : A				
185	AE Follis	324-325	PROVIDENTIAE AVGG	Camp		<i>RIC</i> VII p. 615, 90	1
			gate				
			<i>off</i> : A				
186	AE Follis	325-326	Same			<i>RIC</i> VII p. 620, 121	1
†187	AE Follis	"	Same	<i>off</i> : A		<i>RIC</i> VII p. 620, 121 note	1
188	AE Follis	328-329	Same	<i>off</i> : A		<i>RIC</i> VII p. 625, 153	1
†189	AE Follis	330-335	GLORIA EXERCITVS	Two soldiers		<i>RIC</i> VII p. 633, 188 and note	8
			and standards				
			<i>off</i> : A, B, Γ, Δ (4), €				
190	AE Follis	336-337	GLORIA EXERCITVS	Two soldiers		<i>RIC</i> VII p. 635, 199	6
			and standard				
			<i>off</i> : A (2), B (1), Γ (1), E (1)				
		<i>Cyzicus</i>					
191	AE Follis	313-315	IOVI CONSERVATORI	Jupiter I.		<i>RIC</i> VII p. 643, 3	1
			<i>off</i> : A				
192	AE Follis	321-324	IOVI CONSERVATORI	Jupiter		<i>RIC</i> VII p. 645, 14	1
			and captive				
			<i>off</i> : A				
193	AE Follis	329-330	PROVIDENTIAE AVGG	Camp		<i>RIC</i> VII p. 652, 59	1
			gate				
194	AE Follis	331-334	GLORIA EXERCITVS	Two		<i>RIC</i> VII p. 655, 78	2
			soldiers and standards				
			<i>off</i> : A, B				

187 C59.50. The head of Constantine occurs with diadem on this example. The coin is a deliberately cut half.

189 The head of Constantine occurs with diadem of pearls on two

pieces, C70.61.33, C71.138 (= LRBC 1116), from officinae Γ and Δ; otherwise it is laureate.

<b>*195</b>	AE Follis	332-335	Same	<i>off:</i> A		<i>RIC</i> VII p. 656, 94	3
<b>196</b>	AE Follis	336-337	GLORIA EXERCITVS	Two soldiers and standard		<i>RIC</i> VII p. 659, 135	1
<b>197</b>	AE Follis	<i>Antioch</i> 313-314	IOVI CONSERVATORI AVGG	Jupiter I. <i>off:</i> A		<i>RIC</i> VII p. 676, 7	1
<b>198</b>	AE Follis	315-316	IOVI CONSERVATORI AVGG	NN Jupiter I. <i>off:</i> I		<i>RIC</i> VII p. 677, 15	1
<b>199</b>	AE Follis	335	GLORIA EXERCITVS	Two soldiers and standards <i>off:</i> A		<i>RIC</i> VII p. 693, 86	1
<b>200</b>	AE Follis	335-337	GLORIA EXERCITVS	Two Soldiers and standard <i>off:</i> A (2), Γ (1), Δ (1)		<i>RIC</i> VII p. 697, 108	5
<b>201</b>	AE Follis	<i>Alexandria</i> 333-335	GLORIA EXERCITVS	Two soldiers and standards <i>off:</i> A		<i>RIC</i> VII p. 711, 58	1
<b>202</b>	AE Follis	<i>Uncertain Mints</i> 311-316	IOVI CONSERVATORI	Jupiter I.			1
<b>203</b>	AE Follis	312-319	SOLI INVICTO COMITI	Sol I.			1
<b>204</b>	AE Follis	318-320	VICTORIAE LAETAE PRINC PERP	Two Victories			2
<b>205</b>	AE Follis	330-336	GLORIA EXERCITVS	Two soldiers and standards			5
<b>206</b>	AE Follis	330-337	Same, standards or standard				1
<b>207</b>	AE Follis	335-337	GLORIA EXERCITVS	Two soldiers and standard			7
<b>208</b>	AE		Uncertain type				1

*Posthumous*

		<i>Heraclea</i>			
209	AE	337-341	Quadriga r. off: € (1)	LRBC I 943	2
210	AE	341-346	VN MR Emperor r. off: A, Γ	LRBC I 962	2
		<i>Constantinople</i>			
†*211	AE	337-341	Quadriga r.	LRBC I 1041	6
†212	AE	341-346	IVST VEN MEM Aequitas l. off: A	cf. LRBC I 1060	1
213	AE	"	VN MR Emperor r. off: A	LRBC I 1063	1
		<i>Nicomedia</i>			
214	AE	337-341	Quadriga r. off: A (2), B (2)	LRBC I 1132	4
†215	AE	341-346	IVST VEN MEM Aequitas l. off: B	cf. LRBC I 1145	1
216	AE	"	VN MR Emperor r. off: Γ (1)	LRBC I 1148	3
217	AE	"	Same off: H (1), Θ (1)	LRBC I 1152	4
218	AE	"	Same off: H (2)	LRBC I 1155	2
		<i>Cyzicus</i>			
219	AE	337-339	Quadriga r. off: Γ, E	LRBC I 1273	2
220	AE	"	Same off: A, Γ (2)	LRBC I 1287	3
221	AE	"	Same off: Δ (1)	LRBC I 1291	2
222	AE	341-346	VN MR Emperor r. off: A (2), B (1), Γ (1), E (2), Z (1)	LRBC I 1304	11
223	AE	"	Same off: A	LRBC I 1311	1
224	AE	"	Same off: I (2)	LRBC I 1317	2
		<i>Antioch</i>			
225	AE	337-341	Quadriga r. off: €	LRBC I 1372, 1374	1
226	AE	"	Same	LRBC I 1374	1
227	AE	341-346	VN MR Emperor r.	LRBC I 1397	3

211 One piece, C67.532b, bears a dot in the center of the reverse: mintmark or a trace of the engraver's compass?  
212 C71.210. The mintmark with final dot, CONSA', is not given in

LRBC for this type.

215 C71.227. The mintmark with final dot, SMNB', is not given in LRBC for this type.

		<i>Alexandria</i>				
<b>*228</b>	AE	337-341	Quadriga r. <i>off:</i> A		LRBC I 1445	1
<b>229</b>	AE	"	Same <i>off:</i> A		LRBC I 1454	1
<b>230</b>	AE	341-346	VN MR Emperor r. <i>off:</i> A		LRBC I 1473	1
		<i>Uncertain</i>				
		<i>Mints</i>				
<b>231</b>	AE	337-341	Quadriga r.			15
<b>232</b>	AE	341-346	IVST VEN MEM Aequitas l.			3
<b>233</b>	AE	"	VN MR Emperor r.			32
			<b>Fausta (2)</b>			
		<i>Nicomedia</i>				
<b>234</b>	AE Follis	324-325	SALVS REIPVBLICAE Empress with children <i>off:</i> A (2)		RIC VII p. 615, 96	2
			<b>Helena (5)</b>			
		<i>Constantinople</i>				
<b>235</b>	AE	337-341	PAX PVBLICA Pax l. <i>off:</i> A, €		LRBC I 1046	2
<b>236</b>	AE	"	Same <i>off:</i> € (2)		LRBC I 1047	2
		<i>Uncertain</i>				
		<i>Mint</i>				
<b>237</b>	AE	337-341	Same			1
			<b>Urbs Roma (25)</b>			
		<i>Thessalonica</i>				
<b>238</b>	AE Follis	330-337	Wolf and Twins <i>off:</i> € (1)		RIC VII p. 524, 187; p. 530, 229	2
		<i>Heraclea</i>				
<b>239</b>	AE Follis	330-333	Same <i>off:</i> €		RIC VII p. 557, 114	1
<b>240</b>	AE Follis	"	Same <i>off:</i> € (2)		RIC VII p. 558, 119	2
<b>241</b>	AE Follis	"	Same <i>off:</i> € (1)		RIC VII p. 558, 124	2
<b>242</b>	AE Follis	333-336	Same <i>off:</i> B		RIC VII p. 560, 143	1
<b>243</b>	AE Follis	336-337	GLORIA EXERCITVS Two soldiers and standard <i>off:</i> €		RIC VII p. 561, 156	1

244	AE	341-346	VOT XX MVLT XXX off: A	Wreath	LRBC I 960	1
		<i>Constantinople</i>				
245	AE Follis	330-333	Wolf and twins off: € (2)		RIC VII p. 579, 62	2
246	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard	Two	RIC VII p. 590, 154	1
		<i>Nicomedia</i>				
247	AE Follis	330-335	Wolf and twins off: A		RIC VII p. 634, 195	1
248	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard	Two	RIC VII p. 635, 205	1
		<i>Cyzicus</i>				
†249	AE Follis	336-337	Same		LRBC I 1271	1
		<i>Antioch</i>				
250	AE Follis	335-337	Wolf and twins off: ☉		RIC VII p. 693, 91; p. 697, 113	1
		<i>Uncertain Mints</i>				
†251	AE Follis	330-337	Wolf and twins			4
252	AE Follis	335-341	GLORIA EXERCITVS soldiers and standard	Two		2
253	AE	341-346	VOT XX MVLT XXX	Wreath		2
<b>Constantinopolis (32)</b>						
		<i>Thessalonica</i>				
254	AE Follis	330-337	Victory on prow l. off: € (1)		RIC VII p. 524, 188; p. 530, 230	2
		<i>Heraclea</i>				
255	AE Follis	330-333	Same off: Δ		RIC VII p. 558, 125	1
256	AE	341-346	VOT XX MVLT XXX	Wreath	LRBC I 966	1
		<i>Constantinople</i>				
257	AE Follis	330-333	Victory on prow l. off: IA (1)		RIC VII p. 579, 63	3
258	AE Follis	333-335	Same		RIC VII p. 582, 86	1

249 C68.159. The issue is omitted from RIC VII where it should be added as p. 659, 133A.

251 Only at Rome and Alexandria do the types of Wolf and Twins, and Victory on Prow appear to continue into the period 337-341.

Since no identifiable example of either type has been found from either mint, the pieces listed under "uncertain mint" are assumed not to include those late issues and have been dated to 330-337.

		<i>Cyzicus</i>				
259	AE Follis	330-334	Same	<i>off:</i> Γ (2)	<i>RIC</i> VII p. 654, 73	2
260	AE Follis	331-334	Same	<i>off:</i> B, €, S	<i>RIC</i> VII p. 656, 93	3
261	AE Follis	335-336	Same	<i>off:</i> A (1)	<i>RIC</i> VII p. 658, 120	2
		<i>Antioch</i>				
262	AE Follis	335-337	Same	<i>off:</i> I (1)	<i>RIC</i> VII p. 693, 92; p. 697, 114	3
		<i>Uncertain</i>				
		<i>Mints</i>				
†263	AE Follis	330-337	Victory on prow l.			7
264	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard			7
			<b>Crispus 317-326 (4)</b>			
		<i>Arles</i>				
265	AE Follis	321	CAESARVM NOSTRORVM / VOT Wreath <i>off:</i> T		<i>RIC</i> VII p. 260, 241	1
		<i>Rome</i>				
266	AE Follis	321	CAESARVM NOSTRORVM / VOT X Wreath <i>off:</i> S		<i>RIC</i> VII p. 321, 240	1
		<i>Thessalonica</i>				
267	AE Follis	324	Same	<i>off:</i> Δ	<i>RIC</i> VII p. 513, 125	1
		<i>Antioch</i>				
268	AE Follis	325-326	PROVIDENTIAE CAESS	Camp gate	<i>RIC</i> VII p. 688, 64	1
			<b>Constantine II (40)</b>			
			<i>Caesar 317-337</i>			
		<i>Trier</i>				
269	AE Follis	321	BEATA TRANQVILLITAS	Globe on altar <i>off:</i> P	<i>RIC</i> VII p. 191, 312	1
		<i>Siscia</i>				
270	AE Follis	321-324	CAESARVM NOSTRORVM / VOT X Wreath <i>off:</i> A		<i>RIC</i> VII p. 446, 182	1
		<i>Thessalonica</i>				
271	AE Follis	320-321	CAESARVM NOSTRORVM / VOT V Wreath <i>off:</i> B		<i>RIC</i> VII p. 512, 120	1

272	AE Follis	330-333	GLORIA EXERCITVS soldiers and standards <i>off</i> : A	Two	<i>RIC</i> VII p. 524, 184	1
†273	AE Follis	335-336	Same <i>off</i> : B		<i>RIC</i> VII p. 526, 199	1
		<i>Heraclea</i>				
*274	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A (1)	Jupiter	<i>RIC</i> VII p. 548, 55	2
275	AE Follis	326	PROVIDENTIAE CAESS gate <i>off</i> : A	Camp	<i>RIC</i> VII p. 552, 83	1
276	AE Follis	327-329	Same <i>off</i> : A		<i>RIC</i> VII p. 554, 96	1
277	AE Follis	333-336	GLORIA EXERCITVS soldiers and standards <i>off</i> : A	Two	<i>RIC</i> VII p. 559, 137	1
278	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard <i>off</i> : A	Two	<i>RIC</i> VII p. 561, 151	1
		<i>Constantinople</i>				
279	AE Follis	330-333	GLORIA EXERCITVS soldiers and standards	Two	<i>RIC</i> VII p. 579, 60	2
280	AE Follis	333-335	Same <i>off</i> : Γ		<i>RIC</i> VII p. 581, 74	1
		<i>Nicomedia</i>				
281	AE Follis	317-320	PROVIDENTIAE CAESS Jupiter I.		<i>RIC</i> VII p. 605, 36	1
282	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A, Δ	Jupiter	<i>RIC</i> VII p. 608, 50	2
283	AE Follis	328-329	PROVIDENTIAE CAESS gate <i>off</i> : S	Camp	<i>RIC</i> VII p. 626, 157	1
284	AE Follis	330-335	GLORIA EXERCITVS soldiers and standards <i>off</i> : S (2)	Two	<i>RIC</i> VII p. 633, 189	3
		<i>Cyzicus</i>				
285	AE Follis	321-324	IOVI CONSERVATORI and captive <i>off</i> : A	Jupiter	<i>RIC</i> VII p. 646, 19	1
286	AE Follis	324-330	PROVIDENTIAE CAESS gate <i>off</i> : A, B	Camp	<i>RIC</i> VII p. 647, 26; p. 653, 63	2

287	AE Follis	330-334	GLORIA EXERCITVS soldiers and standards <i>off: A</i>	Two	<i>RIC VII p. 654, 68</i>	1
288	AE Follis	331-334	Same <i>off: S</i>		<i>RIC VII p. 655, 80</i>	1
289	AE Follis	"	Same <i>off: S</i>		<i>RIC VII p. 655, 83</i>	1
290	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard <i>off: Γ (1)</i>	Two	<i>RIC VII p. 659, 123</i>	2
291	AE Follis	"	Same <i>off: Γ</i>		<i>RIC VII p. 659, 136</i>	1
†292	AE Follis	<i>Antioch</i> 335	GLORIA EXERCITVS soldiers and standards <i>off: A, ⊕</i>	Two	<i>RIC VII p. 693, 87</i>	2
293	AE Follis	335-337	GLORIA EXERCITVS soldiers and standard <i>off: € (2), S</i>	Two	<i>RIC VII p. 697, 109</i>	4
		<i>Uncertain Mints</i>				
294	AE Follis	330-336	GLORIA EXERCITVS soldiers and standards	Two		2
<b>Augustus 337-340</b>						
		<i>Nicomedia</i>				
295	AE Follis	337-340	GLORIA EXERCITVS soldiers and standard <i>off: €</i>	Two	<i>LRBC I 1135</i>	1
		<i>Antioch</i>				
296	AE Follis	337-340	Same <i>off: Δ I</i>		<i>LRBC I 1385</i>	1
<b>Constantius II (714)</b>						
<i>Caesar 324-337</i>						
		<i>Heraclea</i>				
297	AE Follis	325-326	PROVIDENTIAE CAESS gate <i>off: Γ</i>	Camp	<i>RIC VII p. 551, 78</i>	1
298	AE Follis	326	Same <i>off: €</i>		<i>RIC VII p. 552, 84</i>	1
299	AE Follis	330-333	GLORIA EXERCITVS soldiers and standards <i>off: A</i>	Two	<i>RIC VII p. 557, 113</i>	1



		<i>Constantinople</i>					
300	AE Follis	330-333	Same	off: I (1)		RIC VII p. 579, 61	2
301	AE Follis	333-335	Same	off: I (2)		RIC VII p. 581, 75	2
		<i>Nicomedia</i>					
302	AE Follis	324-329	PROVIDENTIAE CAESS	Camp gate		RIC VII p. 615, 94; p. 626, 158	1
				off: B			
*303	AE Follis	325-326	Same	off: Δ (2)		RIC VII p. 620, 124	2
304	AE Follis	330-335	GLORIA EXERCITVS	Two soldiers and standards		RIC VII p. 633, 191	1
†305	AE Follis	336-337	GLORIA EXERCITVS	Two soldiers and standard		RIC VII p. 635, 201	1
				off: A			
		<i>Cyzicus</i>					
306	AE Follis	330-334	GLORIA EXERCITVS	Two soldiers and standards		RIC VII p. 654, 69	1
				off: Δ			
307	AE Follis	"	Same	off: Γ (1)		RIC VII p. 654, 70	2
308	AE Follis	336-337	GLORIA EXERCITVS	Two soldiers and standard		RIC VII p. 659, 126	1
				off: Δ			
309	AE Follis	"	Same	off: B, Γ		RIC VII p. 659, 139	2
		<i>Antioch</i>					
310	AE Follis	330-335	GLORIA EXERCITVS	Two soldiers and standards		RIC VII p. 693, 88	1
				off: Z			
311	AE Follis	335-337	GLORIA EXERCITVS	Two soldiers and standard		RIC VII p. 697, 110	2
				off: Z (1)			
				<i>Augustus 337-361</i>			
		<i>Rome</i>					
312	AE3	352-354	FEL TEMP REPARATIO	FH3 Virtus spearing horseman		LRBC II 678	1
				off: T			
313	AE3	355-360	Same	off: P (2)		LRBC II 684	2
		<i>Aquileia</i>					
314	AE3	352-360	Same	off: P		Uncertain variety	1
315	AE4	355-360	SPES REIPVBLICE	Virtus l.		LRBC II 955	1
				off: P			

		<i>Siscia</i>				
316	AE	341-346	VICTORIAE DD AVGGQ NN 1	LRBC I 798	1	
			Two Victories <i>off:</i> Δ			
317	AE3	351-361	FEL TEMP REPARATIO FH3	LRBC II 1222, 1228	1	
			Virtus spearing horseman			
		<i>Sirmium</i>				
318	AE3	355-361	Same <i>off:</i> A	LRBC II 1610	1	
†*319	AE4	"	SPES REIPVBLICE Virtus I.	LRBC II 1618	2	
			<i>off:</i> A, B			
		<i>Thessalonica</i>				
320	AE	341-346	VICTORIAE DD AVGGQ NN 1	LRBC I 859	1	
			Two Victories <i>off:</i> A			
321	AE	"	Same	LRBC I 862	1	
*322	AE3	351-354	FEL TEMP REPARATIO FH3	LRBC II 1681	6	
			Virtus spearing horseman <i>off:</i> A (3), B (1), Γ (1)			
323	AE3	355-361	Same <i>off:</i> ⊕	LRBC II 1684	1	
324	AE4	"	SPES REIPVBLICE Virtus I.	LRBC II 1689	3	
			<i>off:</i> B (1)			
325	AE4	"	Same <i>off:</i> A (1)	LRBC II 1691	2	
		<i>Heraclea</i>				
326	AE Follis	337-341	GLORIA EXERCITVS Two soldiers and standard	LRBC I 949	1	
			<i>off:</i> Γ			
327	AE	341-346	VOT XX MVLT XXX Wreath	LRBC I 958	1	
			<i>off:</i> B			
328	AE	"	Same <i>off:</i> Δ (1)	LRBC I 963	3	
†*329	AE3	351-354	FEL TEMP REPARATIO FH3	LRBC II 1900	7	
			Virtus spearing horseman <i>off:</i> A (2), B (1)			
330	AE3	355-361	Same <i>off:</i> A (1)	LRBC II 1902	3	
331	AE4	"	SPES REIPVBLICE Virtus I.	LRBC II 1905	5	
			<i>off:</i> A (2), Γ (2)			
		<i>Constantinople</i>				
332	AE Follis	337-341	GLORIA EXERCITVS Two soldiers and standard	LRBC I 1043	2	
			<i>off:</i> Γ (1)			

319 The example from officina A, C62.1020, appears to read S rather than ·S· in the reverse field left. 329 C62.1732 is a tiny imitation.

333	AE Follis	337-341	Same		<i>LRBC</i> I 1052	1
334	AE Follis	"	Same	<i>off:</i> A (2), Γ (1), H (1), Θ (1)	<i>LRBC</i> I 1055	7
†335	AE	341-346	VOT XX MVL T XXX	Wreath <i>off:</i> A (3), Γ (1), AI (1)	<i>LRBC</i> I 1064	12
336	AE	"	Same	<i>off:</i> A (1)	<i>LRBC</i> I 1071	2
*337	AE2	346-350	FEL TEMP REPARATIO	Emperor and captives I <i>off:</i> Z	<i>LRBC</i> II 2015	1
338	AE3	"	FEL TEMP REPARATIO	Phoenix 2 <i>off:</i> A, IA	<i>LRBC</i> II 2019	2
339	AE2	"	FEL TEMP REPARATIO	<i>FH4</i> Virtus spearing horseman	<i>LRBC</i> II 2024	1
340	AE2	351-354	Same	<i>off:</i> A (2)	<i>LRBC</i> II 2028	2
341	AE2	"	Same	<i>off:</i> H (1)	<i>LRBC</i> II 2037	2
342	AE3	"	FEL TEMP REPARATIO	<i>FH3</i> Virtus spearing horseman <i>off:</i> A (2)	<i>LRBC</i> II 2039	7
343	AE3	"	Same	<i>off:</i> Δ, Z, Θ	<i>LRBC</i> II 2041	3
344	AE3	"	Same	<i>off:</i> A, S, H	<i>LRBC</i> II 2043	3
345	AE3	355-361	Same	<i>off:</i> A (5), IA (1)	<i>LRBC</i> II 2049	17
†*346	AE3	"	FEL TEMP REPARATIO	<i>FH4</i> Virtus spearing horseman <i>off:</i> H (1)	<i>LRBC</i> not (2051A)	2
347	AE3	351-361	Same	<i>off:</i> Z	Uncertain variety	1
348	AE3	"	FEL TEMP REPARATIO	<i>FH3</i> Virtus spearing horseman <i>off:</i> A (1)	Uncertain variety	3
349	AE3	"	FEL TEMP REPARATIO	<i>FH</i> <i>off:</i> A	Uncertain variety	1
350	AE4	355-361	SPES REIPVBLICE	Virtus I. <i>off:</i> Θ (1)	<i>LRBC</i> II 2053	3
†*351	AE4	"	Same	<i>M/m:</i> $\frac{C}{A}$ <i>off:</i> A	<i>LRBC</i> not (2054A)	1
†*352	AE4	"	Same	<i>M/m:</i> $\frac{*}{\quad}$	<i>LRBC</i> not (2055A)	1

335 C65.524, of uncertain officina, includes a center dot, X X : mintmark or engraver's point?  
346 C66.314, C69.218. The type is given to Julian Caesar but not to Constantius in *LRBC*.

351 C69.137. The variety with C in left reverse field is given only to Julian Caesar in *LRBC*.

352 C64.521. A new mintmark variety, not in *LRBC*. Unfortunately the officina mark on this example is not recoverable.

		<i>Nicomedia</i>					
353	AE Follis	337-341	GLORIA EXERCITVS soldiers and standard <i>off</i> : Γ	Two	<i>LRBC</i> I 1136	1	
354	AE Follis	"	Same	<i>off</i> : S	<i>LRBC</i> I 1139	1	
355	AE Follis	"	Same		<i>LRBC</i> I 1141	1	
356	AE	341-346	VOT XX MVLT XXX	Wreath	<i>LRBC</i> I 1149	1	
357	AE	"	Same	<i>off</i> : €, S	<i>LRBC</i> I 1153	2	
358	AE	"	Same	<i>off</i> : A, Γ	<i>LRBC</i> I 1156	2	
359	AE2	351-354	FEL TEMP REPARATIO Virtus spearing horseman	<i>FH3</i>	<i>LRBC</i> II 2304	1	
360	AE2	"	Same		<i>LRBC</i> II 2306	1	
361	AE3	351-361	Same	<i>off</i> : A (2), Γ (1)	<i>LRBC</i> II 2309, 2311	9	
362	AE3	"	Same	<i>off</i> : €	Uncertain variety	1	
363	AE3	355-361	Same	<i>off</i> : A (1), Γ (1), € (1)	<i>LRBC</i> II 2313	4	
364	AE4	"	SPES REIPUBLICAE <i>off</i> : A (2), B (1)	Virtus l.	<i>LRBC</i> II 2315	4	
		<i>Cyzicus</i>					
365	AE Follis	337-339	GLORIA EXERCITVS soldiers and standard <i>off</i> : A	Two	<i>LRBC</i> I 1280	1	
366	AE Follis	"	Same	<i>off</i> : A (2), €	<i>LRBC</i> I 1289	3	
367	AE	341-346	VICT AVG <i>off</i> : S	Victory l.	<i>LRBC</i> I 1301	1	
368	AE	"	VOT XX MVLT XXX <i>off</i> : A (1), Γ (1)	Wreath	<i>LRBC</i> I 1305	4	
369	AE	"	Same	<i>off</i> : S	<i>LRBC</i> I 1306	1	
370	AE	"	Same	<i>off</i> : A (2), € (1)	<i>LRBC</i> I 1307	4	
371	AE	"	Same	<i>off</i> : H	<i>LRBC</i> I 1312	1	
372	AE	"	Same	<i>off</i> : Γ (1), H (1)	<i>LRBC</i> I 1318	3	
373	AE2	346-350	FEL TEMP REPARATIO <i>off</i> : A	Emperor and captives 2	<i>LRBC</i> II 2480	1	
†*374	AE3	"	FEL TEMP REPARATIO <i>off</i> : A (4), Δ (1)	Phoenix 2	<i>LRBC</i> II 2483	8	
375	AE2	"	FEL TEMP REPARATIO Virtus spearing horseman	<i>FH4</i>	<i>LRBC</i> II 2484	1	

374 C58.275 etc. Mintmark  $\frac{\_}{\_}^*$  on all examples. Correct *LRBC*, which gives  $\frac{*}{\_}$ .

376	AE2	351-354	FEL TEMP REPARATIO Virtus spearing horseman <i>off:</i> A, Δ	<i>FH3</i>	<i>LRBC</i> II 2486	2
377	AE2	"	Same		<i>LRBC</i> II 2488	1
378	AE2	"	Same		<i>LRBC</i> II 2490	1
379	AE2	"	Same	<i>off:</i> Δ (1)	<i>LRBC</i> II 2492	3
380	AE2	"	Same	<i>off:</i> Δ (1)	<i>LRBC</i> II 2494	2
*381	AE3	351-361	Same	<i>off:</i> A (4), B (1), Γ (2), Δ (2), € (2), S (1)	<i>LRBC</i> II 2496, 2498	15
†*382	AE3	"	Same	<i>off:</i> A	Uncertain variety	1
383	AE3	355-361	Same	<i>off:</i> € (2), S (1)	<i>LRBC</i> II 2500	4
384	AE3	"	Same	<i>off:</i> B (2), Γ (3)	<i>LRBC</i> II 2502	8
385	AE4	"	SPES REIPVBLICE <i>off:</i> A (7), B (1), Γ (2), Δ (1), € (2), S (2)	Virtus 1.	<i>LRBC</i> II 2504	18
386	AE4	"	Same	<i>off:</i> A	<i>LRBC</i> II 2506	1
†387	AE4	"	Same	<i>M/m:</i> <u>  </u> <i>off:</i> A	<i>LRBC</i> not (2507A)	1
		<i>Antioch</i>				
388	AE Follis	337-341	GLORIA EXERCITVS soldiers and standard <i>off:</i> AI (1)	Two	<i>LRBC</i> I 1380	2
389	AE Follis	"	Same	<i>off:</i> H	<i>LRBC</i> I 1386	1
390	AE Follis	"	Same	<i>off:</i> B	<i>LRBC</i> I 1391	1
391	AE Follis	"	Same		<i>LRBC</i> I 1392	1
*392	AE	341-346	VOT XX MVLT XXX <i>off:</i> A (5), Γ (1), Δ (2), € (1), Z (1), H (2), I (1), ΔI (1)	Wreath	<i>LRBC</i> I 1398	19
†393	AE	"	Same	<i>off:</i> Δ	<i>LRBC</i> I 1401	1
394	AE2	346-350	FEL TEMP REPARATIO and captives 2 <i>off:</i> B	Emperor	<i>LRBC</i> II 2614	1
395	AE2	351-354	FEL TEMP REPARATIO Virtus spearing horseman <i>off:</i> Δ	<i>FH4</i>	<i>LRBC</i> II 2623	1

382 C69.87. Exergue SNKA (*sic*) an imitation.387 C60.22 reads I for S in left reverse field, doubtless a late sign since it is found as well at Nicomedia in the issue of *Spes Reipublice*

for Julian Augustus, 513.

393 C59.208. The piece is a certain example of the variety wanting confirmation in *LRBC* I pp. 30-31.

396	AE3	351-354	FEL TEMP REPARATIO Virtus spearing horseman <i>off</i> : € (1), Γ I (1)	<i>FH3</i>	<i>LRBC</i> II 2632	4
†397	AE3	351-361	FEL TEMP REPARATIO Virtus spearing horseman <i>off</i> : Δ (1), I (1), Δ I (1)	<i>FH4</i>	<i>LRBC</i> II 2634, 2635	5
398	AE3	355-361	Same	<i>off</i> : I	<i>LRBC</i> II 2637	1
399	AE3	351-361	FEL TEMP REPARATIO	<i>FH</i>	Uncertain variety	1
400	AE4	355-361	SPES REIPVBLICE <i>off</i> : A	Virtus I.	<i>LRBC</i> II 2638	1
		<i>Alexandria</i>				
†*401	AE Follis	337-341	GLORIA EXERCITVS <i>off</i> : A	Two soldiers and standard	<i>LRBC</i> I 1467	1
402	AE	341-346	VOT XX MVLT XXX <i>off</i> : A (1)	Wreath	<i>LRBC</i> I 1474	2
403	AE3	351-361	FEL TEMP REPARATIO Virtus spearing horseman <i>off</i> : A (2), B, Γ	<i>FH3</i>	<i>LRBC</i> II 2844, 2846	4
404	AE3	355-361	Same		<i>LRBC</i> II 2848	2
†405	AE4	"	SPES REIPVBLICE <i>off</i> : B (1)	Virtus I.	<i>LRBC</i> II 2850	2
		<i>Uncertain Mints</i>				
406	AE Follis	337-341	GLORIA EXERCITVS soldiers and standard	Two		19
407	AE	341-346	VICTORIAE DD AVGGQ NN 1 Two Victories			1
408	AE	"	VOT XX MVLT XXX Wreath			42
409	AE2	346-350	FEL TEMP REPARATIO Emperor and captives 2			2
410	AE3	"	FEL TEMP REPARATIO Phoenix 2			3
411	AE2	346-354	FEL TEMP REPARATIO Virtus spearing horseman	<i>FH3</i>		2
†412	AE2 or 3	346-361	Same	<i>FH</i>	Uncertain variety	67
†*413	AE3	351-361	FEL TEMP REPARATIO Virtus spearing horseman	<i>FH3</i>		141

397 C65.442, AN[ is a tiny imitation.

401 C67.533a. The obverse bust type IeK is not in *LRBC* for this mintmark variety.

405 C71.258 is a half coin, apparently deliberately cut.

412 The total includes four tiny imitations, in module similar to that

in note to 413.

413 The total includes ten ancient imitations, some very small. A typical example is C68.315, 10 mm., 0.5/0.3 g., with blundered mintmark SKKA (*sic*).

†414	AE3	351-361	FEL TEMP REPARATIO <i>FH4</i> Virtus spearing horseman			15
415	AE4	355-361	SPES REIPVBLICE Virtus l.			114
416	AE		Uncertain type			6

## Constans (174)

*Caesar 333-337*

		<i>Thessalonica</i>				
417	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard <i>off: Δ</i>	Two	<i>RIC VII</i> p. 529, 225	1
		<i>Constantinople</i>				
418	AE Follis	333-335	GLORIA EXERCITVS soldiers and standards <i>off: IA</i>	Two	<i>RIC VII</i> p. 582, 83	1
419	AE Follis	336-337	GLORIA EXERCITVS soldiers and standard <i>off: IA (1)</i>	Two	<i>RIC VII</i> p. 589, 140	2
		<i>Nicomedia</i>				
420	AE Follis	336-337	Same <i>off: A (3)</i>		<i>RIC VII</i> p. 635, 202	3
		<i>Cyzicus</i>				
421	AE Follis	336-337	Same <i>off: A (1)</i>		<i>RIC VII</i> p. 659, 129	2
422	AE Follis	"	Same <i>off: A</i>		<i>RIC VII</i> p. 660, 142	1
		<i>Antioch</i>				
423	AE Follis	335	GLORIA EXERCITVS soldiers and standards <i>off: H</i>	Two	<i>RIC VII</i> p. 693, 89	1
		<i>Uncertain Mints</i>				
424	AE Follis	333-335	Same			2
		<i>Augustus 337-350</i>				
		<i>Trier</i>				
425	AE	341-346	VICTORIAE DD AVGGQ NN 1 Two Victories <i>off: S</i>		<i>LRBC I</i> 148	1
		<i>Rome</i>				
426	AE	337-341	SECVRITAS REIP <i>off: P</i>	Securitas r.	<i>LRBC I</i> 599	1

427	AE	341-346	VICTORIAE DD AVGGQ NN 1 Two Victories <i>off</i> : P	LRBC I 638	1
428	AE	"	Same <i>off</i> : P (2), T (1)	LRBC I 642	4
429	AE	"	Same <i>off</i> : S (1)	Uncertain variety	2
430	AE	<i>Aquileia</i> 341-346	Same <i>off</i> : T	LRBC I 702	1
431	AE	<i>Thessalonica</i> 341-346	Same	LRBC I 860	1
432	AE Follis	<i>Heraclea</i> 337-341	GLORIA EXERCITVS Two soldiers and standard	LRBC I 951	1
433	AE Follis	"	Same	LRBC I 954	1
434	AE	341-346	VOT XX MVLT XXX Wreath <i>off</i> : Γ (1), Δ (1)	LRBC I 959	3
†*435	AE	"	Same <i>off</i> : Γ	LRBC not (968A)	1
*436	AE2	346-350	FEL TEMP REPARATIO Hut 2 <i>off</i> : A	LRBC II 1886	1
437	AE2	"	Same	LRBC II 1889	1
438	AE Follis	<i>Constan-</i> 337-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : I	LRBC I 1044	1
439	AE Follis	"	Same <i>off</i> : I	LRBC I 1045	1
440	AE Follis	"	Same <i>off</i> : S (1), I (2)	LRBC I 1056	4
441	AE Follis	"	Same <i>off</i> : S (1), I (1)	LRBC I 1057	3
442	AE	341-346	VOT XX MVLT XXX Wreath <i>off</i> : IA (2)	LRBC I 1065	3
†*443	AE	"	Same <i>off</i> : A	LRBC not (1072A)	1
444	AE2	346-350	FEL TEMP REPARATIO Hut 2 <i>off</i> : €	LRBC II 2014	1
445	AE2	"	Same <i>off</i> : €	LRBC II 2017	1
446	AE Follis	<i>Nicomedia</i> 337-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : A, B	LRBC I 1143	2
447	AE Follis	"	Same <i>off</i> : A (4)	LRBC I 1144	5

435 C63.1315. The full mintmark is SMHΓ, not in LRBC.

443 C65.192. A dot follows the end of the legend—XXX·—(= ⚭), not in LRBC.



448	AE	341-346	VOT XX MVLТ XXX Wreath <i>off</i> : Δ (1)	<i>LRBC</i> I 1150	2
449	AE	"	Same <i>off</i> : A (2), B	<i>LRBC</i> I 1154	3
450	AE Follis	<i>Cyzicus</i> 337-339	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : Γ (1), € (2)	<i>LRBC</i> I 1283	7
451	AE Follis	"	Same <i>off</i> : A (1), Δ (2), S (2)	<i>LRBC</i> I 1290	6
452	AE Follis	"	Same <i>off</i> : B, Δ	<i>LRBC</i> I 1294	2
†*453	AE Follis	"	Same <i>off</i> : S	<i>LRBC</i> not (1298A)	1
454	AE	341-346	VICT AVG Victory 1. <i>off</i> : B	<i>LRBC</i> I 1302	1
455	AE	"	VOT XX MVLТ XXX Wreath <i>off</i> : A (4), B (2), Γ (1), Δ (1), S (1)	<i>LRBC</i> I 1308	12
456	AE	"	Same <i>off</i> : A, B (2), Γ, I	<i>LRBC</i> I 1308a	5
457	AE	"	Same <i>off</i> : A (1), Z (1)	<i>LRBC</i> I 1313	3
†*458	AE3	346-350	FEL TEMP REPARATIO Phoenix 2 <i>off</i> : B (1), Γ (1), Δ (1)	<i>LRBC</i> II not (2483A)	4
459	AE	<i>Antioch</i> 341-346	VOT XV MVLТ XX Wreath <i>off</i> : A (1)	<i>LRBC</i> I 1399	2
460	AE2	346-350	FEL TEMP REPARATIO Hut 2 <i>off</i> : IA	<i>LRBC</i> II 2615	1
†*461	AE Follis	<i>Alexandria</i> 337-341	GLORIA EXERCITVS Two soldiers and standard	<i>LRBC</i> not (2483A)	1
462	AE Follis	"	Same	<i>LRBC</i> I 1464	1
463	AE	341-346	VOT XX MVLТ XXX Wreath <i>off</i> : Γ	<i>LRBC</i> I 1476	1
†464	AE Follis	<i>Uncertain</i> <i>Mints</i> 337-341	GLORIA EXERCITVS Two soldiers and standard		29

453 C63.537. The full officina mark is ∪ SMKS, rather than SMKS ∪

458 C62.693. The type is not given to Constans in *LRBC* though it had been earlier reported (*LRBC* II p. 107 n. 2483). The mintmark, like Constantius', is for all examples.

461 C67.533b. As *LRBC* 1449 but portrait bust r.

464 Owing to the condition of the coins, it is not possible to distinguish the examples of this type struck for Constans as Caesar from those as Augustus. The great majority of the mint-attributable pieces are Augustan — 36 out of 43 — which suggests that most of these illegible examples belong here.

465	AE	341-346	VICT AVG	Victory 1.		1
466	AE	"	VICTORIAE DD AVGGQ NN 1	Two Victories		1
467	AE	"	VOT XX MVLT XXX	Wreath		36
468	AE3	346-350	FEL TEMP REPARATIO	Phoenix 2		1
<b>Delmatius 335-338 (3)</b>						
		<i>Constantinople</i>				
*469	AE Follis	335-337	GLORIA EXERCITVS	Two soldiers and standard <i>off</i> : I (1)	LRBC I 1032a	2
		<i>Uncertain Mint</i>				
470	AE Follis	335-337	Same			1
<b>Decentius 351-353 (1)</b>						
		<i>Arles</i>				
†*471	AE1	351-353	SALVS DD NN AVG ET CAES 2	Christogram	LRBC not (446A)	1
<b>Constantius Gallus 351-354 (33)</b>						
		<i>Aquileia</i>				
472	AE3	352-354	FEL TEMP REPARATIO	<i>FH3</i> Virtus spearing horseman <i>off</i> : T	LRBC II 933	1
		<i>Thessalonica</i>				
473	AE3	351-354	Same	<i>off</i> : € (2)	LRBC II 1682	2
		<i>Heraclea</i>				
474	AE2	351-354	Same	<i>off</i> : Δ	LRBC II 1894	1
475	AE3	"	Same	<i>off</i> : A (1)	LRBC II 1901	2
		<i>Constantinople</i>				
476	AE2	351-354	FEL TEMP REPARATIO	<i>FH4</i> Virtus spearing horseman <i>off</i> : I	LRBC II 2029	1
477	AE2	"	Same	<i>off</i> : A (2)	LRBC II 2038	3
478	AE2	"	Same	<i>off</i> : A	Uncertain variety	1

479	AE3	351-354	FEL TEMP REPARATIO <i>FH3</i> Virtus spearing horseman <i>off: A</i>	<i>LRBC</i> II 2044	1
†*480	AE3	" <i>Nicomedia</i>	Same <i>off: "I"</i>		1
481	AE3	351-354 <i>Cyzicus</i>	Same <i>off: A (1), Γ (1)</i>	<i>LRBC</i> II 2310	3
482	AE2	351-354	Same <i>off: Δ</i>	<i>LRBC</i> II 2491	1
483	AE2	"	Same <i>off: A</i>	<i>LRBC</i> II 2493	1
484	AE2	"	Same <i>off: A, €</i>	<i>LRBC</i> II 2495	2
485	AE3	" <i>Alexandria</i>	Same <i>off: Γ (2), S</i>	<i>LRBC</i> II 2497	3
*486	AE3	351-354 <i>Uncertain</i> <i>Mints</i>	Same <i>off: A</i>	<i>LRBC</i> II 2845	1
487	AE2	351-354	FEL TEMP REPARATIO <i>FH4</i> Virtus spearing horseman		1
488	AE2 and 3	"	FEL TEMP REPARATIO <i>FH3</i> Virtus spearing horseman		7
489	AE3	"	Same	Uncertain variety	1

## Julian (65)

*Caesar 355-360*

		<i>Thessalonica</i>			
490	AE4	355-361	SPES REIPVBLICE Virtus 1.	<i>LRBC</i> II 1690	1
491	AE4	"	Same	<i>LRBC</i> II 1692	1
		<i>Heraclea</i>			
†*492	AE3	355-361	FEL TEMP REPARATIO <i>FH3</i> Virtus spearing horseman: <i>M/m: €  </i>	<i>LRBC</i> not (1904A)	1
		<i>Constantinople</i>			
†*493	AE3	355-361	Same	<i>LRBC</i> II 2050	2
494	AE3	"	Same	<i>LRBC</i> II 2051	1
495	AE3	"	FEL TEMP REPARATIO <i>FH4</i> Virtus spearing horseman		1

480 C58.175. This splendid piece is a contemporary counterfeit of the FEL TEMP REPARATIO *FH3* issues of Gallus. The die work is very crude, the legends less than accurate: ]VL CONSTANTIVS NOB ΓAES, and O'!] REFHRATIO. The officina legend is retrograde, ΙΖΗΟΟ. However false the dies, they have been used on a good flan, for the piece is overstruck on a regular AE 3 of Gallus, also of *FH* type. Of the original piece DN[ ]NO[BAES] can be made out on

the obverse, ]TEMP REP[ on the reverse. The die position of the counterfeit overstrike is /. For the phenomenon of counterfeit overstriking on genuine pieces, see J. P. C. Kent, "Fel. Temp. Reparatio," in *NC* 7th ser. 7 (1967) 83-90.

492 C69.107. The mintmark is unattested for Heraclea in *LRBC*. 493 C62.522, C62.776. The two pieces confirm Voetter's earlier report (*LRBC* II p. 107 n. 2050).

496	AE4	355-361	SPES REIPUBLICAE Virtus l. <i>off:</i> A (1)	LRBC II 2054	4
†497	AE4	"	Same <i>off:</i> € (2)	LRBC not (2055A)	2
<i>Nicomedia</i>					
498	AE3	355-361	FEL TEMP REPARATIO FH3 Virtus spearing horseman <i>off:</i> € (1)	LRBC II 2314	2
499	AE4	"	SPES REIPUBLICAE Virtus l.	LRBC II 2316	1
<i>Cyzicus</i>					
500	AE3	355-361	FEL TEMP REPARATIO FH3 Virtus spearing horseman	LRBC II 2499	1
501	AE3	"	Same <i>off:</i> A (1), Γ (1), Δ (1)	LRBC II 2503	4
502	AE4	"	SPES REIPUBLICAE Virtus l. <i>off:</i> A (1), Γ (3)	LRBC II 2505	6
<i>Antioch</i>					
503	AE4	355-361	Same	LRBC II 2639	1
<i>Alexandria</i>					
†504	AE3	355-361	FEL TEMP REPARATIO FH3 Virtus spearing horseman <i>off:</i> A (1)	LRBC II 2849	2
505	AE4	"	SPES REIPUBLICAE Virtus l.	LRBC II 2851	1
<i>Uncertain</i>					
<i>Mints</i>					
506	AE3	355-361	FEL TEMP REPARATIO FH3 Virtus spearing horseman		8
507	AE3	"	Same, FH4		1
508	AE3	"	Same, FH	Uncertain variety	4
509	AE4	"	SPES REIPUBLICAE Virtus l.		13
<i>Augustus 361-363</i>					
<i>Constantinople</i>					
510	AE1	361-363	SECVRITAS REIPVB Bull r.	LRBC II 2057	1
*511	AE3	"	VOT X MVLT XX Wreath <i>off:</i> Γ	LRBC II 2060	1

497 C61.221, C67.601. Both examples can be clearly read CONSE and bear no other mintmarks on the reverse either after the officina mark or in the field.

504 C67.121, C69.200. Misread? LRBC reports only Δ as officina for Julian in this period (II p. 107 n. 2847-2851). Confusion of A and Δ is easy in the epigraphic style of the coins.

†*512	AE4	<i>Nicomedia</i> 361-363	SPES REIPVBLICE off: €	Virtus l.	<i>LRBC</i> not (2316A)	1
†*513	AE4	"	Same off: A	<i>M/m:</i> <u>  </u> <u>  </u>	<i>LRBC</i> not (2316B)	1
514	AE1	"	SECVRITAS REIPVB off: B	Bull r.	<i>LRBC</i> II 2319	1
†*515	AE4	<i>Cyzicus</i> 361-363	SPES REIPVBLICE <i>M/m:</i> <u>  </u> <u>  </u> off: A, B	Virtus l.	<i>LRBC</i> not (2507A)	2
516	AE4	<i>Alexandria</i> 361-363	SPES REIPVBLICE	Virtus l.	<i>LRBC</i> II 2852	1
<b>Jovian or Herculian (4)</b>						
517	AE Follis	<i>Trier</i> 303-307	GENIO POPVLI ROMANI Genius l. off: P			1
518	AE fraction	<i>Heraclea</i> 295-298	CONCORDIA MILITVM and Emperor off: €	Jupiter		1
<i>Uncertain</i>						
<i>Mints</i>						
519	AE fraction	295-299	Same			1
520	AE Follis	308-312	GENIO AVGVSTI Genius l.			1
<b>Constantinian or Licinian (4)</b>						
521	AE Follis	<i>Heraclea</i> 311-313	IOVI CONSERVATORI [AVGG] Jupiter with or without captive off: A			1
522	AE Follis	<i>Cyzicus</i> 317-320	Same			1
<i>Uncertain</i>						
<i>Mints</i>						
523	AE Follis	309-319	SOLI INVICTO COMITI Sol l.			1

512-513 C67.362a, C62.1600, SMN€ and SMNA respectively. No examples of the SPES REIPVBLICE type of Julian as Augustus are given to Nicomedia in *LRBC*. These two pieces bear the obverse J2B (Augustus); the second also carries a mintmark      in the left reverse field, one not otherwise found at this mint.

515 C62.1664, C68.261, SMKA and SMKB respectively. Again no example of the *Spes* type is given by *LRBC* to Cyzicus under Julian Augustus. The second example bears a mintmark in the left field, obscure on the first piece. The abbreviation of *Sacra Moneta* is not otherwise found under Julian Augustus at Cyzicus.

524	AE Follis	310-313	IOVI CONSERVATORI [AVGG] Jupiter with or without captive	1
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## House of Constantine (237)

525	AE	<i>Arles</i> 341-346	VICTORIAE DD AVGGQ NN 1 Two Victories	1
526	AE Follis	<i>Rome</i> 335-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : €	1
527	AE4	355-361	SPES REIPVBLICE Virtus l. <i>off</i> : P	1
528	AE Follis	<i>Thessalonica</i> 335-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : Γ	1
529	AE Follis	<i>Heraclea</i> 335-341	Same <i>off</i> : Γ	1
530	AE	341-346	VOT XX MVLT XXX Wreath	1
531	AE Follis	<i>Constantinople</i> 330-335	GLORIA EXERCITVS Two soldiers and standards <i>off</i> : A, ·A·	2
532	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : A (1), AI (1)	6
533	AE	341-346	VOT XX MVLT XXX Wreath <i>off</i> : B (1)	3
534	AE Follis	<i>Nicomedia</i> 330-341	GLORIA EXERCITVS <i>off</i> : A	Uncertain variety 1
535	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : A	1
536	AE	341-346	VOT XX MVLT XXX Wreath	1
537	AE Follis	<i>Cyzicus</i> 330-335	GLORIA EXERCITVS Two soldiers and standards <i>off</i> : A (1)	2

538	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard <i>off</i> : A (1), Γ (2), I (1)	6
539	AE	341-346	VOT XX MVLT XXX Wreath <i>off</i> : A (1), H (1)	6
540	AE3	346-350	FEL TEMP REPARATIO Phoenix 2	1
541	AE4	355-361	SPES REIPVBLICE Virtus 1. <i>off</i> : A	1
		<i>Antioch</i>		
542	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard	1
543	AE3	346-361	FEL TEMP REPARATIO FH3 Virtus spearing horseman <i>off</i> : Γ I	1
		<i>Alexandria</i>		
544	AE3	346-361	Same	1
		<i>Uncertain Mints</i>		
545	AE Follis	324-330	PROVIDENTIAE CAESS Camp gate	2
546	AE Follis	330-335	GLORIA EXERCITVS Two soldiers and standards	7
547	AE Follis	330-341	GLORIA EXERCITVS	Uncertain variety 1
548	AE Follis	335-341	GLORIA EXERCITVS Two soldiers and standard	44
549	AE	341-346	VICTORIAE DD AVGGQ NN 1 Two Victories	3
550	AE	"	VOT XX MVLT XXX Wreath	44
551	AE	"	VOT — MVLT — Wreath	1
†552	AE	341-346 or 383	VOT XX MVLT XXX Wreath	21
553	AE2	346-350	FEL TEMP REPARATIO Emperor and captives 2	1
554	AE3	"	FEL TEMP REPARATIO Phoenix 2	2
555	AE2 or 3	346-361	FEL TEMP REPARATIO FH4 Virtus spearing horseman	3

552 The type was commonly struck in the fourth and the eighth decades of the century. In the case of well-preserved specimens the earlier and later groups are distinguishable by fabric, but these examples are so corrupted by wear and corrosion that only the fact of

the reverse legend can be ascertained. The more legible pieces of this type from Sardis tend to fall in the Constantinian period, in a ratio of about ten to one, so that most of these poorly preserved pieces probably belong here.

†556	AE3	346-361	Same, <i>FH3</i>		24
†557	AE2 or 3	"	Same <i>FH</i>	Uncertain variety	22
558	AE4	355-361	SPES REIPVBLICE	Virtus l.	23
<b>Jovian 363-364 (1)</b>					
<i>Uncertain Mint</i>					
559	AE3	363-364	VOT V	Wreath	1
<b>Valentinian I 364-375 (94)</b>					
<i>Rome</i>					
*560	AE3	364-367	RESTITVTOR REIP	Emperor r.	<i>LRBC</i> II 700 1
off: B					
561	AE3	367-375	SECVRITAS REIPVBLICAE		<i>LRBC</i> II 712 1
Victory l.					
off: PRIMA					
<i>Siscia</i>					
†562	AE3	367-375	Same	off: A	<i>LRBC</i> II 1302 1
<i>Thessalonica</i>					
563	AE3	364-367	GLORIA ROMANORVM 8		<i>LRBC</i> II 1704 1
Emperor and captive r.					
564	AE3	"	Same	off: B	<i>LRBC</i> II 1708 1
565	AE3	"	Same		<i>LRBC</i> II 1711 1
†*566	AE3	"	Same	off: A	<i>LRBC</i> not (1716A) 1
567	AE3	364-375	SECVRITAS REIPVBLICAE		Uncertain variety 1
Victory l.					
†*568	AE3	367-375	GLORIA ROMANORVM 8		<i>LRBC</i> not (1736A) 1
Emperor and captive r.					
569	AE3	"	SECVRITAS REIPVBLICAE		<i>LRBC</i> II 1765 1
Victory l.					
off: Δ					
<i>Heraclea</i>					
570	AE3	364-367	Same	off: A	<i>LRBC</i> II 1921, 1934 1
571	AE3	367-375	Same	off: A	<i>LRBC</i> II 1939 1

556-557 A few of these pieces are the very small ancient imitations. See note to 413 above. C68.288 (557), 18 mm., is a deliberately cut half.

562 C61.195. *LRBC* assigns officina Δ to Valentinian for the *Securitas* issue of 367-375 (Period I). Our specimen appears to read officina A.

566 C63.1596. The reverse marks, M/m:  $\frac{1}{\text{TESA}}$ , are given at *LRBC* 1717 only for Valens.

568 C67.310. The reverse exergual mark is either ·TES·, or TES·. In either case the variety is not found in *LRBC* for Valentinian.




		<i>Constantinople</i>				
572	AE3	364-365	RESTITVTOR REIP	Emperor r.	LRBC II 2066	4
			<i>off:</i> A (1)			
573	AE3	"	GLORIA ROMANORVM 8	Emperor and captive r.	LRBC II 2068	1
			<i>off:</i> A			
574	AE3	"	Same		LRBC II 2074	1
*575	AE3	"	SECVRITAS REIPVBLICAE	Victory I.	LRBC II 2071	4
			<i>off:</i> A (4)			
576	AE3	"	Same	<i>off:</i> A	LRBC II 2076	1
577	AE3	364-367	GLORIA ROMANORVM 8	Emperor and captive r.	LRBC II 2085	1
			<i>off:</i> A			
578	AE3	"	SECVRITAS REIPVBLICAE.	Victory I.	LRBC II 2087	1
			<i>off:</i> A			
579	AE3	367-375	Same	<i>off:</i> A (2)	LRBC II 2094	2
580	AE3	"	Same		LRBC II 2109	1
		<i>Nicomedia</i>				
581	AE3	364-365	RESTITVTOR REIP	Emperor r.	LRBC II 2323	4
			<i>off:</i> A (3)			
		<i>Cyzicus</i>				
582	AE3	364-365	Same	<i>off:</i> A, B, Γ (4)	LRBC II 2515	6
583	AE3	364-375	GLORIA ROMANORVM 8	Emperor and captive r.	LRBC II 2517, 2526	5
			<i>off:</i> A (1), B (1), Γ (1)			
584	AE3	"	SECVRITAS REIPVBLICAE	Victory I.	LRBC II 2519, 2529	6
			<i>off:</i> A (1), Γ (1), Δ (3)			
		<i>Antioch</i>				
585	AE3	364-375	GLORIA ROMANORVM 8	Emperor and captive r.	LRBC II 2653, 2658	1
			<i>off:</i> A			
586	AE3	"	SECVRITAS REIPVBLICAE	Victory I.	LRBC II 2656, 2663	2
			<i>off:</i> A (1)			
		<i>Alexandria</i>				
587	AE3	364-367	GLORIA ROMANORVM 8	Emperor and captive r.	LRBC II 2858	1
588	AE3	364-375	SECVRITAS REIPVBLICAE	Victory I.	LRBC II 2860, 2862	1

		<i>Uncertain Mints</i>			
589	AE3	364-367	RESTITVTOR REIP Emperor r.		3
590	AE3	364-375	GLORIA ROMANORVM 8 Emperor and captive r.		11
591	AE3	"	SECVRITAS REIPVBLICAE Victory l.		23
592	AE		Uncertain type		3
<b>Valens 364-378 (230)</b>					
		<i>Arles</i>			
593	AE3	364-367	SECVRITAS REIPVBLICAE Victory l. <i>off:</i> III	LRBC II 492	1
		<i>Rome</i>			
594	AE3	364-367	GLORIA ROMANORVM 6 Emperor and captive r. <i>off:</i> P	LRBC II 707	1
595	AE3	367-375	SECVRITAS REIPVBLICAE Victory l. <i>off:</i> TERTIA	LRBC II 713, 719	1
596	AE3	"	Same <i>off:</i> QVARTA	LRBC II 719	1
		<i>Aquileia</i>			
597	AE3	364-367	GLORIA ROMANORVM 8 Emperor and captive r.	LRBC II 974	1
		<i>Siscia</i>			
†598	AE3	367-375	Same <i>off:</i> B	LRBC II 1300	1
†599	AE3	"	Same <i>off:</i> Γ	LRBC II 1306	1
600	AE3	"	SECVRITAS REIPVBLICAE Victory l. <i>off:</i> A	LRBC II 1330	1
		<i>Thessalonica</i>			
601	AE3	364-367	RESTITVTOR REIP Emperor r. <i>off:</i> A	LRBC II 1703	1
602	AE3	"	GLORIA ROMANORVM 8 Emperor and captive r. <i>off:</i> Γ (3)	LRBC II 1705	4
603	AE3	"	SECVRITAS REIPVBLICAE Victory l. <i>off:</i> A (1), Δ (1)	LRBC II 1707	3

598-599 C64.119 and C65.234 respectively. LRBC II p. 69 presents a schematic outline of the *Gloria* and *Securitas* issues at Siscia during 365-375. Unfortunately the outline is incomplete and must be emended

from the lists of pp. 72-74, so as to include (*inter alia*) the *Gloria* of Valens struck in both officinae B and Γ for 367-375 (Period 1).

604	AE3	367-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : B	LRBC II 1795	1
605	AE3	"	SECVRITAS REIPVBLICAE Victory I. <i>off</i> : A	LRBC II 1753	1
606	AE3	375-378 <i>Heraclea</i>	Same	LRBC II 1811	1
607	AE3	364-365	Same <i>off</i> : Γ	LRBC II 1924	1
608	AE3	364-367	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : B, Γ	LRBC II 1920, 1933	2
609	AE3	"	SECVRITAS REIPVBLICAE Victory I.	LRBC II 1922, 1935	1
610	AE3	"	Same <i>off</i> : B	LRBC II 1940	1
611	AE3	364-375 <i>Constantinople</i>	Same	Uncertain variety	1
612	AE3	364-365	RESTITVTOR REIP Emperor r. <i>off</i> : A (1)	LRBC II 2067	2
613	AE3	"	GLORIA ROMANORVM 8 Emperor and captive r.	LRBC II 2069	1
614	AE3	"	Same <i>off</i> : A (1)	LRBC II 2070	2
615	AE3	"	Same <i>off</i> : €	LRBC II 2075	1
616	AE3	"	Same	LRBC II 2070 or 2075	1
617	AE3	"	SECVRITAS REIPVBLICAE Victory I. <i>off</i> : A (1)	LRBC II 2072	3
618	AE3	"	Same <i>off</i> : Γ (1)	LRBC II 2073	4
619	AE3	"	Same <i>off</i> : A	LRBC II 2077	1
620	AE3	364-375	Same	Uncertain variety	4
621	AE3	366-367	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : A, Γ	LRBC II 2086	2
†622	AE3	"	SECVRITAS REIPVBLICAE Victory I.	LRBC II 2088	1
623	AE3	367-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : A (1)	LRBC II 2091	3

624	AE3	367-375	Same		LRBC II 2099	1
625	AE3	"	Same	off: S (1), Z (1)	LRBC II 2107	4
626	AE3	"	SECVRITAS REIPVBLICAE		LRBC II 2110	1
			Victory l.			
		<i>Nicomedia</i>				
*627	AE3	364-365	RESTITVTOR REIP	Emperor r.	LRBC II 2324	3
			off: A (2)			
628	AE3	"	SECVRITAS REIPVBLICAE		LRBC II 2329	1
			Victory l.			
			off: A			
629	AE3	364-375	GLORIA ROMANORVM 8		LRBC II 2327,	4
			Emperor and captive r.		2335	
			off: Γ (2)			
†*630	AE3	"	Same	M/m: 	LRBC not (2342A)	1
			off: A			
631	AE3	"	Same	off: A (2)	Uncertain variety	2
632	AE3	"	SECVRITAS REIPVBLICAE		LRBC II 2330,	2
			Victory l.		2337	
		<i>Cyzicus</i>				
633	AE3	364-365	RESTITVTOR REIP	Emperor r.	LRBC II 2516	2
			off A, B			
634	AE3	364-375	GLORIA ROMANORVM 8		LRBC II 2518,	16
			Emperor and captive r.		2527	
			off: A (4), B (6), Γ (3)			
*635	AE3	"	SECVRITAS REIPVBLICAE		LRBC II 2520,	33
			Victory l.		2530	
			off: A (13), B (6), Γ (8), Δ (2)			
		<i>Alexandria</i>				
636	AE3	364-375	Same	off: A (2)	LRBC II 2861,	2
					2863	
		<i>Uncertain Mints</i>				
637	AE3	364-365	RESTITVTOR REIP	Emperor r.		2
638	AE3	364-375	GLORIA ROMANORVM 8			39
			Emperor and captive r.			
639	AE3	"	SECVRITAS REIPVBLICAE			66
			Victory l.			
640	AE3	364-378	Uncertain type			1

630 C62.972. The mintmark is new for *Gloria Romanorum* at Procopius. Can this coin represent the earliest re-issue of the type at Nicomedia, although the dot in the left field had been used by after the recovery of the mint?

11

**Procopius 365-366 (3)**

		<i>Heraclea</i>			
<b>*641</b>	AE3	365-366	REPARATIO FEL TEMP 3 Emperor r.	<i>LRBC</i> II 1929	1
<b>642</b>	AE3	"	Same <i>off</i> : Γ	<i>LRBC</i> II 1930	1
		<i>Nicomedia</i>			
<b>643</b>	AE3	365-366	REPARATIO FEL TEMP 5 Emperor r.	<i>LRBC</i> II 2331	1

**Gratian 367-383 (35)**

		<i>Rome</i>			
<b>644</b>	AE2	378-383	REPARATIO REIPVB Emperor and woman <i>off</i> : Q	<i>LRBC</i> II 750	1
		<i>Thessalonica</i>			
<b>645</b>	AE3	367-375	SECVRITAS REIPVBLICAE Victory I. <i>off</i> : B	<i>LRBC</i> II 1761	1
<b>646</b>	AE3	378-383	VIRTVS ROMANORVM Roma seated	<i>LRBC</i> II 1816	1
<b>647</b>	AE4	"	VOT XV MVLT XX Wreath	<i>LRBC</i> II 1819	1
		<i>Heraclea</i>			
<b>648</b>	AE4	383	VOT X MVLT XX Wreath	<i>LRBC</i> II 1960	1
		<i>Constantinople</i>			
<b>649</b>	AE3	367-375	GLORIA ROMANORVM 8 Emperor and captive r.	<i>LRBC</i> II 2100	1
<b>650</b>	AE3	378-383	CONCORDIA AVGGG Roma seated 2 <i>off</i> : Γ (2)	<i>LRBC</i> II 2123	2
<b>651</b>	AE3	"	CONCORDIA AVGGG Constantinopolis seated 1	<i>LRBC</i> II 2126	1
<b>652</b>	AE4	383	VOT XX MVLT XXX Wreath	<i>LRBC</i> II 2156	1
		<i>Nicomedia</i>			
<b>653</b>	AE3	378-383	VIRTVS ROMANORVM Roma seated <i>off</i> : A	<i>LRBC</i> II 2343	1
<b>654</b>	AE3	"	CONCORDIA AVGGG Roma seated 2 <i>off</i> : A	<i>LRBC</i> II 2351	1

655	AE3	<i>Cyzicus</i> 367-375	SECVRITAS REIPVBLICAE Victory 1. <i>off</i> : A	LRBC II 2531	1
656	AE3	378-383	CONCORDIA AVGGG Roma seated <i>off</i> : A (2)	LRBC II 2537	4
657	AE3	"	CONCORDIA AVGGG Constantinopolis seated 3 <i>off</i> : Γ	LRBC II 2535	1
658	AE2	383	GLORIA ROMANORVM 15 Emperor on galley 1. <i>off</i> : A, B	LRBC II 2548	2
659	AE4	"	VOT XX MVLT XXX Wreath <i>off</i> : A (2), B (1)	LRBC II 2552	6
660	AE3	<i>Antioch</i> 378-383	CONCORDIA AVGGG Roma seated 2	LRBC II 2688	1
*661	AE3	<i>Alexandria</i> 367-375	SECVRITAS REIPVBLICAE Victory 1. <i>off</i> : B	LRBC II 2864	1
		<i>Uncertain</i> <i>Mints</i>			
662	AE3	367-375	Same		1
663	AE3	378-383	CONCORDIA AVGGG Roma or Constantinopolis seated		1
664	AE4	383	VOT XX MVLT XXX Wreath		4
665	AE		Uncertain type		1
<b>Valentinian II 375-392 (102)</b>					
666	AE3	<i>Aquileia</i> 375-378	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : P	LRBC II 1046	1
667	AE4	383-387	VICTORIA AVGGG 2 Two Victories	LRBC II 1091	1
668	AE4	<i>Thessalonica</i> 383-392	GLORIA REIPVBLICE 2 Camp gate	LRBC II 1858	1
669	AE4	"	Same <i>off</i> : A	LRBC II 1864	1

670	AE4	383-392	VICTORIA AVG 4	Two Victories	LRBC II 1870	1
671	AE4	"	SALVS REIPVBLICAE 2	Victory and captive l.	LRBC II 1873	2
		<i>Heraclea</i>				
672	AE2	383-392	VIRTVS EXERCITI 1	Emperor and captive <i>off</i> : A (1)	LRBC II 1979	3
673	AE4	"	SALVS REIPVBLICAE 1	Victory and captive l. <i>off</i> : A (1)	LRBC II 1983	2
		<i>Constantinople</i>				
674	AE3	378-383	CONCORDIA AVGGG	Roma seated	LRBC II 2122	1
*675	AE3	"	Same	<i>off</i> : A	LRBC II 2132	1
676	AE2	383	GLORIA ROMANORVM 15	Emperor on galley l. <i>off</i> : Δ	LRBC II 2146	1
677	AE2	"	Same	<i>off</i> : Δ (2)	LRBC II 2151	2
678	AE4	"	VOT X MVLT XX	Wreath <i>off</i> : A	LRBC II 2158	1
679	AE2	383-392	VIRTVS EXERCITI 1	Emperor and captive	LRBC II 2177	1
680	AE4	"	SALVS REIPVBLICAE 2	Victory and captive l. <i>off</i> : A (7), B (1)	LRBC II 2183	13
		<i>Nicomedia</i>				
†*681	AE3	378-383	VRBS ROMA 2	Roma seated l. <i>off</i> : B	LRBC II 2345	1
682	AE3	"	CONCORDIA AVGGG	Roma seated 2 <i>off</i> : B	LRBC II 2364	1
683	AE4	383	VOT X MVLT XX	Wreath	LRBC II 2381	1
684	AE4	383-392	SALVS REIPVBLICAE 1	Victory and captive l. <i>off</i> : B	LRBC II 2403	1
685	AE4	"	Same	<i>off</i> : B (2)	LRBC II 2406	3
†*686	AE4	"	Same	<i>off</i> : B	LRBC not (2412A)	1
687	AE4	"	Same	<i>off</i> : B (2)	LRBC II 2415	2

681 C62.286. The obverse legend reads D N VALENTINIA / NVS IV a variety already attributed to Theodosius and Arcadius at *LRBC* (sic) PF AVG. 2413-2414.

686 C67.59. The piece bears an undotted cross in the left reverse field,

†688	AE4	383-392	Same	<i>off</i> : A (1)	Uncertain variety	2
		<i>Cyzicus</i>				
*689	AE2	383	GLORIA ROMANORVM 15	Emperor on galley l.	LRBC II 2549	1
				<i>off</i> : Δ		
690	AE4	"	VOT X MVLTV XX	Wreath	LRBC II 2556	5
				<i>off</i> : B (3), Γ (1)		
691	AE2	383-392	VIRTVS EXERCITI 1	Emperor and captive	LRBC II 2564	1
				<i>off</i> : B		
692	AE4	"	SALVS REIPVBLICAE 2	Victory and captive l.	LRBC II 2568	6
				<i>off</i> : A (3), B (1)		
		<i>Antioch</i>				
693	AE3	378-383	VRBS ROMA 3	Roma seated l.	LRBC II 2670	1
694	AE4	383	VOT XX MVLTV XXX	Wreath	LRBC II 2730	1
				<i>off</i> : A		
695	AE4	383-392	SALVS REIPVBLICAE 1	Victory and captive l.	LRBC II 2768	2
				<i>off</i> : A (2)		
		<i>Alexandria</i>				
696	AE4	383-392	Same		LRBC II 2901	1
		<i>Uncertain</i>				
		<i>Mints</i>				
697	AE3	378-383	CONCORDIA AVGGG	Roma seated		5
698	AE4	"	VOT XV MVLTV XX	Wreath		1
699	AE4	378-392	VOT X MVLTV XX	Wreath		2
700	AE4	"	VICTORIA AVGGG 1	Victory l.		1
701	AE4	383	VOT XX MVLTV XXX	Wreath		2
702	AE4	383-392	SALVS REIPVBLICAE 1 or 2	Victory and captive l.		27
703	AE		Uncertain type			2
<b>Theodosius I 379-395 (318)</b>						
		<i>Rome</i>				
704	AE4	383-387	VICTORIA AVGGG 2	Two Victories	LRBC II 790	1

688 C67.282, C70.53.133. Misread? LRBC gives only B as officina for Valentinian II at Nicomedia in this type.



705	AE4	<i>Aquileia</i> 379-383	VOT V MVLT X Wreath <i>off: S</i>	LRBC II 1081	1
706	AE4	383-387	VICTORIA AVGGG 2 Two Victories <i>off: S</i>	LRBC II 1092	1
707	AE3	<i>Siscia</i> 383-392	GLORIA ROMANORVM 6 Emperor and captive r. <i>off: A</i>	LRBC II 1570	1
708	AE3	<i>Thessalonica</i> 379-383	CONCORDIA AVGGG Roma seated	LRBC II 1818	2
709	AE3	"	CONCORDIA AVGGG Constantinopolis seated <i>off: A</i>	LRBC II 1831	1
710	AE4	383-392	VOT X MVLT XX Wreath	LRBC II 1841	1
711	AE4	"	GLORIA REIPVBLICE 2 Camp gate	LRBC II 1859	3
712	AE4	"	Same <i>off: Δ (1)</i>	LRBC II 1865	2
†713	AE4	"	VICTORIA AVG 4 Two Victories <i>off: A</i>	LRBC II 1868	1
714	AE4	"	Same	LRBC II 1871	2
715	AE3	<i>Heraclea</i> 379-383	CONCORDIA AVGGG Constantinopolis seated 3 <i>off: Γ</i>	LRBC II 1951	1
716	AE2	383	GLORIA ROMANORVM 15 Emperor on galley l. <i>off: A</i>	LRBC II 1954	1
†*717	AE4	"	VOT X MVLT XX Wreath <i>off: A (1)</i>	LRBC II 1962	2
718	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive <i>off: A (2)</i>	LRBC II 1977	2
719	AE2	"	Same <i>off: A (3)</i>	LRBC II 1980	3
720	AE4	"	SALVS REIPVBLICAE 1 Victory and captive l. <i>off: A</i>	LRBC II 1984	1

713 C63.1317, misread? LRBC II pp. 77, 106, assigns officina A for this period only to Valentinian II, Δ to Theodosius.

717 C64.648 is struck from a good obverse die, but a blundered reverse: V<sub>X</sub>T, and S<sub>X</sub>HA.

†*721	AE4	383-392	Same <i>M/m</i> : $\overset{\circ}{\rule{0.5em}{0.4pt}}$ <i>off</i> : A	<i>LRBC</i> not (1985A)	1
722	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (2)	<i>LRBC</i> II 1986	2
723	AE2	"	Same <i>off</i> : B (2)	<i>LRBC</i> II 1989	3
		<i>Constantinople</i>			
†*724	AE3	379-383	CONCORDIA AVGGG Constantinopolis seated 1 <i>off</i> : A (6), B (2), E (1)	<i>LRBC</i> II 2128	10
725	AE3	"	Same <i>off</i> : B	<i>LRBC</i> II 2134	1
726	AE3	"	Same <i>off</i> : E	<i>LRBC</i> II 2143	1
727	AE3	"	Same	Uncertain variety	2
728	AE2	383	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : A	<i>LRBC</i> II 2152	1
729	AE4	"	VOT XX MVLT XXX Wreath	<i>LRBC</i> II 2157	1
730	AE4	"	VOT X MVLT XX Wreath <i>off</i> : A	<i>LRBC</i> II 2159	1
731	AE2	383-392	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : B	<i>LRBC</i> II 2165	1
732	AE2	"	Same	<i>LRBC</i> II 2169	1
733	AE2	"	VIRTVS EXERCITI 1 Emperor and captive	<i>LRBC</i> II 2172	1
734	AE4	383-395	SALVS REIPVBLICAE 2 Victory and captive l. <i>off</i> : A (8)	<i>LRBC</i> II 2184, 2192	15
735	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (7), B	<i>LRBC</i> II 2186	12
736	AE3	"	GLORIA ROMANORVM 19 Emperor a horse r. <i>off</i> : A (2)	<i>LRBC</i> II 2189	3
		<i>Nicomedia</i>			
737	AE3	379-383	CONCORDIA AVGGG Constantinopolis seated 1 <i>off</i> : Γ (1)	<i>LRBC</i> II 2360	2

721 C62.1232. The mintmark is not cited in *LRBC* for any issue of Theodosius I at Heraclea, although it occurred there both earlier and later. 724 All examples read  $\overset{\circ}{\rule{0.5em}{0.4pt}}$ , contrary to *LRBC* which needs correction.

738	AE4	383	VOT XX MVLT XXX Wreath <i>off</i> : A	LRBC II 2380	1
739	AE4	"	VOT X MVLT XX Wreath <i>off</i> : Γ (1)	LRBC II 2382	2
†740	AE2	383-392	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : Γ (2)	LRBC II 2388	2
741	AE2	"	VIRTVS EXERCITI 1 Emperor and captive	LRBC II 2398	1
742	AE2	"	Same <i>off</i> : A (2)	LRBC II 2401	2
743	AE4	"	SALVS REIPVBLICAE 1 Victory and captive l. <i>off</i> : A (1)	LRBC II 2404	2
744	AE4	"	Same <i>off</i> : A	LRBC II 2409	1
745	AE4	"	Same <i>off</i> : A (1)	LRBC II 2413	2
746	AE4	383-395	Same <i>off</i> : A (2)	LRBC II 2404, 2428	3
747	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (3)	LRBC II 2422	3
748	AE4	<i>Cyzicus</i> 379-383	VOT XV MVLT XX Wreath <i>off</i> : A	LRBC II 2533	1
749	AE3	"	CONCORDIA AVGGG Roma seated 2 <i>off</i> : Γ	LRBC II 2534	1
750	AE3	"	Same <i>off</i> : B	LRBC II 2539	1
751	AE3	"	CONCORDIA AVGGG Constantinopolis seated 3 <i>off</i> : A	LRBC II 2536	1
*752	AE2	383	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : A (1), B (1), Γ (2), Δ (1)	LRBC II 2550	6
753	AE2	"	Same <i>off</i> : Γ	LRBC II 2551	1
754	AE4	"	VOT XX MVLT XXX Wreath <i>off</i> : A, Γ	LRBC II 2554	2
*755	AE4	"	VOT X MVLT XX Wreath <i>off</i> : A (5), B (5), Γ (7)	LRBC II 2557	18
756	AE4	"	VOT V Wreath <i>off</i> : A	LRBC II 2561	1

757	AE2	383-392	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : Δ (1)	LRBC II 2563	3
758	AE2	"	VIRTVS EXERCITI 1 Emperor and captive <i>off</i> : A (4), B (2), Γ (1)		8
759	AE4	383-395	SALVS REIPVBLICAE 2 Victory and captive l. <i>off</i> : A (11), B (9), Γ (7)	LRBC II 2569, 2577	34
*760	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : B (2), Γ (2)	LRBC II 2571	4
761	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A (3), Γ (3)	LRBC II 2574	7
		<i>Antioch</i>			
762	AE2	383	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : B	LRBC II 2715	1
763	AE4	"	VOT X MVLTV XX Wreath <i>off</i> : A (2)	LRBC II 2734	2
764	AE4	"	Same	LRBC II 2742	1
765	AE4	383-395	SALVS REIPVBLICAE 1 Victory and captive l. <i>off</i> : A (1)	LRBC II 2765, 2773	2
766	AE4	"	Same <i>off</i> : A (2)	LRBC II 2769, 2776	4
†*767	AE4	"	Same <i>M/m</i> : <u>‡</u>	LRBC not (2790A)	1
768	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (2)	LRBC II 2779	2
769	AE2	"	Same <i>off</i> : A	LRBC II 2780	1
770	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A	LRBC II 2785	1
		<i>Alexandria</i>			
771	AE4	383	VOT X MVLTV XX Wreath <i>off</i> : A (2)	LRBC II 2882	3

767 C63.528. The mintmark does not appear to be a corrupted cross, but a continuation of the control T which had already appeared at Antioch on issues of A.D. 383-392, cf. LRBC 2745-2753.

		<i>Uncertain Mints</i>		
772	AE3	379-383	CONCORDIA AVGGG Constantinopolis seated	2
773	AE4	"	VOT V MVLT X Wreath	1
774	AE4	379-392	VOT X MVLT XX Wreath	18
775	AE4	383	VOT XX MVLT XXX Wreath	3
776	AE4	383-387	VOT V Wreath	1
777	AE4	383-392	VICTORIA AVG 4 or AVGGG 2 Two Victories	1
†*778	AE2	"	GLORIA ROMANORVM 15 Emperor on galley l.	4
779	AE2	"	VIRTVS EXERCITI 1 Emperor and captive	4
†*780	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l.	54
781	AE2	393-395	GLORIA ROMANORVM 18 Emperor r.	2
782	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r.	6
783	AE		Uncertain type	13

### Flaccilla (9)

784	AE2	<i>Heraclea</i> 383-386	SALVS REIPVBLICAE 4 Empress facing <i>off</i> : A	<i>LRBC</i> II 1982	1
785	AE2	<i>Constantinople</i> 383	SALVS REIPVBLICAE 3 Victory seated r. <i>off</i> : Δ	<i>LRBC</i> II 2149	1
786	AE2	"	Same <i>off</i> : €	<i>LRBC</i> II 2149	1
787	AE2	383-386	SALVS REIPVBLICAE 4 Empress facing	<i>LRBC</i> II 2181	1
788	AE2	<i>Nicomedia</i> 383-386	SALVS REIPVBLICAE 3 Victory seated r. <i>off</i> : Γ	<i>LRBC</i> II 2390	1

778 One piece, C65.89, is overstruck on a FEL TEMP REPARATIO FH coin of Constantius II. The mint of the Theodosian overstrike is limited to Constantinople or Nicomedia by the exergual JNA.

780 C70.52.18 bears an incorrect obverse legend, ... THEODODO[ SIVS.... C67.451 is a deliberately cut half.

789	AE2	<i>Cyzicus</i> 383-386	SALVS REIPVBLICAE 4 Empress facing <i>off</i> : Γ		<i>LRBC</i> II 2567	1
790	AE2	<i>Alexandria</i> 383-386	Same <i>off</i> : B		<i>LRBC</i> II 2897	1
791	AE2	<i>Uncertain Mints</i> 383-386	SALVS REIPVBLICAE 3 Victory seated r.			1
792	AE2	"	SALVS REIPVBLICAE 4 Empress facing			1
<b>Magnus Maximus 383-388 (1)</b>						
793	AE4	<i>Uncertain Mints</i> 387-388	SPES ROMANORVM 1 Camp gate			1
<b>Flavius Victor 383?-388 (1)</b>						
794	AE4	<i>Aquileia</i> 387-388	Same <i>off</i> : P		<i>LRBC</i> II 1104	1
<b>Arcadius 383-408 (454)</b>						
795	AE3	<i>Rome</i> 402-408	VRBS ROMA FELIX 1 <i>off</i> : S	Roma r.	<i>LRBC</i> II 814	1
796	AE4	<i>Aquileia</i> 388-402	SALVS REIPVBLICAE 2 and captive l. <i>off</i> : P	Victory	<i>LRBC</i> II 1107, 1110, 1112	1
797	AE4	<i>Siscia</i> 383-392	VICTORIA AVGGG 1 <i>off</i> : B	Victory l.	<i>LRBC</i> II 1581	1
798	AE4	<i>Thessalonica</i> 383-392	VICTORIA AVG 4	Two Victories	<i>LRBC</i> II 1872	1
799	AE4	"	SALVS REIPVBLICAE 2 and captive l. <i>off</i> : A (1), Γ (1)	Victory	<i>LRBC</i> II 1875	3
800	AE4	<i>Heraclea</i> 383	VOT V Wreath <i>off</i> : A (2), S (1)		<i>LRBC</i> II 1964	4

801	AE4	383-392	SALVS REIPVBLICAE 1 Victory and captive l. <i>off</i> : A (1)	LRBC II 1985	2
802	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (3), B (3)	LRBC II 1990	6
803	AE3	395-402	VIRTVS EXERCITI 2 Emperor and victory <i>off</i> : A (3), B (1), Γ (1)	LRBC II 1992	6
804	AE3	"	Same	LRBC II 1994	1
		<i>Constantinople</i>			
805	AE2	383	GLORIA ROMANORVM 16 Emperor and captive <i>off</i> : Γ	LRBC II 2154	1
806	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive <i>off</i> : Γ	LRBC II 2173	1
*807	AE2	"	Same <i>off</i> : Γ (1)	LRBC II 2179	2
808	AE4	"	SALVS REIPVBLICAE 2 Victory and captive l. <i>off</i> : A (6), B (1), Γ (2), I (1)	LRBC II 2185	18
809	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : Γ	LRBC II 2200	1
810	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A (1), Γ (1)	LRBC II 2190	3
811	AE4	"	SALVS REIPVBLICAE 2 Victory and captive l. <i>off</i> : A (2)	LRBC II 2193	4
†812	AE2	393-408	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (1)	LRBC II 2187, 2203	3
†813	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (34), B (5), Γ (2), € (2)	LRBC II 2205	54
814	AE4	"	CONCORDIA AVG 3 Cross <i>off</i> : B	LRBC II 2207	1

812 Again, *LRBC* II p. 107 n. 2203 reads, "*off*. Δ only," but one of the find pieces appears to read A, C61.98.

813 *LRBC* II p. 107 n. 2205-2206 acknowledges *officinae* A, B and Γ

for this issue, but two Sardis specimens appear to read € C62.1280, C68.65.

*815	AE4	395-408	CONCORIA ( <i>sic</i> ) AVG <i>off</i> : A	Cross	cf. LRBC II 2208	1
816	AE3	402-408	CONCORDIA AVGG Constantinopolis seated <i>off</i> : A (2)		LRBC II 2210	4
817	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A		LRBC II 2214	1
818	AE4	"	CONCORDIA AVG 1 facing	Victory	LRBC II 2222	2
819	AE2	<i>Nicomedia</i> 383	GLORIA ROMANORVM 17 Emperor and captive <i>off</i> : A		LRBC II 2377	1
820	AE2	383-392	VIRTVS EXERCITI 1 and captive <i>off</i> : Γ	Emperor	LRBC II 2395	1
†821	AE4	"	SALVS REIPVBLICAE 1 and captive l. <i>M/m</i> : $\frac{\ddagger}{\mid}$ <i>off</i> : Γ (1)	Victory	LRBC not (2412A)	2
822	AE4	"	Same	<i>off</i> : Γ	LRBC II 2414	1
823	AE4	"	Same	<i>off</i> : Γ	LRBC II 2417	1
824	AE4	383-395	Same		LRBC II 2405, 2429	1
825	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A, B, Γ		LRBC II 2423	3
826	AE4	"	SALVS REIPVBLICAE and captive <i>off</i> : A (2)	Victory	LRBC II 2429	2
827	AE3	395-408	VIRTVS EXERCITI 2 and Victory <i>off</i> : A (5), B (1)	Emperor	LRBC II 2436	8
828	AE3	"	Same	<i>off</i> : A (1)	LRBC II 2438	2
829	AE3	"	Same		LRBC II 2440	1
830	AE3	402-408	CONCORDIA AVGG Constantinopolis seated <i>off</i> : A (3)		LRBC II 2442	3



<b>831</b>	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A	LRBC II 2446	1
<b>832</b>	AE4	"	CONCORDIA AVGGG Cross <i>off</i> : A (2)	LRBC II 2451	2
<b>833</b>	AE4	395-408	CONCORDIA AVG 3 or AVGGG Cross		3
<b>*834</b>	AE2	<i>Cyzicus</i> 383	GLORIA ROMANORVM 17 Emperor and captive <i>off</i> : Δ	LRBC II 2547	1
<b>835</b>	AE4	"	VOT V Wreath <i>off</i> : A (5), B (1), Δ (1)	LRBC II 2562	13
<b>*836</b>	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive <i>off</i> : Δ	LRBC II 2566	1
<b>837</b>	AE4	383-395	SALVS REIPVBLICAE 2 Victory and captive l. <i>off</i> : A (3), B (1), Γ (5)	LRBC II 2570, 2578	11
<b>*838</b>	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (2), Γ (2)	LRBC II 2572	6
† <b>839</b>	AE2	"	Same; legend retrograde <i>off</i> : A		1
<b>*840</b>	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A (1), B (2), Γ (4)	LRBC II 2575	8
<b>841</b>	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (18), B (10), Γ (1), Δ (1)	LRBC II 2580	43
<b>*842</b>	AE3	"	Same; obv. C, rosette diademed <i>off</i> : A	LRBC not (2580A)	1
† <b>*843</b>	AE4	"	CONCORDIA AVG Cross <i>off</i> : A	LRBC not (2582A)	1
<b>844</b>	AE3	402-408	CONCORDIA AVGG Constantinopolis seated	LRBC II 2586	1
<b>*845</b>	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A (8), B (4)	LRBC II 2590	13

**839** C62.266. Peculiar though the reverse is, the obverse is of good style and appears to be genuine. If a contemporary counterfeit, the coin is probably struck from an obverse die illegally removed from the mint.

**843** C59.87. The reverse is that already attested for Honorius, LRBC 2583, but the piece is Arcadius', with obverse A1B.

846	AE4	402-408	CONCORDIA AVGGG Cross	LRBC II 2594	1
		<i>Antioch</i>			
847	AE4	383-392	SALVS REIPVBLICAE 1 Victory and captive l. <i>off</i> : Γ	LRBC II 2771	1
848	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : B (1)	LRBC II 2781	2
849	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A, B	LRBC II 2787	2
850	AE3	"	Same <i>off</i> : A	LRBC II 2788	1
851	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (1), B (1)	LRBC II 2791	3
852	AE3	"	Same <i>off</i> : B (1)	LRBC II 2792	2
		<i>Alexandria</i>			
853	AE4	383	VOT X MVLT XX Wreath <i>off</i> : A (3)	LRBC II 2883	3
854	AE3	395-408	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A	LRBC II 2923	1
		<i>Uncertain Mints</i>			
855	AE4	383	VOT V Wreath		4
856	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive		1
857	AE4	"	VOT X MVLT XX Wreath		5
†858	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l.		57
859	AE3	393-395	GLORIA ROMANORVM 19 Emperor ahorse r.		4
860	AE2	393-408	GLORIA ROMANORVM 18 Emperor r.		2
†861	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory		72
862	AE3	402-408	CONCORDIA AVGG Constantinopolis seated		10

858 Although the type continued to be struck at Aquileia and Rome to 402 and 408 respectively, only one piece of the 176 mint-identifiable specimens of all emperors, 796, derived from Aquileia, and none from Rome. It is therefore virtually certain that the

examples unidentifiable by mint were struck in the East no later than 395, and most before 393 since the type is relatively scarce for Honorius. The same chronology is adduced for 918 and 1056. 861 C63.639 is a deliberately cut half.

863	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors		16
864	AE4	"	CONCORDIA AVGGG Cross		3
865	AE		Uncertain type		10

**Eudoxia (26)**

		<i>Constantinople</i>			
866	AE3	400-404	SALVS REIPVBLICAE 3 Victory seated r. <i>off</i> : A (2)	LRBC II 2213	3
867	AE3	"	GLORIA ROMANORVM 24 Empress seated	LRBC II 2218	1
868	AE3	"	Same <i>off</i> : Γ	LRBC II 2220	1
		<i>Nicomedia</i>			
*869	AE3	400-404	Same	LRBC II 2450	1
		<i>Cyzicus</i>			
870	AE3	400-404	SALVS REIPVBLICAE 3 Victory seated r. <i>off</i> : A (6)	LRBC II 2589	8
871	AE3	"	GLORIA ROMANORVM 24 Empress seated <i>off</i> : A	LRBC II 2593	1
		<i>Antioch</i>			
872	AE3	400-404	SALVS REIPVBLICAE 3 seated r. <i>off</i> : Γ	Victory LRBC II 2800	1
		<i>Uncertain</i>			
		<i>Mints</i>			
873	AE3	400-404	Same		7
874	AE3	"	GLORIA ROMANORVM 24 Empress seated		3

**Honorius 393-423 (286)**

		<i>Rome</i>			
875	AE3	402-408	VRBS ROMA FELIX 1 or 2 Roma r. <i>off</i> : Q (2)	LRBC II 816 etc.	2
*876	AE4	410-423	VICTORIA AVGG 1 <i>off</i> : S, €	Victory 1. LRBC II 828	2
877	AE4	"	Same	LRBC II 830	1

878	AE3	<i>Aquileia</i> 408-423	GLORIA ROMANORVM 11 Emperor and two captives	LRBC II 1114	1
879	AE2	<i>Heraclea</i> 393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (1), B (1)	LRBC II 1988	3
*880	AE2	"	Same <i>off</i> : A, B	LRBC II 1991	2
881	AE3	395-402	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A	LRBC II 1993	1
882	AE3	"	Same <i>off</i> : A	LRBC II 1995	1
883	AE4	402-408	CONCORDIA AVGGG Cross	LRBC II 1997	1
884	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A	LRBC II 2000	1
†*885	AE3	"	GLORIA ROMANORVM 23 Two Emperors	LRBC not (2001A)	1
886	AE3	<i>Constantinople</i> 393-395	GLORIA ROMANORVM 19 Emperor ahorse r.	LRBC II 2191	1
†887	AE2	393-408	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : A (4), Γ (1), Δ (1)	LRBC II 2188, 2204	7
888	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (3), Γ (8)	LRBC II 2206	13
889	AE4	"	CONCORDIA AVG 3 Cross <i>off</i> : B	LRBC II 2209	1
890	AE3	402-408	CONCORDIA AVGG Constantinopolis seated	LRBC II 2211	1
891	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : Γ	LRBC II 2215	1
†892	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A (1)	LRBC II 2223	2

885 C71.116a. The coin is in poor condition but the attribution seems assured. The type GLORIA ROMANORVM 23 is not given to the mint of Heraclea by LRBC.

887 The piece marked officina Γ is an ancient counterfeit of good fabric and weight, C67.41.

892 See note to 1006.

893	AE3	408-423	GLORIA ROMANORVM 23 Two Emperors	LRBC II 2224	1
		<i>Nicomedia</i>			
894	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off:</i> Γ (2)	LRBC II 2424	2
895	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off:</i> A (4), B (2)	LRBC II 2437	9
896	AE3	"	Same <i>off:</i> B (2)	LRBC II 2439	2
897	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors <i>off:</i> A (2)	LRBC II 2447	4
898	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off:</i> A, B	LRBC II 2454	2
899	AE3	"	GLORIA ROMANORVM 23 Two Emperors <i>off:</i> A	LRBC II 2456	1
		<i>Cyzicus</i>			
900	AE2	393-395	GLORIA ROMANORVM 18 Emperor r. <i>off:</i> A (3), Γ (4)	LRBC II 2573	8
901	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off:</i> B (1)	LRBC II 2576	6
902	AE4	"	SALVS REIPUBLICAE 2 Victory and captive l. <i>off:</i> A (2)	LRBC II 2579	2
903	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off:</i> A (9), B (6)	LRBC II 2581	23
904	AE3	"	Same <i>off:</i> A (3), B (1), Γ (1)	LRBC II 2582	7
905	AE3	402-408	CONCORDIA AVGG Constantinopolis seated <i>off:</i> A (4)	LRBC II 2587	5
906	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off:</i> A (10)	LRBC II 2591	14
907	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off:</i> A (4)	LRBC II 2598	6

908	AE2	<i>Antioch</i> 393-395	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : Γ	LRBC II 2783	1
909	AE3	"	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : Γ (3)	LRBC II 2789	3
910	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (1)	LRBC II 2793	5
911	AE3	"	Same <i>off</i> : A (2), Γ (2)	LRBC II 2794	4
912	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A	LRBC II 2802	1
913	AE3	<i>Alexandria</i> 395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A	LRBC II 2918	1
914	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A (1)	LRBC II 2924	2
*915	AE3	"	Same; <i>obv.</i> H2B	LRBC not (2924A)	1
<i>Uncertain Mints</i>					
916	AE3	393-395	GLORIA ROMANORVM 19 Emperor ahorse r.		5
917	AE2	393-408	GLORIA ROMANORVM 18 Emperor r.		3
†918	AE4	393-395	SALVS REIPUBLICAE 1 or 2 Victory and captive l.		6
919	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory		45
920	AE4	"	CONCORDIA AVG 3 or AVGGG Cross		3
921	AE4	395-423	VICTORIA AVGG 1 Victory l.		2
922	AE3	402-408	CONCORDIA AVGG Constantinopolis seated		7
923	AE3	"	GLORIA ROMANORVM 21 Three Emperors		24

924	AE4	402-408	CONCORDIA AVGGG Cross		1
925	AE3	402-423	GLORIA ROMANORVM 21, 22, 23 Three or two Emperors		2
926	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors		18
927	AE3	"	GLORIA ROMANORVM 23 Two Emperors		11
928	AE3	"	GLORIA ROMANORVM 22 or 23 Two Emperors		3
929	AE		Uncertain type		4

**Theodosius II 402-450 (171)**

†930	AE3	<i>Rome</i> 402-408	VRBS ROMA FELIX 1 or 2 Roma r.	<i>LRBC</i> II 818, 825	1
931	AE3	<i>Thessalonica</i> 408-423	GLORIA ROMANORVM 22 Two Emperors	<i>LRBC</i> II 1877	1
932	AE4	<i>Heraclea</i> 402-408	CONCORDIA AVGGG Cross <i>off</i> : A	<i>LRBC</i> II 1998	1
933	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A	<i>LRBC</i> II 2001	1
*934	AE3	"	Same <i>M/m</i> : ⚭	<i>LRBC</i> not (2001A)	1
935	AE4	425-450	Cross in Wreath	<i>LRBC</i> II 2004	1
936	AE3	<i>Constantinople</i> 402-408	CONCORDIA AVGG Constans- tinopolis seated <i>off</i> : A (1)	<i>LRBC</i> II 2212	2
*937	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : Γ	<i>LRBC</i> II 2216	1
†*938	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors	<i>LRBC</i> not (2223A)	1
939	AE3	"	GLORIA ROMANORVM 23 Two Emperors <i>off</i> : A (1)	<i>LRBC</i> II 2225	4

930 See also 983 and note.

938 In *LRBC* the type is attributed to Constantinople only for

Honorius. The single Sardis example has been broken along the edge, but the exergue JON[ seems certain (C62.428).

†940	AE4	425-450	Cross in Wreath	<i>LRBC</i> II 2234	5
†941	AE4	"	Same	<i>LRBC</i> II 2238	2
†942	AE4	"	Same	<i>LRBC</i> II 2239	3
943	AE4	"	VT XXX V Wreath	<i>LRBC</i> II 2244	6
†944	AV solidus	402-450	CONCORDIA AVGG/CONOB Roma seated		1
		<i>Nicomedia</i>			
945	AE3	408-423	GLORIA ROMANORVM 23 Two Emperors	<i>LRBC</i> II 2457	1
946	AE4	425-450	CONCORDIA AVG 1 Victory facing	<i>LRBC</i> II 2459	1
*947	AE4	"	Cross in Wreath <i>off</i> : B (1)	<i>LRBC</i> II 2460	2
948	AE4	"	Same	<i>LRBC</i> II 2460, 2461	1
		<i>Cyzicus</i>			
949	AE3	402-408	CONCORDIA AVGG Constan- tinopolis seated <i>off</i> : A (1)	<i>LRBC</i> II 2588	2
950	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A (2), B (1)	<i>LRBC</i> II 2592	5
951	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A (3)	<i>LRBC</i> II 2599	3
952	AE4	425-450	CONCORDIA AVG 1 Victory facing <i>off</i> : A (1)	<i>LRBC</i> II 2602	3
953	AE4	"	Cross in Wreath <i>off</i> : A, B	<i>LRBC</i> II 2604	2
954	AE4	"	Same <i>off</i> : A (1), B (1)	<i>LRBC</i> II 2605	5
955	AE4	"	Same <i>off</i> : B	<i>LRBC</i> II 2604, 2605	1
		<i>Antioch</i>			
956	AE4	425-450	Cross in Wreath	<i>LRBC</i> II 2810	1
		<i>Alexandria</i>			
957	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors	<i>LRBC</i> II 2925	1
958	AE3	408-421	GLORIA ROMANORVM 23 Two Emperors <i>off</i> : A	<i>LRBC</i> II 2931	1



		<i>Uncertain Mints</i>			
959	AE3	402-408	CONCORDIA AVGG Constantinopolis seated		6
960	AE3	"	GLORIA ROMANORVM 21 Three Emperors		7
961	AE4	"	CONCORDIA AVG 3 or AVGGG Cross		3
962	AE3	402-423	GLORIA ROMANORVM 21, 22, or 23 Three or two Emperors		1
963	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors		11
964	AE3	"	GLORIA ROMANORVM 23 Two Emperors		9
965	AE3	"	GLORIA ROMANORVM 22 or 23 Two Emperors		2
966	AE3	423-425	GLOR ORVIS TERRAR Emperor r.		1
967	AE4	425-450	CONCORDIA AVG 1 Victory facing		3
968	AE4	"	Cross in Wreath		53
969	AE4	"	VT XXX V Wreath		10
970	AE		Uncertain type		5

**Eudocia (1)**

		<i>Uncertain Mint</i>			
†971	AE3	423-425	CONCORDIA AVG 2 Empress seated		1

**Valentinian III 425-455 (10)**

		<i>Rome</i>			
972	AE4	425-455	VICTORIA AVGG 1 Victory and captive l. <i>off: S</i>	<i>LRBC</i> II 843	1
973	AE4	"	VOT PVB 1 Camp gate	<i>LRBC</i> II 851	1
974	AE4	"	VOT PVB 2 Camp gate	<i>LRBC</i> II 853- 859	1
975	AE4	"	VICTORIA AVGG 3 Two Victories	<i>LRBC</i> II 860	1

971 C61.343. Presumably Constantinople, the only mint to which the type is given in *LRBC*, but the mark cannot be read.

976	AE4	425-455	VICTORIA AVGG 2 and captive l.	Victory	LRBC II 862, 863	1
977	AE4	"	Same		LRBC II 863	1
		<i>Uncertain Mints</i>				
†978	AE4	425-455	VICTORIA AVGG 3 Victories	Two		1
†979	AE4	"	Cross in Wreath			1
980	AE4	"	Uncertain type			2
<b>Valentinian I-Valentinian III (1139)</b>						
		<i>Arles</i>				
981	AE4	388-425	VICTORIA AVGG 1 or AVGGG 1 off: P	Victory l.		1
		<i>Rome</i>				
982	AE4	383-387	VICTORIA AVGGG 2 M/m: $\frac{\cdot}{\overline{RB}}$	Two Victories		1
†983	AE3	402-408	VRBS ROMA FELIX 1 or 2 off: Q (1)	Roma r.		2
984	AE4	410-455	VICTORIA AVG 1 off: T	Victory l.		1
985	AE4	"	VICTORIA AVGG 1 off: S (1), € (1)	Victory l.		3
†*986	AE4	"	VICTORIA AVG or AVGG or AVGGG off: P (1), S (9), € (9)	Victory l.		20
		<i>Thessalonica</i>				
987	AE3	364-378	SECVRITAS REIPVBLICAE Victory l.			2
988	AE4	383-392	GLORIA REIPVBLICE 2 gate	Camp		3

978 Presumably of Rome, the only mint to which LRBC attributes this type.

979 The type is attested for Valentinian III only at Rome and Cyzicus (LRBC 2606). The former is the more likely mint of this example, given the otherwise exclusive occurrence of Roman mint coins at Sardis for the emperor.

983 LRBC II p. 106 nn. 818, 825 attributes officina Q in this issue to Theodosius II.

986 Only three pieces, one of officina P, two of €, certainly bear the Rome mark (C68.79, C70.55.80, C71.135a). The rest are placed here

because the officina letter seems to permit nothing else. C71.135a, officina S | , bears the exergual mark RP instead of RM. For four additional examples of officina A | , see below, 1070.

In general this issue is struck on flans too small for the dies, so that most of the obverse and reverse legend is missing even when the condition of the piece permits that they be read. One cannot normally distinguish emperor or mint, or whether the piece be of the AVG, AVGG, or AVGGG issue. Five pieces whose emperor can be read are all of Honorius, 875-877.

989	AE4	383-392	VICTORIA AVG 4 Two Victories	4
		<i>Heraclea</i>		
990	AE3	364-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : Γ	1
991	AE3	364-378	SECVRTAS REIPVBLICAE Victory l.	1
992	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory	2
993	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A (1)	2
		<i>Constantinople</i>		
994	AE3	364-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : A (1), € (1)	4
995	AE3	364-378	SECVRTAS REIPVBLICAE Victory l. <i>off</i> : A (1)	3
996	AE3	378-383	CONCORDIA AVGGG Constantinopolis seated l. <i>off</i> : Z	1
997	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive	1
998	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l. <i>off</i> : A (2)	7
†999	AE4	395-408	CONCORDIA AVG 3 Cross	1
1000	AE4	"	CONCORDIA AVG 3 or AVGGG Cross	1
1001	AE3	"	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (3), Γ (2)	10
1002	AE3	402-408	CONCORDIA AVGG Constanti- nopolis seated	3
1003	AE3	"	GLORIA ROMANORVM 21 Three Emperors	2

999 C61.154. The emperor is Arcadius or Honorius, in either case with obverse legend 2, not in *LRBC* for this issue.

1004	AE3	402-423	GLORIA ROMANORVM 21 or 22 Three or two Emperors	1
1005	AE4	402-450	CONCORDIA AVG 1 Victory facing	1
†1006	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors <i>off</i> : A (1)	3
1007	AE3	"	GLORIA ROMANORVM 23 Two Emperors <i>off</i> : A (1)	6
†1008	AE4	425-455 <i>Nicomedia</i>	Cross in Wreath	1
1009	AE3	364-375	GLORIA ROMANORVM 8 Emperor and captive r.	1
1010	AE3	364-378	SECVRITAS REIPVBLICAE Victory l.	1
1011	AE2	383-392	GLORIA ROMANORVM 15 Emperor on galley l. <i>off</i> : A (1)	2
1012	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l.	3
1013	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (2)	6
1014	AE4	"	CONCORDIA AVG 3 or AVGGG Cross <i>off</i> : A (1)	2
1015	AE3	402-408	CONCORDIA AVGG Constantinopolis seated	1
1016	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A (1)	2
1017	AE3	408-423	GLORIA ROMANORVM 23 Two Emperors <i>off</i> : A (1)	5
1018	AE3	<i>Cyzicus</i> 364-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : B (1), Γ (1)	3

1006 These are coins of Honorius, if *LRBC* is correct in denying *Gloria Romanorum* 22 to Theodosius II at Constantinople. But see no. 938.

1008 This is a coin of Theodosius II, if *LRBC* is correct in denying Cross in Wreath to Valentinian III at Constantinople.

1019	AE3	364-378	SECVRITAS REIPVBLICAE Victory I. <i>off</i> : A (1), Γ (1), Δ (1)	6
1020	AE4	383	VOT V Wreath <i>off</i> : A	1
1021	AE4	"	VOT X MVLX XX Wreath <i>off</i> : A (2), Γ	3
1022	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive <i>off</i> : Δ	1
1023	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive I. <i>off</i> : A (3), B (1), Γ (2)	10
1024	AE3	393-395	GLORIA ROMANORVM 19 Emperor ahorse r. <i>off</i> : A	1
1025	AE2	"	GLORIA ROMANORVM 18 Emperor r. <i>off</i> : Γ (1)	2
1026	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (7), B (1), Γ (1)	13
1027	AE3	402-408	CONCORDIA AVGG Constantinopolis seated <i>off</i> : A (2)	4
1028	AE3	"	GLORIA ROMANORVM 21 Three Emperors <i>off</i> : A (5), B (2)	10
1029	AE4	425-455	Cross in Wreath <i>off</i> : A (6), B (1)	8
1030	AE3	<i>Antioch</i> 364-375	GLORIA ROMANORVM 8 Emperor and captive r. <i>off</i> : A (3)	4
1031	AE3	364-378	SECVRITAS REIPVBLICAE Victory I. <i>off</i> : A (1)	4
1032	AE3	378-383	CONCORDIA AVGGG Variety uncertain	1
1033	AE4	383	VOT X MVLX XX Wreath <i>off</i> : A (1)	2

1034	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l. <i>off</i> : A (4)	4
1035	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory <i>off</i> : A (3), Γ (1)	11
1036	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors	4
1037	AE4	"	CONCORDIA AVGGG Cross <i>off</i> : Γ	1
		<i>Alexandria</i>		
1038	AE3	364-378	SECVRITAS REIPVBLICAE Victory l. <i>off</i> : A (3)	3
1039	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l. <i>off</i> : A (2)	2
1040	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory	2
1041	AE3	402-408	GLORIA ROMANORVM 21 Three Emperors	1
		<i>Uncertain Mints</i>		
1042	AE3	364-367	RESTITVTOR REIP Emperor r.	1
1043	AE3	364-378	GLORIA ROMANORVM 8 Emperor and captive r.	81
1044	AE3	"	SECVRITAS REIPVBLICAE Victory l.	85
1045	AE3	378-383	CONCORDIA AVGGG Constantinopolis seated	2
1046	AE3	"	CONCORDIA AVGGG Roma seated 2	1
1047	AE3	"	CONCORDIA AVGGG Uncertain variety	2
1048	AE4	378-392	VOT X MVLT XX Wreath	20
1049	AE4	"	VOT - MVLT - Wreath	1
1050	AE4	383	VOT XX MVLT XXX Wreath	3
1051	AE4	383-387	VICTORIA AVGGG 2 Two Victories	1
1052	AE2	383-392	GLORIA ROMANORVM 15 Emperor on galley l.	1

1053	AE2	383-392	VIRTVS EXERCITI 1 Emperor and captive	1
1054	AE4	"	VOT V Wreath	9
1055	AE2-4	383-404	SALVS REIPVBLICAE 3 Victory seated r.	6
†*1056	AE4	383-395	SALVS REIPVBLICAE 1 or 2 Victory and captive l.	153
1057	AE3	393-395	GLORIA ROMANORVM 19 Emperor ahorse r.	2
1058	AE2	393-408	GLORIA ROMANORVM 18 Emperor r.	5
†*1059	AE3	395-408	VIRTVS EXERCITI 2 Emperor and Victory	119
1060	AE4	"	CONCORDIA AVG 3 Cross	2
1061	AE4	"	CONCORDIA AVG 3 or AVGGG Cross	19
1062	AE3	402-408	CONCORDIA AVGG Constantinopolis seated	33
1063	AE3	"	GLORIA ROMANORVM 21 Three Emperors	70
1064	AE4	"	CONCORDIA AVGGG Cross	2
1065	AE3	402-423	GLORIA ROMANORVM 21, 22 or 23 Three or two Emperors	1
1066	AE4	402-450	CONCORDIA AVG 1 Victory facing	4
†*1067	AE3	408-423	GLORIA ROMANORVM 22 Two Emperors	34
1068	AE3	"	GLORIA ROMANORVM 23 Two Emperors	50
1069	AE3	"	GLORIA ROMANORVM 22 or 23 Two Emperors	3
1070	AE4	410-455	VICTORIA AVG or AVGG or AVGGG Victory l. <i>off:</i> (4) <u>A</u>	63
†1071	AE4	425-455	Cross in Wreath	151
1072	AE		Uncertain type (Valentinian I or Valens)	1

1056 See the note to 858 above. C63.1483 is an ancient imitation with the entire *Salus* type reversed.

1059 C70.61.31 is an ancient imitation with facing head on obverse, the whole crudely cut.

1067 C61.293 is an ancient imitation crudely cut, with blundered

mintmark JOHON.

1071 The great majority are certain to be of Theodosius II. Of the dozens of identifiable pieces only one bore the portrait of Valentinian III, no. 979.

1073	AE		Uncertain type (Theodosius I or Theodosius II)		1
<b>Marcian 450-457 (83)</b>					
		<i>Constantinople</i>			
1074	AE4	450-457	Monogram 4	LRBC II 2249	3
*1075	AE4	"	Monogram 7	LRBC II 2250	1
1076	AE4	"	Monogram uncertain		3
		<i>Nicomedia</i>			
*1077	AE4	450-457	Monogram 5	LRBC II 2465	1
*1078	AE4	"	Monogram 7	LRBC II 2467	3
		<i>Cyzicus</i>			
1079	AE4	450-457	Monogram uncertain		1
		<i>Uncertain Mints</i>			
1080	AE4	450-457	Monogram 1		1
1081	AE4	"	Monogram 2		1
*1082	AE4	"	Monogram 3		1
1083	AE4	"	Monogram 4		6
1084	AE4	"	Monogram 6		2
1085	AE4	"	Monogram 7		16
1086	AE4	"	Monogram 8		1
1087	AE4	"	Monogram 9		6
1088	AE4	"	Monogram uncertain		37
<b>Leo 457-474 (128)</b>					
		<i>Thessalonica</i>			
1089	AE4	457-474	Monogram 1a	LRBC II 1883	1
		<i>Heraclea</i>			
1090	AE4	457-474	Monogram 1b	LRBC II 2008	3
		<i>Constantinople</i>			
*1091	AE4	457-474	Lion 1.	LRBC II 2258	1
1092	AE4	"	Monogram 1	LRBC II 2262-2264	2
1093	AE4	"	Emperor and captive	LRBC II 2266	1
*1094	AE4	"	Empress	LRBC II 2272-2275	36
1095	AE4	"	Two Emperors seated	LRBC II 2276	3



*Uncertain  
Mints*

1096	AE4	457-474	Lion r.		1
1097	AE4	"	Lion l.		15
1098	AE4	"	Lion l. in wreath		7
1099	AE4	"	Monogram 1		21
1100	AE4	"	Monogram 2		9
1101	AE4	"	Monogram uncertain		4
1102	AE4	"	Emperor and captive		19
1103	AE4	"	Uncertain type		5

**Zeno 474-491 (76)**

*Constantinople*

†*1104	AE4	474-491	ZENO Emperor l.	LRBC II 2278	1
†*1105	AE4	"	Monogram 1	LRBC II 2279	26
†1106	AE4	"	Monogram 2	LRBC II 2280	17
†*1107	AE4	"	Monogram 3	LRBC II 2281	14
†1108	AE4	"	Monogram 4	LRBC II 2282	9
†1109	AE4	"	Monogram uncertain		5
†1110	AE4	"	[legend] Victory l.	LRBC II 2282A	4

**Zenonis 475-476 (1)**

*Constantinople*

1111	AE4	475-476	Monogram 3	LRBC II 2287	1
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**Theodosius II to Anastasius I (9)**

*Uncertain  
Mints*

1112	AE4	425-518	Monogram		9
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**UNIDENTIFIABLE (3657)**

1113	Ant.		3rd century		21
1114	Ant.		3rd century barbarous radiates		24
1115	AE		4th century		12
1116	AE		4th/5th century		1881
1117	AE		5th/6th century		1719

1104-1110 All are attributed to Constantinople as per LRBC, but the mint legend is rarely visible.







Table 10. Totals of Roman coins, by mints.

Cyzicus	713	Arles	9
Constantinople	615	Milan	8
Nicomedia	268	Sirmium	3
Heraclea	170	Trier	3
Antioch	159	Ticinum	2
Rome	147	Carthage	1
Thessalonica	86	Ephesus	1
Alexandria	53	London	1
Asia, uncertain	30	Lugdunum	1
Siscia	20	Uncertain	6416
Aquileia	14		
		Total	8720

Table 9. Global totals, by century, of coins which cannot be more precisely identified.

Third century	21
Third century barbarous radiates	24
Fourth century	12
Fourth/fifth century	1881
Fifth/sixth century	1719
Total	3657

### III BYZANTINE, MEDIEVAL AND MODERN COINS AND TOKENS

T. V. Buttrey

#### THE BYZANTINE COINS

The new finds of Byzantine coins are here published as a supplement to Bates' volume.<sup>1</sup> That work covered the coins which had come to light through the 1968 season; those below are the subsequent finds through August 18, 1972, as well as a few additional pieces from the earlier years. They number 110, as against the 1234 pieces listed in Bates.

A glance at the catalogue reveals that in the main the new finds confirm and enlarge the picture of Byzantine circulation derived from Bates. The nummi of Anastasius I continue to appear in quantity, accompanied by the reformed coinage of the sixth century which comprises almost 80% of the Byzantine finds. In the seventh century the rich representation in Bates of Phocas, Heraclius and Constans II finds a gentle enlargement in the dozen or so additional pieces below. After that the finds are sporadic. They include no further Anonymous folles, but do provide two more specimens of the common trachy of John III (1222-1254), of which Bates had already identified about two dozen examples. The configuration of the bronze finds shows a sharp drop from the earliest material. The

three periods, sixth century, seventh century, and eighth century and later, are represented in the ratio 84:10:6. Bates' coins, too, fall away, in the ratio 59:30:11, the difference in rate being due in part to the proportionately larger number of Anastasian nummi included below.

Taken reign by reign, the new finds are largely additional examples of the bronze issues already published by Bates or by H. W. Bell in his earlier catalogue (*Sardis XI* [1916]). No gold was found, and only one piece in silver. The novelties to be noted are:

66 Nummus of Justinian I

103 Miliaretion of Basil I, who was hitherto represented at Sardis only by bronze published by Bell.

In addition, new dates or officinae in series already included in Bates are to be found at **54, 55, 59, 60, 83, 87, 93, 94** (dates), and **76, 91** (officinae).

The finds of Byzantine coins from Sardis will now have been published in three different volumes. They total 1696 pieces, plus one seal and one apparently private manufacture (**110** below). It seems appropriate to provide a minimal conspectus of the whole by means of a table which brings together in totals the largest part of the material, namely the finds of bronze and billon (Table 1), where Bell's attributions of the Anonymous folles of the tenth-twelfth centuries have been revised to

1. G. E. Bates, *Byzantine Coins*. Archaeological Exploration of Sardis. Monograph 1. Cambridge, Mass. 1971.

Table 1. Totals of Byzantine bronze and billon coins found in both Sardis excavations (excluding hoards) arranged according to mint and denomination.

Denominations	Constantinople				Thessalonica				Nicomedia				Cyzicus				Antioch				Carthage				Constantine in Numidia				Rome				Uncertain				Total		
	40	30	10	5	1	40	20	5	2	40	20	10	5	5	40	20	10	5	5	40	20	10	5	5	40	20	10	5	5	40	20	10	5	5	40	20		10	5
Anastasius I*	5	4	6	70					1	2					2																			6					96
Justin I	7	3	8	10					3	2	10			1	1																		1					46	
(Anastasius I or Justin I)	2			9																													<i>1</i>					12	
Justinian I	32	16	22	59	2	3	2	5	18	2	5	3	4	2	2	3	1	1	1											20	7	12			222				
(Anastasius I - Justinian I)									3																			<i>1</i>					4						
(Justin I or Justinian I)	2	3	16																									<i>1</i>					29						
Justin II	31	21	48		20				20	9	1	4	7	7	7	3													4	3	6	11		202					
(Justinian I or Justin II)														<i>1</i>																			<i>1</i>						
Tiberius II	5	2	6	3	5				5	3																		1					30						
(Justin II or Tiberius II)					<i>1</i>																												<i>1</i>						
Maurice Tiberius	22	25	9	11	17				13	3	9	5	1	4	2	1													5	3				130					
(Anastasius I - Maurice)				13					2																			17					32						
(Justinian I - Maurice)				3																								2					5						
(Justin II - Maurice)				2	4																							5	<i>1</i>				12						
(Tiberius II or Maurice)				4																													4						
Phocas	22	1	23	5	3	3				17	5			10	4			5	1									6	1				106						
(Tiberius II - Phocas)																												<i>1</i>	<i>1</i>				2						

\*Roman type indicates a reign. Italics indicate a group of reigns when the coins are too worn for better identification. Underlining indicates the anonymous issues which do not bear the name of an emperor.

Table 1 (continued).

Denominations	Constantinople					Thessalonica					Nicomedia					Cyzicus					Antioch					Carthage					Constantine in Numidia					Rome					Uncertain					Total
	40	30	20	10	5	1	40	20	5	2	2	40	20	10	5	28	40	20	10	5	16	40	20	10	5	40	20	10	5	40	20	10	5	16	40	20	10	5								
Heraclius	142	4					2								28					16													16								210					
(Justinian I - Heraclius)									1																																1					
(Justin II - Heraclius)																																									5					
(Maurice - Heraclius)																																									1					
Constans II	95																																								95					
Constantine IV	1				1																																				2					
Leo IV	2																																								2					
Leo V	1																																								1					
Michael II	2																																								2					
Theophilus	2																																								2					
Basil I	2																																								2					
Leo VI	12																																								12					
Romanus I	6																																								6					
Constantine VII	13																																								13					
Nicephorus II	4																																								4					
Anonymous A <sup>5</sup>																																									40 (= John I - Constantine VIII)					
Anonymous B																																									11 (= Romanus III)					
Anonymous C																																									7 (= Michael IV)					
Anonymous D																																									4 (= Constantine IX)					
Anonymous E																																									2 (= Isaac I)					
Constantine X																																									2					
Anonymous F																																									5					
Romanus IV																																									5					
& Anonymous G																																									6					

5. The Anonymous folles are attributed to Constantinople pro forma. For the tangled question of mint attribution see now Grierson in *Dumbarton Oaks* III.2, 640-643.



	Constantinople	Thessalonica	Nicaea	Magnesia	Uncertain	Total
Michael VII	2					2
Anonymous I	8 (= Nicephorus III)					8
Alexius I & Anonymous K	4					4
John II	3					3
Manuel I	4					4
Andronicus I	1					1
Isaac II	7					7
Theodore Ducas					1	1
Alexius III	11					11
Theodore I			5	14	5	24
John III				24		24
<i>(Theodore I or John III)</i>					1	1
<i>(John III - Michael VIII)</i>					1	1
<i>(Latin imitations)</i>	3					3
<i>(Thessalonica)</i>		1				1
Michael VIII	2					2
John V	1					1

the chronology currently in use and followed by Bates. Note that the table is probably skewed in failing to reveal the complete picture from the first excavations. Thus Bates and the catalogue below include over a hundred pieces only generally identified, which cannot be specifically attributed, "Anastasius I or Justin I", etc. There is no example of this in Bell, who must have omitted such coins as he could not fully identify. He also published only two pieces of uncertain mint (649-650) among the 275 of Anastasius I-Constans II ("Constantine III"), where in fact one frequently encounters examples legible as to emperor and denomination but not as to mint. For the same period Bates notes 89 pieces of certain emperor and denomination but uncertain mint, including the nummi attributed to Justinian I of which Bell gave no example at all. Here too Bell must simply have omitted those pieces of whose attribution he felt unsure. Given the proportions of the coins which we have, it is likely that those unreported will have derived largely from the sixth and seventh centuries, and from the mint of Constantinople.

The coins not included in Table I are the three pieces in gold (solidus of Justin I, Bates 49; tremessis of Maurice, Bates 547; tremessis of Justinian II, Bates 1103) and the two in silver (hexagram of Heraclius, Bates 827; miliaresion of Basil I, 103 below). In addition are omitted ten nummi of very doubtful attribution ("Coins Possibly of the Justinian Period," Bates 298-302 and 67-71 below), and the Byzantine hoard described by Bell and interdigitated into his find catalogue.<sup>2</sup> These last have not been included in the table lest they overbalance the proportion of random find coins, for the hoard includes a far higher percentage of Heraclian folles than do the other finds.

The overview provided by Table I allows a few comments on the Byzantine small-change circulation at Sardis. The fifth century nummi which are so abundant from Marcian onwards were continued in those of Anastasius. The excavations have produced about as many specimens as those of Anastasius' immediate predecessor, Zeno. Doubtless a certain proportion of the 1719 unidentified fifth-sixth century pieces will be his as well (Roman Catalogue 1117), but his flans do frequently tend to

be well made, thin and nicely rounded, where most of those unidentified, like so many of the fifth century identified, are uncouth dumps. In any case, the largest part by far of Anastasius' representation at Sardis consists of the nummi, which are a continuation without a break of those which precede, in spite of their being conventionally separated in cataloguing. On the other hand Anastasius' reformed coinage, which might more properly be taken to represent the beginnings of Byzantine coinage, are much less frequently found, and indeed examples of the earliest reformed weight standard (Dumbarton Oaks 16-22, etc.) have not been found at all. The find coins of Justin I, also restricted to the three mints of Constantinople, Nicomedia and Antioch, are somewhat more common in the reformed denominations but very much scarcer in the nummus.

It is with Justinian I that a wide range of mints and denominations is met with. The per annum average is hardly greater than under Justin I, but the longer reign produces a total of many more coins. The major mint for Sardis is always Constantinople, but with Justinian four other mints are found in three or four denominations each, and there are even two pieces from Carthage. The nummus, here about as common as for Justin I, appears for the last time. Next, Justin II provides almost as many pieces in a much shorter reign, so that the average per annum rises sharply. There is a somewhat narrower spread, with emphasis beginning to shift from the smaller denominations to the follis. Not for a third of a century will Byzantine coins be so plentifully represented.

After Justin II, the annual find rate remains at a middling level, slightly higher than before his reign. Then with Phocas a new surge of coinage occurs. The higher denominations, follis and half follis, had been becoming proportionately more frequent with each succeeding reign; under Phocas the follis for the first time represents more than half the total finds, the follis and half follis together more than 90%. This is virtually the end of fractional bronze at Sardis. While the mints continue to produce it, it is hardly to be found on the site. One caveat about the relative frequency of Phocas' coins is in order. His coins are frequently restruck on those of his predecessors, pieces which had been withdrawn from circulation to be reissued with the

2. *Sardis XI* (1916) viii-ix.

new name and effigy. Therefore the earlier folles, especially those of Tiberius II and Maurice, are underrepresented in the totals, where coins once in circulation at Sardis (or their equivalents) appear under their new designation as coins of Phocas.

Heraclius provides a tremendous amount of coinage, 210 pieces, of which all but six are folles. These would be increased to 411 folles and eight half folles by the addition of Bell's Byzantine hoard. In either case it is clear that masses of Heraclian folles must have reached Sardis shortly before the destruction of the city in 616. The distribution of the hoard is:

	Constantinople	Nicomedia	Antioch	Total
	40	20	40	40
Justin II	5			5
Maurice Tiberius	2		2	6
Phocas	1		1	2
Heraclius	112	2	48	41
				<u>203</u>
				216

Not only is the hoard almost entirely Heraclian, but the proportion of pieces from Nicomedia and Antioch is considerably higher than is the case with the random finds. It must be that the hoard, apparently unrepresentative of the circulation at Sardis at the time of its occultation, 615/616, was imported in whole or in part, though why both the Propontis mint of Nicomedia and the Syrian mint of Antioch should be so heavily represented is hard to say. In any case it is likely that the coins in the hoard, or the hoard itself, will represent military pay sent to Sardis for or with a garrison intended to defend the city against the Sassanians.

Bates has shown how the coins of Heraclius, breaking off as they do, serve to date the destruction of the city to 616 (*Sardis* M1 [1971] 1-2). Note as well what that break implies about subsequent monetary circulation at Sardis. The post-616 coins of Heraclius, which are relatively common, never reached the city, as one might expect when we have so many coins of Constans II. That is, the break in coin import from 616 would later have been blurred when, under Constans, coins began to arrive again,

presumably in a mixture which would have included later Heraclian pieces.<sup>3</sup> But such was not the case, and Bates' hypothesis that "Sardis was no more than a military outpost *circa* 645-670" is well founded. The coins of Constans are a phenomenon unto themselves at Sardis, numerous but restricted to the follis denomination and the Constantinople mint, preceded and followed by only a trickle of importation represented today by random and sporadic finds. There must have been a purposeful assignment of new money to Sardis under Constans, and on a number of occasions since the coins span the entire reign.

Bell wrote, "The period of 199 years between the death of [Constans II] (668) and the accession of Basil I (867) is, up to the present, represented by no coins whatsoever" (*Sardis* XI [1916] ix), a vacancy which he associated with the disuse of both temple and chapel. This gap has now been covered by the ten coins of six emperors found elsewhere on the site and published by Bates, but it is still true that the period is very thinly represented. There is still a gap of sixty years between Justinian II and Leo IV, another of a third of a century to Leo V (813-820).

Thereafter, however, the coins, though very sparse, represent with regularity almost every reign for the next four centuries, down to Alexius III. On the establishment of the Latin Empire in 1204, coinage at Constantinople fairly lapsed, and the excavation coins now derive from the Empire of Nicaea. The relatively numerous examples of Theodore II and John Ducas Vatatzes have provided one argument for the identification of a major Nicaean mint at Magnesia (modern Manisa), 55 km. to the west of Sardis.<sup>4</sup>

The re-establishment of Byzantine power in Constantinople under Michael VIII (1261-1282) is reflected in the find of two pieces, after which for all practical purposes Byzantine coinage ceases to matter at Sardis. An isolated trachy of John V (1341-1391) closes the series.

3. The late and light Heraclian folles continued to circulate under Constans. For hoard evidence from Turkey see, e.g., S. Bendall, "A Mid Seventh Century Hoard of Byzantine Folles," in *Numismatic Circular* 77 (1967) 198-201. Nine pieces of Heraclius accompany 132 of Constans struck as late as the eleventh year of Constans' reign, 651/652.

4. M. Hendy, *Coinage and Money in the Byzantine Empire, 1081-1261* (= *Dumbarton Oaks Studies* 12; Washington 1969) 232-234.

Table 2. Totals, proportionate totals (adjusted to include the pieces of uncertain attribution in proportion to the certain, per reign), and per annum average of Byzantine coins found at Sardis.

	40	30	20	10	5	2	1	Total	Proportionate Total	No. Yrs.	No. Per Yr.
Anastasius I	6	4	4	16	70	96	109	27¼	4.0		
Justin	10	6	6	20	10	46	58	9	6.4		
Justinian I	45	25	64	74	2	222	262	38¼	6.8		
Justin II	64	67	1	70		202	222	13	17.1		
Tiberius II	10	11	6	3		30	33	4	8.3		
Maurice Tiberius	48	54	13	15		130	146	20¼	7.2		
Phocas	60	1	37	5	3	106	108	8	13.5		
Heraclius	204	6				210	213	6 <sup>6</sup>	35.5		
Constans II	95					95		27	3.5		
Constantine IV to Theophilus	8	1				9		173½	.1		
<hr/>											
Basil I to Alexius I						126		251	.5		
John II to Theodore Ducas						16		86	.2		
Alexius III to John III						60		59½	1.0		
Michael VIII to John V						8		130	.1		

6. The coins of Heraclius at Sardis effectively end in 616. Bell attributes only two pieces, each with incomplete date, to a later year (808-809), the catalogue below includes one (94). Bates includes no bronze coin of certain later date and only three of possible later date (943-945).

Table 2 provides a summation by denomination of the finds from both Sardis excavations, and a reduction of the issues to a per annum average. The examples which have been only generally identifiable, Anastasius to Heraclius, have been divided proportionately among the reigns from which they must derive.

## CATALOGUE

The catalogue of Byzantine coins is a continuation of that already published by Bates. The information given for each coin continues his system: weights in g., before and after cleaning where available; diameters in mm., on two axes if the coin is out of round; die position. To conform with other sections of this volume, the date precedes the description. Reference to published specimens is in the last column. All coins are of copper unless otherwise stated. The system of reference follows Bates', with the addition of his own monograph which is always cited first wherever possible.

### Anastasius I 11 April 491 - 1 July 518

#### CONSTANTINOPLE

##### *Nummus*

##### Diademed bust r. $\aleph$

1	1.0	9-10	↓	491-518	Ba 16-42
2	1.0	9	\	"	
3	1.0-0.9	8-9	/	"	
4	0.9	11	?	"	
5	0.9	9-10	↓	"	
6	0.9	9-10	?	"	
7	0.8	10	↓	"	
8	0.8	9	/	"	
9	0.8	8	?	"	
10	0.7	9-11	\	"	
11	0.7	9-10	↑	"	
*12	0.7	10	\	"	
13	0.7	9	↑	"	
14	0.7	9	?	"	
*15	0.7	9	\	"	
16	0.7	9	?	"	
17	0.7	7	?	"	
18	0.6-0.6	7-8	/	"	
19	0.6	9-10	?	"	
20	0.6	9	\	"	
21	0.6	9	?	"	
22	0.6	8-9	?	"	
23	0.6	8	?	"	

24	0.6	8	?	"
25	0.6	7-8	/	"
26	0.6	7-8	?	"
27	0.7-0.5	7-8	/	"
28	0.5	10	/	"
29	0.5	8-10	/	"
30	0.5	8-8.5	↓	"
31	0.5	8	\	"
32	0.5	8	\	"
33	0.5-0.4	7-8	?	"
34	0.4	10	↓	"
35	0.4	9	↓	"
36	0.4	7.5	?	"
37	0.4-0.3	6-8	?	"
38	0.3	9	?	"
39	0.3	8	\	"
40	0.3	7-8	?	"
41	0.3	?	?	"
42	0.3-0.2	8	\	"
43	0.2	8	?	"

(cut half)

(fragment)

*NICOMEDIA**Pentanummium*

Same Type

€ To r., N

44 2.3-2.1 12-13 \ 498-518

Ba 44

*ANTIOCH**Pentanummium*

Same type

€ To r. AGN

45 1.5 11-12 \ 498-518

DO 49c

*MINT UNCERTAIN**Pentanummium*

Same type

€ To r., ?

46 2.1-2.0 13 ? 498-518

Ba 45-48

47 1.9 14 \ "

## Justin I 10 July 518 - 1 August 527

## CONSTANTINOPLÉ

*Pentanummium*

					Diademed bust r. $\text{K}$ To r., $\text{E}$	
48	1.9-1.7	12-13	↓	518-527	SPC	To l., B a 62

*Nummus*

					Same type	$\text{K}$	
49	0.7	8-9	/	518-527			Ba 66-71
50	0.5	9	↓	"			
51	0.5	7-8	\	"			
52	0.3-0.2	8-9	↑	"			

## NICOMEDIA

*Half Follis*

					Same type	$\text{K}$ To l. long cross between NI	
*53	7.0-5.5	25-26	/	518-527		To r. $\text{V}$ ( <i>sic</i> )	DO 34

## Justinian I 1 August 527 - 14 November 565

## CONSTANTINOPLÉ

*Decanummium*

					Diademed bust r.	$\text{I}$ surmounted by cross, etc.	
*54	2.8-2.5	16	↑	554/555	(overstruck)	$\text{X}$ To r. $\text{X}$ $\text{I}$	DO 87
*55	3.8-3.7	16	/	564/565		$\text{X}$ $\text{XX}$ $\text{I}$	cf. W 138

*Pentanummium*

					Same type	$\text{E}$	
56	1.8	13	\	527-565		To r., $\text{A}$	Ba 161
57	1.9	12	/			$\text{I}$	Ba 166

*NICOMEDIA**Decanummium*

Same type

					I	Above, cross, etc.	
58	3.7-3.0	17	/	558/559	To r.,	X X X II	Ba 233
59	2.0-1.9	13-14	↓	560/561		X XX IIII	DO 158
*60	3.6-3.0	15	/	560/561		X XX II II	cf. DO 158

*CYZICUS**Half Follis*

Same type

					K	Above, cross, etc.	
61	4.91	23	\	527-565	To r. X[		Ba 248-249

*MINT UNCERTAIN**Decanummium*

Same Type

					I	Above, cross, etc.	
62	3.62	11-12	↑	562-	To r. XX	X II	

*Nummus*

Same type

*63	0.4-0.3	9-10	—	527-565	↗		Ba 293-297
64	0.5-0.3	8	/	"			
65	-	-	-	"			
66	-	-	/	"	↘		DO 372



## Coins Possibly of the Justinian Period †

## UNKNOWN MINTS

67	-	11	?	Bust r.	V <sup>O</sup> <sub>V</sub> T	Ba 302
*68	-	-	-		V <sup>O</sup> <sub>V</sub> OT	
*69	-	-	-		T <sup>O</sup> <sub>VV</sub>	
*70	-	-	-		TV	
71	0.7	8	-		TV	

## Anastasius I through Justinian I

## NICOMEDIA

## Pentanummium

Diademed bust r. €

72	1.45	14	\	498-565	To r., N	Ba 303-304
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## Justin I or Justinian I

## CONSTANTINOPE

## Half Follis

Same type

K Above and  
below, stars, etc.

73	8.7	21-23	/	518-538	To r., Γ	Ba 308
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## MINT UNCERTAIN

## Decanummium

Same type

I  
Above, cross. To  
l., \* ; to r., ?

74	2.6	18	?	518-538		
----	-----	----	---	---------	--	--

## Pentanummium

Same type

\* €

75	2.24	12-13	\	518-538		Ba 331
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## Justin II 15 November 565 - 5 October 578

## CONSTANTINOPLE

*Follis*Justin and  
Sophia facing

M Above, cross, etc.

76 13.1-12.7 28-29 / 575/576

To r.,  $\begin{matrix} \times \\ | \\ \text{A} \end{matrix}$   
Below, A

DO 40a

*Half Follis*

Same type

K Above, cross, etc.

77 6.69 24 / 569/570

To r., 4

Ba 368

78 8.1-6.4 23 ? 572/573

II

cf. Ba 372

*Pentanummium*

E

E

79 3.0-1.8 13-17 ? 565-578

To r. A

Ba 379-388

## NICOMEDIA

*Half Follis*Justin and  
Sophia facing

K Above, cross, etc.

\*80 5.3-5.0 20-22 / 573/574

To r.  $\begin{matrix} \text{q} \\ | \\ \text{II} \end{matrix}$ 

Ba 466-467

81 8.3-8.0 22-23 ↓ 574/575

X

Ba 468

*Decanummium*

Diademed bust r.

I Above, star

To l., A  
N  
N  
O

\*82 2.5-2.2 13 / 565/566

To r., I  
Beneath, NIK

Ha 48

*CYZICUS**Half Follis*

Same type

K Above, cross, etc.

83 6.5-5.9 24 † 575/576

To r., X

I

W 190

*MINT UNCERTAIN**Pentanummium*

‡

E To r., ?

84 0.9 18 / 565-578

Ba 510-519

**Tiberius II 26 September 578 - 14 August 582***CONSTANTINOPOLE**Decanummium*

Bust facing

I To l. &amp; r., stars

\*85 3.1-2.3 18-20 † 578

Ba 528

*Pentanummium*

Diademed bust r.

Y

\*86 2.7-2.5 15-17 † 579-582

Ba 533-534

**Maurice 13 August 582 - 25 November 602***CYZICUS**Half Follis*

Bust facing

K Above, cross, etc.

\*87 5.7 22 / 591/592

To r., X  
Below, A

cf. DO 142

**Anastasius I through Maurice***CONSTANTINOPOLE**Pentanummium*

Diademed bust r.

E

88 2.2-2.2 12.5 / 498-602

To r. Δ

Ba 687

*MINT UNCERTAIN**Pentanummium*

E

89 2.50 12-14 ? 498-602

Ba 690-704

90 2.15 12 ? "

**Phocas 23 November 602 - 4 October 610***CONSTANTINOPLE**Follis*

Bust facing

XXXXX

\*91 11.51 29-30 / 605/606

To r. II

DO 28e

Below, E

**Heraclius 5 October 610 - 11 February 641***CONSTANTINOPLE**Follis*Two figures  
facing

M Above, cross, etc.

92 10.7 29 / 612-616

To r., ?

Ba 928

Below, Δ

ov. Maurice:

[ ]

M II  
CON

†93 11.1-8.3 25-30 ? 613/614

Three figures  
facing

M Above, \* etc.

To r., II

ov. Maurice:

Below, E

*NICOMEDIA**Follis*

Same type

M Above, cross,  
etc.

94 8.5-8.2 25-28 ↓ 617/618

ov. Maurice

To r. ¶  
Below, A

cf. DO 164

*CYZICUS**Follis*

Bust facing

**M** Same type

95 12.5-11.2 29 † 612/613

To r. III  
Below, A

Ba 984-987

**Justin II through Heraclius***MINT UNCERTAIN**Follis*

Obscure

**M**

96 6.5 32 ? 565-616

Ba 1010-1012

**Constans II September 641 - 16 September 668***CONSTANTINOPLE**Follis Class A*

Emperor facing

**m** etc.

97 4.0-3.6 20-23 † 642/643

Above, star  
In exergue, €II

Ba 1026

98 5.0-4.5 23-26 † 644/645

Above, ?  
In exergue, BIII

Ba 1030-1031

99 5.2-4.0 23-25 ? 641-645

Above, ?  
In exergue, ?

Ba 1037

100 4.7-4.0 22 ? "

101 4.2-3.6 16-20 ? "

*Follis - Class C*

Same type

**m** Above, ANA,  
etc.

102 5.8-4.5 24 / 643/644

To l, ?

Ba 1038

**Basil I 24 September 867 - 29 August 886***CONSTANTINOPLE**Miliaresion*

					+bASI LIOSCE	Cross potent	
<b>103</b>	3.7-2.5 (Broken)	25	\	868-879	CONSTAN ΤΙΝΨΡΙΣΤΥ bASILIS ROMEOS		DO 7

**Leo VI 29 August 886 - 12 May 912***CONSTANTINOPLE**Follis*

Emperor facing

					+LEON ENΘEOBA SILEVSR OMEON		
<b>*104</b>	7.71	25	↓	ca. 890-908			Ba 1111-1116

**Romanus I 17 December 920 - 16 December 944***CONSTANTINOPLE**Follis*

Emperor facing

					+RΩMA N'ENΘEOBA SILEVSRΩ MAIΩN		
<b>*105</b>	6.9-6.3	27-28	\	931-944	ov. Leo VI		Ba 1117-1119

**Constantine VII 6 June 913 - 9 November 959***CONSTANTINOPLE**Follis*

Emperor facing

					+CONST' ENΘEOBA SILEVSR OMEON		
<b>106</b>	7.48	22-23	↓	945			Ba 1120-1128

**John II 15 August 1118 - 8 April 1143***CONSTANTINOPLE**Trachy*

Emperor facing      Christ facing

107   4.0-3.5   28-29   \   1118-1143      W 53-55

**John III 1222 - 30 October 1254***MAGNESIA**Trachy*

Virgin seated      Emperor facing

108   2.2   23-26   ↓   1222-1254      Ba 1210-1221

109   1.6   20-23   ↓   "

**Imitation or Weight**

†*110	13	(602-610?)	IB
			incuse on earlier coin flan

**NOTES TO BYZANTINE CATALOGUE**

**67-71** These nummi of very doubtful origin were included by Bates with others of obscure types under a general rubric. Whether or not they are properly placed here, there are additional specimens to note. They are arranged here so as to suggest the origin of the curious legend TV. It appears that the prototype of these issues was the late fourth century AE 4 VOT V issue of Arcadius. An early corruption of that legend occurred in the form seen on **67**; on subsequent imitations the orientation of the letters changed about, and the letter O became a medial dot; finally the two V's were reduced to one, the remaining legend being a retrograde corruption of the original VOT.

**93 C69.22.** The reading is as certain as possible with a coin in poor condition which is overstruck on another, but does not fit the expected pattern. If correct it would extend Grierson's Class 3 folles

back in time to Heraclius' fourth year. The description should best be considered preliminary.

**110 C62.473.** This curious piece is a deliberately cut down fourth or early fifth century flan, now of 13 mm., completely devoid of original type. Upon it has been punched 27 indentations, from a punch in the shape of a half moon, the pattern appearing to form the Greek letters IB. These were the denomination of the dodecanummium struck exclusively at Alexandria beginning in the reign of Justin I. They were of relatively large module, 4 g., 19 mm. Under Phocas there was a decided drop, and specimens at Dumbarton Oaks run down to as little as 1.27 g., 11 mm. Heraclius brought the denomination up to a much larger module and thicker flans; at Dumbarton Oaks the largest measures 20 mm. (the "29" of DO 191.5 is a misprint), weighing 12.88 g. Our piece then is closest to the reduced issues of Phocas. While Byzantine coins of Alexandria have not been found at Sardis, it is conceivable that they were known there and that this piece

(itself perhaps imported) represents a crude attempt at imitating one of their issues.

Alternatively, the piece might be a crude attempt at a weight. For square weights inscribed IB, see Nicolas Dürr, "Catalogue de la Collection

Lucien Naville au Cabinet de Numismatique du Musée d'Art et d'Histoire de Genève: Contribution à un Corpus des Poids Byzantines," in *Genava* n.s. 12 (1964) 65-106: nos. 200, 201, 219, and 252, four pieces averaging 2.19 g.

## LEAD

The 41 pieces of monetiform lead discovered at Sardis are likely to represent two separate phenomena: tokens, used for religious or other ceremonial purposes, and counterfeit coins. The distinction between the two is not always certain, both because of the poor condition of some of the figured pieces, and because even a clearly defined figured type is not always explicable on its own terms. 1-13 are probably tokens. None of them certainly represents an identifiable coin, and none of them carries a legend, an almost invariable aspect of the coinage (although 7 and 10, and perhaps 13, do bear a monogram). Where the type might be taken superficially to reflect a coin type, there is not in fact such similarity as to prove that the piece was intended to pass as a coin. Thus the rosette of 5 recalls the reverse type of the silver of Erythrae (*BMC Ionia* 119 no. 18 ff.); these coins, however, are never uniface, and the rosette is normally of ten or twelve petals when the coin is more than 7 mm. in diameter. Again, 2 bears types of Ephesus, the bee having appeared on its coinage from the earliest times, and the cult statue of Artemis from the late 1st century B.C. Their association as well as their reference to Ephesus is obvious, yet the two types never appeared together thus, as the major figurations upon opposite faces of Ephesian coin. Again, there are no legends on the lead.

There is no way of discovering whether or not 1-13 ever passed as coin, but it seems best to conclude that at least they were not originally intended so to pass. A counterfeit coin depends on its mixing imperceptibly with similar pieces of good weight and metal for its commercial success, and it is not easy to identify pieces comparable to our lead among the ancient coinages. Further, the chronology of the lead would also have to be fixed in

order to establish its monetary circulation, but that cannot be done with the Sardis examples, which are largely without datable context. The only chronological indications which emerge from the types alone are that 2 is likely Imperial rather than Hellenistic, and that 7 and 10 bear monograms appropriate to the 5th-6th centuries.

Actually, 10 may be in a different case. The monogram could be taken as a corruption of that of Anastasius on his very common nummi, and the module of the coin approaches that of the same issues. The reverse figure is not appropriate to the Anastasian nummi, but might have been introduced by confusion from other issues, e.g. those of Zeno portraying the emperor and captive (e.g. *LRBC* II 2471). The module of 10 fits the nummus, and the possibility of its substitution for a proper coin is enlarged by the fact that others of our lead dumps were certainly so used. Thus, of the examples under 14—all without type, at least as they now are—one of the 8-9 mm. pieces (C63.1410A) was found in company with a number of 5th century minimi, the other (C63.1828A) came from the so-called Synagogue second hoard, and the piece of 7-8 mm. (C68.151A) was found together with 84 nummi in the Byzantine shops. There can be no question that these three pieces served as money. Nor was the nummus the only coin likely to have been counterfeited in lead at Sardis. The typeless piece of 12-13 mm. (C65.606) is of the module appropriate to the small *Spes Reipublicae* issues of the mid-4th century; that of 11 mm. (C65.434) is appropriate to the *Salus Reipublicae* 1-2 issues of 383-395.

In sum, while the origin and purpose of the lead pieces cannot be documented, it is certain that some passed as coin and probable that such service was illegal. Nor can it have been difficult in the case of the minimi. The flans of the official bronze coins were so poorly prepared, and the coins so badly



struck, that it is normal to find them at Sardis today bearing no trace of type or legend. In the same way the lead counterfeits, usually bearing no type, give the impression of having been struck, if only between blank dies. It is a matter of some poignancy that anyone could find it worthwhile to

forge copies of a bronze coin so tiny and of such small value as the execrable late-5th century nummus.

In the catalogue all diameters, in the second column, are given in mm., and all weights, in the third column, in g.

## CATALOGUE

*1	16-17	3.59	Sarapis head r.	(Uncertain type)
*2	11-15	1.44	Bee	Figure of Artemis Ephesia
3	15	1.38	Two figures	----
*4	14	2.29	Cybele seated l. holding tymp <sup>an</sup> um, lion at feet	----
*5	12-14	2.21	Rosette of 16 petals	----
6	"	1.06	Head r. (?)	----
7	"	2.55	☞ monogram	(Uncertain type)
8	12	1.63	Head r.	Figure standing r. with scepter and staff
9	10-12	1.02	Figure striding r.	----
*10	"	1.55	☞ monogram	Figure standing r.
11	10-11	0.64	Head r.	----
†*12	8-10	0.39	Horseman r. with double axe	Nike l. (?)
13	9	0.72	Head r.	Monogram in wreath (?)
14	14-15	1.35	----	----
	14	1.35		
	13	1.36		
	12-13	1.98		
	12	0.80		
	11-12	1.21		
	"	0.87		
	11	0.84		
	10-11	1.03		
	"	0.84		
	"	0.66		
	"	0.50		
	9	0.72		
	8-10	0.50		
	8-9	0.63		
	"	0.38		
	8.5	0.56		

12 The obverse type appears commonly as a reverse on coins of Lydia, Phrygia, and less frequently Caria. The horseman has been identified variously as Sabazios, or at Thyatira as the hero Tyrinnos; he is a

persistent type and therefore probably a local hero at Mostene. For discussion and a list of the cities whose coins bear this representation, see *BMC* cxxviii.

8.5	0.55
8	0.64
"	0.56
"	0.45
"	0.43
7-8	0.46
"	0.29
"	0.27
7	0.89
"	0.36
"	0.31

## THE MEDIEVAL AND MODERN COINS

The medieval and modern coins are few in number, and in nature a very mixed bag. They do not, of course, illustrate the currency at Sardis in post-Byzantine times; for that see the catalogue of Islamic coins. They do, however, suggest what sort of foreign coin could make its way to Sardis, the local residents presumably finding it useful. Most important is the group of late 13th and early 14th century Crusader deniers from Greece, to which no doubt should be added the Serbian imitation matapan. One denier of Thebes had appeared in Butler's excavation, but was considered an intruder by Bell (*Sardis* XI [1916] ix); our ten examples show that these silver pieces must have played an important role at Sardis. They fall neatly into the period in which Byzantine coin (or at least the bronze) appears to have been entirely wanting in the city. Neither Bates nor the new Byzantine finds published above include anything after Michael VIII (1261-1282); Bell adds a single piece of John V (no. 988, 1341-1391). The Crusader deniers fall almost exactly between.

Additional evidence for the circulation of Christian silver in Moslem Asia Minor in the 14th century is provided by the imitations of Neapolitan *gliati* struck at Ephesus by the Turcoman emir of Aydın, Isa-Beg. One of these has also been found at Sardis and is included in the catalogue of Islamic coins (48).

From the late 16th century comes a surprising gold ducat, of Hungarian type but struck in Overijssel in the Netherlands. The imitation of type shows that it was intended as a trade coin, and indeed the Dutch have continued to our own day to strike gold of archaic type for export.

The nineteenth century has been arbitrarily selected as the limit of the catalogue. There the curious lot of Austrian *kreuzers* is worth remarking; how they came to rest in Sardis can only be a wild surmise. Some twentieth century foreign coins have been found, notably of Greece, while current Turkish coins continue to be lost about the site by the incautious, in preparation for the next generation of archaeologists.

Perhaps the most unexpected find in this category is the group of seven tokens from among the voluminous production of the private coiners of Nürnberg. Their use as counters in Germany and elsewhere in Europe is well known, but they were ever capable of being passed as coin by the unscrupulous. Presumably that is why they occur at Sardis, where their original purpose in calculating, and their unofficial types and legends, could hardly have been understood.

Few and disparate though all these coins be, they cannot be dismissed as simply an accidental accretion of unique, random importations. That some, if not all, played a genuinely important role in the currency is suggested by similar finds elsewhere. Of five medieval and modern coins found at Priene, four are analogous to ours: an English silver penny of Henry III, struck just prior to the

Crusader deniers from Sardis; a silver tallero of coin of Austria (cf. 7), and a base token of Ragusa (cf. 10), a small nineteenth century silver Nürnberg.<sup>1</sup>

## CATALOGUE

### Vandal

\*1 AE Nummus Geilamir, 530-533 Wroth, *Vandals* p. 16, 4-6 1

### Crusader

#### *Thebes*

\*2 AR Denier tournois William I, 1280-1287 Schlumberger p. 338 3

#### *Lepanto*

3 AR Denier tournois Philip of Tarentum, 1294-1313 Schlumberger p. 388 1

#### *Chiarenza*

4 AR Denier tournois Philip of Tarentum, 1307-1313 Schlumberger p. 317 3

5 AR Denier tournois John of Anjou-Gravina, 1318-1333 Schlumberger p. 319 3

### European

#### *Austria*

6 AE 12 Kreuzer Francis I = II, 1795 1

7 AE 1 Kreuzer Francis I = II, 1816 9  
Kremnitz (1), Schmöllnitz (1)  
Vienna (6)

#### *Greece*

8 AE 10 Lepta George I, 1878 (1), [1869-1882] (1) 2

#### *Netherlands, Overijssel*

\*9 AV Ducat MON. OR. TRAN - ISL.VA.VNG Delmonte p. 155, 1049 var. 1  
Royal figure / PATRONA  
VNGARI Madonna. 1580-1600

1. Kurt Regling, *Die Münzen von Priene* (Berlin 1927) 186.

*Ragusa*

10 AR Tallero Bust l. / Arms, 1758 *CNI* VI p. 521, 289 1

*Russia*

11 AE 5 Kopeks Alexander II, [1856-1867] 1

*Serbia*

\*12 AR Grosso Imitation of Venetian matapan  
13th-14th cent. Ljubić, *passim*. 1

*Venice*

13 AR 4 Soldi Pietro Lando, 1539-1545 *CNI* VII p. 298-299, 70-79 1

**Tokens and Counters***Nürnberg*

14 Brass Georg Schultes, 1515-1559 Neumann p. 403, 32134 1  
Imperial orb / Fleurette with crowns  
and fleur-de-lys

15 Brass Wolf Laufer II, 1618-1660 Neumann p. 427, 32339 1  
Imperial orb / GOTTES SEGEN  
MACHT REICH, Equilateral cross  
with fleur-de-lys, etc.

16 Brass Wolf Laufer II, 1612-1632 Neumann p. 428, 32346 1  
GOTTES REICH BLEIBT EWIG,  
Imperial orb / Sunburst

17 Brass Johan Christian Reich, 1740-1814 de la Tour p. 424, 2327 1  
Bust of Louis XVI / Lion  
standing r.

18 Brass Uncertain 3

# IV THE ISLAMIC COINS

Kenneth M. MacKenzie  
Michael L. Bates

## COINS OF THE ANATOLIAN BEYLIKS

Toward the end of the thirteenth century, the disintegration of the Seljuq sultanate of Rum permitted Turkoman tribesmen to filter into western Anatolia, where they set up a number of independent states. The first attack, or raid, on Sardis is recorded in the reign of Michael Palaeologus (1259-1282).<sup>1</sup> By the end of the century Sardis was one of a number of Byzantine fortified places in a region otherwise controlled by Turks. In 1304 a party of Turkomans was able, through negotiation, to occupy a part of the citadel; but the opportune arrival of Byzantine troops prevented the Turks from seizing the entire fortification.<sup>2</sup> The final conquest of the town must have occurred soon afterward, between 1313 and 1316, when Sārūkhān, an amir of the Germiyānid family, established a principality in Lydia with its capital at Manisa (ancient Magnesia ad Sipylum). Sārūkhān and his descendants continued to rule the region until 1390, when it and the other Turkoman amirates were conquered by the Ottoman Bayezid I. According to D. E. Pitcher, Sardis, as well as Nif to the west and the amirate of Aydin to the south, were all contested. Other amirates arose at about the same time as that of Sārūkhān; traditionally these are numbered at ten, including the Ottomans, but in Pitcher's words, "it is probable that all defensible sites and all

unusually vigorous chieftains had a period of independence at some time during this chaotic age."<sup>3</sup>

The Turkish conquest marks a complete transformation in the numismatic evidence: there are no Muslim coins from the period before the Turkish conquest; with one possible exception, there are no Byzantine coins from the period after it.<sup>4</sup> The gap at Sardis between the latest Byzantine issues, of Michael VIII (1261-1282), and the earliest Islamic issues, of the second half of the fourteenth century, is bridged by the ten deniers of Frankish Crusader states in Greece described elsewhere in this volume.<sup>5</sup> These deniers, each found in isolation, are perhaps testimony to the close economic relations between the Sārūkhān realm and the Frankish merchants of the Aegean. A Genoese colony at Phocaea (Foca), on the coast of the Sārūkhān amirate, paid tribute to the amirs until it, like the amirate, was absorbed by Bayezid in 1390.

3. Pitcher, 30; on Sardis, 31, 33. The little that is known of the history of Sardis itself in the fourteenth century is gathered by Clive Foss, *Sardis* M4 (1976), 90-95. For the general history of the region, see Pitcher, and Claude Cahen, *Pre-Ottoman Turkey: A General Survey of the Material and Spiritual Culture and History c. 1071-1330* (London 1968), especially 303-314; Speros Vryonis, Jr., *The Decline of Medieval Hellenism in Asia Minor and the Process of Islamization from the Eleventh through the Fifteenth Century* (Berkeley 1971) 133-142.

4. Coins of Michael VIII (1261-1282) are the latest issues in G. E. Bates, *Sardis* M1 (1971). A single coin in *Sardis* XI (1916) 108 no. 988, pl. II (obv. only), is assigned to John V, 1341-1391, but the attribution seems problematic.

5. Medieval and modern coins 2-5; note also the thirteenth-fourteenth century Serbian imitation of the Venetian grosso, 12.

Frankish coins were not only imported into the amirates, but actually struck there. These were derivations of the coinage of Robert of Anjou, King of Naples (1309-1342), whose silver *gigliati* were the standard silver trade coinage among the Franks and other peoples of the Aegean, along with the gold ducat of Venice. Like the ducat, the *gigliato* was widely imitated. *Gigliati* similar to Robert's, but with local legends and sometimes variant types, were struck by the Hospitalers at Rhodes, by the Genoese at Chios, and by the kings of Cyprus in their mainland possessions, as well as in Turkish territories—at Magnesia under Sārūkhān, at Ephesus under Aydin, and at Palatia (Miletus, Balat) under the Menteshē amirs. The reasonably literate Latin legends, and the formula "coin made in . . . by the will of (or, by order of) the ruler of that place" which appears with minor variations on all the issues from Turkish territories, suggest that these coins were probably not issues of official mints but were produced rather by the Genoese or other Franks in the cities named on the coins with the permission of the local amirs. The 1340's seem the most probable period for all three issues.<sup>6</sup>

Aside from these identifiable imitations, there are also quite barbarous *gigliati* which are more difficult to date and place. One of these was found at Sardis (48, *infra*). Although the legends are nonsense, Schlumberger pointed out that the reverse inscription resembles most closely that of the original *gigliati* of Robert of Naples.<sup>7</sup> This suggests that the barbarous issues are not merely a degenerate perpetuation of one of the identifiable literate issues, but are rather a production of a mint so far unknown, perhaps an unauthorized private operation. The fabric and weight standard of the barbarous issues resemble most closely the late *gigliati* of Chios, leading one to think of a date in the late

fourteenth century or possibly even the first half of the fifteenth century.<sup>8</sup> The find spot of the Sardis example, on the surface above the synagogue, provides no evidence for the solution of this problem.

The absence at Sardis of true Islamic coins of the first half of the fourteenth century may be most plausibly explained by the almost total absence of Muslim minting in western Anatolia in that era. A handful of published coins are attributed to the Ottoman sultans ʿUthmān (1281-1324) and Urkhān (1324-1360) and to the amir of Aydin, ʿUmur (1340-1348), but none has been found at Sardis.<sup>9</sup> These issues, if their attributions are correct, may well have had only a local circulation in the towns where they were struck. Numerous Muslim mints operated in central and eastern Anatolia, producing coins for the İlhānids and their successors, but again, none was found at Sardis. It is impossible to say, in the absence of documented finds from other western Anatolian sites, whether coins from further east came that way at all, but it is not remarkable that they would have failed to reach a place as insignificant as Sardis must have been.

The initiative of the Ottomans and of ʿUmur was followed by most of the larger Turkish beyliks in the course of the fourteenth century. Their coinages are most unprepossessing, consisting of small silver coins, called *akçe*s, weighing approximately one gram (most often less), and of copper *manghirs* of irregular weight. The Arabic legends are laconic, limited for the most part to the ruler's name and a brief religious slogan. The epigraphical style is usually crude, with frequent misspellings. Such issues are recorded from the amirates of Sārūkhān, Aydin, Menteshē, Germiyān, and Denizli, as well as from the Ottomans; in the present catalogue, issues are attributed to the Ḥamīd-oghlu for the first time. It should be remembered, however, that attributions of beylik coins are uncertain in many instances, because of the brevity and near illegibility of the legends.

6. The standard treatment of the imitation *gigliati* remains that of Gustave Schlumberger, 478-490. No original research on them seems to have been done since, but useful comments may be found in Jacques Yvon, "Monnaies et sceaux de l'Orient latin," *RN* 6th ser. 8 (1966) 102-103; A. J. Seltman, "Light-Weight Coins of Peter I and Peter II of Cyprus," *NC* 7th ser. 6 (1966) 235-240; and Philip Grierson, "Le *gillat* ou *carlin* de Naples-Provence: le rayonnement de son type monétaire," in *Catalogue de l'exposition Centenaire de la Société Française de Numismatique (1865-1965)* (Paris 1965) 48-49.

7. Schlumberger, 490.

8. This resemblance was pointed out by Philip Grierson in a conversation with the author.

9. Pere attributes the first coin of his catalogue to ʿUthmān, but the coin is anonymous. Coins of Urkhān are found in *BM* nos. 2-5. A coin of ʿUmur is Artuk no. 1322.

At Sardis only twenty two coins, two of silver and twenty of copper, are identifiable as Turkish issues of the beylik period (up to Bayezid's conquest of western Anatolia in 1390). These include nine coppers of the Sārūkhān Iṣḥāq b. Ilyās (1374-1388) and a silver akçe of ʿIṣā b. Muḥammad, Iṣḥāq's Aydinid neighbor to the south (1360-1390), as well as one akçe and nine coppers of the Ottoman Murād I (1360-1389); also two coppers are attributed to the Ḥamīdīd Ḥusayn b. Ilyās (1374-1388), although this attribution is very problematic and weakened by the distance between Sardis and the Ḥamīd-oghlu territories. Quite probably some of the anonymous coins of the beyliks, 33-40, *infra*, were also issued before Bayezid's conquest, but precise attribution is impossible at present.

The strong representation of coins of Murād I is interesting, but its significance is ambiguous. Did Ottoman coins circulate in the Sārūkhānid realm in large proportion before the first Ottoman conquest, or were these coins of Murād brought into the region by Bayezid's troops and officials? A coin of Murād was found with two coppers of the Sārūkhānid Iṣḥāq, but this means little, for it is probable that Sārūkhānid issues continued to circulate in the region after the conquest.

It looks as if the Ottoman conquest of 1390 brought a higher level of monetary circulation to Sardis. A total of 46 coins from the twelve years of Bayezid I's rule have been found at Sardis, of which 34 (224-257) represent a single copper issue which must have been the standard medium for everyday transactions. It is possible that an Ottoman garrison at Sardis was paid in this currency.

Bayezid's conquests were erased by Tamerlane's invasion of Anatolia in 1402. Bayezid himself was captured and executed, leaving his five sons to contest what remained of the Ottoman realm, while Tamerlane reestablished the various amirs, including the Sārūkhānids, in their territories. A quarter century of confusion followed. Early in this period, before 1405, Sardis and its neighbors were permanently added to the Aydinid territories by Junayd, a cousin of the Aydinid princes set up by Tamerlane. Through shifting alliances with one or another of the Ottoman contenders Junayd managed to gain sole authority and to maintain himself in

power (with some interruptions) until he was captured and executed by the Ottoman Murād II in 1425-1426. In 1425 his territories, including Sardis, became the Ottoman province Aydin.

From this period of strife 63 coins were found at Sardis. Just over half were Sārūkhānid: seventeen of Khidr b. Iṣḥāq (1388-1390, 1402-1410; some of these coins may have been issued during his first reign) and six of Urkhān b. Iṣḥāq, of another branch of the family (ca. 1404-1405). Eleven coins of the Ottoman contenders included three of Sulaymān (1403-1410) and nine of Muḥammad Chelebi (1403-1421). Other dynasties were represented by three coins of the Menteshānids, south of Aydin, and one coin tentatively attributed to the Germiyānids to the east. Despite Junayd's acquisition of Sardis early in his career, only five of his coins were found there, of which four came from a single hoard.<sup>10</sup> This hoard, which has been dated between 1410 and 1415, is the last dated evidence from the acropolis, which was evidently no longer used as a fortification after the reestablishment of Ottoman authority.

## COINS OF THE OTTOMAN SULTANS

Although Sardis was, on paper, the seat of an administrative district under the Ottomans, there is evidence that it was in fact replaced by nearby Sahlīhli even before the formal transfer of the center in 1867. The medieval town seems to have declined to a group of rural villages.<sup>11</sup>

The strong representation of coins of Murād II and Muḥammad II (spanning the years 1421-1481) suggests, however, that some market activity persisted in the village until the end of the fifteenth century. From the sixteenth century onwards, finds become scantier. The excavations revealed a burnt layer in the Turkish village at Pactolus North which can probably be dated by numismatic evidence to the end of the sixteenth or beginning of the seventeenth centuries. It has been suggested that the fire was a result either of the great earthquake of 1595 or of the widespread revolts in western Anatolia in

10. This hoard of five silver akçes (four of Junayd and one of the Menteshānid Ilyās) was described by Miles, *BASOR* 170, 33-35.

11. *Sardis* M4 (1976) 95-97.

1604-1608.<sup>12</sup> Even so, coins appear in the seventeenth century at about the same rate as in the sixteenth; it is not until the eighteenth century that coins practically disappear from the site, with only three Islamic and three European coins for the entire century. The nineteenth century, one would say, brought a revival in monetary circulation. In all, some 354 Ottoman coins of the period after 1421 H. were found, as well as 23 European imports described elsewhere in this volume.

The majority of the Ottoman coins found at Sardis were copper manghirs (more commonly known to contemporaries as *pul*). In the period after the annexation of Sardis, 66 such manghirs can be attributed either to Murād II or Muḥammad II and thus to the period 1421-1481, while only 13 may be attributed to the subsequent sultans including Murād III, that is, to the 114-year period ending in 1595. In addition, there were 159 manghirs which either had no ruler's name or date, or were illegible and cannot be assigned to a specific ruler. These are catalogued at the beginning of the Ottoman section and may be assigned, by analogy with attributable specimens, to the fourteenth and fifteenth centuries or perhaps later. Some of these were no doubt struck before the final annexation of Sardis and indeed some may be issues of other dynasties, for it is to be noted that 37 manghirs attributable to four beyliks and 65 of Ottomans before Murād II were also found, as mentioned above. The manghirs of the sixteenth century seem distinctly underrepresented at Sardis in comparison to other sites or to museum collections.<sup>13</sup> This may be a result of shifts in the location of mints for these manghirs or in their distribution by the government as much as of economic decline at Sardis. In any event one may judge that copper coinage was scarcer there in the sixteenth and seventeenth century (until the large issue of Sulaymān II of 1688, discussed below) than previously.

12. Ibid. 97; *Sardis* R1 (1975) 34. The revolts are described by Pitcher, 114. The hoard of Sulaymān II coppers found below the burnt level (*BASOR* 177, 3) must have been an intrusive burial.

13. See especially Miles, 5; for museum collections, see the catalogues in the bibliography, and Ölçer *NOM* 5, English summary.

14. It is significant that although Ölçer considers the manghirs of Sulaymān Qānūnī (1520-1566) "common," only four were found at Sardis.

It is perhaps not coincidental that European coppers begin to appear at Sardis in the sixteenth century.

A good deal is known about the system of production of the manghirs, largely through firmans on the subject which have survived. They were struck under a special regime and at special mints (*pul darbhane*), different from those of the contemporary silver akçe. They were distributed through tax-farmers and qāḏīs for ultimate sale to merchants against payment in silver, at considerable profit to the state and to the middlemen. Since each *pul darbhane* designed its own dies, and since the manghirs were demonetized and replaced by new issues every three years (normally, but in practice often more irregularly), there is an enormous diversity of inscriptions and designs. The recorded corpus of these manghirs is still far from complete, and many published examples are incompletely legible because of their poor condition. The manghirs catalogued here are therefore copiously illustrated.

The collapse in value of the silver akçe during and after the reign of Murād III (1574-1595) made the fractional copper manghir redundant. In the seventeenth century manghirs almost ceased to be issued, which accounts for their scarcity not only at Sardis but in museum collections in general. The large copper issue of Sulaymān II (1687-1691) found in quantity at Sardis and elsewhere<sup>14</sup> does not belong to the manghir series but was the last stage in the debasement of the akçe (which was subsequently revived). Also under Sulaymān II a new large silver coin was introduced, the *kuṣ* (ghurūsh, qurūsh, piastre), corresponding to the European grossi and talers, but none of these was found at Sardis. The handful of silver coins from Sardis in the late seventeenth, eighteenth, and early nineteenth centuries are all tiny akçe or paras (another seventeenth century innovation, originally equal to 4 akçe), weighing less than a gram, appropriate to the needs of a collection of country villages.

14. Miles, 36-37 no. 173 (485 specimens), with a discussion of the issue.



Table 1. Concordance of names of rulers and dynasties.

Arabic	Transliteration	Modern
ساروخان	Sārūkhānid	Saruhan
اسحق بن الياض	Ishāq b. Ilyās	İshak
خضر بن اسحق	Khiḍr b. Ishāq	Hıdır
ارخان بن اسحق	Urkhān b. Ishāq	Orhan
حميد	Hamīdid	Hamit
حسين بيك بن الياض	Ḥusayn-Beg b. Ilyās	Hüseyn
كرميان	Germiyānid	Germiyan
يعقوب بن سليمان	Ya <sup>ʿ</sup> qūb b. Sulaymān	Yakup
منتشه	Menteshādid	Menteşe
الياض بن محمد	Ilyās b. Muḥammad	İlyas
ليث بن الياض	Layth b. Ilyās	Leys
ايدن	Aydinid	Aydın
عيسى بيك بن محمد	ʿĪsā-Beg b. Muḥammad	İsa-Bey
امير ازميز	Amir of Izmir	Emir of Izmir
جنيد بن ابراهيم	Junayd b. Ibrāhīm	Cüneyt
مراد بن ارخان	Murād I b. Urkhān	Murat I
بايزيد بن مراد	Bayezid I (Yıldırım) b. Murād	Yıldırım Beyazıt
امير سليمان بن بايزيد	Amir Sulaymān b. Bayezid	Emir Süleyman
محمد چلبی بن بايزيد	Muḥammad Çelebi b. Bayezid	Mehmet Çelebi
مراد بن محمد	Murād II b. Muḥammad	Murat II
محمد بن مراد	Muḥammad I (Fātiḥ) b. Murād	Mehmet Fatih (Muhammed the Conqueror)
بايزيد بن محمد	Bayezid II b. Muḥammad	Beyazıt II
سليم بن بايزيد	Salīm I (Yavuz) b. Bayezid	Yavuz Selim I (Selim the Grim)
سليمان بن سليم	Sulaymān I (Qānūnī) b. Salīm	Süleyman I (Suleiman the Magnificent)
مراد بن سليم	Murād III b. Salīm	Murat III
محمد بن مراد	Muḥammad III b. Murād	Mehmet III
احمد بن محمد	Aḥmad I b. Muḥammad	Ahmet I
مراد بن احمد	Murād IV b. Aḥmad	Murat IV
ابراهيم بن احمد	Ibrāhīm b. Aḥmad	İbrahim
محمد بن ابراهيم	Muḥammad IV b. Ibrāhīm	Mehmet IV
سليمان بن ابراهيم	Sulaymān II b. Ibrāhīm	Süleyman II
احمد بن محمد	Aḥmad III b. Muḥammad	Ahmet III
محمود بن مصطفى	Maḥmūd I b. Muṣṭafā	Mahmut I
مصطفى بن احمد	Muṣṭafā III b. Aḥmad	Mustafa

عبد الحميد بن احمد	ʿAbd al-Ḥamīd I b. Aḥmad	Abdül Hamit (Abdul Hamid)
محمود بن عبد الحميد	Maḥmūd II b. ʿAbd al-Ḥamīd	Mahmut
عبد المجيد بن محمود	ʿAbd al-Maǧīd b. Maḥmūd	Abdül Mecit (Abdul Mejid)
عبد العزيز بن محمود	ʿAbd al-ʿAzīz b. Maḥmūd	Abdül Aziz (Abdul Aziz)

## THE MINTS

*Amasya* (anc. Amaseia; Ar. Amāsyā). In north central Anatolia, northwest of Sivas; capital of a vilayet. Represented at Sardis only by a copper of Murād II, dubiously assigned to Amāsyā (284), and an akçe of Murād III (380).

*Ayasoluk* (anc. Ephesus; Ar. Ayāthuluq, Ayāsuluq, Ayāsulūḡh; med. Lat. Theologos; med. Ital. Alto-luogo; mod. Seljuq). One of the chief cities of Aydin, under the amirs and the Ottomans. The Arabic and Latin names are derived from its basilica of St. John, Hagios Theologos. Both silver and copper issues are well represented at Sardis.

*Belgrade* (Ar. Balghrād). Represented by a single akçe of Muḥammad III (391).

*Bergama* (anc. Pergamum). In the province of Izmir. Conquered by Urkhān, it was the capital city of Karasi, and was detached by the Ottomans and treated as an enclave of Hudevendigar. One specimen has been identified (331), the second coin from this mint to have been published.

*Bursa* (Ar. Bursa, Burūsā, Burūsa). The Ottoman capital until 1402 when it was replaced by Edirne but continued to retain considerable administrative importance until the end of the fifteenth century. As a major Ottoman mint, it is abundantly represented at Sardis.

*Cairo* (Miṣr, literally, "Egypt;" the most common mint name on the coins of Cairo before and after the Ottoman conquest). The extent to which its coinage circulated in the metropolitan provinces of the empire is suggested by the fact that five of its coins, ranging from the sixteenth to the nineteenth centuries, were found at Sardis.

*Canca* (Ar. Jānjā; mod. Gümüşhane). As implied by the name Gümüşhane, by which it is more

frequently known, this was an important silver mining center, represented at Sardis by three akçes (392-394).

*Constantinople* (Ar. Quṣṭanṭīniyya; mod. İstanbul). Although the earliest dated issues of the new capital are of the year 865 H. (1460/1461), the earliest coins at Sardis are of Bayezid II.

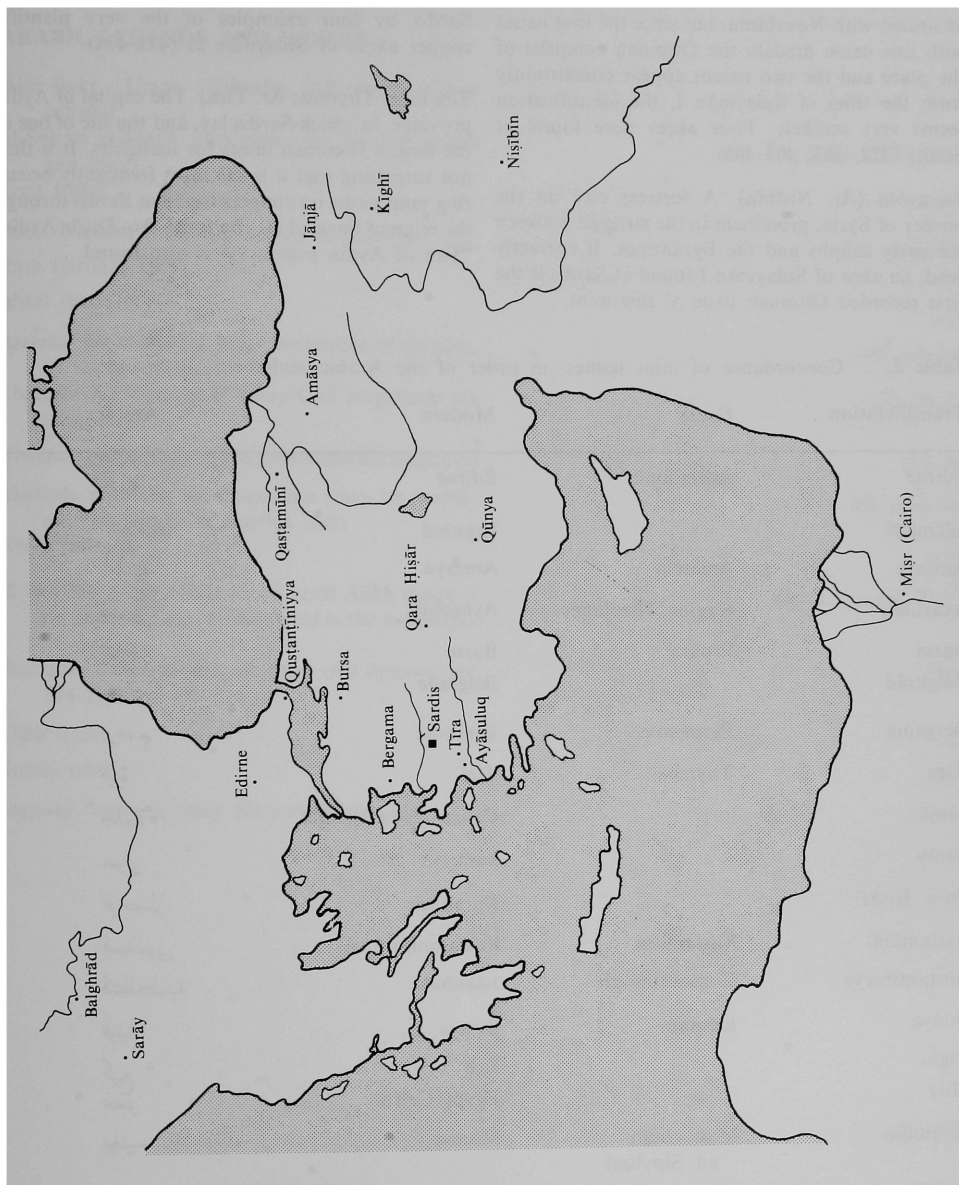
*Edirne* (Hadrianopolis, Adrianople). In European Turkey. Represented at Sardis by a single akçe of Muḥammad II, dated 879 H.? (313).

*Karahisar*, also known as Afyon (Byz. Akroinos; Ar. Afyūn Qara Ḥiṣār or Qara Ḥiṣāri Šāhib; on coins Qara Ḥiṣār). This small town, capital of its district, was annexed by the Ottomans with the rest of the Germiyānid domains in 832/1428-29. There followed a single undated issue of manghirs with the name of Murād II, one example of which (306) was found at Sardis.

*Kastamonu* (Ar. Qaşṭamūnī). A mint in this town southwest of Sinop issued coins under the Rūm Seljūks, the İłkhānids, and the local Isfendiyārids, but none of these issues was found at Sardis. The final Ottoman conquest of the town by Muḥammad II in 866/1462 was followed by the issuance of anonymous manghirs, of which one example (70) was identified among the Sardis finds, and by akçes and manghirs bearing the name of Bayezid II.

*Kiği* (Ar. Kīḡhī). A sanjak in the vilayet of Bitlis, southeast of Erzican. Coins from this mint are extremely rare. Two specimens have been identified at Sardis (73, 74).

*Novabirda* (Ar. Nuwābarda; mod. Novo Brdo). In Serbia; a silver mining center. Only one akçe, of Muḥammad III, was found at Sardis (403). See *Novar*, *infra*.



Map showing location of mints represented by coin finds at Sardis.

*Novar* (Ar. Nuwār). This mint name is generally identified with Novabirda, but since the first issues with this name predate the Ottoman conquest of the place and the two names appear concurrently from the time of Sulaymān I, the identification seems very unlikely. Four akçe were found at Sardis (372, 383, 404-405).

*Nusaybin* (Ar. Niṣībīn). A fortress city on the border of Syria, prominent in the struggle between the early caliphs and the Byzantines. If correctly read, an akçe of Sulaymān I found at Sardis is the first recorded Ottoman issue of this mint.

*Serai* (Ar. Sarāy; mod. Sarajevo). Represented at Sardis by four examples of the very plentiful copper akçe of Sulaymān II (471-474).

*Tire* (anc. Thyraea; Ar. Tīra). The capital of Aydin province, in which Sardis lay, and the site of one of the largest Ottoman mints for manghirs. It is thus not surprising that it is the most frequently occurring mint name on coppers found at Sardis through the reign of Bayezid II. The form Tīra Diyār Aydīn, "Tire of Aydin province," is also found.

Table 2. Concordance of mint names, in order of the Arabic alphabet.

Transliteration	Greek	Modern	Arabic
Edirne	Adrianople	Edirne	ادرنه
Islāmbūl		Istanbul	اسلامبول
Amāsyā	Amaseia	Amasya	اماسيه
Ayāsuluq	Hagios Theologos	Ayasoluk	اياسلق
Bursa	Prousa	Bursa	برسه
Balghrād		Belgrade	بلغراد
Bergama	Pergamon	Bergama	برعمم
Tīra	Thyraea	Tire	تيره
Jānjā		Canca (Gümüṣhane)	جانجه
Sarāy		Sarajevo	سرای
Qara Hiṣār		Karahisar	قرحصار
Qaştamūnī	Kastamone	Kastamonu	قسطمونی
Quştañṭīniyya	Constantinople	Istanbul	قسططنیة
Qūnya	Iconium	Konya	قونیه
Kighi		Kiği	کیغ
Miṣr		Egypt/ Cairo	مصر
Maghnīsa	Magnesium ad Sipyllum	Manisa	مغنیسه
Niṣībīn	Nisbis	Nusaybin	نصیبین
Nuwābarda		Novo Brdo	نواپرده
Nuwār		Novar	نوار

## ARABIC LEGENDS AND WORDS

Abū Bakr, ʿUmar, ʿUthmān, ʿAlī (the first four caliphs)

al-Sulṭān al-Malik al-Aʿẓam (the greatest sultan and king)

amīr (title)

ʿazza naṣrahu (may his victory be glorious)

ḍarb (striking [of])

ghāzī (title)

ḥamala ʿusr al-bāb (he bears the burden of the gate, i.e. of government)

khallada Allāh mulkahu (may God perpetuate his kingdom)

khallada mulkahu (may He perpetuate his kingdom)

khallada mulkahu wa-dawlatahu (may he perpetuate his kingdom and his rule)

Khān (title)

lā ilāh illā Allāh Muḥammad rasūl Allāh (there is no god but God, Muhammed is the messenger of God)

Ramaḍān (ninth month, or name of a dynasty; see 214-219)

Shāh (title)

Sulṭān (title)

zayyada ʿumrahu (may He prolong his life)

ابوبكر عمر عثمان على

السلطان الملك الاعظم

امر

عز نصره

ضرب

غازى

حمل عسر الباب

خلد الله ملكه

خلد ملكه

خلد ملكه ودولته

خان

لا اله الا الله محمد رسول الله

رمضان

شاه

سلطان

زند عمره

## CATALOGUE

The coins are listed first by dynasty, with the Beyliks followed by the Ottomans, and within each dynasty by ruler in chronological order. The coins of each ruler are listed by metal (silver, copper), and then by mint in the order of the Arabic alphabet, followed by coins with illegible or absent mint names. Within these categories, coins are arranged by date where feasible (often the dates on coins are those of the accession of the ruler, not the date of issue). Dates in parenthesis signify that the actual dates of the reign are unknown. The letter x as a component of a date indicates a missing or illegible numeral.

Descriptions have been kept brief, but are accompanied by a reference to a similar published coin. *Cf.* preceding the citation indicates only an approximate similarity to the published issue. Often incompletely legible specimens are included under a given catalogue number because of their similarity to more perfectly preserved specimens.

Weights are in grams; they are from the original field weighings and should be considered approximate. They precede diameters, which are in mm.

For each specimen, the original field identification number (beginning with the last two digits of the find year) is given.

*Illegible* means that there is a trace of a type, legend, symbol, etc. which cannot be read or comprehended. *Obscure* means that the condition of the coin is such that there is nothing recognizable on it.

Where metal is not mentioned manghirs are copper and akçes are silver.

- indicates information is not available.

\* indicates that the coin is illustrated.

## COINS OF THE ANATOLIAN BEYLIKS

SĀRŪKHĀNIDS *ca.* 700-813/1300-1410

ISHĀQ b. Ilyās 776-790/1374-1388

MANGHIR

*No mint, no date*

KHALLADA

ISHĀQ

within pentagon or hexalobe, with  
plain circular border

1 60.184b 4.6 22

KHALLADA [ALLĀH]

MULKAHU

within pentagon and plain circular  
border surrounded by dots

Tevhid 790

*No mint, no date*

As above but with border of dots

\*2 62.187 3.19 20

3 62.186 2.91 18-20

4 62.308 3.83 17-21

5 62.371 2.72 19-22

6 65.62 3.04 18-20

7 61.8 0.90 13

8 63.41 3.91 22

9 78.42 2.89 21

As above but with border of dots

Butak 169

Illegible

2-3 were found in a Christian sarcophagus in the Byzantine cemetery with a manghir of Murād I (221 *infra*, 62.188), evidently a later intrusion (*BASOR* 170, 17).

6 was found in the lower level of the Islamic village at PN (*BASOR* 182, 25).

KHIḌR b. Ishāq 790-792/1388-1390, 805-813/1402-1410

AKÇE

*No mint, no date*

. . .

ISHĀQ

KHIḌR b.

within double linear circle

10 63.27 0.96 12

. . . ILĀH ILLĀ AL[LĀH]

MUḤAMMAD

RASŪL ALLĀH

within linear circle

Tevhid 791-  
793; Artuk  
1320

MANGHIR

*No mint, no date*

KHALLADA ALLĀH

MULKAHU

. . . .

11 63.241 2.69 17

[LĀ ILĀH ILLĀ ALLĀH]

MUḤAMMAD

RASŪL ALLĀH

within linear circle

*No mint, no date*

ISHĀQ

KHALLADA ALLĀH

Tevhid 794;  
Butak 171

KHIDR b.

MULKAHU

within linear and dotted circle

within linear and dotted circle

<b>12</b>	60.184a	4.5	20x17				
Some	specimens in this group vary slightly			in design. Most are partially illegible.			
<b>13</b>	60.184c	2.85	17	<b>20</b>	63.403	1.88	18-20
<b>14</b>	62.199	1.97	17-18	<b>21</b>	63.445	2.57	17-20
<b>*15</b>	62.301	2.64	16-17	<b>22</b>	65.131	2.40	17-18
<b>16</b>	60.185b	2.44	16	<b>23</b>	67.36	2.00	17-20
<b>17</b>	62.251	3.53	17-19	<b>24</b>	62.198	3.34	16-19
<b>18</b>	62.268	1.93	16	<b>25</b>	63.439	2.07	18-19
<b>19</b>	62.320	1.97	19				

Tevhid 794  
(coin **14**)*No mint, no date*

Ornament

. . . . ILLĀ . .

Double linear circle with dividing  
line; legends above and  
below illegible

Legend illegible

**26** 60.40 4.50 21

## URKHĀN b. Ishāq 806-807/1404-1405

MANGHIR

*No mint, 806?*

URKHĀN

(b. ISHĀQ)

within linear border  
surrounded by dots

[KHALLADA] MULKAHU

Artuk 1321



[806]

within linear border  
surrounded by dots

<b>*27</b>	69.77	1.79	17
<b>*28</b>	61.163	1.70	13

*No mint, 806?*

°ALĀ'L-DĪN

URKHĀN

8xx

within circle, partially linear,  
partially dotted

KHALLADA

MULKAHU

8[06]

within linear circle

<b>*29</b>	72.1	0.70	18 (var.)
<b>*30</b>	60.134	1.13	15-19 (var.)
<b>*31</b>	64.54	0.93	16-17 (var.)

°Alā'l-Dīn appears to be the *laqab* of this Urkhān, who is mentioned in the inscription of the entrance to the Shahadeh Jami, Bursa. See Uzunçarşılı 89, 91; Pere 29.



*No mint, no date*

Sprigs

AL-MALIK AL-SULTĀN  
KHALLADA ALLĀH  
MULKAHU

Barbarous legend, two lines

· · ·  
within hexalobe

\*32 59.271 3.05 22

This coin is tentatively attributed to the Sārūkhān Urkhān b. Ishāq on stylistic evidence.

### Anonymous Coins of Sārūkhān Style

MANGHIR

*No mint, ca. 746-812*

\* LA ILLĀH

· · · [AL]LĀH

within square in linear circle

· · · · ·  
MUḤAMMAD  
RASŪL ALLĀH

within linear circle surrounded by dots

\*33 62.295 3.42 17-19

34 63.87 1.92 18-20

35 1011 2.13 17-21

36 1054 2.27 18

The style of these coins is similar to issues of Khidr b. Ishāq.

*No mint, no date*

KHALLADA ALLĀH

MULKAHU

within a hexalobe surrounded by dots

KHALLADA ALLĀH

MULKAHU

within a hexalobe surrounded by dots

\*37 60.185c 3.20 18-22

*No mint, no date*

Legend as above within linear circle  
surrounded by dots

Legend as above within linear circle  
surrounded by dots

38 62.240 3.47 20-22

39 62.200 3.44 18x24

*No mint, no date*

Illegible

KHALLADA ALLĀH?

MULKAHU

Obscure

40 65.46 1.80 17-18

37-40 are sometimes attributed to the Ottoman Urkhān inasmuch as the legend of obverse and reverse is characteristic of his period and his son's.

*HAMĪDIDS 700-826/1300-1423***ḤUSAYN-BEG b. Ilyās 776-788/1374-1386**

MANGHIR

*No mint, no date*

ḤUSAYN?

GHĀZĪ?

Border of dots

**\*41** 65.112 0.94 14-15

Illegible

*No mint, no date*

ḤUSAYN?

GHĀZĪ?

within linear border surrounded

by dots

**\*42** 60.100 1.25 12-16Lion r., head turned back; linear  
border surrounded by dots

The attribution of **41-42** must be considered tentative and problematical. Ḥusayn is almost certain on both specimens. Part of the area of the principality is not far east of Sardis. Coins of at least eight members of the dynasty are known, but mostly in silver.

*GERMIYĀNIDS 699-832/1299-1428***YA<sup>ʿ</sup>QŪB b. Sulaymān ca. 789-792, 804-814, 816-832/ca. 1387-1389, 1401-1411, 1413-1428**

MANGHIR

*No mint, no date*. . .  
AL-SULTĀN  
YA<sup>ʿ</sup>QŪB?

within hexagon with annulets at corners, within linear circle, within dotted circle

**43** 60.80 1.27 23ALLĀH  
[LĀ ILĀH ILLĀ  
MUḤAMMAD . . . .]

Ghalib 175

. . . . .  
within square with lobe at top, within  
linear circle, within dotted circle

The attribution of this coin was suggested by Miles. The Germiyānid territories lay not far to the northeast of Sardis.

*MENTESHĀDIDS ca. 700-829/ca. 1300-1426***ILYĀS b. Muḥammad 793/1391, 804-824/1402-1421**

AKÇE

*No mint, no date*

KHALLADA

MULKAHU

within square surrounded by dots

**44** 62.221 0.60 13-15

ILYĀS b.

MUḤAMMAD

within circle surrounded by dots

BM 61; Wittek

157 no. 6;

Tevhid 795

(dated 805)

This silver coin was found with four others of Junayd, **49-52**, q.v.; see *BASOR* 170, 34, no. 5.

**LAYTH b. Ilyās 824/1421**

MANGHIR

*No mint, no date*

LAYTH? . . .

within linear circle, within dotted circle

**\*45** 60.48 0.82 15-18*No mint, no date*

Legend illegible

Legend illegible

**46** 60.47 1.22 15*AYDINIDS 708-829/1308-1426***ᶜĪSĀ-BEG b. Muḥammad 760-791/1360-1390**

AKÇE

*No mint, no date*

KHALLADA ALLĀH

LĀ ILĀH. . .ALLĀH

Tevhid 786

MULKAHU

MUḤAMMAD

ᶜṬSĀ

RASŪL [ALLĀH]

within double linear circle, within dotted circle

within double square, within linear circle; words in segments illegible

**47** 71.270 0.72 19

The precise dates of ᶜĪsā-Beg's two reigns are disputed. Zambaur 151 ends the first reign in 794/1392 and puts the second reign entirely in 805/1403; Tevhid 20 gives the dates 749-792/1349-1390 and 805-806/1403-1404; I. Melikoff "Aydin Oghlu" in EI<sup>2</sup> gives 760-791/1360-1389; and Uzunçarşili 112 ca. 765-797/1365-1395.

**Unassigned Fourteenth-Fifteenth Century A.D.**

SILVER

*No mint, no date*

Crowned figure seated on throne supported by two lions, holding scepter in left hand; around: barbarous Latin legend

Crown embellished with lilies (Neapolitan giglias); around: barbarous Latin legend

**\*48** 62.314 3.63 29-31For a discussion of this coin, see the introduction, *supra*.

## AMĪR OF IZMİR

Ghāzī JUNAYD b. Ibrāhīm 813-816/1410-1413

AKÇE

*No mint, no date*

Barbarous declaration of faith and  
names of the four orthodox caliphs  
around



Ölçer *YB* pl.  
4:CB

Segmented

MUḤAMMAD (above)

KHALLADA (at r.)

MULKAHU (at l.)

GHĀZĪ JUNAYD (below)

*49	62.217	0.58	13
50	62.218	0.60	13
51	62.219	0.60	13
52	62.220	0.58	12-13
53	62.233	0.65	12

49-52 were found as a hoard with a single Menteshādid akçe (44 *supra*) on the floor of a dwelling unit on the Acropolis; Miles, *BASOR* (1963) 170, 33-35, fig. 23. The first publication of a coin of this type was in *Jahrbuch der asiatischen Kunst* (1925) pl. 105: 11.

## COINS OF THE OTTOMAN SULTANS

Early Anonymous Manghirs with Mint Names

*Tīra*

ʿAZZA NAŞRAHU  
DARB TĪRA

Ölçer *NOM* 398

54 59.314 3.12 21

ʿAZZA NAŞRAHU  
[DARB] TĪRA

Ölçer *NOM* 396

55 62.37 1.21 17



ʿAZZA NAŞRAHU  
DARB TĪRA

Ölçer *NOM* 364

56 58.292 2.83 16



KHALLADA  
MULKAHU  
ÐARB TĪRA

Ölçer *NOM* 361

Overstrike: rosette with fleur-de-lys in petals; linear circle with border of dots. Undertype: only linear and dotted border visible within linear circle surrounded by dots

\*57 63.252 2.42 16-18



ʕAZZA NAŞRAHU  
ÐARB TĪRA

Ölçer *NOM* 381

58 63.104 2.96 15-16

\*59 62.38 1.26 13



KHALLADA  
MULKAHU  
TĪRA

Ölçer *NOM* 392

\*60 59.62 0.96 12

*TĪra, no date*



ʕAZZA NAŞRAHU  
[ÐARB TĪRA]

Ölçer *NOM* 378

Doublestruck  
\*61 64.189 0.86 11-12

Ornament:  
flower  
62 65.38 2.35 15-16

ʕAZZA NAŞRAHU  
ÐARB [TĪRA]

Ornament  
63 1325 2.06 15

ÐARB  
TĪRA

*TĪra, date?*

Triangle in centre with  
[KHALLADA MULKAHU]  
ÐARB TĪRA around  
\*64 78.45 3.59 16

Ornament

cf. Ölçer *NOM*  
245

*Tīra? no date*

Legend illegible  
 \*65 61.439 0.71 10  
 Ornament in linear circle

Ornament

Ölçer NOM 32

. . . . .  
 MULKAHU  
 DARB TĪRA?  
 in linear circle

66 78.39 2.76 16

*Tīra?*

Ornament; flower with mint name  
 TĪRA?  
 \*67 64.19 1.49 13-15  
 KHALLADA MULKAHU  
 DARB TĪRA?  
 68 65.154 0.51 14-15

Ornament; Legends illegible

Geometric design

*Sarāy? no date*

Legend illegible  
 \*69 78.40 2.2 15

. . . . .  
 SARĀY. . . . .  
 . . . . .

*Qasṭamūnī? no date*

Ornament  
 70 66.16 0.95 14

Legend illegible  
 with mint QASṬAMŪNĪ?

Ölçer NOM 233

*Qusṭantīniyya, no date*

Ornament  
 71 1266 1.12 13

[DARB]  
 QUSṬANTĪNIYYA

Ölçer NOM 17

*Qūnya, no date*

\*72 65.34 1.47 13

Circular legend:  
 KHALLADA MULKAHU  
 DARB QŪNYA

Ölçer NOM 245

*Kīghī*

MUHAMMAD? in center, within  
linear circle surrounded by dots

*73	62.267	2.83	16
74	61.21	2.70	15



Upper legend:  
[ʿAZZA] NASRAHU  
Lower legend: KĪGHĪ

### Manghirs With No Mints or Illegible Mints

*No mint, no date*

KHALLADA MULKAHU

Illegible legend above and below a  
single line within a linear circle  
surrounded by dots

within linear circle surrounded by dots

*75	62.364	2.75	18-21
-----	--------	------	-------

. . . .MULKAHU

Legend illegible

and illegible legend

*76	65.76	0.80	16-19
-----	-------	------	-------

KHALLADA MULKAHU

Illegible legend within linear circle  
surrounded by dots

. . . . .

within linear circle surrounded by dots

77	65.29	1.45	17-19
----	-------	------	-------

[KHALLADA] MULKAHU

Legend illegible

within linear circle

78	62.206	1.30	14-15
----	--------	------	-------

. . . .MULKAHU

Illegible legend within linear circle  
surrounded by dots

Field divided by three lines within  
linear circle surrounded by dots

79	64.47	1.23	18
----	-------	------	----

. . .MULKAHU. . .

Legend illegible



80	61.48	0.81	13
----	-------	------	----

## KHALLADA MULKAHU

. . . . b.

Linear circle surrounded by dots

81 67.565a 1.34 14-15

82 67.565b 1.66 16-19

Segments with illegible legend

(effaced)

## KHALLADA MULKAHU

. . . . KHĀN

Legend illegible

within linear circle surrounded by dots

83 71.633 1.42 18-19

84 71.634 2.72 15-16

85 71.635 3.11 17-20

86 71.636 0.66 14-15

87 71.637 0.93 13-15

88 71.638 0.62 10

. . . . . MULK[AHU]

Legend illegible

89 64.43 0.46 14-15

. . . . . [SUL]ṬĀN?

within linear circle surrounded by dots

KHALLADA MULKAHU

Illegible legend below

90 64.55 1.44 12

Legend illegible

Legend illegible

SULṬĀN . . . . .

Legend illegible

91 62.134 1.88 14

This coin was among those found at the Turkish level in the workroom designated "West Room" connecting with the "West Apse" of Church E (PN/E S377/W220 *BASOR* 170, 15).

. . . ILLĀ

surrounded by dots

92 68.346a 2.88 24

Legend illegible; crude style

93 67.555 1.50 17-19

Legend illegible

AL-SULṬĀN?

AL-MALIK? . . .

. . . . .

Legend illegible

[ʿAZZA] NAṢRAHU

within linear circle

94 62.159 0.74 10

Four-line illegible legend

95 65.141 1.36 13

Legend illegible

This coin was found in the lime slaking pit, PN (*BASOR* 182, 25).

Legend illegible

96 64.110 0.39 8

Legend illegible



	Legend illegible			[ʿAZZA] NAŞRAHU
97	64.63	0.66	17-18	Legend illegible
	Illegible legend within linear circle			ḌARB? . . .
98	66.53	0.97	14-15	ʿAZZA NAŞRAHU Legend illegible

### Manghirs With Ornaments on One Side

*No mint, no date*



SULTĀN. . . .  
Effaced legend within linear circle

99	64.39	1.94	13-17		
	Illegible (?)ornament			Illegible	
100	67.35	0.51	10-11		
	Field divided by three lines ending in knot to l.; illegible legends above and below; all within linear circle			Illegible legend in linear circle surrounded by dots	Edhem 406 (for divider style)
101	64.59	1.36	14-15		
	Large knot device at end of three-line divider? Within linear circle surrounded by dots			ʿAZZA NAŞRAHU. . . within thick linear border	
102	65.80	0.66	11		
	Field divided by knot device at end of three lines; illegible legend above			Legend illegible	
103	65.47	0.58	10-12		
	Complex double knot device			Legend illegible	
104	67.563	0.96	14-16		
	Rosette within square or hexagon; below,			Illegible legend in linear circle surrounded by dots	
105	63.53	2.73	14-17		
				ʿAZZA NAŞRAHU. . .	



Field divided by flexed cable to left between lines; below  
ʿAZZA NAŞRAHU?  
cf. Ölçer  
NOM 2

\*106 62.300 3.12 13

	Four-petalled flower ornament			Legend illegible; border of dots	
<b>*107</b>	64.31	0.45	18		
	Ornament			Legend illegible?	
<b>108</b>	61.32	2.22	13x13		
	Geometric ornament			Field divided by two lines in which a wavy, overlapping two-line division occurs; illegible legend below	
<b>109</b>	58.356a	2.86	18		
	Geometric design (legend effaced)			Legend effaced	
<b>110</b>	67.649	1.23	13-14		
	Geometric design			Legend obscure	
<b>111</b>	63.447	2.68	14-16		
	Geometric design and/or illegible legends			Legend obscure	
<b>112</b>	67.243	0.38	8		
	Geometric design obscure			Legend obscure	
<b>113</b>	62.1754	1.21	15x18		
	Two-line illegible legend ending in B . . . . .			Ornament consisting of a series of dots	
<b>114</b>	62.1772	0.28	13		
	Legend illegible			Legend illegible	
<b>115</b>	61.63	4.22	19		
	Field divided by three lines, possibly within lozenge with illegible legend			Legend illegible	
<b>116</b>	64.64	2.39	17-18		
	Illegible legend with <b>ḌARB?</b> . . .			Ornament	
<b>*117</b>	62.298	1.38	13-14		
	Arabesque ornament			Legend illegible	
<b>118</b>	67.567	0.63	11x14		
	Ornament			Ornament	cf. Ölçer <i>NOM</i> 755 (for obv.)
<b>*119</b>	1331	1.66	18		

### Manghirs With Ornaments on Both Sides




*No mint, no date*



Geometrical design?

Edhem 468

**120** 64.81 0.64 13-15

- | Ornament   | Floral ornament   |
|--|---|
| *121 62.155 1.40 13-14   |   |
| Found among the Turkish houses west of Church E, in the same area as an akçe of 886 H. (356, <i>infra</i> ) and an unidentifiable seventeenth century akçe (418, <i>infra</i> ); <i>BASOR</i> 170, 15. |   |
| Linear hexagram with central dot   | Spokes interspersed with single dot, within linear circle surrounded by dots            |
| 122 60.66 0.66 16  |   |
|   | Legend or ornament illegible  |
| *123 61.47 0.72 16   |   |
| Linear hexagram, dots within linear circle surrounded by dots  | Animal to left: lion?   |
| 124 62.1739 0.80 15  |   |
| Linear hexagram within thick double linear circle  | Obscure ornament within linear circle surrounded by dots                                |
| *125 64.90 0.93 15-16  |   |
| Linear hexagram with large dot in center   | Ornament with illegible legend  |
| 126 64.169 0.80 14   |   |
| Linear hexagram? in which squashed rosette is visible  | Ornament with illegible legend  |
| 127 67.21 3.99 18-20   |   |
| Geometric design with KHĀN in upper panel  | Two-line twisted divider with rays extended, illegible legends between rays and divider |
| *128 62.193 1.32 15-16   |   |
|    |       |
| *129 63.43 2.49 16-17  |   |
| Square with plain border within linear circle surrounded by dots; three dots in each quarter between square and circle; illegible letters? in center of square   | Variant of the obverse  |
| *130 62.367 0.91 15-17   |   |

	Geometric design		Animal design?
<b>131</b>	62.1747	1.33 14-18	
	Effaced		Animal or bird design?
<b>132</b>	60.67	0.76 17	

### Manghirs With Illegible or Effaced Legends

Some coins have ornaments or traces of ornaments on one or both sides, but all are too worn to be legible. Coins marked with a plus sign may have been issued by one of the fourteenth or fifteenth century amirates rather than by the Ottomans.

#### *No mint, no date*

<b>133</b>	1337+	3.57	19	<b>163</b>	63.242+	1.20	16-17
<b>134</b>	59.288	1.18	13	<b>164</b>	63.310	1.62	18
<b>135</b>	60.43	0.57	17	<b>165</b>	63.326	1.42	14
<b>136</b>	60.196	2.64	14-15	<b>166</b>	63.328	1.38	12-14
<b>137</b>	60.197	1.10	21-25	<b>167</b>	63.329	0.68	11
<b>138</b>	60.198	0.61	14	<b>168</b>	63.380	0.72	11
<b>139</b>	60.199	0.61	13-15	<b>169</b>	63.417	0.73	12-16
<b>*140</b>	61.224	2.01	15	<b>170</b>	63.438	3.26	19-21
<b>141</b>	61.437	0.49	12	<b>171</b>	63.463	1.05	14-16
<b>142</b>	61.441	0.64	15	<b>172</b>	63.494	0.69	15
<b>143</b>	61.444	1.97	21	<b>173</b>	63.504	0.46	11-12
<b>144</b>	62.91	2.56	17	<b>174</b>	63.532	2.35	17
<b>145</b>	62.950	0.50	fragmentary, estimated diameter 15	<b>175</b>	63.596	0.96	16
				<b>176</b>	63.680	1.51	19-21
<b>146</b>	62.1510	0.54	10-11	<b>177</b>	63.681	1.28	17
<b>147</b>	62.1737	0.98	13	<b>178</b>	63.731+	1.62	15-16
<b>148</b>	62.1738	0.39	13	<b>179</b>	63.733	0.81	16-17
<b>149</b>	62.1740	0.46	10-13	<b>180</b>	63.783	0.98	18-20
<b>150</b>	62.1741	0.29	9-10	<b>181</b>	63.859	0.14	fragmentary, estimated diameter 10
<b>151</b>	62.1744	0.42	11-15				
<b>152</b>	62.1745	0.67	14	<b>182</b>	63.1080+	2.02	18-20
<b>153</b>	62.1748	1.07	14	<b>183</b>	63.1324	0.40	fragmentary
<b>154</b>	62.1749	1.23	15	<b>184</b>	63.1433	0.29	12
<b>155</b>	62.1751	0.44	10	<b>185</b>	64.18	0.70	14-15
<b>156</b>	62.1752	0.95	17	<b>186</b>	64.20	2.80	20-22
<b>157</b>	62.1756	0.27	10	<b>187</b>	64.33	0.53	14-16
<b>158</b>	62.1759	1.33	16	<b>188</b>	64.45	0.91	12
<b>159</b>	62.1761	1.34	15-19	<b>189</b>	64.135	0.32	11
<b>160</b>	62.1762	0.42	16	<b>190</b>	65.48+	0.58	13-17
<b>161</b>	62.1763+	1.91	19	<b>191</b>	65.56+	1.66	15-19
<b>162</b>	62.1766	0.88	11	<b>192</b>	65.61+	0.55	13

<b>193</b>	66.2	0.82	16	<b>203</b>	67.564	0.43	11-13
<b>194</b>	66.15	0.60	16	<b>204</b>	67.566	0.36	14
<b>195</b>	67.11+	1.36	13-15	<b>205</b>	67.753	0.74	16
<b>196</b>	67.14+	1.38	16	<b>206</b>	73.83	0.96	13
<b>197</b>	67.549	0.46	9	<b>207</b>	73.107	2.99	21
<b>198</b>	67.550	2.51	15-16	<b>208</b>	1008	0.88	10-13
<b>199</b>	67.553	1.87	14	<b>209</b>	1010	0.91	14
<b>200</b>	67.559	0.90	14	<b>210</b>	1032	2.49	15-17
<b>201</b>	67.560+	2.69	18-20	<b>211</b>	1058	0.70	14-18
<b>202</b>	67.562	0.70	12-13	<b>212</b>	1610	2.10	16

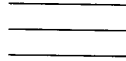
### MURĀD I b. Urkhān 763-791/1362-1389

AKÇE

*No mint, no date*MURĀD b.  
URKHĀN

Knot device above and below

KHALLADA

Edhem 16 ff;  
Pere 8

213 62.1735 0.88 12

MULKAHU

MANGHIR

*No mint, Ramaḍān? 790/1388*MURĀD KHĀN  
ʿAZZA NAŞRAHU

RAMAḌĀN

Edhem 53;  
BM 88

790

<b>*214</b>	63.878	2.43	17
<b>215</b>	64.58	2.32	17
<b>216</b>	60.122	2.17	14-15
<b>217</b>	63.54	1.44	13-18
<b>218</b>	63.605	2.20	14-17
<b>219</b>	78.43	1.91	16

As Edhem points out, this is the only instance of the use of the month as well as the year in dating an Ottoman coin, although the practice is encountered earlier on the issues of the Rūm Seljūks. Ramaḍān 790 corresponds to the period September 3 to October 3, 1388. An alternative explanation of the word Ramaḍān is possible, however. The coin may be an issue of the Ramaḍān Oghullari, a minor dynasty of eastern Anatolia, struck with Murād's name to reflect their acknowledgment of Ottoman suzerainty as a result of the Karaman war of 788/1386. If so, this is the only issue of the Ramaḍān Oghullari known.

MURĀD b. URKHĀN  
KHALLADA MULKAHU  
within linear circle

AL-SULTĀNŪL-GA  
KHALLADA MULKAHU

Edhem 38;  
Pere 9

within octagonal border, within  
linear circle

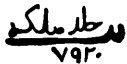
*220	62.297	2.70	18-20
221	62.188	3.15	21-22
222	62.190	4.11	20

221 was found with two Sārūkhān coppers, 2-3, *supra*, q.v.

BAYEZID I (*Yildirim*) b. Murād 791-804/1389-1401

AKÇE

*No mint, 792*



KHALLADA MULKAHU  
792 ·

within linear circle surrounded by dots

223	63.36	0.80	12-14
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BAYEZID  
b. MURĀD

within linear circle surrounded by dots

Edhem 59-60  
var. (none with

single dot after  
date)

MANGHIR

*No mint, no date*

BAYEZID

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

b. MURĀD

KHALLADA MULKAHU

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Five-pointed open star

224	60.99	1.11	18
225	60.185a	2.21	17-18
226	60.185e	2.36	17-20
227	62.224	2.00	15
228	62.234	1.46	14-16
229	62.290	1.75	15-18
230	62.291	2.18	18-19
231	62.1760	0.99	15x17
*232	63.33	2.82	20
233	63.44	3.30	18-22
234	63.395	2.32	15-17
235	63.402	1.09	14-16
236	63.572	2.23	15
237	63.573	2.93	15-19
238	63.574	2.97	16-19
239	63.642	0.93	16-19
240	63.906	2.42	18-19

241	63.982	2.00	15-18
242	64.17	3.83	20-22
243	64.24	1.55	13-15
244	64.38	1.68	17
245	64.44	0.86	17-18
246	64.49	1.03	18
247	64.82	0.80	14
248	64.89	2.75	14-19
249	64.104	2.23	16-18
250	64.109	1.90	15-16
251	64.118	2.42	15-18
252	65.10	1.59	18-19
253	65.24	1.23	15-16
254	65.37	2.06	17
255	65.49	1.60	14-17
256	67.9	1.82	15-16
257	1014	1.33	15-16

Edhem 71;  
Pere 18

**254** was found beneath a layer of heavy burning in the Islamic village at PN (*BASOR* 182, 25). **255** was found in medieval fill over the Gymnasium, where late Byzantine coins and a denier of John of Anjou, 1318-1333 (see Medieval and Modern section, 5) were also found (*BASOR* 182, 31).

### Coins Attributed to Bayezid I by Type-Style

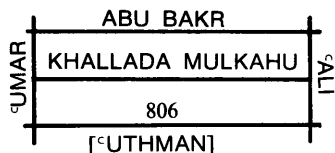
#### MANGHIR

Mint, date illegible							
<b>258</b>	1336	1.26	17	<b>263</b>	66.12	2.06	17
<b>259</b>	78.41	2.15	21	<b>264</b>	66.11	1.92	17
<b>260</b>	66.10	1.83	19	<b>265</b>	66.6	1.25	17
<b>261</b>	61.447	1.23	16	<b>266</b>	61.438	1.59	17
<b>*262</b>	73.89	1.32	16	<b>*267</b>	73.97	2.3	18
				<b>268</b>	63.48	2.11	18

### AMĪR SULAYMĀN b. Bayezid 805-813/1402-1411

#### MANGHIR

No mint, 806



**\*269** 60.104 0.90 17

AMĪR SULAYMĀN  
b. BAYEZID  
in tughra form

Edhem 85;  
Ölçer YB 5A  
822

No mint, 808

KHALLADA MULKAHU

As above

Ölçer YB 5A  
851

808

within linear circle surrounded by dots

**\*270** 71.409 3.27 16-22

No mint, no date

Legend illegible; cinquefoil

Legend illegible

**271** 62.309 1.84 23-26 (thin fabric)

### MUḤAMMAD CHELEBI b. Bayezid 806-824/1403-1421

#### AKÇE

Bursa, 816?

Legend obscure

Legend obscure

cf. Pere 43

**272** 62.24 1.12 13

## MANGHIR

*Bursa, 806*

LĀ ILĀH ILLĀ. . .  
 MUḤAMMAD RASŪL ALLĀH  
 ʿARB BURUSA 806

[TIMUR KHĀN GŪRGĀN]  
 MUḤAMMAD b. BAYEZID  
 KHĀN KHALLADA MULKAHU  
 within linear circle surrounded by dots

Edhem 90;  
 Pere 28

\*273 62.283 1.73 13-16

If the top reverse inscription is correctly reconstructed, this issue acknowledges Muḥammad's subordination to Tamerlane.

*No mint, 810?*

Four-line inscription within linear  
 circle surrounded by dots

Three-line illegible legend

274 60.103 1.01 11

*Bursa? 806*

Linear circle, divided by two lines  
 806

Tughra

275 67.5 1.54 15-16

*No mint, 812?*

[KHALLADA]  
 MULKAHU  
 81x

MUḤAMMAD b.  
 [BAYEZID. .]

276 62.1758 1.87 16x20

*No mint, 813*

KHALLADA MULKAHU  
 WA-DAWLATAHU 813

AL-SULTĀN AL-MALIK  
 AL-ʿAZĀM MUḤAMMAD  
 b. BAYEZID

Edhem 101

277 62.282 1.64 15-17

278 62.312 1.90 16-17

\*279 71.208 2.19 17-18

*No mint, date illegible*

.....

Legend illegible

\_\_\_\_\_

BAYEZID?

280 58.356b 0.92 14



**MURĀD II b. Muḥammad 824-848/1421-1444** (first reign)  
**850-855/1446-1451** (second reign)

## AKÇE

*Ayāsuluq, date?*

KHALLADA MULKAHU



ḌARB AYĀSULUQ

281 61.226 1.47 10

*Mint? date?*

Legend illegible

282 1449 0.94 10

Legend illegible

*No mint, no date*

SULTĀN MURĀD?

b. . . . .

283 60.81 0.43 14

Knotted line, illegible legend above  
and below

## MANGHIR

*Amāsyā, no date*

KHALLADA MULKAHU

MURĀD b.?

284 60.85 1.26 13

ḌARB  
AMĀSYA?*Ayāsuluq? 827*

SULTĀN

MURĀD b.

MUḤAMMAD KHĀN

[KHALLADA] MULKAHU

within linear circle surrounded by dots

\*285 63.400 2.48 17-19

ḌARB. . .  
ḤAMALA ʿUSR AL-BĀB  
827

Edhem 172;

*Ayāsuluq? 84x*

KHALLADA MULKAHU



ḌARB [AYĀSULUQ]

286 67.568 1.35 17

8 MURĀD [b.]  
4 [MUḤAMMAD KHĀN]

Edhem 174

*Ayāsuluq or Tīra, 848*

KHALLADA MULKAHU

ḌARB [TĪRA]?

within linear circle surrounded by dots

287 64.106 1.55 11-14

MURĀD [b.]  
[8] 8  
[4]  
[MUḤAMMAD KHĀN]  
within linear circle surrounded by dots

cf. Edhem 199

*Ayāsuluq? 8xx*

KHALLADA MULKAHU



ḌARB AYĀSULUQ

<b>288</b>	67.22	1.35	10-11
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MURĀD b.

Edhem 176

8

MUḤAMMAD KHĀN

*Ayāsuluq, no date*

Geometric design?

<b>289</b>	67.3	0.67	10
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<b>290</b>	61.226a	1.47	11
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ḌARB AYĀSULUQ

cf. Edhem 174

*Bursa, 827*

SULTĀN

MURĀD b.

MUḤAMMAD KHĀN

[KHALLADA] MULKAHU

within linear circle surrounded by dots

<b>*291</b>	59.203	2.48	21
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<b>292</b>	60.185f	3.00	17-18
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<b>293</b>	64.787b	2.50	20
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ḌARB BURSA

ḤAMALA ʿUSR AL-BĀB

[827]

Edhem 182;

BM 110

*Bursa, 836*

MURĀD b.

MUḤAMMAD KHĀN

<b>294</b>	58.310	3.51	18-21
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<b>295</b>	59.255	0.61	13
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<b>296</b>	62.131	2.17	16
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<b>297</b>	62.132	2.68	17-19
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<b>298</b>	62.135	2.05	13-17
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KHALLADA MULKAHU

836

ḌARB BURSA

<b>299</b>	62.154	1.04	10
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<b>300</b>	63.1328	0.87	15x15
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<b>301</b>	64.32	1.32	15-17
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<b>302</b>	64.84	1.78	19-20
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<b>303</b>	64.213	0.80	16
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Edhem 186;

BM 112

**296-298** were found at the same location as **91** *supra*, q.v.

*Tīra, no date*

\*304 67.558 2.18 14-17

ʿAZZA NAŞRAHU  
ḌARB TĪRA*Tīra, no date*KHALLADA MULKAHU  
ḌARB TĪRA?Plain circular border surrounded by  
dots, with divided fieldIllegible legend within linear border,  
possibly:

MURĀD b.

8

[MUḤAMMAD KHĀN]

\*305 67.2 2.12 13-16 (clipped)

*Qara Hişār, no date*MURĀD b.  
MUḤAMMAD KHĀN  
in linear circleḌARB. . .  
QARA HIŞĀR  
in linear circle

306 64.50 1.64 13-17

*Mint? 836*

Legend illegible

Legend illegible, BURSA?

cf. Edhem 186

307 1335 2.77 18

*Mint illegible, [8]38*

Illegible

cf. Edhem 214  
(probably  
similar)KHALLADA  
MULKAHU

38

in square; words on each side illegible

308 67.557 1.84 13-18

*Mint? no date*MURĀD b.  
MUḤAMMAD KHĀN  
(tughra)

Legend illegible

cf. Edhem 196

309 78.44 1.33 14

*Mint, date illegible*

Ornament effaced

. . . . .  
MUḤAMMAD KHĀN

310 60.88 0.90 12

*No mint, date illegible*KHALLADA MULKAHU?  
MURĀD

Ornament

311 67.556 1.11 11-12

*No mint, no date*

. . . ID?

MUḤAMMAD? . . . . .

Legend illegible

Legend illegible

\*312 66.1 1.85 18

**MUḤAMMAD II (*Fatih*) b. Murād 848-850/1444-1446** (first reign)**855-886/1451-1481** (second reign)

AKÇE

*Edirne, 879?*KHALLADA MULKAHU  
ḌARB EDİRNEMUḤAMMAD b. MURĀD  
KHĀN ʿAZZA NAŞRAHU

313 60.202 0.96 11

Not in Edhem, but there are akçes of the years 875, 880, and 886 from this mint.

MANGHIR

*Edirne? date?*

Illegible

MUḤAMMAD b.  
MURĀD? [KHĀN]  
Field divided by  
flexed cable r.

314 62.17 2.61 14

*Ayāsuluq, 865*KHALLADA MULKAHU  
ḌARB AYĀSULUQ865 ʿAZZA NAŞRAHU  
MUḤAMMAD b. MURĀD KHĀN

Edhem 331

315 63.46 0.85 10-11

*Ayāsuluq 875?*KHALLADA MULKAHU  
ḌARB AYĀSULUQMUḤAMMAD b. MURĀD  
KHĀN ʿAZZA NAŞRAHU  
Legend circular

cf. Edhem 260

316 64.184 0.79 10

*Bursa? 861?*

	MUḤAMMAD b. [MURĀD] KHĀN	[KHALLADA MULKAHU]	Edhem 347 ff.
	in segments within linear circle	ḌARB BURSA?	
	surrounded by dots		
317	61.128	1.15 11	

*Quṣṭanṭīniyya 865*

	MUḤAMMAD b.	KHALLADA MULKAHU	Pere 86
	MURĀD KHĀN	ḌARB QUṢṬANṬĪNIYYA	
318	63.40	0.90 10	

*No mint, 865*

	MUḤAMMAD b. MURĀD KHĀN	KHALLADA [MULKAHU]	Edhem 390 ff.;
	Circular legend		Pere 86
319	62.57	0.87 11	

## MANGHIR

*Amāsiya? [8]58?*

	ḌARB AMĀSIYA?	[MUḤAMMAD] b. [MURĀD]	
	x58	ʿAZZA NAṢRAHU	
		Divider bar joined to V's pointing	
		inwards at each end	
320	62.349	1.00 15-16	

*Ayāsuluq, 856*

	KHALLADA MULKAHU	Edhem 336
	MUḤAMMAD b.	
	MURĀD KHĀN	
	within linear circle surrounded by dots	

Dragon/snake head, date "852" at top left (engraver's error for 856);

AYĀSULUQ at right

*321	60.20	1.36 13
322	64.46	0.64 11-12
323	63.35	1.32 14-16
324	64.25	1.22 12-14

This curious design (sometimes described as a *basilisk*) may have been influenced by an Italian mint master. Sulṭān Murād was in Edirne in 852 H., and his son, the prince Muḥammad, was resident in Maghnāsa, close to Ayāsuluq. The prince was acting in a very independent manner—encouraging the attacks on the Venetian possessions by pirates. However, it would have been most unlikely for him to have authorized the striking of a coin in his name during his father's reign, thereby risking his head.

*Ayāsuluq? no date*

	KHALLADA MULKAHU	[MUḤAMMAD] b. [MURĀD]
	ḌARB [AYĀSULUQ]	ʿAZZA NAṢRAHU
	Dividing line with central knot device	Dividing line with V's pointing inwards
	and V's pointing inwards at each end	at each end
325	58.356c	1.27 11

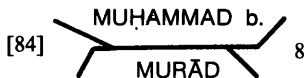
*Bursa, 848*

KHALLADA MULKAHU

ḌARB BURSA?

within hexagon surrounded by dots

326 64.92 1.31 13-14



cf. Edhem 231

*Bursa, 861*

KHALLADA MULKAHU

861

ḌARB BURSA

327 63.404 1.15 13

MUḤAMMAD b.

MURĀD

KHĀN

Edhem 347

*Bursa, date?*

KHALLADA MULKAHU

ḌARB BURSA

328 63.47 0.98 14

ʿAZZA NAṢRAHU?

*Bursa, no date*

KHALLADA MULKAHU

ḌARB BURSA

329 67.10 1.90 13

330 72.2 0.81 13

MUḤAMMAD b. (in center)

KHĀN ʿAZZA NAṢRAHU/MURĀD

(on three sides)

Edhem 358 ff.

*Bergama, no date*

MUḤAMMAD b. MURĀD KHĀN



KHALLADA MULKAHU

ḌARB BERGAMA

\*331 59.212 0.79 13

NY 1 3

*Tīra, 865*KHALLADA MULKAHU ḌARB  
TĪRA DIYĀR AYDINIn center: SULTĀN  
around: MUḤAMMAD b.  
MURĀD KHĀN ʿAZZA  
NAṢRAHU 865

Edhem 390

\*332 73.20 3.03 16-19

*Tīra?* [8]x8

MUḤAMMAD 8  
b. MURAD

divided by bar joined to V's pointing  
inwards at each end

333 63.57 1.12 12-13

KHALLADA. . . . .

ḌARB. . . ?  
within linear circle

*Tīra, no date*

KHALLADA MULKAHU  
ḌARB TĪRA  
Circular legend around a dot

334 63.119 2.94 14-16

MUḤAMMAD b.  
MURĀD KHĀN  
Field divided by flexed cable to r.

ʿAZZA NAṢRAHU  
[MUḤAMMAD b.] MURĀD  
KHĀN

Edhem 395

Circular legend around a small circle

\*335 73.40 3.06 17

336 61.26 2.52 18

337 63.15 2.29 16-18

KHALLADA MULKAHU



ḌARB TĪRA

338 58.127 0.76 14

339 63.890 0.41 13

340 67.561 0.46 11-12

341 60.201 2.56 14

MURĀD KHĀN



MUḤAMMAD b.

Edhem 406

*Tīra? date?*

?

MURĀD KHĀN

ʿAZZA NAṢR[AHU]

342 63.407 2.89 14-17

?

KHALLADA MULKAHU

TĪRA?

cf. Edhem 402

*Mint effaced, xx8*

MUḤAMMAD  
MURĀD b.  
. . . . . KHĀN

xx8

343 68.22 1.34 11-13

KHALLADA MULKAHU

Edhem 230

*Mint? date?*

Circular legend ending:  
MURĀD KHĀN

344 61.39 0.82 11-12

Legend illegible

*No mint, 86x?*

Legend illegible  
**345** 64.85 1.35 12-13

Legend illegible

cf. Edhem 347

*No mint, date illegible*

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

Effaced

b. MURĀD

**346** 62.1743 2.30 17  
**347** 62.1750 2.50 14-18

*No mint, date illegible*

b. MURĀD

KHALLADA MULKAHU

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_

. . . . .

**348** 62.1736 1.48 16-17

*No mint, date illegible*

MUḤAMMAD b.

Effaced, but three lines clear

MURĀD

**349** 63.536 1.34 18-19

*No mint, no date*

Legend obscure; perhaps:

Illegible;

. . . MUḤAMMAD. . .

MURĀD?. . . . .

**350** 62.1753 0.27 11

Small wheel with eight spokes in  
 linear circle

MUḤAMMAD b?. . . .  
 rest illegible

**351** 62.129 2.70 15

This was among coins found in the "West Room," as were **91** and **296-298**, *supra*.

Ornament

Ornament with illegible legend  
 around it

Edhem 399

**\*352** 73.72 2.33 17

Legend obscure

Legend obscure

**353** 63.676 2.19 16-17

**354** 63.678 2.03 17-22

Miles suggested that these may be coins of Muḥammad II.

Illegible

Illegible

**355** 1329 0.65 10



## BAYEZID II b. Muḥammad 886-918/1481-1512

AKÇE

*Qustaṅṭīniyya, 886*

ʿAZZA NAŞRAHU ǪARB

SULṬĀN  
BAYEZID

Edhem 450

QUSṬANṬĪNIYYA 886

b. MUḤAMMAD KHĀN

\*356 62.183 0.53 10

This coin was found among the Turkish houses west of Church E, as was 121.

MANGHIR

*Tīra, 889*

ʿAZZA NAŞRAHU



Edhem 543

88x

within single line border

\*357 61.13 0.86 10

*Tīra, no date*

SULṬĀN BAYEZID

KHALLADA MULKAHU (inverted)

TĪRA?

ǪARB TĪRA

divided by bar joined to V's pointing  
inwards at each enddivided by flexed cable within linear  
circle surrounded by dots

\*358 59.325 3.33 17

See Edhem 508 ff. for coins from Bursa mint with KHALLADA MULKAHU inverted.

[BAYEZID] b.  
MUḤAMMAD KHĀN

Edhem 379

around rosette, within linear circle

\*359 62.227 2.56 16-18

*Qustaṅṭīniyya, no date*SULṬĀN BA  
[YEZID] ǪARB  
QUSṬANṬĪNIYYA  
within linear circle

Edhem 468

\*360 65.146 1.40 12

	Ornament			
361	58.121	2.15	12	
<i>Mint? no date</i>				
	. . . . . b.			
	ʿAZZA NAŞRAHU			
362	64.51	1.12	10-11	

Inscription illegible  
QUSṬANṬNIYYA

ḌARB? . . .  
within linear circle surrounded by dots

*No mint, no date*

[SUL]ṬĀN  
. . . . .  
[BAYEZ]ID



Edhem 595

KHĀN

\*363 62.130 3.18 15

This coin was found in the same location as 91, *supra*.

SALĪM I (*Yavuz*) b. Bayezid 918-926/1512-1520

AKÇE

<i>Bursa? date?</i>				
	SALĪM SHĀH			
	b. BAYEZID KHĀN			
364	67.547	0.58	10-12	

ʿAZZA NAŞRAHU  
ḌARB [BURSA]  
xxx

<i>Qusṭanṭniyya, 918</i>				
	SALĪM SHĀH			
	b. BAYEZID KHĀN			
365	67.23	0.64	10	

ʿAZZA NAŞRAHU  
ḌARB  
QUSṬANṬNIYYA  
918

Edhem 627;  
similar to Pere  
144

<i>No mint, no date</i>				
	SALĪM SHĀH SULTĀN			
	b. BAYEZID			
366	64.170	0.50	11	
	Illegible			
367	60.183	0.94	10	
368	62.22	0.66	15	

Same as obv.

cf. Pere 136

Illegible

## MANGHIR

*Qustaṅṭīniyya, 918?*

SULTĀN [SALĪM SHĀH]  
b. BAYEZID [KHĀN]

ʿAZZA NAŞRAHU  
ḌARB  
QUSTAṆṬĪNIYYA  
SANA [9xx]

Edhem 631

369 62.40 1.23 13

*Qustaṅṭīniyya, 925*

Obscure legend in three lines

ḌARB . . .

QUSTAṆṬĪNIYYA

[SANA] x25

370 63.416 3.40 14-15

SULAYMĀN I (*Kanuni*) b. Salīm 926-974/1520-1566

## AKÇE

*Nişibīn, 926?*

SULAYMĀN  
KHĀN b.  
SALĪM KHĀN

ʿAZZA NAŞRAHU  
ḌARB  
NIŞİBTİN

926

in linear circle surrounded by dots

\*371 64.9 0.33 12

*Nuwār, 926?*

SULTĀN SULAYMĀN  
SHĀH b.  
SALĪM SHĀH

ʿAZZA NAŞRAHU  
NUWĀR  
SANA 962

Edhem 1053 ff.

372 59.43 0.68 13

## MANGHIR

*Edirne, 928?*

Illegible

ʿAZZA NAŞRAHU  
ḌARB  
EDİRNE 9xx

373 73.145 2.68 14

*Bursa, 926*

ʿAZZA NAŞRAHU  
ḌARB BURSA  
SANA 926



Edhem 834

within linear circle surrounded by dots

\*374 59.263 3.49 17



*Nuwār, 982*SULTĀN MURĀD b.  
SALĪM KHĀNʿAZZA NAŞRAHU  
ḌARB NUWĀR  
982

383 62.1729d

380-383, as well as 24 other akçes, (see note to coin 413), came from a single hoard found by chance in the Sardis region in February 1962.

*No mint, no date*

Legend obscure

Legend obscure

384 64.65 0.34 11-12

MANGHIR

*No mint, no date*

Legend obscure

Legend obscure

385 63.446 0.32 10-11

### MUḤAMMAD III b. Murād 1003-1012/1595-1603

AKÇE

*Edirne, 1003*MUḤAMMAD b.  
MURĀD KHĀNʿAZZA NAŞRAHU  
ḌARB EDİRNE  
[1003]

cf. Pere 340

386 62.1729o

387 62.1729p

*Bursa, 1003*SULTĀN MUḤAMMAD b.  
MURĀD KHĀNʿAZZA NAŞRAHU  
ḌARB BURSA  
[1003]

cf. Pere 340

388 62.1729q

389 62.1729r

390 62.1729s

*Balghrād, 1003*

As above

ʿAZZA NAŞRAHU  
ḌARB BALGHRĀD  
[1003]

cf. Pere 340

391 62.1729n

*Jānjā, 1003*MUḤAMMAD b.  
MURĀD KHĀNʿAZZA NAŞRAHU  
ḌARB JĀNJĀ  
[1003]

Pere 340

392 64.215 0.32 11

393 62.1729m

394 61.442 0.20 12 (broken)

*Qusṭanṭīniyya, 1003*

MUḤAMMAD b.  
MURĀD KHĀN

ʿAZZA NAŞRAHU  
ḌARB QUSṬANṬĪNIYYA  
[1003]

cf. Pere 340

395 62.1729e  
396 62.1729f  
397 62.1729g  
398 62.1729h

399 62.1729i  
400 62.1729j  
401 62.1729k  
402 62.1729l

*Nuwābarda? 1003*

MUḤAMMAD b.  
MURĀD KHĀN  
SULTĀN

ʿAZZA NAŞRAHU  
ḌARB NUWĀBARDA?

403 58.89 0.32 11

*Nuwār, 1003*

As above

ʿAZZA NAŞRAHU  
ḌARB NUWĀR

404 62.1729t  
405 61.225 0.71 11

*Mint illegible, 1003*

MUḤAMMAD b.  
[MURĀD KHĀN]

ʿAZZA NAŞRAHU  
ḌARB

406 62.1729u  
407 62.1729v  
408 62.1729w  
409 62.1729x

410 62.1729y  
411 62.1729z  
412 62.1729aa  
413 62.1729bb

380-383, 386-391, 393, 395-402, 404, and 406-413 all came from the same hoard.

*Mint? date?*

Legend illegible

Legend illegible

414 61.443 0.21 10

**AḤMAD I b. Muḥammad 1012-1026/1603-1617**

AKÇE

*No mint, no date*

Tughra  
SULTĀN AḤMAD KHĀN

Legend obscure

415 62.196 0.24 10

Legend illegible

Legend illegible

416 62.1733 0.26 15

417 61.33 0.17 10 (pierced)

## Ruler Illegible, Seventeenth Century A.D.

AKÇE

*Mint? date?*Legend illegible; Sulṭān's name  
and father's name

Legend illegible; mint name?

418 62.182 0.14 10

419 64.16 0.24 10

420 65.30 0.42 14-15

418 was found at the same location as 121, *supra*.

## MURĀD IV b. Aḥmad 1032-1049/1623-1640

SILVER—PARA

*Qusṭanṭīniyya, 1032*

Legend incomplete

Legend illegible with date  
10x2

421 60.89 1.70 15

## IBRĀHĪM b. Aḥmad 1049-1058/1640-1648

SILVER—AKÇE

*Qusṭanṭīniyya, 1049*SULṬĀN IBRĀHĪM b.  
AḤMAD KHĀNʿAZZA NAŞRAHU  
ḌARB QUSṬANṬĪNIYYA  
[1049]

BM 351

422 63.156 0.27 10-11

## MUḤAMMAD IV b. Ibrāhīm 1058-1099/1648-1687

SILVER—AKÇE

*Qusṭanṭīniyya, 1058*SULṬĀN MUḤAMMAD  
b. IBRĀHĪM KHĀNʿAZZA NAŞRAHU  
ḌARB  
QUSṬANṬĪNIYYABM 369;  
Pere 461

423 62.197 0.16 8-10

424 1065 0.43 14-15

425 60.26 0.19 12

426 65.12 0.27 10-11

SILVER—MEDIN

*Miṣr, date?*SULṬĀN MUḤAMMAD b.  
IBRĀHĪM KHĀNʿAZZA NAŞRAHU  
ḌARB MIŞR  
[1058]

427 62.20 0.52 14

## COPPER—MANGHIR

*No mint, date?*

	Legend obscure		Legend obscure
428	62.1757 1.59 16x19		
	Tughra?		Legend illegible
429	69.44a 1.35 13-16		
	Legend illegible; design obscure		Legend illegible
430	58.350d 1.0 13 .		

## SULAYMĀN II b. Ibrāhīm 1099-1102/1687-1691

## COPPER—MANGHIR

*Qusṭanṭīniyya, 1099*DURIBA FT  
QUSṬANṬĪNIYYA

Pere 471

SULAYMĀN b. IBRĀHĪM  
KHĀN AL-MUẒAFFIR  
DĀ'IM

in tughra form

431	58.2	1.82	20	451	64.62	0.99	19
432	58.307	4.13	22	452	64.67	1.61	20
433	60.82	1.34	14	453	64.68	2.02	20
434	60.83	1.24	19	454	64.69	0.85	20
435	60.200	1.34	18-20	455	64.70	1.05	18-19
*436	61.12	1.29	19	456	64.71	1.85	18
437	62.36	1.55	19	457	64.72	2.21	20
438	62.54	1.30	20	458	64.73	1.26	19-20
439	62.55	1.82	20	459	64.74	0.87	19-20
440	62.93	1.30	18	460	64.75	1.10	18-19
441	62.228	0.88	17	461	64.76	0.91	20
442	62.257	1.75	18	462	64.77	1.70	18-19
443	62.1755	1.18	19	463	64.200	0.70	19
444	63.24	1.92	19	464	65.28	1.15	19
445	63.56	1.15	17	465	65.33	1.66	19
446	63.568	2.01	19	466	65.63	1.34	19-20
447	64.10	1.75	19	467	67.4	2.41	20
448	64.11	1.23	19	468	68.346b	-	-
449	64.30	1.30	19	469	69.227	0.85	19-20
450	64.40	1.52	20	470	1423	2.17	13



*Sarāy, 1100*SULAYMĀN b. IBRĀHĪM  
KHĀN AL-MUẒAFFIR  
DA'IMḌURIBA FĪ  
SARĀY

Pere 472

in tughra form

*471	64.78	1.50	20
472	64.79	1.12	19
473	60.128	1.42	18
474	64.41	0.70	19

On Sulaymān II's large issue of copper akçe, see the introduction. Thirteen of the above listed coins, comprising eleven of Qusṭanṭīniyya and two of Sarāy, **451-461, 471-472** were found as a hoard in the PN village (PN W259/S345 \*88.25). Coins **463** and **465** were found in the Islamic village at PN above the level of heavy burning (*BASOR* 182, 25).

**AḤMAD III b. Muḥammad 1115-1143/1703-1730**

SILVER—AKÇE

*Qusṭanṭīniyya, 1115*

Tughra

ḌURIBA FĪ  
QUSṬANṬĪNIYYA  
1115*BM* 463

Letter preceding date illegible

475	65.22	0.25	13-14
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**MAḤMŪD I b. Muṣṭafā 1143-1168/1730-1754**

SILVER—PARA

*Qusṭanṭīniyya, 1143*

Tughra

ḌURIBA FĪ  
QUSṬANṬĪNIYYA  
1143*BM* 531The letters <sup>c</sup>*ayn-alif*, of uncertain significance, are to the left of the date

476	65.20	0.45	17
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**MUṢṬAFĀ III b. Aḥmad 1171-1187/1757-1774**

SILVER—AKÇE

*Qusṭanṭīniyya, 1171*

Tughra

Legend illegible

Pere 640

477	73.146	0.07	10
-----	--------	------	----

SILVER—PARA

478	61.214	0.15	14
-----	--------	------	----

ʿABD AL-ḤAMĪD I b. Aḥmad 1187-1203/1774-1789

SILVER—PARA

*Miṣr*, 118[7]  
Tughra

ḌURIBA FT MIṢR  
SANA

BM 733

118[7]

479 67.642 0.26 15

Ruler Illegible, Seventeenth or Eighteenth Century A.D.

SILVER—PARA

*Mint, date illegible*

480 67.551 0.38 13 (pierced)

481 67.552 0.37 10 (pierced)

482 58.367 0.20 11

483 62.1746 0.16 10

484 68.313 0.50 12-14

MAḤMŪD II b. ʿAbd al-Ḥamīd 1223-1255/1808-1839

Regnal year missing or as stated

SILVER—10 PARAS

*Qusṭanṭīniyya*, 1223

485 58.46 0.52 17 year 27

Ölçer Mahmud  
30 277

SILVER—20 PARAS

*Qusṭanṭīniyya*, 1223

486 1297 0.96 22 year 27

487 72.15 1.3 20 year 29

SILVER—PIASTRE

*Qusṭanṭīniyya*, 1223

488 58.4 0.49 17

Mentioned in *Sardis* RI (1975) 135; surface find.

SILVER—PARA

*Miṣr*, 1223

489 64.107 0.17 13-14

BM 997

BILLON—PARA

*Qusṭanṭīniyya*, 1223

490 58.332 1.38 21 year 25

Ölçer Mahmud  
30 275

*Miṣr*, 122[3]

Obscure (tughra?)

29

ḌURIBA FĪ

MIṢR

122x

BM 997

491 60.31 0.16 12 year 29

492 68.346f - -

493 68.346g - - (pierced)

494 69.224 0.52 15 (pierced)

cf. Ghalib 973

Three "sequins"—jewellers' pieces imitating gold coins of Maḥmūd II. Similar pieces were found in the Agora excavations (*Agora IX* (1962) 331).

ʿABD AL-MAJĪD b. Maḥmūd 1255-1277/1839-1861

Regnal year missing or as stated

BRONZE—5 PARAS

*Qusṭanṭīniyya*, 1255

Tughra

ʿAZZA NAṢRAHU 1255  
FĪ QUSṬANṬĪNIYYA SANA,  
5 in centre

BM 1089 ff.

495 67.548 1.72 20-21

496 58.5 2.85 22

497 58.321 1.7 21 year 5

BRONZE—10 PARAS

*Qusṭanṭīniyya*, 1255

Tughra

ʿAZZA NAṢRAHU 1255  
FĪ QUSṬANṬĪNIYYA SANA,  
10 in centre

BM 1086

498 58.285 5.28 27 year 19

499 60.185 5.52 27 year 19

500 65.111 5.4 28 year 20

BRONZE—20 PARAS

*Qusṭanṭīniyya*, 1255

Tughra

ʿAZZA NAṢRAHU 1255  
FĪ QUSṬANṬĪNIYYA SANA,  
20 in centre

BM 1078

\*501 65.32 7.52 28 year 16

As above

502 62.354 4.85 27 year 27

As above, but the value 20 is missing

## COPPER—5 PARAS

*Miṣr, 1255*

Tughra

ḌURIBA FĪ  
MIṢR  
1255

*BM 1124*

503 58.331 6.79 20 year 4

ᶜABD AL-ᶜAZĪZ b. Maḥmūd 1277-1293/1861-1876

## BRONZE—5 PARAS

*Qusṭanṭīniyya, 1277*

Tughra  
4 SANA

ᶜAZZA NAṢRAHU  
ḌURIBA FĪ  
QUSṬANTĪNIYYA  
SANA 1277

*BM 1168*

504 61.7 2.55 23 year 4

# ILLUSTRATIONS

All coins are shown 1:1. The Greek, Roman, Byzantine, Medieval and Modern coins and Lead were photographed from casts by Michael Nedzweski. Sardis field staff, notably Graydon Wood, photographed the Islamic coins themselves.



3



90



10



106



117



128



159



153



180



178



183



184



186



190



194



199



229



231



251



248



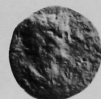
250



252



255a



255c









25



3



29



32



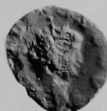
2



34



39



53



55



60



80



89



93(1)



97



93(2)



98



99



102



107



109



113





114



121



125



134



140



147



160



149



168



176



182



195



211



228



274



303



319



322



329





337



346



351



352



374



381



382



392



401



413



435



436



443



453



458



461



469



471



480



486



492



493



497



511



512



513





515



560



566



568



575



627



630



635



641



661



675



681



686



689



717



721



724



752



755



760



767



778



780



807



815





821



834



836



838



839



840



842



843



845



869



876



880



885



915



934



937



938



947



986



1056



1059



1067



1075



1077



1078



1082



1091



1094



1104



1105



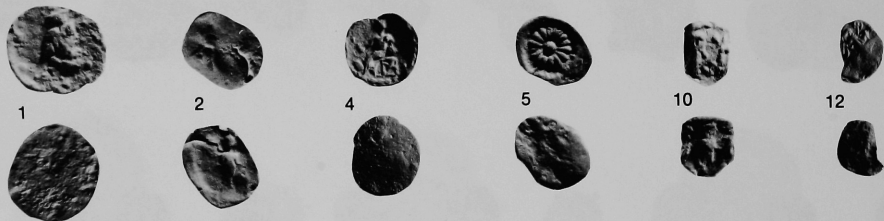
1107



Byzantine



Lead



Medieval and Modern





