FIDES

Contributions to Numismatics

IN HONOR OF RICHARD B. WITSCHONKE





Alan Roche

RICHARD B. WITSCHONKE

FIDES

Contributions to Numismatics in Honor of Richard B. Witschonke

EDITED BY
PETER G. VAN ALFEN
GILLES BRANSBOURG
MICHEL AMANDRY



THE AMERICAN NUMISMATIC SOCIETY

NEW YORK

2015

© 2015 The American Numismatic Society

ISBN 978-0-89722-339-3

Contents

Preface	vii
A Bibliography of Richard B. Witschonke	ix
KATERINI LIAMPI. A Hoard from Thessaly Containing Aeginetan Staters and Thessalian Issues of the <i>Taurokathapsia</i> Type	1
Andrew Burnett and Maria Cristina Molinari. The Capitoline Hoard and the Circulation of Silver Coins in Central and Northern Italy in the Third Century BC	21
PETER VAN ALFEN. A Late Third Century BC Hoard of Sardo-Punic Bronzes (IGCH 2290)	127
GILLES BRANSBOURG. Currency Debasement and Public Debt Management at the Time of the Second Punic War	141
DAVID VAGI. Alliance and Coinage: South Italy during the Second Punic War	159
Andrew McCabe. A Hoard of Cut Roman Republican <i>Denarii</i> from the Second Punic War	221
François de Callataï. The Late Hellenistic Didrachms of Leukas: Another Case of Greek Coinage for the Roman Army	239
Andrew R. Meadows. Four Cistophoric Hoards?	279
WILLIAM E. METCALF. The Cistophori of Nysa	311
NATHAN T. ELKINS. "A City of Brick": Architectural Designs on Roman Republican Coins and Second-Style Wall Painting	321
LIV MARIAH YARROW. Ulysses's Return and Portrayals of <i>Fides</i> on Republican Coins	335
CLIVE STANNARD. The Labors of Hercules on Central Italian Coins and Tesserae of the First century BC	357
MICHAEL H. CRAWFORD. Sextus Pompeius between Hispania and Germania	389
PHILIP DAVIS. Erato or Terpsichore: A Reassement	393
Bernhard E. Woytek. The Aureus of Pompey the Great Revisited	403
DAVID HENDIN. Judaea and Rome: The Early Numismatic Commentary, First Century BCE	427

PATRICK VILLEMUR. De Quelques Émissions Coloniales Romaines en Sicile:	
Retour à Tyndaris	435
Sophia Kremydi and Athena Iakovidou. Corinth and Athens: Numismatic	
Circulation from the Late Republic to the High Empire	457
JANE DEROSE EVANS. The Third Neokorate of Sardis in Light of a New Coin Type	
Found in Sardis	485
MICHEL AMANDRY. Le Monnayage de la Res Publica Coloniae Philippensium:	
Nouvelles Données	495

PREFACE

This volume had its genesis, appropriately enough, among friends enjoying a fine lunch provided by a host, who as it happened was not at the table due to a scheduling conflict. The discussion of coins, wine, and the importance of friendship that afternoon naturally led to the consideration of ways to thank our host for his habitual generosity. Many who knew him were at one time or another a guest at his table; these moments of good cheer and serious conversation, he felt, were the best way to explore ideas in numismatics, to think of grand new projects, and to bring together old colleagues and new friends in an attempt to ever widen the circles of knowledge and acquaintance. As a host, he preferred to ask questions and let others do the talking, to recede to the sidelines (that afternoon to the point of invisibility!), convinced that his role was secondary to the "real" work of others. We all knew this not to be true. Although he modestly considered himself no more than an amateur, there is no question he made substantial contributions to numismatic scholarship, stewardship, and education. A volume of essays in his honor seemed the right answer for all he had done for us individually and collectively.

The enthusiastic response to the *Festschrift* for Richard Beyer Witschonke, "Rick" to most all who knew him, proved the value of the man and the project. Sadly, he did not live to see it completed, although he took great pleasure in reading early drafts of many of the papers. His decade-long battle with cancer, in which he displayed his typical good cheer and immense fortitude, came to an end on 24 February 2015. Now as a *Gedenkschrift*, we hope that this volume will serve as a fitting tribute to an exceptional individual.

Born in 1945 and raised in Connecticut, Rick graduated from Harvard Business School in 1972 with an MBA with high honors and took a position with American Management Systems (AMS), a technology consulting firm. Rick worked for AMS for most of his career, and after leaving the company in 2000, he continued to work in technology consulting in California before deciding to retire to Califon, New Jersey, to be with his partner Heidi Becker in 2003. Soon thereafter, he began to volunteer several days a week at the American Numismatic Society (ANS) in New York City, before becoming a Curatorial Associate in 2006. Numismatics, especially the coinage of the Roman Republic, had long been a major passion of his; another collecting passion was fine wine.

Rick's coin collecting interests began as a teenager. In 1960 at age 15, he obtained a Roman Republican denarius from a Lu Riggs auction. His interest in *denarii* intensified after reading Edward A. Sydenham's *The Coinage of the Roman Republic* (1952), which inspired him to learn more about Republican coinage in general. Republican period coinage was his major collecting focus for the next several decades, during which time he assembled an impressively comprehensive collection of Roman Republican and provincial coins. Most of the Republican collection was sold over the last several years and is featured in the the 2013 Numismatic Ars Classica publication *The RBW Collection of Roman Republican Coins*. The second part of his collection, almost 3,500 Provincial coins of the Republican period he bequethed to the ANS. This absolutely unique group of coins, probably the only area of Roman coinage that has never been properly catalogued, is comprised of coins from the third to first centuries BC, produced in various parts of the Mediterranean region under Roman control. A volume on this portion of the collection will be published in the near future by the ANS.

Rick's affiliation with the ANS began after his first visit in the late 1960s, when he became, for a while, the ANS's youngest member. In 1999, Rick was elected a member of the Society's Governing Council and served one term as an ANS Trustee. Where he felt better able to serve the Society, however, was in the curatorial department helping with the care of the Roman collection, and in sharing his passion for coinage with Summer Seminar students. With his immense enthusiasm for teaching and his conviction that the Seminar is one of the most important activities of the ANS, since it helps to train the next generation of numismatists, Rick was asked to co-direct the Seminar in 2006. Thanks to his enormous input and energy, an already good program was turned into a great program. His commitment to teaching was demonstrated again in the summer of 2014, when he was already in steep decline from the cancer and in tremendous pain; he still insisted on coming into the Seminar to teach his full roster of sessions.

Although he never considered himself a scholar, Rick nevertheless shared his vast knowledge of Republican coinage in a series of critical articles published by several of the most respected numismatic periodicals and helped as well to edit *Festschriften* for his close friends, one for Charles Hersch that appeared in 1998, and another for Roberto Russo, that appeared in 2013. Perhaps his greatest contributions to scholarship, however, stemmed from his experience as a businessman. A quick study, highly decisive, and hugely pragmatic, he was able to undertake large scale, complicated projects and see them to fruition. At the same time, he demonstrated an amazing openeness to new ideas and perspectives, investing his time, resources and energy in assessing and launching new projects. Such traits were well demonstrated by the computerized die-recognition project he launched and financed, now being further developed by the ANS, which promises to create a software package for automating die studies that will be available in the near future. He also played an important role in the early stages of the ANS's various digital project initiatives, including Nomisma.org, and more recently in helping to organize and launch Coinage of the Roman Republic Online (www.numismatics.org/crro) and Coin Hoards of the Roman Republic (www.numismatics.org/chrr).

As is always the case, a volume such as this one would not have been possible without the assistance, diligence, and hard work of others not named on the title page or in the table of contents. Here we must thank Ute Wartenberg for her immediate and full support of the volume; Andrew Reinhard for his excruciating eye for editorial detail; Aadya Bedi and Alan Roche for image assistance; and Muserref Yetim, whose typesetting and design have given this book life.

Peter G. van Alfen

Gilles Bransbourg

Michel Amandry

A BIBLIOGRAPHY OF RICHARD B. WITSCHONKE

Edited Volumes

Co-editor. 2013. Essays in honour of Roberto Russo. Zurich and London: Numismatic Ars Classica AG.

Co-editor. 2008. One hundred years of solicitude: collecting by the New York Numismatic Club. New York: American Numismatic Society.

Co-editor. 1998. Coins of Macedonia and Rome: essays in honour of Charles Hersh. London: Spink and Son.

Editor. Manuscript: C. Hersh. Sequence marks on the coinage of the Roman Republic. (Rare books, ANS Library).

Articles and Chapters

Author. 2013. Some unpublished Roman Republican coins. In: P. van Alfen and R. Witschonke, eds. *Essays in honour of Roberto Russo*. Zurich and London: Numismatic Ars Classica AG, pp. 305–363.

Author. 2012. The use of die marks on Roman Republican coins. *Revue belge de Numismatique* et de Sigillographie 158: 63–84.

Author. 2010. Nine new numismatists: 2010 Eric P. Newman Graduate Seminar. *ANS Magazine* 9.3: 46–51.

Author. 2009. Guest editorial. Celator. 23.1: 2.

Author. 2009. "There is much more to the study of numismatics...": the 2009 ANS graduate seminar. *ANS Magazine* 8.3: 42–45.

Author. 2008. The H denarius rehabilitated. Numismatic Chronicle: 141-144.

Author. 2008. Better late than never: Newell manuscript finally published. ANS Magazine 7.3: 32–36.

Author. 2008. Frank Campbell: an appreciation of five decades of service. ANS Magazine 7.1: 52-54.

Co-author. 2008. Q. Aemilius Lepidus (Barbula?) cos. 21 B.C. Historia 57.2: 174-207.

Editor. 2008. Coins from the excavations at Beisa (Nysa-Scythopolis, Tel Beth Shean), 1929–1935. *American Journal of Numismatics* 20: 1–52.

Author. 2007. The 2007 summer seminar. ANS Magazine 6.1: 60–61.

Author. 2007. The 2007 graduate seminar. ANS Magazine 6.3: 56-60.

Author. 2005. Volunteer impressions. ANS Magazine 4.3: 43.

Author. 2005. Volunteer impressions: the ANS photofile. ANS Magazine 4.2: 34–35.

Author. 2005. Michael Bates: a brief biography. ANS Magazine 4.3: 44-48.

Co-author. 2004–2005. Another Fimbria cistophorus. *American Journal of Numismatics* 16-17: 87–92.

Author. 1998. Some late "early" Republican *quinarii*. In: A. Burnett, U. Wartenberg, and R. Witschonke, eds. *Coins of Macedonia and Rome: essays in honour of Charles Hersh*. London: Spink and Son, pp. 137–138.

Book Reviews

Author. 2008. Rev: Hollander, Money in the Late Roman Republic. ANS Magazine 7.2: 59–60.

Author. 2007. Rev: Draganov, Sylloge nummorum Graecorum Bulgaria. ANS Magazine 6.2: 69.

Corinth and Athens: Numismatic Circulation from the Late Republic to the High Empire

Sophia Kremydi and Athena Iakovidou*

The aim of our contribution is to present and discuss circulation patterns in two major cities of the province of Achaia: Corinth and Athens. These two cities offer representative examples of communities with different legal statuses and monetary histories that have been systematically excavated, mainly by the American School of Classical Studies at Athens. The sufficient amount of numismatic material that has been published enables the parallel study of their numismatic finds. When examined as a body, coin finds reveal important information that allows us to draw conclusions concerning the role of Roman currency in the local economy or the range of visitors to a given city. In this paper we intend to discuss numismatic circulation and search for emerging patterns and local particularities.

Corinth, capital of the province and chair of the governor, developed into an important international trade center that controlled the passage from Italy to the Aegean. A Roman colony was founded by Julius Caesar in 44 BC on the site of the city that had been violently destroyed during the Achaian war and had continued to live in decline for over a century. Coinage had ceased at Corinth by the beginning of the second century BC and was revived shortly after the foundation of the colony. The local mint produced regular issues of an important size until the time of the first Severans and was probably the most prolific mint in Achaia during the early Imperial period. In this paper we intend to examine numismatic circulation at Corinth from the time of the foundation of the colony until the

457

(2001), the BCD Collection.

^{*}Section of Greek and Roman Antiquity (KERA), Institute of Historical Research (IHR), National Hellenic Research Foundation (NHRF). This work was performed in the framework of the "Kyrtou plegmata" project within GSRT's KRIPIS action, funded by Greece and the European Regional Development Fund of the European Union under the O. P. Competitiveness and Entrepreneurship (NSRF 2007–2013) and the Regional Operational Program of Attica.

^{1.} For recent synthetic studies on Roman Corinth see: Friezen, Scholwalter, and Walters 2010; Williams and Bookidis 1990. 2. On the coinage of Corinth see: Amandry 1988; RPC I, 249–258, nos. 1116–1244; RPC II, 56–63, nos. 101–218; Lanz 105

reign of Gallienus. The reign of Gallienus marks a turning point when most provincial mints ceased their production and was therefore chosen as an ending terminus for our study. The choice of this date enables comparisons between the material or the currency in the two cities and furthermore it offers the opportunity to examine the currency that circulated in Corinth during the first half of the third century AD, when the city had no coinage of its own.

Athens had sided with Mithridates during the war against Rome and fell into the hands of Sulla in March of 86 BC. The city was captured and vandalized by Roman troops and temporarily deprived of its prestigious status as civitas libera et foederata. After the final defeat of Mithridates in 84 BC, the constitution was changed to favor Roman interests and the privileged status of the city was restored. During the Empire, Athens continued to play the role of an international cultural center and attracted the interests of emperors and wealthy Roman citizens.³ Athenian coinage, in decline from the third century BC, had never ceased completely. There was a revival of silver issues after the acquisition of Delos in 167/6 BC with the production of the abundant *stephanephoroi* and its accompanying bronze. After the cessation of their production in the early 40s BC the silver coinage of Athens became extremely scarce, but bronze was issued continuously down to the time of Augustus. According to the classification proposed by Kroll and Walker, Athens produced a very prolific bronze coinage between the period of the Mithridatic wars and the reign of Augustus (86-10 BC, Period IV) when minting was interrupted for over a century. Coinage was subsequently revived for an important part of the second century AD (ca. AD 120s-ca. AD 170s, period V), whereas a last period of intense monetary production at Athens coincided with the final years of the reign of Gallienus (AD 264-267, period VI).4 Unlike Corinth and many other provincial cities, numismatic production at Athens during the Imperial period was erratic with important gaps between the various periods of issue.

The data we shall discuss in this paper have been compiled from the published excavation finds of the two cities. For Corinth the material relies on the volume *Corinth* VI, where Edwards published the stray finds of the years 1896–1929. For the following years we have used the excavation reports published in *Hesperia*, to which we have added the recent publication of the finds of Kenchreai, as well as the *Corinth* monograph series that present accounts of excavation coins. For Athens we have based our conclusions mainly on the material of the Agora, published by John Kroll and Margaret Thompson, with the addition of some reports published in the *Hesperia*. Apart from the finds of the Agora, no other numismatic finds from Athens have been systematically published. The complete list of publications on which this paper has been based can be found in the appendix at the end of this chapter.

The numismatic material has been divided into three different categories of coins—local, Roman, and provincial—that are discussed separately. The provincials include the Roman provincials but also some late Hellenistic coins, when they fall into the chronological range we are examining. Coins deriving from hoards or deposits discovered during the excavations have been added to our material. Some hoards have also been discussed as a body since they provide important information concerning the duration of circulation of monetary issues and therefore help to interpret the data of the stray finds.

^{3.} On the history of Roman Athens see: Geagan 1979, 373–437. On monuments, architecture and identity see the collective volume: Vlizos 2008.

^{4.} On the coinage of Athens in the Roman period: Kroll 1993; Kroll 1997a, 131–150; Kroll 1997b, 61–73; Tselekas 2008, 473–485.

^{5.} These include finds from the North Cemetery, the road to Lechaion and the sanctuary of Demeter and Kore on the Acrocorinth.

Chronological divisions of the material aim at understanding the evolution of circulation patterns. The material has been divided into successive chronological groups that roughly correspond to centuries. For Corinth, our first group begins with the foundation of the colony and ends with Domitian (44 BC–AD 96), the second includes the reigns between Nerva and Commodus (AD 96–192), whereas the third group includes issues from the time of Septimius Severus until the reign of Gallienus (AD 193–268). For Athens, since our starting date is earlier, we have divided our material into four groups. Our first group (86–31 BC) begins with the capture of Athens by the Romans, a crucial turning point for the history of the city that marks the permanent establishment of Roman control and ends before Actium. This period coincides with Kroll's periods IVa and IVb of the Athenian coinage. Our second group includes the reigns between Augustus and Domitian (Athens strikes coins only until AD 10, Kroll's periods IVc-IVe), whereas the next two groups follow the same pattern as the Corinthian coins, i.e., Nerva to Commodus the third and Septimius Severus to Gallienus the fourth. In the chronological division of the provincial issues (Tables 1 and 2) we have treated the issues of the early Severans as a separate group, since they form a very large group that falls on the turning between the second and third centuries AD.

CORINTH

Local Coinage

As one would certainly expect, the Corinthian coinage forms the majority of the currency found at Corinth, although its percentage, 66% (Fig. 1), is lower than at Athens where local coins represent the 85% of the numismatic material (Fig. 9). The division of the data from Corinth into chronological periods offers further information and raises certain questions. For the period between 44 BC and AD 96 we have 1,329 Corinthian coins out of a total of 1,505 that amounts to a percentage of 88% for the local coinage (Fig. 2). This gives us a rate of 9.5 coins per year. For our second period (AD 96–192) we have 207 local coins out of a total of 534, a percentage of 39% and approximately two coins per year (Fig. 3), whereas for our third period (AD 193–268) we have 110 Corinthian coins out of 643, a percentage of 17% or 1.4 coins per year (Fig. 4).

The first century local coins seem to be much more abundant at Corinth; however, some methodological limitations should been taken into consideration before drawing conclusions from this data. The percentage of second and third century coins, is based on a much smaller number of specimens and may be less representative, for reasons that we need to explain. Certain publications containing an important number of Corinthian coins do not offer sufficient details but describe the coins either as "coins of the duovirs", as "anonymous," or as "Imperial coins" with no further information on their dates. The total numbers of Corinthian coins per emperor, including these undated issues can be found on Fig. 5. These undated coins naturally raise difficulties when one needs to draw conclusion concerning the chronological distribution of the material. The coins of the duovirs, whose production was restricted between 44 BC and the reign of Galba, have naturally been added to our first group,

6. Mainly Edwards 1937, 251 and Harris 1941, 147; also Williams and Fischer 1976, 149, no. 81, Williams and Zervos 1985, 86, no. 32, and Williams and Zervos 1991, 46, no. 17.

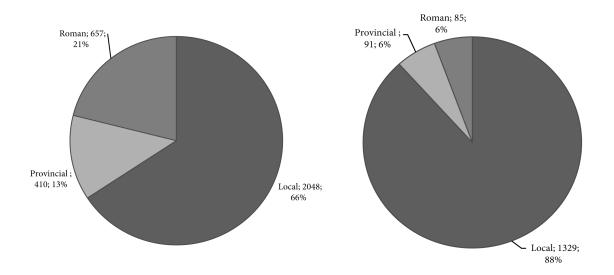


Figure 1. Corinth. Coins dated 44 BC-AD 268. Figure 2. Corinth. Coins dated 44 BC-AD 96.

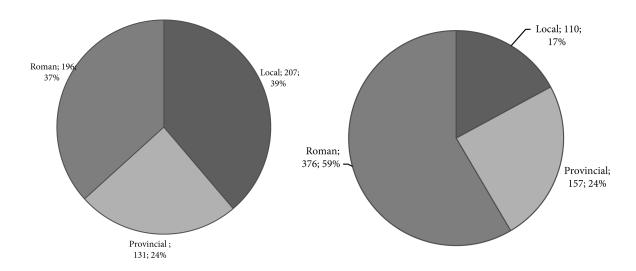


Figure 3. Corinth. Coins dated AD 96–192. Figure

Figure 4. Corinth. Coins dated AD 193-268.

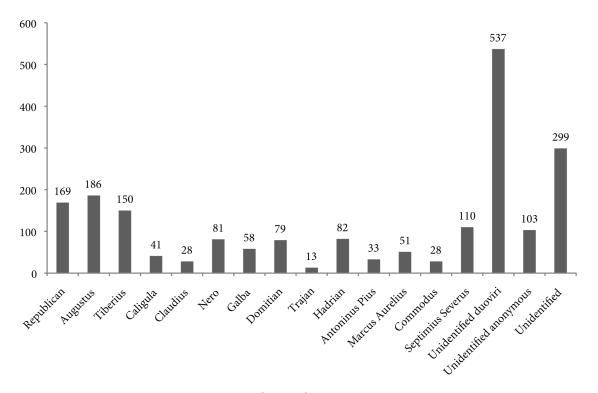


Figure 5. Corinth. Local coins per Emperor.

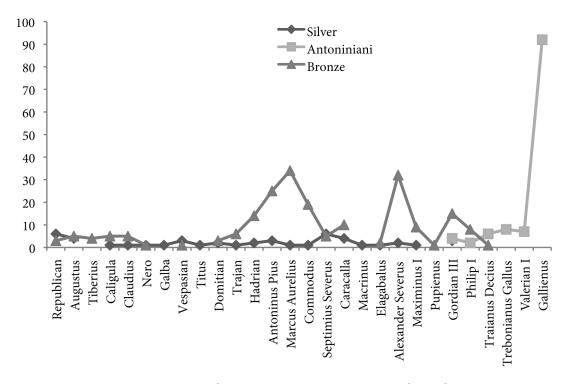


Figure 6. Corinth. Roman coins per Emperor and metal.

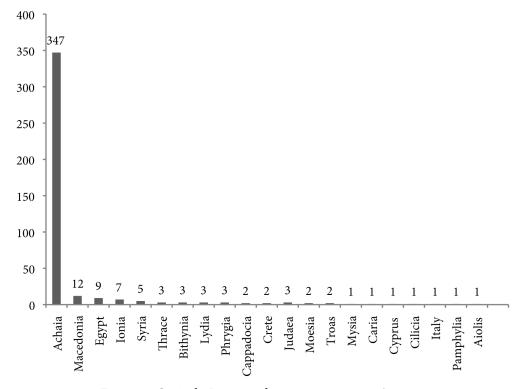


Figure 7. Corinth. Provincial coins per province/region.

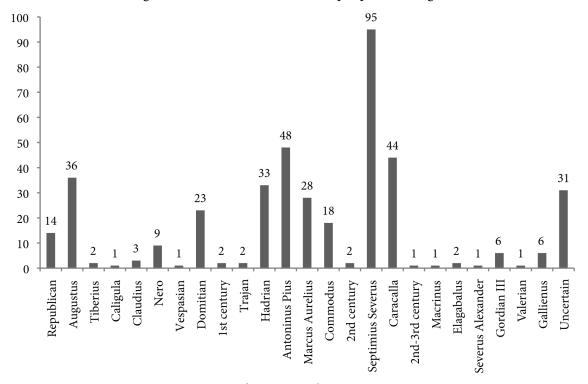


Figure 8. Corinth. Provincial coins per Emperor.

Table 1. Corinth. Provincial Coins per Mint

Province/Region	Mint	1st cent.	2nd cent.	Severans	3rd cent.	Uncertain date	Total
Italy	Paestum	1					1
Crete	Knossos	1					1
	Koinon of Crete					1	1
Achaia	Aigeira			2			2
	Aigion		2	2			4
	Argos		55	55	1		111
	Arkadia (uncertain city)			1			1
	Athens	8	6		3	19	36
	Bouthrotos					1	1
	Chalkis	5					5
	Delphi		2				2
	Dyme	3					3
	Elis		1				1
	Epidauros		4	1			5
	Gytheion			2			2
	Heraia			2			2
	Hermione			1			1
	Kleonai			5			5
	Korkyra		1			1	2
	Kyparissia			1			1
	Megalopolis			3			3
	Megara		2	5			7
	Messene			1		1	2
	Methana			3			3
	Mothone			3			3
	Nikopolis	3	3	2			8
	Orchomenos			4			4
	Pagai		1				1
	Patras	10	25	9		1	45
	Pellene			1			1
	Peparethos					1	1
	Phigaleia			1			1
	Phlious			1			1
	Psophis			1			1
	Pylos			1			1

Table 1 (Continued)

Province/Region	Mint	1st cent.	2nd cent.	Severans	3rd cent.	Uncertain date	Total
	Sikyon	2		12			14
	Sparta	8	12	2	1		23
	Syros		1				1
	Tanagra	4				1	5
	Thelpoussa			3			3
	Thespiai	21					21
	Thessaly uncertain city	1			1		2
	Thessalian League	1					1
	Thouria			5			5
	Troizen		1	4			5
	Zakynthos	1					1
Macedonia	Amphipolis	1					1
	Dion		1			1	2
	Koinon of Macedonia		2		1		3
	Stobi					1	1
	Thessalonike	4		1			5
Thrace	Anchialos				1		1
	Hadrianopolis				1		1
	Perinthos				1		1
Moesia	Markianopolis				1		1
	Viminacium				1		1
Bithynia	Nikomedeia	1	1	1			3
Mysia	Pergamon		1				1
Troas	Alexandreia Troas			1			1
	Ilion			1			1
Aiolis	Kyme				1		1
Lydia	Maionia			1			1
	Sardis	1	1				2
Ionia	Chios					1	1
	Ephesos	1	1	1			3
	Magnesia on the Maiander					1	1
	Phokaia		1				1
	Samos				1		1
	5411100				1		1

Province/Region	Mint	1st cent.	2nd cent.	Severans	3rd cent.	Uncertain date	Total
Caria	Rhodes	1					1
Phrygia	Apameia	1					1
	Kibyra	1					1
	Synnada		1				1
Pamphylia	Aspendos				1		1
Cappadocia	Kaisareia		2				2
Cilicia	Kelenderis	1					1
Cyprus	Paphos or Salamis					1	1
Syria	Antiochia on the Orontes	3		1	1		5
Judaea	Kingdom of Judaea	3					3
Egypt	Alexandria	4	4		1		9

Table 1 (Continued)

whereas the other two categories had to be omitted from our statistics since their dating cannot be defined on the evidence provided in their publication. The addition of these 402 insufficiently dated coins to our material would, to a certain extent, alter the picture but the number of Corinthian coins of the second and third centuries would still remain limited compared to those of the first.

The limited number of Corinthian coins of our third group (AD 193-268) can be easily accounted for, since Corinth only minted for about thirteen years (AD 193-205) under Septimius Severus. If we therefore only take these years into consideration, the rate of coins per year is 8.5, comparable to the 9.5 coins per year of the first century. But the scarcity of the Corinthian coins of the second century is more difficult to interpret. Two possible explanations could be envisaged: this could either reflect the stratigraphic layers that have been excavated, or it could be the result of a restricted monetary production in the second century. The first hypothesis is possible, but not consistent with the evidence of the other two categories of coins—Roman and provincial—which do not show any reduction in the absolute numbers of the different chronological groups. The second hypothesis cannot be proven, since there is no published die study for the Corinthian coinage after the reign of Galba. Available evidence, however, does not enforce this hypothesis. If we accept that the number of coins in important collections roughly represents the volume of a coinage, then we may note that the BCD collection of Corinthian coins⁷ does not confirm the evidence of the Corinth excavations. Out of the 675 coins of the Roman colony of Corinth in this collection, 261 belong to the period between 44 BC and Domitian, 259 to the period between Trajan and Commodus and 155 to the Severans. Unlike the material from the site, there is no significant difference in volume between the first and second century coins in this collection, suggesting that there was no important decrease in production during the second century. The unpublished material from RPC III furthermore, suggests a very high production at Corinth under Hadrian, in contrast with a very restricted production under Trajan.8 It is therefore clear that

^{7.} Lanz 105 (2001), The BCD Collection.

^{8.} Information from Michel Amandry, whom we thank.

stray finds should be used with caution and not considered as a secure indication of the volume of coin production.

Roman coinage

Roman coinage, on the other hand, shows a gradual increase not only in percentage but also in absolute numbers from the time of the late Republic to the middle of the third century AD (Figs. 2–4). In the important sample of material from our first period, the 85 Roman coins, only 6% of the total currency, are 57% bronze and 43% silver. The silver are mainly *denarii* of Marcus Antonius and Augustus, whereas the bronze are mostly *assaria* of the Julio-Claudian dynasty. During the second century Roman coins become much more frequent at Corinth. They represent 37% of the total coins' sample and—in absolute numbers—196 coins. Out of these, 92% are bronze, mostly *sestertii* of Hadrian and the Antonines and to a smaller extent *asses*. By the third century—and for the period between the early Severi and Gallienus—Roman coins form the majority (59%) of the coins that have been discovered on the site. Their high percentage is partly explained by the very large number of *antoniniani* which date to the reign of Gallienus as well as by the fact that Corinth, and most of the other mints in the Peloponnese, stopped producing civic coins after Septimius Severus.

If we examine the distribution of the various denominations by emperor (Fig. 6)9 we may note the stable presence of the *denarii* and its subdivisions from the time of the late Republic until the reign of Gordian III. The numbers are small but silver coins are always scarce amongst stray finds since they are rarely lost because of their larger value. After Gordian III the *denarii* are minted only occasionally and at Corinth these rare issues are totally absent. The exceptionally large numbers of *antoniniani* that date to the time of the sole reign of Gallienus¹⁰ reflect the conditions of high insecurity which prevailed because of the invasions of the Heruli in AD 267. Although there is no direct literary evidence that Corinth was sacked by the German warriors and the discussion remains open, coin finds reflect an important unrest in the city during this period.¹¹ Furthermore, the reign of Gallienus formed a turning point in the presence of Roman currency. Even though it extends the chronological range of this study it is worth mentioning that in the second half of the third century we have 30 coins for Claudius II who reigned for only three years, 121 coins for Aurelianus, 82 for Probus, and 270 for the period of the Tetrarchy. It is therefore clear that after the reign of Gallienus, Roman coins at Corinth are found in relatively larger numbers than previously, a fact which is certainly related to the more extended use of Roman currency in provincial cities, after the end of their own issues.

As can be also seen on Fig. 6, Roman bronzes of the late Republic and the first century AD—mainly *asses* and *dupondii*—are relatively few. In the second century there is an important increase in the number of Roman bronzes that began under Trajan and reached its peak under Marcus Aurelius. Amongst the finds of the third century the number of bronzes is more moderate with a considerable increase under Alexander Severus. The second and third century bronzes found at Corinth are mostly

^{9.} It should, however, be noted that the data concerning denominations derives only from that part of material for which these are mentioned in the publications. For our first group 47 out of 85 coins (55%), for our second 106 out of 196 (54%) and for our third 220 out of 376 coins (59%).

^{10.} The number of coins of Gallienus are certainly higher than those on our Fig. 7, since 78 coins have been excluded because their denomination is not identified in their publication, although they must all have been *antoniniani*.

^{11.} For discussion see: Spoerri-Butcher and Casoli 2012, 130-131, n. 49.

sestertii, a denomination struck abundantly at Rome and very popular in the provinces, as can be confirmed by the hoard evidence.¹²

Information on the provenance of the Roman coins is not always complete. In fact we only have a mint identification for 44% of our material (290 specimens). Although the evidence is rather limited the results are interesting. For the period between 44 BC and AD 96 we find 26 coins from Rome and eight from various other mints that, with the exception of a halved as of Augustus, are all silver.¹³ For the second and the first half of the third century AD all Roman coins found at Corinth come from the mint of Rome. The picture changes for the reigns of Valerian I and Gallienus. One hundred and thirteen out of 144 coins (78%) come from Rome, whereas 15 come from Asian mints (10%). Coins from mints in the west and the Balkans are more rare, seven (5%) from Mediolanum and six (4%) from Siscia.¹⁴

Provincial coinage

The list of provincial mints whose coins circulated at Corinth, and their chronological distribution can be found on Table 1. Even at a cosmopolitan trade center such as Corinth, the large majority of provincial coins come from neighboring cities: 85% come from cities in the province of Achaia out of which 76% are Peloponnesian. The remaining 15% come from more distant regions confirming the fact that provincial coinage had mostly a regional circulation (Fig. 7).

When examining the presence of individual mints one needs to note the high number of coins from Argos beginning in the second century when the city inaugurated its provincial coinage. Argos, one of the most prolific mints in Achaia was a neighboring city with close ties—but also rivalries with Corinth. Other Peloponnesian mints that are well represented on this list are either those with a considerable production such as Patras and Sparta or those that are especially close to Corinth, such as Sikyon. The significant number (36) of coins from Athens shows contacts between the two cities, a fact that is confirmed by the finds of Athens where Corinthian coins are found in even larger numbers (Table 2). The presence on our list of 21 coins from the small city of Thespiai in Boiotia, all dating to the reign of Domitian, is exceptional.¹⁵ This numismatic evidence shows an exceptional relationship between the two cities, which is confirmed by other sources. 16 The presence of coins from Nikopolis and Patras shows a movement of people from the West, whereas coins from several cities in the Eastern provinces of Asia and Syria show contacts with the Eastern part of the Empire. Coins from the Northern regions and provinces are more scarce: Thessalian and Macedonian coins are relatively rare, whereas the few coins from Thrace and Moesia, all date to the third century, a period when the movements of military troops were more frequent. The circulation pattern that emerges from this study is in accordance with that provided by Engels whose conclusions, however, need to be nuanced. According to Engels: "The relative number of coins indicate that north-south trade between Egypt, North

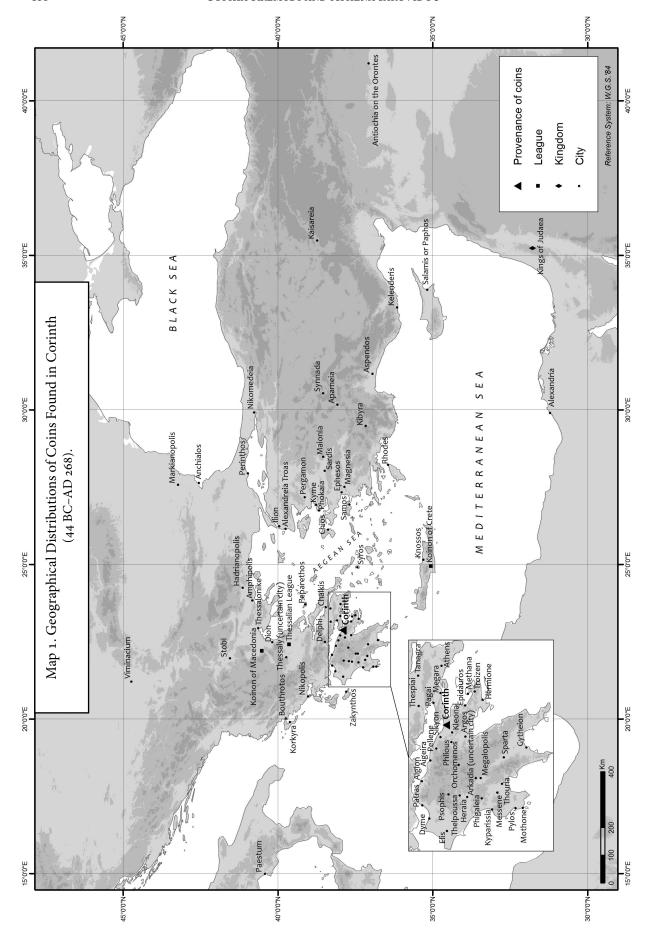
^{12.} Touratsoglou 2006, 156–157 has shown that Roman bronzes, and especially *sestertii*, which were very popular in hoards from Achaia, were much more rare in Macedonia where the local bronzes prevailed.

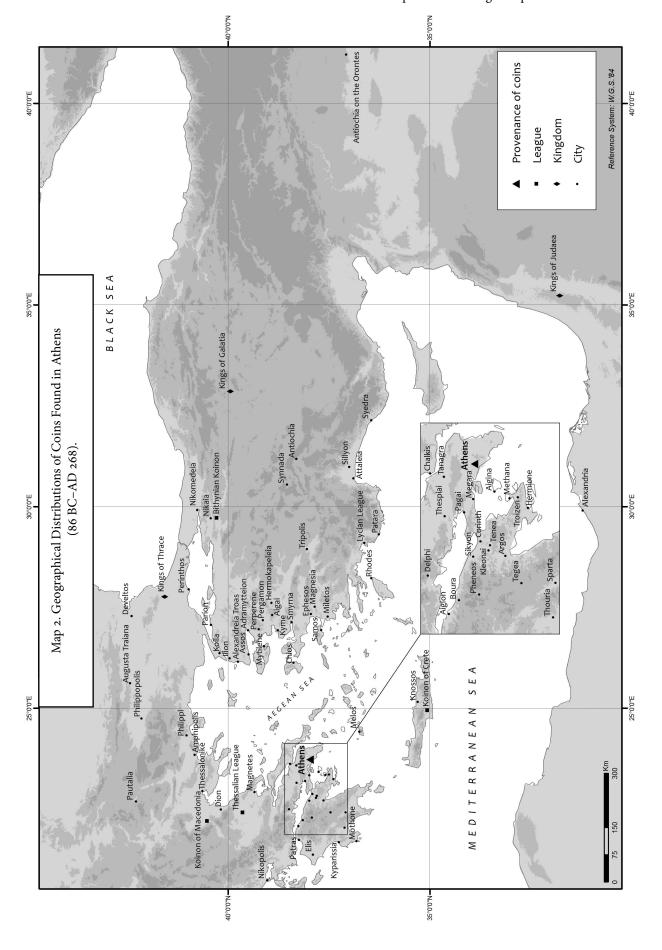
^{13.} These are two coins of Marcus Antonius, one from Gaul and one from Ephesos, five coins of Augustus, three from an eastern mint, one from Lugdunum and one from Pergamon, as well as one coin of Titus from Antiochia.

^{14.} The other 3% comes from coins with uncertain attribution.

^{15.} In Roman times Thespiai only minted coins under Domitian. For the relations of the city with Domitian see: Schachter and Marchand 2013, 292–294. For the frequent presence of the *gentilicium* Flavius at Thespiai see: Müller 1996, 163.

^{16.} Robert 1946, 5-14; SEG XLV (1995), 454; SEG XLVI (1996), 537; Müller 1996, 164-165; Jones 2004, 93-95.





Africa and northern Greece was less important than east-west trade."¹⁷ The circulation of bronze coins is an index of the movement of people, which could be due to various reasons: administrative business, visiting festivals and games, war and also trade. The provincial bronzes therefore, whose use was confined to local markets, cannot be taken as direct evidence for long distance trade for which silver and gold coins of larger value were the norm.

The distribution of the provincial coins found at Corinth per emperor can be found on Fig. 8. Their interpretation, however, needs to take into consideration the rhythm of production of the neighboring mints. The large number of coins dating to the early Severans certainly reflects the burst of minting activity in the Peloponnese during this period, whereas the scarcity of coins after that is the result of the end of minting in the region. The relatively high number of coins of Augustus coincides with a period when Corinth was the administrative center of the province of Achaia, a status that was temporarily lost during the reigns of Tiberius, Caligula, and Claudius. The general picture is that of a gradual increase of provincial coins found at Corinth from the first century to the beginning of the third century AD as can be seen in Figs. 2–4. This is consistent with the pattern of monetary production in the Peloponnese: six cities minted during the first century, 12 during the second, whereas 42 mints were active under Septimius Severus. After that coinage had practically ceased with the exception of Argos and Sparta.

ATHENS

The Agora is the only part of the city of Athens whose numismatic finds have been systematically published. The Greek coins discovered between 1931 and 1990 were published by Kroll and Walker in 1993. The publication is complete and provides all necessary information concerning dating and denominations. The Roman coinage, on the other hand, was recorded by Thompson in a less detailed publication that only included the finds of the Agora between 1931 and 1949. To this material we have added a few Roman coins published in reports which appeared later in the *Hesperia*. There is therefore a discrepancy between the different groups of coinage that needs to be kept in mind when reading the data. Information concerning local and provincial coins is based on a larger sample of material than the Roman.

Local coinage

At Athens, the currency dating between the end of the Mithridatic wars and the reign of Augustus is almost exclusively Athenian. The presence of 31 Hellenistic¹⁸ and 15 Roman coins out of a total of 1,288 specimens (Fig. 10) shows a city that remained dependent on its own currency. Coinage dating to the period between Augustus and Domitian shows very little change (Fig. 11).¹⁹ It should be noted that according to the dating proposed by Kroll and Walker, the Athenian coins in our second group should

^{17.} Engels 1990, 53.

^{18.} A few specimens may have been omitted because they were dated too vaguely (second-first centuries) but they certainly would not change the overall picture.

^{19.} Note that 849+ unclassified coins of period IVA-IVE and two Clerurchy issues of period IV (Kroll 1993, 110) have only been added to Figs. 6 and 12 since their dating falls into both our first and second period.

all be dated to the reign of Augustus; after that no coins were minted in Athens until the second century AD. The very heavy wear of these coins, as well as the evidence of hoards and deposits, show that the Athenian coins struck before and under Augustus formed the main currency circulating in Athens down to the second century AD and that a fair amount of these abundant issues continued to circulate into the third.²⁰ Athenian coinage remained dominant amongst the second century AD currency, but its percentage decreased from 93% to 88% (Fig. 12), whereas in the first half of the third century the percentage dropped to 58% (Fig. 13). As in Corinth, there is a general decrease of the percentage of local coinage during the second and third centuries AD, as well as a steady increase of Roman currency. These numbers however should be examined in relation to the number of years that the Athenian currency was produced, especially since the rhythm of production was not continuous but erratic.

If we compare the volume of the local coins per year discovered at Athens for each period of issue (Fig. 14) we have 55 coins/year for period IV, 42 coins/year for period V and 289 coins/year for period VI. There seems to be a slight decrease in the number of coins of the second century, less important than at Corinth but still visible. However, since the first century coins continued to circulate in very important numbers during the second century, the actual Athenian coins in circulation would be more important than is obvious at first sight. During the third century there is a very high surviving rate of coins per year that is certainly due to the special conditions of insecurity that were caused by the raid of the city by the Heruli in AD 267, just after the coins of period VI had been issued.²¹ As always happens under such circumstances, a very large number of individual specimens were accidentally lost and never recovered, whereas others were deliberately concealed. All eight hoards that have been discovered during the excavations of the Athenian Agora date to the third century AD. Out of these six contain coins dating to the reign of Gallienus and their concealment can therefore be directly related to the raid on Athens. The other two were concealed somewhat earlier but were never recovered, probably for the same reason.²² These hoards offer direct proof that the large number of third century Athenian individual coins found at the Agora were the result of the insecure conditions that prevailed during these years. However production must have been considerable, since Kroll and Walker have identified over 300 obverse dies for the Athenian coinage of period VI.²³

Roman Coinage

Roman coins discovered at Athens per emperor and per metal can be found on Fig. 15. As at Corinth, the silver *denarii* and their subdivisions are constantly found in moderate numbers but disappear from our finds after the appearance of the debased *antoniniani*,²⁴ specimens of lower value that tend

^{20.} Kroll 1993, 91-94.

^{21.} It had been supposed that the coins of Period V were issued in advance to meet the needs of wall building and other military preparations related to the barbarian attacks of the third century AD. In an oral communication for which we thank him, John Kroll mentioned he now believes that the coinage should not be related with military preparations for attacks which the Athenians could not have anticipated in advance, but rather with the role of a prominent citizen Herennius Dexippos who aimed at reviving the glory of Hadrianic Athens.

^{22.} See hoards B17:1a concealed ca. AD 250 and P7:10 concealed during the second quarter of the third century. Hoards B17:1b; B17:1c; Q19:3; F10:2; P7:10 published in Kroll 1993, 303–304, 307, 315–316 as well as Hoard 1955 from the stoa of Attalos and Hoard 1956 from the Agora date to AD 267 (Kroll 1973, 318, note 23, c, d).

^{23.} Kroll 1993, 332, table IX.

^{24.} With the exception of two denarii of Gallienus.

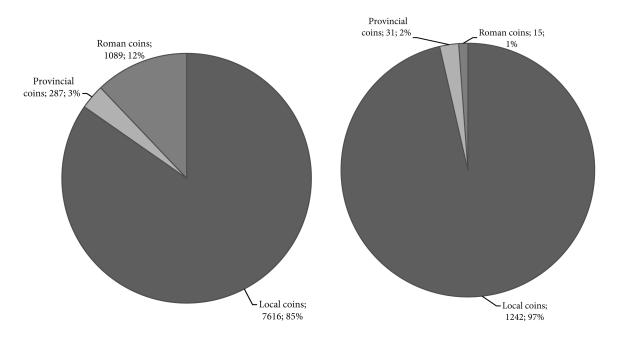


Figure 9. Athens. Coins dated 86 BC-AD 268.

Figure 10. Athens. Coins dated 86-31 BC.

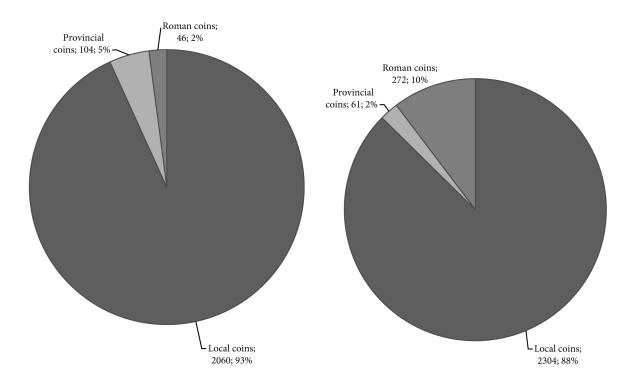


Figure 11. Athens. Coins dated 31 BC-AD 96.

Figure 12. Athens. Coins dated AD 96–192.

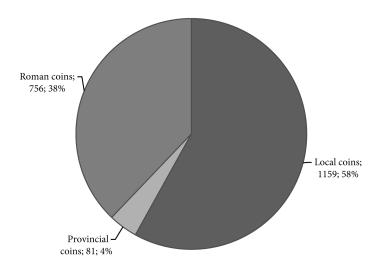


Figure 13. Athens. Coins dated AD 193-268.

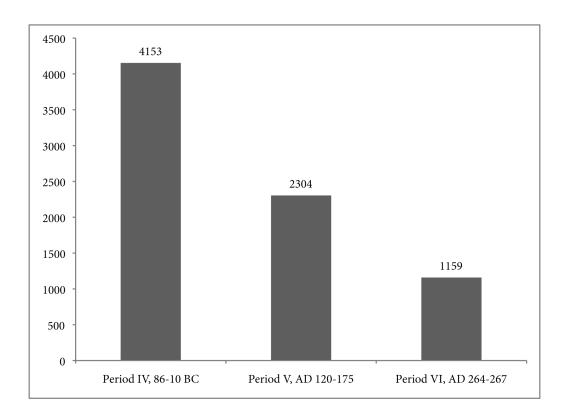


Figure 14. Athens. Local coins per period of issue.

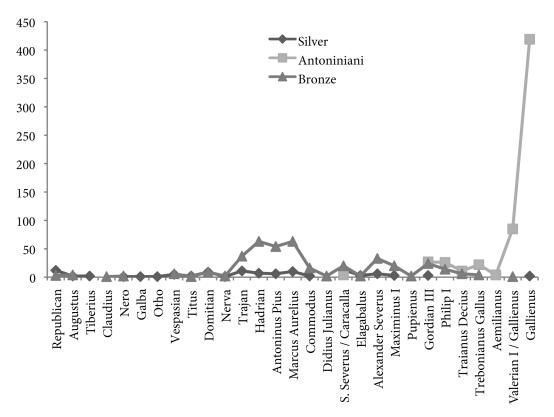


Figure 15. Athens. Roman coins per Emperor and metal.

Table 2. Athens. Provincial Coins per Mint

Province/ Region	Mint	1st cent. BC	1st cent. AD	2nd cent. AD	Severans	3rd cent. AD	Uncertain Total date
Crete	Knossos	1	1				2
	Koinon of Crete			1			1
Achaia	Aigina				1		1
	Aigion	2		1			3
	Argos				2		2
	Boura				1		1
	Chalkis		3		3		6
	Corinth	14	49	8	8		79
	Delphi			3			3
	Elis			3			3
	Hermione				1		1
	Kleonai				1		1

Table 2 (Continued)

Province/ Region	Mint	1st cent. BC	1st cent. AD	2nd cent. AD	Severans	3rd cent. AD	Uncertain date	Total
	Kyparissia				1			1
	Magnetes					1		1
	Megara			2	3		3	8
	Melos			1			1	2
	Methana				1			1
	Mothone				1			1
	Nikopolis			4	5	2		11
	Pagai			1				1
	Patras		1	2	3		1	7
	Pheneos				1			1
	Sikyon		2		1			3
	Sparta	9	5	3				17
	Tanagra		7	1			1	9
	Tegea				1			1
	Tenea				1			1
	Thespiai Thessalian		4					4
	League		2	3	1	1		7
	Thouria				1			1
	Troizen			1				1
Macedonia			1	1				2
	Dion Koinon of Macedonia					3	1	3
	Philippi		3			3		3
	Thessalonike	1	1	1	1	1		5
Thrace	Augusta Traiana	-	-	1	1	1		1
1111400	Koila				-	1		1
	Develtos					1		1
	Kings of Thrace		1			-		1
	Pautalia		-	1				1
	Perinthos			-		1		1
	Philippopolis Bithynian					1		1
Bithynia				1				1
	Nikaia					1		1

Table 2 (Continued)

Province/ Region	Mint	1st cent. BC	1st cent. AD	2nd cent. AD	Severans	3rd cent. AD	Uncertain Total date
	Nikomedeia			1		2	3
Mysia	Adramytteion				1		1
	Parion (?)		9				9
	Pergamon			2			2
Troas	Perperene Alexandreia Troas		2				2
110as	Assos				3	2	5
	Ilion			1			1
A i alia			1				1
Aiolis	•					1	1
	Kyme Mytilene			1	_	1	2
Toodia	•				1		1
Lydia	Hermokapeleia			1	_		1
Tauta	Tripolis Chios			_	2	_	2
Ionia			1	2	2	2	7
	Ephesos Magnesia on the Maiander	1	1	2	2	2	8
	Miletos		1				1
	Samos					1	1
	Smyrna		1	1		4	6
Caria	· ·			1			1
Phrygia	Synnada						2 2
Lycia			1				1
•	Patara						1 1
Pamphylia	Attaleia			1			1
	Sillyon			1			1
Galatia	Amyntas	1					1
Pisidia	Antiochia			1			1
Cilicia	Syedra Antiochia on					1	1
Syria	the Orontes Kingdom of	1		1		1	3
Judaea	Judaea		6				6
Egypt	Alexandria	1	1	7			9

to be lost more easily. Unlike Corinth, where no *antoniniani* have been discovered before the reign of Gordian III, at Athens these coins appear under Caracalla, at the time they were first minted at Rome. The extremely high number of *antoniniani* at Athens under the sole reign of Gallienus (AD 260–268) is certainly related to the emergency situation that the city faced during the Herulian invasions. Although it goes beyond the range of our study it is worth mentioning that after the reign of Gallienus the presence of Roman coins becomes much more abundant, and shows a second peak under Aurelian and a third under the sons of Constantine.²⁵

Roman bronzes were very scarce at Athens during the late Republic and only very few asses of this period have been discovered, a picture which is in accordance with their very limited production at Rome. After Augustus and his reform of the bronze coinage, Roman bronzes appear in considerable numbers. For the period down to the reign of Domitian, 50% of the Roman coinage discovered is bronze, mainly asses and quadrantes. From the reign of Trajan Roman bronzes become far more frequent due to the very popular sestertii that now form the majority of bronze denominations circulating in Athens and which continue to be the dominant coin during the third century. After the additional debasement of the antoninianus under Gordian III, the volume of the bronzes starts to decrease.

If we examine the presence of Roman coinage per period (Figs. 10-13) we observe a steady increase in Roman coins from the time of the late Republic until the middle of the third century AD, which must reflect a gradual integration of the local markets into the mainstream Roman currency system. The provenance of the Roman coins shows some evolution. Apart from the last years of the Republic, when denarii derived from a variety of mints,26 the mint of Rome was the main provider until the third century AD. Between Augustus and Domitian only four coins out of a total of 30 have a different origin.²⁷ For the second century all the Roman coins from identified mints that were found at Athens were minted at Rome with only one exception, 28 but in the third century the picture gradually changes: coins from a number of mints which now started to operate are represented at Athens. Coins from Antioch make their appearance from the reign of Alexander Severus whereas the first coins from Milan date to the reign of Trebonianus Gallus. This tendency continues under the reigns of Valerian I and Gallienus where the surviving material is far more important. Out of 391 coins from identified mints, dating to the period AD 253-268, we have 197 from the mint of Rome, 101 from Antioch, 34 from uncertain Asian mints, 32 from Siscia, 26 from Milan and one from Lyon. Although Rome remains first on the list, during the third century coins coming from the capital form just over 50% of the Roman currency circulating in Athens. Antioch and "other Asian mints" come second, whereas coins from other Balkan or western mints are rarer. One can state a gradual increase in the volume of Roman currency that has survived in Athens and an evolution of the pattern of its provenance that generally follows the patterns of production of Roman coins.

^{25.} This can be clearly seen at the table provided in Thompson 1954, x: 49 coins/year for Gallienus, 26 coins/year for Aurelian, 11 coins/year for the Tetrarchy, and 109 coins/year for the sons of Constantine.

^{26.} For the period before Augustus we have out of a total of 15 specimens: 5 from Ephesus, 1 from Spain, 6 from Rome, 1 from Italy and 2 uncertain. Out of these 12 are *denarii* and 3 are *asses*: Thompson 1954, nos. 1–13.

^{27.} Two denarii from the mint of Lyon (under Augustus and Tiberius), one as from an eastern mint (under Augustus) and one as from Tarraco (under Vespasian): Thompson 1954, nos. 16, 17, 18, 29. Another 16 coins come from uncertain or unidentified mints

^{28.} Out of a total of 272 coins discovered only one of Trajan was minted in the East: Thompson 1954, no. 66 (59 coins come from uncertain or unidentified mints).

Provincial coinage

At Athens, coins minted by other cities—whether late Hellenistic or provincial—remain very rare during the periods we are examining. Their percentage varies between 2% and 5% of the total currency found, with small differences between our various chronological groups (Figs. 10–13). The first and the third centuries show a wider distribution of mints but the differences are of no important significance. The average percentage for the provincial coins is 3% for all periods (Fig. 9). Here we may note a significant difference with Corinth where these percentages vary between 6% and 24% with an average of 13%.

The mints of the coins that circulated in Athens can be found on Table 2. 62% of these coins come from the province of Achaia, with Corinth coming first in the list and Sparta coming second. One could note that—apart from these two mints—the Peloponnese is not represented very strongly. There are very few coins from the very prolific mint of Argos, and the presence of the important mint of Patras, is rather scarce. The Severan issues of the small Peloponnesian cities arrive in small numbers. The mints of neighboring Boeotia such as Megara, Tanagra, and Thespiai are better represented given their limited production, and so are mints in Central Greece such as Chalkis, Delphi, and the Thessalian League. The presence of coins from Nikopolis on the western coast of Achaia is considerable, since this is the third city in our list. As at Corinth, the various regions of Asia Minor, when put together, show a considerable movement of people from the East. Coins from Macedonia and Thrace are less frequent, as are coins from Syria, Judaea, Egypt, and Crete.

CONCLUDING REMARKS

The general question which circulation studies always raise is whether foreign coins discovered on a site were actually used in transactions within the city they were found, or whether they were just coins that people carried with them and happened to lose while traveling. Fourth century BC written sources are very clear in stating that the only currency to have legal tender within a given city was that produced by the city itself.²⁹ The only exception would be the *koinon nomisma*, a strong currency with international reputation, mainly the Athenian tetradrachms for the Classical period. But in the Hellenistic period this pattern seems to gradually have evolved. League currencies became more common and circulated wider than the civic coins, probably even beyond the territory of the league.³⁰ Individual cities such as, Smyrna and Magnesia ad Sipylum could agree to accept one other's currency through their treaties of sympoliteia.³¹ Furthermore, the nature of the *koinon nomisma* seems to be gradually transformed. The Athenian owls were minted at Athens and occasionally imitated by others. During the Hellenistic period however, the Alexanders and other Attic-weight international currencies, were minted by a variety of authorities such as cities, kings or leagues in parallel to their own issues. The

^{29.} See, for example, the much discussed chorion in Xenophon, *Poroi*, III, 2 which is very clear in stating that merchants had to change their currency when trading in a city other than their own. See also SIG^3 , 218 for the fourth century BC Olbian law, requiring that all buying and selling in the city be transacted in Olbian coinage and Rhodes and Osborne 2003, no. 25, for the Athenian law of 375/4 BC, regarding Athenian coinage and imitations.

^{30.} For the league coinages in the classical and Hellenistic periods see: Psoma and Tsangari 2003.

^{31.} CIG 3137; Schmitt 1969, no. 492.

persistence of the local issues that consisted of smaller denominations of lower value ensured a profit to the city that produced them, since the latter charged a commission for their exchange.³² But it is clear that the role of local currencies in transactions had gradually diminished.

After the establishment of the Roman Empire and the reform of its coinage by Augustus, Roman coins were gradually imposed as the common currency of the Mediterranean world. The use of the Roman coins in city affairs is well documented through literary texts and inscriptions. The local communities, now subordinate to the new ruling power, could only strike bronze currencies with a limited circulation. The question that arises is whether, under the Empire, the provincial cities continued to exclude coins of their neighboring cities from circulation within their territory by charging a commission for their exchange. There are, to our knowledge, no written sources for this period that could provide a secure answer.

When examining the circulation patterns in the two cities we noted an important difference between them. Roman and provincial coins are found in relatively larger numbers at Corinth (21% Roman and 13% provincial) than at Athens (12% Roman and 3% provincial). Concerning the Roman coins one should not draw easy conclusions since, as we have already mentioned, the data has been accumulated from a smaller sample of material than that of the rest. Concerning the provincials however, there can be no doubt that at Corinth they were relatively abundant, whereas at Athens they were practically inexistent. Since we accept that the movement of bronze coins reflects the movement of people we may explain the presence of a large number of foreign coins at Corinth by the fact that it was the administrative capital of the province, as well as an important trade center with two ports, which attracted a large number of visitors.

A further difference concerns the provenance of the provincial coinage in the two cities. The coins found at Athens, although relatively fewer in number, come from more distant provinces. Only 62% of the provincial currency comes from Achaia, whereas 24% comes from Asia Minor, 7% from the Levant, 33 and 7% from the North, (Macedonia, and Thrace). The finds at Corinth, on the other hand, tend to be more orientated to Achaia and the Peloponnese: 85% of the foreign currency comes from other mints in Achaia, 6% from Asia Minor, 5% from the Levant, and 4% from Macedonia, Thrace and Moesia. This is a significant difference in the circulation pattern of the provincial coins between these two cities, which shows a higher percentage of regional circulation for Corinth. Coin circulation illustrates in a very vivid way and confirms the role and function of the two cities, as we know them from other sources: Corinth was visited by citizens of neighboring cities mostly for administrative purposes as capital of the province, whereas Athens attracted people from more distant regions, because she retained an international reputation as a cultural and educational center.

But the question of why we have so few non-Athenian provincial coins at Athens remains. Part of the answer could be that Athens received fewer visitors than Corinth, but still the numbers are surprisingly low and one should also consider other aspects. Corinthian coinage was struck on the Roman standard, as was the majority of the coinages in the region.³⁴ The unit in this system was the *as, assarion* in Greek, which was exchanged at 16 to the denarius. The Athenian coinage on the

^{32.} For local and common currencies in the Hellenistic period see: Marcellesi 2000, 326-358.

^{33.} Where we include Syria, Judaea, Cyprus, Crete, and Egypt.

^{34.} The Roman standard was adopted by most cities in Achaia under Augustus and the few such as, for example, Aigion, which continued to use the Greek denominations, were gradually converted into the Roman by the second century AD. Kroll 1997a, *RPC* I, 31–34, 245–247.

other hand, not only retained its Greek appearance by excluding the Emperor's portrait from its obverses, but also continued to use the Greek denominational system.³⁵ Inscriptions dating to the time of Hadrian show that at Athens the main denomination was the bronze drachm that was exchanged at six to the denarius.³⁶ The second century Athenian hemidrachms therefore, which had approximately the same size and weight as the Corinthian *asses*, were overvalued compared to the latter, since they were exchanged at 12 to the denarius. This overvaluation of the Athenian bronze coinage would allow a more profitable exchange with the denarius and would furthermore prevent coins of neighboring cities from entering circulation at Athens where they would have to be exchanged at an unfavorable rate. Through this exchange the city would withdraw the foreign coinage and use its metal probably for striking its own coins, while at the same time it would make a profit by issuing coins with larger value. The different circulation pattern at Corinth allows us to suppose that all cities did not function in the same way as Athens and that perhaps, during the Empire, the strict rule concerning the exclusion of foreign coins from circulation in neighboring cities could have started to be neglected.

REFERENCES

- Amandry, M. 1988. *Le monnayage de duovirs corinthiens*. Bulletin de correspondance hellénique. Suppl. 15. Athens.
- Engels, D. 1990. Roman Corinth. An alternative model for the classical city. Chicago.
- Friezen, D. Scholwalter, and J. Walters, eds. 2010. *Corinth in context: comparative studies on religion and society.* Leiden.
- Geagan, D. 1979. Roman Athens: Some aspects of life and culture. I. 86 BC-AD 267. In Aufstieg und Niedergang der römischen Welt II.7.1, edited by H. Temporini, 373-437. Berlin.
- Jones, C. P. 2004. Epigraphica VIII-IX. Zeitschrift für Papyrologie und Epigraphik 46: 93–98.
- Kroll, J. 1997a. Coinage as index of Romanization. In *Romanization of Athens. Proceedings of an international conference held at Lincoln, Nebraska (April 1996)*, edited by M.C. Hoff and S.I. Rotroff, 131–150. Oxbow Monograph 94. Oxford.
- Marcellesi, M.-Chr. 2000. Commerce, monnaies locales et monnaies communes dans les États hellénistiques. *Revue des Études Grecques* 113, 326–358.
- Müller, C. 1996. Les nomina romana à Thespies du IIe s.a. à l'édit de Caracalla. In Roman onomastics in the Greek East. Social and political aspects. Proceedings of the international colloquium on Roman onomastics, Athens, 7–9 September 1993, edited by A. D. Rizakis, 157–166. ΜΕΛΕΤΗΜΑΤΑ 21. Athens.
- Numismatik Lanz, Münzen von Korinth: Sammlung BCD, Auction 105 (26 November 2001), München.

^{35.} Kroll 1993, 1997a. 36. *IG* II² 2776. For discussion see: Kroll 1993, 118–120.

- Psoma, S. and D. Tsangari. 2003. Monnaie commune et États fédéraux. La circulation des monnayages frappés par les États fédéraux du monde grec. In *The idea of European community in history. Conference proceedings*, vol. II. *Aspects of connecting poleis and ethne in Greek Antiquity*, edited by K. Buraselis, and K. Zoumboulakis, 111–141. Athens.
- Rhodes, P. J. and R. Osborne. 2003. Greek historical inscriptions: 404-323 B.C. Oxford.
- Robert, L. 1946. Hellenica. Recueil d'épigraphie de numismatique et d'antiquités grecques II. Paris.
- RPC I = Burnett, A., M. Amandry, and P. P. Ripolles. 1992. Roman Provincial Coinage, vol. I (The Julio-Claudians). London.
- RPC II = Burnett, A., M. Amandry, and I. Carradice. 1999. Roman Provincial Coinage, vol. II (The Flavians). London.
- Schachter, A. and F. Marchand. 2013. Fresh light on the institutions and religious life of Thespiai: six new inscriptions from the Thespiai survey. In *Epigraphical approaches to the post-classical Polis, fourth century BC to second century AD*, edited by P. Martzavou, and N. Papazarkadas, 277–335. Oxford.
- Schmitt, H. H., ed. 1969. *Die Staatsverträge des Altertums* 3: *Die Verträge der griechisch-römischen Welt von* 338 *bis* 200 v. *Chr.* Munich.
- Spoerri-Butcher, M. and A. Casoli. 2012. Un trésor d'antoniniens trouvé à Erétrie (Eubée) en 2011: Questions de circulation monétaire en Grèce au IIIe siècle ap. J.-C. Schweizerische numismatische Rundschau. Revue Suisse de numismatique 91: 111–206.
- Touratsoglou, I. P. 2006. *Greece and the Balkans before the end of antiquity*. Bibliotheca of the Hellenic Numismatic Society 8. Athens.
- Tselekas, P. 2008. Ταυτότητα και ιδεολογία στη ρωμαική Αθήνα: η νομισματική μαρτυρία. In *Athens during the Roman period: recent discoveries, new evidence*. Mouseio Benaki, Suppl. 4. Athens.
- Vlizos, S., ed. 2008. *Athens during the Roman period: recent discoveries, new evidence*. Mouseio Benaki, Suppl. 4. Athens.
- Williams, C. K. and N. Bookidis, eds. 2003. *Corinth: the centenary 1896–1996*. Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens XX. Athens.

APPENDIX

Sources for the numismatic material

Athens

- Kroll, J. H. 1973. The Eleusis hoard of Athenian imperial coins and some deposits from the Athenian Agora. *Hesperia* 42.3: 312–333.
- ——, with contribution by A.S. Walker. 1993. *The Greek coins*. The Athenian Agora. Results of Excavations Conducted by the American School of Classical Studies in Athens XXVI. Princeton.
- Shear Jr., T. L. 1973. The Athenian Agora: excavations of 1971. Hesperia 42.2: 121–179.
- ——. 1997. The Athenian Agora: excavations of 1989–1993. *Hesperia* 66.4: 495–548.

- Thompson, H. A. and K. Kourouniotes. 1932. The Pnyx in Athens. *Hesperia* 1: 90–217.
- Thompson, M. 1954. *Coins: from the Roman through the Venetian period.* The Athenian Agora. Results of Excavations Conducted by the American School of Classical Studies in Athens 2. Princeton.

Corinth

- Biers, J. C. 1985. *The great Bath on the Lechaion road*. Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens XVII. Princeton.
- Blegen, C. W., H. Palmer, and R. S. Young. 1964. *The north cemetery*. Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens XIII. Princeton.
- Bookidis, N. 1997. *The sanctuary of Demeter and Kore: topography and architecture.* Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens XVIII.III. Princeton.
- ———, and J. E. Fisher. 1972. The sanctuary of Demeter and Kore on Acrocorinth: preliminary report IV: 1969–1970. *Hesperia* 41.3: 283–331.
- ——, and J. E. Fisher. 1974. Sanctuary of Demeter and Kore on Acrocorinth: Preliminary Report V: 197 1–1973. *Hesperia* 43.3: 267–307.
- Edwards, K. M. 1933. *Coins*, 1896–1929. Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens VI. Cambridge.
- ——. 1937. Report on the coins found in the excavations at Corinth during the years 1930–1935. *Hesperia* 6.2: 241–256.
- Eliot, C. W. J., and M. Eliot. 1968. The Lechaion cemetery near Corinth. Hesperia 37.4: 345-367.
- Fisher, J. E. 1980. Coins: Corinth excavations, 1976, Forum Southwest. *Hesperia* 49.1: 1–29.
- ——. 1984. Coins: Corinth excavations, 1977, Forum Southwest. *Hesperia* 53.2: 217–250.
- Gebhard, E. R., F. P. Hemans, and J. W. Hayes. 1998. University of Chicago: excavations at Isthmia, 1989: III. *Hesperia* 67.4: 405–456.
- Harris, J. M. 1941. Coins found at Corinth. Hesperia 10.2: 143-162.
- Hayes, J. W. 1973. Roman pottery from the South Stoa at Corinth. Hesperia 42.4: 416-470.
- Hohlfelder, R. L. 1973. A sixth century hoard from Kenchreai. *Hesperia* 42.1: 89–101.
- ——. 1978. *The coins*. Kenchreai, Eastern Port of Corinth, Results of Investigations by the University of Chicago and Indiana University for the American School of Classical Studies at Athens 3. Leiden.
- Mac Isaac, J. D. 1987. Corinth: coins, 1925–1926 the Theater district and the Roman Villa. *Hesperia* 56.2: 97–157.
- Palinkas, J. and J. A. Herbst. 2011. A Roman road southeast of the Forum at Corinth: technology and urban development. *Hesperia* 80.2: 287–336.
- Price, M. J. 1967. Coins from some deposits in the South Stoa at Corinth. Hesperia 36.4: 348–388.
- Robinson, H. S. 1962. Excavations at Corinth, 1960. Hesperia 31.2: 95-133.
- Sanders, G. D. R. 1999. A late Roman bath at Corinth: excavations in the Panayia Field, 1995–1996. *Hesperia* 68.4: 441–480.
- Scranton, R. L. and E. S. Ramage. 1967. Investigations at Corinthian Kenchreai. Hesperia 36.2: 124-186.

- Shear, T. L. 1931. A hoard of coins found in the Theatre district of Corinth in 1930. American Journal of Archaeology 35: 139-151.
- Slane, K. W. 1990. The sanctuary of Demeter and Kore: the Roman pottery and lamps. Corinth. Results of Excavations Conducted by the American School of Classical Studies in Athens XVIII.II. Princeton.
- Stirling, L. M. 2008. Pagan statuettes in late antique Corinth: sculpture from the Panayia Domus. Hesperia 77.1: 89-161.
- Stroud, R. S. 1965. The sanctuary of Demeter and Kore on Acrocorinth: preliminary report I: 1961-1962. Hesperia 34.1: 1-24.
- ——. 1968. The sanctuary of Demeter and Kore on Acrocorinth: preliminary report II: 1964–1965. Hesperia 37.3: 299-330.
- Williams II, C. K. 1969. Excavations at Corinth, 1968. Hesperia 38.1: 36-63. ——, and J. E. Fisher. 1971. Corinth, 1970: Forum Area. *Hesperia* 40.1: 1–51. —, and J. E. Fisher. 1972. Corinth, 1971: Forum Area. *Hesperia* 41.2: 143–184. —, and J. E. Fisher. 1975. Corinth, 1974: Forum Southwest. *Hesperia* 44.1: 1–50. ——, and J. E. Fisher. 1976. Corinth, 1975: Forum Southwest. *Hesperia* 45.2: 99–162. —, and O. H. Zervos. 1982. Corinth, 1981: east of the Theater *Hesperia* 51.2: 115–163. , and O. H. Zervos. 1983. Corinth, 1982: east of the Theater. Hesperia 52.1: 1-47. ——, and O. H. Zervos. 1984. Corinth, 1983: the route to Sikyon. *Hesperia* 53.1: 83–122. ——, and O. H. Zervos. 1985. Corinth, 1984: east of the Theater. *Hesperia* 54.1: 55–96. —, and O. H. Zervos. 1986. Corinth, 1985: east of the Theater, *Hesperia* 55.2: 129–175. ——, and O. H. Zervos. 1987. Corinth, 1986: Temple E and east of the Theater. *Hesperia* 56.1: 1–46. , and O. H. Zervos. 1988. Corinth, 1987: south of Temple E and east of the Theater. Hesperia 57.2: 95-146. , and O.H. Zervos. 1989. Corinth, 1988: east of the Theater. Hesperia 58.1: 1-50. ——, and O. H. Zervos. 1990. Excavations at Corinth, 1989: the Temenos of Temple E. *Hesperia* 59.2: 325-369. , and O. H. Zervos. 1991. Corinth, 1990: southeast corner of Temenos E. Hesperia 60.1: 1-58. ——, and O. H. Zervos. 1992. Frankish Corinth: 1991. Hesperia 61.2: 133-191. ——, and O. H. Zervos. 1993. Frankish Corinth: 1992. *Hesperia* 62.1: 1–52.
- ——, and O. H. Zervos. 1994. Frankish Corinth: 1993. Hesperia 63.1: 1-56.
- ——, and O. H. Zervos. 1995. Frankish Corinth: 1994. *Hesperia* 64.1: 1–60.
- ——, and O. H. Zervos. 1996. Frankish Corinth: 1995. *Hesperia* 65.1: 1–55.
- _____, J. L. Angel, P. Burns and J. E. Fisher. 1973. Corinth, 1972: the Forum Area. Hesperia 42.1: 1–44.
- —, J. MacIntosh, and J. E. Fisher. 1974. Excavation at Corinth, 1973. Hesperia 43.1: 1–76.
- —, L. M. Synder, E. Barnes, and O. H. Zervos. 1998. Frankish Corinth: 1997. Hesperia 67.3: 223–281.
- Wiseman, J. 1969. Excavations in Corinth, the Gymnasium Area, 1967-1968. Hesperia 38.1: 64-106.
- Zervos, O. H. 1986. Coins excavated at Corinth, 1978–1980. Hesperia 55.2: 183–205.
- ——. 1997. Frankish Corinth, 1996: the coins. *Hesperia* 66.2: 173–192.
- —, A. H. Rohn, E. Barnes, and G. D. R. Sanders. 2009. An early Ottoman cemetery at ancient Corinth. Hesperia 78.4: 501-615.