

Constantina Katsari, Christopher S. Lightfoot, Adil Özme

The Amorium Mint and the Coin Finds

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Amorium Reports 4



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PREFACE

C.S. Lightfoot

The present volume, the fourth in the monograph series of *Amorium Final Reports*, has a long and somewhat tortuous history. In 1992, my first year at Amorium as a team member, I was invited by the then director, Prof. R. Martin Harrison (†), to undertake a study of the coin finds. Despite the fact that I had limited numismatic experience and, at that time, absolutely no knowledge of or interest in Byzantine coins, I began to prepare a full descriptive catalogue of the coins found that year, accompanied by a short report for publication. This set the trend for all subsequent seasons, and the system has continued in operation right up until 2009, the most recent field season. In order to compile a full catalogue of the coin finds, as desired by Martin Harrison, I also undertook to study the finds made in previous years, namely between 1987 and 1991. These were then added to the 1992 list to form the basis for the catalogue. By the mid-1990s, however, it had become clear that the coin catalogue I had prepared for a volume devoted to the first five years of excavation (1988–1992) would not be forthcoming, and so I continued to add to it the list of finds compiled during the subsequent seasons. Thus for a number of years the catalogue was completely revised on an annual basis in order to accommodate the latest additions. Eventually in 2006 I decided to draw a halt to these constant revisions and to prepare the publication of the present catalogue. If I had not done so then, there is no way of knowing when the (first) final report on the Amorium coin finds might have seen the light of day.

As I worked on the coin finds and particularly after the 1993 season, during which the first example of a Roman

coin of the city mint was found, I also turned my attention to gathering data on the provincial Roman coinage of Amorium. I was encouraged to pursue such a study principally by Richard Ashton, and his guidance, wisdom, and experience were invaluable as I began to carry out this work, assembling specimens from museum catalogues, private collections, and sale inventories. In 1998, however, as a result of my mounting duties as field director, I decided to invite Constantina Katsari to take over the completion of the study. This she did with enthusiasm and exemplary professionalism. She submitted a first draft of her catalogue, together with an accompanying discussion of the city mint, in 2006. She has since shown great fortitude and patience in waiting for the publication to be completed.

Finally, since I have failed to master the skill of reading coin legends in Arabic, I have relied on Turkish colleagues to identify the Seljuk and Ottoman coins found at Amorium. Initially Tahsin Saatçı (†), for many years the curator of Islamic coins at the Anatolian Civilisations Museum in Ankara, provided his willing assistance. It is with much regret that I record here his death in 2008. As a consequence of our co-operation on the publication of the Bolvadin collection in 2000, I invited Dr. Adil Özme to prepare a full catalogue of the Islamic coins from Amorium. I acknowledge with sincere gratitude his admirable contribution to the present volume.

New York, June 2011

ACKNOWLEDGMENTS

Many people have contributed directly or indirectly to the work that went into producing this volume. It is now almost impossible to recall all of the help that has been received and so, first of all, we must extend our apologies to anyone who has unwittingly been left out. There are a number of people whose contributions have been of major importance and they deserve special mention, although of course none of them should be held responsible for any of the opinions expressed herein or the mistakes that remain. First and foremost, thanks go to Richard Ashton, who encouraged us to undertake the project and provided much sage advice and willing assistance during the long process of its completion. Others scholars who offered valuable advice, expertise, and information include Michel Amandry, Melih Arslan, Carmen Arnold-Biucchi, Michael Bates, John Casey, Peter Franke, Zeliha Demirel Gçkalp, Teyfik Gçktürk, Richard Hoge, Stanley Ireland, Wolfgang Leschhorn, William E. Metcalf, Cécile Morrisson, Adrian Popescu, Şennur Şentürk, Ahmet Tolga Tek, Oğuz Tekin, and Peter van Alfen. Additionally, much time, effort, and assistance have been generously provided by Amorium team members Serhat Karakaya, Christopher Petitt, and Hüseyin Yaman and by Metropolitan Museum interns Allia Benner, Jacob Coley, and Victoria Keddle. The cleaning of the coin finds was largely carried out on site by members of the conservation team; they included Karen Barker, Hande Günyol, Emre Eser, Inez Litas, and Füsun Sultan Gürsoy. From 2001 until 2006 Serhat Karakaya was in charge of cleaning and conserving the coin finds at the site. His careful and thorough treatment and recording of the material has greatly assisted in compiling the following catalogue. A group of coins from the first years of excavation was also cleaned in the Istanbul Central Conservation Laboratory during the winter and early spring of 1993. This work was carried out through the kind assistance of Prof. Dr. Ülkü İzmirligil, Dr. Revza Ozil, and Dr. Hande Günyol.

Many of the Amorium coin finds were studied at various times in the Afyonkarahisar Museum. For this research work access was kindly provided by the director and staff of the museum; special thanks go to Mevlüt Üyümez and Ahmet İlaslı. In order to house and so preserve the coins from Amorium, a wooden coin cabinet was constructed in Uşak by the Amorium Excavations Project and donated to the Afyonkarahisar Museum in 2005; much help and advice was provided by Halil Arça during this

work. Finally, the coin collection of the Afyonkarahisar Museum was studied in 1996 by Richard Ashton and John Casey, with the assistance of Mevlüt Üyümez. They recorded sixty-five examples of coins from the city mint of Amorium and very generously provided us with their detailed notes, as well as photographs of the casts they made, so that we could include them in Section 1 of this publication.

It is also appropriate to acknowledge here those institutions and benefactors that have over the years supported the Amorium Excavations Project, whose existence provided the *raison d'être* for this publication. First and foremost, we are grateful for the sponsorship of the British Institute of Archaeology at Ankara, which also provided annual grants from the time of the Project's inception in 1987 until 2006. Dumbarton Oaks in Washington D.C. awarded annual grants to the Project from 1995 until 2005. The Leon Levy Foundation provided generous funding between 2005 and 2008. The Metropolitan Museum of Art's Adelaide and Milton de Groot Fund, in memory of the de Groot and Hawley Families has also made major annual contributions to the Project since 2003. The Project has also been supported by grants from the Loeb Classical Library Foundation in 2006, 2008, and 2009. Finally, from 2001 until 2010 the Amorium Excavations Project was the grateful recipient of an annual grant of substantial funds from an anonymous benefactor in the United States.

The special fonts used here for the coin inscriptions were first created by the late Professor Nicolas Oikonomides in 1986 and subsequently enriched by Glenn Ruby (†) and the Publications Department of Dumbarton Oaks (Washington, DC). The authors are very grateful to Dumbarton Oak's programme in Byzantine Studies for graciously releasing these fonts for use in scholarly publications.

Finally, this volume is dedicated to all the villagers, past and present, of Hisarkçy. They have welcomed the excavation team into their midst and become our dear friends. In addition, as the catalogue of coin finds records, several of the villagers have over the years generously and honestly handed in to the Amorium Excavations Project numerous coins that they had come across in and around the site.

C. Katsari

The main purpose of this volume is to bring together all the information on the coins that were produced or distributed at the city of Amorium in Asia Minor. In the first instance, it was decided to compile a catalogue of the Roman coins that were issued by the mint of Amorium from the Roman Republic until the middle of the third century. But such a task would not have been complete without the publication of the coin finds from the excavations at the site. The director of the excavations has been responsible for the compilation of a catalogue of the finds, which range from the Hellenistic to the Ottoman period, marking the rise, the eventual decline of the city, and its afterlife as a Turkish settlement. The analysis of the existing numismatic material from Amorium, whether it has been found on the archaeological site or not, aims specifically at the historical reconstruction of the ideology and the economy of the city and its surroundings. In order to achieve this aim we have endeavoured to follow the appropriate methodological guidelines that will be outlined here.

A variety of diverse methodological tools could facilitate the process of recovering significant information from the distant past. Such procedures, though, are not always as straightforward or as widely accepted in the scholarly community. The fact that only a small part of the ancient material survives today imposes further difficulties in the completion of the task. During the past decades a number of well-known numismatists have repeatedly pointed out the pitfalls in the study of coins. Nevertheless, while some of these researchers emphasized the impossibility of drawing secure conclusions from any numismatic study, others focused on the solution of the problems and suggested a series of methods that may facilitate the study of certain ideological and economic aspects of ancient history. In this volume we will also try to overcome a series of methodological problems in order to achieve our initial goal, an overview of the history of Amorium in the Roman and Byzantine world.

It should be noted that the majority of the rich numismatic finds from the excavations date to the Byzantine, not the Roman period. These coins represent what their owners carried in their purses for their daily transactions in the market and what they could best afford to lose; that is, mainly small change.¹

Despite their low value, we ought to place some importance on their recovery, especially because these coins provide accurate indications about the types of currency circulating in the city and the levels of the monetisation in the surrounding area. It cannot be doubted that smaller denominations are probably the most important indication of the extent of the use of coins and the velocity of cash transactions within a specific urban centre. After all, they were employed daily in the markets and they covered the needs of the majority of the population for less expensive but necessary items. Furthermore, the study of the different types of currencies in circulation could also demonstrate the economic links that the city had with neighbouring communities and even with the city of Rome itself. Given the fact that a number of Phrygian cities issued their own bronze denominations according to their individual weight standards and bearing the representations and inscriptions of each city, we may be in the position to locate their exact provenance, if we find them within the context of the excavations of Amorium. The main problem with their detailed analysis is that most of these coins are found in contexts dated later than the date of their production. It is therefore almost impossible to pinpoint exactly how long they continued in circulation or when they were finally lost.² In addition, a large number of the coin finds (some 200 specimens or 27.5% of the total) are illegible because of corrosion and cannot be positively identified; as a result, any statistical analysis may be distorted to a certain point. Despite the existence of a number of apparent difficulties, the economic results from the study of the Byzantine coins found in Amorium have already received preliminary publication.³ In this volume we will analyse the circulation of both imperial and civic currencies at the Roman city and we will also try to establish the degree of monetisation in the economy of Amorium during the Roman period. A comparison with the excavation finds from the neighbouring city of Pessinus and the study of the stray finds from the Afyonkarahisar Museum will help complete the picture of the monetary economy in the region of Phrygia.

The study of the Roman mint of Amorium is important for the reconstruction of the regional economy,

¹ The results of the Amorium excavations can be compared with the results from the excavations in Athens. It seems that of the 16,557 coins found in Athenian Agora only 182

were silver and 3 gold, while the rest were all bronze or copper alloy; Walker 1997, 21, n. 17.

² Rotroff 1997, 9.

³ Lightfoot 2002.

especially since similar research projects on Phrygian cities of Phrygia are yet to be undertaken. The coins included in the catalogue of the civic mint were produced exclusively at Amorium. A small number of them were found during the excavations conducted at the site, but the majority of the coins – the unprovenanced or so-called ‘stray’ finds – were located in international auctions, private collections, and several museums in Europe and the United States of America. With the term ‘stray’ we describe the individual coins that were not found in the context of an excavation and are not part of a hoard. It is generally accepted that the owners of most stray coins did not bury them with the intention of future recovery, as in the case of hoards, but lost them in the course of a transaction. In this respect they should be regarded as comparable to the excavation finds, since they were lost individually and at a point in time that cannot be defined with absolute certainty. Consequently, it is methodologically correct to place them in the same category and examine them in a similar way with the coins found at archaeological sites. As we will see in the next section, the statistical analysis of all of the excavation finds in combination with the analysis of stray finds could help us assess fluctuations in the mint output and, thus, could greatly enhance our understanding of the function of the monetary economy in Phrygia.

Even if I opted to use every shred of available numismatic information for the reconstruction of the history of Phrygia, the scepticism of several numismatists with regard to the poor quality and quantity of the stray coins and their impact on the statistical analysis should not and cannot be ignored. Because of these constraints, my research focuses on the study of only specimens that can be identified with relative certainty. Furthermore, it is undeniable that stray coins, which were usually discovered without any ancient context, could give little evidence for any general conclusions relevant to one period or another, thus undermining further their historical value.⁴ Additional problems are caused by the selective attitude of collectors and curators alike, who usually favour higher denominations such as gold and silver, while bronze coins are discarded as of less importance. In view of these attitudes it is not at all surprising that numismatists preferred to engage only in the study of the typology of stray coins. Of course, the reconstruction of the ideological background of the citizens of Amorium is a fixed part of this volume and is undoubtedly facilitated by the study of stray finds. In addition, though, their significance in the study of regional economic history should not be under-

estimated, especially since their numbers are large enough to allow for detailed statistical analysis.

In order to assess the value of stray finds in statistics we should probably compare them with their counterparts, the archaeological coin finds, whose analysis is considered more accurate. It seems that the use of archaeological finds in statistical analysis presents the same problems as the analysis of stray finds; for instance, we notice the tendency to lose mostly smaller denominations. Since at archaeological sites we find predominately small change of insignificant value to their owner, we could conclude that the patterns of excavation finds are also heavily influenced by personal behaviour; the behaviour of the man or woman who did not retrieve his/her money all those centuries ago. And yet, these coins are still used for successful statistical analysis. This situation makes one wonder why stray finds should be less valuable to the modern researcher. Even if they were discovered under obscure and sometimes even illegal circumstances in unidentified contexts, they were also probably the outcome of the same random loss of small change in antiquity. Despite the fact that we do not know their place of origin, we should not rule out further numismatic analysis, especially when we are aware of both the place of production and the issuing authorities. Although I agree that they probably should not be used to estimate the exact annual mint output, these coins can still portray approximate fluctuations in their production. Whether museum curators prefer to acquire the better-preserved specimens or not, the fact remains that the collections represent a tiny percentage of the initial production of coins.⁵ Consequently, this percentage of the best-preserved coins in museums would be representative of the best-preserved pieces that circulated in antiquity. Since we do not have the ability to recover the entire coin population, we can only suppose that our sample has been randomly lost and that our results would not be radically altered if new material resurfaced.

A second line of argument followed by another sceptical group of researchers is that the number of dies should be taken to represent more accurately the ancient coin populations in circulation than the total of individual coins. In fact, the mint output of the Roman Republic and the Empire has been estimated almost exclusively according to the results from the study of dies.⁶ It has been suggested that, in order to calculate

⁴ Grierson 1965, iii and xii.

⁵ According to John Casey, only 0.003% of Roman coinage can now be recovered, only a small part of which comes from excavations at archaeological sites; Casey 1986, 84.

⁶ For an example of the relative frequency of issues in hoards used as an index of their original relative size, see Crawford 1974, section 7. For recent bibliography on the methods

approximately the size of any individual issue, one should count the known dies used to produce the surviving coins and multiply this number by an estimate of the quantity of coins struck per die. Other numismatists have advocated different approaches to the calculation of the number of dies and the number of coins struck by those dies.⁷ In the case of the exact estimate of coins produced by one die, there have been expressed as many opinions as there are numismatists; consequently, it is not likely that we will reach a consensus in the near future. Of course, there are also researchers who reject altogether the value of the entire process. T.V. Buttrey was the first but not the only one to declare that such procedures are not acceptable because the poor quality of the ancient material does not allow for its statistical analysis.⁸ His views initiated a vigorous debate. Finally, his pessimistic ideas were seriously contested in a series of articles written by other numismatists who have managed to show that there is some validity in die linking and the use of statistics in ancient history.⁹

In this volume, however, the reader will notice that we have not engaged in a detailed die study, although some links have been noted. According to a recent study that compares the numbers of individual coins from museums and private collections with the number of dies produced in the colony of Corinth during the Roman period, as they are presented in RPC, there is no substantial differentiation in the number of dies and coins once they are turned into percentages.¹⁰ Therefore, whether we estimate the number of coins or the number of dies in order to calculate the mint output, the outcome will probably be almost identical. Furthermore, the fact that the study of both coins and dies leads to the same conclusion could support the hypothesis that the collections include mainly artefacts acquired in a random fashion. If the collections were the product of personal preferences alone, then acute differences between the number of coins and dies would have been apparent. Also, it is possible that museum curators did not discriminate substantially against particular types of bronze provincial coins, although in the past they may have shown a preference for certain types of silver and gold coinages.

The quantification of the coins from the mint of Amorium not only facilitates the drawing of economic conclusions but it also allows us to outline the main characteristics of the political and cultural ideologies of the civic elites. For it is possible that the local magistrates who undertook the production of civic issues also supervised the choice of the obverse and reverse types. This choice was based both on the existing imperial ideologies as well as the advertisement of the achievements of their city. In order to understand the development of the interplay of the two identities in the Roman Republic and later during the Empire in the wider area of Phrygia it was essential to divide the types on the coins of Amorium into two categories: a) the civic types, which bear representations of local deities, buildings, myths, athletic or religious festivals, and b) the state types, which depict Roman mythological scenes, symbols of the Roman state, Roman gods, the imperial family, and military symbols. As we will see in the next section, it becomes increasingly difficult to distinguish clearly between the two identities during the Empire. In particular, the coins minted at the beginning of the third century depict images that could be attributed to the influence of both the Roman state and the city of Amorium. Nevertheless, until that time the civic and state identities are not only identifiable but their quantification may be presented in the form of statistical charts. It is likely that the relative proportions of the two categories provide a broad indication of the political influences and trends that underlay the production of bronze coins and give an insight into the ideological orientation of the civic authorities that were responsible for the choice of the obverse and reverse designs. Furthermore, these types varied according to the chronological period and they demonstrate the interaction and development of imperial and local civic elements in the creation of communal identities.¹¹

All in all, both the qualification and quantification of the numismatic evidence coming from the excavations conducted at the city of Amorium and from a number of museums and private collections could give us valuable insights into some aspects of the economy of the area and the ideological background of the issuing authorities. Despite the problems arising from the methodological procedures, it is possible to draw an impressionistic picture of the history of Roman Amorium. In fact, the purpose of this work is not to produce either a strict numismatic study or a complete

used since Crawford's study, see Savio 1997.

⁷ On the methodology, see Howgego 1992, 2. For a general survey on the number of dies used to strike an issue, see Esty 1986. The closest possible reckoning of a single issue has been estimated as about 23,333–27,250 coins per die; Kinns 1983, and see also Marchetti 1999.

⁸ Buttrey 1993, 338–9; Buttrey 1994; Buttrey and Buttrey, 1997.

⁹ See especially De Callatay 1995; Lockyear 1999.

¹⁰ Katsari 2003.

¹¹ For a preliminary outline of civic and state identities at Amorium, see Katsari 2006b. References to this work, noting changes in the numbering of the city coins, have been added to the present catalogue.

and detailed history of the region. Instead, we intend only to hint at the economic and ideological forces that affected the lives of the citizens, while providing the basic information as material for future study. In this

volume we present our current evidence and its preliminary analysis, hoping that more finds will soon be unearthed in order to complete our views on the subject.

COINS AT AMORIUM

C.S. Lightfoot

Although excavations only began in 1988, Amorium has long been of interest to travellers, antiquarians, and historians, mainly because the surviving Byzantine literary sources make frequent reference to the city.¹ As such, it was one of the principal sites whose location was sought by early scholars studying the historical geography of Phrygia. Richard Pococke, who journeyed across central Anatolia in March 1739, became the first European to identify the exact location of the ancient and mediaeval city. However, it was not until September 1836 that the English geologist William John Hamilton made the first recorded visit to the site by a western scholar.² One indication that Amorium was a place of considerable interest is the fact that it was regularly marked on antiquarian maps of Asia Minor produced during the 18th and 19th centuries.³ After Hamilton's visit, this was even done with a fair degree of accuracy.⁴ The collecting of coins from the city mint at Amorium is another sign of the early scholarly interest in the site.

The history of this activity is in itself a fascinating topic, and one that is often neglected by numismatists. As the following catalogue indicates, many of the Amorium specimens now in public collections were acquired many years ago—indeed, in numerous cases more than a century ago, and a few of these coins have even been known for more than two hundred years. So, for example, Théodore Mionnet published the first examples as long ago as 1809, and other individual specimens appeared soon afterwards—cat. no. U35 in 1814 and cat. no. K12 in 1816. Such coins were probably acquired locally from villagers, but not all of the coins of the city mint need to be from Amorium or its immediate vicinity, as the recent find of an issue of Geta (cat. no. T20) at the Yenikapı excavations in Istanbul indicates. There are, in fact, some clues to the acquisition history of some coins. For example, two issues of Amorium, one of Augustus (similar to cat. no. C29), the other of Geta as Caesar (similar to cat. no. S13), appeared at a sale in Paris in 1872.⁵ They belonged to the collection of Lionel, Marquis de

Moustier, who had served as the French ambassador in Constantinople between 1861 and 1866, and they may well have been obtained during his time in Turkey. However, records also indicate that coin dealers in Paris and Athens had access to Amorium coins at least as early as the 1880s.⁶ Several coins listed in the catalogue came into the British Museum (in 1902) and the National Museum in Copenhagen (in 1904) from the collection of A.O. van Lennep, who is said to have acted as a Consul General in Smyrna (Izmir). Whether this person is connected in any way with the Rev. Henry J. van Lennep, who travelled across central Anatolia from Ankara to Afyonkarahisar in the summer of 1864, remains unclear, but the latter certainly came within striking range of Amorium, for he spent the night of August 22 at Bağlıca.⁷ It may be noted that an Amorium coin in the Afyonkarahisar Museum (cat. no. U16) is recorded as coming from the same place.

Six Amorium coins (cat. nos. A70, D3, K13, R15, R40, and S26) in the Fitzwilliam Museum were first published in the 1850s by William Martin Leake, who thirty years before had also published an account of his journey across Asia Minor in 1800 to join the British fleet in Cyprus.⁸ Leake presumably acquired the coins at some point as a result of his travels and his life-long interest in ancient topography.⁹ Sir William Ramsay made several expeditions to Phrygia in the 1880s, and it may be assumed that it was during one of these that he acquired a coin (cat. no. S2) that he sold to the Revd. Lewis in 1885.¹⁰ A similar case is provided by William Buckler, who conducted epigraphic research in Phrygia during the 1930s. One of the coins in the Ashmolean (cat. no. D20) is recorded as having been donated by him in 1939, and it may be assumed that he obtained the specimen during his travels. Likewise, two other coins in the Fitzwilliam (cat. nos. C43 and F16) are recorded as having been acquired in Afyonkarahisar in 1966. Indeed, it would appear that the habit of obtaining coins at the site continued until fairly recent times (see cat. no. D17).

¹ There was also a preliminary survey season in 1987; see *AnatSt* 1988, 176-80.

² See Lightfoot 2012a, 469.

³ See, for example, the map of Asia Minor published by Baldwin & Craddock under the superintendence of the Society for the Diffusion of Useful Knowledge, London 1830. For the use of the name Hergan Kale for Amorium on antiquarian maps, see Lightfoot 2000, 82-3.

⁴ See Lightfoot 2012a, esp. 478 and fn. 87.

⁵ Hoffmann 1872, 16, no. 251; 156, no. 2417 (respectively).

⁶ See cat. nos. C34, Q22 (Lambros); G17, Q10 (Stiliano-poulos).

⁷ Van Lennep 1870, 218-20.

⁸ For his discussion of the history and location of Amorium, see Leake 1824, 86-8; 1854, 10.

⁹ For Leake's scholarly contribution to the historical geography of Asia Minor, see Wagstaff 1987.

¹⁰ There is no firm evidence, however, that Ramsay ever visited Amorium himself.

Although some coins of the city mint will have been dispersed in antiquity—and the discovery of several examples during the excavations at Pessinus is particularly significant in that regard—it is likely that most were found locally either at Amorium itself or in its immediate vicinity.¹¹ The present catalogue includes eight examples that have been recorded at the site by the excavation team since 1987. Only two of these coins, however, were excavated (cat. nos. A39 and K17); the remainder were all chance surface finds (cat. nos. A34, A64, C18, D9, E3, and G55). Three more surface finds from the site (cat. nos. C17, C46, and M5) are also in the collection of the Afyonkarahisar Museum, having been acquired by other means. The unique specimen issued under Commodus (cat. no. O1) is also said to have been found at the site, although in this case it made its way directly to Ankara.¹² In addition, the collections of the Afyonkarahisar Museum include, as well as five specimens from villages within a 25-kilometre radius of the site, fourteen examples that are said to be from Emirdağ, the local administrative centre and market town, although this attribution may in fact simply be shorthand for Amorium.¹³ Likewise, the six examples that are said to be from Afyonkarahisar itself may come from elsewhere. On the other hand, records that attribute Amorium coins to Dinar, Sandıklı, Şuhut, and Tatarlı may be taken as an accurate reflection of actual finds from the ancient cities of Apameia, Hieropolis, Synnada, and Metropolis that are associated with these modern towns and villages.¹⁴ Another six Amorium coins have been published from collections in Bolvadin.¹⁵ Finally, an example (R35) was noted in the possession of villagers at Çeltik during the summer of 2010.¹⁶

It is clear therefore that a considerable number of coins of the city mint originate from Amorium itself. These, however, are not the only coins that have been found

there. Between 1987 and 2009 some 849 coins have been recovered from the site and, as stated above, only eight of them—that is, less than one percent of the excavation finds—belong to the city mint. If, however, one takes into account only those coins that were recorded as surface finds, assuming them to be more indicative of the nature of chance finds made at the site generally, then the figure rises to three percent (six out of some 200 coins). It would seem to indicate that the city mint coins found at Amorium over the past two centuries constitute only a small fraction of the total number of coins that could have been collected from the surface of the site. It is, of course, impossible to trace these other coins and to speculate on what periods, mints, and types they might have represented. However, if, as has been suggested, many of the coins that were acquired by western collectors and museums before the beginning of the present excavations were brought out by foreign visitors to the area, it is likely that they specifically chose coins of the Amorium mint from the assortment of coins that were offered to them by the locals. There would, in effect, have been a positive discrimination in favour of such coins, and many other surface finds may have been rejected and so condemned to an unknown fate.

¹¹ Nine Amorium coins are recorded from Pessinus; see cat. nos. A80, A81, C55, C56, E30, E31, E32, Q24, and S37.

¹² Seven other Amorium coins are also recorded in the collections of the Anatolian Civilizations Museum; see cat. nos. A21, B11, F11, N22, Q13, Q20, and S20.

¹³ For Emirdağ, see cat. nos. A24, A51, A79, A82, E8, E9, E22, F8, K7, K23, K35, L8, S27, and U8; the other coins are from Bağlıca (cat. no. U16), Demircili (cat. no. F10), Güveççi (cat. nos. C16 and C58), and Piribeyli (cat. no. D18). Two other coins are attributed to an unspecified village near Emirdağ; see cat. nos. C42 and T1.

¹⁴ See cat. nos. A54, B7 (Dinar), S29 (Sandıklı), Q16 (Şuhut), and G53 (Tatarlı).

¹⁵ Ashton, Lightfoot, and Özme 2000, 175, nos. 19–24.

¹⁶ Information kindly provided by Amorium team member Güven Deniz Apaydin. Çeltik is approximately 40 km. east of Amorium; see Calder 1956, xlv: map of eastern Phrygia (2).

ABBREVIATIONS

AJA	<i>American Journal of Archaeology</i>	GRBS	<i>Greek, Roman, and Byzantine Studies</i>
AJNum	<i>American Journal of Numismatics</i>	Grierson	P. Grierson, <i>Byzantine Coins</i> , London/Berkeley/Los Angeles 1982
AM	<i>Mitteilungen des deutschen archäologischen Instituts. Athenische Abteilung.</i>	HA	<i>Historia Augusta</i>
AMC	C.H.V. Sutherland and C.M. Kraay, <i>Catalogue of the Coins of the Roman Empire in the Ashmolean Museum. I. Augustus</i> , Oxford 1975	HBN	<i>Hamburger Beiträge zur Numismatik</i>
Amorium 1	M.A.V. Gill (with contributions by C.S. Lightfoot, E.A. Ivison, and M.T. Wypyski), <i>Amorium Reports, Finds I: The Glass</i> (1987-1997), BAR International Series 1070, Oxford 2002	IG	<i>Inscriptiones Graecae</i>
Amorium 2	C.S. Lightfoot (ed.), <i>Amorium Reports II: Research Papers and Technical Studies</i> , BAR International Series 1170, Oxford 2003	IGRom	R. Cagnat (ed.), <i>Inscriptiones Graecae ad Res Romanas pertinentes</i> , Paris 1901-1927
Amorium 3	C.S. Lightfoot and E.A. Ivison (eds.), <i>Amorium Reports 3: The Lower City Enclosure, Finds Reports and Technical Studies</i> , Istanbul 2012	ILS	<i>Inscriptiones Latinae Selectae</i>
AnatArch	<i>Anatolian Archaeology: Reports on Research Conducted in Turkey</i> , BIAA, ed. G. Coulthard, London	JÖB	<i>Jahrbuch der Österreichischen Byzantinistik</i>
AnatSt	<i>Anatolian Studies</i>	JRA	<i>Journal of Roman Archaeology</i>
ANS	The American Numismatic Society, New York	JRS	<i>Journal of Roman Studies</i>
ANSMN	American Numismatic Society. <i>Museum Notes</i>	KST	<i>Kazı Sonuçları Toplantısı</i>
AST	<i>Araştırma Sonuçları Toplantısı</i>	LIMC	<i>Lexicon Iconographicum Mythologiae Classicae</i> . Zurich/Munich 1981-1997
BAR	British Archaeological Reports	Lindgren III	H.C. Lindgren, <i>Lindgren III. Ancient Greek Bronze Coins from the Lindgren Collection</i> . Quarryville 1993
BBBS	<i>Bulletin of British Byzantine Studies</i>	LRBC	P.V. Hill, J.P.C. Kent, and R.A.G. Carson, <i>Late Roman Bronze Coinage, A.D. 324-498</i> , London 1960.
BCH	<i>Bulletin de correspondance hellénique</i>	Morrisson	C. Morrisson, <i>Catalogue des monnaies Byzantines de la Bibliothèque Nationale</i> , 2 vols., Paris 1970.
BJ	<i>Bonner Jahrbücher</i>	Musei Sanclementiani	<i>Musei Sanclementiani. Numismata Selecta Imperatorum Romanorum Graeca Aegyptiaca et Colonialium Illustrata</i> , vol. I, Rome 1808
BMC	<i>British Museum Catalogue</i> , London	NC	<i>Numismatic Chronicle</i>
BMC Phrygia	B.V. Head, <i>Catalogue of the Greek Coins of Phrygia</i> , <i>British Museum Catalogue</i> , London 1906	NCirc	<i>Numismatic Circular</i>
BMCRE	H. Mattingly, <i>Coins of the Roman Empire in the British Museum</i> , vol. 1. <i>Augustus to Vitellius</i> , London 1923	OGIS	W. Dittenberger (ed.), <i>Orientis Graecae Inscriptiones Selectae</i>
ByzF	<i>Byzantinische Forschungen</i>	PIHANS	Publications de l'Institut historique-archéologique néerlandais de Stamboul
CIL	<i>Corpus Inscriptionum Latinarum III</i> , Berlin 1873-1953	RA	<i>Revue archéologique</i>
CNA	Classical Numismatic Auctions Ltd.	RE	<i>Real-encyclopädie der classischen Altertumswissenschaft</i>
CNG	Classical Numismatic Group, Inc.	RIC	<i>The Roman Imperial Coinage</i> , H. Mattingly and E.A. Sydenham, 10 vols., London
DOC	A.R. Bellinger and P. Grierson, <i>Catalogue of the Byzantine Coins in the Dumbarton Oaks Collection and in the Whittemore Collection</i> , 3 vols., Washington, D.C. 1962-1973	RN	<i>Revue Numismatique</i>
DOP	<i>Dumbarton Oaks Papers</i>	RPC I	A. Burnett, M. Amandry, and P.P. Ripollés, <i>Roman Provincial Coinage: Supplement I</i> , London and Paris 1998
		RPC I Suppl.	A. Burnett, M. Amandry, and P.P. Ripollés, <i>Roman Provincial Coinage: From the Death of Caesar to the Death of Vitellius (44 BC to AD 69)</i> , London and Paris 1992
		RPC II	A. Burnett, M. Amandry, and I. Carradice, <i>Roman Provincial Coinage</i> , vol. 2, part 1: <i>From Vespasian to Domitian (AD 69-96)</i> ,

- London and Paris 1999
- Sear D.R. Sear, *Greek Imperial Coins and their Values. The Local Coinages of the Roman Empire*, London 1982
- SKB Schweizerische Kreditanstalt, Bern
- SNG Aul *Sylloge Nummorum Graecorum Deutschland. Sammlung v. Aulock. Phrygien*, Nr. 3329–4040, Berlin 1964, and *Nachträge IV. Phrygien*, Nr. 8299–8458, Berlin 1968
- SNG Bern B. Kapossy, *Sylloge Nummorum Graecorum Schweiz, II. Münzen der antike : Katalog der Sammlung Jean-Pierre Righetti im Bernischen Historischen Museum*, Bern 1993
- SNG Cop *Sylloge Nummorum Graecorum. The Royal Collection of Coins and Medals. Danish National Museum Copenhagen. Phrygia to Cilicia*, West Milford, NJ 1982
- SNG Fitz *Sylloge Nummorum Graecorum, Vol. 4, Fitzwilliam Museum, Leake and General Collections, Part Six, Asia Minor—Phrygia*, Oxford 1965
- SNG Lewis *Sylloge Nummorum Graecorum. The Lewis Collection in Corpus Christi College Cambridge, Part Two, The Greek Imperial Coins*, Oxford 1992
- SNG Leypold W. Szaivert and C. Daburon, *Sylloge Nummorum Graecorum Österreich, Sammlung Leypold. Kleinasiatische Münzen der Kaiserzeit, Band II: Phrygien – Kommagene*, Nr. 1344–2846, Vienna 2004
- SNG Mün *Sylloge Nummorum Graecorum Deutschland, München. 24. Heft, Phrygien*, Munich 1989
- SNG PfPS J. Nollé, *Sylloge Nummorum Graecorum Deutschland, Pfälzer Privatsammlungen. Band 5, Pisidien und Lykaonien*, Munich 1999.
- SNG Soutzos E. Tsourti and M.D. Trifiró, *Sylloge Nummorum Graecorum Greece 5, Numismatic Museum, Athens, The A.G. Soutzos Collection*, Athens 2007
- SNG Sweden *Sylloge Nummorum Graecorum Sweden I:2, Sammlung Eric von Post. Kungl. Myntkabinettet*, Stockholm 1995
- SNG Tüb *Sylloge Nummorum Graecorum Münzsammlung der Universität Tübingen*, vol. 6, *Phrygien – Kappadokien. Römische Provinzprägungen in Kleinasien*, Nr. 3887–4744, Munich 1998
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- ZfN *Zeitschrift für Numismatik*.

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