

ARCHAEPRESS ROMAN ARCHAEOLOGY 100

# BETWEEN ROMAN CULTURE AND LOCAL TRADITION

Roman Provincial Coinage of Bithynia  
and Pontus during the Reign of Trajan  
(98-117 AD)

Barbara  
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# Preface

*Sis felicior Augusto, melior Traiano* – ‘be more lucky than Augustus [and] better than Trajan’. This formula, uttered during the inauguration of the new ruler in the late Empire, recall the times of happiness and stability of the Roman state. Trajan was considered as one of the best emperors, who not only expanded the borders of the Empire but also supported society through various monetary donations and founded new architectural structures.<sup>1</sup> Despite this, we have an insufficient number of historical sources to enable us to accurately reflect all the events, policies, or decisions of the ruler within the Empire. Usually, individual aspects of important military events of that period are analysed, i.e. the Dacian wars or the Parthian campaign, and thus the territories related to them.<sup>2</sup> Less attention is paid to the politics, organisation, and culture of other individual regions. One of the best sources from the time of Trajan is the correspondence of Pliny the Younger, who was the governor of Bithynia and Pontus, concerning the administration and finances of the province.<sup>3</sup> However, this is not an adequate source to allow us exhaustively to recreate the financial and monetary policy of the province. Provincial coinage is a very complicated issue, with a number of phenomena, such as the lack of a uniform monetary system or the diversified nature of the coins (e.g. pseudo-autonomous and colonial coinage, coins struck by *koinon* or neocorate). Moreover, together with the local currency, coins issued in the capital’s mint were also circulated.<sup>4</sup> Thus, a colourful, dynamic and, at first glance, quite chaotic image of provincial coinage appears, which, however, was subject to certain rules, although not necessarily known or recognisable today.

The aim of this work, based on a doctoral dissertation, is a detailed analysis of the Roman provincial coinage of Bithynia and Pontus during the reign of Trajan (98–117) based not only on numismatic material, but also on other source categories. It will allow us to recreate as much as possible the coinage policy of individual cities, culture, and religion in various centres during this period, as well as contacts and relations among the local communities.

Determining the coinage policy in a given area is accompanied by a number of questions related to the authorities and decision-making regarding coin production, reasons, possibilities, organisation of the mint, ore, number, metrological parameters, images, circulation, and, ultimately, deposit.<sup>5</sup> So far, general analyses of all provinces in the Roman period have been mainly made,<sup>6</sup> but each of them should be viewed as a separate organism in order to try to understand the local nature of individual phenomena. So far, a lot of research has been focused on provinces such as Asia, Syria, Judea, and Egypt. Much less attention, despite its important location, was given to Bithynia and Pontus during the Roman period.

What was the coinage policy in Bithynia and Pontus during the reign of Trajan, between 98–117? What was the influence of the central intervention on local production, the status of

<sup>1</sup> Plin. *Pan.* 12–13, 29, 51; Bennett 1997 (2015): 19, 123.

<sup>2</sup> Cf. Dubicki 2013; Ellithorpe 2017; Lepper 1946 (2013).

<sup>3</sup> Plin. *Ep.* X; Dębiński *et al.* 2017.

<sup>4</sup> Butcher 1988: 9–13; Heuchert 2005: 29–56; Zając 2017c.

<sup>5</sup> Butcher 1988: 23. Cf. Amandry, Burnett *et al.* 1992; 1999; 2015.

<sup>6</sup> Cf. Butcher 1988; Katsari 2011.

the cities, trade, cult, and the army? Did the neighbouring provinces, such as Thrace, Asia, and Cappadocia, and their cities, have any influence on the coinage in Bithynia and Pontus? Could an imperial branch have functioned in these areas? What was the monetary production in local centres? Have the cities within the provinces entered a kind of monetary union? In which years and from what ores were the individual coins minted? What was their number and how many dies for their production can we distinguish? How important were imperial coins for monetary policy and the provincial market? Were these issues a model of some of the provincial coins minted in Bithynia? What was the meaning of the images on the coins? What do the coin finds say about the circulation in a given region? The aim of this study is to try and answer the above questions, and thus to define the various aspects of the coinage policy in Bithynia and Pontus during the reign of Trajan.

The chronological framework of the discussed issue focuses mainly on the period of the emperor's reign, between 98 and 117, however, when completing some aspects, it is necessary to refer also to other periods. In order to more precisely define the reasons and rhythm of production, the denominations minted at that time, or the meaning of the presented effigies, it is necessary to trace previous traditions both in the local areas and in individual centres. Thus there will be reference to provincial issues of Bithynia and Pontus from the Julio-Claudian and Flavian dynasties, and in the case of the cults and beliefs worshiped, to the Hellenistic period, the reign of the Mithridatic dynasty, and even to earlier times related to colonisation. To complete the cultural and religious context reflected to some extent on the coins, other categories of sources were used, including historical, epigraphic and material ones, such as figures, sculptures and architectural remains. Many of these have a broader chronological framework (e.g. terracotta figurines dating from the Hellenistic period), or we are unable to determine their exact dating (e.g. inscriptions from the 2nd or 3rd centuries). To examine the popularity of the motif and its repetition on coins of similar size, the issues also minted in earlier and later periods of the reign of individual emperors were traced.

In terms of territory, the discussed issues concern the areas of Bithynia and Pontus, i.e. the northern part of Anatolia and the southern shores of the Black Sea, as a Roman province in the administrative context. In the time of Trajan, it then included a small part of Thrace, where Byzantium was located, then Bithynia, the northern part of Paphlagonia, and a small, western part of Pontus.<sup>7</sup> The individual cities are also discussed in this order in the chapter about mints. Other aspects discussed were analysed according to the order adopted in the study of *Roman Provincial Coinage* (2015), with emissions without ethnic with uncertain attribution described at the end of the chapters, after the review of coins from other cities. For the sake of clarity of the issues raised, an exception is made for the coins from Apamea Myrlea and Sinope, analysed in terms of the Latin legends. It is also worth emphasising that the traditions of individual regions and cities were not limited only to the administrative borders of the provinces, which were undergoing changes. Hence, the research material was subjected to comparative analyses with neighbouring centres located within other provinces, such as Thrace, Asia, and Galatia and Cappadocia.

One should pay attention to the name of the province, which in various writings and studies is referred to as Bithynia, Bithynia and Pontus, or Pontus and Bithynia. Epigraphic sources from

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<sup>7</sup> Plin. *Ep.* X; Amandry, Burnett *et al.* 2015: 118–154; Rémy 1986: 65.

the middle and end of the 1st century show that the official form of the name at that time was Pontus and Bithynia, despite the larger part of the province belonging to Bithynia. In several inscriptions, as well as from the historical records of Tacitus and Cassius Dio, a colloquial reference only to Bithynia appeared. In turn, in most epigraphic sources, dated to the end of the 2nd and into the 3rd century, the form of the name used at that time was Bithynia and Pontus.<sup>8</sup> It is also worth noting that in the correspondence of Pliny there is a reference to the latter.<sup>9</sup> In modern studies, this form is very often used, with some researchers also referring to the official name of Pontus and Bithynia. In this case, due to the correspondence of Pliny, the name of the province was adopted as Bithynia and Pontus. It should also be emphasised that the work sometimes includes colloquial references to the name of the province or geographic country within which a given town was located. In the case of individual modern Turkish names of cities, provinces or districts, the original spelling was left. The legends placed on the coins in the work, both in Greek and Latin, as well as the individual nicknames of the emperor, remain in the original, with their translation and meaning discussed in a separate chapter.

All dates quoted in the work referring to times before Christ are abbreviated 'BC'. The exceptions in this case are the dates in parentheses relating to the reigns of rulers or historical events. The rest of the dates written without marking are Anno Domini (AD).

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<sup>8</sup> Wesch-Klein 2001: tab. 1–2.

<sup>9</sup> Dębiński *et al.* 2017: 426, 444.

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# Introduction

Roman provincial coinage differed from units issued in Rome (the so-called imperial coinage). Due to the lack of a uniform system, the nominal, typological and iconographic diversity, it still requires detailed research that can provide much information on the economy, politics, or tradition in a given region. Research on Roman provincial coinage is developing very dynamically, among others, thanks to the international project *The Roman Provincial Coinage* (RPC), coordinated by the University of Oxford. The project is aimed at creating a complete catalogue of provincial issues minted in the area of the Roman Empire.<sup>1</sup>

Provincial coins initially co-existed in some catalogues with Roman imperial issues.<sup>2</sup> They were also partly the subject of studies in the Greek coinage from individual regions and cities, published in the *Die antiken Münzen Nordgriechenlands* series (1898–1935), then its re-issued version *Griechisches Münzwerk* (from 1956), or as part of the *Sylloge Nummorum Graecorum* project (from 1930). Provincial emissions were also included in articles and studies, inter alia those of F. de Saucy,<sup>3</sup> J. Rouvier,<sup>4</sup> N.A. Moushmov,<sup>5</sup> and F. Imhoof-Blümer.<sup>6</sup>

So far, several different issues related to provincial coinage have been addressed. Among them, we can distinguish monographic studies of some mints, such as Caesarea in Cappadocia,<sup>7</sup> Antioch in Syria,<sup>8</sup> or Byzantium in Thrace.<sup>9</sup> Various categories of coins were analysed, such as cystophores or pseudo-autonomous coins,<sup>10</sup> as well as the monetary structure in the provinces.<sup>11</sup> Provincial issues were also published as part of developed museum collections and finds from archaeological sites, thus drawing attention to possible aspects of coin circulation.<sup>12</sup> Moreover, in many cases individual features of the issues have been analysed, such as denominations and iconography.<sup>13</sup>

Due to the chronology of the issue under consideration, the state of research on the period of Trajan's rule should be mentioned. As much as possible, some events are recreated, however, there are still many gaps and blank spots. This is due to the small number of historical sources, including the *Panegyric* and the correspondence of Pliny the Younger, book 68 of *Roman History* of Cassius Dio, and the speeches written by Dio Chrysostom.<sup>14</sup> Some of the activities related to the Parthian campaign are described in a fragmentary work, *Parthica*, by Arrian

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<sup>1</sup> Cf. Roman Provincial Coinage online – <https://rpc.ashmus.ox.ac.uk/project/> Access: from May 2018 to January 2022.

<sup>2</sup> Cf. Imhoof-Blümer 1908; Mionnet 1807; series *Roman Imperial Coinage* (RIC), from 1926.

<sup>3</sup> de Saucy 1874.

<sup>4</sup> Rouvier 1900a; 1900b; 1901a; 1901b; 1902.

<sup>5</sup> Moushmov 1912.

<sup>6</sup> Imhoof-Blümer 1913.

<sup>7</sup> Metcalf 1996; Sydenham 1933.

<sup>8</sup> Butcher 2004.

<sup>9</sup> Schönert-Geiss 1972.

<sup>10</sup> Johnston 1985; Metcalf 1980.

<sup>11</sup> Johnston 2007; Katsari 2011.

<sup>12</sup> Bellinger 1961; Bodzek 2020; Corsten 1996; Evans 2018; Schachinger 2014.

<sup>13</sup> Bennett 2014; Elkins 2015; Howgego 2005a; Johnston 1997; 2007.

<sup>14</sup> Dio Chrys. *Or.*; Plin. *Pan.*; Plin. *Ep.* Cf. Bennett 1997 (2015): 13–14, 363–368, there a more detailed characteristic of the works is given, as well as a reference to the entries in the Byzantine chronicles.

of Nicomedia.<sup>15</sup> Tacitus only mentions the prosperity and security of the Nerva and Trajan epochs, without giving more specific information about the periods concerned.<sup>16</sup> Because of this lack of information in historical works, archaeological research, and epigraphic and numismatic materials are becoming an inseparable source of reconstruction.

The times of Trajan have, of course, been the subject of research, e.g. R. Paribeni, J. Bennett, and K. Strobel.<sup>17</sup> They are general and basic studies that compile, characterise, and organise individual events and activities during the emperor's reign. Trajan's war campaigns and military successes are of great interest to scholars. The wars with the Dacians have been analysed by many, e.g. A.S. Stefan, M. Schmitz, A. Dubicki, and W. Kelso.<sup>18</sup> In turn, the Parthian campaign was discussed by F.A. Lepper and J.M. Schlude.<sup>19</sup> Of course, it should be emphasised that the above aspects have also been referenced many times as, inter alia, analogies or objects of analysis in other studies concerning, for example, politics, propaganda, architecture, or art, which, due to the topic in hand, cannot be listed here.<sup>20</sup>

In publications relating to the reign of Trajan, or provincial administration during this period, an inseparable and widely quoted source is the correspondence between Pliny the Younger and the emperor, regarding the needs and finances of the provinces of Bithynia and Pontus. It is one of the few and very valuable accounts that is the basis for further research on the life and functioning of this region, or on Trajan's policy itself. There have been many studies on the correspondence itself,<sup>21</sup> including analyses that undermine the authenticity of the work.<sup>22</sup> The interpretation of the work remains another issue. G. Woolf emphasised that Pliny's correspondence reflects the views of the Latin-speaking audience and the elites managing the provinces, thus reflecting 'the outline of the ideology of Roman power'. Letters were a propaganda tool, creating the positions of the ideal ruler and governor, caring for society.<sup>23</sup> Bearing in mind the given aspects, it was limited only to providing information on individual projects in the centres, as well as to the phenomenon itself, related in this case to central intervention, which was considered, among others, by G. Salmeri.<sup>24</sup> The credibility of the source and the various views of Pliny have also not been analysed in this present study.

In the case of research on the numismatics of this period, Trajan's imperial coinage was very well developed,<sup>25</sup> being characterised by a systematised structure, continuation of nominal units from the years of the previous rulers, and diligence in titles and images related to the emperor's ideological trends. As for Trajan's provincial coins, they have been included in the catalogues of major publications.<sup>26</sup> Currently, the most up-to-date study of the issue from this period is the third volume of *Roman Provincial Coinage*.<sup>27</sup> Due to the amount of material and

<sup>15</sup> Arr. *Parth.* Cf. Bennett 1997 (2015): 327–328.

<sup>16</sup> Tac. *Hist.* Cf. Bennett 1997 (2015): 227–229.

<sup>17</sup> Bennett 1997 (2015); Paribeni 1926 (1975); Strobel 2010.

<sup>18</sup> Dubicki 2013; Kelso 2017; Schmitz 2005; Stefan 2005.

<sup>19</sup> Lepper 1946 (2013); Schlude 2020.

<sup>20</sup> Individual works are listed by i.a. Bennett 1997 (2015); Lepper 1946 (2013); Strobel 2010.

<sup>21</sup> Cf. Debiński *et al.* 2017; Winniczuk 1987b (2015); Woolf 2006 (2017).

<sup>22</sup> Bennett 1997 (2015): 59.

<sup>23</sup> Woolf 2006 (2017): 125–126, 131–142.

<sup>24</sup> Salmeri 2005.

<sup>25</sup> Allen 2007; Beckmann 2000; 2007; Mattingly 1926; 1936; Mattingly and Sydenham 1926; Metcalf 1975; Strack 1931; Woytek 2010.

<sup>26</sup> Imhoof-Blümer 1908; Mionnet 1807; Waddington, Reinach and Babelon 1904–1912.

<sup>27</sup> Amandry, Burnett *et al.* 2015; Supplement IV (2017).

type of publication, the analysis of the coinage in individual cities and provinces is a general study that highlights the main and most important aspects. Moreover, compared to the reign of the next emperor, Hadrian (117–138), the minting activity in Trajan's time is sometimes marginalised. The provincial coins of Bithynia and Pontus were included in the catalogues of older studies, however, no more detailed regional analyses were undertaken. One of the basic publications on this issue is the work of W.H. Waddington, T. Reinach and E. Babelon,<sup>28</sup> which was one of the first catalogues on the areas of Bithynia and Pontus, compiling coins from different centres and periods. Each town's history is briefly given. Coins of Bithynia and Pontus were also found in various museum inventories.<sup>29</sup> Monetary activity associated with some of them was also the subject of several monographs (Byzantium, Sinope<sup>30</sup>) and articles (Apamea Myrlea, Prusias, Nicomedia, Amisus<sup>31</sup>). The attribution of some coins or countermarks was also considered.<sup>32</sup> Coins from museum collections in northern Turkey, issues related to numismatics and epigraphy in the Roman period or individual iconographic motifs were developed as part of several Bachelor's, Master's and Doctoral dissertations.<sup>33</sup>

Until now, Bithynia has been the subject of several analyses in terms of organisation and administration, urbanisation, and the economy of the province,<sup>34</sup> however these are general studies of the entire Roman period or a selected city. There was also interest in the society within the region and local elites.<sup>35</sup> Tradition, geography, and individual artefacts from the provinces have been the subject of much research by Ch. Marek,<sup>36</sup> in turn, the economy of Nicomedia, but also the coinage of the region, was considered in the works of H. Güney.<sup>37</sup> It should also be emphasised that the areas of Pontus have often been far more discussed than the areas of Bithynia.<sup>38</sup> No detailed research has been undertaken so far analysing various aspects of the coinage of this region, such as, e.g., production or iconography, for the period of Trajan's reign. Moreover, the discussed issues were supplemented by other source categories, including inscriptions; these have made it possible to obtain a broader perspective, allowing for the explanation of individual phenomena.

A very important stage of this current research involved museum and library queries, enabling the collection of material used for analyses. Mainly collections in Europe and Turkey were visited. Individual issues from various studies, archaeological research reports and auctions were also collected. On this basis, fourteen mints, issuing bronze coins, were distinguished during the reign of Trajan. The individual centres and their emissions have been elaborated in terms of chronology, production, denominations, placed images, legends, and circulation. The coins without ethnic and with uncertain attribution, prototypes of some Bithynia and Pontus issues, and pseudo-autonomous coins were also studied. The next step was to take into

<sup>28</sup> Waddington, Reinach and Babelon 1904–1912.

<sup>29</sup> Cf. Corsten 1996; Williams 2009.

<sup>30</sup> Casey *et al.* 2010; Manisse 2015; Schönert-Geiss 1972.

<sup>31</sup> Cf. Blanco Pérez 2015a; 2015b; Bilir *et al.* 2015; Güney 2014; Nordbø 1988; Price 1967; Woytek 2011.

<sup>32</sup> Price 1967; Sommer 1996; Zając 2019a.

<sup>33</sup> Bilici 2002; Demirkök 1999; Doğanç 2001; Erol-Özdizbay 2011; Lenger 1996; Tekdemir 2016.

<sup>34</sup> Cf. Bekker-Nielsen 2008; Güney 2012; Harris 1964; Langer 1986; Lorient 2011; Mikael 2016; Torchia 1970; Salmeri 2005; Storey 1998; Weissová 2017.

<sup>35</sup> Fernoux 2004; Nicols 1990; Rémy 1989; Tsetschaldze 2012; Vitale 2014.

<sup>36</sup> Marek 1985; 1993b; 2003; 2009.

<sup>37</sup> Güney 2012; 2014; 2015b; 2015c; 2015d; 2016.

<sup>38</sup> Amandry, Rémy and Özcan 1994; de Callatay 2007; 2011b; Dalaison 2017b.

account other source categories, i.e. epigraphy, iconography or historiography, which shed more light on the possible monetary situation in the province.

In terms of the contents of this present study, the first chapters briefly describe the times of Trajan and the financial policy pursued, as well as the organisation of the province and the delegation of Pliny the Younger to Bithynia and Pontus. Then, the history of the region and individual cities are discussed, along with annotations to Pliny the Younger and the problems he raised. In addition, due to other issues, such as the tradition present in a given area, or circulation, and thus finds and possible analogies, the state of the archaeological research in individual cities was also briefly discussed.

One of the problematic issues in provincial coinage is the chronology of individual coins. It was typical and frequent to place portraits of a ruling emperor on the obverses, which allows for fairly wide dating of the given issues. One should also remember those pseudo-autonomous emissions that lack any portrait of the emperor.<sup>39</sup> Roman imperial coins were probably the prototypes of some of the images of the ruler placed on the obverse of the coins of Bithynia and Pontus in the time of Trajan. For the times of interest to us, four chronological periods can be distinguished in connection with the nicknames given to the emperor. However, to define the chronology of Trajan's emission a little more precisely, Strack, and then Woytek, developed a method of more precise dating based on the changes of the portrait.<sup>40</sup> So far, this method has not been used for a slightly more precise dating of provincial coins, due to the different style of engravers and the individual character of the images. However, a more detailed analysis of the issue from this period shows regularities that may confirm the copying of portraits from imperial coins (underlined and distinct physiognomic elements corresponding to possible prototypes or elements of clothing). On this basis, attempts were made to determine the individual issues struck a little more precisely, as well as to specify the period of the mint's operation.

Other issues discussed were the denominations of individual coins, and their recognition and assignment to the values adopted in the general provincial system. Possible adaptations of the imperial system were also considered, as well as certain traditions related to placing a given image on coins of a certain size.

An important subject of the work involves the legends and effigies on coins of Bithynia and Pontus in the times of Trajan. The first issue was analysed in terms of the content posted and its record. In turn, attempts were made to look at the issues of images as much as possible, both from the point of Roman and local tradition, indicating more civic motifs, related to the propaganda of the Empire, or reflecting the regional character associated with the current cult. For this purpose, other categories of artefacts have also been compiled, which may prove the presence of a given tradition in the centre or its nearby areas. It is worth paying attention to the epigraphic and historical-geographical researches within these regions, which were

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<sup>39</sup> Amandry, Burnett *et al.* 2015: 857–858; Heuchert 2005: 47–48.

<sup>40</sup> Strack 1931: 26–29; Woytek 2010: 55–73. The imperial portrait considered also by Besombes 2008; Etienne and Rachet 1984; Hill 1970.

undertaken from the mid 19th century,<sup>41</sup> and which are still prominent in the work leading Turkish specialists.<sup>42</sup>

Chapter 2 looks at possible prototypes of motifs placed on coins, which could indicate a certain degree of city integration. Kraay has suggested the presence of a coinage centralisation system in the province, which could be reflected in a similar denomination structure, ore structure, images, legends, and die-links, and the existence of a specific currency in circulation. The individual coins in Bithynia and Pontus show some similarities, but not in all respects, thus contradicting a strict system of centralisation, and pointing to some kind of integration between the centres.<sup>43</sup> It should be borne in mind that cities often competed for status to gain benefits (in Bithynia and Pontus, the rivalry between Apamea and Prusa, or Nicaea and Nicomedia).<sup>44</sup> So where does the integration in a given period come from? It can be noticed that some of the images placed on the coins, reproduced in various places, reflected a certain character of the Roman tradition rather than the local culture. The source of some effigies on the reverse of the coins issued locally in Bithynian centres during the Trajan period, indicating a certain integration, are Roman imperial issues minted between 80–82 in the imperial mint located in Thrace or Bithynia.<sup>45</sup>

One of the more interesting categories of coins struck in Bithynia and Pontus in the time of Trajan are the coins without the ethnic identifying the mint. Based on, *inter alia*, effigies, denominations, legends, traditions of various centres, or countermarks, attempts were made to assign individual coins to possible cities.

Pseudo-autonomous coins are also discussed separately, which, due, *inter alia*, to the lack of a portrait of the emperor, it is not known whether they were minted precisely in this period, and which can be attributed to the times of Trajan due to the similar style of execution or the repetition of motifs. In this case, it is mainly the issues struck at Amastris, Sinope, and Amisus.

An important stage of the research was the analysis of production in various localities, during which the earlier periods of coin production and the ore used were indicated. The number of dies and possible links are specified. On this basis, attempts were also made to estimate, for some centres, as much as possible, the number of minted coins of a given issue. For this purpose, the Carter method was used to estimate the presumed original number of dies. The obtained result was compared with the possible number of coins from one die, that is *c.* 15,000, assumed by the author. It should be emphasised, however, that there is currently no certain position on this issue.<sup>46</sup> Different scientists take a different number, depending on various factors. This topic is discussed in more detail in Chapter 8. Moreover, on some coins various countermarks were placed, the possible provenance and the reasons for which were tried to be determined.

<sup>41</sup> Ainsworth 1842; 1855: 235–241; Dörner 1941; Hirschfeld 1883; 1888; Kalinka 1933; Mendel 1900; Mordtmann 1887: 168–183; Perrot, Guillaume and Delbet 1872; Robert 1937. Cf. Weissová 2017: 56–65, tab. 7.

<sup>42</sup> Akyürek Şahin 2012a; 2012b; Avcu and Doğan 2014; Onur 2014; Öztürk 2010a; 2010b; 2013b; 2013c; 2016a; Öztürk, Aktaş and Demirhan-Öztürk 2020; Öztürk *et al.* 2012; Şahin 1987; 1999. In addition, some volumes of the collected inscriptions, *i.a.*, INicaea, TAM IV.

<sup>43</sup> Amandry, Burnett *et al.* 1999: 92.

<sup>44</sup> Salmeri 2005: 196; Winniczuk 1987b (2015): 79.

<sup>45</sup> Amandry, Burnett *et al.* 1999: 87–91; Burnett 1999; Cahn 1984/1985; Carradice and Cowell 1987.

<sup>46</sup> Crawford 1974; Kinns 1983: 18–19; Walker 1988: 301–305. Cf. de Callatay 1995: 290–291, 296–298.

The subject of circulation in the areas of Bithynia and Pontus was also discussed, but it should be looked at a bit wider than just the Trajan period, due to the possible longer circulation and use than the times analysed. On the basis of various finds and coins from the local museum collections, attempts were made to present the possible functioning of individual issues in the province.

The research problem undertaken is an important subject of scientific consideration regarding the monetary policy in the territories of Bithynia and Pontus during the Roman Empire, and has not been analysed in detail so far. Due to the large variety of both denominations and types of coins, it is very difficult to specify or capture certain phenomena that are obvious to the inhabitants of a given region, but not so clear in the modern world. The provincial coinage is not a simple issue, therefore scientific theses should be formulated very carefully. Research on this issue is developing quite dynamically; previously they were not undertaken on such a large scale. It should be emphasised that the discussed issue is not only a local view on the mint production of a given region, but also a broader view on the importance of imperial coins in the monetary circulation of the province and the impact on local units, which has not been analysed in detail before. Considering all the above aspects, confronting and supplementing them with other source categories will allow us, as much as possible, to reflect the coinage policy in Bithynia and Pontus of the Trajan period.



# The Roman Empire and Bithynia and Pontus during the reign of Trajan

## The Roman Empire and financial policy during the reign of Trajan

The times of Trajan were a special period for the Roman Empire. The ruler conducted several victorious war campaigns, founded and developed various architectural structures, and supported society through financial donations. The Roman Empire then expanded its borders to the greatest extent, taking over new territories such as Dacia, Armenia, Mesopotamia, and Arabia. It was a period of great development, stability, and prosperity for the Empire. For this reason, the emperor was nicknamed *Optimus Princeps*.<sup>1</sup>

Monetary production in Trajan's time was very abundant. Currently, we have a huge number of coins from this period, both in numismatic collections and in many archaeological sites or in hoards, both from the former Empire and the *Barbaricum*.<sup>2</sup> The campaigns, architectural projects and distributions, such as *donativa*, *congiaria* and *alimenta*, needed a very large financial outlay. Other expenses should also be mentioned, including for the benefit of agricultural law, colonies, city privileges, tax remission, or various burdens,<sup>3</sup> while remembering that in the time of Domitian (81–96) there was a financial crisis. The ruler, like several other emperors, including Trajan, sought centralisation.<sup>4</sup> At the end of 82, the weights of the aureus and denarius were increased comparable to that of Augustus. Due to the greater number of bronze issues, the use of countermarks was discontinued and used coins were withdrawn from circulation. Initially, this could indicate a good economic condition of the state and stabilisation, but not for long due to the large financial burdens, e.g. military expeditions, increased military salaries, Dacia peacekeeping fees, a building program, and entertainments in Rome. Despite the reform, the coins were devalued after a few years. Another effect was the increase in the amount of taxes and provincial tribute. Additional levies were also forced from the aristocracy. All of this eventually led to a financial crisis in the Roman Empire.<sup>5</sup> Domitian was succeeded by the elderly Nerva (96–98), who only ruled for two years. It was he who saw in Trajan his successor. Nerva during his short reign tried to introduce a new order, including reducing taxation and means of counteracting fraud. *Cursus publicus* was no longer included in public expenditure. Despite the reduction of various sums, the ruler's new projects were again generating costs, which in turn he tried to solve by introducing a program of financial savings.<sup>6</sup>

Trajan faced the difficult task of stabilising the Empire's finances. Therefore, a number of different solutions were applied in relation to individual taxes and land use. For example, the emperor gave some of his private property to the state, which could be subtle and used for

<sup>1</sup> Bennett 1997 (2015): 19, 116–117, 125–126, 133, 174, 188, 227, 235–240, 259–284, 304, 353–354; Hill 1984; 1985.

<sup>2</sup> Bennett 1997 (2015): 222; Hellings and Spoerri Butcher 2017.

<sup>3</sup> Bennett 1997 (2015): 116–117, 150; Syme 1930: 56, 60.

<sup>4</sup> Bennett 1997 (2015): 203; Burnett 2011; Carradice 1983: 3; Howgego 1994.

<sup>5</sup> Bennett 1997 (2015): 71–72, 221–223; Boruch 2004: 109–112; Carradice 1983; Kunisz 1978: 131, 133–134; Rogers 1984; Sutherland 1935; Syme 1930.

<sup>6</sup> Bennett 1997 (2015): 80–90; Morawiecki 1994: 122–123.

agricultural production, and thus derive income.<sup>7</sup> In addition, the Empire's funds during this period supported the gains after the Dacian wars.<sup>8</sup> Two monetary reforms were also carried out. The imperial mint was probably also transferred from the Capitol to Caelius at that time.<sup>9</sup>

Trajan strove to centralise the monetary system throughout the Empire, but due to the range of the state, as well as the large variety of city and society statuses, and thus the culture and traditions of individual regions, this, it seems, proved impossible. It should be noted, however, that these measures were probably reflected in the silver coins for the provinces, held at three mints, in Rome, Antioch and Alexandria.<sup>10</sup> In addition, perhaps such a policy should also be seen in the bronze coins minted in Rome for the Cyrenaica, Cappadocia, Cilicia, and Syria.<sup>11</sup>

### Roman provinces in the Roman Empire

Despite the spread of borders, the Roman Empire was not a uniform organism. Among the annexed territories in the times of Augustus were client kingdoms, federal states, autonomous centres of worship, and cities. With the adoption of the title of Augustus in 27 BC, the governance of the provinces was also divided between the emperor and the senate (the so-called imperial and senatorial provinces), although the statuses of individual regions were sometimes changed. Management consisted in appointing a governor and the time of his term of office.<sup>12</sup> Many of these areas were not very urbanised.<sup>13</sup> Annexation to the Roman state gave the towns a chance for greater development. Over time, individual provinces changed their statuses and administrative boundaries. Cities were expanded, receiving titles and privileges.<sup>14</sup> Many emperors tried to integrate the provinces. It was similar in the time of Trajan, as evidenced also by the correspondence with Pliny.<sup>15</sup> In addition, this type of action can be found in the urbanisation processes of individual cities or regions. In many, new structures were built or some of them were rebuilt. To improve communication in the Empire the road network system was also developed.<sup>16</sup> Another activity aimed at integration was the granting of Roman citizenship to the inhabitants of the provinces, as well as their inclusion in the senate.<sup>17</sup> Larger cities or capitals could be the seat of the *koinon*, responsible for the imperial cult. Each *koinon* served a particular region (e.g. Bithynia, Nicomedia or Pontus, Amastris), however, their boundaries were very fluid. The task of the *koinon* was also to settle disputes, bring complaints against governors, send envoys to Rome, or award honours to people of merit for individual centres (e.g. donors).<sup>18</sup>

<sup>7</sup> Bennett 1997 (2015): 144–148, 216–226; Hopkins 1980.

<sup>8</sup> Bennett 1997 (2015): 116–117, description of the acquired treasure and its value: 181; Syme 1930: 56, 60.

<sup>9</sup> Bennett 1997 (2015): 216–226.

<sup>10</sup> Amandry, Burnett *et al.* 2015: 798; Mattingly 1967: 112; Metcalf 2007: paragraphs 30–32. <https://books.openedition.org/ausonius/1256?lang=en>

<sup>11</sup> Cf. Amandry, Burnett *et al.* 2015: 870.

<sup>12</sup> Bennett 1997 (2015): 196; Burnett 2011; Millar 2004: 34–35; Sartre 1997: 16, 22–25; Weiss 2005. The number of Roman provinces changed from time to time, and also their status. Hence, only the organisation and status of Bithynia and Pontus is discussed. The issue devoted to the organisation of the Roman provinces is discussed in more detail by, i.a., Millar 2004; Sartre 1997.

<sup>13</sup> Sartre 1997: 16.

<sup>14</sup> Sartre 1997: 16; Weiss 2005: 58–61.

<sup>15</sup> Bennett 1997 (2015): 203–204; Burnett 2011.

<sup>16</sup> Adak and Öztürk 2016; Ścisło 2014: 107–109.

<sup>17</sup> Cf. Bennett 1997 (2015): 41–42; Ścisło 2014: 110–111.

<sup>18</sup> Lund Sørensen 2016; Ostrowski 2005: 110–111; Vitale 2014: 55–60.

Various local traditions, with the predominance of elements of Greek culture, were intertwined in the cities included in the Roman Empire. Strabo wrote that it is difficult to distinguish between Bithynians, Mysians, Phrygians, and Lydians, because they were mixed up with each other. They took over the customs of the land in which they were.<sup>19</sup> Thus, we are dealing with a mosaic of different peoples, beliefs, languages, and customs. However, the dominant culture in the eastern provincial cities was the Greek and Roman culture, the manifestations of which were visible, among others in the lifestyle, architecture, or language.<sup>20</sup> J.M. Madsen has stated that it was impossible to define 'Roman identity'. People 'became Romans' because of the benefits obtained, financial, legal, and material. Working as a soldier in the Roman army, or as a civil servant, you received a payment from the Empire, and also gained a higher social status.<sup>21</sup>

Particular issues in the province were regulated mainly by *leges provinciarum* (the laws in force in the centres), *senatus consulta* (senate announcements), *constitutiones* (decisions of emperors), and then *decreta* (court judgments issued by the ruler), *edicta* (instructions to officials), *rescripta* (replies to letters), and *subscripta* (decisions based on the original claim), as well *mandata* (documents from emperors to governors) and *edictum perpetuum* (a list of rules and a list of judgments issued in the province for the next governor). The entrusted tasks were made by travelling around the cities in a given region. Moreover, the governor could have his subordinates. Among them could be the military commander where the army was, the financial secretary, and the imperial prosecutor. Such a limited group did not facilitate the management of the province.<sup>22</sup>

The Roman provinces were, above all, an important source of financing and meeting the various needs of Rome. Tax was collected from the provinces, with the most important being the *tributum capitis* levied on the basis of the census in a given province, paid in cash or in kind.<sup>23</sup> Some of revenue stayed in the province to settle current affairs or pay for the governor, while the majority went to Rome.<sup>24</sup> Both internal and external factors influenced the monetary situation in a given region. Among the factors of a nationwide nature, one can distinguish direct ones, such as the monetary policy of emperors or reforms, or indirect ones, such as military events or the ruler's activities in the economic or political sphere.<sup>25</sup>

Unfortunately, local authorities very often committed fraud in the governed provinces (the so-called *de repetundis*). It is presumed that the highest numbers of cases of corruption were recorded in the provinces of Asia and Bithynia, which, in a way, suggests the wealth of the elite and the quarrels which characterised the centres.<sup>26</sup> It should be remembered, however, that accusations of abuse were not entirely fair. Even an honest administrator could be accused, while the person who committed the crime could be left unpunished after giving

<sup>19</sup> Strab. XII.4.4; XIII.4.12. Cf. Harris 1980; Marek 2009.

<sup>20</sup> Harris 1980; Marek 2009; Millar 2004: 249–251; Ostrowski 2005: 103–104; Sartre 1997: 11–13, 290–294; Veyne 2008: 160–256.

<sup>21</sup> Madsen 2009. Cf. Veyne 2008: 160–256.

<sup>22</sup> Bennett 1997 (2015): 198–200. Cf. Baz 2013: 265.

<sup>23</sup> Bennett 1997 (2015): 195–197, 285–286; Harl 1997: 225–227; Howgego 1994: 17–20; Sartre 1997: 60.

<sup>24</sup> Ostrowski 2005: 114. 500 cities of Asia Minor – tribute seven million denarii; Plutarch, *Life of Pompeius* – 45 million, the second half of 1st century BC Asia 50 million denarii. Contemporary estimates – Anatolia 49 million, Egypt 27 million denarii.

<sup>25</sup> Kunisz 1971: 21.

<sup>26</sup> Bennett 1997 (2015): 200; Brunt 1961: 224–227; Levick 1990: 164; Sartre 1997: 62–63.

the *equites* part of the profits. During the Roman Empire, the situation improved somewhat. It was possible to file a complaint with the emperor. From the second half of the 1st century AD, clerical functions in the provinces were also performed by people from local regions – a very logical and good move considering the knowledge of local problems.<sup>27</sup>

Trajan, as a soldier and administrator who lived in different regions, would have known what problems could be associated with provincial cities and what benefits they provided to the state. Very often the office in such a province was given to an inexperienced person. Because of the possible abuses, Trajan realised that he should fill administrative positions with trusted people, although this did not mean that corruption was not present.<sup>28</sup> Some of the emperor's rivals, after his rise to power, lost their positions, such as M. Cornelius Curiatius Maternus, governor of Syria. Mostly, however, the governors still elected by Domitian, remained in their posts. In several cases information is known about the trials, e.g. that of the administrator of Baetica, or Marius Priscus, proconsul of Africa, at which Pliny the Younger himself was a witness. Another contribution to the governance of the provinces was when the emperor raised the number of prosecutors to 62 (45 under Domitian); they were probably responsible for collecting taxes. Perhaps there were also so-called *curatores rei publicae* and *iuridici*, responsible for the financial affairs of the cities and the administration of justice. These individuals could also have better control over the governors, which could lead to a more centralised system of government, something that Trajan was also striving for in his actions. An example of the so-called 'provincial policy' pursued by the emperor is an organisation in Dacia and Arabia; local communities governing the region known to them were adapted, but remained under the control of Roman officials, and, when necessary, there were interventions.<sup>29</sup>

### **Bithynia and Pontus during the reign of Trajan**

Bithynia was handed over to the Roman Empire in the will of Nicomedes IV (c. 94–74 BC) in 74 BC, while the responsibility for administration of the new territories was entrusted to the then governor of the province of Asia. The kingdom of Pontus was incorporated after the defeat of Mithridates VI Eupator (120–63 BC) in 63 BC, thanks to Pompey the Great.<sup>30</sup> The area of the province was then expanded. Administratively, it covers part of the southern coast of Propontida, the Asian coast of the Bosphorus, and the northern coast of the Black Sea up to Amisus. Bithynia and Pontus was a senate province until the reign of Marcus Aurelius (161–80), however, during the reigns of Claudius (41–54), Nero, Trajan, and Hadrian, an imperial legate was established. In fact, the main administrator of the province was a governor who resided in Nicomedia.<sup>31</sup> The addition of Bithynia and Pontus to the Roman Empire meant that the cities and people of that time changed again. Pompey divided Pontus into eleven cities and introduced a new uniform law allowing local authorities to some control over local issues.<sup>32</sup>

<sup>27</sup> Ostrowski 2005: 109–110.

<sup>28</sup> The increase in abuses during this period: Bennett 1997 (2015): 199–202; cf. also Winniczuk 1987a: 240; Sherwin-White 1966: 414.

<sup>29</sup> Bennett 1997 (2015): 142–144, 199–202, 316.

<sup>30</sup> Sartre 1997: 284–285; Winniczuk 1987b (2017): 79.

<sup>31</sup> Baz 2013: 263; Bennett 1997 (2015): 196–197; Sartre 1997: 24; Seltman 1928.

<sup>32</sup> Strab. XII. 1. 3. These eleven cities are given, but the historian mentions only seven. Cf. Bekker-Nielsen 2016; Marshall 1968.

The province was situated in a good and strategic location, connecting Europe with Asia, in the north of Anatolia by the Black Sea. Currently, these areas lie within today's Turkey, in the provinces of Kocaeli, Iznik, Yalova, Bursa, Bilecik, Sakarya, Düzce, Bolu, and Zonguldak. In the west, it was bordered by Thrace, with the Bosphorus Strait and the Sea of Marmara as its natural boundary. In the south there was one of the oldest provinces, Asia, while in the southeast there were Cappadocia and Galatia. The province of Bithynia and Pontus during the reign of Trajan was mainly located in three important historical lands: Bithynia, Paphlagonia, Pontus.<sup>33</sup>

Few legions were stationed in the provinces of Asia Minor, with two known on the eastern border, Satala and Samosata.<sup>34</sup> Bithynia was deprived of a legion, although, due to the military operations against Armenia and the Parthian campaign, the Roman army did also have occasion to march through the territory of Bithynia. For example, to reach the border of Armenia, troops from the province of Dacia travelled through Byzantium, Nikomedia, Nicaea, Iuliopolis, Ancyra, and Sebasteia.<sup>35</sup>

As mentioned earlier, abuses in the provinces were very common, especially in Bithynia and Asia. In the time of Trajan, there were several cases of lawsuits where the governors of Bithynia were accused of this type of illicit activity.<sup>36</sup> At the request of the inhabitants of the province, the emperor sent his legate, Pliny the Younger, to check the individual finances of the centres. Unfortunately, nothing can be said about other possible reasons for the emperor's interventions, including possible preparation for a future Parthian campaign.<sup>37</sup> We know very little about Pliny himself, including exactly when he was born or died. He took up the post of consul on 1 September 100. He was an educated man, with probably a long political career. It is also unknown in what year he came to Bithynia. From correspondence it is known that it was 17 September, with the year 109 being assumed. He stayed in the province for less than three years and returned to Rome in 112.<sup>38</sup> The court cases in which Pliny took part, defending the inhabitants of Baetica, or the governors accused by the inhabitants of Bithynia, made him approach many issues very carefully.<sup>39</sup> In one of the trials in 103, he defended Gaius Julius Bassus, proconsul of the province between 101 and 102, who was accused of accepting gifts. One of the lawyers was Warena Rufus, the later proconsul of Bithynia, probably between 102 and 103, as evidenced by one of the discovered inscriptions. He was also accused of abuses, and the case was dismissed and reopened several times. Probably the subject of the dispute was some conflicts between the Roman authorities and the local provinces.<sup>40</sup> For this reason, Pliny could ask the emperor for even minor details, so as not to be exposed to any accusations from the inhabitants of Bithynia.<sup>41</sup>

<sup>33</sup> Cf. Baz 2013: 262–263; Sartre 1997: 24. During the reign of Trajan, the city of Byzantium, located in the territory of Thrace, was also part of the province (Rémy 1986: 65).

<sup>34</sup> Ścisło 2014: 115.

<sup>35</sup> Bennett 1997 (2015): 197; Salmeri 2005: 192; Ścisło 2014: 117.

<sup>36</sup> Bennett 1997 (2015): 200; Ścisło 2014: 111–112.

<sup>37</sup> Bennett 1997 (2015): 202–203; Salmeri 2005: 192.

<sup>38</sup> Baz 2013: 266–267; Bennett 1997 (2015): 203; Winniczuk 1987a: 8–9. The particular years in which Pliny held office have been a subject of study, i.a., Th. Mommsen, G. Przychocki, W. Otto, B. Rémy, A.N. Sherwin-White. For a bibliography of this subject, see Winniczuk 1987a: 477. However different dates may be found in different studies.

<sup>39</sup> Winniczuk 1987a: 212–215.

<sup>40</sup> Baz 2013: 278–279; Akyürek Şahin 2012b (also further literature on Rufus Warena); Winniczuk 1987a: 233–234.

<sup>41</sup> Winniczuk 1987a: 240.

Central intervention, which we might call today state interference, was one of the topics of many discussions in the field of economic theory and politics, touching on its scope, purpose, and economic and political causes. Its aim is to increase the welfare of the participating societies through mutual cooperation.<sup>42</sup> The contemporary theory of integration of market economies distinguishes five stages of the integration process, which include preferential trade zones, free trade zones, customs union, common markets, and economic union. At the same time, it is emphasised that such processes are difficult and long-lasting, which is indicated by other experiences of this type, such as, for example, the European Union or the European Free Trade Association.<sup>43</sup>

In his article on central intervention in Bithynia and Pontus, G. Salmeri, on the basis of the correspondence of Pliny the Younger, distinguished two types of relations between the centre and the provinces. The first was the rigid provincial administration of Rome with precise rules of universal application, while the second assumed the influence of the emperor on economic and social processes. Pliny addressed various questions to the emperor regarding the administration of justice, expenditure control, and public works.<sup>44</sup> He gave examples of costs, including millions of sestertii for the aqueduct in Nicomedia, or 10 million sestertii for the theatre in Nicaea.<sup>45</sup> He solved the financial problems he encountered via a system of collective euergetism.<sup>46</sup>

In this context, the impact of central intervention on the provincial monetary policy should be considered. The central intervention, according to the emperor's correspondence and responses, was more political and ideological than economic. The revenues of the cities did not arouse the interest of the emperor greatly. He was more worried about the interests of the local notables.<sup>47</sup> According to M. Rostovtzeff, 'the emperors of the first two centuries were supporters of economic liberalism, whose behavior opened the way to the development of a market economy in the Mediterranean region'.<sup>48</sup> M. Finley emphasised that 'the economic elements were inextricably linked with political and religious factors'.<sup>49</sup> In this case, in Bithynia and Pontus there was no decision related solely to economic nature. Trajan's interventions had a more political aspect, but with economic consequences, for example related to various construction projects that generated additional costs.<sup>50</sup>

When determining the economy in individual cities or regions, many factors should be taken into account, including production possibilities, distribution, demographics, terrain, and prices. Due to the nature of this present research, this type of study within Bithynia and Pontus in the time of Trajan is limited to matters of a financial nature.

One of the basic methods used in market research is the quantitative theory of money, based on the relationship between the quantity of money and its velocity in circulation, and the

<sup>42</sup> Duda, Mamcarz and Pakuła 2002: 267, 307.

<sup>43</sup> Cf. Duda, Mamcarz and Pakuła 2002: 307–308; Machlup 1986.

<sup>44</sup> Salmeri 2005: 188.

<sup>45</sup> Plin., *Ep.* X, 37–39.

<sup>46</sup> Salmeri 2005: 193; Schwarz 2001: 147; Weiss 2005: 62–63.

<sup>47</sup> Salmeri 2005: 195.

<sup>48</sup> Rostovtzeff 1957: 74–75. Cf. Salmeri 2005: 190.

<sup>49</sup> Finley 1999: 155. Cf. Salmeri 2005: 191.

<sup>50</sup> Salmeri 2005: 190, 195–196.

number of transactions and prices ( $MV = PT$ ). However, one should be careful in applying these formulas to the market in antiquity, where we have incomplete data on the amount of money, velocity, or prices, which remained volatile.<sup>51</sup> Ch. Howgego points to two areas that might have yielded more certain results useful in determining the economics of ancient Rome, namely circulation and the analysis of the chemical composition of the alloy from which the coins were minted. In the last aspect, information can be provided by both the alloy, mainly in the case of gold and silver emissions, as well as weight standards.<sup>52</sup> Lead isotope studies may indicate the origin of metals that might have been imported and added to other alloys (lead from Britain used in Spain).<sup>53</sup> In the case of Bithynia and Pontus coins, these are the bronze issues, but not much research has been done on the chemical composition. Because of the lack of information, the small number of coins, as well as the state of research in the region, it is impossible to fully define the exact economic rules limited specifically to just the period of Trajan's reign.

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<sup>51</sup> Howgego 2009: 287–289.

<sup>52</sup> Howgego 2009: 289–291.

<sup>53</sup> Howgego 2009: 291.

## Mints in the province of Bithynia and Pontus

Mint production in the Roman provinces was very often irregular. Mainly bronze coins were issued, sometimes silver ones.<sup>1</sup> Similarly, in Bithynia and Pontus, some of the mints functioned only in certain periods, mainly depending on demand. The bronze emissions from Trajan's reign recorded so far were struck in fourteen cities. Among them were important ports (Byzantium, Heraclea Pontica), metropolises (Nicomedia, Heraclea, Amastris), colonies (Apamea, Sinope), as well as autonomous cities (Calchedon, Amisus). Some of the provincial towns, despite their previous minting activities, do not seem to have issued coins in Trajan's time (Bithynium Claudiopolis, Caesarea Germanica, Cius).<sup>2</sup> The history of the centres issuing coins at that time is briefly outlined below, taking into account the fact that cities belonged to particular historical lands (Thrace, Bithynia, Paphlagonia and Pontus), as well as the state of research mainly in terms of archaeology, which allows us to determine the cognitive capabilities of a given town.<sup>3</sup>



Map 1. Mints in Bithynia and Pontus (© <https://rpc.ashmus.ox.ac.uk/map>, Accessed: 08.01.2022)

<sup>1</sup> Gold coins were struck exceptionally. See Amandry, Burnett *et al.* 1992: 6–25; 1999: 8–19; 2015: 797–837; Butcher 1988: 25–27; Jones 1963.

<sup>2</sup> Amandry, Burnett *et al.* 2015: 125 (Caesarea Germanica); 128–129 (Cius); 134–136 (Bithynium Claudiopolis).

<sup>3</sup> Due to the topic, the histories of the cities are discussed in general terms, the focus primarily being on the Hellenistic and Roman periods. A short, informative note about archaeological research has been added to each of the centres, which in turn illustrates the state and research possibilities, both in terms of the city and numismatic material.

## Thrace

Thrace was a fertile land in southeastern Europe, on the Black Sea and Aegean Sea, the northern boundary of which was delimited by the Danube and the western by the Struma River. The Thracians were mentioned by Homer as hard-riding warriors who helped the Trojans.<sup>4</sup> Between the 5th and 1st centuries BC, the Thracian tribes formed the Odrisian kingdom.<sup>5</sup> Then the territories of Thrace were a separate Roman province, the territories of which were annexed to the Empire in AD 46.<sup>6</sup> In the time of Trajan, the province was reorganised,<sup>7</sup> however, one of the cities within the historical region was then within the administrative boundaries of Bithynia and Pontus.

**Byzantium** (today Istanbul) founded on the Bosphorus, between the peninsula of Asia Minor and Europe, and the Black Sea and Marmara, due to its location, has become an important centre of trade.<sup>8</sup> The city belonged to Thrace during the Roman period, but in the time of Trajan it was within the administrative boundaries of the province of Bithynia and Pontus.<sup>9</sup> This is also confirmed by the correspondence of Pliny, in which the governor checks its finances.<sup>10</sup>

The city was founded by Greek colonists from Megara c. 670–660 BC, led by Byzas, the son of King Nisos.<sup>11</sup> According to the oracle of Delphi, the new town was to be founded in front of the ‘city of the blind’. This name referred to the choice of a worse location by the inhabitants of Calchedon.<sup>12</sup> After the Persian conquest of Lydia in 546 BC, Byzantium also came under the rule of the Achaemenids after some time. King Darius I (521–485 BC) visited the city in 513 BC, during an expedition against the Scythians. In 499 BC, the city joined the uprising against the Persians and, as a result of defeat, was razed to the ground. In 481 BC, the inhabitants of Byzantium supported the Persian fleet in the war with Athens.<sup>13</sup> After the defeat, the centre became part of the Delian League. Due to its convenient location and various transactions, mainly in the Black Sea basin, the city was one of the richest, so its inhabitants also paid a higher contribution to the League. In 339 BC Byzantium repulsed the attack of Philip II of Macedon (357–336 BC), and Alexander the Great (336–323 BC) recognised its autonomy. The Hellenistic period was a time of splendour for the city. After 281 BC, Byzantium, together with Calchedon, Cius, Heraclea, and Tium, founded the so-called ‘Northern Union’, also joined by the kingdoms of Pontus and Bithynia. In 149 BC Byzantium formed an alliance with Rome, and by 73 BC it officially belonged to the Roman Empire.<sup>14</sup> In the 2nd century it was one of the largest cities in Thrace, profiting from port fees, fishing, and crops,<sup>15</sup> and it was also one

<sup>4</sup> Casson 1977: 2.

<sup>5</sup> Archibald 1998.

<sup>6</sup> Parissaki 2009: 320.

<sup>7</sup> Amandry, Burnett *et al.* 2015: 85.

<sup>8</sup> Polyb. 4.38.1–11; Procop. *Aed.* 1.5.2–10; Step. Byz. 189.12. Cf. Graham and Mitchell 1999a: 266; Lordoğlu 2019; MacDonald 1976: 177; Russell 2017: 13. For more literature, see Yavuz 2014. Cf. Map 1.

<sup>9</sup> Rémy 1986: 65.

<sup>10</sup> Plin. *Ep.* 10.43.

<sup>11</sup> Dion. Byz. 24; Hesych. Mil. FGrH 390, F1.5–6; Strab. 7.6.2; Hdt. 4.144.3 (Megabazos); Hdt. 6.33.1–2. Cf. Graham and Mitchell 1999a: 266; Nollé 2015: 47–51; Yavuz 2014: 156–165.

<sup>12</sup> Strab. 7.6.2; Tac. *Ann.* 12.63; Polyb. 4.44. Cf. Russell 2017: 13; Wolińska and Leszka 2011: 24.

<sup>13</sup> Hdt. 4.87.1–2. Cf. Wolińska and Leszka 2011: 24–26; Yavuz 2014: 169–189.

<sup>14</sup> Polyb. 4.38.1–11. Cf. Graham and Mitchell 1999a: 266; MacDonald 1976: 177; Ostrowski 2005: 29, 101; Wolińska and Leszka 2011: 24–26; Russell 2017: 69–80; Yavuz 2014: 191–227, 208–209 and 221–227, 290–291, 293–332, 333–349.

<sup>15</sup> Hdn. 3.1.

of the best fortified.<sup>16</sup> Many cults were performed in Byzantium, including those in honour of Artemis Orthosia, Dionysus, Athena Ecbasia, Poseidon, Aphrodite, Apollo, and Hecate.<sup>17</sup> As a result of the ongoing civil war in 193, Septimius Severus (193–211) plundered and destroyed the city that supported Pescennius Niger (193–194). However, due to its positions, it was rebuilt by the emperor. In 330, the centre became one of the most important cities and the capital of the Empire, the name of which was changed to Constantinople.<sup>18</sup>

In Trajan's time, the city's expenses, which were supposed to be excessive, were inspected by Pliny the Younger. The governor reduced the additional costs related to the delegation of deputies.<sup>19</sup> Also in one of the letters there was information about the shipment to the town of the garrison due to the large number of travellers arriving and the location of the resort, thus ensuring its safety.<sup>20</sup>

Today, Istanbul is one of the largest cities in the world. Several archaeological projects have been carried out on its territory. Much of this research resulted from the need to rebuild and modernise a huge agglomeration. One of the most interesting discoveries is Theodosius' harbour from the 4th century, unveiled during the Marmaray-Metro project. Due to the large scale of the project, studies were also carried out in individual districts, e.g. Yenikapı, Sirkeci, Üsküdar.<sup>21</sup> In earlier years, excavations were carried out, inter alia, at the site of the former hippodrome<sup>22</sup> and in Saraçhane.<sup>23</sup> It should be emphasised that very many of the finds and the sites explored have provided much information on life in times later than the Hellenistic and Roman periods. This is not surprising given the very long history and importance of the city that what was formerly Constantinople.<sup>24</sup>

## Bithynia

Bithynia was a mountainous land covered with forests lying in the northwest of Asia Minor, between the Sea of Marmara and the Black Sea. The eastern border of the land was marked by the Sangarius River. In the south, it was adjacent to Mysia and Phrygia. Economically, it was one of the richest lands, known for its good wood, pasture, fruit, and grains. There were also marble quarries and important ports. In addition, the main roads and trade routes to Pontus and the depths of Anatolia ran through it.<sup>25</sup>

According to Herodotus, the territory of Bithynia was inhabited by the Thracians, who came under the command of Bassakes, son of Artabanos, in the 7th century BC.<sup>26</sup> The land was initially part of Lydia, and then, after the conquest of Cyrus the Great (559–530 BC), it came

<sup>16</sup> Paus. 3.31.4.

<sup>17</sup> Hdt. 4.87.2; Dion. Byz. 8–9. Cf. Lordoğlu 2019: 172, 174; Russell 2017: 40; Yavuz 2014: 52–59.

<sup>18</sup> MacDonald 1976: 177.

<sup>19</sup> Plin. Ep. 10.43–44; Yavuz 2014: 360–362.

<sup>20</sup> Plin. Ep. 10.77–78; Winniczuk 1987a: 425–426.

<sup>21</sup> Cf. Kızıltan and Çelik 2013; Kocabaş and Kızıltan 2010. Research reports: Asgari 1984; 1985; Aydıngün 2008; 2016; Lordoğlu 2019: 174.

<sup>22</sup> Casson *et al.* 1928.

<sup>23</sup> Harrison and Hill 1986.

<sup>24</sup> Cf. MacDonald 1976: 177; Özgümiş and Dark 2003; Sayar 2001.

<sup>25</sup> Skylaks 92; Strab. 12.4.1; Arr. *Peripl. M. Eux.* 13. Cf. Broughton and Mitchell 1999b: 244–245; Marek 2003: 4–11; Waddington, Reinach and Babelon 1904–1912: 211; Umar 2004: 1–2.

<sup>26</sup> Hdt. 7.75.

under the rule of the Persians (belonging to the III and XIX satrapies). From c. 297 B.C. Bithynia became an independent kingdom, with its first ruler Zipoetes I (c. 297 – c. 278). Successive kings, most notably Nicomedes I (c. 278–255), Prusias I (228–182) and Nicomedes II (149–127), founded many cities and spread a culture that was predominantly Greek. In 74 BC, Bithynia was handed over to Rome under the will of Nicomedes IV.<sup>27</sup>

It is worth emphasising that several important writers and intellectuals came from Bithynia. Among medical practitioners, the figure of Asclepiades from Prusa (c. 129/124–140) stands out; among the writers we have Arrian of Nicomedia (c. 95–175), known mainly for his work devoted to the expeditions of Alexander the Great, Cassius Dio (c. 155–235), the provider of the history of Rome, and Dio Chrysostom (c. 40 – c. 110), the famous orator and rhetorician.<sup>28</sup>

In the time of Trajan in Bithynia, coins were issued by centres such as Calchedon, Nicomedia, Nicaea, Apamea Myrlea, Prusa, Iuliopolis, and Prusias.

**Calchedon** (today one of the districts of Istanbul, Kadıköy), formerly called Prokerastis, lay on the opposite bank of the Bosphorus – in Bithynia. In antiquity it was also called ‘the city of the blind’ – from having chosen a location inferior to that of Byzantium;<sup>29</sup> for this reason, also, Calchedon had many contacts and connections with that city.

The city was founded by the colonists of Megara, led by Archias, c. 685–680 BC. According to Ctesias of Cnidus, Darius I (522–486 BC) set out to burn Calchedon in return for the destruction of the altar to Zeus Diabaterios he had built, and wreck the bridge over the strait.<sup>30</sup> Around 499 BC, like its neighbouring cities, Calchedon came under Persian rule. After the collapse of the uprising, the town, like Byzantium, was burnt down.<sup>31</sup> After the war with Athens, Calchedon joined the Delian League.<sup>32</sup> Near the city, in 74 BC, the Romans, led by Aurelius Cotta, were defeated by the troops of Mithridates VI. As a result of the war, Calchedon was partially destroyed.<sup>33</sup> Also in this year the city was annexed to Rome; however, it probably retained its independence most of the time.<sup>34</sup> The centre was famous for its temple and oracle of Apollo; there was also a temple to Aphrodite and an Asclepion.<sup>35</sup> In the time of Valerian (253–260), the city was plundered by the Scythians.<sup>36</sup>

Part of the archaeological research carried out in Istanbul today is described above. In the area of the former Calchedon, the necropolis used between the 6th century BC and the 3rd century AD were discovered. The remains of tombs and sarcophagi were found in smaller districts as

<sup>27</sup> Strab. 12.4.; Plin. *HN* 5.43. Cf. Broughton and Mitchell 1999b: 244–245; Boyana 2017; Jones 1998: 148, 152–153, 157; Umar 2004: 5; Waddington, Reinach and Babelon 1904–1912: 211–212; Winniczuk 1987b (2017): 79.

<sup>28</sup> Strab. 12.4.9. Cf. Jażdżewska 2016: 19.

<sup>29</sup> Plin. *HN* 5.43; Strab. 12.4.2; Polyb. 4.44; Hdt. 4.144.3; Tac. *Ann.* 12.63. Cf. Bean 1976a: 216; Graham and Mitchell 1999b: 315; Lordoğlu 2019: 179; Waddington, Reinach and Babelon 1904–1912: 288; Yavuz 2014: 151–153. Cf. Map 1.

<sup>30</sup> Strab. 12.3.7; 12.4.2; Ktesias *FGRH* 688 F 13.21. Cf. Bean 1976a: 216; Graham and Mitchell 1999b: 315; Lordoğlu 2019: 180; Umar 2004: 67; Waddington, Reinach and Babelon 1904–1912: 288; Yavuz 2014: 150–151, 176–177.

<sup>31</sup> Hdt. 5.103.2; 6.33.1–2. Cf. Yavuz 2014: 181, 183–184.

<sup>32</sup> Umar 2004: 69; Yavuz 2014: 208–209, 217–221.

<sup>33</sup> Eutr. 6.6.3; App. *Mith.* 10.71. Cf. Bean 1976a: 216; Umar 2004: 69; Waddington, Reinach and Babelon 1904–1912: 288; Yavuz 2014: 344–345.

<sup>34</sup> Jones 1998: 160; Magie 1950: 304; Waddington, Reinach and Babelon 1904–1912: 288.

<sup>35</sup> Dion. Byz. 111; Luc. *Alex.* 10; Strab. 12.3.7; 12.4.2; IK Kalchedon 12. Cf. Bean 1976a: 216; Konstantinos 2013: 37; Lordoğlu 2019: 179, 182–183; Türkoğlu 2014: 597–598; Yavuz 2014: 71–74.

<sup>36</sup> Bean 1976a: 216.

well, e.g. Yeldeğirmeni, Hasanpaşa, Söğütlüçeşme, Altıyol. Parts of the city's buildings were also exposed. Unfortunately, due to limitations and the relatively small number of finds, it is impossible to fully recreate the old topography or delineate borders. The objects obtained during the research have been exhibited at the Istanbul Archaeological Museum.<sup>37</sup>

**Nicomedia** (today Izmit, in the province of Kocaeli) was located in northwestern Bithynia, c. 100 km from Calchedon, on the Gulf of Astacus. Due to its location it was an important port as well as the provincial capital during the Roman period.<sup>38</sup>

The city was founded by Nicomedes I in 264 BC, and residents of the nearby city of Astacus were resettled there.<sup>39</sup> The centre became a metropolis within the province of Bithynia and Pontus, competing with Nicaea for priority. Perhaps conflict also arose over the question of access to and use of the port in Nicomedia.<sup>40</sup> It was one of 37 cities given the title of *neokoros* several times, associated with the imperial cult, and also the seat of the *koinon*.<sup>41</sup> During the reign of Augustus, a temple and a road were built and the port was modernised.<sup>42</sup> Based on various sources, including discovered artefacts and historical accounts, we know that the city contained temples of Roma, Demeter, and Isis.<sup>43</sup> Nicomedia was sacked in 256 by the Goths.<sup>44</sup>

According to the correspondence, Pliny came to Nicomedia on 24 November, after investigating the finances of Prusa.<sup>45</sup> In his letters to the emperor, the governor mentioned several problems relating to the city. One such, also occurring in Nicaea and other nearby towns, was that people sentenced to various penalties, i.e. public works or gladiatorial combat, were in fact public slaves, even receiving salaries for the work they did.<sup>46</sup> Another problem was the renovation works of the city: many houses, the seat of the city council, and the temple of Isis, all burned down in a great fire in Nicomedia. The construction of aqueducts, some of which were never completed, resulted in large financial outlays. The emperor suspected that there had been abuses in this case.<sup>47</sup> The letters also dealt with the problem of connecting the lake with the sea, thus facilitating transport and improving trade.<sup>48</sup> During this period, the construction of a new market began, and the temple of the Great Mother was probably moved to within the site of the former agora.<sup>49</sup>

Unfortunately, the modern urban infrastructure in today's Izmit makes it impossible to carry out wide-ranging archaeological research; where feasible, minor surveys have been realised.

<sup>37</sup> Asgari and Firatli 1978; Atik 2003; Lordoğlu 2019: 183–186.

<sup>38</sup> *Step. Byz.* 475.15. Cf. Robert 1977; Smith 1854 (=Nicomedeia); Umar 2004: 98–99; Waddington, Reinach and Babelon 1904–1912: 512. Cf. Map 1.

<sup>39</sup> *Strab.* 12.4.2.; *Plin. HN* 5.43; *Paus.* 5.12.5 (Nicomedia as a former city Astakos). Cf. Broughton and Mitchell 1999c: 1043; Güney 2012; Jones 1998: 151–152; MacDonald 1976: 623; Nollé 2015: 35–40; Smith 1854 (=Nicomedeia); Umar 2004: 98–99; Waddington, Reinach and Babelon 1904–1912: 265–266, 512.

<sup>40</sup> *Dio Chrys. Or.* 38–39. Cf. Broughton and Mitchell 1999c: 1043; Waddington, Reinach and Babelon 1904–1912: 512; Winniczuk 1987b (2017): 79. Moreover, *Hdn.* 3.2.

<sup>41</sup> *Plin. HN* 5.43. Cf. Broughton and Mitchell 1999c: 1043; Burrell 2004: 147–162; Güney 2012; Haensch 1997: 282–288; Ostrowski 2005: 110; Robert 1977; Smith 1854 (=Nikomedeia).

<sup>42</sup> Broughton and Mitchell 1999c: 1043; Güney 2012; Smith 1854 (=Nikomedeia).

<sup>43</sup> *Plin. Ep.* 10.41. Cf. Boyana 2006; MacDonald 1976: 623; Waddington, Reinach and Babelon 1904–1912: 512.

<sup>44</sup> MacDonald 1976: 623.

<sup>45</sup> *Plin. Ep.* 10.25.

<sup>46</sup> *Plin. Ep.* 10.31–32.

<sup>47</sup> *Plin. Ep.* 10.33; 37–38.

<sup>48</sup> *Plin. Ep.* 10.41–42, 61–62.

<sup>49</sup> *Plin. Ep.* 10. 49–50.

Thus far the remains of Hellenistic buildings, an aqueduct, a nymphaeum, and fortifications, including a tower and one of the gates, have been discovered. The former necropolis is also being gradually explored, and, since 2016, research has been carried out in the so-called Palace of Diocletian.<sup>50</sup>

**Nicaea** (today Iznik, in Bursa province), one of the most important centres of Bithynia, situated on Lake Ascanius (now Iznik), south of Nicomedia. Called a metropolis by Strabo, it was a city with regular buildings, surrounded by a wall with four gates.<sup>51</sup> It is very possible that various officials resided there.<sup>52</sup> The city was also famous for its grapes and wine.<sup>53</sup>

Although its mythical founders of the city were Dionysus and Heracles,<sup>54</sup> the city was, in fact, begun by Antigonus I (382–301), c. 316 BC, and originally named after him – Antigoneia. Soon afterwards, Lysimachus (306–281) changed the name of the settlement in honour of his wife, Nicaea.<sup>55</sup> There are also texts that indicate an earlier foundation and another founder – one of the soldiers of Alexander the Great, with the city being called Helikore.<sup>56</sup> Around 282–281 BC, Nicaea came under the rule of the Bithynian princes. After the death of Nicomedes IV, the city became the property of Rome. Due to its position the centre competed with Nicomedia for priority in the province.<sup>57</sup> Similarly to it, it received the title *neokoros*, but at a later date.<sup>58</sup> The city contained temples to Roma, Caesar, Dionysus, and Apollo.<sup>59</sup> In 123, the town was visited by Hadrian, who began the construction of fortifications, although these were not completed until the 3rd century, after the invasion by the Goths. Constantine the Great convened the First Council of Nicaea in 325.<sup>60</sup>

Pliny the Younger, in his letters to the emperor, described the city's building problems, in particular the unfinished theatre and gymnasium. It was probably in the time of Trajan that several renovations were carried out in the city, as possibly indicated by various honorific inscriptions found to the emperor.<sup>61</sup>

Pliny also details one of the privileges of the inhabitants of Nicaea, granted by Augustus, i.e. the right to seize the property of any citizen who died intestate.<sup>62</sup>

Walking the streets of the modern city, one can see traces of old buildings, in particular the remains of fortifications, gates, the theatre, churches, and houses. Some of these sites are undergoing restoration or archaeological research. Excavation campaigns were also carried

<sup>50</sup> Çalık Ross 2007; Umar 2004: 112–113; Weissová 2017: 30, 72–73; Zeyrek and Asal 2005; pers. comm. courtesy of the Museum staff.

<sup>51</sup> Plin. *HN* 5.43; Strab. 12.5.7. Cf. Dilke and Mitchell 1999; Robert 1977; Waddington, Reinach and Babelon 1904–1912: 395. Cf. Map 1.

<sup>52</sup> Baz 2013: 264; Haensch 1997: 282–290.

<sup>53</sup> Boyana 2016: 48; Şahin 1987: 373.

<sup>54</sup> Memnon 28.5, 9–11. Cf. Boyana 2016; Şahin 1987.

<sup>55</sup> Strab. 12.5.7; Step. Byz 474.17. Cf. Dilke and Mitchell 1999: 1040; Jones 1998: 151; Umar 2004: 195–196; Waddington, Reinach and Babelon 1904–1912: 395.

<sup>56</sup> Plin. *HN* 5.43; Step. Byz 474.17; Memnon from Heraclea by Smith 1854 (=Nicaea). Cf. Bonacasa 1976: 622–623.

<sup>57</sup> Dio Chrys. *Or.* 38–39; Dio Cass. 51.20.6–7. Cf. Waddington, Reinach and Babelon 1904–1912: 395.

<sup>58</sup> Burrell 2004: 163–165; Robert 1977; Waddington, Reinach and Babelon 1904–1912: 395; Wilson 1976e: 622.

<sup>59</sup> Boyana 2016: 48; Wilson 1976e: 623.

<sup>60</sup> Bonacasa 1976: 623.

<sup>61</sup> Öztürk *et al.* 2012: 84, fig. 2.

<sup>62</sup> Plin. *Ep.* 10. 39–40, 84.

out on the premises of the former theatre.<sup>63</sup> From the city are also many epigraphic sources, which have been intensively studied in recent years.<sup>64</sup>

**Apamea** (near today's Mudanya, in Bursa province), also called Myrlea, was situated on the eastern shore of the Sea of Marmara, also serving as a port; not far from the city was Prusa (today's Bursa), with which Apamea competed.<sup>65</sup>

The centre was founded by the Colophonians under the command of Myrlos;<sup>66</sup> although another tradition records that settlement bears the name of Myrlea, an Amazon.<sup>67</sup> Apamea, during the war with Pergamum, was conquered by Philip V of Macedon (221–179 BC) and handed over to the king of Bithynia, Prusias I. The king developed and enlarged the city, c. 202 BC, naming it in honour of his wife, Apama. After the death of Nicomedes IV, the town was taken over by Mithridates VI, and then by Lucullus. During the reign of Caesar (49–44 BC) or Augustus (27 BC – AD 14) the centre was converted into a Roman colony.<sup>68</sup>

In Trajan's time, Pliny the Younger visited the city to audit its accounts. In letters to the emperor, the governor noted that the people of Apamea had the privilege of managing public funds independently and had, thus far, not been controlled by anyone.<sup>69</sup>

Little is known today of the architecture of the early city, although it is likely that there was a temple to Apollo there, judging by the popularity of images of this deity found on coins.<sup>70</sup>

**Prusa** (today's Bursa) is situated below Mt Olympus (today's Uludağ), near Apamea Myrlea, c. 40 km from Nicaea; the centre was located in the area bordering Mysia and Phrygia.<sup>71</sup>

The city was founded by Prusias I, and significant works were undertaken by Hannibal (247–183/182 BC), but perhaps the first foundation took place in the 6th century BC. Prusa, according to Strabo, was a well-managed town, also famous for its baths.<sup>72</sup> It was the home of Dio Chrysostom, who lived in the 1st century AD, whose writings are an important source of information about the realities of life in Bithynia at that time. His family was one of the wealthiest and most influential in the city. In his speeches, Dio mentions the implementation of the construction programme, the beautification of the city, and the riots that took place during this period. His speeches were probably made during the early period of the city's

<sup>63</sup> Some archaeological sites can be seen behind the archaeological museum – Eşrefzade and Eşrefoğlu Streets, and on Maltepe Street, among others. Cf. also Dilke and Mitchell 1999: 1040; Şahin 1987: 369; 2014; Şahin *et al.* 2007; Weissová 2017: 30–31, 70–72; Yalman 1981 (and see forthcoming issues of *Kazı Sonuçları Toplantıları*).

<sup>64</sup> Öztürk, Aktaş and Demirhan-Öztürk 2020; Öztürk *et al.* 2012; Şahin 1987. The *Epigraphic Historical Geographical Surface Research Project Nicaea* was carried out from 2010.

<sup>65</sup> Strab. 12.4.3; Dio Chrys. *Or.* 40–41. Cf. Waddington, Reinach and Babelon 1904–1912: 245. Cf. Map 1.

<sup>66</sup> Plin. *HN* 5.40, 43; Smith 1854 (=Apamea); Umar 2004: 261; Waddington, Reinach and Babelon 1904–1912: 245; Woytek 2011: 128–129.

<sup>67</sup> Step. Byz. 103.3.; Stoll 1894–1897: 3312.

<sup>68</sup> Strab. 12.4.3. Cf. Blanco Pérez 2015a; 2015b; Jones 1998: 152; Magie 1950: 1189; Smith 1854 (=Apamea); Umar 2004: 262; Waddington, Reinach and Babelon 1904–1912: 245; Woytek 2011: 128–129.

<sup>69</sup> Plin. *Ep.* 10.47–48.

<sup>70</sup> Cf. Şahin 2011; 2012; Waddington, Reinach and Babelon 1904–1912: 245–264; Weissová 2017: 66.

<sup>71</sup> Plin. *Ep.* 5.43; Strab. 12.4.3; Step. Byz. 537.5. Cf. Waddington, Reinach and Babelon 1904–1912: 575. Cf. Map 1.

<sup>72</sup> Plin. *HN* 5.43; Strab. 12.4.3. Cf. Corsten 1989; Jones 1998: 152; Nollé 2015: 40–42; Smith 1854 (=Prusa); Umar 2004: 245; Waddington, Reinach and Babelon 1904–1912: 575.

prominence, before the rhetorician moved away (most likely c. 103) and after he returned (c. 110).<sup>73</sup>

In his letters to the emperor, Pliny the Younger provided information on the revenues and debts of the cities in the province. Prusa is mentioned first. According to the governor's reports, the inhabitants very often did not repay their loans and some of the expenses noted remained unjustified. Looking to provide a solution, Pliny suggests employing an auditor, who would undertake a detailed list of real estate assets and collect monies due, thereby regulating the city's finances. In his reply, the emperor indicated the need to check the city's accounting records, as well as the possibility of finding an auditor among appropriate local candidates.<sup>74</sup> Another problem raised in the letters regarding Prusa was the renovation of the old bathhouse. The funds for this project were to come from amounts collected from private individuals and funds allocated for the purchase of oil. Trajan agreed to carry out the renovations provided that too much strain was not placed on the city's budget.<sup>75</sup>

Prusa became later one of the most important centres in Turkey. It was the capital of the Ottoman Empire and remains one of the country's largest cities to this day. During the expansion of today's Bursa, the earlier buildings were found. However, due to the former position of the city and its many reconstructions, the architectural remains from ancient times have been hard to trace: thus far, Roman baths have been located in the Çekirge district, and a Roman-period basilica was discovered in 2014.<sup>76</sup>

**Iuliopolis** (now part of the city of Nallıhan, Ankara province), originally called Gordium or Gordiukome, is to be found in southern Turkey, near the Sangarius River, on the border with Galatia.<sup>77</sup> Its siting was significant due to the trade route between Ancyra and other centres, e.g. Nicomedia, Nicaea, Calchedon, Byzantium.<sup>78</sup>

The mythical founder of the city is said to have been Gordios. The village was incorporated into Bithynia following the war between the king of Pergamum, Eumenes II (197–159 BC) and Prusias I, c. 184/183 BC.<sup>79</sup> During the reign of Augustus, Kleon, who supported the ruler during the war with Mark Antony, rebuilt the city and changed its name to Iuliopolis. Kleon was the leader of a criminal group then active in the city, he worshipped Zeus Abrettenos and was also a high priest of the Pontic Comana.<sup>80</sup>

In the letters of Pliny, Iuliopolis is described as a small town on the outskirts of the province and as a transit point subject to 'heavy burdens'. To solve the problem, the governor suggested a

<sup>73</sup> Dio Chrys. *Or.* XLII–XLV, XLVII; Plin. *Ep.* 10.81. Cf. Jażdżewska 2016: 19–20; Jones 2012. Different opinions regarding the credibility of speeches in Szarmach 1979: 71–85.

<sup>74</sup> Plin. *Ep.* 10.17A, 17B, 18.

<sup>75</sup> Plin. *Ep.* 10.23–24, 70–71.

<sup>76</sup> Excavations in Bursa: <https://www.hurriyetdailynews.com/excavations-uneearth-basilica-in-bursa-65838> (Accessed: 06.01.2021); Weissová 2017: 73–74.

<sup>77</sup> For the city in the historical sources as a part of Galatia or Bithynia: Plin. *HN* 5.42, 5.143.5, 5.149.8–150.1; Livy 38.18; Ptol. *Geog.* 5.1.14. Cf. Onur 2014: 65–67; Smith 1854 (=Go'rdium); Waddington, Reinach and Babelon 1904–1912: 384.

<sup>78</sup> Onur 2014: 65–66; Smith 1854 (=Go'rdium).

<sup>79</sup> Strab 12.4.1; Liv. 38.39.14–17; Pol. 21.46.9–11. Cf. Onur 2014: 66; Şahin 1986.

<sup>80</sup> Strab. 12.8.8–9. Cf. Arslan 2014: 13–14; Onur 2014: 65–67; Smith 1854 (=Go'rdium); Umar 2004: 157–158; Waddington, Reinach and Babelon 1904–1912: 384.

garrison be sent to the city, but the emperor, following similar previous precedents in smaller towns, ordered Pliny to resolve the issue in a different way.<sup>81</sup>

Currently, the old city lies within a part of modern Nallıhan. Thanks to archaeological research conducted since 2009, a necropolis from Roman times has been uncovered. Many items of daily life have been retrieved, including over 200 coins.<sup>82</sup> Studies of various epigraphic sources found in and around the former centre have also been made.<sup>83</sup>

**Prusias** (today's Konuralp, Düzce province), in the northern part of Bithynia, on the River Hypium, is located on the route between Nicomedia and other settlements in the northern part of Anatolia.<sup>84</sup>

Before the conquest in 190 BC by King Prusias I, the city was called Kieros and belonged to the inhabitants of Heraclea. The king of Bithynia changed the name of the centre to Prusias. In 74, it came under the authority of Rome.<sup>85</sup> Olympian Zeus, Asclepius, Aphrodite, and Tyche were all worshiped in the city.<sup>86</sup> Notable visitors included Hadrian, Caracalla (198–217), and Elagabalus (218–222).<sup>87</sup>

The present-day Konuralp is a small town that works hard to take care of old traditions. Some of the ancient city's buildings, such as the fortifications, gate, and theatre, are still visible. Others are confirmed in sources but their exact locations on the city map remain unknown. Only a small assemblage of finds, emphasising the importance of this centre, is on show in the museum. Archaeological research is being carried out at two sites – the former theatre and the remains of the Roman bridge.<sup>88</sup>

## Paphlagonia

Paphlagonia, also known as Pylamenia, was a region on the Black Sea coast, between Bithynia, Galatia and Pontus. With its capital at was Gangra (later Germanicopolis),<sup>89</sup> its borders were marked by two rivers – in the west the Partenius (today Bartın) and in the east Halys (today Kızılırmak) – and in the south by the Olgassys Mountains.<sup>90</sup> Paphlagonia was once an area of contention between the kingdoms of Bithynia and Pontus. In turn, during the Roman period, only the northern part of the land lay within the province. Olive groves, nut- and fruit-bearing trees provided the natural wealth of these areas, while fishing was popular along the coasts.

<sup>81</sup> Plin. *Ep.* 10.77–78.

<sup>82</sup> Arslan 2012; 2014; Arslan, Cinemre and Erdoğan 2011; Sağır, Metin and Cinemre 2017.

<sup>83</sup> *Nallıhan Çevresi ve Eskişehir Müzesi'nde Epigrafi ve Tarihi Coğrafya Çalışmaları* (Epigraphic and Historical Geographic Research around Nallıhan and in Eskişehir Museum); Onur 2014: 65.

<sup>84</sup> Plin. *HN* 5.43; Ptol. *Geog.* 5.1.13. Cf. Firatlı 1976: 741; Umar 2004: 119; Waddington, Reinach and Babelon 1904–1912: 602. Cf. Map 1.

<sup>85</sup> Mem. Her. *FGrHist* 434 F.19.1–3. Cf. Firatlı 1976: 741; Özlü 2009: 16–22; Tuna and Erdoğan 2017: 258–259; Umar 2004: 119; Waddington, Reinach and Babelon 1904–1912: 602.

<sup>86</sup> Waddington, Reinach and Babelon 1904–1912: 602. Cf. Kocaeli Museum (ed.) 2012: 17.

<sup>87</sup> Firatlı 1976: 741.

<sup>88</sup> Ayengin 2015; Firatlı 1976: 741; Tuna and Erdoğan 2017; Umar 2004: 123–127; Weissová 2017: 74. Information also kindly provided courtesy of the Museum staff.

<sup>89</sup> Bricault and Delrieux 2014: 9–10; Umar 2007: 2.

<sup>90</sup> Skylaks 90; Strab. 12.3.1 ; 12.3.5; 12.3.40; Plin. *HN* 6.2; Hdt. 1.72; Arr. *Peripl. M. Eux.* 14. Cf. Barat 2013: 152–153; Broughton and Mitchell 1999d: 1107–1108; Smith 1854 (=Paphlagonia); Umar 2007: 2; Waddington, Reinach and Babelon 1904–1912: 121.

Paphlagonia was a mountainous land covered with forests, the wood of which was used for shipbuilding among other things.<sup>91</sup> According to Strabo, its inhabitants stood out from the neighbouring peoples by having their own language, customs, and equipment.<sup>92</sup>

The inhabitants of the region appear early on the pages of history, although their origins are not fully known. The Paphlagonians, under the command of Pylaemenes, took part in the Trojan War. According to Homer, the people descended from the Heneti, who perhaps should be associated with the Veneti, who came from the Balkans.<sup>93</sup> The land was conquered by Croesus (c. 560–546),<sup>94</sup> before later coming under the authority of the Persians (III Satrapy), Macedonians, Seleucids, and Galatians.<sup>95</sup> The people of the land, considered to be somewhat superstitious and stupid, were said to have had their own king.<sup>96</sup> In the last resort, Paphlagonia fell to the king of Pontus, Mithridates V Euergetes (c. 150–120). During his reign, it was supposed to be under the authority of Rome, but the ruler, together with Nicomedes III (c. 127–94), king of Bithynia, appropriated and divided Paphlagonia among themselves. Independence was briefly restored to the land following the defeat of Mithridates VI in the first war with Rome (88–84), however it again became part of the Kingdom of Pontus after the death of Nicomedes IV. After the defeat of Mithridates VI, Pompey the Great attached the coastal areas to the province of Bithynia, and handed over the rest of the region to the previous ruling dynasty. In 6 BC most of the land was incorporated into the Roman province of Galatia.<sup>97</sup>

In the area of Paphlagonia, several field studies and investigations have been undertaken to identify and register various sites and artefacts from particular periods.<sup>98</sup> During the reign of Trajan in the province, coins were issued by cities such as Pontic Heraclea, Tium, Amastris, and Abonoteichos.

**Heraclea Pontica** (today's Karadeniz Ereğli, Zonguldak province) was located on the Black Sea, in the area inhabited by the Mariandines and was the westernmost village of Paphlagonia.<sup>99</sup> The name alluded to the myth of the nearby caves and the descent of Heracles to Hades to kidnap Cerberus. In legends, the hero was also associated with the foundation of the town.<sup>100</sup> The city had two ports and was one of the most important commercial centres.<sup>101</sup>

Heraclea was founded c. 560 BC by the colonists of Megara. The Boeotians from Tanagra were also supposed to have helped with the foundation of Heraclea.<sup>102</sup> Strabo, on the other hand,

<sup>91</sup> Strab. 12.3.11–12. Cf. Broughton and Mitchell 1999d: 1108; Marek 2003: 4–11; Smith 1854 (=Paphlagonia).

<sup>92</sup> Strab. 12.3.25; Hdt 7.72.

<sup>93</sup> Hom. *Il.* 2.851–855; Strab. 12.3.8. Cf. Chiai 2019: 97–101; Smith 1854 (=Paphlagonia); Umar 2007: 3–4.

<sup>94</sup> Hdt. 1.28. Cf. Smith 1854 (=Paphlagonia).

<sup>95</sup> Hdt. 3.90. Cf. Chiai 2019: 97–101; Smith 1854 (=Paphlagonia); Umar 2007: 14–20; Waddington, Reinach and Babelon 1904–1912: 121.

<sup>96</sup> Xen. *An.* 5.9.6; 5.6.3; Luc. *Alex.* 9. Cf. Smith 1854 (=Paphlagonia).

<sup>97</sup> Strab. 12.3.38. Cf. Barat 2013: 157–159; Broughton and Mitchell 1999d: 1108; Sartre 1997: 185; Smith 1854 (=Paphlagonia); Waddington, Reinach and Babelon 1904–1912: 122.

<sup>98</sup> Matthews 1998.

<sup>99</sup> Skylaks 91; Strab. 12.3.1; Plin. *HN* 6.1; Paus. 5.26.7; Step. Byz. 303.16. Cf. Broughton and Mitchell 1999a: 684; Burstein 1976: 1–11; Waddington, Reinach and Babelon 1904–1912: 343. Cf. also Map 1.

<sup>100</sup> Xen. *An.* 6.2.2; Umar 2004: 37; Wilson 1976d: 383.

<sup>101</sup> Ostrowski 2005: 101; Smith 1854 (=Heracleia (Pontica)); Waddington, Reinach and Babelon 1904–1912: 343.

<sup>102</sup> Xen. *An.* 6.2.1; Paus. 5.26.7. Cf. Broughton and Mitchell 1999a: 684; Burstein 1976: 12; Jones 1998: 149; Smith 1854 (=Heracleia (Pontica)); Waddington, Reinach and Babelon 1904–1912: 343; Wilson 1976d: 383.

describes the city as having been colonised by Miletus.<sup>103</sup> Heraclea quickly developed as an important trading centre and began seizing power over nearby lands. It also founded its own colonies, e.g. Callatis and Tauric Chersonesus. The domination of the coastal cities was tested by the Bithynian princes. Around 74 BC, the town was captured by Mithridates VI, and then plundered and burned by the Romans. Heraclea was rebuilt and, although no longer holding the same power it once had, was still an important city. During the Roman period it was a metropolis among other coastal centres.<sup>104</sup> Among its temples was one dedicated to Heracles.<sup>105</sup>

Pliny, controller of accounts for the individual cities of Bithynia and Pontus, wrote little about the city. The only information in his letters is an annotation about the donation of funds to Heraclea and Tium, obtained under the will of one Julius Largus of Pontus. The donor asked for a temple to be erected in honour of the emperor and for games to be held every five years.<sup>106</sup>

The present city no longer reflects the key role it had in ancient times. Despite difficulties, such as modern infrastructure needs, archaeological research has been carried out at several sites. The famous caves associated with Heracles should be mentioned here; one of them contains an early Christian church with the remains of mosaics.<sup>107</sup> In accounts by visitors in the 19th century, e.g. Ainsworth, von Diest, and Perrot, there are references to Roman temples and an aqueduct.<sup>108</sup>

**Tios/Tium/Tieion** (near today's Filyos, Zonguldak province) was a city on the southern coast of the Black Sea, next to the Filyos River, also known as the Billaeus. It was c. 38 miles from Pontic Heraclea. The centre has various names in the old texts.<sup>109</sup> It was a small port town whose economy was based on the cultivation of vines and cereals.<sup>110</sup>

Tium was founded by the colonists of Miletus in the second half of the 7th century BC. One theory is that the founder could have been a priest named Tios or Pataros, who conquered Paphlagonia, while another links the name to Phrygian Zeus (Tios).<sup>111</sup> According to Strabo, the citizens considered themselves as a Scythians, although others said they were Macedonians or Pelasgians; the same geographer/historian also mentions that the only thing worth noting about Tium is that Philetaerus (283–263), the founder of the Attalid dynasty, had his origins there.<sup>112</sup> Amastris, wife of the tyrant Dionysius of Heraclea (345–305), apparently formed one large centre from the four smaller ones (Sesamus, Cytorum, Cromna, Tium), however Tium revolted and separated from the union. The city was taken over by Prusias I. As with the former Kieros (Prusias), it belonged to the inhabitants of Heraclea at that time. In later years it

<sup>103</sup> Strab. 12.3.4. Cf. Burstein 1976: 13.

<sup>104</sup> Mem. Her. *FGrHist* 434 F.19.1–3; F.29.1; Strab. 12.3.2. Cf. Broughton and Mitchell 1999a: 684; Burstein 1976; Jones 1998: 148–151, 154; Öztürk 2016a; Smith 1854 (=Heracleia (Pontica)); Waddington, Reinach and Babelon 1904–1912: 343–344; Wilson 1976d: 383.

<sup>105</sup> Mem. Her. *FGrHist* 434 F35, 7–8. Cf. Gemci 2016: 7–8; Öztürk 2016a: 685.

<sup>106</sup> Plin. *Ep.* 10.75.

<sup>107</sup> Umar 2004: 38–41; Weissová 2017: 69–70.

<sup>108</sup> Ainsworth 1842: 38–41; Perrot, Guillaume and Delbet 1872: 15; von Diest 1889: 79–81; Wilson 1976d: 383.

<sup>109</sup> Plin. *HN* 6.1; Step. Byz. 624.2. Cf. Öztürk 2012; Umar 2007: 33; Waddington, Reinach and Babelon 1904–1912: 615. Cf. As well Map 1.

<sup>110</sup> Atasoy 2015a: 9.

<sup>111</sup> Arr. *Peripl. M. Eux.* 13.5. Cf. Atasoy 2015a: 8; 2015b: 15; Gemci 2016: 10–11; Obrador-Cursach 2018: 43, 290. On the Bithynian origin of Zeus (Tios): Witczak 1992–1993: 265–267.

<sup>112</sup> Strab. 12.3.5; 12.3.8. Cf. Waddington, Reinach and Babelon 1904–1912: 615.

was conquered by Mithridates VI. Along with the rest of the kingdom of Bithynia, the Romans ultimately took control of the city.<sup>113</sup>

Remains of some of the old buildings are still to be seen in the city, including fortifications, theatre, aqueduct, necropolis, and port. Between 2007 and 2012 archaeological research was carried out, mainly in the acropolis and the centre (lower city), as a result of which some further ancient buildings were discovered, as well as monuments dated mainly to the Roman and Byzantine periods.<sup>114</sup>

**Amastris** (today's Amasra) was one of the centres located on the Black Sea coast, near the River Parthenius. The city was named after its founder, Amastris, niece of Darius III (336–330), wife of Dionysius, tyrant of Heraclea, and later wife of Lysimachus.<sup>115</sup> There was the seat of a *koinon*, and due to its favourable location and two ports, perhaps part of the Roman fleet was also stationed there. The economic basis of the city relied on fish and timber.<sup>116</sup>

As mentioned above, the city was formed as a result of the union of four smaller settlements, from which Tium left. Sesamus became the acropolis of Amastris;<sup>117</sup> it was also mentioned as the original foundation of the later city.<sup>118</sup> The centre was taken over by Eumenes I (263–241), who preferred to give the city to Ariobarzanes (c. 300–256), son of Mithridates I Ktistes (died 266 BC), than to sell it to the inhabitants of Heraclea.<sup>119</sup> Amastris was taken over by Lucullus c. 70 BC during the war with Mithridates VI, and then attached to Bithynia and Pontus by Pompey in 64 BC. The town was a metropolis, which was also emphasised in the legends of the coins.<sup>120</sup> Based on epigraphic sources, it is known that there was a sanctuary of Zeus Bonitenos in the city.<sup>121</sup> Perhaps there was also a temple of Zeus Strategos on the acropolis.<sup>122</sup>

According to Pliny the Younger, Amastris was a wealthy, charming city. During the period of his governorship, he covered over a polluted river that was harmful to the health of the inhabitants.<sup>123</sup>

The city was once situated on a peninsula and an adjacent island, today connected to the mainland by a bridge, extending into the nearby valley and hills. Works conducted revealed some of the architecture, including the temple and a building interpreted as a large warehouse. Some building materials were used later in the construction of the nearby fortress, the

<sup>113</sup> Mem. *FGrHist* 434 F.35.7; F.19.1; Strab. 12.3.10. Cf. Bean 1976b: 925; Jones 1998: 149; Öztürk 2012; Waddington, Reinach and Babelon 1904–1912: 615.

<sup>114</sup> Atasoy 2015a: 10–13; Atasoy and Ertuğrul 2008; Atasoy and Yıldırım 2015; Öztürk 2012: 28–29; Weissová 2017: 75.

<sup>115</sup> Strab. 12.3.1; 12.3.10; Mem. *FGrHist* 434 F.5.4; Step. Byz. 84.3. Cf. Smith 1854 (=Amastris); Umar 2007: 41–42; Waddington, Reinach and Babelon 1904–1912: 134.

<sup>116</sup> Arr. *Peripl. M. Eux.* 14. Cf. Hill 1989: 82; Marek 1996: 574; Ostrowski 2005: 110; Waddington, Reinach and Babelon 1904–1912: 134.

<sup>117</sup> Strab. 12.3.10; Mem. *FGrHist* 434 F.4.9. Cf. Jones 1998: 150; Smith 1854 (=Amastris); Waddington, Reinach and Babelon 1904–1912: 134.

<sup>118</sup> Hom. *Il.* 2.853; Plin. *HN* 6.2. Cf. Umar 2007: 41.

<sup>119</sup> Mem. *FGrHist* 434 F.9.4. Cf. Jones 1998: 153; Waddington, Reinach and Babelon 1904–1912: 134; Wilson 1976b: 47.

<sup>120</sup> RPC III 1204A, 1205, 1207–1210; Smith 1854 (=Amastris); Waddington, Reinach and Babelon 1904–1912: 134; Wilson 1976b: 47.

<sup>121</sup> Marek 1985: 184; Summerer 2014: 199–200.

<sup>122</sup> Marek 1985; Summerer questions the thesis about the identification of this temple (2014: 196–197).

<sup>123</sup> Plin. *Ep.* 10.98–99.

initial phases of which should be dated back to the Roman period, which was extended and transformed – mainly in the Byzantine period but in the 15th century also.<sup>124</sup>

**Abonoteichos** (today's İnebolu) was a small town on the Black Sea coast.<sup>125</sup> The name of the village should be translated as the fortresses of Abana, thus referring to the city 22 km away.<sup>126</sup>

Not much is known about the town itself; it was probably founded by the Ionians. During the reign of Marcus Aurelius, the name was changed to Ionopolis. Alexander (c. 105–70), also known as the false prophet, founder of the cult of Glycon, the deity associated with Asclepius, came from the city. Its oracle was in the city.<sup>127</sup> There was also a temple of Apollo, which perhaps should be identified with Apollo Iatros.<sup>128</sup>

On the acropolis traces of old fortifications and buildings were found. They can also be seen in the city's current infrastructure. Research has also been carried out in the area to register and analyse epigraphic sources.<sup>129</sup>

### Pontus

Pontus was in the northeastern part of Anatolia, on the Black Sea, between the rivers Halys and Phasis. To the west it was adjacent to Paphlagonia, to the south to Cappadocia, and to the east to Colchis. The land was fertile with all manner of produce: fruits such as cherries, apples, and pears were grown here; olive trees flourished and cereals were also grown. The nearby forests provided timber for ship construction and other uses. Iron, copper, and silver ores were mined, as well as salt and alum. Local honey was also traded.<sup>130</sup>

Due to its convenient location, most of the cities of Pontus were founded in the 8th century BC. The land was an ethnic mosaic, inhabited by various peoples, among which we distinguish mainly Greeks, Persians, and native Anatolians. Over time, Pontus became practically completely Hellenised. During the Achaemenid rule, these regions were in the III and XIX Satrapies.<sup>131</sup> In 363 BC Ariobarzanes subjugated some of the Pontic tribes. These areas were occupied a few years later by Alexander the Great.<sup>132</sup> During the wars of the Diadochi, Mithridates I founded the independent kingdom of Pontus. Sinope was conquered by Pharnaces II (63–47) for a short time. During the reigns of Mithridates V and Mithridates VI, Pontus became one of the most powerful kingdoms in Anatolia. It was additionally extended to areas stretching from Heraclea, part of Galatia, Colchis, Armenia Minor and the Bosporan Kingdom.<sup>133</sup> Between 88–63 BC, Mithridates VI waged wars with Rome for domination in Asia Minor, which ended

<sup>124</sup> Hill 1989; Wilson 1976b: 47.

<sup>125</sup> Arr. *Peripl. M. Eux.* 14.3; Strab. 12.3.10; Step. Byz. 10.16. Cf. Umar 2007: 63; Waddington, Reinach and Babelon 1904–1912: 129. Cf. as well Map 1.

<sup>126</sup> Umar 2007: 63–64.

<sup>127</sup> Luc. *Alex.* 18, 38–40, 43. Cf. Marek 2003: 114–115; Umar 2007: 64; Waddington, Reinach and Babelon 1904–1912: 129; Wilson 1976a: 4.

<sup>128</sup> Konstantinos 2013: 38; Saprykin 2010: 474.

<sup>129</sup> Marek 1993a: 85.

<sup>130</sup> Strab. 12.3.15; 12.3.30; Xen. *An.* 5.4.1.; 5.6.15; Plin. 6.1; Plin. *HN* 21.45; Polyb. 4.38.1–6. Cf. Broughton and Mitchell 1999e: 1220; Marek 2003: 4–11; Smith 1854 (=Pontus); Waddington, Reinach and Babelon 1904–1912: 1.

<sup>131</sup> Strab. 12.3.15; 12.3.30; Hdt. 3.90–94. Cf. McGing 2004 (=Pontus); Smith 1854 (=Pontus).

<sup>132</sup> Smith 1854 (=Pontus).

<sup>133</sup> Strab. 12.3.1–2; 12.3.41. Cf. Broughton and Mitchell 1999e: 1220; McGing 2004 (=Pontus); Smith 1854 (= Pontus); Waddington, Reinach and Babelon 1904–1912: 2.

in the defeat of the Pontus king. Only the western part of the region was incorporated into Rome, mainly to maintain good contacts and donate parts of the region to the rulers of Galatia and Cappadocia.<sup>134</sup> Pompey the Great divided the provinces between eleven cities.<sup>135</sup> It should be emphasised, however, that the status of Pontus changed many times. In 47 BC Julius Caesar waged a war with Pharnaces II, finally defeating him at Zela.<sup>136</sup> In 37 BC, power over Pontus was entrusted to Polemon, who came from a Greek family from Caria. In 3 BC, Galatian Pontus was incorporated into the province of Galatia. The kingdom of Pontus was ruled for a time by Queen Pythodoris (8 BC – AD 33), followed by her daughter Antonia Tryphaena (33–55) and grandson Polemon II (38–64).<sup>137</sup> Up until the time of Tiberius (14–37), Pontus had the status of a client kingdom, and in AD 64, during the reign of Nero (54–68), it was largely incorporated into the province of Galatia.<sup>138</sup> Within the provinces of Bithynia and Pontus only the western part of the land had mints, e.g. Sinope and Amisus.<sup>139</sup> However, in the area of Galatian Pontus, the later province of Galatia and Cappadocia, coins were issued at Amasea, Cerasus, Comana, Neocaesarea, Nicopolis, Sebaste, Sebastopolis-Heracleopolis, Trapezunt, and Zela.

**Sinope** was one of the towns located on the Black Sea, on the extended peninsula, between Paphlagonia and Pontus.<sup>140</sup> Pomponius Mela included the city as part of Pontus, which was also emphasised by F. de Callataj.<sup>141</sup> In antiquity, it was one of the most important trading centres and harbours, with one of the best sea fleets.<sup>142</sup> The people of Sinope founded several other colonies, e.g. Cotyora, Cerasus, Trapezunt. Timber was felled from the nearby mountains, olive oil was pressed, metal ores were mined, and catches of tuna made. From Sinope came celebrities such as Mithridates VI and the famous cynic, Diogenes.<sup>143</sup>

The city was founded by Thessalians in the 8th century BC, or by colonists from Miletus in the 7th century BC. The legendary founder was Autolycus, one of the Argonauts, hence his worship locally; he also had his oracle in the town.<sup>144</sup> However, according to Herodotus, Sinope was founded by the Cimmerians.<sup>145</sup> The city maintained its independence for a long period. For a time it was oppressed by the tyrant Timesilaus, who was helped by the Athenians (some of whom were also supposed to have settled there).<sup>146</sup> Around 220 BC, Mithridates III (c. 220–183) declared war on Sinope. Thanks to the support of the Rhodians, the city repelled the attack.<sup>147</sup> In 183 BC the centre was conquered by Pharnaces II, Sinope then becoming later the capital of Pontus. Like Amastris, Lucullus conquered the city c. 70 BC and later helped rebuild

<sup>134</sup> Sartre 1997: 285; Waddington, Reinach and Babelon 1904–1912: 1.

<sup>135</sup> Broughton and Mitchell 1999b: 245; Waddington, Reinach and Babelon 1904–1912: 2.

<sup>136</sup> McGing 2004 (=Pontus); Smith 1854 (=Pontus).

<sup>137</sup> Sartre 1997: 18, 285; Smith 1854 (=Pontus); Waddington, Reinach and Babelon 1904–1912: 2–3.

<sup>138</sup> Suet. *Nero* 18. Cf. Sartre 1997: 47–48; Smith 1854 (=Pontus); Waddington, Reinach and Babelon 1904–1912: 3.

<sup>139</sup> Cf. Amandry, Burnett *et al.* 2015: 119–154; Rémy 1986: 65; Waddington, Reinach and Babelon 1904–1912: 3–4.

<sup>140</sup> Polyb. 4.56; Step. Byz. 571.8. Cf. Akurgal 1976: 842; Broughton and Mitchell 1999f: 1412. Cf. Map 1.

<sup>141</sup> de Callataj 2011b: 456.

<sup>142</sup> Strab. 12.3.11; Plin. *HN* 6.2. Cf. Casey *et al.* 2010: 3–4.

<sup>143</sup> Strab. 12.3.11; Paus. 2.4. Cf. Akurgal 1976: 842; Broughton and Mitchell 1999f: 1412; Casey *et al.* 2010: 3–4; McGing 2004 (=Pontus); Robinson 1906a: 140–144; Umar 2007: 75–77.

<sup>144</sup> Strab. 12.3.11; Xen. *An.* 6.1.15. Cf. Akurgal 1976: 842; Broughton and Mitchell 1999f: 1412; Gemci 2016: 20–21; Umar 2007: 74; Waddington, Reinach and Babelon 1904–1912: 178.

<sup>145</sup> Hdt. 4.12. Cf. Smith 1854 (=Sinope); Ostrowski 2005: 101.

<sup>146</sup> Plut. *Per.* 20. Cf. Casey *et al.* 2010: 3–4; Umar 2007: 77; Waddington, Reinach and Babelon 1904–1912: 178.

<sup>147</sup> Polyb. 4.56. Cf. Broughton and Mitchell 1999f: 1412; Jones 1998: 153; Waddington, Reinach and Babelon 1904–1912: 178.

it. In 47 BC, Caesar transformed it into a Roman colony (*Colonia Romana Julia Felix Sinope*).<sup>148</sup> There was supposed to be a temple of Serapis in the city, and also a famous temple to Jupiter *Dis* near the town.<sup>149</sup>

In the time of Trajan, Sinope had a problem with access to water and proposals were made to build an aqueduct from a source c. 25 km from the city. The emperor supported the idea of this investment to ensure the future health of the inhabitants. It also helped that Sinope had the necessary funds to complete the construction.<sup>150</sup>

Several modern projects have been carried out in the city, including field surveys and excavation campaigns. During these the remains of the old infrastructure and numerous artefacts from different periods were discovered. Research was also carried out to analyse the economy and trade contacts both in the centre itself and in relation to the Black Sea basin.<sup>151</sup>

**Amisus** (today's Samsun) was situated in the western part of Pontus on the Black Sea, near Sinope.<sup>152</sup> Pliny the Elder included the city within Paphlagonia.<sup>153</sup> Amisus was one of the more significant towns in Pontus Euxinus, after Sinope. It was known, among other things, for its viticulture and oil production. Its status is reflected by its very abundant coinage.<sup>154</sup>

In the beginning the city was called Enete, and its inhabitants were already mentioned in the Iliad.<sup>155</sup> The centre was inhabited several times, by colonists from Miletus or Phocaea in the 6th century BC, and then by Cappadocians and Athenians. The latter were to change the name of the city to Piraeus.<sup>156</sup> The town came under the rule of the Persians, then it belonged to the Delian League, and later it was included within the kingdom of Pontus. Alexander the Great was to rebuild it, while Mithridates VI connected it with another centre, Eupathoria. The city was also one of the ruler's residences, after Sinope.<sup>157</sup> The city was conquered by the Romans (c. 71 BC) and then taken over by Mithridates' son, Pharnaces II. After losing the battle with Caesar at Zela, the city gained its independence, although a few years later it had to face the tyrant Straton, and then became the capital of Pontus.<sup>158</sup> Near the town was said to be a temple of Apollo Didymos, as well as a sanctuary perhaps dedicated to Zeus Dikaiosynos.<sup>159</sup>

<sup>148</sup> Strab. 12.3.11; Plin. *HN* 6.2. Cf. Akurgal 1976: 842; Broughton and Mitchell 1999f: 1412; Doonan 2004: x–xi; Jones 1998: 153; Smith 1854 (=Sinope); Umar 2007: 83–84; Waddington, Reinach and Babelon 1904–1912: 178.

<sup>149</sup> Tac. *Ann.* 4.83. Cf. Casey *et al.* 2010: 6; Gemci 2016: 22–23; Summerer 2014: 193–196.

<sup>150</sup> Plin. *Ep.* 10.90–91.

<sup>151</sup> Cf. Akurgal and Budde 1956; Doonan 2004; Doonan *et al.* 1998 (there also reference to other previous research and literature); Dönmez 1998; Kassab Tezgör 2012. Among the realised projects, see *Sinope Regional Archaeological Project*.

<sup>152</sup> Strab. 12.3.14; Step. Byz. 85.22. Cf. Mitchell 1999: 72; Smith 1854 (=Amisus); Waddington, Reinach and Babelon 1904–1912: 43; Wilson 1976c: 49. Cf. as well Map 1.

<sup>153</sup> Plin. *HN* 6.2.

<sup>154</sup> Mitchell 1999: 72; Smith 1854 (=Amisus).

<sup>155</sup> Hom. *Il.* 2.852; Strab. 12.3.8; 12.3.25. Cf. Smith 1854 (=Amisus).

<sup>156</sup> Strab. 12.3.14. Cf. Jones 1998: 149; Mitchell 1999: 72; Smith 1854 (=Amisus); Waddington, Reinach and Babelon 1904–1912: 43; Wilson 1976c: 49.

<sup>157</sup> Plin. *HN* 6.2; Strab. 12.3.14. Cf. Mitchell 1999: 72; Smith 1854 (=Amisus); Waddington, Reinach and Babelon 1904–1912: 43; Wilson 1976c: 49.

<sup>158</sup> Gemci 2016: 27; Mitchell 1999: 72; Smith 1854 (=Amisus); Waddington, Reinach and Babelon 1904–1912: 43; Wilson 1976c: 49.

<sup>159</sup> Gemci 2016: 28–29; Summerer 2014: 209–212.

During the reign of Trajan, Amisus sent a letter to the emperor regarding the establishment of a charitable society. The ruler respected the rights of cities in the provinces, and, provided that no contributions would go to funding riots and conspiracies, but only to helping the poor, he approved of an association to run its activities.<sup>160</sup>

Traces of the old buildings of the city are still visible in the infrastructure of the modern centre; surface and excavation studies have been undertaken in this area. The remains of fortifications and a semi-circular tower were discovered on the acropolis. Underground cisterns and tombs have also been registered in other parts of the city.<sup>161</sup>

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<sup>160</sup> Plin. *Ep.* 10.92–93.

<sup>161</sup> Atasoy 1997; Backofen 1985; Bilgi *et al.* 2001 (with further literature); Dönmez 1998; Gemci 2016: 27–28 (with further literature); Wilson 1976c: 49.

# Chronology

One of the problematic issues of provincial coinage is the precise determination of the time individual issues were struck. The chronology of most of them is defined on the basis of the placed portrait of the emperor. Only some coins show the date of striking, the titles of the emperor, the names of officials, or a reference to some particular event that narrows down the issue date. For the times of Trajan, the determinant of the time after which the coins were minted (the so-called *terminus post quem*), there is a title, as well as a portrait of the ruler. During his reign, the emperor adopted individual nicknames, e.g. *Germanicus* (October 98), *Dacicus* (December 102), *Optimus* (June 114) and *Parthicus* (February 116), which were also placed on coins.<sup>1</sup> Legends of imperial issues were also completed by the numbers of individual consulates and tribunal authorities,<sup>2</sup> which usually did not reflect in the legends of provincial coins.<sup>3</sup> P. Strack, as well as B. Woytek, developed another method for more precise dating of some imperial coins issued during the reign of Trajan, based on changes to the emperor's portrait.<sup>4</sup> The nature of the image, more realistic or idealised, or with particular enhanced and reflected features, allowed for the precise dating of coins to within a few years.<sup>5</sup>

Looking at the provincial coins, one gets the impression that the prototypes of some images and legends, primarily on the obverse, were representations placed on Roman imperial coins. A very common phenomenon, present in provincial coinage, was the placing of portraits of the ruling emperor. However, this was not a rule, as indicated by pseudo-autonomous coins with deities or personifications.<sup>6</sup> Roman imperial coins were probably the prototypes of some of the portraits of emperors placed on the obverse of the coins of Bithynia and Pontus during the reign of Trajan. This would be a very simple method of accurately and correctly reflecting both the reigning emperor and his image directly on the coin. In the portrait of the emperor on some provincial coins one can see similar physiognomic elements as well as parts of the clothing, something also found on coins issued in Rome. The phenomenon of modelling provincial coins on imperial ones in the times of Trajan has already been noticed within the research community, however, it is indicated that as being sporadic.<sup>7</sup> A similar dependence was also noticed in the case of one of the Apamea Myrlea coins from the period of the Flavian dynasty.<sup>8</sup>

A noticeable feature of the coins of Bithynia and Pontus struck during the reign of Trajan are long legends (although this was not a permanent feature), Latin or Greek, with individual names, elements of imperial titles, and nicknames. The same references are seen on imperial coins. Unfortunately, not all provincial coins have dates of issue, years of office, or nicknames. Hence, a method based on modifications to the portrait could be a helpful technique for the more precise dating of some of Trajan's coins. Due to the different styles of engravers

<sup>1</sup> Amandry, Burnett *et al.* 2015: 791; Bennett 1997 (2015): 25–26; Woytek 2010: 18.

<sup>2</sup> Awianowicz 2017: 46–51.

<sup>3</sup> Exceptions include some colonial coins such as Syria, e.g. RPC III 3663–3678.

<sup>4</sup> The imperial portrait is also considered by Bastien 1992–1994; Besombes 2008; Etienne and Rachet 1984; Hill 1970; Woytek 2014.

<sup>5</sup> Strack 1931: 26–29; Woytek 2010: 55–73.

<sup>6</sup> Amandry, Burnett *et al.* 2015: 857–858; Dalaison 2017a; Heuchert 2005: 47–48; Johnston 1985.

<sup>7</sup> Amandry, Burnett *et al.* 2015: 843; Butcher 1988: 115.

<sup>8</sup> Amandry, Burnett *et al.* 1999: 92; Woytek 2011: 121–122.

and the individual character of the images of provincial coins, this type of dating method is rather rarely used. However, upon more detailed analyses of the coins of Bithynia and Pontus from this period, regularities can be found that may confirm the modelling of portraits from provincial coins on imperial issues (underlined and distinct physiognomic elements corresponding to any prototypes or elements of clothing), e.g. the motif of a radiate crown appearing on some denominations (Byzantium, Calchedon) may indicate a certain modelling of this image on dupondi issued by the capital mint. It could also indicate an influx of this type of coins to Bithynia and Pontus but this would have to be reflected in the finds, which is difficult to verify due to the state of research and/or the lack of context for most of the issues in museums in northern Turkey. To more precisely define the chronology of the coins of individual centres, and thus the functioning of the mints in the province, in the first stage, the coins can be divided into four distinct periods, based on nicknames, and then, considering the individual elements and features of the portrait, try to determine a more precise date after which the striking of the individual issues took place.

Only on some coins of individual towns in the time of Trajan, minted in Apamea, Sinope and Amisus, were the dates of issue or consulate numbers added as well. Single issues of the Sinope mint date to years 103/104 (year 149 from the colony's foundation), 107/108 (year 153), 109/110 (year 155), 113/114 (year 159), and perhaps 104/105 (year 150) and 114/115 (year 160). Determining the last two dates is problematic due to the state of preservation of the coins. Amisus coins were minted between 98 (year 129), 98 / 99 (year 130), 106 / 107 (year 138), 108 / 109 (year 140) and 113 / 114 (year 145).<sup>9</sup> The coins of Apamea Myrlea, a Roman colony, bear the numbers of the consulates (COS II, COS III), which can indicate the production of the coins in 98 and 100.<sup>10</sup> However, despite the exact references, as B. Woytek points out, the emissions may have been struck at a later date.<sup>11</sup> Finally, the dates of issue were not marked on the Heraclea and Tium coins, however, on the basis of the titles, they were assigned to three periods covering the years between 98–102, 103–14, and 114–16.<sup>12</sup> Likewise, Amastris coins were minted at the beginning of the emperor's reign, and also after receiving the nicknames *Optimus* (114) and *Parthicus* (116).<sup>13</sup>

Offices held by strategists, proconsuls, and magistrates can also serve to define a more precise chronology of individual issues. During the reign of Trajan, coins with the name of Gaius Julius Bassus were minted, which can be dated between 101 and 102.<sup>14</sup> These are coins without an ethnic, however they probably should be attributed to the Nicaea mint.

Coins with the title *Germanicus* in Greek were issued in Apamea, Nicomedia, Iuliopolis, Prusias, Tium, Amastris, and Abonoteichos. They account for 35% of the emissions issued in Bithynia and Pontus. Imperial coins from the beginning of Trajan's reign showed a non-idealised image of the emperor – with a long neck and an unrounded back of the head. These features were also reflected in the emissions of Bithynia and Pontus.<sup>15</sup> Portraits of this type were also placed

<sup>9</sup> Apamea RPC III 1029–1031; Sinope RPC III 1217–1219; Amisus RPC III 1231–1244.

<sup>10</sup> RPC III 1029–1031.

<sup>11</sup> Woytek 2011: 122–125.

<sup>12</sup> Amandry, Burnett *et al.* 2015: 139–141.

<sup>13</sup> Amandry, Burnett *et al.* 2015: 139, 141, 143.

<sup>14</sup> RPC III 1121–1124.

<sup>15</sup> Apamea RPC III 1029–1031; Nicomedia RPC III 1089–1092; Iuliopolis RPC III 1098–1100; Prusias ad Hypium RPC III 1101–1103; Tium RPC III 1178–1183; Amastris RPC III 1199–1204; Abonoteichos RPC III 1211–1212.

on Heraclea coins, but without a nickname.<sup>16</sup> It should be assumed that these issues also come from the beginnings of Trajan's reign, especially since modifications to the portrait are visible on later emissions from this centre. In addition, perhaps one of the issues from Calchedon was struck after 98. Unfortunately, only one example of the coin is currently registered.<sup>17</sup> Based on these features, it can be assumed that some of the coins, without the ethnic, bearing the legends ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ/ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ, ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ, ΔΗΜΗΤΡΑ ΣΕΒΑΣΤΗ, ΔΙΟΚ, ΚΤΙCΤΗC, and ΔΗΜΗΤΡΟC, may also have been struck in the early reign of Trajan.<sup>18</sup>

Most of the coins (48%) are dated to the period when the *Dacicus* title was placed on the coins. This nickname appeared on the issues of Prusa, Nicaea, Calchedon, Byzantium, Heraclea, Tium, Sinope, Amastris, and Amisus. The title was on all coins struck in Prusa, on most of the Byzantium (95%), Heraclea (80%), Sinope (66%), Amisus (64%), Tium (50%), and single coins from Amastris (10%), Nicaea, and Calchedon.<sup>19</sup> In Woytek's classification, busts made of imperial coins with the title *Dacicus* can be divided into four categories of representations. Type A is dated to the years 99–105, with the characteristic features of the images from this period being flat, a slender face, a flat back of the head, and sharp facial features. Type B is characterised by a large, broad head and bust, a convex back of the head, and a clearly defined jaw; it is dated between 105–107. Type C portraits, on issues dated 107–109, have a long neck and a convex back of the head. They are similar to Type A, but the portrait is idealised. Type D, shown on coins struck after 109, is characterised by a broad bust, a clearly marked nose and chin, and a convex back of the head.<sup>20</sup>

Only some of the coins struck in the mints of Bithynia and Pontus bear features that allow the identification of the type from imperial issues, on which the image of the emperor was probably modelled.<sup>21</sup> Only on one of the Prusa coins was the bust of the emperor based on early images, with a long neck and an unrounded back of the head.<sup>22</sup> The issues struck in Byzantium did not reflect very precisely the individual features of the portrait of the emperor from imperial coins, however, in some cases the ruler was depicted in a radiate crown and paludamentum.<sup>23</sup> Perhaps this type of emission was modelled on dupondii not minted earlier than 103–107.<sup>24</sup> Effigies of the emperor on one of the few Calchedon coins from this period<sup>25</sup> represent one type of portrait (type A) placed on coins issued after 102.

The coins from Nicaea bear very clear features of the B-type portrait so were struck no earlier than 105.<sup>26</sup> Also some coins without the ethnic and with Eirene and Nike crowning the tropaeum,<sup>27</sup> due to the dies and portrait of the emperor, can be dated to the same period.

<sup>16</sup> RPC III 1161–1162.

<sup>17</sup> RPC III 1060.

<sup>18</sup> RPC III 1125–1130, 1137–1138, 1148–1149, 1153, 1156–1160, 6548.

<sup>19</sup> Prusa ad Olympus RPC III 1035–1049; Byzantium RPC III 1067–1069, 1071–1083; Heraclea RPC III 1163–1177; Sinope RPC III 1217–1218; Amisus RPC III 1236–1244; Tium RPC III 1185–1190; Amastris RPC III 1207; Nicaea RPC III 1059; Calchedon RPC III 1061.

<sup>20</sup> Woytek 2010: 58–62, 685–686.

<sup>21</sup> Prusa RPC III 1035–1049; Byzantium RPC III 1071–1083A; Nicaea RPC III 1059, 1134, 1136; Heraclea RPC III 1163–1165, 1167, 1170; Tium RPC III 1187–1190.

<sup>22</sup> RPC III 1040.

<sup>23</sup> RPC III 1071–1083A.

<sup>24</sup> Woytek 2010: 606. Cf. Woytek 196f, 201f, 251f (103–107), 324f, 330f (107–110).

<sup>25</sup> RPC III 1061.

<sup>26</sup> RPC III 1059, 1134, 1136.

<sup>27</sup> RPC III 1131, 1134.

## CHRONOLOGY

Probably most of the portraits on Prusa issues bear the features of type C images. Coins with effigies of Zeus, Demeter, the personification of Mount Olympus, Aphrodite Anadyomene, Artemis, the altar shrine, and the eagle,<sup>28</sup> were perhaps all minted after 107.

The small number of issues with the title *Dacicus* from Amastris<sup>29</sup> allows for no more precise conclusions to be drawn.

The images of the emperor placed on the coins of Heraclea with the nickname *Dacicus* have the features of portraits of type A and B. The coins with the effigy of Poseidon on the reverse<sup>30</sup> were based on early portraits of the ruler and were struck after 102. Probably coins with representations of Heracles, Dionysus, and Asclepius<sup>31</sup> were issued after 105 (type B portrait). A similar dating can be suggested for issues featuring a bust of Athena, ears of grain in a laurel wreath, a goddess holding a spear and a shield, and a club.<sup>32</sup>

The portraits of Trajan on the coins from Tium bear the features of types A and B. Probably the issues with the effigies of Hera and Zeus on the reverse were struck after 102, and with the representations of Zeus Syrgastes, Hera, and Asclepius<sup>33</sup> after 105.

Some of the coins without the ethnic with the image of Demeter, Athena, Nike, and the altar shrine were minted after 102.<sup>34</sup> The portraits on these issues were based on early images, while the coins with the legend ΔΙΟC were struck in several different periods, as evidenced by the nicknames and the large number of coins. It should be emphasised, however, that the portraits shown on them provide ambiguous answers regarding the dating of individual issues.

Only small numbers of coins of Bithynia and Pontus were minted at the end of Trajan's reign. On some emissions from Heraclea, Amastris, and possibly Nicaea, due to the issues with the legends ΔΙΟC, ΝΕΙΚΗ CΕΒΑCΤΟΥ ΑΡΜΕ, ΚΤΙCΤΗC, and possibly CΕΒΑCΤΟΥ with the image of Tyche, the nickname *Optimus* (gr. ΑριστοC) was placed.<sup>35</sup> Only on the coins from Amastris is the legend *Parthicus* featured.<sup>36</sup>

Only two centres, Byzantium and Amastris, placed the effigy of Plotina on their coins.<sup>37</sup> The earliest imperial issues bearing her portrait were struck after 112,<sup>38</sup> hence provincial coins with her image should probably be dated after this period.

Moreover, in determining whether some of the issues were struck earlier or later, it may be useful to introduce a simplified form of the sigma in the legends, although sometimes both forms coexisted, i.e. with Nicaea, Amastris, Byzantium, Tium, and Amisus coins.

<sup>28</sup> RPC III 1035–1039, 1040A, 1041–1049.

<sup>29</sup> RPC III 1204A.

<sup>30</sup> RPC III 1170.

<sup>31</sup> RPC III 1163–1166.

<sup>32</sup> RPC III 1167–1169, 1171.

<sup>33</sup> RPC III 1187–1190.

<sup>34</sup> RPC III 1132–1133, 1135, 1139–1144, 1146–1147, 1150–1152.

<sup>35</sup> Heraclea RPC III 1172–1177; Amastris RPC III 1205–1206; Uncertain Mint RPC III 1136, 1145, 1154–1155.

<sup>36</sup> RPC III 1207.

<sup>37</sup> Byzantium RPC III 1070; Amastris RPC III 1208.

<sup>38</sup> Woytek 2010: 164–165.

The same dies from different issues can help to define more precisely which coins from particular cities were struck in the same period or in close proximity to each other. In Prusa, die links can be seen between the coins with the images of Zeus and Demeter on the reverse,<sup>39</sup> as well as Olympos and Aphrodite Anadyomene,<sup>40</sup> in Iuliopolis between the issues with the representations of Ares and Elpis,<sup>41</sup> and in Amisus among the coins with the image of seated Zeus and the walking Nike.<sup>42</sup> Some coins without an ethnic were also struck with the same dies. Among these are issues with a legend EIPHNH CEBACTH, with effigies of Eirene and Elpis,<sup>43</sup> coins with legend OMONOIA CEBACTH, and with Eirene and Ares, the latter having the Nicaea ethnic.<sup>44</sup> Some exemplars with the legend NEIKH CEBACTOY ΔAK were also struck with the same dies.<sup>45</sup> Presumably these coins were issued in one period. The same obverse dies were used for some of the coins with the legend ΔIOC, and the legend CEBACTH with the images of Demeter and Athena.<sup>46</sup> Emissions with legends ΔIOC and KTICTHC were also struck with the same die.<sup>47</sup>

Some of the mints may have issued coins only at the beginning of Trajan's reign, as it seems in Prusias, Abonoteichos, Iuliopolis, and Nicomedia, as both the titles and the portrait of the emperor might well indicate. However, it should be borne in mind that the functioning of the mints was quite irregular and the images could be based on earlier traditions. It should also be remembered that in modern times we only have a small number of surviving coins. There may still be new issues, yet unregistered, which may have been struck in other periods as well.

Based on certain factors, such as titles, it is estimated that the greatest numbers of provincial coins during Trajan's reign were issued at the very beginning of his rule, in the years 98–102.<sup>48</sup> Based on the nicknames and analyses of the coin portraits registered so far, it can be concluded that in Bithynia and Pontus, however, most of the issues were struck after 102, which is unsurprising due to the period of the emperor's reign, as well as the various building projects financed by the city funds (Prusa's baths, Nicomedia's aqueduct, Nicaea's theatre,<sup>49</sup> etc.).

Only four centres in the province – Amastris, Sinope, Amisus, Byzantium – could also issue pseudo-autonomous coins during this period.<sup>50</sup> Due to the absence of the emperor's portrait and the issue dates of this type of coins, it is very difficult to determine their exact dating, which, judging by the style of the images, may have a wide chronology.

<sup>39</sup> RPC III 1035 (1, 3–6) and 1038 (1–2).

<sup>40</sup> RPC III 1042 (1–2) and 1045 (1–3, 5).

<sup>41</sup> RPC III 1098 (1) and 1099 (1); 1098 (2) and 1099 (2).

<sup>42</sup> RPC III 1236 (1, 4) and 1237 (2).

<sup>43</sup> RPC III 1125 (1–3), 1126 (4–5) and 1127/4–5; 1126 (1) and 1127 (1, 3).

<sup>44</sup> RPC III 1059 (1) and 1131 (3, 6–7).

<sup>45</sup> RPC III 1131 (3, 6–7) and 1134 (2–3); 1131 (2) and 1134 (1).

<sup>46</sup> RPC III 1141 (3), 1156 (4) and 1158 (1); 1139 (19) and 1151 (1); 1141 (1) and 1148 (13); 1142 (6) and 1151A (1); 1139 (12) and 1152 (2, 4).

<sup>47</sup> RPC III 1155 (4) and 1160 (3).

<sup>48</sup> Amandry, Burnett *et al.* 2015: 841.

<sup>49</sup> Plin., *Ep.* X, 23, 37, 39.

<sup>50</sup> Amastris RPC III 1209–1210; Sinope RPC III 1230; Amisus RPC III 1297; Byzantium RPC IV.1. 3908–3909, 3911, 1932, 0010363–10364.

## Metrology and denominations

Bronze coin denominations remain one of the most problematic issues in Roman provincial coinage. Individual centres struck coins of various sizes and weights, which often differed from the adopted system. It is therefore interesting what denominations we are dealing with in reality, what the transactions looked like, and how people recognised the values of individual coins. Unfortunately, the numbers of coins minted at that time, as well as possible denominations, can be overwhelming. Occasionally this also applies to some localities that issued more coins of different sizes in a narrower period. If we look at this issue more pragmatically, it does not seem so difficult. Coins were struck at different times, but, unfortunately, very often it is impossible to give an exact date, except for the years of the reign of individual emperors. However, if the denominations appeared on the market at certain intervals, e.g. coins with a new value or the continuation of the current issues, it seems that they were not a problem for the ordinary citizen. In addition, it should be borne in mind that the availability and circulation of some units was limited (e.g. large denominations).<sup>1</sup>

Identifying coin denominations remains another problem, especially in the absence of names or marks to denote their value. Chios was one of the few cities that put denomination names on the coins. This facilitated the correct identification of units, especially in view of their large number, as well as standard and similar images.<sup>2</sup> Why, then, with a large variety of coins, was this solution not adopted at other centres?<sup>3</sup> The simplest explanation seems to be that they were not needed. Perhaps it was due to an earlier tradition, and the use of individual coins on the market posed no major difficulties to the inhabitants. Perhaps the value of some bronze coins was just fluctuating.

Several works have been devoted to the issue of denominations in provincial coinage, which will be briefly examined in this chapter. Usually, in general studies of mints, denominations and the images appearing on them throughout the production period are discussed. Differences and changes are emphasised, and individual units are assigned to specific denominations, generally accepted in the provincial monetary system.<sup>4</sup> Whenever possible, coins are analysed under one iconographic type over different periods. For example, on the Germa coins in the Asia province, the same representation was repeatedly placed on the same denomination many times during the reign of individual emperors.<sup>5</sup>

### Denominations in the Roman provincial coinage

The Roman monetary system was based on the as or assarion, however attention should be paid to the differences between both units, which is also confirmed by one of the inscriptions

<sup>1</sup> Cf. Amandry, Burnett *et al.* 1992; 1999; 2015; Butcher 1988; Johnston 1997; 2007; Jones 1963; Katsari 2011; MacDonald 1989; Zajac 2020.

<sup>2</sup> Lagos 1998; Mavrogordato 1918; Zajac 2020: 39–40.

<sup>3</sup> The placement of the symbols, indicating issue value, spread in Roman provinces mainly in the 3rd century. Cf. Johnston 2007.

<sup>4</sup> Cf. Bellinger 1961: 47–49, 185–195; Delrieux 2007: 57–86; Ehling 2001: 24–33; Karwiese 2016: 72–92; Klose 1987; Türkoğlu 2019: 183–184.

<sup>5</sup> Ehling 2001: 33.

BETWEEN ROMAN CULTURE AND LOCAL TRADITION

Table 1a: Denominations of coins struck in the cities of Bithynia and Pontus during the reign of Trajan

|                  | ½ assarion<br>16–17 mm<br>3–5 g | 1 assarion<br>18–20 mm<br>4–6 g | 1 ½ assaria<br>19–21 mm<br>5–7 g | 2 assaria<br>22–24 mm<br>7–9 g | 3 assaria<br>25–27 mm<br>10–13g | 4 assaria<br>28–30 mm<br>14–16 g | 6 assaria<br>31–34 mm<br>17–20 g | 8 assaria ?<br>34–35 mm<br>26–27 g |
|------------------|---------------------------------|---------------------------------|----------------------------------|--------------------------------|---------------------------------|----------------------------------|----------------------------------|------------------------------------|
| Apamea<br>Myrlea |                                 | +                               |                                  |                                |                                 |                                  | +                                |                                    |
| Prusa            | +                               | +                               |                                  | +                              | +                               |                                  | +                                |                                    |
| Nicaea           |                                 |                                 |                                  |                                |                                 |                                  | +?                               |                                    |
| Calchedon        |                                 | +                               |                                  | +                              |                                 |                                  |                                  |                                    |
| Byzantium        | +                               | +                               |                                  | +                              | +                               | +                                |                                  |                                    |
| Nicomedia        | +                               |                                 |                                  | +                              |                                 |                                  |                                  |                                    |
| Iuliopolis       |                                 |                                 |                                  |                                | +?                              |                                  |                                  | +                                  |
| Prusias          |                                 | +                               |                                  | +                              |                                 |                                  | +                                |                                    |
| Heraclea         | +                               | +                               | +                                | +                              | +                               |                                  | +                                |                                    |
| Tium             | +                               | +                               |                                  | +                              | +                               |                                  | +                                |                                    |
| Amastris         |                                 | +                               |                                  | +                              | +                               |                                  | +                                |                                    |
| Abonoteichos     |                                 | +                               |                                  |                                | +                               |                                  | +                                |                                    |
| Sinope           | +                               | +                               |                                  |                                |                                 | +                                |                                  |                                    |
| Amisus           | +                               | +                               | +                                | +                              | +                               |                                  | +                                |                                    |

referring to the so-called ‘the Italian as’.<sup>6</sup> Similarly, the value of the denarius in asses and assaria varied, both in Rome and in the provinces.<sup>7</sup> At the beginning of the 2nd century, the imperial as had a larger and heavier face value (c. 26–27 mm, 11 g), compared to the then Chios assarion (c. 20–23 mm, 5–6 g) or the second basic unit popular in various cities (c. 18–20 mm, 4–6 g).<sup>8</sup> On the basis of available sources, as well as registered coins, it is possible to notice the differentiation of denominations depending on the period and region. The monetary systems of provincial cities depended on the individual history of the town, as well as production capacities. There were cities that never issued their coins, or did so for a short time. Very often, production in the provincial mints was very irregular.<sup>9</sup> An attempt to create a single, uniform monetary system, corresponding to all provincial centres is almost impossible due to the large variety of metrological values of registered coins. The transactions were primarily based on silver and bronze coins.<sup>10</sup> One of the sources informing about the denominations and values of individual units is the inscription called *Salutaris*<sup>11</sup> from Ephesus dated 104.<sup>12</sup> In turn, on the basis of another inscription from Pergamum from the reign of Hadrian, we learn of the possibility of buying some products by paying for them only with a bronze or silver

<sup>6</sup> IGRR III, 1056; Butcher 1988: 33; MacDonald 1989: 121.

<sup>7</sup> Melville Jones 1971: 99–100.

<sup>8</sup> Tables of individual systems, see Zając 2020: tab. 1.

<sup>9</sup> Harl 1997: 224; Jones 1963: 308–309.

<sup>10</sup> IvE 27; Butcher 1988: 31–33; Johnston 2007: 1–2.

<sup>11</sup> IvE 27.

<sup>12</sup> 1 cistophorus = 4 drachmai = 3 denarii (from the reign of Hadrian – 4?); 1 denar = 8 obols = 16 assaria = 96 chalkoi; 1 drachm = 6 obols – 12 assaria = 72 chalkoi (Amandry, Burnett *et al* 2015: 814).

METROLOGY AND DENOMINATIONS

Table 1b: Denominations of coins without an ethnic struck in the cities of Bithynia and Pontus during the reign of Trajan

|  | ½ assarion<br>16–17 mm<br>3–5g | 1 assarion<br>18–20 mm<br>4–6 g | 1 ½ assarion<br>19–21 mm<br>5–7g | 2 assaria<br>22–24<br>mm<br>7–9 g | 3 assaria<br>25–27<br>mm<br>10–13 g | 4 assaria<br>28–30<br>mm<br>14–16 g | 6 assaria<br>31–34 mm<br>17–20 g | 8 assaria ?<br>34–35 mm<br>26–27 g |
|--|--------------------------------|---------------------------------|----------------------------------|-----------------------------------|-------------------------------------|-------------------------------------|----------------------------------|------------------------------------|
| I. Coins with the name of G. Julius Bassus               | +                              |                                 | +                                |                                   |                                     |                                     |                                  |                                    |
| II. Coins with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ/ ΕΙΡΗΝΗ CEBACTH |                                |                                 |                                  |                                   |                                     |                                     | +                                |                                    |
| III. Coins with the legend ΟΜΟΝΟΙΑ CEBACTH/ ΟΜΟΝΟΙΑ      |                                |                                 | +                                |                                   | +                                   |                                     | +                                |                                    |
| IV. Coins with the legend ΝΕΙΚΗ CEBACTOY ΔΑΚ/ APME       |                                |                                 |                                  |                                   | +                                   |                                     | +                                |                                    |
| V. Coins with the legend ΔΗΜΗΤΡΑ CEBACTH                 |                                |                                 | +                                |                                   | +                                   |                                     |                                  |                                    |
| VI. Coins with the legend CEBACTH                        |                                |                                 | +                                |                                   |                                     |                                     |                                  |                                    |
| VII. Coins with the legend CEBACTOY/ ΣΕΒΑΣΤOY            |                                |                                 | +                                | +                                 | +                                   |                                     |                                  |                                    |
| VIII. Coins with the legend ΔΙΟC                         |                                |                                 | +                                | +                                 |                                     |                                     |                                  |                                    |
| IX. Coins with the legend ΚΤΙCΤΗC                        |                                |                                 | +                                |                                   |                                     |                                     |                                  |                                    |
| X. Coins with the legend ΔΗΜΗΤΡOС                        |                                | +                               |                                  |                                   |                                     |                                     |                                  |                                    |
| XI. Coins with the Cornucopia                            | +                              |                                 |                                  |                                   |                                     |                                     |                                  |                                    |
| XII. Coins with the Serpent Staff                        | +                              |                                 |                                  |                                   |                                     |                                     |                                  |                                    |

coin.<sup>13</sup> We also have information on the conversion of certain units for this period. It is known that one denarius could be bought for 17 and sold for 18 assaria. The information then posted may indicate a change in course compared to the previous period, which could have been applicable to most provinces in the East.<sup>14</sup> Moreover, it also indicates a greater demand for a bronze coin for exchanges.<sup>15</sup>

<sup>13</sup> OGIS 484.

<sup>14</sup> Butcher 1988: 26; Crawford 1970: 42; Melville Jones 1971: 104.

<sup>15</sup> Harl 1997: 24–25; Katsari 2011: 214.

At the very beginning of the analysis of denominations in provincial coinage, it is necessary to briefly characterise some general visible trends that have been present at different times. First of all, the reign of Augustus was revolutionary for monetary production in the Roman provinces. The changes that took place at that time were the subject of research by A. Burnett<sup>16</sup> and L. Carbone.<sup>17</sup> Probably during this period attempts were made to introduce a unified monetary system for the entire Empire, however, according to numismatic sources, without success. A. Burnett in his work stated that 'There was no dramatic shift throughout the Empire from non-Roman to Roman denominations, but a gradual tendency towards such a change can be observed'.<sup>18</sup> In the 1st century it can be noticed that among the minted denominations in various towns, coins in two sizes dominate: 18–20 mm, 4–6 g and 15–17 mm, 3–4 g, corresponding to the assumed values of the assarion and hemiassarion.<sup>19</sup> Their continuation is also visible in the times of the Flavians and at the beginning of the 2nd century. During the reign of the Flavians, the tendency to also issue larger denominations (units with a size of over 30 mm) spread. The number of representations on the coins has also increased.<sup>20</sup> Both the trends established at that time, including larger denominations, as well as more diverse iconographic types, were reproduced in individual centres in Trajan's time. During the reign of Hadrian the number of denominations struck in various mints increased. In many cities there appeared larger (35–39 mm coins were introduced) and heavier coins (hence the proposal of scientists from the RPC project of a new alternative monetary system).<sup>21</sup> During the Antonine dynasty the minting of the same denominations was largely continued, with new and more extensive iconographic types appearing.<sup>22</sup> The introduction of larger denominations certainly made it easier to distinguish them, especially when the differences between the sizes of the coins were small. In addition, these types of coins facilitated larger transactions and could be used for thesaurisation.

The question of distinguishing and identifying individual denominations of bronze issues in provincial coinage is quite problematic due to the large number of coins made of various alloys, in various sizes, with different weights and with many iconographic types. It is worth noting, however, that to define certain denominations a conventional general monetary system for the provinces was created. As mentioned above, mainly since the time of Hadrian, heavier and larger coins were minted in some centres, hence the RPC researchers' proposal for a new alternative monetary system.<sup>23</sup> It is possible to order and specify the denominations of the issues, but their values could actually be different. Typically, bronze provincial coins struck in the 1st and 2nd centuries did not bear the names or marks of denominations, which means that there was no such need,<sup>24</sup> and the value of individual coins was very well known or changed depending on market needs. Much more often unit names were placed on the provincial coins in the 3rd century.<sup>25</sup> For the period of the reigns of Nerva, Trajan, and Hadrian (96–138), we have a few exceptions to this rule. First Chios, Rhodes, Cyme, and

<sup>16</sup> Burnett 2011.

<sup>17</sup> Carbone 2014.

<sup>18</sup> Dio Cass. 52.30.9; Amandry, Burnett *et al.* 1992: 37; Burnett 2011: 25–27, 30.

<sup>19</sup> Amandry, Burnett *et al.* 1992: 372–373.

<sup>20</sup> Amandry, Burnett *et al.* 1999: 24, 17, 124.

<sup>21</sup> Amandry, Burnett *et al.* 2015: 818–819; Zajac 2020: 35–41.

<sup>22</sup> 3,526 iconographic types during this period. In the years 96–138 AD, 1,232 iconographic types were distinguished. Information based on the coin database available on the website [rpc.ashmus.ox.ac.uk](http://rpc.ashmus.ox.ac.uk) (accessed: 05.07.2020).

<sup>23</sup> Amandry, Burnett *et al.* 2015: 818–820. Cf. Tables of individual systems, see Zajac 2020: tab.1.

<sup>24</sup> Amandry, Burnett *et al.* 2015: 814; Johnston 1997: 205.

<sup>25</sup> Johnston 2007: 1–2.

probably Alexandria as well, should be mentioned here – a very large variety of units in the monetary systems of individual cities can be noticed.<sup>26</sup> In some regions, up to nine possible denominations have been distinguished based on different metrological values.<sup>27</sup> Referring to the monetary system in Chios, in which six denominations were minted during this period, it can be noticed that the weight differences in individual units increase with size, even up to 10 g.<sup>28</sup>

Due to the lack of names and differences in diameters and weights, it is very difficult to determine the value of individual units in a given period and place, especially assuming the possibility of contractually adopting different values in bronze coinage.<sup>29</sup> Thus changes in value did not necessarily have to be reflected in the denomination structure or the issued coins.<sup>30</sup> This is very visible nowadays, where the value of coins is changed due to various phenomena, such as inflation, but the monetary system does not undergo visible internal transformations, in a way due to the additional costs being generated.<sup>31</sup> Moreover, the possible adoption of the imperial monetary system in different regions of the Roman Empire still remains a problem.<sup>32</sup> Perhaps a manifestation of this type of process could be a greater number of coins of different sizes, however, there is no certain answer to this matter. A general monetary system was adopted for the provincial coinage, however, as can be seen in historical or epigraphic sources, various units were in circulation.<sup>33</sup> Looking at the issues from the beginning of the 2nd century, it can be assumed that mainly, in everyday transactions, coins were struck in two or three sizes. In her research, C. Katsari concluded that ‘smaller denominations are perhaps the most important indicator of coin using and velocity of cash transactions in a given city center’.<sup>34</sup> K. Harl emphasised that smaller denominations were needed in the exchange between silver and bronze coins, and were also used for distribution during festivals or the emperor’s arrival.<sup>35</sup> For this reason, attention should be paid to units sized at 18–20 mm, 4–6 g and 15–18 mm, 3–4 g, most frequently struck in provincial towns and serving for basic, everyday transactions. Larger denominations could be used for thesaurisation, larger transactions, tax fees, and perhaps also had a commemorative function,<sup>36</sup> as it seems in the case of the coins with the image of Antinous.

Many cities only struck a few different bronze units, making daily transactions not too complicated. The problem arises when the number of coins of different sizes from a given place and period is greater. Nowadays, the value of a coin is emphasised by several determinants, such as size, images, legends, or the material from which the coin was made. Similarly, if we look at the mint in Rome, where brass and bronze coins were struck to facilitate the correct identification of the unit, as well as characteristic images, such as *corona radiata* on

<sup>26</sup> Amandry, Burnett *et al.* 2015: 814; Jones 1963: 309.

<sup>27</sup> Smyrna (Amandry, Burnett *et al.* 2015: 238).

<sup>28</sup> Zajac 2020: 39.

<sup>29</sup> Crawford 1970: 40–41; Johnston 1997: 205; Katsari 2011: 72–75; MacDonald 1989: 122; Melville Jones 1971: 104.

<sup>30</sup> Howgego 1990: 261.

<sup>31</sup> Johnston 1997: 205–206.

<sup>32</sup> Burnett 2011; Johnston 1997: 205–206.

<sup>33</sup> Inscription from Mesena – obols, chalkoi; inscription from Thessaly – obols for smaller units; inscription from Athens – lepton drachma (Amandry, Burnett *et al.* 1992: 32); Bible – assarion, quadrans, lepton (Mark 12.42); Ephesus – tetrachalkus (Habicht 1975: 64).

<sup>34</sup> Katsari 2012: 1.

<sup>35</sup> Harl 1997: 224–225.

<sup>36</sup> Johnston 1997: 207.

dupondii, or busts of deities on the smallest denominations.<sup>37</sup> There is no single pattern for distinguishing units in provincial coinage. Most of the bronze coins had an admixture of lead, further adding to the weight of the coin. This, in turn, also makes it impossible to distinguish individual denominations on the basis of the alloy used.<sup>38</sup> Researchers from the RPC project, considering the issues related to the recognition of bronze coin units, drew attention to two factors – the weight and type of image.<sup>39</sup> A. Johnston, focusing her attention, among other things, on Greek denominations in Roman provinces, stresses the importance of both the size of the coin and its iconography.<sup>40</sup> D.O.A. Klose, in a study of emissions from Smyrna, found that weight and size were insufficient to distinguish the coins.<sup>41</sup> D. MacDonald, in the elaboration of the coins of Aphrodisias, believed that the size of the coin was more significant than its weight.<sup>42</sup> C. Katsari saw the correct identification in size and representations. She also claims that the weight changes did not alter the population's attitude to the coin if it remained the same size.<sup>43</sup> R. Duncan Jones pointed out that bronze issues lose weight faster because they circulate faster as opposed to silver or gold coins.<sup>44</sup> In this matter, it is also worth recalling the example of Chios denominations described above and the differences in weight within them, which additionally may indicate a greater importance of the size of the coins. In the opinion of the author of this present study, the determinants allowing for the correct identification of the value of a provincial bronze coin are all three indicators, which were of greater or lesser importance depending on the place and time.<sup>45</sup>

Due to the large variety of coin sizes, as well as the representations placed on them, as already emphasised above, it becomes very problematic to create a uniform monetary system or regulation for all cities. Hence, a solution is to notice the popular and spreading trends at that time, which could be reproduced in several centres.<sup>46</sup> In addition, one should remember other aspects that make it difficult to determine in full the monetary system in a given locality, which is only a part of the coins that have survived to our times, as well as their exact time of being struck.

### Monetary systems in Bithynia and Pontus during the reign of Trajan

As in other provincial cities in the 1st century, Bithynia and Pontus mainly issued two smaller denominations, probably corresponding to the assarion and hemiassarion. In addition there are similarities between the coins of Bithynia, mainly Nicaea and Nicomedia, with the emissions of Thrace, especially Perinthus. Probably some of the denominations in the times of Claudius and Nero were modelled on the issues minted in Rome, but it seems that the largest unit was the sestertius. It should be remembered, however, that the other coins did not strictly correspond to the sizes of the other imperial denominations.<sup>47</sup> It should be

<sup>37</sup> Crawford 1970: 43–44.

<sup>38</sup> Brass coins in some cases could emphasise their special character, not exactly indicating the denominations. The use of different metals was a fashion (Amandry, Burnett *et al.* 1992: 371–372; 1999: 122–123; 2015: 814).

<sup>39</sup> Amandry, Burnett *et al.* 2015: 814.

<sup>40</sup> Johnston 1997: 207.

<sup>41</sup> Klose 1987: 108.

<sup>42</sup> MacDonald 1976: 28–31; 1992: 18.

<sup>43</sup> Katsari 2012: 48.

<sup>44</sup> Duncan Jones 1998: 191.

<sup>45</sup> Cf. Zając 2020: 35.

<sup>46</sup> Cf. Zając 2020.

<sup>47</sup> Amandry, Burnett *et al.* 1992: 22–23, 35, 338.

emphasised, however, that the other coins did not strictly correspond to the sizes of the other imperial denominations. During the reign of the Flavians, the tendency to strike larger coins, which were also issued during the times of Trajan, spread.<sup>48</sup> Some of the coins in both periods were minted from brass.<sup>49</sup>

In Apamea, at the time of Trajan, at least two denominations were issued, possibly during the reigns of Augustus and Vespasian (69–79).<sup>50</sup> These were coins from the early period of the emperor's reign, probably corresponding to the assarion (20–21 mm, 4–5 g) with the image of Myrlos, and 6 assaria (30–33 mm, 20–22 g) with the effigies of Pax and Fortuna.<sup>51</sup>

Coin production in the colony continued until the end of the Republic, when pseudo-autonomous units measuring 15–16 mm, 2–4 g were struck.<sup>52</sup> In the times of Augustus there were at least four denominations in circulation, probably representing  $\frac{1}{2}$ , 1, 2 and 3 assaria.<sup>53</sup> During the reign of Caligula (37–41), a unit sized at 31–33 mm, 10–14 g was introduced, emissions were also minted with a value of probably 1 and 2 assaria.<sup>54</sup> From the times of Nero and Vespasian, single coins of 25 mm, 8–9 g and 33 mm, 22–23 g are known.<sup>55</sup> Probably during the Flavian era Apamea also issued coins with a portrait of Caesar corresponding to the nominal assarion.<sup>56</sup> In Trajan times coins continued to be struck that were similar in size to those from earlier periods. The depiction of Pax appears on the city's coins only during this period, while the image of Tyche was probably on the assaria in the times of Caligula and the Flavians.<sup>57</sup> During the reigns of Antoninus Pius (138–161), Maximinus Thrax (235–238), Philip the Arab (244–249), and Valerian, the Fortuna motif appeared on the coins of the same size (30 mm, 21–22 g; 29–30 mm, 15–19 g).<sup>58</sup> In the times of Hadrian and Gallienus (253–268) it was placed on slightly smaller units (25 mm, 11 g; 25–29 mm).<sup>59</sup> The figure of a man, who probably should be identified with Myrlos, also appeared on coins of a similar size to those from the reign of Trajan during the reign of Antoninus Pius.<sup>60</sup> This, in turn, shows that the individual images on the coins of Apamea from Trajan's time could have been characteristic of given denominations both in the shorter period, as in the case of Myrlos, and in the longer period, such as the representation of Fortuna. Looking at individual denominations, also from earlier periods, probably in the time of Trajan in Apamea, three or even four units ( $\frac{1}{2}$ , 1, 2 or 3 and 6 assaria) were used in various transactions. However, it is worth remembering that for this period we only have a few coins.

<sup>48</sup> Amandry, Burnett *et al.* 2015: 814–815.

<sup>49</sup> Amandry, Burnett *et al.* 1992: 22–23; 1999: 16–17, 24; 2015: 813–815.

<sup>50</sup> Unfortunately, only a small number of 1st and early 2nd century Apamea coins have been registered so far. Cf. Dalaison 2017b.

<sup>51</sup> RPC III 1029–1031. It should be remembered that many different types could be placed on issues of various sizes, therefore it cannot usually be stated that one type was the sole determinant of the nominal value in some cities.

<sup>52</sup> RPC I 2001–2006.

<sup>53</sup> RPC I 2007–2011.

<sup>54</sup> RPC I 2012–2015.

<sup>55</sup> RPC I 2016; RPC II 619.

<sup>56</sup> RPC II 619A–B.

<sup>57</sup> Caligula RPC I 2015; Flavian dynasty RPC II 619A.

<sup>58</sup> Antoninus Pius RPC IV.1. 4722; Maximinus Thrax RPC VI 3004; Philip the Arab RPC VIII 19770 (temporary number); Valerian Rec 110.

<sup>59</sup> Hadrian RPC III 1033; Gallienus Rec 115–116.

<sup>60</sup> RPC IV.1. 4720 (temporary number).

One of the questions that arises in the case of denominations in the Roman colonies is the possible adaptation of the imperial system. In the 1st century, this type of system was adopted in the colonies of Macedonia and Achaia. In the case of Apamea, it seems that during Trajan's time coins were issued according to the standard sizes of the provincial system, but if we consider that perhaps weight was not so important as size, then the coins might have also reminded the inhabitants of imperial issues.

At least five denominations were issued by the mint in Prusa during the reign of Trajan, after 102.<sup>61</sup> Only coins from the time of Nero are known from an earlier period, corresponding to the size of an assarion.<sup>62</sup> Unfortunately, due to the small number of coins preserved from the 1st century, it is not known whether the issues of a certain value were introduced earlier or only in the time of Trajan. Among the registered coins from this period, the following values can be distinguished: ½ (16–18 mm, 3–4 g), 1 (20–22 mm, 4–6 g), 2 (22–24 mm, 7–9 g), 3 (24–26 mm, 10–14 g), and 6 assaria (30–33 mm, 18–25 g),<sup>63</sup> there is a certain regularity that the larger the unit, the greater the problem in maintaining a similar weight of individual emissions (up to 6 g difference). The largest coins had effigies of Zeus, Demeter, and Olympos. The image of Zeus was also reproduced in the times of Marcus Aurelius, probably on the same face value and possibly smaller during the reign of Commodus (180–192), Severus Alexander (222–235), Elagabalus, and Maximinus Thrax.<sup>64</sup> Demeter appeared on later issues in the times of Severus Alexander (20 mm, 4–5 g) and Trajan Decius (249–251) (25 mm, 8–9 g).<sup>65</sup> The representation of the personification of Olympos was placed on the coins also in the smaller denomination (22–26 mm, 10–14 g) with the name of the city.<sup>66</sup> They were also reproduced on later, mostly similar in size, issues.<sup>67</sup>

On the reverse of the coins corresponding to the size of the three assaria there are images of Athena and the already mentioned Olympos. Athena, the goddess of wisdom and war, also appeared on the later issues, presumably of different values.<sup>68</sup> Some of the emissions from the times of Elagabalus, Severus Alexander, Maximinus Thrax, and Philip the Arab are the closest in terms of size. In this case, it seems that the image was not the indicator of denomination.

Aphrodite Anadyomene appears on the units of the size of 2 assaria; she is also found on larger coins during the time of Geta (209–211).<sup>69</sup> On the other hand, Artemis Phosphoros appeared on the issues of a size that should probably be identified as an assarion. She was also reproduced

<sup>61</sup> Perhaps, on the basis of the features of the portraits, the coins were struck after AD 107.

<sup>62</sup> RPC I 2018–2019.

<sup>63</sup> Amandry, Burnett *et al.* 2015; Cf. Tab. 2.

<sup>64</sup> Marcus Aurelius RPC IV.1 10369 (temporary number); Commodus RPC IV.1. 4797 (25 mm, 11–12 g); Severus Alexander RPC VI 3026, 3028 (25 mm, 10–12 g). The City personification(?) seated on throne to left, holding long sceptre and patera which can be associated with Zeus (?); Elagabalus RPC VI 3022 (temporary number); Maximinus Thrax RPC VI 3052 (22 mm, 7–8 g) (temporary number).

<sup>65</sup> Severus Alexander RPC VI 3033, 3038 (temporary number); Trajan Decius RPC IX 209.

<sup>66</sup> RPC III 1041–1044.

<sup>67</sup> Marcus Aurelius RPC IV.1 4792 (30 mm); Commodus RPC IV.1. 4822 (24–25 mm, 10–11 g); Pertinax Rec 64 (30 mm); Manlia Scantilla Rec 67 (20 mm).

<sup>68</sup> Marcus Aurelius RPC IV.1 4796 (16–17 g) (temporary number); Commodus RPC IV.1 4797 (14–15 g) (temporary number); Elagabalus RPC VI 3011–3012, 3014, 3019, 10819 (9–11 g; 5–6 g) (temporary number); Severus Alexander RPC VI 3025, 3037 (5–6 g; 10–11 g) (temporary number); Maximinus Thrax RPC VI 3043, 3049, 3053–3054 (4–5 g; 9–12 g) (temporary number); Philip the Arab RPC VIII 19777–19778 (25 mm, 9–11 g) (temporary number).

<sup>69</sup> Geta Rec 115 (33 mm).

on later, mostly smaller, coins.<sup>70</sup> The smallest denomination had an eagle and a temple with two columns. Probably the first of the motifs was on coins of the same face value in the times of Nero, Commodus, Severus Alexander, Geta, and Maximinus Thrax.<sup>71</sup> In turn, the image of the temple also appeared on later coins minted in various sizes, but it was not the same building.<sup>72</sup> In the case of the smallest units, it should be noted that it is not always known what the value of the coins might have been – whether it is a ½ or a ¼ of an assarion.

Perhaps such a diversified monetary system for Prusa in Trajanic times may indicate the development of the centre and its growing importance. For this period we have the account of Dio Chrysostom from Prusa, who emphasises his own role in the reconstruction of the city.<sup>73</sup>

The only registered coin with the name Nicaea from the reign of Trajan, as well as one of the issues without ethnic, which can be assigned to the city due to the same dies,<sup>74</sup> was struck at a size of 34–35 mm, 21–22 g. It probably needs to be identified with the 6 assaria. In earlier periods, at least five denominations were issued in the village. Based on the coins registered so far, Nicaea initially minted units that perhaps should be equated with 3 assaria (25–26 mm, 8–12 g).<sup>75</sup> In Augustus' time, apart from the previous denomination, assaria were also struck (20 mm, 4–6 g).<sup>76</sup> In the reign of Claudius, coins were struck in at least four different sizes, including additional issues that could be ½ (15 mm, 2–3 g) and 6 (33–35 mm, 21–23 g) assaria.<sup>77</sup> The production of individual denominations continued in the reigns of Nero, Vespasian, and Domitian, to which units worth 2 assaria were additionally introduced.<sup>78</sup> As mentioned above, from Nicaea in the time of Trajan, there is one coin with ethnic and the image of Ares. It was one of the representations placed on the imperial issues minted in Rome, as well as on coins struck between 80 and 82 at the mint probably located in Thrace. They were also reproduced on Nicaean coins during the reign of Domitian.<sup>79</sup> All coins were minted in a similar size. The figure of Ares was also on the Nicaean issues in the times of Caracalla and Maximinus Thrax, however, in a different iconographic type.<sup>80</sup> Coins of this city, both from the times of Domitian and Trajan, could imitate the sestertii minted in the branch in Thrace.

Hence, in the case of coins from Nicaea, perhaps an attempt at adapting the imperial system should be considered. Looking at the individual denominations mentioned above, one gets the impression that they could correspond in the reality of the time with the values of a quadrans, semis, as, dupondius, and sestertius, although sometimes slightly lighter. It is worth paying attention to the size of one of the first coins minted in Nicaea in the period of Augustus (25

<sup>70</sup> Marcus Aurelius RPC IV.1 11143, 9882 (18 mm, 3–4 g) (temporary number); Commodus RPC IV.1 4799, 8455 (17 mm, 3–5 g) (temporary numbers); Geta Rec 109 (19 mm); Gordian III RPC VII.2 ID 19773 (28 mm, 10 g).

<sup>71</sup> Nero RPC I 2019; Commodus RPC IV.1 4827, 11785, 11796 (temporary number); Geta Rec 114, 117; Severus Alexander RPC VI 3035 (temporary number); Maximinus Thrax RPC VI .

<sup>72</sup> On the coins an image of a hexastylus was placed. Cf. Marcus Aurelius RPC IV.1 4830, 4833, 5675, 8452 (temporary numbers); Commodus RPC IV.1 4834, 5673, 5674, 8444, 8454, 9886, 10488 (temporary numbers); Elagabalus RPC VI 3013, 3018, 3020, 10894 (temporary number); Severus Alexander RPC VI 3034 (temporary number); Maximinus Thrax RPC VI 3056 (temporary number); Philip the Arab RPC VIII ID 19786.

<sup>73</sup> Dio Chrys. *Or.* XL–XLI. Cf. Szarmach 1979: 78–80.

<sup>74</sup> Amandry, Burnett *et al.* 2015: 136. Die links RPC III 1059 (1) and 1134 (2–3).

<sup>75</sup> RPC I 2026.

<sup>76</sup> RPC I 2027–2030.

<sup>77</sup> RPC I 2031–2048A.

<sup>78</sup> RPC I 2049–2061; RPC II 627–647.

<sup>79</sup> Domitian RPC II 632.

<sup>80</sup> Caracalla Rec 412–413; Maximinus Thrax RPC VI 3267 (temporary number).

mm, 8–12 g), which could represent a Roman as. A popular tendency in many centres during this period was to strike mainly smaller emissions, with the size of  $\frac{1}{2}$  and 1 assarion. Another element that may indicate a possible adaptation or modelling on imperial emissions is the placement of the image of the emperor in a radiant crown on coins with a size of 27 mm, 10–11 g in the time of Nero,<sup>81</sup> similar in size to the dupondius. The radiate crown was used to make this denomination easily recognisable. However, during the reign of Domitian, this element accompanied the emperor on coins sized at 23 mm, 6–7 g and 17 mm, 3–4 g,<sup>82</sup> hence it seems that, at least for these times, as well as for the Trajan period, it did not matter in terms of distinguishing the value of the issue and served more as a ‘decoration’.

If some coins without ethnic, including issues with the legend referring to proconsul Gaius Julius Bassus, OMONOIA CEBACTH, NEIKH CEBACTOY ΔAK/APME, CEBACTH, ΔΙΟC, ΚΤΙCΤΗC, and cornucopia, and also some coins with the legend CEBACTOY, struck at a mint in Nicaea, it means that, during the reign of Trajan, in addition to the 6 assaria mentioned above, there were  $\frac{1}{2}$ ,  $1\frac{1}{2}$ , 2, and 3 assaria in the city.

In Chalcedon, during the reign of Trajan, after 98 and 102, two denominations were issued, corresponding to the value of 1 (19–20 mm, 4–5 g) and 2 (22–24 mm, 6–8 g) assaria. Not many units of various sizes were struck in the town. At the end of the Republic these were small coins, probably worth  $\frac{1}{2}$  and 1 assarion;<sup>83</sup> the smallest are the coins without the portrait of the emperor. In turn, during the reigns of Tiberius, Claudius, and Domitian, inter alia, units corresponding to the size of 2 assaria appear.<sup>84</sup> Thus, the coins from Trajan’s time duplicate the previously established system. On this basis, it can be assumed that during this period there were two or three denominations in circulation on the local market ( $\frac{1}{2}$ , 1 and 2 assaria). However, it should be borne in mind that so far not many Calchedon coins have been registered.

A tripod, which was one of the most popular motifs on Calchedon coins in the Roman period, was placed on the smaller nominal issues from Trajan’s time.<sup>85</sup> On the larger ones (22–24 mm, 6–8 g) there is a figure of Apollo on a swan, holding a lyre,<sup>86</sup> which was also placed on the later issues, sometimes larger in nominal terms.<sup>87</sup> Due to the slight variation in size, there seems to be no problem with recognising the value of the coins, with the individual images at certain times only serving as a guide if they only appeared on coins of a given size, as possibly during the reign of Trajan. However, when comparing the duplicated motifs on units from different periods it can be seen that the representations were not only assigned one size of coins.

<sup>81</sup> RPC I 2060–2061.

<sup>82</sup> RPC II 644, 646.

<sup>83</sup> Assarion: RPC I 1783;  $\frac{1}{2}$  assarion: RPC I 1784–1785.

<sup>84</sup> RPC I 1786–1788; RPC II 370A.

<sup>85</sup> RPC I 1783, 1785 (16–18 mm); Tiberius RPC I 1786 (23 mm); Hadrian RPC III 1064 (19 mm, 3–4 g); Marcus Aurelius RPC IV.1 3774, 4750, 4754 (18 mm, 3 g; 23 mm, 13 g) (temporary numbers); Elagabalus RPC VI 3501, 3503, 3505, 3512 (20 mm, 4–6 g; 23 mm, 11–13 g) (temporary numbers); Severus Alexander RPC VI 3516 (23 mm, 11–12 g) (temporary number); Gordian III RPC VII.2 ID 19663, 19670 (21 mm, 3–5 g; 28 mm, 9–10 g). Cf. Türkoğlu 2014: 597, Tab. 1.

<sup>86</sup> RPC III 1060–1061.

<sup>87</sup> Marcus Aurelius RPC IV.1 4747, 4753 (38 mm, 36–42 g and 23 mm, 13 g) (temporary number); Elagabalus RPC VI 3507, 3509 (20 mm, 7 g; 22–23 mm, 10–11 g) (temporary numbers); Severus Alexander RPC VI 3519 (20 mm, 7–8 g) (temporary number); Gordian III RPC VII.2 ID 19665 (25 mm, 7–8 g). Cf. Türkoğlu 2014: 597, Tab. 1.

Byzantium issued at least five denominations in the times of Trajan, among which coins corresponding to  $\frac{1}{2}$  (18 mm, 3–4 g), 1 (18–21 mm, 4–7 g), 2 (22–24 mm, 7–10 g), 3 (25–29 mm, 9–12 g), and 4 (29–31 mm, 13–17 g) assaria. Initially, at the end of the Republic, the city struck perhaps two units worth  $\frac{1}{2}$  and 1 assarion.<sup>88</sup> During the reign of Tiberius, silver and bronze coins in the size of 1 and 2 assaria were issued.<sup>89</sup> For the time of Caligula and Nero, only coins corresponding to the assarion were recorded.<sup>90</sup> The same unit was also struck during the reign of Vespasian. In addition, even smaller denominations were issued at that time (15 mm, 3–4 g).<sup>91</sup> During the reign of Domitian, a coin worth 3 assaria may have been introduced.<sup>92</sup> Unfortunately, due to the city's few emissions from the time of Flavians, it is not certain whether a unit of the size of 4 assaria appeared in this period as well. Perhaps it was introduced under Trajan.

On the Byzantium coins in Trajan's time, references were made to two magistrates, indicating at least two production periods, which were ordered both in terms of denominations minted at that time and the images placed on them. On the coins corresponding to the size of 4 assaria there is a double-coned object interpreted as a torch, buoy, or fish trap.<sup>93</sup> Emissions of the same size with the same motif were struck in the times of Hadrian, Antoninus Pius, and Marcus Aurelius.<sup>94</sup> Originally, the depiction appeared on the smaller issues under Tiberius, while two such objects were placed on coins in the 1st century and during the reign of Marcus Aurelius.<sup>95</sup>

The Corinthian helmet appeared on coins corresponding to the 3 assaria minted in the first production period.<sup>96</sup> This motif was also placed on the later, similar in size, coins from the times of Trajan, and then of Hadrian and Antoninus Pius. It probably appeared on the other denominations as well, such as the 1 assarion during the Caligula and Hadrian period and perhaps the 4 assaria in the time of Marcus Aurelius.<sup>97</sup> In addition, the coins corresponding to the 3 assaria with a portrait of Plotina and a dolphin between two tuna also come from the times of Trajan's magistracy.<sup>98</sup> It was the first motif of this type, which was also reproduced on issues of similar size with the bust of Faustina the Younger, Lucilla, and Crispina. It was also placed on coins, possibly of a similar denomination, for Gordian III (238–244) and Trebonianus Gallus (251–253), however, some weight differences between these issues should be emphasised.<sup>99</sup>

<sup>88</sup> RPC I 1770–1777.

<sup>89</sup> RPC I 1778–1779C.

<sup>90</sup> RPC I 1780–1782A.

<sup>91</sup> RPC II 366–369.

<sup>92</sup> RPC II 370.

<sup>93</sup> RPC III 1067, 1071–1072.

<sup>94</sup> Hadrian RPC III 1084–1085; Antoninus Pius RPC IV.1 8677 (temporary numbers); Marcus Aurelius RPC IV.1 3905, 8688–8693, 8712 (temporary numbers).

<sup>95</sup> 1st century: RPC I 1776 (14 mm); Tiberius RPC I 1779A (22 mm, 6–7 g); Marcus Aurelius RPC IV.1 3905, 8688–8693, 8712 (16–17 g) (temporary numbers).

<sup>96</sup> RPC III 1068, 1073–1074.

<sup>97</sup> Caligula RPC I 1781A (20 mm, 6–7 g); Hadrian RPC III 1086–1086A (10 mm, 5–6 g; 27 mm, 11–12 g); Antoninus Pius RPC IV.1 8678–8679 (27 mm, 10–12 g) (temporary number); Marcus Aurelius RPC IV.1 3771, 8710–8711, 8713 (14–17 g) (temporary numbers).

<sup>98</sup> RPC III 1070.

<sup>99</sup> Marcus Aurelius RPC IV.1 3907, 8694, 8698, 8703–8704, 8706, 8715–8717 (temporary numbers); Gordian III VII.2 ID 49002 (24 mm, 16–17 g); Trebonianus Gallus RPC IX 172 (25 mm, 7–8 g).

During the Nike magistracy period, on coins the size of 3 assaria, in addition to the effigy of a helmet, we also depicted a motif featuring two tuna.<sup>100</sup> It was also found on issues, perhaps of the same value, in the times of Hadrian and Antoninus Pius, and on coins corresponding to 1 assarion under Caligula.<sup>101</sup>

During both magistracy in the time of Trajan, Byzantium struck units identical in size to the 2 assaria, with a ship's prow.<sup>102</sup> The motif probably appeared on the issues of similar size under Hadrian and Marcus Aurelius, while on assaria in the times of Caligula, Nero, and Antoninus Pius.<sup>103</sup>

On the coins minted in the second production period, corresponding to the size of the assarion, there were images of a star and crescent, a dolphin with trident, and grapes.<sup>104</sup> The star and crescent type was also found on the city's small emissions during this period, probably corresponding to the ½ assarion, similar to those found in the reigns of Tiberius, Vespasian, and also in the case of pseudo-autonomous coins.<sup>105</sup> The motif of dolphin with a trident was on the city's small emissions during the 1st century and on the pseudo-autonomous coins dated to the 2nd century.<sup>106</sup> The representation of grapes was found on the pseudo-autonomous coins corresponding to the assarion, dated to the 2nd century and the time of Gordian III.<sup>107</sup> On the smallest coins, with a size of 14–19 mm, 3–6 g, probably identical to the ½ assarion, we also find a caduceus.<sup>108</sup> The image was also on the pseudo-autonomous coins of similar size.<sup>109</sup> It is worth noting that some of these motifs in different periods were rather small issues, corresponding to the size of the ½ assarion or on some pseudo-autonomous coins. These types of images were good determinants, however, due to the slight differences between the sizes of the smallest denominations and the character of the issue, it is not possible to state with certainty what specific value we are dealing with in particular periods.

Perhaps in Trajan's time, the Byzantium monetary system was 'ordered' in terms of the denominations struck, as well as the images placed on them. This, in turn, made it easier for the residents of the centre to conduct various transactions. Probably, this type of unification was also related to its position as an important coastal metropolis. The rules introduced at that time, if not during the reigns of the Flavians, were reproduced under successive emperors, which proves the convenience and stability of the system. Differences in placing certain images on other denominations than earlier or later issues, such as an item that perhaps

<sup>100</sup> RPC III 1076.

<sup>101</sup> Caligula RPC I 1780 (20 mm, 4–6 g); Hadrian RPC III 1087 (25 mm, 10 g); Antoninus Pius RPC IV.1 8695–8696 (7 g; 25 mm, 10–11 g) (temporary numbers).

<sup>102</sup> RPC III 1069, 1077–1079.

<sup>103</sup> Caligula RPC I 1781 (19 mm, 5–6 g); Nero RPC I 1782A (20 mm, 5–6 g); Hadrian RPC III 1088 (23 mm, 6–7 g); Antoninus Pius RPC IV.1 8680–8686 (20 mm, 5–6 g) (temporary numbers); Marcus Aurelius RPC IV.1 8707–8709, 8718–8731 (22 mm, 6–8 g) (temporary numbers).

<sup>104</sup> RPC III 1180–1182.

<sup>105</sup> Tiberius RPC I 1778A (18 mm, 3–4 g); Vespasianus RPC II 367–369 (17 mm, 3–4 g); pseudo-autonomous coins RPC IV.1 3908 (20 mm, 4–5 g) (temporary number).

<sup>106</sup> 1st century: RPC I 1771 (15 mm, 2–3 g); Tiberius RPC I 1779C (17 mm, 4–5 g); pseudo-autonomous coins RPC IV.1 3911 (3–4 g) (temporary number).

<sup>107</sup> Pseudo-autonomous coins RPC IV.1 10363–10364 (5–7 g) (temporary numbers); Gordian III RPC VII.2 ID 49001 (20 mm, 5–6 g).

<sup>108</sup> RPC III 1183A.

<sup>109</sup> RPC IV.1 1932 (3–4 g) (temporary number).

should be identified as torches on 4 assaria, or stars and a crescent on the assarion, are likely to be related to an increase in awareness of significant events or figures during this period.<sup>110</sup>

The mint of Nicomedia, perhaps at the beginning of Trajan's reign, issued two denominations of the size of the  $\frac{1}{2}$  (16–18 mm, 2–3 g) and 2 (22–24 mm, 7–8 g) assaria. In earlier periods, coins of up to six different values may have been minted in the town. At the time of Augustus, Nicomedia issued at least two denominations corresponding to 1 (21 mm, 6 g) and 3 (25 mm, 9 g) assaria.<sup>111</sup> Coins with an assarion value (20 mm, 5 g) are known from the reign of Tiberius, while for Claudius we have the  $\frac{1}{2}$  (14 mm, 2–3 g), 1 (20 mm), 3 (25–27 mm, 8–9 g), and 6 (32–34 mm, 20–24 g) assaria.<sup>112</sup> Emissions were struck during the reign of Nero, probably corresponding to 1 (20 mm, 5–6 g), 3 (24 mm, 12 g) and 8 (35 mm, 25–27 g) assaria.<sup>113</sup> These above units were issued during both the Vespasian and Domitian periods.<sup>114</sup> Perhaps also in Nicomedia there were issues, without ethnic, with the legend ΔΗΜΗΤΡΑ CEBACTH and ΔΗΜΗΤΡΟC, of the size of 1 or  $1\frac{1}{2}$  assaria.

In Trajan's time, on the larger coins struck, there was a portrait of Tyche and a legend referring to the name and status of the town. The motif with the bust of the city guardian was also found on units of a similar size during the reigns of Claudius, Vespasian, Domitian, Marcus Aurelius, and Commodus.<sup>115</sup> The image of Tyche also appeared on other Nicomedian issues in the Roman period, but in a different iconographic type. Probably the bust of the goddess was placed mainly on those issues corresponding to the 2 assaria, which could also be used as a denomination. The type referring to the name and position of the centre was found on the coins of Tiberius, Claudius, Vespasian, Domitian, Antoninus Pius, Caracalla, Maximinus Thrax, Trajan Decius, Trebonianus Gallus, and Volusian (251–253).<sup>116</sup> A popular motif was placed on the issues of various sizes. Perhaps it could be a certain determinant of the value in particular periods. The smallest denominations minted in the city depict the cornucopia,<sup>117</sup> probably characteristic only for the times of Trajan.

Perhaps, as in the case of Nicaea, the centre's monetary system could correspond at certain times to the imperial system, as in the case of coins similar in size to the sestertius issued in Nero's time. And, as in the case of Nicaea, on one of the issues from this period, with a value similar to the dupondius, there was a portrait of the emperor in a radiate crown.<sup>118</sup> This element also appeared on the units of a similar size, as well as slightly smaller ones (23 mm, 8–9 g) minted in the times of Domitian.<sup>119</sup>

<sup>110</sup> Cf. Heuchert 2005: 51–52.

<sup>111</sup> RPC I 2062–2063.

<sup>112</sup> RPC I 2064–2082.

<sup>113</sup> RPC I 2083–2086A.

<sup>114</sup> RPC II 648–664.

<sup>115</sup> Claudius RPC I 2069–2072 (25 mm, 8–10 g); Vespasianus RPC II 651, 652A (24–25 mm, 7–9 g); Domitian RPC II 658, 658B (23–25 mm, 8–9 g); Marcus Aurelius RPC IV.1 5609, 5658, 5666, 10491, 11819 (22 mm, 8–10 g) (temporary numbers); Commodus RPC IV.1 6111, 7982 (22 mm, 7–8 g) (temporary numbers).

<sup>116</sup> Tiberius RPC I 2064 (20 mm, 5–6 g); Claudius RPC I 2076, 2079–2082 (14 mm, 3–4 g; 20 mm, 3–5 g; 27 mm, 11–12 g; 34 mm, 23–24 g); Vespasianus RPC II 648, 652 (32–34 mm, 20–24 g); Domitian RPC II 661 (25 mm, 9–10 g); Antoninus Pius RPC IV.1 7980 (20 mm, 5–6 g) (temporary number); Caracalla Rec 250 (28 mm); Maximinus Thrax RPC VI 3452, 3487 (22 mm, 7 g) (temporary numbers); Trajan Decius RPC IX 345–346 (20 mm, 4–6 g); Trebonianus Gallus RPC IX 365 (20 mm, 4–6 g); Volusianus Rec 403 (20 mm).

<sup>117</sup> RPC III 1091–1092.

<sup>118</sup> RPC I 2085.

<sup>119</sup> RPC II 656, 658A–658B.

In the time of Trajan at least two denominations were issued in Iuliopolis, probably corresponding to 3 (25–26 mm, 10–13 g) and 8 (32–34 mm, 23–26 g) assaria.<sup>120</sup> However, perhaps due to the iconographic types reproduced from the issue minted in the branch, probably in the areas of Thrace between 80–82, as well as the size and weight of these units, they should be viewed as a representation of imperial coins. Thus, among the struck issues there could be both sestertii and asses. Coins of these sizes were initially minted during the reign of Vespasian, when the centre started monetary production. In addition, units worth 2 assaria (24 mm, 7–8 g) were also issued at that time.<sup>121</sup>

On the larger coins struck in Iuliopolis there were images of a walking Ares (as at Nicaea, Prusias, Amastris), as well as Eirene – also known from issues from Prusias. These motifs were only on the city's emissions during this period. On the smaller units we find a standing Demeter, who also appears on the Geta coins.<sup>122</sup> It seems that the denominations and motifs may have imitated the imperial issues known from Domitian's time.

The mint at Prusias in the times of Trajan issued three denominations, corresponding to 1 (18 mm, 4–6 g), 1½ (19–22 mm, 5–7 g), and 6 (31–33 mm, 19–21 g) assaria. Coins of similar sizes were struck as early as the times of the Flavians, when the centre started monetary production. In addition, during the reigns of Vespasian and Domitian, emissions worth 3 assaria (27 mm, 10–13 g) were also minted.<sup>123</sup>

On the largest denominations in the time of Trajan, the image of the walking Ares and the standing Eirene were placed, both of which are also found on the issues of similar size from the reign of Domitian.<sup>124</sup> Perhaps coins of the same denomination from this period, and with the figure of Eirene, without ethnic, should also be assigned to the same mint.<sup>125</sup> On issues that could correspond to 1½ assarion (or, in reality, 1 assarion), an altar shrine appeared on the coins of the same size in the time of Vespasian.<sup>126</sup> There are also asses with this motif from the imperial branch probably from the Thracian area, and similar sizes from Nicaea from the Flavian period.<sup>127</sup> The effigy of the eagle, present on the coins worth 1 assarion, probably first appeared during the Trajan period. They were also reproduced on coins from the time of Marcus Aurelius.<sup>128</sup> Most of the images were placed on coins of similar size, mainly during the times of the Flavians and Trajan. Perhaps because of the motifs, they could refer to the imperial coinage, but in terms of denominations, the exact same values were not duplicated.

In Heraclea, during the reign of Trajan, at least five denominations were issued, among which one can probably distinguish ½ (16 mm, 2–4 g), 1 (18–21 mm, 4–6 g), 2 (22–24 mm, 7–9 g), 3 (24–26 mm, 11–15 g), and 6 (30–33 mm, 17–21 g) assaria. The pseudo-autonomous issues, which perhaps should be dated to the time of Augustus, represent two smaller denominations (20 mm and 17 mm, 3 g).<sup>129</sup> For the reign of Claudius, two issues of 16 mm, 4 g and 29 mm, 15

<sup>120</sup> The smaller units: RPC III 1100.

<sup>121</sup> RPC II 665–667.

<sup>122</sup> Rec 28 (28 mm).

<sup>123</sup> RPC II 668–687.

<sup>124</sup> RPC II 671–672, 676.

<sup>125</sup> RPC II 676–678.

<sup>126</sup> RPC II 670.

<sup>127</sup> RPC II 513, 535, 640A, 710.

<sup>128</sup> RPC IV.1 4856 (27 mm) (temporary number).

<sup>129</sup> RPC I 2087–2088.

g were recorded.<sup>130</sup> In turn, in the time of Nero, at least four denominations were minted, corresponding to 1 (20 mm, 4 g), 2 (22 mm, 7 g), 3 (26–27 mm, 11–13 g) and 4 (31 mm, 13–14 g) assaria.<sup>131</sup> During the reign of Vespasian, there were at least two denominations, 2 (24 mm, 6 g) and 3 (27 mm, 12–13 g) assaria.<sup>132</sup> In this case, the Trajan issues were probably mostly introduced in the earlier periods. Perhaps the new denomination was 6 assaria, although it is not known whether coins of the same value, similar size, but less weight, did not appear also in the time of Nero.

In Heraclea, in the Trajan era, three main production periods can be distinguished. At the beginning of the emperor's reign, at least two denominations were minted, corresponding to 3 and 6 assaria. The figure of Heracles was placed on the largest one,<sup>133</sup> and, based on the centre's traditions, it was one of the most popular motifs on coins of various sizes in many periods.<sup>134</sup> In turn, on the issues of smaller face value we have the standing Dionysus,<sup>135</sup> a motif that also appeared on coins of similar size in the times of Nero, Septimius Severus, Caracalla, Geta, and Macrinus (217–218), as well as on slightly smaller issues in the times of Severus Alexander, Maximinus Thrax, Balbinus and Pupienus (238), and Gordian III.<sup>136</sup>

In the next production period, after 102,<sup>137</sup> motifs with the representations of Heracles were reproduced on the coins similar in size to 6 assaria, although the image of the hero was also shown in a different iconographic type.<sup>138</sup> It is worth noting that some of these 28–30 mm units have a lighter weight, ranging between 15 g – 20 g, which, in turn, could raise the question whether they do not represent a different denomination. However, in this case, one should bear in mind the difficulty of handling the weights of the larger denominations. In addition, the image may indicate the value of the coin. The figure of Dionysus was placed on the smaller coins corresponding to the 2 assaria, and an effigy of Asclepius appeared on issues of the same size.<sup>139</sup> The latter motif is also found on coins of similar size minted in the times of Caracalla, Geta, Macrinus, and, perhaps, corresponding to the assarion of Maximinus Thrax, Balbinus and Pupienus, Gordian III, and Gallienus.<sup>140</sup> In this case, it seems that both the depictions of

<sup>130</sup> RPC I 2089–2090.

<sup>131</sup> RPC I 2091–2096.

<sup>132</sup> RPC II 688–689.

<sup>133</sup> RPC III 1161.

<sup>134</sup> Vespasianus RPC II 688; Commodus RPC IV.1 4784 (temporary number); Septimius Severus Rec 105–112, 114; Caracalla Rec 132–135; Geta Rec 145–149, 161–163; Macrinus Rec 172–175; Severus Alexander RPC VI 3542–3543, 3545–3548 (temporary numbers); Maximinus Thrax RPC VI 3554–3557 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19675–19676, 19681, 72592; Gordian III RPC VII.2 ID 19693–19698, 19701–19705, 19714, 19716–19717, 19728, 48129, 59587, 73021; Philip the Arab RPC VIII ID 19742, 19744–19747, 22051; Valerian Rec 232; Gallienus Rec 235–241; Trajan Decius RPC IX 365A; Saloninus Rec 250.

<sup>135</sup> RPC III 1162.

<sup>136</sup> Nero RPC I 2095 (25 mm, 8–9 g); Septimius Severus Rec 116 (28 mm); Caracalla Rec 131 (23 mm); Geta Rec 142–144, 160 (18–24 mm); Macrinus Rec 176–177 (23–26 mm); Severus Alexander RPC VI 3549 (20 mm, 5 g) (temporary number); Maximinus Thrax RPC 3566 (20 mm, 4–5 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19687 (22 mm, 5–6 g); Gordian III RPC VII.2 ID 19733–19734 (22 mm, 5–7 g).

<sup>137</sup> Perhaps due to the features of the emperor's portrait, some of the issues can be dated a bit more precisely, i.e. to the years after 105 or 107.

<sup>138</sup> RPC III 1164.

<sup>139</sup> RPC III 1165–1166.

<sup>140</sup> Caracalla Rec 136 (22 mm); Geta Rec 150–151 (21–24 mm); Macrinus Rec 179 (24 mm); Maximinus Thrax RPC VI 3564 (20 mm, 5 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19686 (22 mm, 5–6 g); Gordian III RPC VII.2 ID 19731–19732 (22 mm; 5–6 g); Gallienus Rec 242 (21 mm).

Dionysus and Asclepius could have been characteristic of the above units issued in particular periods.

The next coins from this period, corresponding to the size of 1 assarion, are coins with a bust of Athena, five ears of corn in a laurel wreath, a walking goddess in a mural crown, which due to the attributes kept may be identified with Athena, and Poseidon.<sup>141</sup> The portrait of Athena was also found on the smaller units struck in the times of Severus Aleksander, Maximinus Thrax, as well as Balbinus and Pupienus,<sup>142</sup> while the figure of the goddess of wisdom and war was also shown in the centre's coins, in a different iconographic type, in the times of Maximinus Thrax, Balbinus and Pupienus, as well as Gordian III; these might correspond to 2 or 3 assaria.<sup>143</sup> The figure of Poseidon was found on the larger coins with portraits of Claudius, Julia Domna, Maximinus Thrax, Balbinus and Pupienus, Gordian III, and Saloninus (258–260).<sup>144</sup> In turn, motifs with ears of corn and a walking goddess in a radiant crown were placed on the city's emissions only during this period. Perhaps different and more numerous, compared to other units, motifs on one of the denominations that can be identified with the assarion, may suggest a greater demand for this type of emissions during the reign of Trajan.

A club was placed on the smallest denominations in that period.<sup>145</sup> The motif was initially on emissions corresponding to 1½ and 2 assaria in the time of Vespasian.<sup>146</sup> From the reign of Trajan the image appeared on smaller units; it was also reproduced on coins of similar size in the period of Severus Alexander.<sup>147</sup>

In the next production period, after 114, some of the motifs, such as Heracles, the bust of Athena, or the club, were reproduced on the same denominations.<sup>148</sup> A new type of image of Heracles with lion skin and Cerberus appeared on the largest issues.<sup>149</sup> The representation of Poseidon with a dolphin and a trident was placed on coins the size of 3 assaria.<sup>150</sup> The new type in this period, which appears on emissions corresponding to 2 assaria, was the standing goddess in mural crown, holding a pomegranate.<sup>151</sup> Perhaps the same images of the goddess were found on similar denominations in the time of Nero, and then smaller ones with portraits of Elagabalus and Severus Alexander.<sup>152</sup>

It is worth noting that some of the images had a long tradition. They were placed many times on very similar emissions in particular periods, as in the case of Dionysus, Asclepius, and the

<sup>141</sup> RPC III 1167–1170.

<sup>142</sup> Severus Alexander RPC VI 3553 (16 mm, 3 g) (temporary number); Maximinus Thrax RPC VI 3567 (16 mm, 3 g) (temporary number); Uncertain Issuer RPC VI 3539 (18 mm, 4 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19691 (18 mm, 3–4 g).

<sup>143</sup> Maximinus Thrax RPC VI 3560 (21 mm, 8–9 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19680, 22049 (25–28 mm, 10–11 g); Gordian III RPC VII.2 19718–19719, 19726 (25 mm, 6–7 g).

<sup>144</sup> Claudius RPC I 2090 (29 mm, 14–15 g); Julia Domna Rec 123–124 (26–28 mm); Maximinus Thrax RPC VI 3562 (25 mm, 11 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19682 (25 mm, 7–8 g); Gordian III RPC VII.2 ID 19723, 19731 (25 mm, 8–9 g); Saloninus Rec 249 (24 mm).

<sup>145</sup> Vespasianus RPC II 1171.

<sup>146</sup> Severus Alexander RPC VI 3552 (temporary number).

<sup>147</sup> RPC II 689.

<sup>148</sup> Heracles: RPC III 1172; bust of Athena: RPC III 1176; club: RPC III 1177.

<sup>149</sup> RPC III 1173.

<sup>150</sup> RPC III 1174.

<sup>151</sup> RPC III 1175.

<sup>152</sup> Nero RPC I 2092; Elagabalus RPC VI 3541 (temporary number); Severus Alexander RPC VI 3550 (temporary number).

standing Athena. A constant element during the reign of Trajan was also the placing on the largest coins of a representation of Heracles, one of the most significant motifs for the centre, and on the smallest the club.

The mint at Tium in Trajan's time may have issued five denominations, which should be identified with a ½ (13–18 mm, 2–3 g), 1 or 1½ (20–21 mm, 5–8 g), 2 (23–24 mm, 5–7 g), 3 (25–28 mm, 8–12 g), and 6 (31–35 mm, 19–24 g) assaria. Coins of the same size were minted in the time of Domitian.<sup>153</sup>

During the first production period, dating to the beginning of the emperor's reign, coins of ½, 2, 3, and 6 assaria were issued. On the largest denominations the image of Zeus Syrgastes was placed, which also features on similar issues in the times of Domitian and Marcus Aurelius, as well on differently sized units under Domitian, Antoninus Pius, Severus Alexander, Maximinus Thrax, Gordian III, Philip the Arab, and Trajan Decius.<sup>154</sup>

On the 3 assaria appeared Poseidon and Dionysus.<sup>155</sup> The former motif was placed on coins, most probably of the same, or slightly smaller denomination, also during the reigns of Hadrian, Antoninus Pius, Marcus Aurelius, Elagabalus, Severus Alexander, Maximinus Thrax, and Gordian III.<sup>156</sup> In turn, Dionysus appears on similar issues in the times of Domitian and Antoninus Pius, while on issues of different sizes in the periods of Hadrian, Antoninus Pius, Marcus Aurelius, Gordian III, and pseudo-autonomous coins.<sup>157</sup>

On the coins corresponding to the 2 assaria there is the figure of Asclepius.<sup>158</sup> The image was also shown on issues of the same size in the Domitian era, and probably different denominations in the periods of Antoninus Pius, Marcus Aurelius, Commodus, Elagabalus, Gordian III, and Philip the Arab.<sup>159</sup>

<sup>153</sup> RPC II 700–704.

<sup>154</sup> Domitian RPC II 700–703 (17 mm, 3–4 g; 21 mm, 5–6 g; 27 mm, 11–12 g; 34 mm, 24–25 g); Antoninus Pius RPC IV.1 5555–5556, 6118–6119, 6132 (17 mm, 3–4 g; 21 mm, 7–8 g) (temporary numbers); Marcus Aurelius RPC IV.1 5704, 9534 (30 mm, 21–22 g; 27 g) (temporary number); pseudo-autonomous coins RPC IV.1 7991 (temporary number); Severus Alexander RPC VI 3590–3591 (25 mm, 14–15 g) (temporary number); Maximinus Thrax RPC VI 3609 (24 mm, 12–13 g) (temporary number); Gordian III RPC VII.2 ID 20023–20024, 20028 (29 mm, 11–12 g); Philip the Arab RPC VIII ID 20040 (29 mm, 11 g); Trajan Decius RPC IX 368 (28 mm, 11–12 g).

<sup>155</sup> RPC III 1180–1182.

<sup>156</sup> Hadrian RPC III 1192 (37 mm, 25 g); Antoninus Pius RPC IV.1 6120, 6133 (8–9 g) (temporary numbers); Marcus Aurelius RPC IV.1 5577, 6143 (8–9 g) (temporary number); pseudo-autonomous coins RPC IV.1 7990 (7–8 g) (temporary number); Elagabalus RPC VI 3576, 3585 (7–9 g) (temporary number); Severus Alexander RPC VI 3600 (20 mm, 5–6 g) (temporary number); Maximinus Thrax RPC VI 3614 (7–8 g) (temporary number); Gordian III RPC VII.2 ID 20036 (25 mm, 10–11 g).

<sup>157</sup> Domitian RPC II 704 (28 mm, 11–12 g); Hadrian RPC III 1191 (19 mm, 6–7 g; 37 mm, 37 g); Antoninus Pius RPC IV.1 5557, 5567, 8458, 10725 (5–6 g; 12–13 g) (temporary numbers); Marcus Aurelius RPC IV.1 5703, 5563, 6140 (5–6 g; 3–4 g) (temporary number); pseudo-autonomous coins RPC IV.1 5705; RPC VI 3625 (3–4 g; 5–6 g) (temporary numbers); Gordian III RPC VII.2 ID 20031, 29440 (25 mm, 7–8 g).

<sup>158</sup> RPC III 1183; Öztürk 2013c: 333.

<sup>159</sup> Domitian RPC II 701A (24 mm, 7–8 g); Antoninus Pius RPC IV.1 6122, 10372(?) (3–4 g) (temporary number); Marcus Aurelius RPC IV.1 5578, 5582, 5701–5702, 7989 (3–4 g; 7 g) (temporary numbers); Commodus RPC IV.1 10916 (23–24 g) (temporary number); Elagabalus RPC VI 3569 (13–14 g) (temporary number); Gordian III RPC VII.2 ID 20017 (29 mm, 11–12 g); Philip the Arab RPC VIII ID 20041 (29 mm, 11–12 g).

The smallest coins had torches with the legend ΑΡΤΕΜΙΔΙΟΣ and a bunch of grapes.<sup>160</sup> The second theme appeared on issues of the same size in the Antoninus Pius period.<sup>161</sup> In turn, the first effigy was on larger emissions in the times of Antoninus Pius, Severus Aleksander, Maximinus Thrax, and Gordian III.<sup>162</sup>

During the production period after 102, some of the motifs, such as the image of Zeus Syrgastes,<sup>163</sup> were reproduced on the next issues of the same size. The figures of Hera and Zeus were also placed on the largest coins.<sup>164</sup> These types of effigies was also found on coins of large face value in the time of Marcus Aurelius.<sup>165</sup> It is worth noting that between the individual specimens corresponding to the 6 assaria minted in Tium in this period, a difference in weight of up to 6 g (from 18 g to 24 g) is noticeable.

On the issues corresponding to the 3 assaria there is an image of Hera with a long sceptre,<sup>166</sup> which until now was on the centre's coins only during this period, while on the assarion there was an effigy of Asclepius.<sup>167</sup>

Amastris issued at least four denominations during Trajan's reign, which should probably be identified with 1 (20–22 mm, 4–6 g), 2 (23–24 mm, 7–9 g), 3 (24–26 mm, 8–12 g) and 6 (30–32 mm, 22–24 g) assaria. At the end of the Republic, the city minted coins to a size of 21 mm, 8–9 g, while in the times of Augustus it was possible that the issues of similar value, but a little lighter (22 mm, 5 g), were continued.<sup>168</sup> Two units are known from the Domitian period, measuring 22 mm, 6–7 g and 32 mm, 24–25 g.<sup>169</sup> In the time of Trajan, four main production periods can be distinguished, dating from the years 98, 102, 114, and 116.<sup>170</sup> Perhaps some of the coins without ethnic were also issued in the city, with the legend ΕΙΡΗΝΗ ΚΕΒΑΚΤΗ and ΚΕΒΑΚΤΟΥ, with sizes of 30–33 mm, 22–26 g and 27–28 mm, 12–13 g.

At the beginning of the emperor's reign, units corresponding to 3 and 6 assaria were issued in the town. As in Iuliopolis and Prusias, the largest coins bear the figure of the walking Ares.<sup>171</sup> Perhaps the god of war was also shown on smaller issues from the times of Antoninus Pius, Marcus Aurelius and Caracalla, but in a completely different iconographic type.<sup>172</sup> On the same size of coins also appeared an image of Elpis, which was only shown during this period.<sup>173</sup>

<sup>160</sup> RPC III 1180A, 1184.

<sup>161</sup> Antoninus Pius RPC IV.1 6127, 10199 (15 mm, 3–4 g) (temporary numbers).

<sup>162</sup> Antoninus Pius RPC IV.1 5560 (28 mm, 12–13 g) (temporary number); Severus Alexander RPC VI 3596 (8–9 g) (temporary number); Maximinus Thrax RPC VI 3613 (5–6 g) (temporary number); Gordian III RPC VII.2 ID 20033–20034 (25 mm, 6–8 g).

<sup>163</sup> RPC III 1187–1188.

<sup>164</sup> RPC III 1185.

<sup>165</sup> Marcus Aurelius RPC IV.1 5581 (27 g) (temporary numbers).

<sup>166</sup> RPC III 1189.

<sup>167</sup> RPC III 1190.

<sup>168</sup> RPC I 2105–2106.

<sup>169</sup> RPC II 712–713.

<sup>170</sup> Amandry, Burnett *et al.* 2015: 143–144.

<sup>171</sup> RPC III 1198.

<sup>172</sup> Antoninus Pius RPC IV.1 5401 (temporary number); Marcus Aurelius RPC IV.1 5438–5439, 8424 (11–14 g) (temporary numbers); Caracalla Rec 161.

<sup>173</sup> RPC III 1199.

On the smaller issues, with a value probably corresponding to 3 assaria, the image of Demeter/Artemis with torches was placed, while on the coins with the size of 2 assaria we have Demeter with ears of corn and a long sceptre, Athena, and an eagle standing on the globe.<sup>174</sup> In this case, the similarity of the two units is noticeable, with diameters between 24 mm – 27 mm and weights from 7 g – 12 g. The distinction is based on the only one coin registered so far with a different type of Demeter/Artemis depiction. However, as one can see in another issue sized at 24–25 mm, 10–11 g with the figure of Demeter, perhaps both units were identical. The figure of the goddess of harvest was also shown on coins of a similar size with the bust of Faustina the Younger,<sup>175</sup> while the effigy of Athena appears on issues with images of Antoninus Pius, Marcus Aurelius, Faustina the Younger, Gordian III, Philip the Arab, and Otacilia Severa.<sup>176</sup> The eagle motif is also found on coins, although smaller, with portraits of Marcus Aurelius and Faustina the Younger, as well as on the pseudo-autonomous issues.<sup>177</sup> It seems that, despite the different periods, the motifs with the figure of Demeter or Athena could be placed on the same denominations, which suggests the presence of a certain repeated tradition in the case of recognising the value of coins on the basis of the above images, introduced in the time of Trajan.

The bust of Tyche in a mural crown was found on coins struck after 102,<sup>178</sup> which is also found on coins of a similar size issued in the 1st century and in the times of Saloninus, as well as on the pseudo-autonomous issues.<sup>179</sup>

In the production period after 114, coins the size of 2 and 6 assaria were minted. On the larger units we have an eagle standing on the globe,<sup>180</sup> while the Nike figure appears on the smaller ones,<sup>181</sup> as it did on the coins of various sizes in the times of Severus Aleksander and Maximinus Thrax, as well as on the pseudo-autonomous issues.<sup>182</sup>

In the last production period, after 116, units of 1, 3, and 6 assaria were minted. On the largest coins with the bust of Plotina was the image of Zeus,<sup>183</sup> which also appeared on smaller issues with the image of the empress, identical to the 3 assaria.<sup>184</sup> The motif is also known from coins of similar size from the times of Domitian and Antoninus Pius.<sup>185</sup> Some coins that probably

<sup>174</sup> RPC III 1201–1204.

<sup>175</sup> RPC IV.1 5414 (24 mm, 7–8 g) (temporary number).

<sup>176</sup> Antoninus Pius RPC IV.1 4882, 5471 (24 mm, 7–8 g) (temporary numbers); Marcus Aurelius RPC IV.1 11743 (9 g) (temporary numbers); Faustina the Younger RPC IV.1 4888, 5416–5417, 5474, 6251, 9677 (24 mm, 7–9 g) (temporary numbers); Gordian III RPC VII.2 ID 20049 (24 mm, 6–7 g); Philip the Arab RPC VIII ID 22050 (28 mm, 13–14); Otacilia Severa RPC VIII ID 27698 (28 mm, 7 g).

<sup>177</sup> Marcus Aurelius RPC IV.1 5400, 5413, 5437, 5472, 10223 (20 mm, 3–4 g) (temporary numbers); Faustina the Younger RPC IV.1 3549 (20 mm, 3–4 g) (temporary number); pseudo-autonomous coins RPC IV.1 4899 (20 mm, 3–4 g).

<sup>178</sup> RPC III 1204A.

<sup>179</sup> Rec 24–30; RPC I 2105–2106 (21–22 mm, 4–8 g); Saloninus Rec 177 (22 mm); pseudo-autonomous coins RPC IV.1 4911–4912 (20 mm, 5–6 g) (temporary number).

<sup>180</sup> RPC III 1205.

<sup>181</sup> RPC III 1206.

<sup>182</sup> Pseudo-autonomous coins RPC IV.1 4903, 4911–4912 (20 mm, 5–6 g) (temporary numbers); Severus Alexander RPC VI 3630 (29 mm) (temporary number); Maximinus Thrax RPC VI 3633 (32 mm, 14–15 g) (temporary number).

<sup>183</sup> Rec 59–60; RPC III 1208; SNG France 68.

<sup>184</sup> RPC III 1208.

<sup>185</sup> Domitian RPC II 712 (32 mm, 24–25 g); Antoninus Pius RPC IV.1 5367–5368, 9671 (25 mm, 12 g) (temporary numbers). Coins from this city also featured the deity with Hera, but not during the reign of Trajan.

should be identified with the assarion feature Asclepius,<sup>186</sup> who was also placed on issues corresponding to ½ and 3 assaria in the times of Antoninus Pius and Marcus Aurelius.<sup>187</sup>

Perhaps in the Trajan era the pseudo-autonomous coins with images of Dionysus and Helios with the size of 1 assarion were also issued in the city,<sup>188</sup> although, perhaps due to the effigies, they should be identified with the emissions of lowest value.

In the case of the coins from Amastris, there is a certain repeating tradition, also present in Iuliopolis and Prusias, regarding the placement of certain types of images on the largest denominations. Some of the depictions, such as Demeter or Athena, could have been indicators of the value of coins for a long period. There are also some similarities in the issue, which can be associated with 2 or 3 assaria, that can actually mean one and the same denomination. Perhaps because of the striking of coins in these sizes after 98, 114, and 116, and the different types of images placed on them, they were some of the main units of a certain value used on the Amastris market. However, it is worth remembering that not many coins have survived to our times, hence the picture of the monetary systems in individual cities remains incomplete.

The first coins in Abonoteichos were minted when Trajan ruled. So far, three denominations have been registered, corresponding to 1 (20–21 mm, 5–6 g), 3 (25–26 mm, 10–11 g), and 6 (30–32 mm, 19–20 g) assaria.<sup>189</sup>

The largest issues depicted the standing Elpis, while on the units corresponding to the 3 assaria there was probably the figure of the standing Zephyrus, also present on the specimens of the same size during the time of the Trebonianus Gallus.<sup>190</sup> On the assaria was an effigy of Demeter,<sup>191</sup> which was also found on the issues of a similar size in the time of Severus Alexander, as well as on the larger coins during the reign of Antoninus Pius.<sup>192</sup> The Abonoteichos monetary system in Trajan's day reflected the denominations popularly minted at the time. From the sizes of the coins it seems that they were easily recognisable by the residents of this centre.

From Sinope during the reign of Trajan only single coins are known, which perhaps should be identified as ½ (14 mm), 1 (17–19 mm, 4–7 g) and 4 (29 mm, 16–17 g) assaria. There was obviously much coinage activity in the city: since the end of the Republic there are at least six denominations among the registered coins (½, 1, 1½, 3, and 6 assaria).<sup>193</sup>

<sup>186</sup> RPC III 1207.

<sup>187</sup> Antoninus Pius RPC IV.1. 5381–5383, 5394–5395, 8417 (18 mm, 3–4 g; 29 mm, 11–12 g) (temporary numbers); Marcus Aurelius RPC IV.1 5409, 10637 (18 mm, 3–4 g; 29 mm, 11–12 g) (temporary numbers); uncertain issuer RPC IV.1 9138 (18 mm, 3–4 g).

<sup>188</sup> RPC 1209–1210.

<sup>189</sup> RPC III 1211–1213.

<sup>190</sup> RPC IX 1219.

<sup>191</sup> RPC III 1213.

<sup>192</sup> Antoninus Pius RPC IV.1 5353 (temporary number); Faustina the Younger RPC IV.1 5361 (25 mm; 10 g) (temporary number); Severus Alexander RPC VI 6460 (20 mm, 6–8 g) (temporary number).

<sup>193</sup> RPC I 2107–2142; RPC II 714–725; RPC III 1214–1216.

In the years 109–110, the coins minted to the size of 4 assaria depicted a standing Hermes,<sup>194</sup> who is found on a similar denomination in the time of Caracalla and on a smaller one in the reign of Diadumenian.<sup>195</sup>

A depiction of Nemesis was placed on the issues corresponding to the assarion in 103–104, and possibly 104–105; it was one of the more popular motifs found on the centre's coins. It also features on issues of probably similar values in the times of Vespasian and Maximinus Thrax, as well as on the coins of various sizes with portraits of Antoninus Pius, Marcus Aurelius, Julia Domna, Elagabalus, Severus Alexander, Gordian III, Philip the Arab, and Trajan Decius. The coins feature an image of the goddess in the temple.<sup>196</sup>

Probably also on the assaria minted between 107–108 was the figure of a standing goddess, perhaps to be interpreted as Pax.<sup>197</sup> This type of effigy on issues of similar size was found in the times of Vespasian and Marcus Aurelius,<sup>198</sup> and the figure on these coins was referred to as a Genius.

Perhaps the same denomination is represented by the coins with the figure of Demeter, probably minted between 114–115.<sup>199</sup> The smallest units are pseudo-autonomous coins, with images of Priapus and herma on the reverse.<sup>200</sup> The motif of herma was also placed on the coins of the same size in the times of Vespasian and Domitian and on the larger denomination during the reigns of Antoninus Pius, Marcus Aurelius, and Elagabalus.<sup>201</sup>

The small number of Trajanic coins from Sinope recorded so far represents only a fraction of the monetary production of this period. On this basis, it can be concluded that the minting of individual issues of various amounts introduced in the 1st century was continued. The city's coinage, despite the status of a Roman colony, did not reflect the traditional denominations present in the imperial monetary system. Because only single coins are extant, it is not possible to say exactly whether there was a greater demand for any particular currency during this period, which could be suggested by issues corresponding to the size of the assarion.

Perhaps six denominations were issued in Amisus in the time of Trajan. These include ½ (17 mm, 2–4 g), 1 (19–21 mm, 5–6 g), 1½ (19–23 mm, 5–10 g), 2 (24–25 mm, 6–8 g), 3 (28–30 mm, 8–13 g) and 6 (33–34 mm, 17–23 g) assaria. In earlier periods, probably five denominations were minted, including ½ (17 mm, 3–4 g), 1 (20 mm, 5–6 g), 2 (22 mm, 7–8 g), 3 (24–25 mm,

<sup>194</sup> RPC III 1219.

<sup>195</sup> Caracalla Rec 132; Diadumenian (18 mm) Rec 144.

<sup>196</sup> Vespasianus RPC II 717; Antoninus Pius RPC IV.1. 5480, 10478 (23 mm, 9–10 g); Marcus Aurelius RPC IV.1. 4939; Julia Domna Rec 126–127; Elagabalus RPC VI 6484 (20 mm, 7 g) (temporary number); Severus Alexander RPC VI 6493 (20 mm, 5–6 g) (temporary number); Maximinus Thrax RPC VI 6501–6503 (20 mm, 5–6 g) (temporary number); Gordian III RPC VII.2 ID 19564–19565 (21 mm, 4–6 g); Philip the Arab RPC VIII ID 19566, 19569 (21 mm, 4–5 g; 27 mm, 11 g); Trajan Decius RPC IX 1222 (28 mm, 11–12 g). Cf. Robinson 1906b: 266.

<sup>197</sup> RPC III 1218.

<sup>198</sup> Vespasianus RPC II 716; Marcus Aurelius (Genius): RPC IV.1 4944–4945 (temporary numbers).

<sup>199</sup> Casey 336.

<sup>200</sup> Manisse 243; Dalaison Sinope 6.

<sup>201</sup> Vespasianus RPC II 718; Domitian RPC II 725 ; Antoninus Pius RPC IV.1 1936, 4937 (20 mm, 4–5 g; 22 mm, 8–9 g) (temporary numbers); Marcus Aurelius RPC IV.1 4943 (23 mm, 7–8 g) (temporary number); Elagabalus RPC VI 6485 (21 mm, 6–7 g) (temporary number).

12–13 g) and 4 (27–30 mm, 14–15 g) assaria.<sup>202</sup> In the time of Trajan, coins were issued in the years 98, 98–99, 106–107, 108–109, and 113–114.

On the coins struck at the beginning of the emperor's reign, i.e. probably two sizes corresponding to 1 and 2 assaria, there was no portrait of Trajan. On the obverse of the issue appeared an effigy of Nike, while on the reverse of the larger ones there is a temple and the personifications of Amisus and Roma, on the smaller bust of Athena.<sup>203</sup> Nike was also placed on the later issues from Trajan's times, but differing in size.<sup>204</sup> This motif was also found on the Amisus coins dated to the 1st century, as well as in the periods of Claudius, Vespasian, Caracalla, Severus Alexander, Maximinus Thrax, Philip the Arab, Trajan Decius, and Saloninus. It was one of the images on the pseudo-autonomous coins from the 2nd century.<sup>205</sup> The effigy of probably the same temple, however in a more elaborate iconographic type, was placed on units with an assarion value in the time of Hadrian.<sup>206</sup> The motif of standing personifications, i.e. Amisus and Roma, was found on coins of the size of 4 assaria, minted perhaps in the 1st century BC and in the time of Augustus.<sup>207</sup> The bust of Athena was also placed on the later coins of similar size struck in 106–107. The motif probably originally appeared on assarion in the time of Augustus, and then during the reign of Hadrian on emissions corresponding to ½ assarion.<sup>208</sup>

On the coins minted in the years 98–99, corresponding to the value of 3 assaria, there is an image of a horned goat with a cornucopia. The motif probably also featured on the same denomination in the times of Vespasian, on the ½ assarion during the times of Hadrian, Severus, and Alexander, as well as on the assarion of Trajan Decius.<sup>209</sup>

Issues with a portrait of Dionysus and a *cista*, perhaps to be identified with 2 assaria, also come from the same period.<sup>210</sup> The bust of Dionysus was also found on coins struck in various sizes during the times of Antoninus Pius, Commodus, Caracalla, and Aemilian (253).<sup>211</sup>

The next issues come from the years 106–107, among which 3 assaria can be distinguished bearing the images of Zeus and Nike.<sup>212</sup> The figure of Zeus was placed on silver coins in the time of Hadrian, as well as on the bronze coins corresponding also to the 3 assaria during the

<sup>202</sup> RPC I 2143–2154: 1st century: 27 mm, 20 g (4 assaria), 21 mm, 5–6 g (1 assarion), 22 mm, 7–8 g (2 assaria); Augustus 20 mm, 5–6 g (1 assarion), 25 mm, 11 g (3 assaria); Tiberius 30 mm, 14–15 g (4 assaria), 19–20 mm, 4–5 g (1 assarion), 18 mm, 3 g (½ assarion); Claudius 20 mm, 5–6 g (1 assarion), 17 mm, 3 g (½ assarion); RPC II 726–729: Vespasianus 26–28 mm, 12–14 g (3 assaria) and 20 m, 5–6 g (1 assarion).

<sup>203</sup> RPC III 1231–1233.

<sup>204</sup> 3 assaria: RPC 1237; assarion: 1240.

<sup>205</sup> 1st century: RPC I 2145 (24 mm, 12 g); Claudius RPC I 2154 (17 mm, 3–4 g); Vespasianus RPC II 729 (19 mm, 3–6 g); Caracalla Rec 115, 118–119, 121 (32 mm, 35 mm, 39 mm); Severus Alexander Rec 128 (32 mm); Maximinus Thrax (24 g) RPC VI 6517 (temporary number); Philip the Arab RPC VIII ID 19598 (35 mm, 25 g); Trajan Decius RPC IX 1223, 1225 (25 mm, 8–9 g); Saloninus Rec 156 (18 mm); pseudo-autonomous coins RPC III 1297.

<sup>206</sup> RPC III 1263–1264.

<sup>207</sup> RPC I 2143–2144A.

<sup>208</sup> Augustus RPC I 2147; Hadrian RPC III 1261.

<sup>209</sup> Vespasianus RPC II 726–727 (26–28 mm, 12–14 g); Hadrian RPC III 1252 (16 mm, 2–3 g); Severus Alexander Rec 62 (15 mm); Trajan Decius RPC IX 1224 (21 mm, 8–9 g).

<sup>210</sup> RPC III 1235.

<sup>211</sup> Antoninus Pius RPC IV.1 5322 (7 g) (temporary numbers); Commodus RPC IV.1 5325 (13 g) (temporary number); Caracalla Rec 122 (25 mm); Aemilian RPC IX 1233 (19 mm, 7 g).

<sup>212</sup> RPC III 1236–1237.

reigns of Gordian III and Aemilian.<sup>213</sup> In 106–107, coins were also minted, perhaps worth 1½ assarion, depicting Heracles and the assarion with a bust of Athena and kneeling Aphrodite.<sup>214</sup> The image of the hero was placed on silver issues in the time of Hadrian, as well as on the large bronzes from the reign of Gordian III.<sup>215</sup> The figure of Aphrodite was also found on the silver coins of Hadrian, with a portrait of Sabina, and on the larger bronze issues during the reigns of Severus Alexander Sever and Maximinus Thrax.<sup>216</sup>

From the period 108–109 there is only one coin with the Nike depiction, the size of an assarion.<sup>217</sup> The last issue in Trajan's time is dated 113–114, and the units struck at that time were perhaps ½ and 6 assaria. The figure of a seated Tyche was placed on the larger coins.<sup>218</sup> There is a difference in weight of up to 7 g between individual coins (with weights ranging from 16 g – 23 g). The figure of the city guardian, sitting and standing, was on the silver and bronze issues in the times of Hadrian and Antoninus Pius, and only bronze coins, mostly on large units, in the times of Commodus, Caracalla, Elagabalus, Severus Aleksander, Maximinus Thrax, Balbinus and Pupienus, Gordian III, Philip the Arab, Trajan Decius, and Aemilian.<sup>219</sup> This indicates that it was one of the traditional images placed mainly on large denominations. Athena features on the smaller issues from this period.<sup>220</sup> This image was also reproduced on silver issues in Hadrian's time, as well as on the large bronzes of Gordian III and Aemilian.<sup>221</sup>

Perhaps, pseudo-autonomous coins were also struck in this period as suggested by their images of Nike and the bust of Athena. Unfortunately, there are currently only two such coins recorded, perhaps corresponding in size to 1 and 2 assaria.<sup>222</sup>

In the case of coins from Amisus there is much variety in terms of the images placed, which can be an indicator of the denomination, but the period involved seems to be rather a narrow one. The exception may be the figure of Tyche, who appears on the large bronzes struck on behalf of various rulers. However, due to the size of these coins, it is not entirely certain with which face value individual units should be identified.

During the reign of Trajan, some of the mints of Bithynia and Pontus also issued coins without ethnic. Coins with the name of the proconsul Gaius Julius Bassus were struck in the size of probably ½ (18 mm, 2–3 g) and 1½ assaria (20–24 mm, 6–8 g).<sup>223</sup> Issues with the legend EIPHNH

<sup>213</sup> Hadrian RPC III 1245–1246; Gordian III Rec 135 (29 mm); Aemilian RPC IX 1232 (30 mm, 13–14 g).

<sup>214</sup> RPC III 1238–1239.

<sup>215</sup> Hadrian RPC III 1275; Gordian III RPC VII.2 ID 19580–19581, 19589 (36 mm, 17–21 g).

<sup>216</sup> Hadrian RPC III 1294; Severus Alexander RPC VI 6511 (13 g) (temporary number); Maximinus Thrax RPC VI 6518 (19 g) (temporary number).

<sup>217</sup> RPC III 1240.

<sup>218</sup> RPC III 1241–1243.

<sup>219</sup> Hadrian RPC III 1247–1248, 1296 (bronze coins: 20 mm, 5–6 g); Antoninus Pius RPC IV.1 5320, 5449, 6250, 8000 (28–30 mm, 19–22 g) (temporary numbers); Commodus RPC IV.1 5323–5324 (16–19 g) (temporary numbers); Caracalla Rec 116 (35 mm); Elagabalus RPC VI 6510 (c. 30 mm, 25 g) (temporary number); Severus Alexander RPC VI 6512 (c. 30 mm, 27 g) (temporary number); Maximinus Thrax RPC VI 6522 (c. 30 mm, 22 g) (temporary number); Pupienus and Balbinus RPC VII.2 ID 19578 (36 mm, 24 g); Gordian III RPC VII.2 ID 19584, 19592 (36 mm, 24 g); Philip the Arab RPC VIII ID 19596, 19601 (35 mm, 23–26 g); Trajan Decius RPC IX 1226 (25 mm, 11 g); Aemilian RPC IX 1231 (30 mm, 17 g).

<sup>220</sup> RPC III 1244.

<sup>221</sup> Hadrian RPC III 1249–1250; Gordian III RPC VII.2 ID 19579, 19585–19586 (36 mm, 22–25 g); Aemilian RPC IX 1228 (30 mm, 13 g).

<sup>222</sup> RPC III 1297.

<sup>223</sup> RPC III 1121–1124A.

ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ CEBACTH or CERAC represent large denominations of 30–33 mm, 22–26 g, which perhaps should be interpreted with the heavier 6 assaria or the Roman sestertius.<sup>224</sup> Coins with the legend ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ / ΟΜΟΝΟΙΑ CEBACTH / ΟΜΟΝΟΙΑ were minted in several denominations. In the first group, issued after AD 98, the units correspond to 1½ (21–23 mm, 5–7 g) and 3 (23–28 mm, 9–13 g) assaria.<sup>225</sup> The next units from this group represent denominations identical to the heavier 6 assaria or the Roman sestertius (33–35 mm, 24–26 g), as well as 3 assaria, or the Roman as (24–27 mm, 10–13 g), if both types of coins were issued by the same mint and were to imitate their imperial equivalent.<sup>226</sup> Perhaps similar standards link the imperial sestertius or heavier 6 (30–32 mm, 20–23 g) assaria, as well as 3 assaria or Roman asses (24–27 mm, 8–11 g). These coins feature the legend ΝΕΙΚΗ CEBACTOY, ΔΑΚ / ΝΕΙΚΗ ΣΕΒΑΣΤOY, ΑΡΜΕ.<sup>227</sup> The next group are coins with the legend ΔΗΜΗΤΡΑ CEBACTH issued probably in two denominations of 1½ (22–23 mm, 5–7 g) and 3 (24–26 mm, 10–11 g) assaria.<sup>228</sup> Emissions with the CEBACTH / ΣΕΒΑΣΤΗ legend struck in the same size, 22–24 mm, 6–10 g, corresponding to the value of 1½ assarion.<sup>229</sup> The next group are coins with the legend CEBACTOY / ΣΕΒΑΣΤOY issued probably in three denominations identical to 1½ (21–22 mm, 6–7 g), 2 (23–24 mm, 8–9 g) and 3 (24–25 mm, 11–13 g) assaria.<sup>230</sup> Coins with the legend ΔΙΟC were minted in probably two denominations of 1½ (19–22 mm, 5–7 g) and 2 (24 mm, 9 g) assaria.<sup>231</sup> Perhaps the coins with the legend ΚΤΙCΤΗC also represent the face value of 1½ assarion (22 mm, 5 g).<sup>232</sup> Coins with the legend ΔΗΜΗΤΡOС of the size of 1 assarion (19–20 mm, 4 g)<sup>233</sup> and also with the depiction of the cornucopia, and possibly the staff of Asclepius, corresponding to the ½ assarion (16–17 mm, 2–5 g),<sup>234</sup> were probably also struck in the mints of Bithynia and Pontus during the reign of Trajan.

Part of the issue without ethnic was minted in denominations corresponding to the size of 1½, 3, and 6 assaria, the latter, due to heavier weights, perhaps supposed to represent Roman units such as the as or sestertius.

Cities that issued five or six different denominations during Trajan's reign are likely to be considered the most prosperous – commercially and economically. Among them, mention should be made of Prusa, Byzantium, Heraclea, Tium, and Amisus. At the same time we should also remember Nicomedia, the provincial capital, and Nicaea, which competing with it for priority. Some of the coins in circulation during this period were minted in the time of the Flavians. Among the most frequently issued denominations during this period were 1, 2, 3, and 6 assaria sizes, noting that a large proportion of the coins without ethnic represent an 1½ assarion denomination. Coins, possibly of a similar size, were minted at Heraclea and Amisus. Thus, perhaps the lack of ethnicity and the image relating to imperial issues could suggest the value of the coin.

<sup>224</sup> RPC III 1125–1127.

<sup>225</sup> RPC III 1128–1130.

<sup>226</sup> RPC III 1131–1132.

<sup>227</sup> RPC III 1134–1136.

<sup>228</sup> RPC III 1137–1138.

<sup>229</sup> RPC III 1139–1143.

<sup>230</sup> RPC III 1144–1146.

<sup>231</sup> RPC III 1148–1155.

<sup>232</sup> RPC III 1160.

<sup>233</sup> RPC III 6548.

<sup>234</sup> RPC III 6550–6551, 6559.

There may be some spread of denominations in different centres at various times, although it is important to bear in mind any future new units that could change this picture. Larger denominations, which could correspond to 6 assaria, were introduced in the time of Caligula in Apamea, Claudius in Nicaea and Nicomedia, Nero, perhaps, in Heraclea, under Vespasian in Iuliopolis and Prusias, Domitian in Tium and Amastris, and in the time of Trajan also in Prusa and Abonoteichos. This latter town, due to the beginning of production in this period, seems to have been able to issue the most basic units functioning within the market at that time, i.e. 1, 3, and 6 assaria.

It is also worth noting certain trends among the different types of coins. The pseudo-autonomous issues, perhaps struck in the time of Trajan, from Amastris, Sinope, and Amisus, represent rather small units, thus being a good indicator of the value of the coin. On the other hand, images of Plotina were placed on the denominations corresponding to 3 assaria in Byzantium and Amastris, and probably also 6 assaria in the latter.<sup>235</sup>

Finally, when considering the monetary systems in individual cities of Bithynia and Pontus, it should be stated that both denominations similar to imperial units and traditional local ones are manifested in them. Certain customs for minting coins in the image of imperial ones were introduced in the times of Claudius and Nero and then spread during the eras of the Flavians and Trajan. In this case, it seems that instead of viewing the monetary system as an adaptation of only the imperial or only the provincial one, it should be interpreted as a synthesis of both, creating a single system suitable for the inhabitants of a given centre.

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<sup>235</sup> Cf. Zając 2020: 44–46, 49–51, 55 (denominations with the portraits of empresses struck between 98–138 and pseudo-autonomous issues in the province of Asia).

# Iconography and legends of coins of Bithynia and Pontus during the reign of Trajan

## Legends of the provincial coins<sup>1</sup>

On the obverse of provincial coins, as on imperial issues, the names of the reigning emperor or a member of his family and more or less extensive imperial titles were placed. On the reverse there was usually the name of the city where the coins were struck. Legends were usually written only in Greek or Latin (Roman colonies), although some issues had bilingual legends, words or single letters in local languages. Compared to the imperial coins, in the provincial issues, we can notice less attention to the correct writing of legends. There are errors related to the differences between the Greek and Latin alphabets, and in many cases various syntactic forms are also visible.<sup>2</sup> This, in turn, may result from ignorance, level of skill, or the nomenclature used in a given society and colloquialisms.<sup>3</sup> Unfortunately, some of the coins are in poor condition, so it is often difficult to read the legend or identify individual letters.

On the obverse of provincial coins from the reign of Trajan a long legend was usually placed with the name of the emperor and the corresponding elements of the title, usually in the nominative.<sup>4</sup> This confirms the influence of imperial coins on the coinage of individual centres. However, on the coins of some cities there are also short legends such as TPAIANOC KAICAP or simply CEBACTOC,<sup>5</sup> which may indicate some local trends in the images placed, the ability of the engraver, or the limitation related to the size of the flan. Moreover, it should be mentioned that the second, shorter form of the legend dates back to the times of Augustus and was found on many provincial issues from later periods, but in imperial coinage always bearing the name of the ruler.<sup>6</sup> Thus, the use of only a reference to the title could also be a universal way, on the one hand to emphasise the coin as imperial in each period, and on the other to enable its longer period of circulation. The Latin legends of provincial issues included elements of the standard imperial titles such as IMP(erator), AVG(ustus) and CAES(ar). The same terms were found on the coins with legends in Greek (ΑΥΤ(οκράτωρ), ΣΕΒ(αστός),

<sup>1</sup> I would like to thank Bartosz Awianowicz (Nicolaus Copernicus University in Toruń) for valuable corrections and comments to this chapter.

<sup>2</sup> Amandry, Burnett *et al.* 2015: 838–839; Awianowicz 2013; Butcher 1988: 109–115; Calomino 2014; Dalaison and Rémy 2017; Woytek 2011.

<sup>3</sup> Cf. Amandry, Burnett *et al.* 2015: 838–839; Mavrogordato 1918 (colloquialisms in the legends on Chios coins).

<sup>4</sup> Amandry, Burnett *et al.* 2015: 840–841; Dalaison 2017a; Zając 2019b: 126–128.

<sup>5</sup> Cyrenaica and Crete: RPC III 45–48, Cydonia RPC III 108–110; Achaëa: Andros RPC III 400, Carystus RPC III 416–419, Nicopolis RPC III 467–475; Macedonia: Thessalonica RPC III 617–620, Amphipolis RPC III 643–644; Thrace: Sestus RPC III 756; Bithynia and Pontus: Tium RPC III 1080A; Amisus RPC III 1234; Asia: Abydus RPC III 1553–1556, Dardanus RPC III 1561, Methymna RPC III 1681, Hypaëpa RPC III 2020–2022, Miletus RPC III 2136, Cos RPC III 2160–2162, Euromus RPC III 2210–2214, Heraclea Salbace RPC III 2266, 2269, Trajanopolis RPC III 2462–2465, Synaus 2525; Lycia-Pamphylia: Magydus RPC III 2681–2683, Perge RPC III 2686–2688, Aspendus RPC III 2713–2715; Galatia-Cappadocia: Pednelissus RPC III 2812–2813; Cilicia: Selinus RPC III 3183–3184, Anemurium RPC III 3196, 3198, Flaviopolis RPC III 3379; Judaea: Ascalon RPC III 3972–3973, 3975–3979, 3981–3982, 3984–3985, 3987–3988, 3990–3992, 3994. Also other forms of shorter legends. Cf. Amandry, Burnett *et al.* 2015: 840–841; Dalaison 2017.

<sup>6</sup> Awianowicz 2017: 46; Leschhorn and Franke 2002: 268–271.

KAI(σα̃ρ)).<sup>7</sup> Moreover, on the coins of Trajan, both imperial and provincial, the name NER(va) was placed in legends, emphasising the emperor's adoption of the name of his predecessor. Trajan, as an adopted son, tried to emphasise the relationship with Nerva, mainly due to the legitimacy of power.<sup>8</sup> The legends of provincial coins were also reflected in the nicknames that the emperor received in particular years of his rule, i.e. *Germanicus* (October 98), *Dacicus* (December 102), *Optimus* (June 114),<sup>9</sup> and *Parthicus* (February 116).<sup>10</sup> The tendency to extend legends on provincial coins, as well as to use many abbreviated forms, had been developing since the time of the Flavian dynasty.<sup>11</sup> The coins of individual centres from the reign of Trajan are dominated by long legends, often in various syntactic forms, however nicknames, e.g. *Germanicus* or *Dacicus*, in the Latin or Greek transcription were placed at the end. The writing of some names or titles was sometimes limited to the one letter. The legends of coins from individual cities also include ligatures made of two or more letters. This type of tendency can also be seen in epigraphic sources.<sup>12</sup> Also, grammatical or linguistic errors were not avoided.

In addition, some provincial coins of Trajan's times also reflect Plotina, Marciana, and Matidia. The legends accompanying the images of the women of the emperor's family were short and standard. There was usually an inscription on the coins with the bust of the emperor's wife ΠΛΩΤΕΙΝΑ / ΠΛΩΤΙΝΑ<sup>13</sup> (rare ΠΛΩΤΕΙΝΑ or ΠΛΟΤΕΙΝΑ)<sup>14</sup> СЕΒΑСТΗ (Plotina Augusta), which also had minor transformations (presence of additional letters or their absence).<sup>15</sup> A similar legend, depending on the name, also accompanied the portraits of Matidia and Marciana.<sup>16</sup>

On the reverse of provincial coins with Greek legends the name of the city was usually placed in genitive plural. On the other hand, on Latin-language colonial coins the name was written mainly in abbreviation in nominative.<sup>17</sup> Sometimes in legends nicknames referring to the status (metropolis, colony or *neokoros*), established alliances or current cults were added.<sup>18</sup> The years related to the minting of the coin, indicating the person holding the magistrate in a given region, or the local chronology, could also be complemented.<sup>19</sup> Some city names, including those in Bithynia and Pontus, were written using the ligatures mentioned above.

In the legends of coins from individual towns there are differences in the writing of certain letters. During the reign of Trajan, in some centres, the standard Greek sigma began to be

<sup>7</sup> Awianowicz 2017: 46–47, 49–50; Butcher 1988: 111; Dalaison and Rémy 2017: 249; Leschhorn and Franke 2002: 65, 159, 268; Sear 2001: xi. In addition, translations to individual words based on The Liddell, Scott, Jones Ancient Greek Lexicon (LSJ).

<sup>8</sup> Awianowicz 2017: 266; Bennett 1997 (2015): 99–101; Woytek 2010: 11.

<sup>9</sup> Greek equivalent Ἀρίστος (Sear 2001: xi).

<sup>10</sup> Amandry, Burnett *et al.* 2015: 791; Bennett 1997 (2015): 25–26; Woytek 2010: 18.

<sup>11</sup> Amandry, Burnett *et al.* 1999: 33; 2015: 841.

<sup>12</sup> Cf. TAM IV, 12 (in the names, e.g. Nervae letters NE; in the titles – Optimus letters MU; Pontifex letters NT).

<sup>13</sup> Sear 2001: xii. Byzantium RPC III 1070; Amastris RPC III 1208; Mytilene RPC III 1683; Thyatira RPC III 1828–1830; Hermocapelia RPC III 1872; Aegae RPC III 1920A; Hyrcanis RPC III 1953–1954; Tabae RPC III 2291–2293; Laodicea RPC III 2320–2321; Philadelphia RPC III 2384; Sardis RPC III 2397; Ancyra RPC III 2535–2536; Iulia Gordus RPC III 2549A–2550A; Cotiaenum RPC III 2634;

<sup>14</sup> ΠΛΩΤΕΙΝΑ: Amphipolis RPC III 645, Gaba 3943–3944; ΠΛΟΤΕΙΝΑ: Assus RPC III 1579.

<sup>15</sup> RPC III 638, 645, 1070, 1208, 1579, 1828–1830, 1872, 1920A, 1953–1954, 2291–2293, 2320–2321, 2384, 2397, 2535–2536, 2549A–2550, 2634, 3943–3944.

<sup>16</sup> Matidia RPC III 1831, 2322–2323, 2632, 6559A; Marciana RPC III 1829A, 2398, 6559.

<sup>17</sup> Amandry, Burnett *et al.* 2015: 838; Butcher 1988: 35; Sear 2001: xix.

<sup>18</sup> Butcher 1988: 35–36, 47–55, 111–114; Howgego 2005a: 2–16; Millar 1993 (2001): 230; Zajac 2017c.

<sup>19</sup> Amandry, Burnett *et al.* 2015: 841; Butcher 1988: 114–115.

BETWEEN ROMAN CULTURE AND LOCAL TRADITION

Table 2a: List of iconographic types on the coins of Bithynia and Pontus during the reign of Trajan

|                | Altar | Amisus and Roma | Aphrodite | Apollo | Ares | Artemis | Asclepius | Athena | Caduceus | Capricorn | Cista | Club | Ears of Corn | Cornucopia | Demeter | Dionysus | Dolphin | Eagle | Elpis | Goddess ? | Grapes | Helmet |
|----------------|-------|-----------------|-----------|--------|------|---------|-----------|--------|----------|-----------|-------|------|--------------|------------|---------|----------|---------|-------|-------|-----------|--------|--------|
| Apamea         |       |                 |           |        |      |         |           |        |          |           |       |      |              |            |         |          |         |       |       |           |        |        |
| Prusa          |       |                 | +         |        |      | +       |           | +      |          |           |       |      |              |            | +       |          |         | +     |       |           |        |        |
| Nicaea         |       |                 |           |        | +    |         |           |        |          |           |       |      |              |            |         |          |         |       |       |           |        |        |
| Calchedon      |       |                 |           | +      |      |         |           |        |          |           |       |      |              |            |         |          |         |       |       |           |        |        |
| Byzantium      |       |                 |           |        |      |         |           |        | +        |           |       |      |              |            |         |          | +       |       |       |           | +      | +      |
| Nicomedia      |       |                 |           |        |      |         |           |        |          |           |       |      |              | +          |         |          |         |       |       |           |        |        |
| Iuliopolis     |       |                 |           |        | +    |         |           |        |          |           |       |      |              |            | +       |          |         |       |       |           |        |        |
| Prusias        | +     |                 |           |        | +    |         |           |        |          |           |       |      |              |            |         |          |         | +     |       |           |        |        |
| Heraclea       |       |                 |           |        |      |         | +         | +      |          |           |       | +    | +            |            |         | +        |         |       |       | +         |        |        |
| Tium           |       |                 |           |        |      |         | +         |        |          |           |       |      |              |            |         | +        |         |       |       |           |        |        |
| Amastris       |       |                 |           |        | +    | +       | +         | +      |          |           |       |      |              |            | +       |          |         | +     | +     |           | +      |        |
| Abonoteichos   |       |                 |           |        |      |         |           |        |          |           |       |      |              |            | +       |          |         |       | +     |           |        |        |
| Sinope         |       |                 |           |        |      |         |           |        |          |           |       |      |              |            | +       |          |         |       |       |           |        |        |
| Amisus         | +     | +               | +         |        |      |         |           | +      |          | +         | +     |      |              |            |         |          |         |       |       |           |        |        |
| Uncertain mint | +     |                 |           |        |      |         |           | +      |          |           |       |      |              |            | +       |          |         | +     |       |           |        |        |

|            | Hera | Hera and Zeus | Heracles | Herma | Hermes | Legend | Myrtos (?) | Nemesis | Nike | Olympus | Pax/Eirene | Poppy | Poseidon | Prow | Star/Crescent | Temple | Torch | Tripod | Tuna | Tyche/Fortuna | Zephyrus/Zephyrion (?) | Zeus |
|------------|------|---------------|----------|-------|--------|--------|------------|---------|------|---------|------------|-------|----------|------|---------------|--------|-------|--------|------|---------------|------------------------|------|
| Apamea     |      |               |          |       |        |        | +          |         |      |         | +          |       |          |      |               |        |       |        |      | +             |                        |      |
| Prusa      |      |               |          |       |        |        |            |         |      | +       |            |       |          |      |               | +      |       |        |      |               |                        | +    |
| Nicaea     |      |               |          |       |        |        |            |         |      |         |            |       |          |      |               |        |       |        |      |               |                        |      |
| Calchedon  |      |               |          |       |        |        |            |         |      |         |            |       |          |      |               |        |       | +      |      |               |                        |      |
| Byzantium  |      |               |          |       |        |        |            |         |      |         |            |       |          | +    | +             |        |       |        |      | +             |                        |      |
| Nicomedia  |      |               |          |       |        | +      |            |         |      |         |            |       |          |      |               |        |       |        |      |               | +                      |      |
| Iuliopolis |      |               |          |       |        |        |            |         |      |         | +          |       |          |      |               |        |       |        |      |               |                        |      |
| Prusias    |      |               |          |       |        |        |            |         |      |         | +          |       |          |      |               |        |       |        |      |               |                        |      |
| Heraclea   |      |               | +        |       |        |        |            |         |      |         |            |       |          | +    |               |        |       |        |      |               |                        |      |



Table 3: List of iconographic types on imperial coins probably issued at the Thracian mint between AD 80–82, and on provincial coins of Bithynia and Pontus during the reigns of Domitian and Trajan

| Imperial coinage from Thrace (?)  |              | Ref.  | Iconography of the coins of Bithynia and Pontus                                  | Provincial coinage – Domitian (AD 81–96) |                 |               | Provincial coinage – Trajan (AD 98–117)                |  |                      |
|---|--------------|---|--|--|-----------------|---------------|--|--|----------------------|
| Iconographic type   | Denomination |   |  | Mint                                     | Denomination    | Ref. (RPC II) | Mint   | Denomination                                       | Ref. (RPC III)       |
| Pax standing l., with olive branch and cornucopia                               | Sestertius   | Cahn 1, 4, 20, 24; BMCRE 309, 315; RIC 181; RPC II 501, 504, 526, 530 | Eirene standing l., with olive branch and cornucopia                             | Nicaea                                   | 34–36mm, 23–27g | 633           | Apamea   | 32–33mm, 20–21g                                    | 1029                 |
|   |              |   |  | Nicomedia (Eirene/Demeter?)              | 35mm, 23–24g    | 654           | Iuliopolis   | 32–34mm, 23–26g                                    | 1099                 |
|   |              |   |  | Prusias ad Hypium                        | 33–34mm, 22–26g | 672           | Prusias ad Hypium                                      | 31–32mm, 19–21g                                    | 1101                 |
| Mars walking r., with trophy and spear  | Sestertius   | Cahn 2, 5, 21, 25; BMCRE 310; RIC 182; RPC II 502, 527, 531           | Ares walking r., with trophy and spear   | Uncertain Mint (perhaps Prusias)         | 34mm, 24–25g    | 676           | Uncertain Mint (Amastris and Nicaea?)                  | 30–32mm, 20–24g                                    | 1125<br>1126<br>1131 |
|   |              |   |  | Nicaea                                   | 33–36mm, 23–26g | 632           | Nicaea   | 35mm, 21–22g                                       | 1059                 |
|   |              |   |  | Nicomedia                                | 34mm, 22–23g    | 653           | Iuliopolis   | 32mm, 24–26g                                       | 1098                 |
| Spes standing l., holding up flower in r. hand and raising hem of dress with l. | Sestertius   | Cahn 6, 18, 34; RPC II 506, 521, 522, 541                             | Elpis standing l., holding up flower in r. hand and raising hem of dress with l. | Prusias ad Hypium                        | 35mm, 25–27g    | 671           | Amastris   | 31–32mm, 21–22g                                    | 1198                 |
|   |              |   |  | Nicaea                                   | 33mm, 26–27g    | 634           | Uncertain Mint (Amastris?)<br>Amastris<br>Abonoteichos | 31–34mm, 20–23g<br>29–30mm, 24–25g<br>30–31mm, 20g | 1127<br>1199<br>1211 |

ICONOGRAPHY AND LEGENDS OF COINS OF BITHYNIA AND PONTUS DURING THE REIGN OF TRAJAN

| Imperial coinage from Thrace (?)  |              | Iconography of the coins of Bithynia and Pontus | Provincial coinage – Domitian (AD 81-96) |                    |              | Provincial coinage – Trajan (AD 98-117) |                        |              |
|---|--------------|---|--|--------------------|--------------|---|------------------------|--------------|
| Iconographic type   | Denomination |   | Ref.                                     | Mint               | Denomination | Ref. (RPC II)                           | Mint                   | Denomination |
| Ceres standing l., holding ears of corn in r. hand, l. resting on sceptre | Dupondius    | Cahn 9; RPC II 509                              | Nicaea                                   | 26-27mm, 11-13g    | 636          | Prusa ad Olympus                        | 35mm, 28g<br>29mm, 20g | 1038         |
|   | As           | Cahn 8, 23, 27; RPC II 508, 529, 533            | Prusias ad Hypium                        | 27-28mm, 10-14g    | 673-674      | Iuliopolis                              | 25-26mm, 10-14g        | 1100         |
| Roma seated l., holding wreath  | Dupondius    | Cahn 7, 22, 26; BMCRE 314; RPC II 507, 528, 532 | Bithynium<br>Claudiopolis                | 24mm,<br>7-9g      | 694-695      | Amastris                                | 25-27mm,<br>7-11g      | 1201<br>1202 |
|   | As           | RPC II 512<br>534                               | Nicaea                                   | 25-27mm,<br>9-11g  | 640          | Abonoteichos                            | 20-21mm,<br>5-6g       | 1213         |
| Victory flying l., with shield  | Dupondius    | RPC II 512<br>534                               | Nicaea                                   | 26-28mm,<br>10-12g | 709-709A     | Uncertain Mint                          | 24-25mm, 12-13g        | 1146<br>1147 |
|   | As           | RPC II 508A                                     | Uncertain Mint                           | 20mm,<br>5-6g      | 711A         | Uncertain Mint (Nicaea?)                |                        |              |

BETWEEN ROMAN CULTURE AND LOCAL TRADITION

| Imperial coinage from Thrace (?)            |              | Iconography of the coins of Bithynia and Pontus | Provincial coinage – Domitian (AD 81-96) |               |              | Provincial coinage – Trajan (AD 98-117) |   |  |
|---|--------------|---|--|---------------|--------------|---|---|--|
| Iconographic type                           | Denomination |   | Ref.                                     | Mint          | Denomination | Ref. (RPC II)                           | Mint  | Denomination   |
| Minerva advancing r., with spear and shield | As           | Cahn 19, 35; RPC II 523, 542                    | Prusias ad Hypium                        | 25mm, 7-8g    | 648A         | Uncertain Mint (Nicaea?)                | 22-24mm, 5-7g   | 1141<br>1142<br>1143   |
| Eagle standing facing on globe              | As           | Cahn 13, 29; RPC II 514, 536                    | Nicaea                                   | 24-25mm, 6-9g | 641 641A     | Uncertain Mint (Nicaea?)                | 21-23mm, 6-9g<br>20-22mm, 3-6g  | 1102<br>1124<br>1152<br>1158<br>1158A,B<br>1158C<br>1159A<br>1153<br>1155<br>1160                                      |
| Altar                                       | As           | Cahn 12, 28; RPC II 513, 535                    | Nicaea?                                  | 23mm, 6-8g    | 710          | Uncertain Mint (Nicaea?)                | 19-22mm, 6-8g (Bassus)<br>24-25mm, 9g<br>19-22mm, 5-6g<br>21-24mm, 6-8g | 1204<br>1205<br>1103<br>1121<br>1122<br>1149<br>1148<br>1150<br>1151<br>1152A<br>1154<br>1156<br>1159<br>1156A<br>1157 |

gradually replaced by its simplified version, called the lunar sigma.<sup>20</sup> Very often the letter Y in various words, although most often in the word ΑΥΤ(οκράτωρ), was also written as V. Alternating notation was also used for a vowel ι and diphthong ει, e.g. in names such as ΒΕΙΘΥΝΙΑC. Sometimes the diphthong ou was replaced with a consonant β, as in the name Nerva (Νέρβας).<sup>21</sup> Small elements of individual letters are not always visible, hence A looks like Λ, or Θ like O. The occurrence of this type of detail may result from the current tradition, skill, and knowledge of the engraver, or the use of certain simplifications. Another very important factor influencing on the correct reading of the legend is the state of preservation of the coin, which unfortunately makes this possibility difficult in the case of bronze provincial issues.

In addition, attention should also be paid to the location of legends on provincial coins. At the beginning of the 2nd century, two trends can be noticed concerning both the obverse and the reverse of the issue. The beginning of the legend is placed at the bottom or top of the flan, below or above the portrait or other depiction.<sup>22</sup>

The legends of the coins struck in Bithynia and Pontus during the reign of Trajan were written mainly in Greek. Only Apamea and Sinope, with the status of Roman colonies, issued coins with legends in Latin. In most cases, on the obverse a long legend with the name and title of the ruler, similar to imperial coins, was placed. On the reverse, the names of individual cities with the consulate number (Apamea) or years according to the adopted local chronology (Sinope) dominated.

The Apamean coins from the reign of Trajan known so far are early issues dated to the second and third consulate periods (years: 98 and 100). A legend on the obverse IMP(erator) CAES(ar) NERVA TRAIAN(us) AVG(ustus) GERM(anicus) or IMP(erator) NERVA CAES(ar) TRAIAN(us) AVG(ustus) GERM(anicus) in nominative was placed.<sup>23</sup> The legend of this type appeared on imperial coins struck between 98 and 103.<sup>24</sup> On one of the coins of this centre,<sup>25</sup> after the GERM abbreviation, there was a continuation of the legend, in which perhaps one should look for the abbreviation P(ontifex) M(aximus), also appearing on the early issues of Trajan issued in Rome.<sup>26</sup> This could also be confirmed by the legend on the reverse of the coin, TR(ibunicia) POT(estas) COS II C(olonia) I(ulia) C(oncordia) A(pamea), D(ecreto) D(ecurionum)<sup>27</sup> (in field). However, Woytek points out the unusual inversion of elements such as NERVA and CAESAR in the obverse legend. This type of record was used only on a small group of coins from the beginning of the reign of Trajan and cystophores probably also issued in Rome from 98.<sup>28</sup> This, in turn, could indicate a later date for Apamean issues. On the other hand, perhaps we should also look at coins from the time of Nerva from the other places, where the name and title of the emperor were similarly placed.<sup>29</sup> Hence, this type of tradition could have been known to engravers from an earlier period. In addition, perhaps at the end of the obverse legend there should be a reference to the nickname *Dacicus*, but in this case the consulate number

<sup>20</sup> Butcher 1988: 110.

<sup>21</sup> Butcher 1988: 110.

<sup>22</sup> Butcher 1988: 111; Johnston 1985: 98.

<sup>23</sup> Apamea RPC III 1029–1031. Cf. Appendix 1.

<sup>24</sup> Awianowicz 2017: 267.

<sup>25</sup> RPC III 1030.

<sup>26</sup> RIC II 28–31.

<sup>27</sup> Leschhorn 2009a: 57; Leschhorn and Franke 2002: 333, 395; Weiss 2005: 62; Woytek 2011b: 124.

<sup>28</sup> Woytek 2011b: 123; Woytek 1–11A; RPC III 1308–1311. Cf. Awianowicz 2017: 267.

<sup>29</sup> Cassandrea (Macedonia) RPC III 636; Sinope RPC III 1214, 1216; cystophores: RPC III 1298–1307.

on the reverse does not match.<sup>30</sup> Also on the obverse of this coin you can see a combination of letters R and M in the title GERM(anicus). On the larger coins from the times of the second consulate,<sup>31</sup> the legend on the reverse is more extensive and refers to the emperor's official titles of high priest, tribune and consul, as well as the name of the colony and the power of the *duoviri* in the colony.<sup>32</sup> Probably the letters on one of the coins were written incorrectly, hence the legend on the emission with Pax can be read as RM IR DOI CICA COS II.<sup>33</sup> In addition, the unusual location of the name of the colony is also noteworthy.<sup>34</sup> The letter A on both the obverse and reverse is written without a crossbar, which makes it resemble the Greek lambda. A similar relationship can be seen on the coins dated to the third consulate. The name of the centre was not mentioned on these issues, only the dating and reference to the *Decreto Decurionum*.<sup>35</sup>

On the issues minted in 149 (in the city's own chronology, i.e. between 103 and 104), only the final part of the legend is visible on the obverse of the coins, AVG(ustus) GER(manicus) DAC(icus).<sup>36</sup> Perhaps its initial part is simply IMP(erator) CAES(ar) NER(va) TRAIAN(us), or it is the same as on the coins struck in 153 (between 107 and 108),<sup>37</sup> that is IMP(eratori) CAES(ari) NER(vae) TRAIANO AVG(usto) GER(manico) DA(cico). The legend was written in the dative, translated as 'To the Emperor Caesar Nerva Trajan Augustus Germanicus Dacicus'. A similar legend was found on imperial emissions struck between 104 and 111 AD.<sup>38</sup> Another of the coins from Sinope should be dated after 150 according to the local chronology (104–105).<sup>39</sup> Unfortunately, part of the legend on the reverse is impossible to read. The obverse shows only a few letters referring to Emperor Trajan. Perhaps in this case the types of legends that appeared on imperial coins should be considered, namely IMP TRAIANVS AVG GER DAC, placed on issues minted between 103 and 111, or IMP TRAIANO AVG GER DAC in the dative, appearing on coins from 107 and 114.<sup>40</sup> On the coin from year 155 (109–110), some of the titles are also invisible. As in one of the issues, where the legend was written in dative, giving individual elements of the imperial titles, including the abbreviation informing about the imperial power for the sixth time (received in 106), the consulate for the fifth time (received in 103) and *Pater Patriae* title – IMP(eratori) NERVAE TRAIANO [ ] IMP(eratori) VI CO(n)S(uli) V P(atri) P(atriciae). A legend of this type does not appear on imperial coins. Looking a little closer, one gets the impression that Trajan's name ends with the letter C, and then part of the letter A starting the title *Augusto* can be seen. Probably the rest of the legend, as on the earlier coin, as well as in the standard nomenclature used at the time, may refer to the titles *Germanicus* and *Dacicus*. It is not possible to state whether the coin also had in its legend the office of the high priest (P(ontifex) M(aximus)) or of people's tribune (TR(ibunicia) P(otestate)), but they should not be excluded. These were very popular titles included in the legends of coins, although it is worth emphasising that during the reign of Trajan subsequent years of tribunal

<sup>30</sup> Woytek 2011b: 123–124.

<sup>31</sup> RPC III 1029.

<sup>32</sup> Awianowicz 2017: 48, 50–51; Woytek 2011b: 123–124.

<sup>33</sup> RPC III 1029 (1).

<sup>34</sup> Woytek 2011b: 122.

<sup>35</sup> RPC III 1031; Sear 2001: xix. The attribution of the coins to the mint at Apamea is described by Woytek 2011b: 124.

<sup>36</sup> RPC III 1217.

<sup>37</sup> RPC III 1218.

<sup>38</sup> Cf. Awianowicz 2017: 231–232, 266–269.

<sup>39</sup> Casey 334.

<sup>40</sup> Awianowicz 2017: 267.

power were not placed on imperial issues, only the title.<sup>41</sup> A reference to the rank of pontifex was also found on the Augustus coins.<sup>42</sup> In addition, the spacing, as well as the narrow letters, may suggest a greater number of characters in an unreadable field. It is also worth noting that the beginning of the legend is located above the bust of the emperor.

On the next issue of the Sinope, dated in the year 159 (113–114), there is a representation of Priapus with a legend referring to the name of the colony (C I F) on the obverse, and herms with datation on the reverse.<sup>43</sup> The coin represents the smallest denomination (14 mm), hence the limitations. The last of the coins registered so far from this centre from the time of Trajan may be dated to the year 160, according to the local chronology (114–115).<sup>44</sup> Only part of the IMP CAES TRAIAN legend is visible on the obverse. Probably in the illegible field one should look for references to ‘Augustus Germanicus Dacicus’. Perhaps due to the coins struck after 114, the title *Optimus* was also in the legend. A similar shorter version of this type of legend (IMP CAES TRAIAN AVG GERM) also appeared on the quadrans. In turn, it is longer (IMP CAES TRAIANO OPTIMO AVG GER DAC) on the other imperial issues minted in 114.<sup>45</sup> On the reverse of the Sinope coins from the reign of Trajan there was the name of the colony, C(olonia) I(ulia) F(elix) and a year referring to the local chronology of the city. As mentioned above, the individual years are not always legible. On one of the coins the letter L appears upside down in the year CXLIX.<sup>46</sup>

At the other mints in Bithynia and Pontus legends in Greek were placed on the coins. On the obverse of Prusa coins there was a reference to the emperor in the nominative, ΑΥ(τοκράτωρ) ΝΕΡ(ουαζ) ΤΡΑΙΑΝΟC ΚΑΙ(σᾶρ) CΕ(βαστός) ΓΕΡ(μανικός) Δ(ακικός). However, in the legends of individual issues there are various abbreviations or single letters. Hence, we can distinguish at least 11 different variants of ways of writing the same legend.<sup>47</sup> Usually the form was continuous, but sometimes there are dots between the abbreviations as separators.<sup>48</sup> On the reverse of Prusa coins there is a reference to the name in five forms written in at least nine different variants (e.g. ΠΡΟΥCΑ, ΠΡΟΥCΑΕΩΝ, ΠΡΟΥCΑΕΙC ΔΙΑ ΟΛΥΜΠΙΟΝ or ΟΛΥΜΠΙΟC ΠΡΟΥCΑΕΩΝ).<sup>49</sup> The most frequently used legend during the reign of Trajan was the name of the city written in genitive plural, which should be read that the minted coin belongs to the citizens of ‘Prusa’. Longer forms were placed on the larger denominations. The legend of ΟΛΥΜΠΙΟC ΠΡΟΥCΑΕΩΝ should be translated as ‘Olympus of the citizens of Prusa’. Thus it also identifies the image on the coin.<sup>50</sup> On the other hand, the legend ΠΡΟΥCΑΕΙC ΔΙΑ ΟΛΥΜΠΙΟΝ on the issues with the effigy of Zeus should be read as ‘to the Prusans of Olympian Zeus / to the inhabitants of Prusa of Olympian Zeus’.<sup>51</sup> In this case, the reference to the inhabitants is in the dative, but the deity’s name is in the accusative. Such forms, although not very popular, that could emphasise the consecration or dedication character, were also placed on other

<sup>41</sup> Cf. Awianowicz 2017: 266–270, fn. 177 (uncertain type RIC 375 in the legend TR P VI); Hill 1970: 6, 23–47; Mattingly and Sydenham 1926; Woytek 2010.

<sup>42</sup> RPC I 2107. Cf. Leschhorn and Franke 2002: 378.

<sup>43</sup> Manisse 243; Dalaison Sinope 6. Cf. Leschhorn and Franke 2002: 333–334; Dalaison 2014.

<sup>44</sup> Casey 336.

<sup>45</sup> Awianowicz 2017: 267.

<sup>46</sup> RPC III 1217 (1).

<sup>47</sup> Cf. Appendix 1.

<sup>48</sup> RPC III 1035 (5).

<sup>49</sup> Cf. Appendix 1; Leschhorn and Franke 2002: 226, 251.

<sup>50</sup> RPC III 1039.

<sup>51</sup> Leschhorn and Franke 2002: 226, 251.

Greek issues.<sup>52</sup> It is worth noting that during the reign of Trajan more and different forms of writing the name of the city were used, compared to other periods. On the coins from the reign of Nero, the legend ΠΡΟΥΣΑΕΩΝ in genitive plural appears,<sup>53</sup> which can be translated as (a coin (implicitly)) ‘of the citizens of Prusa’.<sup>54</sup> The same reference to the city was the main form placed on the issues of later emperors.<sup>55</sup> It seems that both in the times of Trajan and Marcus Aurelius, the size of the flan could have an influence on the name of Prusa on the coins. Longer legends were generally placed on issues more than 30 mm in diameter,<sup>56</sup> while short forms were placed on coins of c. 15–17 mm.<sup>57</sup> Probably during the reign of Marcus Aurelius, one standardised notation of the issuer’s name began to be used.<sup>58</sup> We should also pay attention to errors and the writing of individual letters.

Very often, in the forms of epsilon written on coins at that time, V, not Y, was the dominant vowel (e.g. in abbreviation Αὐτοκράτωρ or in the name of the city). On the coins of Prusa registered so far, there are legends only with a simplified lunar sigma. Perhaps this form was introduced in this town from the reign of Trajan. On one of the coins it has a square shape, which can also be seen in the legends of the city from later periods.<sup>59</sup> Also, on some emissions, after the word ΤΡΑΙΑΝΟC the letter A appears incorrectly.<sup>60</sup> In one of the legends there is a ligature made of the first two letters in the name of ΝΕΡ(ουας).<sup>61</sup>

One issue with the ethnic Nicaea registered so far has a more complete form of the legend, ΑΥΤ ΝΕΡΟΥΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ Δ.<sup>62</sup> The traditional sigma notation was used. On the obverse there is a ligature in the word ΝΕΡΟΥΑΣ, while on the reverse there is a legend which should be read as ΝΕΙΚΑΙΑ ΠΡΩΤΗ or ΝΕΙΚΑΙΕΩΝ ΠΡΩΤΩΝ,<sup>63</sup> abbreviated as ΝΚ ΠΡ, also in the form of two ligatures. The city was an important centre, competing with Nicomedia for priority status in the province,<sup>64</sup> hence the emphasis on the rank also on coins. The writing of the city’s name in the legends of Roman coins has changed many times since the end of the Republic.<sup>65</sup> Reference to the status of Nicaea appears for the first time on the coins of the proconsul Marcus Salvidenus Asprenas, struck in the time of Vespasian.<sup>66</sup> This status was also emphasised on the coins of Domitian and Trajan. Coins with this form have not yet been registered for later periods. As on the Prusa coins, the name of the city in genitive plural was more often placed on the issues.<sup>67</sup>

<sup>52</sup> Cf. Awianowicz 2020.

<sup>53</sup> RPC I 2018–2019.

<sup>54</sup> Cf. Butcher 1988: 35; Leschhorn and Franke 2002: 251.

<sup>55</sup> Cf. Waddington, Reinach and Babelon 1904–1912: 576–601; list of coins from Prusa in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 10.09.2020.

<sup>56</sup> Trajan RPC III 1035–1037, 1039; Marcus Aurelius RPC IV.1 4792 (temporary number).

<sup>57</sup> Trajan RPC III 1048–1049.

<sup>58</sup> Cf. Waddington, Reinach and Babelon 1904–1912: 576–601; list of coins from Prusa in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 10.09.2020.

<sup>59</sup> Cf. Waddington, Reinach and Babelon 1904–1912: 576–601; list of coins from Prusa in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 10.09.2020.

<sup>60</sup> RPC III 1040, 1047.

<sup>61</sup> RPC III 1042, 1045.

<sup>62</sup> RPC III 1059.

<sup>63</sup> ‘Nicaea the First and the First Nicaeans’. Cf. Butcher 1988: 112; Leschhorn 2009a: 181–182; Leschhorn and Franke 2002: 206, 252; Sear 2001: xx.

<sup>64</sup> Dio Chrys. Or. 38–39; Dio Cass. 51.20.6–7. Cf. Burrell 2004: 147, 163; Butcher 1988: 112.

<sup>65</sup> Cf. Amandry, Burnett *et al.* 1992: 345–349; Waddington, Reinach and Babelon 1904–1912: 397–406.

<sup>66</sup> RPC II 630–631.

<sup>67</sup> Leschhorn and Franke 2002: 252–254; Waddington, Reinach and Babelon 1904–1912: 397–511; list of coins from

On the obverse of the Calchedon coins there was the emperor's name with titles and nicknames – AVT NEP TPAIANOC KAI CEB(A) ΓΕ Δ, as well as its simpler form, AVT NEP TPAIANOC KAICAP, in nominative. On the reverse was the standard city name ΚΑΛΧΑΔΟΝΙΩΝ, in genitive plural, which could be translated as (implicitly a coin) 'the inhabitants of Calchedon'. From the reign of Trajan, a simplified sigma form was introduced.<sup>68</sup>

As in the above-discussed issues of the cities of Bithynia and Pontus, on the obverse of the Byzantium coins there was one type of legend referring to the name of Trajan with the imperial titles and nicknames. All the coins registered so far have been titled *Γερμανικός* and *Δακικός*. Individual words were written in various abbreviated forms, with or without some letters, hence at least 16 variants of legends placed on the obverse of the Byzantium coins in the reign of Trajan can be distinguished.<sup>69</sup> As on the Prusa coins, some issues have dots between the abbreviations.<sup>70</sup> One legend lacks reference to the title of Augustus,<sup>71</sup> while in others some of the words have letters omitted. The title *Σεβαστός* was written as CB or CBA, *Γερμανικός* as ΓΜ or ΓΡΜ, and *Δακικός* as ΔΚΙ. The title *Αὐτοκράτωρ* occurs as both ΑΥΤ and AVT. Sometimes in letters some smaller elements are missing, hence A looks like Λ, and E such as Γ.<sup>72</sup> The legends mainly contained a simplified Greek sigma (C). Only on a few does the reverse show the traditional Greek sigma.<sup>73</sup> Also on a few issues, like on Prusa coins, the letter C has a square form.<sup>74</sup> On the obverse of the Byzantium coins there was also a portrait of Plotina with the legend CEBACTHΝ ΠΛΩΤΕΙΝΑΝ<sup>75</sup> in accusative, which should be read as (implicitly a coin of) 'Augusta Plotina'. On most of the surviving coins the simplified sigma in the legend is also square, as in the issue with the portrait of the emperor. On the reverse of the coins there were two types of legends, BYZANTIΩΝ ΕΠΙ ΤΡΑΙΑΝΟΥ ΚΑΙ(σάρος) ΤΟ Γ or ΕΠΙ ΝΕΙΚΗC ΤΟ Δ BYZANTIΩΝ in genitive singular (referring to the magistracy) and plural (the name of the city). It can be read as: (implicitly a coin of) 'the citizens of Byzantium for Trajan for the third time' or 'the citizens of Byzantium on the occasion of the Victory for the fourth time'.<sup>76</sup> Also in this case, several variants of writing can be distinguished, depending on the presence or absence of individual letters. On some coins the term ΕΠΙ is missing,<sup>77</sup> and some coins do not have an omega in the word BYZANTIΩΝ.<sup>78</sup> In the name ΤΡΑΙΑΝΟΥ on the reverse of one of the issues the last letter looks like T.<sup>79</sup> The legends refer to the centre and the time they were struck.<sup>80</sup> Unfortunately, it is not possible to specify the production period of individual emissions more precisely, despite the magistrates provided. It is also worth noting

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Nicaea in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 11.09.2020.

<sup>68</sup> Leschhorn 2009a: 131; Leschhorn and Franke 2002: 162; Waddington, Reinach and Babelon 1904–1912: 298–308; list of coins from Calchedon in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 11.09.2020.

<sup>69</sup> Cf. Appendix 1. Schönert-Geiss 1972: 45–49; list of coins from Byzantium in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 12.09.2020.

<sup>70</sup> RPC III 1068 (1–6); RPC III 1069 (1, 7); RPC III 1070 (3).

<sup>71</sup> RPC III 1081 (2).

<sup>72</sup> E.g. RPC III 1081 (1), 1082 (1).

<sup>73</sup> RPC III 1073–1074 (1–2).

<sup>74</sup> RPC III 1067–1068, 1069 (14), 1070.

<sup>75</sup> RPC III 1070.

<sup>76</sup> Cf. Amandry, Burnett *et al.* 2015: 130; Leschhorn and Franke 2002: 215.

<sup>77</sup> RPC III 1080–1081, 1083A.

<sup>78</sup> RPC III 1077, 1080–1081.

<sup>79</sup> RPC III 1070 (3).

<sup>80</sup> Amandry, Burnett *et al.* 2015: 130. Cf. Weiss 2005: 63.

that the placement of this type of legends on the reverse of Byzantium coins, introduced in the times of Trajan, was also reproduced on the issues from the reign of Hadrian and Antoninus Pius.<sup>81</sup> In later periods, the notation was more extensive.<sup>82</sup> In the legends there is a reference to individual deities, as well as people, in some cases possibly with the marking of the period of mintage (?) (Demeter – Β, Tyche, Dionysus – Ζ). Among the Byzantium coins from the reign of Trajan there are also those that perhaps should be interpreted as ancient imitations. On the reverse of these coins, the last letter of the name ΤΡΑΙΑΝΟΥ was written as V, and at the end of the legend there is no Γ.<sup>83</sup>

On the obverse of the coins of Nicomedia the same legend referring to the emperor was placed in at least five variants in the nominative.<sup>84</sup> All coins registered so far in the legends contain only one of the nicknames received by the emperor – Γερμανικός. On some issues one of the emperors names, Νέρουας, has been omitted.<sup>85</sup> On the reverses were legends Η ΜΗΤΡΟΠΟΛΙΣ ΚΑΙ ΠΡΩΤΗ ΒΙΘΥΝΙΑΣ, ΝΙΚΟ ΜΗ or ΚΑΙ ΠΡΩΤΗ ΠΟΝΤΟΥ ΚΑΙ ΒΕΙΘΥΝΙΑΣ, Η ΜΗ/ΤΡΟΠΟ/ΛΙΣ/ΝΙΚΟ. There is a shortened version on the smaller denominations – ΝΕΙΚΟΜ ΠΡΟ ΠΟΝΤ ΒΙΘΥ and ΝΕΙΚΟΜ ΠΡΩΤ ΒΙΘΥ.<sup>86</sup> Legends should be translated as ‘Nicomedia, metropolis and the first (implicitly a city) of Bithynia’ or ‘Pontus and Bithynia’. The title of metropolis referred to an important city in the region, often the capital or seat of a *koinon*.<sup>87</sup> Such phrases were already placed on the coins of Nicomedia in the time of Domitian.<sup>88</sup> They were also reproduced in the times of later emperors.<sup>89</sup> It is worth noting that a characteristic feature of coins from this centre is the placing of usually long legends referring to the power of the proconsul (mainly in the 1st century) and the status of the city from the times of Tiberius.<sup>90</sup> Abbreviated forms of the name and title of the metropolis on individual issues are written as ligatures. There were also a few typological errors in the legends of Nicomedia’s coins during the reign of Trajan. The name Bithynia was written in two ways, as ΒΙΘΥΝΙΑΣ and ΒΕΙΘΥΝΙΑΣ.<sup>91</sup> On some issues, the letter Y appears as V in the word ΒΙΘΥΝΙΑΣ,<sup>92</sup> while the middle crossbar is not visible in the letter Θ.<sup>93</sup> On one coin the name ΒΕΙΘΥΝΙΑΣ is written as ΒΓΙΘΥΝΙΑΣ.<sup>94</sup> Also, in some of the legends the abbreviation ΠΡΟ and ΠΡΟΤ,<sup>95</sup> derived from the word ΠΡΩΤΗ, were incorrectly spelled. In addition, the lunar sigma appears on all Nicomedia coins from the time of Trajan recorded so far. It is worth noting that it was during this period that this form of the

<sup>81</sup> Amandry, Burnett *et al.* 2015: 130. Antoninus Pius RPC III 3906, 8678–8677, 8679, 8680–8685, 8694–8697 (temporary numbers).

<sup>82</sup> Cf. list of coins from Byzantium in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 12.09.2020.

<sup>83</sup> RPC III 1069 (6, 11, 15).

<sup>84</sup> Cf. Appendix 1.

<sup>85</sup> RPC III 1092.

<sup>86</sup> RPC III 1091–1092.

<sup>87</sup> Butcher 1988: 112; Leschhorn 2009a: 182–185; Leschhorn and Franke 2002: 70, 199–201, 217, 218, 246–247, 253; Sear 2001: xx.

<sup>88</sup> RPC II 655–664. Cf. Leschhorn 2009a: 182–185.

<sup>89</sup> Leschhorn 2009a: 182–185; Waddington, Reinach and Babelon 1904–1912: 514–572; list of coins from Nicomedia in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 12.09.2020.

<sup>90</sup> Amandry, Burnett *et al.* 1992: 350.

<sup>91</sup> Cf. Butcher 1988: 110; Leschhorn and Franke 2002: 70–71.

<sup>92</sup> RPC III 1089 (3), 1090 (2), 1091 (2).

<sup>93</sup> RPC III 1090 (2), 1091 (2).

<sup>94</sup> RPC III 1090 (1).

<sup>95</sup> RPC III 1091, 1092. Cf. Leschhorn and Franke 2002: 252.

letter was introduced in the legends of coins in the town. The traditional sigma appears on the earlier issues.<sup>96</sup>

The obverses of the Iuliopolis coins bear the same reference to the name and titles of the emperor with the nickname *Γερμανικός* in four different variants in the nominative. In one legend, the word *Νερούας* was written as *NERBAS*.<sup>97</sup> On the reverse, on the other hand, there are three types of legends. The name of the city was written both in abbreviated form with ligatures of individual letters *ΙΟΥ-ΛΙΟΥ*, and in full form *ΙΟΥΛΙΟΠΟΛΙΤΩΝ* in genitive plural. One of the issues with the Eirene effigy also had the legend *ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ*,<sup>98</sup> which can be translated as the holy/divine consent or consent of Augustus.<sup>99</sup> The Latin form for this expression, also reflected on the coins, was *CONCORDIA AVGVSTA*.<sup>100</sup> The type of issue referred to universal consent in certain political and military situations, between groups or institutions, and during the Empire, above all, to the relations of individual persons within the family or co-rulers.<sup>101</sup> Dio Chrysostom also encouraged agreement between the two cities in his speeches to the Nicaeans and Nicomedians, as being primarily beneficial.<sup>102</sup> During the reign of Trajan in Bithynia and Pontus, very many emissions without an ethnic with this type of legend were struck.<sup>103</sup> Later coins from Nicomedia also emphasised the importance of consensus with the centre as *neokoros*, related to the imperial cult.<sup>104</sup> In provincial coinage, the word *ὁμόνοια* usually accompanied the names of two towns that established an agreement between each other.<sup>105</sup> In the case of the Iuliopolis coins with this legend, it could refer to the celebrated and popular cult,<sup>106</sup> however, it should be stressed that the issues belonged to a group whose motifs were reproduced on many coins of individual cities of Bithynia and Pontus. Hence, it seems that the legends placed on them were typical of imperial propaganda rather than the local cult. Their message could reinforce harmonious relations between the centres, and thus emphasise possible cooperation due to common motifs and similar coin sizes. The issues from the time of Trajan only contain the traditional Greek sigma. Perhaps the introduction of a simplified form of this letter in legends took place a little later, maybe in the time of Antoninus Pius.<sup>107</sup> However, one should bear in mind the relatively small number of coins from the town that have been registered so far.

The legends on the obverse of the Prusias coins represent a standard reference to the name and title of the emperor, written in two variants in the nominative.<sup>108</sup> As in several other provincial cities, at that time a simplified form of the Greek sigma was introduced on the coins and the traditional one was abandoned. Only one of Trajan's nicknames from the beginning of his reign was on the emissions of the city. On the reverses there was an abbreviation of the

<sup>96</sup> Waddington, Reinach and Babelon 1904–1912: 514–572; list of coins from Nicomedia in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 13.09.2020.

<sup>97</sup> RPC III 1098 (2). Cf. Butcher 1988: 110.

<sup>98</sup> RPC III 1099.

<sup>99</sup> Plut. *Vit. Cam.* 42; App. *B Civ* 1,26; Dio Cass. 44,4.

<sup>100</sup> Leschhorn and Franke 2002: 227–228.

<sup>101</sup> Mikocki 1997: 17–18.

<sup>102</sup> Dio Chrys. *Or.* XXXVIII. Cf. Jones 2012; Szarmach 1979: 76.

<sup>103</sup> *ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ*: RPC III 1128–1131; *ΟΜΟΝΟΙΑ*: RPC III 1132–1133.

<sup>104</sup> Marcus Aurelius RPC IV.1 5617, 6095, 7981, 10656 (temporary numbers); Burrell 2004: 147–162.

<sup>105</sup> Amandry, Burnett *et al.* 2015: 839; Butcher 1988: 35; Mikocki 1997: 38–39.

<sup>106</sup> Strubbe 1984–1986: 283.

<sup>107</sup> Waddington, Reinach and Babelon 1904–1912: 386–393; list of coins from Iuliopolis in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 13.09.2020.

<sup>108</sup> Cf. Appendix 1.

name of the centre, Π-P, which in turn is characteristic only for this period – in the following years this abbreviation was not used.<sup>109</sup> A similar notation of the name appears only on the coins of Domitian.<sup>110</sup> On some issues there was also a reference to ΕΙΡΗΝΗ ΣΕΒΑΚΤΗ with the image of the goddess of peace.<sup>111</sup> This type of effigy, as well as a legend, was placed on the coins without the ethnic.<sup>112</sup> The legend of this type appeared on the coins of Prusias only during this period. The issue belongs to a group some of whose motifs and legends appeared in various towns of Bithynia and Pontus. Perhaps, as with the coins of Iuliopolis, the imperial overtone was significant. The legend can be translated as Pax Augusta, in a broader sense it may also be understood as a *Pax Romana*, thus referring to the Empire and the rule of emperors as guarantors of peace and stability.

On the obverse of the coins of the Heraclea Pontica in the time of Trajan three types of legends referring to the name of the emperor appear. Among these legends are AVT NEP ΤΡΑΙΑΝΟC ΚΑΙCΑΡ ΣΕΒΑΚΤΟC, ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙC ΕΡ ΔΑ, and ΑΥΤ Κ ΝΕΡ ΤΡΑΙΑΝΟC ΑΡΙCΤΟ ΓΕΡ Δ, written in several variants, in nominative.<sup>113</sup> Individual words included in the title are given in abbreviated form or as a single letters. The title Αὐτοκράτωρ is written using both, Y and V. There are three nicknames of Trajan on the

coins – *Γερμανικός*, *Δακικός*, *Ἄριστος*. On the reverse the name of the city, ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛΙΤΑΝ, was written in the accusative. The legend can be translated as (implicitly a coin of) ‘the inhabitants of the Heraclea metropolis’.<sup>114</sup> The description of the city as a metropolis appeared first on coins during the reign of Trajan. The word metropolis itself has at least six different variants, including five abbreviations. Its notation differs from the word on the coins of Nicomedia or Amastris. However, both forms, i.e. the long I and EI, are correct.<sup>115</sup> Also at this time a simplified form of the sigma was introduced in the coin legends.<sup>116</sup>

On the Tium coins there was both a standard legend with an imperial title, written in at least 15 variants, as well as the short form ΤΡΑΙΑΝΟC ΚΑΙCΑΡ.<sup>117</sup> Among the nicknames placed on the city’s coins there are *Γερμανικός* and *Δακικός*. On some issues, various abbreviations of individual words appeared. In some cases single letters are missing, as in the title *Γερμανικός* – ΓΜ or ΓΕΜ.<sup>118</sup> The abbreviation of the name Νερούας is sometimes written as ΝΕΡΒ.<sup>119</sup> As in several earlier centres, the title Αὐτοκράτωρ was abbreviated as AVT or ΑΥΤ. The legends placed on the reverses of coins of Tium were much more varied compared to the rest of the cities of Bithynia and Pontus in the time of Trajan. The name of the city is written as both ΤΙΑΝΩΝ and

<sup>109</sup> Leschhorn and Franke 2002: 251; Waddington, Reinach and Babelon 1904–1912: 602–614; list of coins from Prusias in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 13.09.2020.

<sup>110</sup> RPC II 671–674.

<sup>111</sup> RPC III 1101. Cf. Leschhorn and Franke 2002: 102–103.

<sup>112</sup> RPC III 1125–1126.

<sup>113</sup> Cf. Appendix 1.

<sup>114</sup> Leschhorn and Franke 2002: 130, 199–200.

<sup>115</sup> Węcłowski 1869: 442, 455.

<sup>116</sup> Waddington, Reinach and Babelon 1904–1912: 356–383; list of coins from Heraclea in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 13.09.2020.

<sup>117</sup> Cf. Appendix 1.

<sup>118</sup> RPC III 1186, 1188.

<sup>119</sup> RPC III 1185 (1–6). Cf. Butcher 1988: 110; Leschhorn and Franke 2002: 111.

TEIANΩN.<sup>120</sup> During the reign of Vespasian, the name Tium appeared on the coins as ΤΙΟΣ,<sup>121</sup> with Domitian in the standard form, TEIANΩN.<sup>122</sup> TIANΩN on the coins during the reign of Trajan became the most popular form used on issues in later periods.<sup>123</sup> Among the cults on the coins there are references to Asclepius, Dionysus, and Zeus; additionally individual deities are accompanied by nicknames. On the coins with Asclepius we have the legend ΑΣΚΛΗΠΙΟΣ ΤΙΑΝΩΝ or ΑΣΚΛΗΠΙΟΣ ΣΩΤ(ΗΡΙΟΣ) ΤΙΑΝΩΝ,<sup>124</sup> which can be read as ‘Asclepius (Savior) of Tium’.<sup>125</sup> The image of Dionysus has the legend ΔΙΟΝΥΣΟΣ ΚΤΙΣΤ(ΗΣ) ΤΙΑΝΩΝ,<sup>126</sup> written in at least three different variants. The translation refers to ‘Dionysus the founder/restorer of Tium’.<sup>127</sup> On the other hand, the coins with Zeus contain a reference to ΖΕΥΣ ΣΥΡΓΑΣΤΕΙΟΣ ΤΙΑΝΩΝ,<sup>128</sup> i.e. Zeus Syrgastes Tium, also written in at least five variants. All three legends already appeared on Domitian’s coins and were reproduced in the next periods.<sup>129</sup> Coins with the torch also bear the legend in genitive, ΑΡΤΕΜΙΔΟΣ (Artemis),<sup>130</sup> which does not appear on the other issues from this mint. The legend of this type was associated mainly with the representations of Artemis or the themes related with her cult.<sup>131</sup> In one legend with the effigy of Hera there is also a mysterious date referring to the year (TEIANΩN ΕΤΟΥΣ ΙΣ) in the genitive. Probably it should be read as the years 112–113, if the 16 refers to the years of the emperor’s regency. It is uncertain whether this should be interpreted in this way.<sup>132</sup> Furthermore, the date was not usually added to the coins from this centre: perhaps it was a special year for the town itself. We should also pay attention to the letters in the reverse of some coins in the lower section.<sup>133</sup> Unfortunately, their identification is quite problematic due to the state of preservation of individual copies and the making of the letters. The first one is usually fragmentary, sometimes more distant than the other two, which are ΙΑ. The last letter can be read as A, based on the similar writing of the letter in the coin’s legend. The same iconographic type on one of the coins, with effigies of Hera and Zeus, was also reproduced on the issues of later emperors.<sup>134</sup> Unfortunately, there were no letters or words in the lower section on any of the reverses. On coins from the other periods struck in Tium the name of the city<sup>135</sup> or the name of the deity<sup>136</sup> was usually placed there. In the case of coins of Trajan, it seems that types with such a notation were not issued. Other references that could appear

<sup>120</sup> Cf. Butcher 1988: 110.

<sup>121</sup> RPC II 699.

<sup>122</sup> RPC II 700–704.

<sup>123</sup> Waddington, Reinach and Babelon 1904–1912: 615–640; list of coins from Tium in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 14.09.2020.

<sup>124</sup> RPC III 1183, 1190.

<sup>125</sup> Leschhorn and Franke 2002: 58–59, 289.

<sup>126</sup> RPC III 1181–1182.

<sup>127</sup> Leschhorn and Franke 2002: 95, 179–181.

<sup>128</sup> RPC III 1178–1179, 1186–1188.

<sup>129</sup> Domitian Zeus Syrgastes RPC II 700–703; Asklepios RPC II 701A; Dionysos RPC II 704. Cf. Leschhorn and Franke 2002: 127, 287; Waddington, Reinach and Babelon 1904–1912: 615–640; list of coins from Tium in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 14.09.2020.

<sup>130</sup> RPC III 1180A.

<sup>131</sup> Leschhorn and Franke 2002: 51. Mostly on the coins from Perge. During the reign of Trajan: Perge RPC III 2686–2687.

<sup>132</sup> Amandry, Burnett *et al.* 2015: 141; Butcher 1988: 114.

<sup>133</sup> RPC III 1180, 1185.

<sup>134</sup> Marcus Aurelius RPC IV.1 5581 (temporary number), Rec 90, BMC 14; pseudo-autonomous coins RPC VI 3623 (temporary number); SNG vAulock 924; RPC VI 3624 (temporary number); Gordian III Rec 164; Tranquillina RPC VII.2, ID 20025.

<sup>135</sup> Hadrian RPC III 1191–1192; Antoninus Pius RPC IV.1 8458; Marcus Aurelius RPC IV.1 5703, 5580, 6139; Commodus RPC IV.1 6149 (temporary numbers).

<sup>136</sup> Hadrian RPC III 1195 (Billaios); Antoninus Pius RPC IV.1 5572 (Billaios), 5573 (Hestia) (temporary numbers).

on provincial coins were dates, numbers, control marks, or names of engravers.<sup>137</sup> Perhaps the letters in the lower section of the above issue may indicate the date or the number 11, due to the notation of A without the crossbar in the legends. This, in turn, could point to the years 107–108 during the reign of Trajan. However, the first letter remains a mystery. The date could have been preceded by the word *έτους*, also abbreviated as ET or E, or, as in the case of Alexandrian coins, as L.<sup>138</sup> Perhaps the first letter in the lower segment should be interpreted this way?<sup>139</sup> Or should we look for the engraver's signature in this notation? This could be indicated by the images of the coins, which represent rather non-standard effigies for this city. The figure of Poseidon is shown advancing right, his left foot held on the prow, which is in the form of a siren, in his hand a trident, and with a dolphin, and a fish between his feet. In later periods the characteristic motif of a standing Poseidon with a trident and a dolphin, or the prow, were shown. Additionally, the image of Zeus and Hera is not standard for the city, and in the next periods it appears only on the coins of Marcus Aurelius. Thus, a certain 'innovation' in the effigies and the letters could refer to the artist's signature. In the legends of the city's coins attention should also be paid to individual letters. The Greek sigma was written in both traditional and simplified forms. On the basis of the features of the portraits on the individual issues of Tium, it can be concluded that the introduction of the final form of the letter took place between 102 and 114. From then on the writing of the traditional sigma on coins was abandoned.<sup>140</sup> On some issues, as mentioned above, the letter A looks like Λ in legends.<sup>141</sup>

On the coins from Amastris a standard legend appears with a reference to the emperor in several variants in the nominative.<sup>142</sup> All the nicknames adopted by the emperor during his reign were used. In legends with the title *Ἄριστος*, the title *Δακικός* at the end was not placed. On the other hand, the notation on the issues with the nickname *Παρθικός* contains only abbreviated forms of the individual words. As in other cities, in the title *Αὐτοκράτωρ* is alternately Y and V. There is also the traditional Greek sigma and its simplified form. The traditional sigma appears in the legends of coins with the title *Ἄριστος*. Perhaps its form on emissions was abandoned at the end of Trajan's reign. In later periods, only the lunar sigma was used.<sup>143</sup> In one of the legends, a ligature was created from the first letters of the name *Νερούας*.<sup>144</sup> Among the coins struck in Amastris, the coin that stands out stylistically from the rest is noteworthy.<sup>145</sup> In the legend on the obverse, *ΑΥΤ•ΝΕΡ ΤΡΑΙΝ•C ΚΑΙCΑΡ CΕΒ Γ•Δ*, the letters A and O on the name of the emperor were omitted. There were also dots between the words. The centre also issued coins with the image of the empress with the legend *ΠΛΩΤΕΙΝΑ CΕΒΑCΤΗ* or *ΠΛΩΤΕΙΝΑ ΘΕΑ CΕΒΑCΤΗ*, in nominative.<sup>146</sup> They can be translated as 'Plotina Augusta' or 'Plotina goddess Augusta'. On the reverse there were mainly references to the name of the city. Both the abbreviated form AMA-

<sup>137</sup> Butcher 1988: 114; Sear 2001: xxv.

<sup>138</sup> Sear 2001: xxv.

<sup>139</sup> Cf. RPC III 1185 (7).

<sup>140</sup> Waddington, Reinach and Babelon 1904–1912: 615–640; list of coins from Tium in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 14.09.2020.

<sup>141</sup> RPC II 1180 (2), 1185.

<sup>142</sup> Cf. Appendix 1.

<sup>143</sup> Waddington, Reinach and Babelon 1904–1912: 138–156; list of coins from Amastris in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 14.09.2020.

<sup>144</sup> RPC III 1206 (1–2).

<sup>145</sup> RPC III 1204A.

<sup>146</sup> RPC III 1208, Rec 59–60.

CTP, and the full ΑΜΑΚΤΡΙΑΝΩΝ ΜΗΤΡΟΠΟΛΕΙΤΩΝ were used.<sup>147</sup> In shorter notation, some of the letters were ligature. The meaning of the longer form, in genitive plural, should be read as (implicitly a coin of) ‘inhabitants of the Amastris metropolis’. Thus, the city had to function as one of the most important towns in the province.<sup>148</sup> The title of the metropolis appears for the first time in coin legends during the reign of Trajan, probably after 114.<sup>149</sup> Like in Heraclea, it was only placed during this period. Some issues had the legend ΑΜΑΚΤΡΙΚ ΜΗΤΡΟΠΟΛΙΣ, in nominative. Also on one of the coins with the effigy of Nike was the notation ΝΕΙΚΗ ΚΕΒΑΚΤΗ (‘divine Nike’) in nominative. Pseudo-autonomous coins were also issued in the city, perhaps due to stylistic similarities, during the reign of Trajan. On one of the issues on the obverse there was an image of Dionysus with the legend ΔΙΟΝΥΚΟΚ ΚΕΒΑΚΤΟΚ (‘divine Dionysus’), on the reverse a vine with six grapes with the legend ΜΗΤΡΟ ΑΜΑΚΤΡΙΑΝΩΝ.<sup>150</sup> Another effigy of Helios had the legend ΜΗΤΡΟ ΑΜΑΚΤΡΙΑΝΩΝ and a star with ΜΗΤΡΟ, ΑΜΑ.<sup>151</sup> Due to the reference to the status of a metropolis on the coins, perhaps their issues should be dated to the end of Trajan’s reign.

On a small number of coins from Abonoteichos that have survived to our times the standard type of legend was placed, with the name of the emperor in two variants in the nominative.<sup>152</sup> On the reverse there are references to the centre and the deity. The name Abonoteichos appears in abbreviated form, ΑΒΩ-ΝΟ, with the first two letters forming a ligature, and in full form, ΑΒΩΝΟΤΕΙΧΙΤΩΝ, in genitive plural. One of the emissions also includes a reference to the deity of the wind, ΖΕΦΥΡΙΟΚ ΑΒΩΝΟΤΙΧΕΙΤΩΝ, which can be translated as ‘Zephyrios (of citizens of the) Abonoteichos’.<sup>153</sup> However, it is uncertain whether it is a deity that was not commonly reflected on the provincial coins. This, in turn, could indicate an interesting local cult. Or is it a geographical name referring to a nearby port city, between Karambis and Abonoteichos?<sup>154</sup> The production of coins in the city began from the reign of Trajan and from then a simplified form of the sigma appears in the legends of the issue.<sup>155</sup>

Several different types of legends with name of the emperor were placed on the obverse of coins from Amisus.<sup>156</sup> These include the type from the beginning of Trajan’s reign, ΑΜΙΚΟΥ ΕΛΕΥΘΕΡΑΚ, the standard form ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΚ ΚΑΙΚΑΡ ΚΕ(Β) ΓΕΡ(Μ) Δ(ΑΚΙΚΟΚ), as well as the shorter forms found in genitive, such as ΘΕΟΒ ΚΕΒΑΚΤΟΥ ΤΡΑΙΑΝΟΥ or ΤΡΑΙΑΝΟΣ ΣΕΒΑΣΤΟΥ.<sup>157</sup> In the following years, coins with the ΘΕΟΒ segment were not issued, which in turn could indicate an error occurring in earlier issues,<sup>158</sup> or simply commemorate the beginning of the reign of the new emperor. However, if we look at coins from the reign of Vespasian, legends like ΘΕΟΣ ΣΕΒΑΣΤΟΣ were placed on every issue from that period.<sup>159</sup> Hence,

<sup>147</sup> Leschhorn and Franke 2002: 37.

<sup>148</sup> Cf. Butcher 1988: 35, 112; Leschhorn and Franke 2002: 37.

<sup>149</sup> RPC III 1205.

<sup>150</sup> RPC III 1209. Cf. Dalaison 2017a: 267.

<sup>151</sup> RPC II 1210. Cf. Dalaison 2017a: 267.

<sup>152</sup> Cf. Appendix 1.

<sup>153</sup> Leschhorn and Franke 2002: 127.

<sup>154</sup> Arr. *Peripl. M. Eux.* 13. Cf. Marek 2002: 767 (place as an Ankerplatz); Oakley 1997: 308–309; Weiss 1997: 307–308.

<sup>155</sup> Waddington, Reinach and Babelon 1904–1912: 130–132; list of coins from Abonoteichos in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 14.09.2020.

<sup>156</sup> Cf. Appendix 1.

<sup>157</sup> Cf. Dalaison 2017a: 292.

<sup>158</sup> Amandry, Burnett *et al.* 2015: 843.

<sup>159</sup> RPC II 726–729. Cf. Dalaison and Rémy 2017: 254.

perhaps it is a simply a duplication of a form known from earlier coins. It can be translated as ‘god August’. It is worth noting that on many coins of various cities there was a description of the emperor as a deity, hence this type of legend is not something new.<sup>160</sup> The nickname describing the ruler as a god appeared already in the Hellenistic period.<sup>161</sup> It can be noticed that much more often this type of notation referring to the emperor appears on provincial coins in the 1st century, while in the later periods much less frequently. Such a legend also very often accompanied the deceased, deified after death, such as Augustus, Drusus and Germanicus, Nerva, or Antinous.<sup>162</sup> Most likely, at the beginning of the reign of Trajan, coins were struck with a notation known to the city from an earlier period,<sup>163</sup> and then from 138 (106–107) a standard portrait and legend with the title and nicknames of the emperor appeared. On some coins, the first two letters in the name of Νερούας form a ligature. On the reverse there was a reference to the city’s name as well as to the local chronology. Amisus was a free city, hence the status was also emphasised on the centre’s emissions through the legends AMICOY ΕΛΕΥΘΕΡΑC,<sup>164</sup> in genitive singular. The adjective Ἐλεύθερα was in genitive on the coins from the time of Trajan and was duplicated on issues in later periods.<sup>165</sup> Thus, the legend could be translated as (implicitly a coin of) ‘a free/independent (sc. polis) Amisus’. Among the dates placed on the coins are years ΡΚΘ (98), ΡΛ (98–99), ΡΛΗ (106–107), ΡΜ (108–109) and ΡΜΕ (113–114). As in other cities, the titles Αὐτοκράτωρ, ΘΕΟΥ CΕΒΑCΤΟΥ, the name AMICOY, or the words ΕΛΕΥΘΕΡΑC, ΕΤΟΥC were written both by the use of the letters Y and V. In legends there is a notation of the traditional sigma and its simplified form, however the first letter was written only on coins from the beginning of Trajan’s reign. On the issues dated from 138 (106–107) only the lunar sigma was placed.<sup>166</sup> Probably from this year there were changes in the notation of individual legends on the coins in Amisus. Perhaps during the Trajan period, pseudo-autonomous coins with the image of Athena on the obverse and Nike on the reverse with the legend CΕΒΑCΤΟΥ in genitive, were also struck.<sup>167</sup> A legend of this type was placed on the coins from the reign of Claudius.<sup>168</sup>

Coins without an ethnic were also issued in Bithynia and Pontus and, hence, are of uncertain attribution. The legends of individual issues are described according to the distinguished groups.

On the reverse of the coins struck during the magistrate of Gaius Julius Bassus were the name of the proconsul and the office, ΕΠΙ Γ ΙΟΥ ΒΑCΣCΟΥ ΑΝΘΥΠΑΤΟΥ,<sup>169</sup> in genitive. The legend can be translated as (implicitly a coin) ‘during the proconsul Gaius Julius Bassus’. It is the only issue from Bithynia and Pontus from the reign of Trajan in which the name of the

<sup>160</sup> E.g. Tiberius: Amphipolis RPC I 1635A; Byzantium RPC I 1779; Nero: Laodicea RPC I 2923; Antioch RPC I 4174; Domitian: Temnus RPC II 982B; Anazarbus RPC II 1753–1756; Trajan: Thyatira 1815A, 1817; Smyrna RPC III 1965.

<sup>161</sup> Ostrowski 2005: 131.

<sup>162</sup> E.g. Tiberius: Hierapytna RPC I 955; Sardis RPC I 2994–2995; Trajan: Perinthus RPC III 684–686; 691–693; Hadrian: Bithynium Claudiopolis RPC III 1110–1120; Ancyra RPC III 2835–2839.

<sup>163</sup> Dalaisson and Rémy 2017: 264.

<sup>164</sup> Butcher 1988: 112; Leschhorn and Franke 2002: 105; Sear 2001: xx.

<sup>165</sup> Leschhorn and Franke 2002: 105; Waddington, Reinach and Babelon 1904–1912: 60–73; list of coins from Amisus in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 15.09.2020.

<sup>166</sup> Waddington, Reinach and Babelon 1904–1912: 60–73; list of coins from Amisus in the electronic database of the Roman Provincial Coinage project ([www.rpc.ashmus.ox.ac.uk](http://www.rpc.ashmus.ox.ac.uk)). Accessed: 15.09.2020.

<sup>167</sup> RPC III 1297; Dalaisson 2017a: 293, 298.

<sup>168</sup> RPC I 2153–2154.

<sup>169</sup> Butcher 1998: 114; Leschhorn and Franke 2002: 40–41, 110; Sear 2006: xi, xx.

proconsul appears. Legends of this type referring to the function performed were placed on some coins of the provinces of Thrace, Moesia, Asia, Bithynia and Pontus and Cappadocia at various times. However, the reasons for the presence of the names of officials on the issues are not entirely certain. Perhaps it is not just to be associated with a general emphasis on the power held at that time. It is not known if and how a proconsul could have been involved in the production of coins. One should not exclude a certain honorific function in relation to the given name.<sup>170</sup> On the obverse of the coins there is a standard reference to the name and titles of the emperor in at least five variants in the nominative.<sup>171</sup> The obverse uses the abbreviation ΑΥΤΟ, and on some coins also a single letter referring to the name Νερούας, which, however, is quite unusual for legends from other centres of Bithynia and Pontus. The first of the abbreviations was sometimes placed on Byzantium coins,<sup>172</sup> however in each of the legends there is a reference to the nickname adopted by Trajan. This type of notation, and even the omission of the emperor's abbreviation, can also be seen on later issues of Nicomedia. Due to the minting of these coins at the beginning of Trajan's reign, only one of the nicknames appeared in the legend, with the title incorrectly written as ΓΡΜ.<sup>173</sup> All coins bear the traditional Greek sigma. It is also worth noting that one of the issues has dot between two sigma in the name of ΒΑΣΣΟΥ.<sup>174</sup>

Another group of coins without an ethnic are issues with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ or CE-BAC on the reverse.<sup>175</sup> The latter is usually written incorrectly as CE-RAC. On the obverse there was a reference to the name and titles of the emperor with the nickname *Germanicus*, in the nominative in at least three variants.<sup>176</sup> In the legends are both the traditional sigma and its simplified version. As already mentioned in connection with the issues of Prusias, perhaps the motifs and legends of this group should be associated with a national overtone, thus referring to the idea of *Pax Romana* and the Empire and ruler ensuring peace and stabilisation.

On the reverse of the coins with the legend ΟΜΟΝΟΙΑ CEBACTH or ΟΜΟΝΟΙΑ there was a reference to the name of the emperor in at least nine variants in the nominative.<sup>177</sup> The standard title completed the nicknames *Γερμανικός* and *Δακικός*. Various abbreviations have been used for some elements of the legend. The full name of Νέρούας was given on part of the issue. Some letters in this word were created as a ligature.<sup>178</sup> As in several other cities, the abbreviation Αὐτοκράτωρ was written using the letters Υ and Β. In the legends also appeared a traditional and simplified sigma notation. The letter Α can sometimes be read as lambda due to the lack, or invisibility, of the crossbar. The variant of the legend on the reverse also appears on Iuliopolis coins during this period. Thus, as already mentioned, it could refer to the agreement between individual centres in that period, which could additionally confirm the similarities of some emissions.

<sup>170</sup> Weiss 2005: 60–61.

<sup>171</sup> Cf. Appendix 1.

<sup>172</sup> RPC III 1067–1069.

<sup>173</sup> RPC III 1124.

<sup>174</sup> RPC III 1121 (1, 5); 1122 (2); 1123 (1–2, 4), 1124 (5); 1124A (2).

<sup>175</sup> RPC III 1125–1127. Cf. Leschhorn and Franke 2002: 102–103.

<sup>176</sup> Cf. Appendix 1.

<sup>177</sup> RPC III 1128–1133. Cf. Appendix 1; Leschhorn and Franke 2002: 227–228.

<sup>178</sup> RPC III 1131.

Another group of coins without an ethnic are the issues with the legend NEIKH CEBACTOY, ΔΑΚ or NEIKH ΣΕΒΑΣΤΟΥ, ΑΡΜΕ.<sup>179</sup> Legends emphasised Trajan's victories over the Dacians and the conquest and incorporation of Armenia into the Roman Empire.<sup>180</sup> On the obverse there was a typical reference to the emperor's title and nicknames *Γερμανικός*, *Δακικός*, and *Ἄριστος*, in at least five variants in the nominative. The individual elements of the legend appear in various abbreviated forms. In one of the issues the letter A in the word ΝΕΡΟΥΑΣ was omitted.<sup>181</sup> A ligature also appeared in this name, made up of the first two letters.<sup>182</sup> In the title *Αὐτοκράτωρ*, as well as in the name *Νερούας*, occasionally the letter Y looks like V. Moreover, on the obverse there is mainly the traditional Greek sigma, while on the reverse of the early issues it was written in a simplified form of the letter. It should also be noted that for coins with the nickname *Ἄριστος* there is a traditional sigma notation on the reverse. In the case of these coins, it is worth noting that both the image and the legend refer to a typical Roman tradition, which could additionally confirm the hypothesis about an attempt to resemble or introduce a monetary system similar to the imperial one.

Coins with the legend ΔΗΜΗΤΡΑ CEBACTH referred to the cult of Demeter, the goddess of harvest. This is not the standard legend for the provincial coins.<sup>183</sup> A similar reference is made on coins of uncertain attribution with a poppy head between two ears of corn, likely to be attributed to the Nicomedia mint.<sup>184</sup> It was one of the most important cults for the inhabitants. On the obverse there was a legend with the name of the emperor and the nickname *Γερμανικός*, in at least three variants in the nominative.<sup>185</sup> The abbreviation of ΑΥΤ was written both with the letters Y and V. In the legends there is only the simplified sigma.

Another group of coins without an ethnic are the CEBACTH or ΣΕΒΑΣΤΗ issues, thus referring simply to the emperor. On the obverse there are many different variants of the legend with the title and the name of the ruler in the nominative.<sup>186</sup> Only the nicknames *Γερμανικός* and *Δακικός* appeared on the issues. Various abbreviations of individual words are used. Note the variation of the emperor's name mainly as Traianon in accusative. The abbreviation of the title *Αὐτοκράτωρ* was written using both Y and V. Legends contain both the traditional Greek sigma and its simplified form. Some coins show ligatures formed with the first letters in the name of *Νερούας*.<sup>187</sup>

Coins with the legend CEBACTOY or ΣΕΒΑΣΤΟΥ had two types of legends, in different variants in genitive singular,<sup>188</sup> which can be translated as (implicitly a coin of) 'Augustus'. On one of the issues the ΣΕΒΑΣΣΤΟΥ was written incorrectly.<sup>189</sup> There are three nicknames of the emperor in the legends – *Γερμανικός*, *Δακικός*, *Ἄριστος*. On one of the issues there is a standard ligature in

<sup>179</sup> RPC III 1134–1136. Cf. Appendix 1.

<sup>180</sup> Cf. Leschhorn and Franke 2002: 215–216.

<sup>181</sup> RPC III 1134.

<sup>182</sup> RPC III 1134, 1135.

<sup>183</sup> Only a few issues: Mastaura RPC II 1120; Bithynia RPC III 1138; Uncertain Mint RPC III 6577–6578; Anineta RPC IV.2 1169; Ephesus RPC VI 4957 (temporary numbers). Cf. Leschhorn and Franke 2002: 86.

<sup>184</sup> RPC III 6548.

<sup>185</sup> RPC III 1137–1138.

<sup>186</sup> RPC III 1139–1143. Cf. Appendix 1.

<sup>187</sup> RPC III 1142 (3–5).

<sup>188</sup> RPC III 1144–1147.

<sup>189</sup> RPC III 1147.

the name Νερούας.<sup>190</sup> Both the earlier and this group of coins, with a similar legend in terms of translation, as well as the issues with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ or ΝΕΙΚΗ ΣΕΒΑΚΤΟΥ, may be associated with imperial propaganda, and, in this case, with the imperial cult.

The most numerous group among the coins without the ethnic are the issues with the legend ΔΙΟC.<sup>191</sup> On the reverse there are three standard references to the cult of Zeus, in the form Δ-Ι, ΔΙΟC or ΔΙΟC ΤΡΑΤΗΓΟΥ, in genitive singular. The latter should be translated as (implicitly a coin of) ‘Zeus Strategos’.<sup>192</sup> References to this deity appear on Nicaean coins during the reign of Nero. Then in the legends there was a reference to ‘Zeus taking requests’.<sup>193</sup> Hence, perhaps issues of this type should be attributed to the mint in Nicaea. Legends on the obverse of the coins can be divided primarily into three types, depending on the nicknames placed on the coins, written in many different variants.<sup>194</sup> At first various abbreviations were used. The emperor’s name was written in several forms as ΤΡΑΙΑΝ, ΤΡΑΙΑΝΟC, and ΤΡΑΙΑΝΟΝ. The coins have ligatures made of letters abbreviated as ΝΕΡ and in the words ΤΡΑΙΑΝΟΝ ΚΑΙ.<sup>195</sup> There are also errors in individual legends. In one of the issues, the letter Ρ in the nickname Γερμανικός was omitted, hence the word ΓΕΜΑ on the coin.<sup>196</sup> In one of the legends the letter Τ was omitted in the name of the emperor,<sup>197</sup> while in another the title ΑΠΙCΤΟ was written, apparently incorrectly, as ΑΒΙCΤΟ.<sup>198</sup> There is also an issue where in abbreviation ΣΕΒΑ the Greek Β is more like Ρ.<sup>199</sup> In this case, the coins with the legend ΔΙΟC refer to the cult of Zeus, very popular and characteristic, especially for southern Bithynia, confirmed by numerous inscriptions. Perhaps due to the presence of many different nicknames of the deity, only a reference to his main name was placed on the coins.<sup>200</sup>

Coins with the ΚΤΙCΤΗC legend have a standard notation of the emperor’s title and a nickname Γερμανικός in the nominative.<sup>201</sup> The word κτίcτης translates as the city’s founder, creator, or restorer.<sup>202</sup> The title placed on the reverse of the issue could be related to the foundation, however, in the light of current assumptions, the dominant view is that it referred to obtaining imperial benefits.<sup>203</sup> This title was also received by citizens who were benefactors of the city

<sup>190</sup> RPC III 1145 (2).

<sup>191</sup> RPC III 1148–1159.

<sup>192</sup> Leschhorn and Franke 2002: 95–96.

<sup>193</sup> Λιτάϊος – accepting requests, pleas, prayers (dictionary available on the website HellenicGods.org, accessed: 10.07.2020).

<sup>194</sup> Cf. Appendix 1.

<sup>195</sup> RPC III 1152.

<sup>196</sup> RPC III 1148 (4).

<sup>197</sup> RPC III 1154 (20).

<sup>198</sup> RPC III 1154 (23).

<sup>199</sup> RPC III 1153 (1).

<sup>200</sup> There are many epigraphic sources from Nicaea and the surrounding area, that mention Zeus with nicknames such as: Agathios; Lidaïos (INicaea I, 34); Astrapaïos (INicaea II 1, 702); Aretarkhos (INicaea II 1, 1076); Dimenenos (INicaea II 1, 1110); Epouranios (INicaea II 1, 1114); Okkonenos (INicaea II 1, 1119); Pantokrator (INicaea II 1, 1121; INicaea II 2, 1512); Sabazios (INicaea II 1, 1127); Sebastos (INicaea II 1, 1129); Syngenikos (INicaea II 1, 1130); Soter (INicaea II 1, 1131); Bennis (INicaea II 2, 1503); Olympios (INicaea II 2, 1505); Pappos? (INicaea II 2, 1513). Among the new sources there are also references to Zeus Kronios, Soter, Agathios Pithios, Pithios, Eidikenes (Öztürk *et al.* 2012; Akyürek Şahin 2014).

<sup>201</sup> RPC III 1160. Cf. Appendix 1.

<sup>202</sup> Cf. Leschhorn and Franke 2002: 179–181; Strubbe 1984–1986: 258.

<sup>203</sup> Leschhorn 2009b. Cf. Strubbe 1984–1986: 258, 291.

or officials, as well as the emperor, who helped during the reconstruction of the centre, for example after an earthquake.<sup>204</sup>

Probably the coins struck in Bithynia and Pontus should also include the issues with the legend ΔΗΜΗΤΡΟΣ, referring to Demeter.<sup>205</sup> On the obverse there was a standard reference to the emperor with the nickname Γερμανικός, at least in two variants in the nominative.<sup>206</sup>

Several tendencies in the notations made can be seen in legends of issues from Bithynia and Pontus in the time of Trajan. On the obverse of the coins, the emperor's name, title and individual nicknames were as standard, similar to imperial coins. Only in Tium and Amisus, do we have other forms, i.e. the short ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ or ΘΕΟΥ ΣΕΒΑΚΤΟΥ ΤΡΑΙΑΝΟΥ. The legends on the obverse of the coins of Bithynia and Pontus from the times of Trajan were written mainly in nominative, although there were also forms in dative (Sinope), genitive (Amisus), accusative (coins without attribution, with the legend ΣΕΒΑΚΤΗ / ΣΕΒΑΣΤΗ), and even combined forms of dative and accusative (Prusa). In some cities, such as Byzantium or Amastris, coins with the portrait of Plotina and the legend ΣΕΒΑΚΤΗΝ ΠΛΩΤΕΙΝΑΝ / ΠΛΩΤΕΙΝΑ ΣΕΒΑΚΤΗ in accusative and nominative, or ΠΛΩΤΕΙΝΑ ΘΕΑ ΣΕΒΑΣΤΗ in nominative. On the reverse there was usually a reference to the mint, mainly in genitive plural. During the reign of Trajan, it can be noticed that cities such as Prusa and Tium used various forms of names on their issues. It is worth noting that in some places of Bithynia and Pontus on coins during the rule of the Julio-Claudian dynasty or the Flavian dynasty, there was greater diversity in the writing of the ethnic than in later periods, where, however, some standardisation can be seen. The status as a Roman colony (Apamea, Sinope), an independent city (Amisus), a metropolis (Nicomedia, Heraclea, Amastris), or priority among other towns in the province (Nicomedia, Nicaea) was also emphasised. Some of the coins contain references to well-known and probably local cults. Some of the issues also had legends with an office (Byzantium, Nicaea?). It is also worth noting that some coins, and thus the legends placed on them, could have an overtone related to the Roman and national tradition. These are mainly coins from Iuliopolis, Prusias, or issues without an ethnic, which probably should be attributed to Nicaea, which perhaps refer to consent, military successes, and the imperial cult.

Different tendencies in the writing of individual letters can be seen in the legends of coins struck during the Trajan period. It was very popular to use two forms of the same letter as Y and V, most often in the abbreviation Αὐτοκράτωρ. In almost all cities in Bithynia and Pontus, a simplified sigma notation was introduced in the legends of coins from the time of Trajan. It is uncertain whether this type of change occurred in Nicaea and Iuliopolis during this period, due to the few emissions recorded so far. Among the words, there are notations that use the vowel ι, and diphthong ει interchangeably. Sometimes the diphthong ου was also used as β, e.g. in the name of Νέπουας as Νέβας (Iuliopolis, Tium). In many legends ligatures can be noted, usually formed by letters in the name of Νεπουας or city names. These types of markings during the Trajan period are not seen on the coins of Apamea, Sinope, Tium, Heraclea, Calchedon, and Prusias. Also noteworthy is the lack of smaller elements of individual letters, hence in some legends A looks like Λ, E like Γ or Θ like O. The letter C is sometimes square. In many legends there were also errors such as the abbreviation of the

<sup>204</sup> Strubbe 1984–1986: 290–292.

<sup>205</sup> RPC III 6548.

<sup>206</sup> Cf. Appendix 1.

CEBAC title as CERAC, or one of the legends placed on the Apamean coin which was supposed to refer to the offices of the tribune and pontifex. In addition, attention should be paid to the lack of letters, or additional ones, as well as some abbreviated forms that may be due to ignorance, the engraver's skills, or the size of the flan.

### Iconography of the provincial coins

The iconography of provincial coins usually reflected the local tradition related to the cults and history of the centre, easily recognisable by the inhabitants of a given city or region. Compared to the Classical or Hellenistic period, there is a much greater variety of motifs on the coins, inter alia, to the appearance of local cults, as well as their transformations. Individual deities or personifications were accompanied by a greater number of attributes. Perhaps some of the images reflected buildings, statues or sculptures that were well known to the inhabitants. Some of the motifs referred to earlier canons.<sup>207</sup> Effigies with figures of deities, i.e. Zeus, Artemis, Dionysus, were very popular and universal; hence they were on the coins of many cities, but did not necessarily indicate the presence of a cult. Others were unique, related only to the local history, as in the case of the myth of Hero and Leander shown on the Abydus and Sestus coins.<sup>208</sup> On the colonial coins there were often images related to the Roman tradition. In the cities where the *koinon* was located, or which received the titles of *neokoros* (taking care of the imperial cult), coins were issued with, inter alia, the effigy of a temple or temples, primarily to accentuate the title and status of the place.<sup>209</sup> It is worth noting that the images placed on the coins could have been perceived completely differently depending on their role and interpretation. Their meaning could refer to a religious, social, political, or intellectual function. Hence, the themes on the coins did not have to be perceived in the same way. We should be aware that the territories of the Roman provinces were inhabited by people of various origins, often with their own separate customs and language. Some could have come from other areas and gained more followers, something also reflected in the iconographic effigies or epigraphic sources, e.g. the cults of Serapis and Mithra.<sup>210</sup> However, what dominated in the Roman period, due to the Hellenisation process and the political situation, were the Greek and Roman cultures that interpenetrated everyday provincial life.<sup>211</sup>

Nevertheless, most of the images placed on provincial coins were related to local cults, so it is also worth considering the perception of the religious sphere. T. Whitmarsh in one of his works stressed that a local idea could only be created by colliding with a general, global thought, which was used to transform it into a local consciousness.<sup>212</sup> As mentioned above, cults can be distinguished among those of general, popular, and universal importance, characteristic only for a given area and local society. The centres emphasised their local identity, which was also dictated by rivalry between cities. Their culture was supposed to be better, more important, and more visible.<sup>213</sup> It is also worth noting the differences between public/civic and private forms of cult, where, however, this 'actual religion', as well as beliefs, depended

<sup>207</sup> Elkins 2015: 141–142, 151–153; Metcalf 2007: 4–7 passus; Tiverios *et al.* 1997: 371; Vollkommer 1997: 384.

<sup>208</sup> Abydus: RPC IV.2 30 (temporary); Sestus: RPC VI 1138–1139 (temporary).

<sup>209</sup> Burrell 2004; Heuchert 2005: 29–56; Howgego 2005a: 1–17; Johnston 1985; Nollé 2014; Price 2005: 115–124; Zajac 2017b.

<sup>210</sup> Cf. Olshausen 1990: 1906.

<sup>211</sup> Cf. Harris 1980; Marek 2009.

<sup>212</sup> Whitmarsh 2010.

<sup>213</sup> Chaniotis 2009; Rüpke 2011.

on the individual. Public civic cult was not the entirety of Roman religious practice.<sup>214</sup> People worshipped various cults depending on their needs. Thus, the private sphere remained more religious and opposed to the centralised public cult. Due, inter alia, to the ethnic mosaic within the Roman Empire, scholars underscore the flexibility of Roman religion.<sup>215</sup> On this basis, J. Scheid divided some of the deities, based on various sources (i.e. coins, inscriptions) according to these two categories.<sup>216</sup> This approach was also taken by C. Ando, who stated that the Roman religion was located primarily on the Apennine peninsula, and the cult could spread only when the deities could be located in many places. In this way, Ando located Roman religion in Rome alone.<sup>217</sup> However there is a danger, as S.L. Veake has rightly pointed out, that worship can belong to both spheres – public and private.<sup>218</sup> In the Greek polis, religion was to be centralised, with everything from oracles to festivals to minor associations under control.<sup>219</sup> In the Roman religion, the three dominant assumptions were the central place of civic worship (or the polis religion), the emphasis on communal religious expression (i.e. no single religious unit in antiquity), and embedded religion. S.L. Veale thus emphasises that both models, the Roman civil religion and the Greek religion of polis, were actually the same.<sup>220</sup>

In the case of Bithynia and Pontus we lack the sources allowing us to reconstruct the full history of individual cities in the Roman period. In some places it was possible to uncover the remains of the old infrastructure, fragments of sculptures, inscriptions, and many other artefacts, which only partially allow for the reconstruction of the then realities. Thus, the effigies on coins can provide significant information about the cult, history, or popular myths of the cities; however, the practise of worship could differ (and even differed if we look at the needs of an individual) from what is presented on the coins.<sup>221</sup> Some deities were universal and duplicated in many regions during the Roman period, hence effigies characteristic to a given centre are unique. Other discovered artefacts very often have wide dating due to the lack of any characteristic elements or signatures indicating a certain period, however, in the case of images on coins, they can be an important complementary source. It is worth noting that the effigies on the coins of Bithynia and Pontus from the times of Trajan have a civic character or refer to the official local cults, in turn, for example, the inscriptions reflect a more individual religious identity.<sup>222</sup> Many deities have been worshipped in cities, and they can be identified by individual nicknames giving their function, characteristics, rituals, genealogy, and place. Some might have multiple epithets. The multitude of nicknames could demonstrate the popularity and importance of the deity for a given region.<sup>223</sup> In addition, during this period, a certain phenomenon, also visible on the Bithynia and Pontus issues, was the revival of individual historical events or people of importance for a given city, which was also reflected in the effigies placed on the coins.<sup>224</sup>

<sup>214</sup> Veale 2017: 27.

<sup>215</sup> Cf. Cumont 1911; Gordon 1990; North 1976; Scheid 2016; Veale 2017: 8, 12–13, 16, 40–42.

<sup>216</sup> Scheid 2016: 40–41, 125–141. Cf. Woolf 2013: 136–137, 139, 143, 153–155.

<sup>217</sup> Ando 2000: 208, 385–393.

<sup>218</sup> Veale 2017: 18. Cf. Woolf 2013: 153–155.

<sup>219</sup> Sourvinou-Inwood 2000a; 2000b.

<sup>220</sup> Veale 2017: 20.

<sup>221</sup> Parker 2016: 83.

<sup>222</sup> Cf. Belayche 2013: 246–247; Veale 2017: 27, 49–50.

<sup>223</sup> Versnel 2011: 61; van der Ploeg 2016: 84–86.

<sup>224</sup> Cf. Chaniotis 2009; Heuchert 2005: 51–52.

We should also consider the influence of the Romans and imperial propaganda on the province, related, *inter alia*, to the spread of local traditions, the influx of communities, as well as the political situation. Certain cults may have spread throughout the Empire due to the movements of the armies.<sup>225</sup> Some researchers consider the so-called *Interpretatio Romana*, related to replacing the name of a foreign deity with a Roman equivalent, to some extent similar to him or her.<sup>226</sup> In the case of individual cities of Bithynia and Pontus in Trajan's time it seems that this type of action was not very important. Most of the cults popular and in force at the time referred to the same Roman deities that were based on Greek beliefs.<sup>227</sup> It should be emphasised that individual cults could have been of great importance to the emperors. Thus, the areas where important sanctuaries or religious centres developed could be a destination, and thus gain benefits on behalf of the ruler. Moreover, if the emperor consecrated any sanctuary, a bond was formed between him and the local deity.<sup>228</sup> Giving individual cities the title of *neokoros* also gave the city a chance to enrich itself, and to gain priority over other cities. The imperial cult with which the title was assigned involved the emperor in the life of the provincial society.<sup>229</sup> Some of the rulers may even be seen as incarnations of deities, which in turn shows how the cult and role of the emperor were perceived, as well as the opportunities associated with obtaining certain gratuities.<sup>230</sup> In the case of the Trajan period, none of the cities of Bithynia and Pontus obtained the title of *neokoros*. However, it was a noticeable tradition to place common effigies on the coins of many cities, referring to the Roman tradition. The main reason for such actions was the clash of the provincial community with a certain 'global' phenomenon of the Empire, related to the aggressive expansion of Rome.<sup>231</sup>

Propaganda in the Roman Empire served the ruler, primarily, and it was used to convey certain programs and political ideas of the emperor as well as moral values important for society, with a coin being one of its most important carriers.<sup>232</sup> On many of them, individual ideas related to the ruler were created using personifications, popular and easy to receive throughout the Empire. Hence this also explains such a large variety and richness of effigies, as well as the accuracy in showing the attributes of the characters, and thus the propagated idea.<sup>233</sup> In addition, the importance of certain values could be stressed by the denominations of coins and the metal from which they were minted.<sup>234</sup> Individual motifs from imperial issues, due to the spread of traditions and circulation, could also be reproduced on provincial coins. For example, a very characteristic image placed on the sestertii struck in Rome in the years 37–40 with the image of Agrippina as *Securitas*, Drusilla as *Concordia* and Julia Livilla as *Fortune*,<sup>235</sup> also appeared on the coins of Caesarea Philippi in Syria, Apamea in Bithynia, and Ercavica in Spain.<sup>236</sup>

<sup>225</sup> Cf. Arya 2002: 1; van der Ploeg 2016: 48–49, 196, 327–328.

<sup>226</sup> Tac. *Germ.* 43.3; Rives 2021.

<sup>227</sup> Derks 1991: 249.

<sup>228</sup> E.g. Tiberius as an Imhotep-Asklepios in the relief of the gate on the island of Philae. Cf. van der Ploeg 2016: 94–96, 191, 327–328.

<sup>229</sup> Burrell 2004; Elkins 2015: 151–153; Price 1984.

<sup>230</sup> Cf. van der Ploeg 2016: 94–96, 333.

<sup>231</sup> Cf. Arya 2002: 1; Chaniotis 2009.

<sup>232</sup> Kluczek 2009: 11; Kopij 2017; Kunisz 1993; Morawiecki 1980.

<sup>233</sup> Sichterman and Kohler 1965: 70.

<sup>234</sup> Morawiecki 1980.

<sup>235</sup> RIC I 105, 110–111, Gaius 33, 41.

<sup>236</sup> RPC I 4973, 2012, 2014, Suppl. I 467A.

As already mentioned, we have a very large number of different issues struck in the time of Trajan. Thanks to them, we can in some way recreate the ruler's political program, especially with the small number of written sources from this period. At the very beginning of his reign, the emperor appealed to his adoptive father, Nerva, pointing and confirming his legitimacy. It was one of the most important aspects considering the traditions in Rome, where the current rulers came from the imperial family and Rome. In turn, Trajan was born in Spain and was a meritorious commander. He had to win over the society of the Empire. Thus, the motifs with the person of Nerva and Providentia were shown on the coins.<sup>237</sup> A large part of the images placed on the coins were personifications, reflecting the most important values of the propaganda of the time.<sup>238</sup> Values such as Concordia, Felicitas, Fortuna, and Securitas could refer to concerted cooperation and understanding between the emperor, senate and army, and thus to the prosperity of the Empire.<sup>239</sup> The virtues of Liberalitas or Indulgentia could accentuate the emperor's generosity and the expression of paternal concern for the people and the state.<sup>240</sup> The emperor's military successes were emphasised by coin types related, inter alia, with Roma Victrix, Germania, Nike, or the personifications of Arabia and Dacia.<sup>241</sup> Among the motifs there are numerous buildings and architectural structures.<sup>242</sup> *Congiaria* were promoted.<sup>243</sup> There were also references to old republican traditions, hence on the coin images referring to mythology, such as Aeneas with Anchises, the foundation of Rome, or great leaders such as Marcellus and Aemilius Paullus, as well as the main Roman gods and commemorative types of republican buildings, e.g. the Temple of Vesta or the Basilica of Emilia. Thus, the great Roman traditions, famous and great people, and the favour of deities were highlighted, which could also mean prosperity during the reign of Trajan.<sup>244</sup> Of course, the coins also portrayed figures of deities who assisted the emperor and ensured the prosperity of Roman society.<sup>245</sup>

Due to the period of Trajan's rule we are looking at, as well as the duplication of many elements present in the earlier tradition, we should also take account of the propaganda circulating in Flavian times, mainly Domitian. The iconography of the issue has been enriched with new themes, pointing out the significant share of military successes in the propaganda policy.<sup>246</sup> The dynasty's characteristic motifs promoted on coins were Pax, Fortuna, and Felicitas.<sup>247</sup> The underlined ideas of success, prosperity, peace and security reflected the real condition of the Roman state in the Flavian period.<sup>248</sup> In turn, during the short reign of Nerva, such values as Aequitas, Fortuna, Justitia, Libertas, Pax, and Salus appeared on imperial coins.<sup>249</sup> The ruler promoted values related to Republican traditions. Due to the crisis at the end of Domitian's reign, Nerva on the coins was an attempt to indicate a new beginning. The latter turned to

<sup>237</sup> Bennett 1997 (2015): 30–35, 45, 61–68, 90, 136; Mattingly 1967: 145.

<sup>238</sup> Cf. Bennett 1997 (2015): 135–137; Elkins 2015: 8; Mattingly 1967: 148.

<sup>239</sup> Cf. RIC II 2, 13, 17, 121–122, 126. Cf. Bennett 1997 (2015): 137; Mattingly 1967: 148–149.

<sup>240</sup> Bennett 1997 (2015): 152.

<sup>241</sup> Bennett 1997 (2015): 137, 172; Kaczanowicz 1976: 164–173; Kluczek 2009: 43–51; Mattingly 1967: 151; Ostrowski 1985.

<sup>242</sup> Bennett 1997 (2015): 237–240; Elkins 2015: 85–91; Hill 1984; 1985.

<sup>243</sup> Bennett 1997 (2015): 116–117.

<sup>244</sup> Bennett 1997 (2015): 225–226; Mattingly 1926. Cf. Kluczek 2017.

<sup>245</sup> Bennett 1997 (2015): 135; Mattingly 1967: 156–157.

<sup>246</sup> Amit 1965; Boruch 2002.

<sup>247</sup> Vespasianus RIC II 47, 81, 123.

<sup>248</sup> Amit 1965; Grant 1997: 190; Shotter 1978.

<sup>249</sup> Nerva RIC II 7, 19, 31, 36; Elkins 2017; Mattingly and Sydenham 1926: 220–222; Morawiecki 1994: 117–121.

motifs known from the times of Augustus and Galba, trying to win over the people and the army. The *congriarium* was also paid, which was also reflected in the issues of that time.<sup>250</sup>

### Iconography of coins of Bithynia and Pontus during the reign of Trajan<sup>251</sup>

On the obverse of the coins of Bithynia and Pontus in the times of Trajan there were mainly portraits of the emperor, usually in a laurel wreath, or, more rarely, in a radiant crown. This latter element was found only on the emissions of Calchedon, Byzantium, Tium, and Sinope.<sup>252</sup> In imperial coinage, the *corona radialis* served as a denomination indicator, while on provincial coins this element was rather standard and did not function as an indicator.<sup>253</sup> For example, on the issues of Byzantium it appeared on many different denominations,<sup>254</sup> and on coins of the same size (25–26 mm, 9–12 g) struck in Tium, a portrait of the emperor was placed, both in a laurel wreath and in a radiant crown.<sup>255</sup> Perhaps the *corona radialis* could have been a determinant of the individual denominations in Calchedon and Sinope,<sup>256</sup> however, the small number of coins from both cities does not allow this hypothesis to be verified with certainty. Occasionally the coins also reflected elements of clothing, as well as characteristic physiognomic features that could indicate the modelling of images on imperial issues. Only the four provincial centres of Amastris, Sinope, Amisus, and Byzantium could also issue pseudo-autonomous coins during this period.<sup>257</sup> These were single types with images of Dionysus, Helios (Amastris), and Diogenes, as well as Priapus (Sinope).<sup>258</sup> Some of the Amisus coins in Trajan's time did not depict a portrait of the emperor, but rather effigies of Nike, Dionysus, Aphrodite, and Athens, with a reference to the date of striking.<sup>259</sup>

The image of Plotina was found only on the Byzantium and Amastris issues.<sup>260</sup> Portraits of women appeared on the imperial coins c. 15 years later compared to portraits of men. A visible tradition, followed from the beginning, was to present the image as a bust, as opposed to largely reflecting the heads of men. A part of the dress was one of the indicators that made it easier to identify the characters.<sup>261</sup> Among the members of the imperial family from the reign of Trajan shown on imperial coins, one can highlight the emperor's wife, Pompeia Plotina, her sister Marciana, and her daughter Matidia. It was a common tradition to give women from imperial families models of virtues and values. We should remember that a woman could very often influence the ruler's decisions. The reflection of her character and ethos on the coins could be confirmation of a program of propaganda and the values it proclaimed. Plotina was accompanied by Vesta, Fides, or Pudicitia, identifying the empress with values such as care,

<sup>250</sup> Amit 1965; Bennett 1997 (2015): 84–85; Morawiecki 1994: 117–121.

<sup>251</sup> Cf. Tab. 2a, 2b, 3.

<sup>252</sup> Calchedon RPC III 1061; Byzantium RPC III 1072–1083A; Tium RPC III 1180; Sinope RPC III 1219.

<sup>253</sup> Amandry, Burnett *et al.* 2015: 843; Butcher 1988: 40–44.

<sup>254</sup> Byzantium RPC III 1071–1074 (26–30 mm, 10–15 g), RPC III 1077–1079 (24 mm, 7–9 g), RPC III 1080–1082 (18–21 mm, 5–7 g).

<sup>255</sup> Tium RPC III 1180–1182.

<sup>256</sup> Calchedon RPC III 1061 (23 mm, 7–8 g); Sinope RPC III 1219 (29 mm, 16–17 g).

<sup>257</sup> Due to the lack of a portrait of the emperor or dates, it is very difficult to determine the period when individual pseudo-autonomous coins were struck. In this case, other features of the coins, such as the style or iconographic types, are taken into account.

<sup>258</sup> Amastris: Dionysus RPC III 1209, Helios RPC III 1210; Sinope: Diogenes RPC III 1230.

<sup>259</sup> Amisus: Nike RPC III 1231–1233, Dionysus RPC III 1235, Aphrodite RPC III 1239, Athena RPC III 1297.

<sup>260</sup> Byzantium RPC III 1070; Amastris RPC III 1208.

<sup>261</sup> Woytek 2014: 57.

purity, and modesty.<sup>262</sup> The images of Marciana and Matidia alluded to ensuring the continuity of the Trajan dynastic succession. The ruler's sister was identified with Ceres and Junona, her daughter with Pietas.<sup>263</sup> Due to the small number of artefacts showing women from the Emperor's family, it can be assumed that they did not constitute a very important propaganda element.<sup>264</sup> The portrait of Trajan's wife began to appear on imperial coins after 112.<sup>265</sup> Only her image was on the provincial issues of Bithynia and Pontus, and only on the Byzantium and Amastris coins was she shown in a dress and with her hair in the form of a bun or a ponytail.<sup>266</sup>

On the reverse of the Apamean coins struck in the time of Trajan recorded so far there is an image of a standing Pax, holding an olive branch and a cornucopia, Fortune with a rudder and a cornucopia, and a man with a sword, standing on a ship's prow.<sup>267</sup> The accompanying legends referred to the title, consulate number, and the name of the colony. So far, the effigy of the goddess of peace appeared on the city's coins only during the reign of Trajan. The Pax cult spread under Augustus, after a turbulent period and a civil war at the end of the Republic (the so-called *Pax Romana*). This idea became one of the most important in the Empire, referring to the Romans as guarantors of stability and peace.<sup>268</sup> Historical sources gave praise, for example, of the troops that protected the civilised world and society at the borders of the Empire.<sup>269</sup> The attributes held, the olive branch and the cornucopia, symbolised peace, a better future and prosperity.<sup>270</sup> In the case of Apamea, perhaps the image could also correspond to the situation in the city in dispute with Prusa, as reported by Dio Chrysostom in his speeches.<sup>271</sup> The image of Pax in the time of Trajan was placed on imperial coins in several types. On the denarii struck in the period II (98–99), III (100) and IIII (101–102) of the consulate there was a similar image to the colonial issues, the goddess standing, holding an olive branch and a cornucopia, while on the sestertii and asses from these years there was a seated Pax with the same attributes.<sup>272</sup> In the effigies of V (103–111) and VI (112–117) of the consulate, additional elements appeared, complementing the given motif. On the denarii a figure was placed of a goddess, standing or sitting, sometimes leaning against a column, holding a short torch or holding an olive branch and a cornucopia. Moreover, on most of the issues there was also a Dacian captive. Similar images, in various variants, were reproduced on the asses, dupondii, and sestertii.<sup>273</sup> In the case of coins from the Domitian period, Pax only appeared on asses and sestertii from the time when the emperor was Caesar, co-ruling with Vespasian and Titus,<sup>274</sup> as well as on bronze coins struck at the imperial mint, probably in Thrace in the years 80–82.<sup>275</sup> The main type placed on the above issues was a standing goddess holding an olive branch and a cornucopia, in one case leaning against a column. Apamean coins with this design date back to the beginning of Trajan's reign.<sup>276</sup> Their image, probably due to the lack of an earlier effigy

<sup>262</sup> RIC II 730, 733, 740. Cf. Mikocki 1997: 199–201.

<sup>263</sup> Mikocki 1997: 125–126; Trajan RIC II 742, 759.

<sup>264</sup> Mikocki 1997: 85.

<sup>265</sup> Woytek 2010: 164–165; RIC II 725, 728–738.

<sup>266</sup> Byzantium RPC III 1070; Amastris RPC III 1208, SNG France 68.

<sup>267</sup> RPC III 1029–1031.

<sup>268</sup> Bloch 1997a: 921; Mikalson 1999: 513; Rose 1999: 1129; Simon 1986: 700; 1994: 204–205, 211–212; Stern 2015.

<sup>269</sup> Nollé 2003: 468.

<sup>270</sup> Bloch 1997a: 921; Mikalson 1999: 513; Rose 1999: 1129; Simon 1986: 700; 1994: 204–205, 211–212.

<sup>271</sup> Dio Chrys. Or. XL–XLI. Cf. Szarmach 1979: 78–79.

<sup>272</sup> Denarii: RIC II 5, 17, 29–30, 38, 56B; sestertii and asses: 390, 393, 401, 413, 432.

<sup>273</sup> Denarii: RIC II 102, 126, 187–190, 260; asses, dupondii and sestertii: 503–512, 575–576?

<sup>274</sup> Vespasianus RIC II 669, 924; Titus RIC II 294.

<sup>275</sup> RPC II 501, 504, 526, 530.

<sup>276</sup> Woytek suggests the later issue of coins (2011: 122–125).

on the issues of city,<sup>277</sup> could have been modelled from imperial coins from the beginning of the emperor's rule or from coins struck by the mint in Thrace, which, due to the repeated motifs on the issues of Bithynia and Pontus, also circulated in this region. Perhaps a certain clue enabling the identification of the prototype is the denomination on which the image was placed, struck in the city, which may indicate the sestertii from the imperial mint struck between 80–82.

The figure of Fortuna, like Pax, was placed in Trajan's time on larger denominations (30–32 mm, 21–22 g). This motif was found on the coins of Caligula and the Flavian dynasty with the image of Caesar, and then on the issues struck during the reign of Hadrian, Antoninus Pius, Maximinus Thrax, Philip Arab, Valerian, and Gallienus.<sup>278</sup> This, in turn, shows the popularity and importance of the effigy for the public at many times. Fortuna, identified with the Greek Tyche, was the goddess of happiness and prosperity, as well as the protector of cities. Hence, her images were quite a popular type placed on provincial issues. The first figurative effigies of the goddess come from the turn of the 5th and 4th centuries BC. Her cult developed more widely from the Hellenistic period, but it gained popularity, within the context of official propaganda, from the times of Augustus. The figure of Fortuna on Roman provincial coins usually held a rudder and a cornucopia. Attributes could relate to prosperity in relation to trade and shipping. Very characteristic also is the often seen 'crown of defensive walls' design (*corona muralis*). It should be emphasised that in imperial coinage, the goddess with the rudder and cornucopia referred to Fortuna Redux, who, in turn, was said to watch over safe returns from travel. In the times of Augustus Fortuna appealed to the ruler, who was to be the guarantor of the prosperity of the state, as well as dynastic succession. Thus, it became a very important part of the emperor's cult and the national identity of all social groups. The ideology of prosperity was also juxtaposed with other values, such as Concordia, Felicitas, Genius Militaris, Salus, Spes, and Victoria. The personification of Tyche/Fortuna for the provincial centres probably expressed very universal and fundamental values related to the successful functioning of the city and its inhabitants.<sup>279</sup> Dio Chrysostom also refers to Tyche in one of his speeches. He describes the goddess standing on the globe, holding the rudder, i.e. a guide for sailors and mankind through life, and the cornucopia, symbolising the offering or promise of rich bounty. Thus, it refers to the Roman effigies of the goddess rather than the Hellenistic one.<sup>280</sup> A similar image, however with a legend relating to Genius, appeared on the coins of Antoninus Pius.<sup>281</sup> Both motifs were related to each other, as success also resulted from peaceful times.<sup>282</sup> The cult of Fortuna/Tyche was both official and private. It was one of the most important and universal for all social groups, and is also reflected in many different sources. In the time of Trajan, the emperor himself dedicated one of the temples in Rome to Fortuna Omnium, the location of which is still unknown. The first January, when this event took place, was related to the celebration of her festival. Fortuna also accompanied the ruler

<sup>277</sup> Only a few issues from Apamea from the 1st and 2nd centuries have survived to our times. Perhaps future coin finds will verify this view.

<sup>278</sup> Caligula RPC I 2015; Flavian dynasty (pseudo-autonomous coins) RPC II 619A; Hadrian RPC III 1033; Antoninus Pius RPC IV.1. 4722; Maximinus Thrax RPC VI 3004; Philip the Arab RPC VIII ID 19770; Valerian Rec 110; Gallienus Rec 115–116.

<sup>279</sup> Arya 2002: 52–80, 260–262, 336–338; Johannsen 2002: 936–937; Purcell 1999: 606; Rausa 1997: 125–141; Robertson and Dietrich 1999: 1566; Ruhl 1916–1924: 1309, 1342–1345, 1370–1375; Ostrowski 2005: 131; Purcell 1999: 606; William 1997: 115–125.

<sup>280</sup> Dio Chrys. Or. 65. Cf. Arya 2002: 99–100; Jones 2012.

<sup>281</sup> RPC IV.1 4722 (temporary number).

<sup>282</sup> Simon 1994: 210.

on one of the panels of the arch in Benevento.<sup>283</sup> The figure of prosperity was placed on aurei from the beginning of Trajan's reign in the traditional type,<sup>284</sup> as well as on the aurei, denarii, asses and sestertii dated to the 5th and 6th consulates, with the goddess sitting on the most of the effigies.<sup>285</sup> During the reign of Domitian, the image of Fortuna was found mainly on asses and dupondii struck in 86, 88–89, 90–91, 92–94, 95–96, and on one issue of denarii from 82. On this basis it can be concluded that in Trajan's time Fortuna was one of the most important ideas. Perhaps due to the growing importance of the idea in Rome, the old tradition (the theme on the city's coins from the reign of Caligula), as well as popularity in the provinces, it was placed on the larger issues of Apamea.

During the Trajan period the image of a man standing at the prow of the ship, with an outstretched hand and a sword strapped to his side, probably also appeared on coins for the first time. The motif is also found on issues of similar size in the times of Antoninus Pius.<sup>286</sup> The man should probably be identified with the legendary founder of the city, Myrlos.<sup>287</sup> However, not much is known about the character himself. In Roman provinces, from the beginning of the 2nd century, references were made to the history of cities, mythical founders and important figures, hence the effigies of this type on coins.<sup>288</sup> Another image from the issue of Apamea, referring to a similar tradition, is the effigy of Aeneas with Ascanius and Anchises from the times of Hadrian.<sup>289</sup>

On the few issues of Apamea struck during the reign of Trajan images appeared on coins that related to the Roman tradition (as in the case of Pax), local history (presumably the effigy of Myrlos), and a motif important for both cultures (Fortuna/Tyche). The personification of Pax appeared on issues only during this period; Fortuna/Tyche appeared on coins in several periods; while Myrlos probably only appeared in the times of Trajan and Antoninus Pius. It is worth paying attention to the size of individual coins, suggesting also the possible significance of the motifs. On the largest denominations of the Roman colony there are types important for the Roman tradition, while on slightly smaller images they refer to the legendary founder of the centre. Unfortunately, only a few emissions of Apamea from Trajan's time have survived to our era, reflecting only a fragment of the reality of the former city.

Many different effigies were placed on Prusa coins minted during this period. On the largest denominations of the city (30–32 mm, 18–20 g) there is an image of Zeus sitting on the throne, holding a globe with Nike and a long sceptre (Zeus Nikephoros), with a legend indicating the cult of Olympian Zeus in the city.<sup>290</sup> The effigy was also reproduced in the times of Marcus Aurelius, probably on the same denomination, and a smaller one during the reigns of Elagabalus and Maximinus Thrax.<sup>291</sup> The figure of the god is also found on coins from the periods of Commodus and Alexander Severus, however, in a different iconographic type.<sup>292</sup>

<sup>283</sup> Arya 2002: 363.

<sup>284</sup> Aurei: RIC II 4, 14, 34.

<sup>285</sup> Denarii and aurei: RIC II 122, 177–178, 254, 308, 315–319; asses and sestertii: 500–502, 551–552, 628–629.

<sup>286</sup> RPC VI.1 4720 (temporary number).

<sup>287</sup> Plin. *HN* 5.40, 43; Smith 1854 (word: Apameia); Stoll 1894–1897: 3312; Woytek 2011: 128–129.

<sup>288</sup> Heuchert 2005: 51–52.

<sup>289</sup> RPC III 1032–1032A.

<sup>290</sup> RPC III 1035–1037.

<sup>291</sup> Marcus Aurelius RPC IV.1 10369 (temporary number). A figure sitting on a throne holding a long sceptre and patera (Zeus?): Elagabalus RPC VI 3022 (temporary number); Maximinus Thrax RPC VI 3052 (temporary number).

<sup>292</sup> Commodus RPC IV.1. 4797; Severus Alexander RPC VI 3026, 3028 (temporary numbers).

Zeus was the most important of the deities, the ‘father of men and gods’, ruling over heaven and earth. His first images date back to the 8th century BC. He was usually depicted as a bearded man holding a lightning bolt, a sceptre, and/or accompanied by an eagle.<sup>293</sup> One of the first portraits of the god with Nike appeared on the coins in the time of Alexander the Great.<sup>294</sup> Coins with his image are known, too, from Bithynia, struck in the times of Prusias I, Prusias II, and Nicomedes III.<sup>295</sup> Zeus was treated as the protector of cities, devoting at least one sanctuary to him.<sup>296</sup> It should be emphasised, however, that in the case of Prusa the cult of one of the most important gods was also associated with the foundation of the centre. Prusias I was hunting a boar, whose severed head was carried off by an eagle and dropped at the place where the city was ultimately built.<sup>297</sup> The cult of Zeus is also confirmed by other artefacts from Bithynia and Pontus, inter alia, epigraphic sources and sculptures.<sup>298</sup> It was also one of the most popular images on the coins, some of which included legends with various nicknames of the god, identifying the local cult. The popularity of the deity is evidenced by the wide variety of epithets that define Zeus. Mountain peaks were also a special place of worship.<sup>299</sup> This was probably the case of the nearby Mount Olympus, especially since there was a reference to Olympian Zeus in the coin legends. The name of the mountain referred to the Greek Mount Olympus, the seat of the gods. Other issues with the personification of the mountain can also testify to the peculiarity and importance of the place for the inhabitants of the city.<sup>300</sup> From the inscriptions developed so far, it is known that Zeus was also worshipped in Prusa with the nicknames Basilikos and Agathios. From the village of Çeltikçi (Orhangazi district, north of Bursa) there is an inscription dedicated to Olympian and Zeus Astrapaios and Demeter Karpophoros. In this case the cults referred to fertility.<sup>301</sup> In southern Bithynia, the cult of one of the most important gods was clearly very popular.<sup>302</sup> Moreover, one of the months in the Bithynian calendar, March, was dedicated to Zeus.<sup>303</sup>

On the same denomination there were effigies of a standing Demeter, with ears of corn and a long sceptre, and with the name of the city.<sup>304</sup> The image also appeared on the later issues in the times of Severus Alexander and Trajan Decius.<sup>305</sup> Her figure was placed on the coins of Bithynia already during the reign of Prusias I.<sup>306</sup> It was one of the most popular motifs on the coins of various cities of Bithynia and Pontus during the reign of Trajan.<sup>307</sup> Demeter was the goddess of agriculture and fertility. She was usually depicted with a sceptre, ears of

<sup>293</sup> Graf 1999d: 1636–1638; Henrichs and Bäßler 2002: 782–791; Tiverios *et al.* 1997: 310–312, 317, 339, 362–374; Vollkommer 1997: 384.

<sup>294</sup> Cf. Price 4–29, 36–39, 44, 48, 61, 71, 78–83.

<sup>295</sup> Rec Rois de Bithynie 9–15, 40.

<sup>296</sup> Graf 1999d: 1636–1638; Henrichs and Bäßler 2002: 782–791; Tiverios *et al.* 1997: 310–312, 317, 339, 362–374; Vollkommer 1997: 384.

<sup>297</sup> Nollé 2015: 2–3, 40–42.

<sup>298</sup> Öztürk, Aktaş and Demirhan-Öztürk 2020. The cult and various nicknames of Zeus were quoted when discussing the coins with the altar shrine and the legend ΔΙΟC.

<sup>299</sup> Tiverios *et al.* 1997: 310–312, 317, 339, 362–374; Vollkommer 1997: 384; Graf 1999d: 1636–1638; Henrichs and Bäßler 2002: 782–791.

<sup>300</sup> Marcus Aurelius RPC IV.1 4792; Commodus RPC IV.1. 4822; Pertinax Rec 64.

<sup>301</sup> Avcu, Doğan 2014: 86–87, no. 2.

<sup>302</sup> IPrusa, 1016; INicaea 1062. Cf. Öztürk, Aktaş and Demirhan-Öztürk 2020: 173–174; Boyana 2017: 160–161.

<sup>303</sup> Avram 1999: 29.

<sup>304</sup> RPC III 1038. In the catalogues the long sceptre is also referred to as a torch, however the first interpretation seems to be correct.

<sup>305</sup> Severus Alexander RPC VI 3033, 3038 (temporary number); Trajan Decius RPC IX 209.

<sup>306</sup> Rec Rois de Bithynie 27.

<sup>307</sup> Cf. Tab. 2a and 2b.

corn/poppy heads, serpent, patera/torches, and sometimes accompanied by Persephone or Triptolemus. Due to the importance and universality of the cult, the figure of Demeter was very easily recognisable. Probably some of its first images come from the 6th century BC. The cult related to the fertility of the earth was one of the most important in antiquity,<sup>308</sup> hence its emphasis, inter alia, on the coins of provincial centres, where it was relatively popular. Several inscriptions relating to Demeter are known from Nicomedia and Nicaea. At the same time, in Nicomedia her cult was of specific importance, linked to the history associated with the foundation of the city.<sup>309</sup> The name of the goddess with the epithet Karpophoros was also found on one of the above-mentioned inscriptions from Çeltikçi, north of ancient Prusa, along with Olympian and Zeus Astrapaïos.<sup>310</sup> In addition, Zeus Brontaios and Demeter were worshipped in the nearby Yalova region.<sup>311</sup> Also, one of the months in the Bithynian calendar, September, was dedicated to the goddess.<sup>312</sup>

On another issue of the same size is the personification of Mount Olympus lying among trees and holding a branch, the legend facilitating the correct identification of the image (ΟΛΥΜΠΟΣ ΠΡΟΥΧΑΕΩΝ).<sup>313</sup> The same image appeared on the coins struck in a smaller denomination (22–26 mm, 10–14 g) with the name of the city.<sup>314</sup> They were also duplicated on later, mostly similar in size, issues with portraits of Marcus Aurelius, Commodus, and Pertinax.<sup>315</sup> The mountain, located near Prusa, was overgrown with forests, the timber from which was used to build ships, etc. It is worth mentioning that there are other mountains in Greece and Asia Minor with the same name. In mythology, Olimpos was to be the husband of Cybele, the mother of Corybas, the founder of the cult of the ‘Great Mother’ (*Magna Mater*). He was also identified with the father of Cius, the legendary founder of the city located near Prusa. The effigy of the personification of Mount Olympus was an exclusively local theme. He also appeared on the issues of Caesarea Germanica, located near the city, struck in the time of Elagabalus.<sup>316</sup> Showing the Olimpos figure as a reclining, bearded man is a typical image of the presentation of mountains or rivers on coins and reliefs.<sup>317</sup> In the time of Trajan, Prusa competed with nearby Apamea, hence some researchers have hypothesised that the type referring to Mount Olympus was to remind the inhabitants of Apamea of their dependence on wood from Prusa.<sup>318</sup> It seems, however, that this type of motif highlighted instead local values, the interdependence of the location, and thus the development of economic life.<sup>319</sup> In addition, the name Olympus also referred to the city of Zeus with the nickname Olympian,

<sup>308</sup> de Angeli 1988: 892–908; Arias 1960: 62–63; Beschi 1988: 844–892; Graf and Ley 1997: 420–426; Richardson 1999: 447–448.

<sup>309</sup> TAM IV, 21, 53, 54; Domaszewski 1883: 174, no. 15. Cf. Boyana 2006; 2017: 162; Güney 2015d: 44–45; Nollé 2015: 36–37. See also chapter in this publication: coins without an ethnic or of uncertain attribution, the history of the city’s foundation quoted in the description of the group with the legend ΔΗΜΗΤΡΑ CEBACTH.

<sup>310</sup> Avcu and Doğan 2014: 86–87, no 2.

<sup>311</sup> INicaea II 1, 701.

<sup>312</sup> Avram 1999: 29; Russell 2017: 178.

<sup>313</sup> RPC III 1039.

<sup>314</sup> RPC III 1041–1044.

<sup>315</sup> Marcus Aurelius RPC IV.1 4792 (temporary number); Commodus RPC IV.1. 4822; Pertinax Rec 64.

<sup>316</sup> RPC VI 10901 (27 mm, 7–8 g) (temporary number).

<sup>317</sup> Kluczek 2009: 43–48; Ostrowski 1990.

<sup>318</sup> Dio Chrys. *Or.* XL–XLI; Theophr. *H. plant.* 4, 5; Strabon 10, 3, 14. Cf. Cook 1914: 100–102; Szarmach 1979: 78–79; Weis 1994: 45.

<sup>319</sup> See also Robert 1980: 103–104.

described above.<sup>320</sup> Thus, the motifs placed on the largest denominations refer to local cults and the fertility of the region.

Coins of the size of 22–26 mm, 10–14 g, did not only feature the figure of Olimpos. On the same denominations there was also a figure of a standing Athena, holding a spear and the hem of her robe, with a legend referring to the name of the city.<sup>321</sup> Her effigies also appeared on many coins struck in particular periods, with the same iconographic type being reproduced on the issues of Marcus Aurelius, Commodus, and Elagabalus. On later coins the goddess is depicted holding a spear and a patera, with a shield at her feet.<sup>322</sup> Athena was the goddess of wisdom, craftsmanship, and war, as well as the protector of the cities. Most often she was depicted as an armed woman wearing a helmet, holding a shield, a spear, and/or an owl. The earliest effigies come from the 7th century BC. The images of Athena were the most popular and characteristic in various provincial centres, inter alia on their coins.<sup>323</sup> Her cult came to Asia Minor with Greek settlers. The inhabitants of Heraclea Pontica named the nearby river after her nickname – Parthenos.<sup>324</sup> She represented some of the most desirable attributes, such as bravery and also victory. Athena was to replace another popular warrior goddess in Anatolia, the goddess Ma. However, just how important the cult of the goddess was in the religion practised by the local inhabitants cannot be determined. R. Parker believes that, despite the fact that various provincial cities reflected her on their coins, mainly in Lydia, Mysia, and Bithynia, her cult, apart from its general significance, was not especially widespread, judging by the absence of epigraphic sources. She could only be one part of the religious environment and a reflection of a popular tradition unconfirmed by local beliefs. Perhaps she played a role in more formal and official cults, known by name, iconographic type, and individual virtues.<sup>325</sup> Among other Prusian artefacts depicting a goddess, preserved to our times, there is a bronze bust, as well as fragments of sculptures. One of these represents the same type of image as shown on the coins.<sup>326</sup> Perhaps in the case of Prusa, Athena should be seen as the city's official guardian, especially since the Tyche motif appeared only on the coins from the times of Commodus.<sup>327</sup>

The figure of Aphrodite Anadyomene, i.e. emerging from the waves, also appears on coins sized at 22–24 mm, 8–10 g. She is seen holding her hair on both sides, with a hippocampus at her feet and a legend referring to the name of the city.<sup>328</sup> The effigy is also found on the coins of Geta.<sup>329</sup> Aphrodite was the goddess, above all, of love and fertility. She was also worshipped as the protector of virtues including consent and civic harmony, and the patron of sailors in port cities. She was very often shown with an apple, flowers, myrtle, conch shell, or a dove. The effigy of Aphrodite Anadyomene is probably an early theme that dates back at least to

<sup>320</sup> Cf. Cook 1914: 100–102.

<sup>321</sup> RPC III 1040–1040A.

<sup>322</sup> Marcus Aurelius RPC IV.1 4796 (temporary number); Commodus RPC IV.1 4797 (temporary number); Elagabalus RPC VI 3011–3012, 3014, 3019, 10819 (temporary number); Severus Alexander RPC VI 3037 (temporary number); Maximinus Thrax RP VI 3043, 3049, 3053–3054 (temporary number); Philip the Arab RPC VIII 19777–19778 (temporary number).

<sup>323</sup> Canciani 1984: 1074–1109; Demargne 1984: 955–1044; Graf and Ley 1997: 160–167; Towneley Parker 1999: 201–202.

<sup>324</sup> Braund 2018: 35–36; Robert 1980: 165–176.

<sup>325</sup> Parker 2016: 74, 76–77, 83.

<sup>326</sup> The bronze bust and fragments of sculptures are on display at Bursa's Archaeological Museum.

<sup>327</sup> RPC IV.1. 4820 (temporary number).

<sup>328</sup> RPC III 1045; de Franciscis 1958a: 115.

<sup>329</sup> Geta Rec 115.

the 5th century BC.<sup>330</sup> In northern Turkey a golden figurine of this type was discovered in the city of Sakarya.<sup>331</sup> The image of Aphrodite Anadyomene is also known from one of the columns currently located in the museum in Karadeniz Ereğli (former Heraclea Pontica),<sup>332</sup> and a terracotta figurine from Amisus.<sup>333</sup> A small terracotta fragment was also discovered during research at Tios.<sup>334</sup> Perhaps some terracotta figurines in the museum collection in Bursa (formerly Prusa) can be identified with this goddess. In the epigraphic sources dated so far from this region there is no reference to her cult,<sup>335</sup> however there are temples (or a temple) mentioned in various historical sources in the Bosphorus region.<sup>336</sup> The month of August was also dedicated to the goddess in the Bithynian calendar.<sup>337</sup> The image of Aphrodite in Trajan's time also appeared on Amisus coins, but in a different iconographic type (kneeling Aphrodite). It is not entirely certain whether the inhabitants of Prusa worshipped Aphrodite, because of her image as the patroness of the sea. It is true that the centre was not far from the coast, but it was not a port city. However it is worth noting that on the larger denominations there are motifs relating to the location, natural values, and fertility, which could underscore a certain economic character that may have allowed for its development. The figure of Aphrodite, therefore, could emphasise the city's location and commercial opportunities, while she could be also be worshipped as a goddess of fertility, or within private cults.

On the coins corresponding to the size of the assarion there was an effigy of a walking Artemis, with torches in both hands (Artemis Phosphoros), with a legend referring to the name of the city.<sup>338</sup> It was reproduced on later, mostly smaller, issues.<sup>339</sup> The image of the goddess was also placed on the coins of Nicomedes I.<sup>340</sup> Artemis, Apollo's sister, was the goddess of hunting, forests and animals, and also of a chthonic character. She was a carer for women, especially pregnant women. She was very often depicted with a bow and arrows, sometimes with torches, accompanied by a deer. Some of the earliest images of a goddess holding torches come from the 6th century BC. A figure of Artemis was placed, inter alia, in the wedding parades and associated with the cult of fertility. It was one of the most popular and characteristic images of the goddess. She was also identified with Hecate, so that both iconographic types (i.e. goddess holding torches) were similar to each other. Hecate was a goddess of magic and witchcraft, associated with many spheres of life, in this case also with the birth and initiation of girls, or treated as a guardian deity. According to beliefs, she could influence individual events.<sup>341</sup> The cult of Artemis was popular both in Anatolia and in many centres in the Black Sea basin, mainly in the west and north.<sup>342</sup> In Bithynia, one of the months on the local calendar, April,

<sup>330</sup> Delivorrias, Berger-Doer and Kossatz-Deissmann 1984: 2, 54–57; de Franciscis 1958a: 115; Jentel 1984: 154; Pirenne-Delforge and Ley 1996: 838–844; Pirenne-Delforge and Motte 1999: 120.

<sup>331</sup> Kocaeli Museum (ed.) 2012: 19.

<sup>332</sup> Öztürk 2016b: 90, fig. 13.

<sup>333</sup> Mentessidou 2011: 17; Summerer 1999: 153.

<sup>334</sup> Öztürk 2012: ArkBulRes1.

<sup>335</sup> Boyana 2017: 162.

<sup>336</sup> Arr. *Peripl. M. Eux.* 12.3; Dion. Byz. 8–9. Cf. Lordoğlu 2019: 172, 174.

<sup>337</sup> Avram 1999: 29.

<sup>338</sup> RPC III 1046–1047.

<sup>339</sup> Marcus Aurelius RPC IV.1 11143, 9882 (temporary number); Commodus RPC IV.1 4799, 8455 (temporary numbers); Geta Rec 109; Gordian III RPC VII.2 ID 19773.

<sup>340</sup> Rec Rois de Bithynie 1–2, 4.

<sup>341</sup> Fleischer 1984: 618–619, 682–683, 744; Graf and Ley 1997: 53–59; Johnston 1998: 267–270; Simon and Bauchhens 1984b: 792; Sourvinou-Inwood 1999: 182–184.

<sup>342</sup> Braund 2018; Guldager Bilde 2009; Ostrowski 2005: 128.

was dedicated to Artemis.<sup>343</sup> In the case of Prusa, the deity may have been popular because of the forests surrounding the city near Mount Olympus.

On the smallest denominations, 15–16 mm, 3–4 g, there were two motifs, an image of an eagle, sometimes holding a wreath in its beak, and a temple, with the abbreviated name of the city – ΠΡΟΥΣΑ or ΠΡΟΥΣΑΕ.<sup>344</sup> Probably the first of these effigies appeared on the same denomination in the times of Nero, Commodus, Severus Alexander, Geta, and Maximinus Thrax.<sup>345</sup> The second theme also appeared on later coins, however, the building was not of the same type: the temple shown at that time was a hexastyle.<sup>346</sup> The eagle motif on the coins referred to the cult of Zeus as well as the centre's foundation. The eagle was meant to indicate the future siting of the city. The effigy referred to Zeus and emphasised the protection of the deity, who ensured prosperity and the long life of the city.<sup>347</sup> In turn, the motif of a round temple with two columns and a domed roof probably referred to a local, well-known building. Inside the temple, an object or symbol was placed between the columns, probably to represent the deity or the person to whom the structure was dedicated. Perhaps a given element should be seen as a bust, but due to the size of the coin it is very difficult, at least nowadays, to recognise it. The effigy of this type occurs only during the reign of Trajan. Due to the placement of the temple on coins, it must have been very popular and perhaps significant to the inhabitants, especially in these times.

Several types of motifs were presented on the Prusa issues in the Trajan period, referring to important local cults related to the foundation (Zeus, eagle) or the location near Mount Olympus and the sea (Zeus, Olimpos, Demeter, Artemis, Aphrodite (?), thus underlining the values of the environment that could have influenced the city's development, especially during this time. It should be recalled that so far only a few coins from Nero's times have been identified from earlier periods, hence it is not known whether a monetary system such as this was introduced earlier or under Trajan. Some of the motifs could refer to less official and private cults, such as in the case of Demeter, Artemis, or Aphrodite. The figure of Athena seems to be a more formal, well-known and popular cult, in this case perhaps referring to the deity as the patron of the city. The effigy of the temple must once have been easily recognisable to local people, and more significant, especially in this period. Unfortunately, its correct identification may remain unknown. It is also worth emphasising the size of the coins and the motifs placed on them. The cult of Zeus must have been one of the most important for the inhabitants since it appeared on several issues. Perhaps the single motifs recorded so far on units with a size corresponding to one and two assarion could be a distinguishing feature of very similar denominations.

On one of the emissions with the name Nicaea recorded so far there is a figure of Ares walking, holding a spear and a trophaion.<sup>348</sup> This type of effigy is known, *inter alia*, from imperial issues

<sup>343</sup> Avram 1999: 29; Russell 2017: 178.

<sup>344</sup> RPC III 1048–1049.

<sup>345</sup> Nero RPC I 2019; Commodus RPC IV.1 4827, 11785, 11796 (temporary number); Geta Rec 114, 117; Severus Alexander RPC VI 3035 (temporary number); Maximinus Thrax RPC VI .

<sup>346</sup> Marcus Aurelius RPC IV.1 4830, 4833, 5675, 8452 (temporary numbers); Commodus RPC IV.1 4834, 5673, 5674, 8444, 8454, 9886, 10488 (temporary numbers); Elagabalus RPC VI 3013, 3018, 3020, 10894 (temporary number); Severus Alexander RPC VI 3034 (temporary number); Maximinus Thrax RPC VI 3056 (temporary number); Philip the Arab RPC VIII ID 19786.

<sup>347</sup> Nollé 2015: 2–3, 40–42; 2020.

<sup>348</sup> RPC III 1059.

minted in Rome, as well as coins struck in the mint, probably located in Thrace, which issued coins between 80–82. They were also reproduced on Nicaean coins during the reign of Domitian.<sup>349</sup> The figure of Ares was placed on the issues struck in this mint in the times of Caracalla and Maximinus Thrax, but in a different iconographic type.<sup>350</sup> His bust could also be seen on the emissions of Nicomedes I,<sup>351</sup> as well as on the coins of Mithridates VI.<sup>352</sup> Ares was a god of war, usually portrayed as a strong, armed man. His first effigies date back to the 6th century BC.<sup>353</sup> Due to the small number of images of the deity on the coins, as well as the iconographic type, it seems that he was not very significant in the everyday lives of the local society. In both the Domitian and Trajan periods, the effigies were based mainly on imperial coins of a similar size. No epigraphic sources referring to his worship are known from the areas of Bithynia and Pontus,<sup>354</sup> although one of the months, July, was dedicated to Ares.<sup>355</sup> It is known, however, that the deity was worshipped on the Pontic shores with Perseus, referring to royal propaganda during the Hellenistic period. Terracotta figurines with his depiction are also known. His cult is attested in Cappadocia as well, in the mysteries in honour of Mithra, although sometimes both deities were combined with each other.<sup>356</sup> Perhaps, along with other iconographic types that were then reflected, it was supposed to bring the inhabitants of individual cities closer to Roman culture. After all, the cult of the god of war was much more important and popular to Roman than Greek society; it was spread by the Roman army in the provinces. It is worth remembering that troops to the East, or those returning from the campaigns, passed through Bithynia. Ares was also worshipped, mainly in neighbouring Thrace.<sup>357</sup>

Some coins without the ethnic were probably also issued in Nicaea during this period. For this reason, the iconography of this type of issue is discussed at the end of this chapter.

The images of the Calchedon coins from the Trajan period registered so far refer to the popular local cult of Apollo. His temple and oracle were in the city.<sup>358</sup> On the emissions corresponding to the size of the assarion was a tripod, which was one of the typical images shown on Calchedon coins during the Roman period.<sup>359</sup> On larger denominations (22–24 mm, 6–8 g) there is a figure of Apollo on a swan, holding a lyre.<sup>360</sup> This motif also appeared on later issues, sometimes larger in nominal terms.<sup>361</sup> The local cult was featured on many Hellenistic and Roman coins struck in Calchedon.<sup>362</sup> His figure was also found on the coins minted in the city in the 5th

<sup>349</sup> Domitian RPC II 632.

<sup>350</sup> Caracalla Rec 412–413; Maximinus Thrax RPC VI 3267 (temporary number).

<sup>351</sup> Rec Rois de Bithynie 3–4.

<sup>352</sup> SNG BM Black Sea 1158–1159.

<sup>353</sup> Augé 1984: 493, 497; Bruneau 1984: 479; Graf 1999b: 152; Orlandini 1958: 603, 607; Schachter and Ley 1996: 1047–1050; Simon and Bauchhenss 1984a: 505–507.

<sup>354</sup> Boyana 2017: 161.

<sup>355</sup> Avram 1999: 29.

<sup>356</sup> Saprykin 2009: 265.

<sup>357</sup> Augé 1984: 493, 497; Bruneau 1984: 479; Graf 1999b: 152; Orlandini 1958: 603, 607; Schachter and Ley 1996: 1047–1050; Simon and Bauchhenss 1984a: 505–507.

<sup>358</sup> Dion. Byz. 111; Luc. Alex. 10; Strab. 12.3.7; 12.4.2. Cf. Lordoğlu 2019: 179, 182–183; Türkoğlu 2014: 597–598.

<sup>359</sup> RPC I 1783, 1785; Tiberius RPC I 1786; Hadrian RPC III 1064; Marcus Aurelius RPC IV.1 3774, 4750, 4754 (temporary numbers); Elagabalus RPC VI 3501, 3503, 3505, 3512 (temporary numbers); Severus Alexander RPC VI 3516 (temporary number); Gordian III RPC VII.2 ID 19663, 19670. Cf. Türkoğlu 2014: 597, Tab. 1.

<sup>360</sup> RPC III 1060–1061.

<sup>361</sup> Marcus Aurelius RPC IV.1 4747, 4753 (temporary number); Elagabalus RPC VI 3507, 3509 (temporary numbers); Severus Alexander RPC VI 3519 (temporary number); Gordian III RPC VII.2 ID 19665. Cf. Türkoğlu 2014: 597, Tab. 1.

<sup>362</sup> Amandry, Burnett *et al.* 1992: 323; 2015: 129–130; electronic database Roman Provincial Coinage (<https://rpc>).

and 3rd centuries BC, and then on royal issues from the reigns of Nicomedes I, Prusias I, and Prusias II.<sup>363</sup> Apollo, brother of Artemis and father of Asclepius, was a god and patron of, inter alia, medicine, divination, poetry, and music. His first images appeared in the 7th century BC. In art, he was depicted as a young man, sometimes with a bow or lyre; often depicted with Artemis, Leto, Dionysus, Hermes, and Athena, and less often with Poseidon. Images of Apollo with a swan appeared, inter alia, on Attic ceramics, gems, and seals. A motif of this type was also shown on the Cyzicus staters struck between 400 and 350 BC.<sup>364</sup>

The coins from Byzantium were minted during the times of the magistrates of Trajan and Nike. The individual images were reproduced in both periods on the coins of similar sizes. On the reverse of the denominations sized at 29–31 mm, 12–17 g there is a bi-conical object, sometimes shown with ribbons.<sup>365</sup> Coins of the same size with this motif were minted in the times of Hadrian, Antoninus Pius, and Marcus Aurelius.<sup>366</sup> Originally, the effigy appeared on smaller issues under Tiberius, while two such objects were placed on the coins in the 1st century and during the reign of Marcus Aurelius.<sup>367</sup> So far, several interpretations of the object have appeared, i.e. a torch, referring to the cult of Artemis/Hekate Phosphoros ('light-bearing'),<sup>368</sup> a fish trap,<sup>369</sup> or a buoy for attaching to large fishing nets.<sup>370</sup> Some of the symbols would then refer to the economy of Byzantium in relation to its location.<sup>371</sup> However if the item on the coins is a torch, then it could be associated with the centre surviving the siege of Philip II in 339 BC, when Hecate was thought to have illuminated the night sky, revealing the invaders intending to take the city during the night. Hesychius mentions that a statue was also to be erected in honour of the goddess (λαμπαδηφόρον Ἐκάτης).<sup>372</sup> The importance of this for the local society can also be confirmed by the torchlight races that took place in the region.<sup>373</sup> Perhaps the image of a torch with ribbons could suggest a prize won at these races. Due to the similarity of Hecate and Artemis, an association with the other goddess also comes to mind.<sup>374</sup> Artemis Orthosia, popular among the colonists of Megara, was worshipped in Byzantium. Artemis, nicknamed Soter, was said to have saved Megara from the Persians by turning day into night. Probably Artemis Orthosia should also be associated with the protection of defensive walls. Thus, both goddesses should be associated primarily with the divine protection of the city.<sup>375</sup> In addition, the torch motif, or the epithet of the goddess referencing light-bearing (Phosphoros), might have a broader meaning related to lighthouses and the care generally of sailors passing through the straits.<sup>376</sup>

ashmus.ox.ac.uk/). Accessed: 13.06.2020; Waddington, Reinach and Babelon 1904–1912: 288–308.

<sup>363</sup> Rec Rois de Bithynie 5–7, 16–19; Rec Calchedon 5–6, 28, 31, 33–44.

<sup>364</sup> de Franciscis 1958b: 463–464; Graf 1999a: 122–123; Graf and Ley 1996: 863–870; Lambrinudakis *et al.* 1984: 183, 227–228.

<sup>365</sup> RPC III 1067, 1071–1072.

<sup>366</sup> Hadrian RPC III 1084–1085; Antoninus Pius RPC IV.1 8677 (temporary numbers); Marcus Aurelius RPC IV.1 3905, 8688–8693, 8712 (temporary numbers).

<sup>367</sup> 1st century: RPC I 1776; Tiberius RPC I 1779A; Marcus Aurelius RPC IV.1 3905, 8688–8693, 8712 (temporary numbers).

<sup>368</sup> Schönert-Geiss 1972: 36. Cf. Russell 2017: 135.

<sup>369</sup> BMC Thrace 65, 80–82.

<sup>370</sup> Tekin 1994: 478. Cf. Russell 2017: 135.

<sup>371</sup> Russell 2017: 135, footnote 13.

<sup>372</sup> Hesychius *FGrHist* 390 F 1.27; Russell 2017: 184–185.

<sup>373</sup> IByz 11; IByz: 40; Russell 2017: 181–183, 185.

<sup>374</sup> In turn, Artemis in Thrace was also worshipped under the name Bendis (Russell 2017: 185).

<sup>375</sup> Russell 2017: 185.

<sup>376</sup> Dion. Byz. 78; Russell 2017: 186.

A Corinthian helmet appears on the smaller coins (25–29 mm, 8–13 g).<sup>377</sup> This motif was placed on the issues in different periods, initially on the coins of Caligula, while on similar denominations in the times of Hadrian and Antoninus Pius.<sup>378</sup> The helmet could in this case refer to the cult of Athena. In Byzantium there was a sanctuary of Athena Ecbasia, whose nickname means ‘making landfall’. It probably refers to the symbolic place where the colonists of Megara stayed and then founded the city. This type of nickname also appeared in reference to the expedition of the Argonauts, who, while staying in Moesia, sacrificed to Apollo. Dionysus, in his work, related the legendary expedition with the founders of the centre.<sup>379</sup>

The prow of a ship appears on the city’s coins sized at 20–23 mm, 5–9 g<sup>380</sup> many times.<sup>381</sup> It probably alluded to its importance as a port city, and thus to the maritime symbolism and the cult of Poseidon.<sup>382</sup>

In addition, coins with the portrait of Plotina also originate from the times of Trajan’s magistracy. An effigy of a dolphin between two tuna is depicted on denominations of size 25–27 mm, 8–12 g.<sup>383</sup> It was the first motif of this type to be reproduced on the issues of the same size with the bust of Faustina the Younger, Lucilla, and Crispina. It was also placed on the coins of Gordian III and Trebonianus Gallus.<sup>384</sup> E. Schönert-Geiss combined the importance of the image with the local economy. It seems probable that tuna fishing was one of the most important sources of income for the inhabitants of the city. The symbolism of the sea, and perhaps a reference to the cult of Poseidon, could additionally be underscored by the dolphin.<sup>385</sup> It is also worth noting that the latter motif appeared on some of the first issues from the beginning of the 5th and 4th centuries. Coins with the image of an ox and a dolphin might refer to the agricultural and maritime economy of the centre, as well, possibly, to mythical characters and deities, e.g. the nymph Io and Poseidon.<sup>386</sup> In turn, V. Stolba sees religious significance in the image. The fish could refer to the Syrian goddess Atargatis, also interpreted in the Greek world as the Syrian Aphrodite. Her cult is attested in epigraphic sources from the Black Sea coast, mainly from Berezan, Olbia, and Bizone.<sup>387</sup> However, just how much a particular motif can be associated with the cult meaning is not entirely certain, however, such effigies for people unrelated to a religion might evoke associations with Poseidon. It is worth noting that it was one of the most popular and universal images on the coins of other coastal towns in various periods, e.g. Cyzicus, Karkinitis, Chersonesus, Panticapaeum, Sinope, and Heraclea.<sup>388</sup>

<sup>377</sup> RPC III 1068, 1073–1074.

<sup>378</sup> Caligula RPC I 1781A; Hadrian RPC III 1086–1086A; Antoninus Pius RPC IV.1 8678–8679 (temporary number); Marcus Aurelius RPC IV.1 3771, 8710–8711, 8713 (temporary numbers).

<sup>379</sup> Dion. Byz. 8; Russell 2017: 40.

<sup>380</sup> RPC III 1069, 1077–1079.

<sup>381</sup> Caligula RPC I 1781; Nero RPC I 1782A; Hadrian RPC III 1088; Antoninus Pius RPC IV.1 8680–8686 (temporary numbers); Marcus Aurelius RPC IV.1 8707–8709, 8718–8731 (temporary numbers).

<sup>382</sup> Russell 1990: 135; Schönert-Geiss 1972: 33.

<sup>383</sup> RPC III 1070.

<sup>384</sup> Marcus Aurelius RPC IV.1 3907, 8694, 8698, 8703–8704, 8706, 8715–8717 (temporary numbers); Gordian III VII.2 ID 49002; Trebonianus Gallus RPC IX 172.

<sup>385</sup> Aten.4.132e; Russell 2017: 135; Schönert-Geiss 1972: 34; Stevenson, Smith and Madden 1889; Stolba 2005: 126.

<sup>386</sup> Russell 2017: 135–136; Schönert 1966; Schönert-Geiss 1970: 83, 126.

<sup>387</sup> Parker 2017: 164; Stolba 2005: 126–127.

<sup>388</sup> Russell 2017: 137; Stolba 2005.

During the period of the Nike magistracy, on the coins of 24–28 mm, 8–10 g (the same denomination as that of the helmet motif) the motif of two tuna appears.<sup>389</sup> On the denominations of 20–22 mm, 4–7 g we find a star and crescent, a dolphin and trident, as well as grapes.<sup>390</sup> The two tuna design features on coins from the times of Caligula, Hadrian, and Antoninus Pius.<sup>391</sup> The star and crescent type was placed on the small Byzantium coins during the reigns of Tiberius and Vespasian, as well as on pseudo-autonomous coins.<sup>392</sup> It is also found on similar, smaller denominations from the time of Trajan.<sup>393</sup> It was a symbol of the aforementioned Hecate and the repelling of the attack made by Philip of Macedon in 339 BC. Thus, it became one of the traditional images placed on the city's coins from the Hellenistic period.<sup>394</sup> It is worth noting, however, that during the Roman period this effigy was usually stamped on coins perhaps corresponding to the half assarion. Placing the type on a slightly larger denomination might probably indicate a deliberate action due to the popularity of images relating to a city's history and the important events occurring at the beginning of the 2nd century. Perhaps this is also the way to look at the images seen on the largest emissions, the possible torch for example.<sup>395</sup> The motif of a dolphin and a trident features on coins of the 1st century, and pseudo-autonomous issues dated to the 2nd century.<sup>396</sup> In this case, both attributes referred to the cult of Poseidon.<sup>397</sup> The grape motif was also found on a similar denomination of pseudo-autonomous coins that are dated to the 2nd century and the times of Gordian III.<sup>398</sup> The image is associated with the cult of Dionysus, also celebrated in the city.<sup>399</sup> Moreover, it can also be treated as a symbol of fertility.

On the smallest coins of the city in this period (14–19 mm, 3–6 g) there was a winged caduceus, as well as the above-mentioned star and crescent motif.<sup>400</sup> The effigy of the caduceus was also found on pseudo-autonomous coins of the same size.<sup>401</sup> The caduceus was a symbol of Hermes, messenger of the gods, protector of travellers and merchants, prosperity, and fertility. His figurines were sometimes treated as talismans, bringing good fortune and happiness. He was often shown with a caduceus or in a petasos.<sup>402</sup> The caduceus was also a symbol of peace and concord, given to the deity by Apollo in exchange for a lyre.<sup>403</sup> The cult of Hermes may have been related to the location and/or the economic and commercial prosperity of the city. Moreover, based on epigraphic sources, it is known that torch races devoted to Hermes and Heracles took place in the region.<sup>404</sup>

With Byzantium coins from the times of Trajan can be seen a unified monetary system, both in terms of the minted denominations and the images placed on them. The origins of individual

<sup>389</sup> RPC III 1076.

<sup>390</sup> RPC III 1180–1182.

<sup>391</sup> Caligula RPC I 1780; Hadrian RPC III 1087; Antoninus Pius RPC IV.1 8695–8696 (temporary numbers).

<sup>392</sup> Tiberius RPC I 1778A; Vespasianus RPC II 367–369; pseudo-autonomous coins RPC IV.1 3908 (temporary number).

<sup>393</sup> RPC III 1183A.

<sup>394</sup> Graham and Mitchell 1999a: 266; Johnston 1998: 267–270; Russell 2017: 185.

<sup>395</sup> Cf. Heuchert 2005: 51–52.

<sup>396</sup> 1st century: RPC I 1771; pseudo-autonomous coins RPC IV.1 3911 (temporary number).

<sup>397</sup> Stevenson, Smith and Madden 1889.

<sup>398</sup> Pseudo-autonomous coins RPC IV.1 10363–10364 (temporary numbers); Gordian III RPC VII.2 ID 49001.

<sup>399</sup> Hdt. 4.87.2; Dion. Byz. 8–9. Cf. Lordoğlu 2019: 172, 174; Russell 2017: 40; Yavuz 2014: 52–59.

<sup>400</sup> RPC III 1183–1183A.

<sup>401</sup> RPC IV.1 1932 (temporary number).

<sup>402</sup> Baudy and Ley 1998: 426–432; Jost 1999: 690–691; Sichtermann 1961: 2–4; Siebert 1990.

<sup>403</sup> Stevenson, Smith and Madden 1889.

<sup>404</sup> IByz 11; IByz: 40; Russell 2017: 181–183, 185.

motifs and the values of coins can be traced back to earlier times, however, under Trajan it has already been standardised; they were also reproduced in subsequent periods. Some of the images, due to their placement on issues with specific values, were a very easy and convenient indicator of the nominal value, functioning for a long time. Individual motifs can be classified, according to their possible meaning and message, into those types relating to local cults, history, economy, and, perhaps, even cultural events, i.e. races. It seems that some of the motifs could also have had additional meanings. i.e. an inhabitant of Byzantium, looking at a given type, the torches or tuna for example, could associate the effigy with a cult, location, even sporting events. It is also worth paying attention to the size of individual issues with images, perhaps suggesting the importance of the type or the increase in importance of a certain motif due to the popularity of the city's important events and historical figures in the early 2nd century.

On Nicomedia coins (23–25 mm, 7–9 g) there was a bust of Tyche with a *corona muralis*, as well as a legend referring to the status of the city as a metropolis and the first city in the province.<sup>405</sup> The bust of Tyche appeared on issues similar in size, struck in the times of Claudius, Vespasian, Domitian, Marcus Aurelius, and Commodus.<sup>406</sup> As mentioned earlier, Tyche was the goddess of happiness and prosperity, as well as being city protector overall. Each centre had its own Tyche: her meaning referred to the very universal and general value of welfare, important to every social group.<sup>407</sup> She was usually shown wearing a crown representing defensive walls, holding a rudder and a cornucopia, sometimes also with Pluto in her arms. This type of image, from the 1st century, was discovered in Konuralp (formerly Prusias), where her temple was presumably located.<sup>408</sup> Other representations of the goddess are housed in the museums of Samsun (the former Amisus) and Sinope.<sup>409</sup> Dedications in honour of the goddess were posted on one of the altars in Günüören (Osmaneli district) by T. Marcus Gamus.<sup>410</sup> Many inscriptions (i.e. honouring, dedicating, votive, and milestone) included the salutation Ἀγαθῆ Τύχη (or *Bona Fortuna*), requesting prosperity and good fortune; it was one of the standard and popular greetings. Inscriptions of this type from Roman times are recorded in many areas of northern Turkey, e.g. Samsun, Çankırı, Nallıhan, Çayırhan, Sakari, Iznik, Pronnoeitai, and Karadeniz Ereğli.<sup>411</sup> The image of Tyche on coins referred to the successful functioning of the centre. The image, which included the name and status of the town, was placed on the coins of various sizes in the times of Tiberius, Claudius, Vespasian, Domitian, Antoninus Pius, Caracalla, Maximinus Thrax, Trajan Decius, Trebonianus Gallus, and Volusian.<sup>412</sup> It reminded the residents of the city's special status. Its significance for the Nicomedans is probably reflected in the city's rivalry with the Nicaeans, as well as in their prohibition on their use of the port.<sup>413</sup> On some

<sup>405</sup> RPC III 1089–1090.

<sup>406</sup> Claudius RPC I 2069–2072; Vespasianus RPC II 651, 652A; Domitian RPC II 658, 658B; Marcus Aurelius RPC IV.1 5609, 5657, 5666, 10491, 11819 (temporary numbers); Commodus RPC IV.1 6111, 7982 (temporary numbers).

<sup>407</sup> Arya 2002: 55–57, 72; Johanness 2002: 936–937; Purcell 1999: 606; Ostrowski 2005: 131; Rausa 1997: 125–141; Robertson and Dietrich 1999: 1566; Ruhl 1916–1924: 1309, 1342–1345, 1370–1375; William 1997: 115–125.

<sup>408</sup> Kocaeli Museum (ed.) 2012: 17.

<sup>409</sup> Öztürk 2010: 45.

<sup>410</sup> INicaea 1142.

<sup>411</sup> Samsun: Marek 1985: 184; Çankırı: Umar 2007: 23 (fig. 8); Nallıhan: Onur 2020; Çayırhan: Onur 2014: 76–78; Sakarya: Akyürek Şahin 2014: 132–133; Pronnoeitai and Iznik: Öztürk, Aktaş and Demirhan-Öztürk 2020: 172–186; Karauğuz 2007: fig. 12. Cf. Arya 2002: 55–56, 72.

<sup>412</sup> Tiberius RPC I 2064; Claudius RPC I 2076, 2079–2082; Vespasianus RPC II 648, 652; Domitian RPC II 661; Antoninus Pius RPC IV.1 7980 (temporary number); Caracalla Rec 250; Maximinus Thrax RPC VI 3452, 3487 (temporary numbers); Trajan Decius RPC IX 345–346; Trebonianus Gallus RPC IX 365; Volusianus Rec 403.

<sup>413</sup> It should be emphasised, however, that we do not know what the main reasons for the disputes were, but peace was more favourable for both centres. Dio Chrys. *Or.* XXXVIII, 30. Cf. Szarmach 1979: 76.

smaller denominations (16–18 mm, 2–4 g) there is a cornucopia with a legend emphasising its primacy among the cities of Bithynia.<sup>414</sup> This type of motif appeared on earlier issues, struck in the times of Prusias I and Prusias II, and then for Nicomedes II, Nicomedes III, and Nicomedes IV.<sup>415</sup> The cornucopia appeared on the city's coins during the Roman period only under Trajan, referring to the rather general idea of fertility and prosperity.

So far, only a few emissions struck in Nicomedia during the time of Trajan have been recorded. The images placed on them refer to fairly general values and cults, primarily to Tyche, the guardian of the city, and the harvest, symbolised by the cornucopia. The position of the town was also underscored on the coins. All the motifs referred to successful functioning and prosperity, thus assuring Nicomedian citizens of security and stability. Thus the Tyche motif appeared on issues of similar size in particular periods, which might indicate a certain constant tradition for these types and denominations.

On Iuliopolis coins (32–35 mm, 23–27 g) there are representations of a walking Ares holding a tropaion, a spear, and the name of the city, as well as one of a standing Eirene with a branch and a cornucopia; the legend reads OMONOIA ΣΕΒΑΣΤΗ, ΙΟΥ-ΛΙΟΠ.<sup>416</sup> Both motifs appeared on the coins only in this period. The same type of depiction of the god of war was also found on coins from Nicaea, Prusias, and Amastris; the Eirene appears on the Apamea and Prusias coins, and those without an ethnic, struck during the reign of Trajan.<sup>417</sup> Both images were placed on the coins of similar sizes. Eirene was the Greek equivalent of the Roman personification of peace, Pax. As mentioned above, she was shown especially with an olive branch and cornucopia, alluding to prosperity and future happiness. Occasionally Eirene is also seen holding a miniature Pluto, referring to wealth. The goddess was also sometimes identified with Tyche and Demeter. Her image in this period should probably be associated primarily with the Roman tradition, and thus the political overtones, referring to the idea of *Pax Romana* and the Romans as guarantors of security.<sup>418</sup> Moreover, the notion of peace is referred to in the speeches of Dio Chrysostom, who exhorts the Nicaeans and Nicomedians to stop their quarrels as consensus will bring more benefits to both, and strengthen the political position of the cities in Bithynia. Disputes could be manipulated by the Roman authorities through promises and empty titles, as well as by criminals.<sup>419</sup> Thus, the aforementioned coin images may have been issued in an attempt to take the heat out of the quarrels between the citizens of Bithynia and Pontus.

On the denominations sized at 21–26 mm, 10–14 g, a standing Demeter was depicted with ears of corn and a long spear, and with a legend referring to the name of city.<sup>420</sup> During this period the image also appeared on issues of similar size without an ethnic, probably struck in Prusias and Nicaea. Demeter also appears on the coins of Geta.<sup>421</sup> As with the previously discussed city motifs, it was one of the types placed on dupondii and asses, minted by the imperial

<sup>414</sup> RPC III 1091–1092.

<sup>415</sup> Rec Rois de Bithynie 22–24, 27, 41.

<sup>416</sup> RPC III 1098–1099.

<sup>417</sup> Cf. Devecioğlu 2014: 222.

<sup>418</sup> Bloch 1997a: 921; Mikalson 1999: 513; Rose 1999: 1129; Simon 1986: 700; 1994: 204–205, 211–212; Stern 2015.

<sup>419</sup> Dio Chrys. Or. XXXVIII. Cf. Bennett 1997 (2015): 199–202; Jones 2012; Szarmach 1979: 76.

<sup>420</sup> RPC III 1100.

<sup>421</sup> Rec 28. Cf. Devecioğlu 2014: 222; 2016.

mint, probably in the territory of Thrace, within the period 80–82.<sup>422</sup> Thus, due to the small number of representations of the goddess on coins, her meaning should be associated in this case with the Roman tradition. Among the other sources that might indicate a local cult is one of the city's inscriptions referring to Dionysus Kallikarpos ('bearing good fruit'), sometimes worshipped with Demeter Karpophoros ('bearing fruit'), known mainly from sources from Cilicia and Isauria.<sup>423</sup> On some of the Iuliopolis coins from the reign of Vespasian there are images of a kantharos and grapes, which may additionally confirm the cult of Dionysus.<sup>424</sup> Both deities were also worshipped in connection with the imperial cult, thus, their images indicated the ruler as being the breadwinner of his people.<sup>425</sup> Unfortunately, there are no other sources indicating the special importance of Demeter for local residents, yet it should be remembered that it was one of the most popular and obvious cults performed in provincial centres. In this case, the Demeter theme may have combined Roman tradition with local culture.

Due to the common types of images on similar denominations in several cities of Bithynia and Pontus, which may indicate cooperation in the times of Trajan, as well as a lack of most of the above motifs on the coins of cities in later periods (except for Demeter), it seems probable to relate the representations, as well as the denominations, with the Roman tradition and the imperial system. The implied message of the coins could be a reference to an Empire that ensured security and prosperity. The image of Demeter could also underscore the local and popular cult.

The same images of Eirene and Ares were also placed on the coins of Prusias of similar sizes (32–33 mm, 19–21 g) in the time of Trajan.<sup>426</sup> They are also found on large denominations, perhaps of the same value, minted by the city during the reign of Domitian.<sup>427</sup> Both images were shown on the issues of Prusias only in that period. As mentioned above, both motifs referred to the Roman tradition. On the coins of 19–22 mm, 5–7 g we find an altar shrine with an accompanying legend giving the name of the city.<sup>428</sup> The motif features on the same denomination in the times of Vespasian,<sup>429</sup> and is also known from asses, minted in an imperial mint, probably in Thrace.<sup>430</sup> It was also reproduced during the reign of the Flavians on Nicaean coins.<sup>431</sup> The altar is closely related to the cult and offering sacrifices to deities. Due to their nature, such places or buildings have quite lengthy traditions. Originally cults were worshipped in places of exceptional significance for the local population – hills, springs, caves, etc. – using, for example, slabs of natural rocks on which to make their offerings. Over time, larger, more public structures evolved. In addition, a part of a dwelling might be devoted to worship, perhaps including an altar of some kind. Thus they were very common places to accompany everyday human activities. These altars could take various forms and decorations.<sup>432</sup> The coins found to date lack any reference as to the deity potentially involved,

<sup>422</sup> RPC II 508–509, 529, 533.

<sup>423</sup> Avcu and Doğan 2014: 86–87, no. 2.

<sup>424</sup> RPC II 666–667.

<sup>425</sup> Wallensten 2014: 198.

<sup>426</sup> RPC III 1101.

<sup>427</sup> RPC II 671–672, 676.

<sup>428</sup> RPC III 1103.

<sup>429</sup> RPC II 670.

<sup>430</sup> RPC II 513, 535.

<sup>431</sup> RPC II 640A, 710.

<sup>432</sup> Mustilli 1958: 279–286.

thus the nature of the specific cult in the area remains unknown. Perhaps the appearance of the eagle on other issues is indicating the cult of Zeus – the dominant figure across the entire region. Several inscriptions discovered in the area of present-day Konuralp, from the times of, inter alia, Commodus, Septimius Severus, Caracalla, and Elagabalus, make reference to Olympian Zeus.<sup>433</sup> One includes a dedication to the wife of Augianus Filetianus, while on another there is an inscription in honour of (probably) Claudius Julius. Both men are referred to as priests and *agontes* associated with the worship of Zeus.<sup>434</sup> In turn, one of the altars from this centre, from the reign of Tiberius, and now in the Adapazarı Museum (Sakarya province), mentions Zeus Soter (inv. no. 92/7).<sup>435</sup>

We can now focus on the coin image itself – one with a typical Roman depiction of an altar shrine. Rituals or sacrifices took place inside the *temenos*, which included an appropriate altar, and perhaps also effigies of deities. The sacred area was inaccessible for the uninitiated. The marked door opened outwards, as otherwise it would appear to block the way around the altar. The top features decorative attics. The most famous example of an altar shrine is the Ara Pacis, built in the time of Augustus on the northern outskirts of Rome. However there are older buildings, e.g. the altar of the Twelve Gods in the Athenian Agora. On the imperial coinage this form of image appeared on the issues of Nero, Titus, and Domitian.<sup>436</sup> Some represented highly decorated buildings. Roman coins and those from Prusias, or those with the legend ΔΙΟC, feature the same motif.<sup>437</sup> On provincial issues it was mainly the altar itself that is shown, without additional buildings, which may additionally confirm the reproduction of motifs based on imperial coins.

On the emissions corresponding in size to the assarion (18 mm, 4–6 g) we find an eagle standing on the globe, its wings spread, and a legend that includes the name of the city.<sup>438</sup> The eagle probably first appeared during the reign of Trajan, and then on coins from the reign of Marcus Aurelius.<sup>439</sup> It is also found on the asses from the imperial branch mint that functioned, probably, in Thrace between 80–82,<sup>440</sup> as well as on Nicaean coins in the time of Domitian.<sup>441</sup> As discussed with the Prusa issues above, the eagle was primarily a symbol of Zeus/Jupiter, central to both Greeks and Romans. The cult of Zeus was very popular in many provincial cities, with many inscriptions referring to the deity and his numerous nicknames known from the southern part of Bithynia. In turn, in the Roman tradition, the eagle was associated with strength, protection, state imperialism, and was also an important legionary insignia.<sup>442</sup>

The coins minted in Prusias in the time of Trajan reflected the Roman tradition of images known mainly from imperial issues, probably minted in Thrace between 80–82. Perhaps effigies such as Ares, Eirene, or the eagle could be modelled mainly on them. The altar motif appeared on issues as early as Vespasian's time. Unfortunately, we do not have too many issues of Prusaean coins from earlier periods that could indicate when exactly the types appeared. It

<sup>433</sup> IPrusias 1, 9, 12, 38, 50; Price 1967: 39.

<sup>434</sup> IPrusias 12, 50.

<sup>435</sup> IPrusias 31; Adak and Akyürek Şahin 2005: 135–136; Price 1967: 39.

<sup>436</sup> Vespasianus RIC II 10, 315, 1200, 1234; Titus 440, 1272; Domitian RIC II 224, 227, 305, 385, 517.

<sup>437</sup> Elkins 2015: 70, 75, 78–80; Haerinck and Overlaet 2008: 214–215.

<sup>438</sup> RPC III 1102–1103.

<sup>439</sup> RPC IV.1 4856 (temporary number)

<sup>440</sup> RPC II 514, 536.

<sup>441</sup> RPC II 641–6421A.

<sup>442</sup> Greet 2015: 5, 77–81, 108; Nollé 2020.

is also worth emphasising that effigies such as the eagle or the altar could be associated with both Roman images and popular local cults.

At the beginning of Trajan's reign the coins of Heraclea Pontica (32 mm, 20–21 g) depicted a standing, naked Heracles holding a club and a bow.<sup>443</sup> The character of the hero appeared on the coins at many times, starting in the 5th century BC.<sup>444</sup> Due to the city's foundation as well as its name, his cult in the centre was important and widespread.<sup>445</sup> Heracles was the greatest of the Greek heroes, the son of Zeus, distinguished by great strength. He became famous, among other events, for the execution of twelve labours ordered by Eurystheus. His effigies in the art, dating back to the 7th century BC, were much more varied than other individual characters or deities. Heracles himself was often shown with a club, a lion's scalp, or performing one of his tasks. He was an ideal warrior, hence he also patronised military training. He was also seen as a protector of society against various threats.<sup>446</sup> Many cities, like Heraclea Pontica, are named after him. In Karadeniz Ereğli museum there is a fragment of a sculpture, on the pedestal of which there are dedications by Asclepiodorus to Heracles Alexicacus, healer and saviour (inv. no. A.2001/940). Most of the sculpture has not survived, only the feet and the boar are visible. The deity was thought to protect the local community from disease, catastrophes, and other evils. The cult of Heracles Alexicacus is also known from the areas of Mysia, Troas, Pontus, and Rhodes.<sup>447</sup> Probably the centre also worshipped Heracles, nicknamed Parangeites, associated with the descent of the hero to Hades and the kidnapping of Cerberus.<sup>448</sup> It is very possible that there was also a statue and temple of Heracles in the city.<sup>449</sup> Due to the history of the town, the cult of his person was one of the most important.<sup>450</sup>

Despite the importance of the local cult of Heracles for the inhabitants of the city we should mention that Trajan was also identified with the hero – who was to be the protector of the Roman people: his likeness appears on imperial coins struck in 100. In addition, the symbol of one of the newly formed legions between 102 and 104, the Legio II Traiana, was Hercules holding a club and a lion's skin.<sup>451</sup>

On issues of 25–26 mm, 10–12g there is a standing Dionysus with a kantharos and a thyrsus.<sup>452</sup> His likeness also appears on coins from the times of Nero, Septimius Severus, Caracalla, Geta, Macrinus, Severus Alexander, Maximinus Thrax, Balbinus and Pupienus, and Gordian III.<sup>453</sup>

<sup>443</sup> RPC III 1161.

<sup>444</sup> Stancomb 2009: 15–27; Rec Heraclee 1–22, 29–42, 45, 47–58, 62, 66; Vespasianus RPC II 688; Commodus RPC IV.1 4784 (temporary number); Septimius Severus Rec 105–112, 114; Caracalla Rec 132–135; Geta Rec 145–149, 161–163; Macrinus Rec 172–175; Severus Alexander RPC VI 3542–3543, 3545–3548 (temporary numbers); Maximinus Thrax RPC VI 3554–3557 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19675–9676, 19681, 72592; Gordian III RPC VII.2 ID 19693–19698, 19701–19705, 19714, 19716–19717, 19728, 48129, 59587, 73021; Philip the Arab RPC VIII ID 19742, 19744–19747, 22051; Valerian Rec 232; Gallienus Rec 235–241; Trajan Decius RPC IX 365A; Saloninus Rec 250.

<sup>445</sup> Cf. Xen. *An.* 6.2.2; Öztürk 2016a: 685–686; Wilson 1976d: 383.

<sup>446</sup> Boardman *et al.* 1988/1990; Graf and Ley 1998: 387–394; Schachter 1999: 684–685; Sichtermann 1960a: 378–385.

<sup>447</sup> Gemci 2016: 8–9; Karauğuz 2007: 58, fig. 12; Öztürk 2013d: 505, 511, 2016a.

<sup>448</sup> *ICallatis* 3, 72; *Chirica* 1998: 722–731.

<sup>449</sup> *Mem. Her. FG rHist* 434 F35, 7–8; Gemci 2016: 7–8; Öztürk 2016a: 685.

<sup>450</sup> Cf. Öztürk 2016a: 685–686.

<sup>451</sup> Bennett 1997 (2015): 137.

<sup>452</sup> RPC III 1162.

<sup>453</sup> Nero RPC I 2095; Septimius Severus Rec 116; Caracalla Rec 131; Geta Rec 142–145, 160; Macrinus Rec 176–177; Severus Alexander RPC VI 3549 (temporary number); Maximinus Thrax RPC 3566 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19687; Gordian III RPC VII.2 ID 19733–19734.

It was also on the city's emissions from the Hellenistic period.<sup>454</sup> Dionysus, originally from Thrace, was the god of the vine, fertility, and regeneration: his cult was one of the most popular. The first effigies we have date from the 7th century BC. Very often he was shown with a grapevine, thyrsus, kantharos, panther, in a wreath of ivy, accompanied by maenads, satire, or Silenus.<sup>455</sup> His cult in the area of northern Bithynia is mentioned, inter alia, in the Nicaean inscriptions.<sup>456</sup> From Heraclea itself there are a several fragments of sculptures that can be identified with the deity. His temple was also there.<sup>457</sup> In the Bithynian calendar January was dedicated to Dionysus.<sup>458</sup>

In the next production period, after 102, the same motifs were reproduced on the reverse of the coins. On the largest denominations there are also images of Heracles fighting the Nemean lion and a club in the lower exergue.<sup>459</sup> On denominations with the image of Dionysus<sup>460</sup> a new type appears, depicting a standing Asclepius with a staff.<sup>461</sup> This god was also on the centre's coins during the reigns of Caracalla, Geta, Macrinus, Maximinus Thrax, Balbinus and Pupienus, Gordian III, and Gallienus.<sup>462</sup> Asclepius, son of Apollo, was the god of medicine and healing, usually presented as a bearded man with a staff. Occasionally he is portrayed with his daughter, Hygeia, personifying health. His cult appeared at the end of the 5th century and due to its specificity was popular in many cities, including the Black Sea centres.<sup>463</sup> His temple was also in Heraclea.<sup>464</sup> In addition to coins, a reference to the deity appears on one of the inscriptions found in the town, dedicated on behalf of the healed Marcius Xenocrates.<sup>465</sup>

Coins sized at 19–23 mm, 4–6 g featured several motifs: a bust of Athena, five ears of corn within a laurel wreath, a walking goddess in a *corona muralis*, holding a spear and a shield, and a standing figure of Poseidon, holding a dolphin and a trident.<sup>466</sup> In the legends of the issue there was a reference to the city as a metropolis. The portrait of Athena also appears on the coins of Severus Aleksander, Maximinus Thrax, as well as Balbinus and Pupienus.<sup>467</sup> The representation of a standing Athena holding Nike and a spear was placed on issues in the time of Maximinus Thrax; the goddess with a spear and shield or an owl is known from the periods of Balbinus and Pupienus, and Gordian III.<sup>468</sup> Her bust was also featured on the town's 1st-century BC issues.<sup>469</sup> Presumably, the effigy of the goddess in a *corona muralis* with a spear

<sup>454</sup> Stancomb 2009: 16–17; Waddington, Reinach and Babelon 1904–1912: 345–355.

<sup>455</sup> Gasparri and Veneri 1986: 414, 496–497; Henrichs 1999: 479–482; Ostrowski 2005: 120; Schlesier and Ley 1997: 651–664.

<sup>456</sup> INicaea II 2, 1324/93a; Boyana 2017: 160; Öztürk, Aktaş and Demirhan-Öztürk 2020: 174; Şahin 1987: 370.

<sup>457</sup> Öztürk 2016b: 88.

<sup>458</sup> Avram 1999: 29; Russell 2017: 178.

<sup>459</sup> RPC III 1164.

<sup>460</sup> RPC III 1165.

<sup>461</sup> RPC III 1166.

<sup>462</sup> Caracalla Rec 136; Geta Rec 150–151; Macrinus Rec 179; Maximinus Thrax RPC VI 3564 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19686; Gordian III RPC VII.2 ID 19731–19732; Gallienus Rec 242.

<sup>463</sup> Graf 1999c: 187–188; Graf and Ley 1997: 94–99; Holtzman 1984: 863–865; Konstantinos 2013; Mansuelli 1958: 719–721; van der Ploeg 2016: 50.

<sup>464</sup> Öztürk 2016b: 88.

<sup>465</sup> IHeraclea 7; Öztürk 2013d: 511–512.

<sup>466</sup> RPC III 1167–1170.

<sup>467</sup> Severus Alexander RPC VI 3553 (temporary number); Maximinus Thrax RPC VI 3567 (temporary number); issuer uncertain: RPC VI 3539 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19691.

<sup>468</sup> Maximinus Thrax RPC VI 3560 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19680, 22049; Gordian III RPC VII.2 19718–19719, 19726.

<sup>469</sup> Stancomb 2009: 27.

and shield should also be identified with Athena. As mentioned above, the goddess was also associated with the guardian of the centres, hence perhaps a certain syncretism of the motif related her to Tyche. Athena was worshipped among the colonists of Megara who founded Heraclea. Placing her image on the coins during this period could have been connected with the return to the old tradition and history of the city. Moreover, it is particularly important for the inhabitants to be named after the Parthenos of the nearby river.<sup>470</sup> The representation of ears of corn in a laurel wreath is the only motif of this type among the Heracleian coins minted during the Roman period recorded thus far. Coins from the time of Trajan mostly had references to deities. The ears of corn could suggest a relation to Demeter and the region's fertility, but it seems that no issues of the city with her image have been recorded so far. Perhaps due to the unusual nature of the image, placed on coins after 102 only, it should be viewed as an occasional issue, struck for a particular event, perhaps a festival. The figure of Poseidon had already appeared on issues with portraits of Claudius, Julia Domna, Maximinus Thrax, Balbinus and Pupienus, Gordian III, and Saloninus.<sup>471</sup> Poseidon was the god of the seas, sailors, and earthquakes, often depicted as bearded and with a trident. Due to his characteristics, many sanctuaries located in the coastal areas were dedicated to him,<sup>472</sup> hence his cult was very popular in Heraclea.<sup>473</sup> Moreover, the coastal inhabitants may have equated him with the deification of the Black Sea.<sup>474</sup>

A club, referencing Heracles, appears on small denominations (16 mm, 2–3 g).<sup>475</sup> This attribute is also to be found on the issues from the times of Vespasian, and on similar denominations of Severus Alexander.<sup>476</sup> In the next production period, after 114, some of the motifs were duplicated on coins minted in the same sizes.<sup>477</sup> A new version of the image appeared on the largest denomination – a walking Heracles with a lion's skin and Cerberus.<sup>478</sup> The effigy of Poseidon with a dolphin and trident was placed on larger denominations (23–24 mm, 14–15 g).<sup>479</sup> A standing goddess in a *corona muralis* and holding a pomegranate was also a new type.<sup>480</sup> The image was placed on coins sized at 21–25 mm, 7–8 g. All issues from this period have one style of legend, emphasising the city's status as a metropolis. Perhaps this latter figure should be identified with the image of Hera, due to the attribute she holds. The goddess also appears on coins of a similar size minted in the time of Nero.<sup>481</sup> The figure is depicted holding a veil in her hands. On slightly smaller denominations in the times of Elagabalus and Severus Alexander, we perhaps have the same deity in a veil, with a globe and ears of corn.<sup>482</sup> In the list of coins in the RPC project database referencing characters, a possible identification has appeared as Pomona or Hera. The former was the goddess of orchards, shown with fruit. Hera was the wife of Zeus, the goddess of the heavens, marriage, and fertility. She was depicted as a

<sup>470</sup> Braund 2018: 35–36; Robert 1980: 165–176.

<sup>471</sup> Claudius RPC I 2090; Julia Domna Rec 123–124; Maximinus Thrax RPC VI 3562 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19682; Gordian III RPC VII.2 ID 19723, 19731; Saloninus Rec 249.

<sup>472</sup> Güney 2015a; Jameson 1999: 1230–1231; Simon 1994.

<sup>473</sup> Öztürk 2016b: 88–89.

<sup>474</sup> Imhoof-Blümer 1924: 307.

<sup>475</sup> Vespasianus RPC III 1171; Severus Alexander RPC VI 3552 (temporary number).

<sup>476</sup> RPC II 689.

<sup>477</sup> Heracles: RPC III 1172; bust of Athena: RPC III 1176; club: RPC III 1177.

<sup>478</sup> RPC III 1173.

<sup>479</sup> RPC III 1174.

<sup>480</sup> RPC III 1175.

<sup>481</sup> RPC I 2092.

<sup>482</sup> Elagabalus RPC VI 3541 (temporary number); Severus Alexander RPC VI 3550 (temporary number).

static figure in a peplos and himation, holding a sceptre, patera, or pomegranate. Like Athena or Tyche, she was also the protector of cities.<sup>483</sup> Little is known about the cult of Hera itself in Bithynia. One of the months of the Bithynian calendar, October, was dedicated to the wife of Zeus.<sup>484</sup> Her effigies probably appeared on the 4th- and 3rd-century coins struck in Tium and Cromna, as well as on the tetradrachms of Prusias and Mithridates IV.<sup>485</sup> She was also present in the cult of the Mithridatic royal family.<sup>486</sup> There is an inscription from Nicaea where the goddess is mentioned together with Zeus and Athena.<sup>487</sup> A fragment of an inscription has also been found in Ilgaz, in the province of Çankırı, referring to Hera and her temple.<sup>488</sup> Thus, the image on the coins seems to be interpreted with Hera as the guardian of the city.

The most popular and important cults for the city's inhabitants were emphasised on the coins of Heraclea in the time of Trajan. Some of the motifs had a long tradition, repeated on many issues at different times. The mythical origin and founding of the centre by Heracles were strongly underscored. The cults of Poseidon, Dionysus, and Asclepius were among the most standard and universal ones, and highly promoted, not only on coins but on other artefacts as well. The cult of Athena, known to the colonists of Megara, may have been reflected in the issues as part of a trend to return to older traditions, stories, and legendary figures. Unusual types are possibly the syncretic deities Athena-Tyche and Hera-Tyche, who can be read as the guardians of the city. It is similar in the case of the coins with the motif of ears of corn within a laurel wreath, which perhaps should be associated with some cultural event taking place in Heraclea during this period.

One of the characteristic images on Tium coins in the time of Trajan, struck after 98 and 102, was that of Zeus Syrgastes, holding a patera and a long sceptre, with an eagle at his feet (32–35 mm, 18–25 g). The accompanying legend pointed to the cult of Thracian origin in the city. His epithet may be translated as 'bright/shiny'.<sup>489</sup> He was probably a protector for the centre's residents.<sup>490</sup> Images of the deity were also placed on the issues of Domitian, Antoninus Pius, Marcus Aurelius, Severus Alexander, Maximinus Thrax, Gordian III, Philip Arab, and Trajan Decius;<sup>491</sup> in earlier periods they appear on the coins of Prusias II and Nicomedes II, Nicomedes III, and Nicomedes IV.<sup>492</sup> A reference to the deity was also found on other artefacts, such as inscriptions from Apulum, Alba Julia, and Brescia, as well as on one of the funeral inscriptions from Kayaarkası (Karabük province, northern Turkey). The notation mentions the chairman of the agon in honour of Syrgastes, Antiochus, held in AD 141.<sup>493</sup> The importance of the cult of

<sup>483</sup> Deissmann 1988; Graf and Ley 1998: 357–361; Motte and Pirenne-Delforge 1999: 682–683.

<sup>484</sup> Avram 1999: 29; Russell 2017: 177.

<sup>485</sup> Rec Cromna 1–9; Rec Rois de Pont 7–8; Rec Tius 4. Cf. Hoover 2012: 71–74.

<sup>486</sup> Saprykin 2009: 251.

<sup>487</sup> Boyana 2017: 158–159; Mendel 1900: 389.

<sup>488</sup> Marek and Adak 2016: 69–71, no. 79.

<sup>489</sup> RPC III 1178–1179; Paliga 2006: 328; Öztürk 2012: 102–104; 2013b: 331.

<sup>490</sup> Cf. Saprykin 2009: 253.

<sup>491</sup> Domitian RPC II 700–703; Antoninus Pius RPC IV.1 5555–5556, 6118–6119, 6132 (temporary numbers); Marcus Aurelius RPC IV.1 5704, 9534 (temporary number); pseudo-autonomous coins RPC IV.1 7991 (temporary number); Severus Alexander RPC VI 3590–3591 (temporary number); Maximinus Thrax RPC VI 3609 (temporary number); Gordian III RPC VII.2 ID 20023–20024, 20028; Philip the Arab RPC VIII ID 20040; Trajan Decius RPC IX 368.

<sup>492</sup> Rec Rois de Bithynie 10–11, 40.

<sup>493</sup> Öztürk 2012: 104, 200–201, Ep29; 2013b: 331–332; 2018.

Zeus in Tium can also be assumed by the discovery of other artefacts bearing his image, e.g. weights.<sup>494</sup> His temple was also probably located within the town.<sup>495</sup>

Emissions (26–30 mm, 7–11 g) from the beginning of the emperor's reign featured Poseidon standing on the prow of a ship, holding a trident and a dolphin, with a fish under his feet, as well as a representation of a standing Dionysus, holding a kantharos and a thyrsus.<sup>496</sup> The legend on the latter coin also aided its identification. Poseidon also appears on certain coins during the reigns of Hadrian, Antoninus Pius, Marcus Aurelius, Elagabalus, Severus Alexander, Maximinus Thrax, and Gordian III.<sup>497</sup> Due to the centre's location, and thus its economic importance, the cult of Poseidon was very important to the inhabitants of Tium.<sup>498</sup> Dionysus was placed on the coins of Domitian, Hadrian, Antoninus Pius, Marcus Aurelius, Gordian III, and pseudo-autonomous coins.<sup>499</sup> The coin legends from the times of Trajan, as well as Domitian and Marcus Aurelius, which include the word ΚΤΙΣΤΗΣ, could indicate the person of the deity as a founder or restorer, but there is no confirmation of this assumption in any sources. Perhaps his cult was popular due to the environmental values and fertility of the region.<sup>500</sup> There was also a theatre in the city under the patronage of Dionysus. The importance of his cult in the city is also confirmed by other artefacts, such as weights with the image of the deity and inscriptions. Perhaps there were also mysteries or festivals in his honour.<sup>501</sup> In addition, a mosaic was discovered not far from Tium depicting the story of Lycurgus, king of Thrace, who opposed the introduction of deity worship, for which he was punished.<sup>502</sup>

On the coins sized 22–25 mm, 5–7 g appeared the figure of Asclepius with his staff, and a legend indicating the local cult of the deity with the epithet Soter ('saviour').<sup>503</sup> The effigy was also stamped on the issues of Domitian, Antoninus Pius, Marcus Aurelius, Commodus, Elagabalus, Gordian III, and Philip Arab.<sup>504</sup> The importance of worship in the city can also be demonstrated by individual artefacts, such as sculptures, figurines, and weights bearing the image of a deity.<sup>505</sup> One of the discovered inscriptions contains a reference to Emilius or Emilianus, a priest of Asclepius.<sup>506</sup>

<sup>494</sup> Öztürk 2012: 204–205, Ep32–33; 2013a: 492, fig. 16.

<sup>495</sup> Severus Alexander Rec 138; Öztürk 2012: 104; 2013b: 332; Summerer 2014: 197–199. During the research the remains of the temple were discovered on the Acropolis, but it is not known exactly to which deity it was dedicated (Baran, Dirlik and Kendirci 2015).

<sup>496</sup> RPC III 1180–1182.

<sup>497</sup> Hadrian RPC III 1192; Antoninus Pius RPC IV.1 6120, 6133 (temporary numbers); Marcus Aurelius RPC IV.1 5577, 6143 (temporary number); pseudo-autonomous coins RPC IV.1 7990 (temporary number); Elagabalus RPC VI 3576, 3585 (temporary number); Severus Alexander RPC VI 3600 (temporary number), Maximinus Thrax RPC VI 3614 (temporary number); Gordian III RPC VII.2 ID 20036.

<sup>498</sup> Öztürk 2012: 113; 2013b: 333.

<sup>499</sup> Domitian RPC II 704; Hadrian RPC III 1191; Antoninus Pius RPC IV.1 5557, 5567, 8458, 10725 (temporary numbers); Marcus Aurelius RPC IV.1 5703, 5563, 6140 (temporary number); pseudo-autonomous coins RPC IV.1 5705; RPC VI 3625 (temporary numbers); Gordian III RPC VII.2 ID 20031, 29440.

<sup>500</sup> Domitian Rec 24; Marcus Aurelius Rec 67; Öztürk 2013c: 332.

<sup>501</sup> Öztürk 2010: 79; 2012a: 108–110, 193–195, Ep23–24, 204–205, Ep32–33; 2013a: 492, fig. 16; 2013b: 333 (further literature there).

<sup>502</sup> Öztürk 2012: 110.

<sup>503</sup> RPC III 1183; Öztürk 2013c: 333.

<sup>504</sup> Domitian RPC II 701A; Antoninus Pius RPC IV.1 6122, 10372(?) (temporary number); Marcus Aurelius RPC IV.1 5578, 5582, 5701–5702, 7989 (temporary numbers); Commodus RPC IV.1 10916 (temporary number); Elagabalus RPC VI 3569 (temporary number); Gordian III RPC VII.2 ID 20017; Philip the Arab RPC VIII ID 20041.

<sup>505</sup> Öztürk 2010: 43; 2012a: ArkBulRes4; 2013b: 334, fig. 21–22.

<sup>506</sup> Konstantinos 2013: 37; Öztürk 2012: 107–108, 192–193, Ep22.

The smallest denominations (13–15 mm, 2–3 g) from this period had a torch motif with the legend ΑΡΤΕΜΙΔΟΣ, and another showed a bunch of grapes.<sup>507</sup> The torch motif also appears on the larger coins of Antoninus Pius, Severus Alexander, Maximinus Thrax, and Gordian III.<sup>508</sup> Both the image and the legend indicate the cult of Artemis, very popular in many provincial towns.<sup>509</sup> The grapes motif is also found on coins of the same size from the time of Antoninus Pius.<sup>510</sup> The grapes refer to the aforementioned cult of Dionysus in the city.

During the production period after 102, some of the motifs, such as the images of Zeus Syrgastes and Asclepius,<sup>511</sup> were reproduced on the next issues of the same size during the reign of Trajan.

Coins sized at 30–32 mm, 20–22 g depict figures of Hera and Zeus, holding long sceptres, and an eagle at the feet of Zeus. The legend referred to the name of the city. There are also letters with uncertain meanings in the lower exergue.<sup>512</sup> This type of design also appears on the coins of Marcus Aurelius,<sup>513</sup> and earlier, on the tetradrachms of Mithridates IV and his wife Laodicea.<sup>514</sup> Perhaps the first joint images of deities should be seen as early as the 8th century BC. The marriage of Zeus and Hera was to be part of a complex symbolism referring to the natural world of plants and animals, as well as to the power of the Greek world.<sup>515</sup> The figure of the goddess, holding a long sceptre, was probably also on one of the issues (25 mm, 8–9 g), with a legend referring to the name of the city and the year.<sup>516</sup> Her image might also be identified on the coins from the Hellenistic period.<sup>517</sup>

The images on the Tium coins from the time of Trajan referred primarily to the local cults, as well as to the associated environmental values of the region, which ensured the prosperity and successful functioning of the centre. Many of these images had a long tradition, repeated on the coins at various times. The figures of Zeus and Hera placed on the largest coins represented a unique design. In this case, it is also worth paying attention to the effigy of Poseidon, also representing a specific type. What connects these two issues are the letters in the lower exergue, with an uncertain meaning, which could indicate the same workshop or engraver making the dies of the coins. Thus far we have a few issues recorded that might perhaps include such a signature by this artist from Tium. Hence, it seems that we are dealing with certain ‘innovative’ types of images placed on the coins from this period.

On Amastris coins, as with the Iuliopolis and Prusias issues, struck after 98, the large denomination (31–32 mm, 21–22 g) showed a walking Ares with a tropaion and spear.<sup>518</sup> Perhaps the god of war was also depicted on coins from the times of Antoninus Pius, Marcus

<sup>507</sup> RPC III 1180A, 1184.

<sup>508</sup> Antoninus Pius RPC IV.1 5560 (temporary number); Severus Alexander RPC VI 3596 (temporary number); Maximinus Thrax RPC VI 3613 (temporary number); Gordian III RPC VII.2 ID 20033–20034.

<sup>509</sup> Cf. Ostrowski 2005; Stolba and Peter 2021.

<sup>510</sup> Antoninus Pius RPC IV.1 6127, 10199 (temporary numbers).

<sup>511</sup> RPC III 1187–1188, 1190.

<sup>512</sup> RPC III 1185.

<sup>513</sup> Marcus Aurelius RPC IV.1 5581 (temporary numbers).

<sup>514</sup> Saprykin 2009: 251.

<sup>515</sup> Motte and Pirenne-Delforge 1999: 682–683; Saprykin 2009: 251.

<sup>516</sup> RPC III 1189.

<sup>517</sup> Rec 4.

<sup>518</sup> RPC III 1198.

Aurelius, and Caracalla, but in a completely different iconographic style.<sup>519</sup> The image of Ares was also placed on the coins of Mithridates VI.<sup>520</sup> It was one of the most popular motifs in the Mithridatic era, known from coins of Chabakta, Kabeira, Laodicea, Pimolisa, Taulara, and Gaziura.<sup>521</sup> Nevertheless, the depiction of the god of war, due to its reference on only a few issues from Roman times, the size of the coins, as well as the characteristic type, should be associated with the Roman tradition.

On coins of the same size, minted also in this period there is also a standing Elpis, raising the hem of her dress and holding a flower.<sup>522</sup> It was a characteristic representation of the personification of hope. She is first mentioned in Hesiod.<sup>523</sup> She remained within Pandora's chest after it was opened and when all misfortunes had been released into the world. Although not a very popular personification, she does appear on the coins of several provincial towns, e.g. Anazarbe and Alexandria.<sup>524</sup> Occasionally she could be portrayed as a guardian of the city in a *corona muralis*.<sup>525</sup> In this case, the image, as well as the figure of Ares, should be associated with the Roman tradition. The character of Spes was one of the types placed on sestertii minted in the imperial mint, probably in Thrace between 80–82.<sup>526</sup> Her depiction appeared on issues of a similar size in the time of Domitian in Nicaea, as well as in Abonoteichos and coins with no ethnic, during the reign of Trajan.<sup>527</sup> The Amastris coins echoed the imperial issues of the earlier period, which also must have circulated in the provinces due to the possible location of the mint.

Issues of 24–26 mm, 8 – 12 g, also struck after 98, featured several motifs, including the standard image of Demeter with ears of corn and a long sceptre, as well perhaps as the figure of Artemis with two torches, a standing Athena with a spear and shield, and an eagle standing on a globe.<sup>528</sup> All coins from this period bear a legend referring to the name of the city. The figure of Demeter appears on coins with the bust of Faustina the Younger.<sup>529</sup> The effigy of Athena was also placed on the coins of Antoninus Pius, Marcus Aurelius, Faustina the Younger, Gordian III, and Philip Arab.<sup>530</sup> The goddess was also shown on the Mithridates VI issues,<sup>531</sup> as well as on some of the earliest 4th-century ones.<sup>532</sup> The same image of Athena was found on one of the lamps (inv. no. 392.1.3.A.68) in the museum collection of today's Amasra.<sup>533</sup> The eagle motif was also found on larger issues struck in the times of Trajan after 114, as well as on the coins of

<sup>519</sup> Antoninus Pius RPC IV.1 5401 (temporary number); Marcus Aurelius RPC IV.1 5438–5439, 8424 (temporary numbers); Caracalla Rec 161.

<sup>520</sup> Rec Amastris 17–19.

<sup>521</sup> Rec Chabakta 2–2a; Rec Kabeira 3; Rec Laodicea 1; Rec Pimolisa 2; Rec Taulara 3; Rec Gaziura 6. Cf. Olshausen 1990: 1873–1874.

<sup>522</sup> RPC III 1199.

<sup>523</sup> Hes. Op. 96.

<sup>524</sup> Cf. Nero: Alexandria RPC I 5220; Domitian: Anazarbus RPC II 748; Domitian: Alexandria RPC II 2621.

<sup>525</sup> Bloch 1997b: 1000–1001; Comotti 1960: 323–324; Hamdorf 1986: 722–725.

<sup>526</sup> RPC II 506, 521, 522, 541.

<sup>527</sup> Domitian: Nicaea RPC II 634; Trajan: Abonoteichos RPC III 1211; coins without ethnic: RPC III 1127.

<sup>528</sup> RPC III 1201–1204.

<sup>529</sup> RPC IV.1 5414 (temporary number).

<sup>530</sup> Antoninus Pius RPC IV.1 4882, 5471 (temporary numbers); Marcus Aurelius RPC IV.1 11743 (temporary numbers); Faustina the Younger RPC IV.1 4888, 5416–5417, 5474, 6251, 9677 (temporary numbers); Gordian III RPC VII.2 ID 20049; Philip the Arab RPC VIII ID 22050, 27698.

<sup>531</sup> Rec Amastris 10–12, 15–16.

<sup>532</sup> SNG BM Black Sea 1356–1357; SNG Stancomb 747–748.

<sup>533</sup> Karauğuz 2007: 56, fig. 4.

Marcus Aurelius, Faustina the Younger, and pseudo-autonomous issues.<sup>534</sup> It was also the effigy known from the issue of Mithridates VI.<sup>535</sup> In terms of the images of Demeter, Athena, and the eagle on the globe, perhaps their meanings should be associated with the Roman tradition, as in the case of Ares or Elpis. The same motifs, in the same iconographic types, were found on asses and dupondii that were probably minted in Thrace between 80–82.<sup>536</sup> Also on the same denominations there was a female figure with two torches, interpreted in the catalogues as Demeter, however, due to the attributes and the short chiton, the representation may be that of Artemis, especially since the figure of the goddess of fertility was usually dressed in a long robe.<sup>537</sup> The type of effigy is also noteworthy, differing from the other images of Demeter on the coins from this period. Moreover, the sizes of the two denominations are likely to be different, which would indicate recognition of possible coin values due to the diversity of the motifs. Among the artefacts attesting to the cult of Artemis from the southern part of Pontus are the amphorae stamps from Sinope, as well as a dedication in honour of Apollo, Artemis, and Leto found near Amasea.<sup>538</sup> Also near the city, in the town of Maruf Köyü (Çankırı province), there could be a possible sanctuary, as indicated by one of the inscriptions.<sup>539</sup> As also mentioned earlier, it was one of the most popular cults in provincial centres.

On issues struck after 102 there is a bust of Tyche of the city within a *corona muralis*.<sup>540</sup> However, due to the rather unusual stylistic nature of the coin, might it be interpreted as an antique imitation based on earlier issues? The bust of Tyche was found on coins minted in the 1st century and in the times of Saloninus.<sup>541</sup> Moreover, the image is one of the earliest to be found on the city's coins.<sup>542</sup> Typically, a different iconographic type was depicted, a standing goddess wearing a kalathos/*corona muralis*, and holding a rudder and a cornucopia.<sup>543</sup> Tyche represents values important for all social groups and nations, hence it had the value of a universal image. It is worth reminding ourselves that in the time of Trajan it was one of the types that appeared on several issues from individual periods of the emperor's reign. Unfortunately, among the known coins so far struck in the city after 102, only one has survived, and perhaps future research or finds will help in obtaining a larger number of coins from this period.

Among the coins minted after 114, which have survived to our times, two different types of images can be distinguished. On the coins sized at 32–33 mm, 23–24 g, is an eagle standing on the globe,<sup>544</sup> and on the denominations of 23–25 mm, 7–9 g, Nike with a palm tree and a wreath, as well as a legend identifying the image and the name of the city.<sup>545</sup> The figure of Nike also appeared on pseudo-autonomous coins, issues from the reign of Severus Alexander

<sup>534</sup> Marcus Aurelius RPC IV.1 5400, 5413, 5437, 5472, 10223 (temporary numbers); Faustina the Younger RPC IV.1 3549 (temporary number); pseudo-autonomous coins RPC IV.1 4899.

<sup>535</sup> Rec Amastris 13–14.

<sup>536</sup> Ceres: RPC II 508–509, 529, 533; Minerva: RPC II 523, 542; eagle: RPC II 514, 536.

<sup>537</sup> RPC III 1200.

<sup>538</sup> Guldager Bilde 2009: 308–309.

<sup>539</sup> Marek and Adak 2016: 71–72, no. 80.

<sup>540</sup> RPC III 1204A.

<sup>541</sup> Rec 24–30; RPC I 2105–2106; Saloninus Rec 177.

<sup>542</sup> Rec 1–4.

<sup>543</sup> Antoninus Pius RPC IV.1 5469, 7966 (temporary numbers); Marcus Aurelius RPC IV.1 4893, 5410–5411, 5436, 7969 (temporary numbers); Faustina the Younger RPC IV.1 4890, 9675 (temporary numbers); Elagabalus RPC VI 3628 (temporary number); Gordian III RPC VII.2 ID 20057; pseudo-autonomous coins RPC IV.1 4902, 4913, 4897, 4910 (temporary number).

<sup>544</sup> RPC III 1205.

<sup>545</sup> RPC III 1206.

and Maximinus Thrax.<sup>546</sup> It is also known for the asses struck by the imperial mint, probably located in Thrace between 80–82.<sup>547</sup> Initially, the goddess was on the issues minted c. 300 BC with the personification of the city and Eros, and then on the coins of the kings of Paphlagonia, Pylaemenes II (c. 140–130 BC) or Pylaemenes III Euergetes (c. 108–89 BC).<sup>548</sup> It was also one of the main depictions on the Mithridates VI issues struck in various mints of the former kingdom of Pontus.<sup>549</sup> Nike was the goddess of victory, the daughter of the Titan Pallas and the goddess of the River Styx, sister of Zelus, Kratos, and Bia, whose first effigies date back to the 6th century BC. The goddess was often shown with wings, an olive/palm branch, or a laurel wreath, sometimes crowning a tropaion or holding a weapon, in the company of Zeus or Athena. Her first images were on coins struck at Olympia c. 510 BC to commemorate her victory at the games. It was also one of the most important motifs of political significance on the coins of Alexander the Great and the Diadochi.<sup>550</sup> The figure of Nike on the coins of Mithridates VI was one of the main themes of a coherent and unified monetary system during this period. It appealed to the position of the ruler as a strong and invincible monarch.<sup>551</sup> In imperial times she also emphasised the victories achieved,<sup>552</sup> but, in addition, the emperor was also referred to in this way, who, in the Roman tradition from the early Empire, was to be the only one with military successes, thus underscoring leadership skills and ensuring stability in the state. To him, the celebration of triumphs and the acceptance of winning titles were dedicated. The idea of victory could refer to the success of the ruler or the overall victory of the Empire.<sup>553</sup> Despite the popular significance of Nike, as well as the motif that was important in the earlier period, the images of the goddess, especially in the above type, and the eagle on the globe, seem to refer mainly to the Roman tradition.

The last period to be identified for coin production at Amastris during the reign of Trajan was the one after 116. Issues sized at 20–22 mm, 5–6 g featured Asclepius with a rod.<sup>554</sup> An effigy of this type was also found on the coins from the times of Antoninus Pius and Marcus Aurelius.<sup>555</sup> The deity was also depicted on the city's issues during the reign of Mithridates VI.<sup>556</sup> There is one reference to a deity in the epigraphic sources from Amastris.<sup>557</sup> As highlighted above, the cult of Asclepius was one of the most popular. Several thermal springs, such as Phazemoniten and Sulusaray, are known in the Pontic region, which were also visited and used in antiquity.<sup>558</sup> In turn, inscriptions dedicated to the deity have been found in Sinope, Amisus, Amasea, and Trapezus.<sup>559</sup>

<sup>546</sup> Pseudo-autonomous coins RPC IV.1 4903, 4911–4912 (temporary numbers); Severus Alexander RPC VI 3630 (temporary number); Maximinus Thrax RPC VI 3633 (temporary number).

<sup>547</sup> RPC II 508A.

<sup>548</sup> Rec Amastris 1–4; Rec Rois de Paphlagonie 1–2.

<sup>549</sup> Rec Amastris 20, also Rec Amisus 38, 43–44; Rec Chabacta 3; Rec Comana 1, 4; Rec Laodicee 3; Rec Neocesaree 4.

<sup>550</sup> Arafat 1999: 1044; Bellinger and Berlincourt 1962: 2–3, 21–43; Bulle 1897–1902: 353–358; Moustaka, Goulaki-Voutira and Grote 1992; Schieman and Bähler 2000: 906–908.

<sup>551</sup> Arafat 1999: 1044; Bulle 1897–1902: 353–358; Moustaka, Goulaki-Voutira and Grote 1992; Olshausen 1990: 1890–1891; Schieman and Bähler 2000: 906–908.

<sup>552</sup> Arafat 1999: 1044; Bulle 1897–1902: 353–358; Moustaka, Goulaki-Voutira and Grote 1992; Schieman and Bähler 2000: 906–908.

<sup>553</sup> Bellinger and Berlincourt 1962: 44–64; Nollé 2003: 466. Cf. Kluczek 2009: 175–295.

<sup>554</sup> RPC III 1207.

<sup>555</sup> RPC II 5381–5383, 5394–5395, 8417 (temporary numbers); Marcus Aurelius RPC IV.1 5409, 10637 (temporary numbers); uncertain issuer: RPC IV.1 9138.

<sup>556</sup> Rec Amastris 13–14.

<sup>557</sup> Konstantinos 2013: 37.

<sup>558</sup> Olshausen 1990: 1875–1876.

<sup>559</sup> Konstantinos 2013: 37–38.

Coins with a portrait of Plotina, and a figure with a patera and a long sceptre on the reverse, were also issued in the city; possibly one of the items held should be interpreted as a wreath. The effigy has a legend underlining the centre's status as a metropolis.<sup>560</sup> The interpretation of the character as Zeus appears in the RPC catalogue. The god also appears on the issues of Domitian and Antoninus Pius,<sup>561</sup> and was also one of the most important designs on Mithridatic coins.<sup>562</sup> On one of the issues there was the epithet Strategos/Stratios.<sup>563</sup> Perhaps with this cult, one of the main ones in the centre, we should also associate an effigy on the coins,<sup>564</sup> referred to as the image of the sculpture of Zeus Stratios, made by Daedalus and located in the temple in Nicomedia.<sup>565</sup> The tradition of placing this particular deity on the coins dates back to the 4th century BC.<sup>566</sup> He was also a deity worshipped by Mithridates VI, which is also confirmed by effigies on his coins. The epithet Zeus referred to the warrior god, commander and protector of the army.<sup>567</sup> In this regard, some scholars have made the assumptions that the deity derives from the Iranian god Ahuramazda, while others point to the influence of the Seleucids.<sup>568</sup> In the museum collection in Amastris there are two sculptures of Zeus (inv. nos. 556.3.1.A.80 and 557.3.2.A.80),<sup>569</sup> moreover, from epigraphic sources it is known that there was also a sanctuary of Zeus Bonitenos in the city, and possibly also a temple to the above-mentioned Zeus Strategos.<sup>570</sup> A reference to Zeus Panktesios was also discovered on one of the altars.<sup>571</sup>

Most of the images on the Amastris coins in Trajan's time are effigies of Roman tradition, although some may also be related to local cults. Some (Ares, Elpis, Demeter, Athena, eagle, Nike) may have been modelled on the imperial issues struck in the mint, probably in Thrace, between 80–82. It is worth noting that there was a *koinon* seat in the city, the purpose of which was also to promote the imperial cult.<sup>572</sup>

There are three types of images registered to date on the Abonoteichos coins from the time of Trajan. On issues sized at 32–33 mm, 19–20 g, there appeared, as on the Amastris coins, the effigy of a standing Elpis, raising the hem of her dress and holding a flower, with a legend referring to the city.<sup>573</sup>

On the smaller denominations (26–27 mm, 10–11 g) there may be a figure of a standing Zephyrus, holding a robe and possibly a lightning bolt, with the legend ΖΕΦΥΡΙΟC ΑΒΩΝΟΤΙΧΕΙΤΩΝ.<sup>574</sup> This type of scene also appeared on emissions of the same size during the reign of Trebonianus

<sup>560</sup> Rec 59–60; RPC III 1208.

<sup>561</sup> Domitian RPC II 712; Antoninus Pius RPC IV.1 5367–5368, 9671 (temporary numbers).

<sup>562</sup> Olshausen 1990: 1899–1900.

<sup>563</sup> According to F. Cumont, both names refer to the same deity. At least, both are of a similar nature. Cf. Saprykin 2009: 256–257.

<sup>564</sup> Aydın, Buccino and Summerer 2015: 226; Chiai 2019: 105; Gemci 2016: 17–18; Teffeteller 2012.

<sup>565</sup> Saprykin 2009: 257. Cf. Teffeteller 2012.

<sup>566</sup> McGing 2018: 67, footnote 4.

<sup>567</sup> Arr. *Mith.* 66, 70. Cf. McGing 2018: 10, 96; Saprykin 2009: 252, 255.

<sup>568</sup> Saprykin 2009: 252.

<sup>569</sup> Karağuz 2007: 55–56, figs. 1–2.

<sup>570</sup> Marek 1985: 184; 1993a: 96, no. 668; Summerer 2014: 196–197, 199–200.

<sup>571</sup> Hirschfeld 1888: 878, no. 31.

<sup>572</sup> Butcher 1988: 35–36; Heuchert 2005: 30; Ostrowski 2005: 110.

<sup>573</sup> RPC III 1211.

<sup>574</sup> RPC III 1212.

Gallus.<sup>575</sup> E. Babelon and J. Svoronos made the assumption that the image should be associated with the cult of the Glycon snake and the local oracle, however, no coins of this type from the rule of Trajan were known at that time. The cult was introduced in the mid 2nd century, hence the above hypothesis should be excluded. F. Imhoof-Blümer saw a relation to the local cult in this effigy.<sup>576</sup> Zephyrus was the deity of the West wind who favoured travel and shipping, so his presence at a coastal centre is unsurprising. Temples and altars were also dedicated to the deity.<sup>577</sup> However, it was not a very popular theme in the art. One of the first images of Zephyrus with Hyacinth is on a skyphos dated between 470–460 BC. It can be assumed that his image was placed on only some of the issues, however there is no certainty on this. Typically, the wind god can be equated with a flying, winged youth, sometimes in a light robe, with a horn or flowers, and accompanied by other winds.<sup>578</sup> However, the image on the coin from Abonoteichos stands out in this regard; perhaps it was a new effigy of a deity referring to local tradition or sculpture. The probable lightning bolt he holds was an attribute of Zeus, although it could also be a generally understood symbol of the sky. Perhaps the motif could be related to the nearby port city (anchorage?) of Zephyrium, located between the cities of Karambis and Abonoteichos.<sup>579</sup> In one of his works, Arrian of Nicomedia several times provides distances for certain places from this city, suggesting that it was not such an obscure town.<sup>580</sup> In this case, it seems that Abonoteichos could have benefited from using the nearby port, and the legend and the image placed on the issues were emphasising an important and significant centre for the local economy. In turn, the depicted effigy may allude to a characteristic local cult, and thus perhaps also a statue or sculpture. Arrian also noted that the port there was not the safest, however ships would be secure if storms there were not too violent.<sup>581</sup> Hence, perhaps the image on the coin should be identified as the god of wind, or perhaps even Zeus, holding a lightning bolt, referring to the afore-mentioned storms. Thus, F. Imhoof-Blümer's thesis might be confirmed to some extent. However, due to the few historical and archaeological sources, as well as the state of research, the hypothesis cannot be verified at this time.

On the other hand, the coins sized at 22 mm, 5–6 g minted in Abonoteichos during this period, show a standard image of Demeter with ears of corn and a long sceptre.<sup>582</sup> The goddess of fertility was also found on coins featuring the busts of Antoninus Pius, Faustina the Younger, and Severus Alexander.<sup>583</sup>

The motifs on the few coins from Abonoteichos struck during the reign of Trajan can be interpreted in relation to the Roman tradition, i.e. Elpis or Demeter, and the local one, i.e. Zephyrus. The effigy of the goddess of fertility may combine both cultural tendencies.

Several motifs appeared on a few coins from Sinope. In the legends accompanying the images, reference was made to the name of the colony and dating. On the coins of 17–19 mm, 4–7 g, struck in 103–104, and perhaps 104–105, there is a standing Nemesis, holding a

<sup>575</sup> RPC IX 1219.

<sup>576</sup> The individual views by Weiss 1997: 307. Cf. Marek 2003: 114–115.

<sup>577</sup> Griffiths 1999: 1636; Oakley 1997: 308–309.

<sup>578</sup> Oakley 1997: 308–309; Sichtermann 1966: 1132–1133.

<sup>579</sup> Arr. *Peripl. M. Eux.* 13; Marek 2002: 767 (place defined as an Ankerplatz); Oakley 1997: 308–309; Weiss 1997: 307–308.

<sup>580</sup> Arr. *Peripl. M. Eux.* 14.3, 16.4.

<sup>581</sup> Arr. *Peripl. M. Eux.* 14.3.

<sup>582</sup> RPC III 1213.

<sup>583</sup> Antoninus Pius RPC IV.1 5353 (temporary number); Faustina II RPC IV.1 5361 (temporary number); Severus Aleksander RPC VI 6460 (temporary number).

robe, and a short sceptre. A spoked wheel is shown at her feet.<sup>584</sup> The image was on the same denominations in the times of Vespasian and Maximinus Thrax, as well as on coins with a portrait of Julia Domna, Elagabalus, Severus Alexander, Gordian III, Philip Arab, and Trajan Decius. An image of the goddess in the temple indicates the presence of buildings in the city, as well as the popularity of the cult, especially in the Roman period.<sup>585</sup> Nemesis was the goddess of vengeance, as well as of destiny and justice. Her cult dates back to the 6th century BC, however, due to its character, it was not initially very popular. Her importance grew in the Hellenistic period and she was worshipped as a propitiating and protective deity by lovers, gladiators, and warriors. Sometimes she was shown or identified together with Tyche, Artemis, Isis, Victoria, or Psyche. The attributes of Nemesis include wings, a wheel, a griffin, a scale, a whip, and even a gladiatorial trident.<sup>586</sup> In turn, the image of the goddess with a wheel and a figure at her feet was to be a motif from the times of Trajan.<sup>587</sup> Chapels dedicated to her were registered at theatres, amphitheatres, and stadiums. The finds of votive figures and inscriptions indicate relations with fights and games. Her cult within the Black Sea basin is attested mainly in the 2nd and 3rd centuries, and its spreading, including into Thrace, Moesia and Dacia, was promoted by the Romans.<sup>588</sup> Perhaps on the same denomination, struck between 107 and 108, there appeared also the figure of a standing goddess, interpreted as Pax, leaning against a column and holding a cornucopia.<sup>589</sup> This type of image, with a similar denomination, is depicted on coins from the times of Vespasian and Marcus Aurelius.<sup>590</sup> On later issues, the figure was referred to as a Genius. Perhaps both Nemesis and Pax had similar values. On imperial coins from the time of Claudius and Vespasian, the image of the Nemesis is accompanied by a legend referring to PACI AVGVSTAE / AVGVSTI. This appeared on Trajan's coins as a motif on the restitution issue with the image of Caesar, struck in 107, while in Hadrian's time the effigy was accompanied by the legend VICTORIA AVG.<sup>591</sup>

On the coins minted in the years 109–110, sized at 29–30 mm, 16–17 g, there is a standing Hermes, holding a pileus and a caduceus.<sup>592</sup> This type of image was found on the coins of Caracalla and Diadumenian.<sup>593</sup> The bust of the deity wearing a petasos also appeared on silver and bronze issues, minted between the 3rd and 2nd centuries BC.<sup>594</sup> The reference to Hermes is found in an inscription on the north wall of the Acropolis in Sinope, near the entrance to the prison, that lists individual deities, including the names of Serapis, Selene, Themis, Helios, Hydrachous, and Sirius. In the Trapezus, founded by the inhabitants of Sinope, there was a temple and a statue of Hermes.<sup>595</sup> In the Bithynian calendar, November is dedicated

<sup>584</sup> RPC III 1217; Casey 334.

<sup>585</sup> Vespasianus RPC II 717; Julia Domna Rec 126–127; Elagabalus RPC VI 6484 (temporary number); Severus Alexander RPC VI 6493 (temporary number); Maximinus Thrax RPC VI 6501–6503 (temporary number); Gordian III RPC VII.2 ID 19564–19565; Philip the Arab RPC VIII ID 19566, 19569; Trajan Decius RPC IX 1222. Cf. Robinson 1906b: 266.

<sup>586</sup> Arya 2002: 86–87; Karanastassi and Rausa 1992; Hornum 1993: 7; Paribeni 1963: 404–406; Rofsbach 1897–1902: 118, 121–123, 155–165; Rose and Dietrich 1999: 1034; Stenger 2000: 818–819.

<sup>587</sup> Hornum 1993: 131–138; 1998: 131–135.

<sup>588</sup> Aristodemou 2016: 181; Hornum 1993: 6–14; 1998: 136.

<sup>589</sup> RPC III 1218.

<sup>590</sup> Vespasianus RPC II 716; Marcus Aurelius (Genius): RPC IV.1 4944–4945 (temporary numbers).

<sup>591</sup> Hornum 1993: 16–17, 31.

<sup>592</sup> RPC III 1219.

<sup>593</sup> Caracalla Rec 132; Diadumenian Rec 144.

<sup>594</sup> Rec Sinope 53, 56.

<sup>595</sup> Arr. *Peripl. M. Eux.* 2.1; Olshausen 1990: 1883–1884; Robinson 1905: 323; Summerer 2014: 190.

to this deity.<sup>596</sup> His images on the Sinope coins could refer to the commercial and economic prosperity of the centre.<sup>597</sup>

On the coins of sized at 22–23 mm, 5–6 g, probably minted in 114–115, there may be an effigy of Demeter sitting on a throne with a torch or a cornucopia and ears of corn.<sup>598</sup> Unfortunately, the image on the reverse is not fully legible. Demeter's effigies are also seen on some ceramic vessels found in a sarcophagus in nearby Gelincik.<sup>599</sup> However, as we have already noted several times, her cult was one of the most popular in many provincial cities.

Among the coins recorded so far from the Trajan period there is also a pseudo-autonomous issue (14 mm), stamped with a date and images of Priapus on the obverse and a herma on the reverse.<sup>600</sup> The herma motif was also placed on coins of a similar size from the times of Vespasian, and on issues from the reigns of the Antoninus Pius, Marcus Aurelius, and Elagabalus.<sup>601</sup> Priapus, son of Dionysus and Aphrodite (or a nymph), was a deity of vegetation. He is depicted in art with a basket of vegetables and a large phallus. According to Lucian, Priapus was worshipped in Bithynia as the god of war and the teacher of Ares,<sup>602</sup> something that can be additionally confirmed by an inscription with a reference to the deity from Nicomedia.<sup>603</sup> Perhaps one of the months in the Bithynian calendar was also dedicated to him, i.e. June.<sup>604</sup> Priapus seems to have been especially important for the Roman colonists. Due to the deity's additional role as protector of vegetation, he could also be associated with the fertility of this region. The herma, on the other hand, was an architectural and decorative detail of religious significance, initially associated with Hermes. It was a cult object, topped mainly with the heads of deities, but they could also be used as milestones.

The images of the coins from Sinope struck in the times of Trajan, due to the status of the city, are both related to the Roman and local tradition. The coins do not have very well-known imperial coinage motifs, but their own colonial character, which also seems to refer to the location of the centre and the values enabling its development (Hermes, Demeter, Priapus?).

One of the trends present in Amisus during the Roman period was the placing of dates on the issues. There were no portraits of the emperor on coins from the very beginning of Trajan's reign (98). Perhaps due to the lack of a model, traditions from an earlier period were referred to, and the legend on the obverse only included the name of the ruler. It was accompanied by the image of Nike standing on the globe, holding a palm tree and a wreath. On the other hand, this type of effigy could also be understood as the choice of a new emperor, as well as emphasising his victories over the Germans. On the reverse were images of the altar and the temple with the background of trees, or the personification of Amisus and Rome, and a bust of Athena. The accompanying legends referring to the divine Trajan could indicate an imperial cult. The altar and temple scene was probably placed on the larger denomination (23–25 mm,

<sup>596</sup> Avram 1999: 29.

<sup>597</sup> Cf. Boyana 2017: 159.

<sup>598</sup> Casey 336.

<sup>599</sup> Kaba 2019: 183, 193.

<sup>600</sup> Manisse 243; Dalaison Sinope 6.

<sup>601</sup> Vespasianus RPC II 718; Antoninus Pius RPC IV.1 1936, 4937 (temporary numbers); Marcus Aurelius RPC IV.1 4943 (temporary number); Elagabalus RPC VI 6485 (temporary number).

<sup>602</sup> Luc. Salt.

<sup>603</sup> TAM IV, 26–27; Boyana 2017: 161.

<sup>604</sup> Avram 1999: 29; Parker 2017: 192.

7–11 g), and the scene with Amisus and Rome on the slightly smaller coin (19–22 mm, 4–9 g).<sup>605</sup> The motifs of Nike, the personification of Amisus and Roma, as well as the bust of Athena were placed on coins struck probably in the 1st century BC and in the times of Augustus.<sup>606</sup> Perhaps the same temple appeared on the coins under Hadrian, but in a different iconographic type. Additionally, a statue is shown, which perhaps should be interpreted as Zeus, standing in front of a building, and the scene of an offering.<sup>607</sup> We may assume that it was a local building, known to local residents. The decoration, in the form of trees in the background, could help provide a correct interpretation. Perhaps the image was inspired by images of Mount Argaeus from coins minted in Caesarea in Cappadocia.<sup>608</sup> The effigy of the personifications of Amisus and Roma may testify to the friendly relations and agreement between the city and the Empire. The personification of the Roman state was usually depicted as an armed woman in a helmet, holding a spear and Victoria, thus resembling Athena.<sup>609</sup> After the incorporation of individual cities within the Roman Empire, the Roma cult, as well as the imperial cult, became very popular. As a result, the centres also had additional benefits.<sup>610</sup> The figure of Nike was on the coins from the times of Claudius, Vespasian, Caracalla, Severus Alexander, Maximinus Thrax, Philip Arab, Trajan Decius, and Saloninus.<sup>611</sup> In the earlier period, it also appeared on coins minted not only in Amisus, but also in other cities of the kingdom of Pontus, i.e. Laodicea, Comana, Neocaesarea, and Sinope, then under the rule of the Mithridatic dynasty.<sup>612</sup> As mentioned above, Nike could appeal to a strong ruler who would ensure the security of the state and its society. The origins of the cult of Athena can probably be dated back to the 5th century BC, with the arrival of the Athenians, and the renaming of the city as Piraeus. The coins with the image and attributes of the goddess were struck then.<sup>613</sup> The owl was a symbol of the city, as reflected in the issues of the Pontic kings to the time of Mithridates V.<sup>614</sup> Much less often she was shown on the coins of Mithridates VI, relating to the cult of Perseus, who was the patron of the royal family. On the other hand early issues referred to the coins minted on behalf of Alexander the Great, as confirmation of legitimacy.<sup>615</sup> In Roman times, Athena was placed on many coins struck from the reigns of Tiberius to Gallienus, not only in Amastris, but also in nearby cities such as Amasea, Cerasus, Neocaesarea, and Zela.<sup>616</sup> Perhaps it is related to the spread of local worship.<sup>617</sup> Among the discovered artefacts in the former city are terracotta figurines of Athena and Nike from the Hellenistic period, as well as a gold earring depicting Nike.<sup>618</sup>

<sup>605</sup> RPC III 1231–1233. Cf. Olshausen 1990: 1885.

<sup>606</sup> Rec Amisus 45–49; RPC I 2143–2147.

<sup>607</sup> RPC III 1263–1264; Nordbø 1988: 173.

<sup>608</sup> Nordbø 1988: 173.

<sup>609</sup> Richter 1909–1915: 130–134, 145–158.

<sup>610</sup> Mellor 1975; Olshausen 1990: 1894–1895. Cf. Kluczek 2009: 93–127; Öztürk 2012: 115.

<sup>611</sup> Claudius RPC I 2154; Vespasianus RPC II 729; Caracalla Rec 115, 118–119, 121; Severus Alexander Rec 128; Maximinus Thrax RPC VI 6517 (temporary number); Philip the Arab RPC VIII ID 19598; Trajan Decius RPC IX 1223, 1225; Saloninus Rec 156.

<sup>612</sup> Rec Rois de Pont 1; Rec Amisus 38, 43–44; Rec Chabacta 3; Rec Comana 1, 4; Rec Laodicee 3; Rec Neocesaree 4; Rec Sinope 64–66. Cf. Hoover 2012: 71–74; Waddington, Reinach and Babelon 1902–1914 (Pont).

<sup>613</sup> Rec Amisus 1–6, 8. Cf. Mentessidou 2011: 38; Olshausen 1990: 1876; Summerer 1999: 64.

<sup>614</sup> Rec Amisus 9–11a. Cf. Olshausen 1990: 1876.

<sup>615</sup> Rec Amisus 17. Cf. Olshausen 1990: 1876–1877.

<sup>616</sup> Olshausen 1990: 1877.

<sup>617</sup> Rec Amasea 11, 39a, 46f, 70, 97; Rec Cerasus 6a; Rec Neocaesarea 7a, 10a; Rec Zela 19. Cf. Olshausen 1990: 1877.

<sup>618</sup> Mentessidou 2011: 15, 23, 50, fig. 5; Summerer 1999: 64, cat. K I 1, fig. 19b, 44.

On the coins dated 98–99, with a portrait of the emperor, sized at 29–30 mm, 9–12 g, there is a horned goat and a cornucopia. This motif is also found on coins of Vespasian, Hadrian, Severus Alexander, and Trajan Decius.<sup>619</sup> It appears initially on issues of the queen of Pontus, Pythodoris, with the accompanying head of Augustus on the obverse, minted in one of the mints on the Pontic coast.<sup>620</sup> The horned goat was one of the symbols used by Augustus in his propaganda program. It was probably associated with the birth as well as the enthronement of the ruler. Moreover, the goat was identified with Pan, who assisted other deities in the fight against Typhon and the Titans, and it also referred to the defeat of the assassins of Julius Caesar. It was one of the most characteristic motifs in Augustan times on the coins of many Asian cities;<sup>621</sup> a symbol of loyalty, respect, and support to the emperor.<sup>622</sup> The motif, reproduced on various issues in particular periods, could refer not only to the reign of Augustus and the glory days, but also to successive rulers who were entrusted to ensure stabilisation and prosperity in the Empire.

Also known from this period are coins (24–25 mm, 6–8 g) with a portrait of Dionysus on the obverse and a cylindrical *cista*, decorated with two stripes, a snake coming out of it, and a thyrsus.<sup>623</sup> The *cista* was a universal vessel used to store, inter alia, toiletries, jewellery, etc. It was also occasionally used ritually (the so-called *cista mystica*). These vessels, regularly appearing on coins, with snakes emerging or coiled together, were used during the Eleusinian Mysteries in honour of Demeter and Dionysus.<sup>624</sup> The bust of Dionysus was also found on coins of Antoninus Pius, Commodus, Caracalla, and Aemilian.<sup>625</sup> However, images of this type are already known from the issues of Mithridates VI, probably between 100–85 BC, both in Amisus and in Sinope, Comana, Laodicea, Kabeira, and Dia.<sup>626</sup> The ruler portrayed himself as Dionysus or Heracles, thus referring not only to deities, but also as being the ancestor of Alexander the Great. According to legend, Mithridates, like the first of the gods, was to be struck by lightning.<sup>627</sup> The association of the ruler with Dionysus also appears in the epigraphic sources.<sup>628</sup> Due to the nature of the deity he was supposed to protect against death, and the ruler appointed himself as the saviour of the Greeks from the Romans. Hence the cult of Mithridates VI as the ‘new Dionysus’, and thus part of the imperial propaganda.<sup>629</sup> The cult of Dionysus was very popular in Amisus, also confirmed by other artefacts, including the fragments recovered to date of terracotta and bronze figurines with images including Dionysus Botrys (grapes) and Taurus (bull). The cult may also be associated with numerous theatrical masks depicting satyrs, Silenus, actors, and figurines of children and Eros, which might refer to Dionysus as a *pais*, also symbolising wealth. Most of the above artefacts can be dated between the 3rd and 1st centuries BC.<sup>630</sup> Dionysus as the deity of fertility, wine, patron of

<sup>619</sup> Vespasianus RPC II 726–727; Hadrian RPC III 1252; Severus Alexander Rec Amisus 62; Trajan Decius RPC IX 1224.

<sup>620</sup> Rec Rois de Pont 19; Jellonek 2017: 78.

<sup>621</sup> Jellonek 2017: 74–76; Nordbø 1988: 173.

<sup>622</sup> Jellonek 2017: 78; Zanker 1988: 84.

<sup>623</sup> RPC III 1235.

<sup>624</sup> Hirschmann 1997: 1222; Mansuelli 1959: 694–697.

<sup>625</sup> Antoninus Pius RPC IV.1 5322 (temporary numbers); Commodus RPC IV.1 5325 (temporary number); Caracalla Rec 122; Aemilian RPC IX 1233.

<sup>626</sup> Rec Amisus 24–27. Cf. de Callataj 2007: 273–308; Saprykin 2009: 250.

<sup>627</sup> Mentessidou 2011: 42–43; Saprykin 2009: 249; 2010: 482.

<sup>628</sup> ID 1562–1563. Cf. Saprykin 2009: 251.

<sup>629</sup> Mentessidou 2011: 42–43; Saprykin 2009: 249, 251; 2010: 481–482.

<sup>630</sup> Mentessidou 2011: 36, 45; Saprykin 2010: 481; Summerer 1999: 32, 40–49, 412, cat. P I 1–2, P I 6, P I 9–10, P II 1–2, 4–5, 10, P IV 1, P IV 18, P IV 21.

theatrical arts, and also as the protector of life, was one of the main cults in the city at various times.<sup>631</sup>

On the coins minted in the years 106–107, sized at 29–30 mm, 9–12 g, there are effigies of a seated Zeus, one hand stretched out, the other holding a long sceptre, and a walking Nike with a shield with the notation of the year and a *tropaion*.<sup>632</sup> The figure of Zeus appears on the silver coins in the time of Hadrian, as well as on the bronze coins during the reign of Gordian III and Aemilian.<sup>633</sup> Depictions of the deity and related attributes were also found on the coins struck during the Mithridatic rule, not only in Amisus, but also in Amasea, Comana, Gaziura, Laodicea, Kabeira, Pharnakea, and Pimolisa.<sup>634</sup> It was one of the most important motifs in this period, showing the legitimacy of power and protection over the royal family. References to Zeus Etaphor, Epikarpos, Hypsistos, Stratios, Pallantios, Soter, and Xentios were found among the local cults in Pontus.<sup>635</sup>

In this year, coins sized at 22–25 mm, 4–8 g were also struck, depicting Heracles dressed in a lion's skin and leaning on a club.<sup>636</sup> The same image was placed on the silver coins from the time of Hadrian as well as on the bronze issues from the reign of Gordian III.<sup>637</sup> The character of the hero was previously depicted on the coins from the time of Mithridates VI,<sup>638</sup> with whom he was associated. The effigy of Heracles referred to the ruler as the protector of the Greeks against the Romans, thus serving the official royal propaganda during this period.<sup>639</sup> The images of Mithridates as Heracles are known from carvings, figurines, coins, and gems.<sup>640</sup> The character of the hero himself was very popular on the southern coast of the Black Sea because of his travels in these areas.<sup>641</sup> Terracotta figures of Heracles from the Hellenistic period also come from Amisus.<sup>642</sup> One of the months in the Bithynian calendar, February, was also devoted to him.<sup>643</sup>

From this period come coins (19–20 mm) featuring a bust of Athena on the obverse and a kneeling Aphrodite on the reverse.<sup>644</sup> The figure of the goddess of love was also found on the silver coins from the time of Hadrian, with a portrait of Sabina, and during the reigns of Severus Alexander and Maximinus Thrax.<sup>645</sup> In neighbouring cities, Aphrodite appeared on the Amasea coins struck during the reign of Marcus Aurelius and Lucius Verus.<sup>646</sup> Terracotta figurines were made in Amisus, among which there were several effigies of the goddess. One such is Aphrodite Anadyomene, discovered in Panticapaeum and now in the Louvre (inv. no.

<sup>631</sup> Cf. Mentessidou 2011: 36, 45–46.

<sup>632</sup> RPC III 1236–1237.

<sup>633</sup> Hadrian RPC III 1245–1246; Gordian III Rec 135; Aemilian RPC IX 1232.

<sup>634</sup> Rec Rois de Pont 2–3; Rec Amisus 14; Rec Amasea 1f; Rec Komana Pontica 4; Rec Gaziura 5; Rec Laodycea 4; Rec Cabeira 1–1a; Rec Pharnakea 4; Rec Pimolisa 1. Cf. Saprykin 2009: 251–252.

<sup>635</sup> Olshausen 1990: 1899–1903; Saprykin 2009: 251–252.

<sup>636</sup> RPC III 1238.

<sup>637</sup> Hadrian RPC III 1275; Gordian III RPC VII.2 ID 19580–19581, 19589.

<sup>638</sup> Rec Amisus 39–40.

<sup>639</sup> Mentessidou 2011: 42–43; Olshausen 1990: 1883; Saprykin 2010: 484.

<sup>640</sup> Fulińska 2015: 168–169; Mentessidou 2011: 43–44; Summerer 1999: 130–131.

<sup>641</sup> Mentessidou 2011: 39.

<sup>642</sup> Mentessidou 2011: 15, 39; Summerer 1999: 110–111.

<sup>643</sup> Avram 1999: 29.

<sup>644</sup> RPC III 1239.

<sup>645</sup> Hadrian RPC III 1294; Severus Alexander RPC VI 6511 (temporary number); Maximinus Thrax RPC VI 6518 (temporary number).

<sup>646</sup> Marcus Aurelius Rec 18–18a; Lucius Verus Rec 25–25a. Cf. Olshausen 1990: 1871–1872.

CA2288).<sup>647</sup> Other well-known images are terracotta figurines of the kneeling and Knidian Aphrodite.<sup>648</sup> Perhaps the cult of Aphrodite was related to the colonists of Miletus who settled in these areas. The inhabitants of this city, as well as colonies such as Istria, Olbia, Cyzicus, worshipped her as the goddess of the sea.<sup>649</sup>

From the years 108–109, only 19–20 mm issues are known, with a portrait of the emperor and Nike walking, holding a palm and a wreath.<sup>650</sup> On issues minted in 113–114, sized at 33–36 mm, 22–24 g, there is a figure of a seated Tyche, holding a cornucopia and a patera above the altar.<sup>651</sup> On the lighter coins from this period (33 mm, 16–17 g) there was also a sitting Tyche, but holding a wreath and a cornucopia.<sup>652</sup> The figure of the guardian of the city, sitting or standing, appears on coins from the times of Hadrian, and then Antoninus Pius, Commodus, Caracalla, Elagabalus, Severus Alexander, Maximinus Thrax, Balbinus and Pupienus, Gordian III, Philip Arab, Trajan Decius, and Aemilian.<sup>653</sup> It also features on coins dating back as far as the 4th–3rd centuries BC.<sup>654</sup> A marble head of a goddess in a crown of defensive walls was found in the city, with a smaller figure in a radiant crown with a crescent, who can be interpreted either as Helios, Ma (a goddess popular in nearby Comana), or the Anatolian god, Men, worshipped in Pontus with the epithet Pharnaces, from the name of the ruler who introduced the cult.<sup>655</sup> A fragment of a terracotta figurine of Tyche was also found.<sup>656</sup>

Also on coins from this period, 17 mm, 2–4 g in size, we have a standing Athena holding a spear and a patera above the altar, and a shield at her feet.<sup>657</sup> The image was also reproduced on silver issues in the times of Hadrian, and some bronze ones of Gordian III and Aemilian.<sup>658</sup>

Many effigies referring to local and well-known cults, in many cases with a long tradition, were placed on Amisus coins in the time of Trajan. Only some of the motifs are directly associated with the Roman tradition, such as the personifications of Amisus and Roma, and the horned goat with the cornucopia. Others may refer to popular beliefs, especially in the Hellenistic period,<sup>659</sup> i.e. Dionysus, Heracles, Athena, or Zeus. Perhaps due to the location of the centre on the northern coast of Anatolia, the Roman tradition did not leave much of an imprint during this period, especially in terms of coin effigies.

<sup>647</sup> Summerer 1999: 153.

<sup>648</sup> Corso 2007: 113–114; Mentesisidou 2011: 17, 26; Summerer 1999: S II 3.

<sup>649</sup> Greaves 2004.

<sup>650</sup> RPC III 1240.

<sup>651</sup> RPC III 1241.

<sup>652</sup> RPC III 1243.

<sup>653</sup> Hadrian RPC III 1247–1248, 1296; Antoninus Pius RPC IV.1 5320, 5449, 6250, 8000 (temporary numbers); Commodus RPC IV.1 5323–5324 (temporary numbers); Caracalla Rec 116; Elagabalus RPC VI 6510 (temporary number); Severus Alexander RPC VI 6512 (temporary number); Maximinus Thrax RPC VI 6522 (temporary number); Pupienus and Balbinus RPC VII.2 ID 19578; Gordian III RPC VII.2 ID 19584, 19592; Philip the Arab RPC VIII ID 19596, 19601; Trajan Decius RPC IX 1226; Aemilian RPC IX 1231.

<sup>654</sup> Malloy 9 g, Rec 11.

<sup>655</sup> Marek and Adak 2016: 71–72; Olshausen 1990: 1887–1888, 1895–1896; Öztürk 2010: 45; Summerer and Atasoy 2002.

<sup>656</sup> Mentesisidou 2011: 17, 23–24; Summerer 1999: cat. B III 1.

<sup>657</sup> RPC III 1244.

<sup>658</sup> Hadrian RPC III 1249–1250; Gordian III RPC VII.2 ID 19579, 19585–19586; Aemilian RPC IX 1228.

<sup>659</sup> Saprykin 2009: 249.

Among the coins of Bithynia and Pontus struck during the reign of Trajan there are coins without ethnic, the iconography of which, due to the uncertain attribution, is discussed below according to the groups distinguished.

On the coins with the name of the proconsul Gaius Julius Bassus (20–24 mm, 6–8 g) we have an altar, a standing Demeter with a long sceptre and ears of corn, and an eagle with outstretched wings perched on a globe.<sup>660</sup> A cornucopia appears on the smaller units of 18 mm, 2–3 g,<sup>661</sup> similar to coins struck in Nicomedia. The above-mentioned inscription referring to the cult of Demeter Karpophoros was noted from the area of Bithynia, where the epithet's meaning should be understood literally as a fruit-bearing and fertility, ensuring the survival of mankind.<sup>662</sup> The cornucopia symbolised abundance and prosperity. In myths it is identified with the horn of Amalthea or the horn wrenched from the head of Achelous by Heracles. On Roman coins it is accompanied by many personifications of virtues and goddesses, including Abundantia, Aequitas, Aeternitas, Annona, Fortuna, Fecunditas, Felicitas, Ceres, and Concordia.<sup>663</sup> It is also found on many provincial issues, mainly on small coins, making it a very good denomination indicator. In Bithynia and Pontus, units with this motif were struck by mints in Apamea, Sinope, Nicaea, and Nicomedia.<sup>664</sup> Also in the province, perhaps, small coins were minted exclusively with this image, without any legend.<sup>665</sup>

Two types of images can be distinguished within the group of coins with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ CEBACTH or CERAC. On the large denominations (30–33 mm, 22–26 g) there was a standing Eirene holding an olive branch and a cornucopia, with a legend for additional identification, as well as a standing Elpis raising the hem of her dress and holding a flower.<sup>666</sup>

In the next group of coins without an ethnic, with the legend ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ / ΟΜΟΝΟΙΑ CEBACTH / ΟΜΟΝΟΙΑ, there were two types of effigies depicting Eirene and Demeter.<sup>667</sup> The emissions of this type, of various denominations, were struck after 98 and 102. It is worth noting that, due to the legend accompanying the effigy, the figure of a woman holding an olive branch and a cornucopia may be interpreted not as Eirene, but as Homonoia. On imperial coinage her Roman equivalent, Concordia, could also hold the same attributes, but more often was shown with a patera or ears of corn. The origins of her cult date back to the 4th century BC. Concordia/Homonoia was the personification of universal consent in various political or military situations, as well as groups. During the Roman Empire, individual agreements between individual family members or co-rulers were mainly emphasised.<sup>668</sup> Some women from the imperial families were equated with the allegory of concord. These types are known from the Halasarna inscription on Cos, dated AD 37, and from Thyssanus in southern Caria,

<sup>660</sup> RPC III 1121–1124.

<sup>661</sup> RPC III 1124A.

<sup>662</sup> Wallensten 2014: 198.

<sup>663</sup> Stevenson, Smith and Madden 1889.

<sup>664</sup> Augustus: Apamea RPC I 2002 (15 mm, 2–3 g); Nero: Nicaea RPC I 2050, 2056–2057 (29 mm, 12–13 g; 35 mm, 25–26 g); Augustus: Sinope RPC I 2114 (16 mm, 3–4 g); Domitian: Nicaea RPC II 647 (17 mm, 2–3 g); Antoninus Pius: Apamea RPC IV.1. 5482 (17 mm, 2–3 g) (temporary number); pseudo-autonomous coins: Apamea RPC IV.1. 4719 (temporary number).

<sup>665</sup> RPC III 6550–6551.

<sup>666</sup> RPC III 1125–1127.

<sup>667</sup> RPC III 1128–1133.

<sup>668</sup> Peter 1897–1902: 914; Hölscher 1990: 479; Mikocki 1997: 17–18, 21–23, 36.

where Domitian's wife was named as such.<sup>669</sup> On provincial coinage, the Homonoia motif mainly underscored agreements between individual cities or between co-emperors, mainly in the times of Marcus Aurelius and Lucius Verus, Caracalla and Geta, and Septimius Severus.<sup>670</sup> On some coins from the reign of Trajan, personifications of peace and harmony are juxtaposed, as in the case of the issue from Alexandria.<sup>671</sup> From the time of Domitian, Bithynia coins with images of Demeter and Homonoia are known, but the latter probably should be identified as Tyche, due to the *corona muralis* and the cornucopia.<sup>672</sup> The effigy can be interpreted as ensuring prosperity and fertility brought by consent.<sup>673</sup> In this case, Homonoia could also refer to the understanding and cooperation of cities issuing a similar coin.

On coins sized at 32–34 mm, 20–23 g there is a depiction of Nike holding a palm and crowning the tropaion, with the accompanying legend NEIKH CEBACTOY, ΔAK or NEIKH ΣΕΒΑΣΤΟΥ, APME.<sup>674</sup> The image is Roman in character and refers to the imperial issue minted after the Dacian wars, however it does not exactly follow any of the same motifs or legends from local coins. Thus it can be concluded that the effigies were not taken directly from imperial coins, but only created in a local character against popular propaganda. This is another image that alluded to the military successes of the emperor, including the conquest of Dacia and Armenia.<sup>675</sup> This group also includes emissions of 24–27 mm, 8–11 g, with the image of Nike holding an olive branch and a palm with the legend NEIKH CEBACTOY.<sup>676</sup>

The next group are coins with the legend ΔΗΜΗΤΡΑ CEBACTH with the characteristic image of Demeter holding a long sceptre and ears of corn. Issues of this type were probably only struck in one denomination, i.e. 22–24 mm, 6–11 g.<sup>677</sup> The motif appears on coins of several cities during this period. Bithynia and Pontus probably also had other emissions, without an ethnic, relating to the harvest and the cult of Demeter, with the legend ΔΗΜΗΤΡΟC and a poppy between two ears of corn.<sup>678</sup>

The same denomination (22–24 mm, 6–10 g) is represented by the coins with the legend CEBACTH / ΣΕΒΑΣΤΗ. Two types of images were placed on the reverse, including Demeter and Athena carrying a spear and holding a shield.<sup>679</sup>

Another group is represented by coins with the legend CEBACTOY / ΣΕΒΑΣΤΟΥ, probably minted in three sizes (21–22 mm, 6–7 g, 23–24 mm, 8–9 g, 24–25 mm, 11–13 g). On the coins are images of Demeter, Tyche holding the rudder and cornucopia, and Nike with the globe.<sup>680</sup>

<sup>669</sup> Mikocki 1997: 26.

<sup>670</sup> Franke 1987; Franke and Nollé 1997; Mikocki 1997: 38–39, footnote 93.

<sup>671</sup> BMC Alexandria 428; RPC III 4715, 4792.

<sup>672</sup> SNG vAulock 6913; RPC II 675.

<sup>673</sup> Mikocki 1997: 38, footnote 90.

<sup>674</sup> RPC III 1134, 1136.

<sup>675</sup> Schultz 1968: 214–215.

<sup>676</sup> RPC III 1135.

<sup>677</sup> RPC III 1137–1138.

<sup>678</sup> RPC III 6548.

<sup>679</sup> RPC III 1139–1143.

<sup>680</sup> RPC III 1144–1146.

Two types of images were placed on coins with the legend ΔIOC, i.e. the altar shrine and the eagle perched on the globe.<sup>681</sup> Both effigies refer to Zeus, who perhaps should be identified, on the basis of earlier issues, with Zeus Litaioi, although not necessarily, as it turns out. Based on the inscriptions, Turkish researchers indicate that it was one of the dominant cults in this region, distinguished by many epithets, such as Basilikos, Pithios, and Soter.<sup>682</sup> Some are derived from toponyms, stressing the figure of the god as protector of a given place or a smaller community.<sup>683</sup> The cult of Zeus Bronton was very popular, as indicated by the dedications placed mainly on the altars. There was also probably a temple for him in the region.<sup>684</sup> Many carved busts of the deity have also been discovered, perhaps intended to be placed on the above-mentioned altars.<sup>685</sup> The village of Demirhanlar (Gölpazarı district) revealed an altar with the inscription ΔIOC, decorated with garlands and a bucranium.<sup>686</sup> Other objects of this type with dedications to the deity have also been discovered at, inter alia, Boyacılar (Göynük district), Büyükbelen, Aktaş, Arıcağlar, and Sarıhocalar (Gölpazarı district), Bursa (inv. no. 2526), Hüyük-Köy (Osmaneli district), Gülümbe (Bilecik district), and Yakacık and Koyunlu (Söğüt district).<sup>687</sup> Evidently, then, the cult of Zeus in the south of Bithynia was very popular. For this reason it is not possible to associate the effigy on the coins with one particular altar, or a specific cult of Zeus. It was only a symbol of a common practice in the region, and very easily recognisable by its inhabitants. Due to the various existing epithets of the deity, the simplest solution when minting coins was to refer only to the name ΔIOC itself. It should also be noted that the emissions did not include only the altar itself, but the altar shrine. As mentioned above, this type of image was mainly known from imperial coins.

Coins with the legend ΚΤΙCΤΗC depict an eagle standing on the globe.<sup>688</sup> Perhaps the legend alluded to one of the founders of the centre, which could have been Nicaea. From the historical sources and inscriptions, inter alia, from the time of Hadrian, it is known that these were the cities of Dionysus and Heracles.<sup>689</sup> One of the myths tells of Dionysus' seduction of the nymph Nicaea, after whom the village he founded was named.<sup>690</sup> Another story tells of Heracles wandering through these regions in search of his beloved Hylas, founding settlements as he travelled.<sup>691</sup> However, much more often it is Dionysus who is emphasised; we find him already appearing on the Lysimachus coins struck at this mint.<sup>692</sup> It should be recalled, however, that a similar legend was placed on the coins of Heraclea, also with the image of Dionysus.

<sup>681</sup> RPC III 1148–1155.

<sup>682</sup> INicaea 32, 1125, 1131–1132; Öztürk, Aktaş and Demirhan-Öztürk 2020: 173–183. There are many epigraphic sources from Nicaea and the surrounding area that mention Zeus with epithets such as: Agathios; Lidaioi (INicaea I, 34); Astrapaios (INicaea II 1, 702); Aretarkhos (INicaea II 1, 1076); Dimenenos (INicaea II 1, 1110); Epouranios (INicaea II 1, 1114); Okkonenos (INicaea II 1, 1119); Pantokrator (INicaea II 1, 1121; INicaea II 2, 1512); Sabazios (INicaea II 1, 1127); Sebastos (INicaea II 1, 1129); Syngenikos (INicaea II 1, 1130); Soter (INicaea II 1, 1131); Bennios (INicaea II 2, 1503); Olympios (INicaea II 2, 1505); Pappoos? (INicaea II 2, 1513). References to Zeus Kronios, Soter, Agathios Pithios, Eidikenes are also among the new sources (Akyürek Şahin 2014; Öztürk *et al.* 2012).

<sup>683</sup> Saprykin 2009: 253.

<sup>684</sup> Akyürek Şahin 2012a.

<sup>685</sup> Akyürek Şahin 2012a: 353; 2014.

<sup>686</sup> INicaea 1054.

<sup>687</sup> INicaea 1055–1057, 1062–1064, 1066–1067, 1071, 1080.

<sup>688</sup> RPC III 1160.

<sup>689</sup> Dio Chrys. *Or.*; INicaea II 2, 1324/93a; Boyana 2016; Öztürk, Aktaş and Demirhan-Öztürk 2020: 174; Şahin 1987: 370.

<sup>690</sup> Nonnos, *Dionisiaka* XV; Memnon 28. 9–11; Boyana 2016: 45–46; Şahin 1987: 371–373.

<sup>691</sup> Memnon 28.5; Şahin 1987: 371.

<sup>692</sup> Boyana 2016: 50.

Perhaps one of the centres of Bithynia and Pontus also produced emissions with a staff entwined with a serpent, associated with the art of healing, and thus the cult of Asclepius. In antiquity, the serpent was seen as a mysterious creature with extraordinary powers, symbolising wisdom and eternal life, although it could also be the cause of death. Vipers were associated with the beginning of the world, creation, ancestor worship, wisdom, strength, and eternity. They were also known to have been kept as household pets, ensuring prosperity and happiness. The creatures also played an important role in medicine and Asclepieia. As for the staff, it was probably a symbol of eternity embedded within the forces of nature.<sup>693</sup>

On coins from the cities of Bithynia and Pontus in Trajan's time the most common motifs were images relating to local cults. Some of the effigies were also related to the Roman tradition. Some types could be read in several ways, determined by history, economy, or imperial propaganda. The images also referred to universal values, e.g. prosperity, fertility, peace, etc. Cults from the Mithridatic era were still also present in the region.<sup>694</sup> Among the images placed on the coins known from Bithynia and Pontus to date, 53% are deities, 28% symbols, 11% architecture, 4% personifications, and 4% heroes; of the figures, Demeter (20%), Athena (14%), and Zeus (13%) are the most prominent.

As can be seen from the above analysis, both cultures, Roman and local traditions, interpenetrated, thus creating a unique composition.<sup>695</sup> For this reason, reference should be made to several views focused on this phenomenon. G. Woolf favours that, as a result of the interaction between provincial elites and Roman culture in the times of Augustus and in the 1st century AD, a new Roman-imperial tradition was created, linking both.<sup>696</sup> In turn, J. Webster referred to the phenomenon of intermingling of 'lower social strata' and the adoption of certain Roman influences.<sup>697</sup> R. Hingley and L. Revell turned to a certain 'globalisation' of Rome, from which other communities could benefit.<sup>698</sup> It seems that in individual provincial centres or regions, such tendencies, depending on various factors and periods, could intensify or weaken.

### **Common motifs and prototypes of some coins of Bithynia and Pontus**

Among the effigies on coins issued in Bithynia and Pontus, there are some similarities that might indicate the cooperation of individual cities, e.g. Nicaea, Nicomedia, Prusias, Prusa, Amastris, and Abonoteichos. C. Kraay has pointed to the presence of a coinage centralisation system in the province,<sup>699</sup> which could be reflected in a similar nominal and ore structure, images, legends, die links, and the existence of a specific currency in circulation. Individual emissions in Bithynia and Pontus show some similarities, but not in all aspects, thus contradicting a strict system of centralisation, but rather pointing to some kind of cooperation between particular centres.<sup>700</sup> It should be remembered that cities often competed for status to gain benefits (e.g. Bithynia and Pontus in Trajan's time, or the rivalries between Apamea

<sup>693</sup> Retief and Ciliers 2005: 189–190, 194, 197.

<sup>694</sup> Saprykin 2009: 249.

<sup>695</sup> Cf. Marek 2009; Harris 1980.

<sup>696</sup> Woolf 1994; 1998: 238–249.

<sup>697</sup> Webster 2001.

<sup>698</sup> Hingley 2005: 117–118; Revell 2009: 2–3, 191–193.

<sup>699</sup> Kraay 1953.

<sup>700</sup> Amandry, Burnett *et al.* 1999: 92.

and Prusa, and Nicaea and Nicomedia).<sup>701</sup> So why cooperate with each other during the reign of Trajan?

Some of the images on the coins, reproduced on issues from various centres, reflect Roman traditions rather than local cultures. The individual motifs also appeared on coins without an ethnic to indicate the mint.<sup>702</sup> This, in turn, means a certain popularity, recognition and universality of the iconographic type, both in the centre and within the region. Only some of the images duplicated the motifs from coins issued locally in earlier periods, or imperial coins from the times of Trajan. On the reverses we have images of Eirene (Pax),<sup>703</sup> Ares (Mars),<sup>704</sup> Elpis (Spes),<sup>705</sup> Demeter (Ceres),<sup>706</sup> Athena (Minerva),<sup>707</sup> Nike (Victoria),<sup>708</sup> the eagle standing on the globe,<sup>709</sup> and altar shrines.<sup>710</sup> The origins of these specific motifs appearing on the coins of Bithynia and Pontus can be traced to the reign of Domitian. It was then that the mints of Nicaea, Nicomedia, and Prusias started to strike coins with the above-mentioned images.<sup>711</sup> Several of the types mentioned (Eirene,<sup>712</sup> Athena,<sup>713</sup> Nike,<sup>714</sup> the eagle standing on the globe,<sup>715</sup> altar<sup>716</sup>) were depicted on the coins of Bithynia and Pontus already during the rule of the Julio-Claudian dynasty and Vespasian, however, they are not always the same types of images that were to appear in the eras of Domitian and Trajan.

The sources of the images found on the reverses of individual issues minted locally in the Bithynian centres, indicating a certain cooperation between the cities, are Roman imperial coins issued between 80–82 in the imperial branch mints located in Thrace and Bithynia. Compared to the imperial coins struck in Rome, the issues from these branch mints differ in style and manufacture. Originally, the above group of coins was assigned to the mint in Lugdunum, however, taking into account the finds made to date, the imperial branch mint should be looked for in the eastern Balkans. Contemporary researchers tend to locate the mint in Thrace, due to the alloy, metrological values, and the presence of this type of coins in the museums and collections in Sofia, Belgrade, and Istanbul. Possibly coins of this type were issued from the Perinthus mint, located near the provincial border.<sup>717</sup> In turn, H.A. Cahn, from the reproduction of motifs on the Bithynia issues, assumed that the mint might have been in

<sup>701</sup> Salmeri 2005: 196; Winniczuk 1987b (2017): 79.

<sup>702</sup> Amandry, Burnett *et al.* 2015: 136–139. Cf. Tab. 3.

<sup>703</sup> Apamea RPC III 1029; Iuliopolis RPC III 1099; Prusias ad Hypium RPC III 1101; uncertain mint RPC III 11251–126, 1131.

<sup>704</sup> Nicaea RPC III 1059; Iuliopolis RPC III 1098; Amastris RPC III 1198.

<sup>705</sup> Amastris RPC III 1199; Abonoteichos RPC III 1211; uncertain mint RPC III 1127.

<sup>706</sup> Prusa ad Olympus RPC III 1038; Iuliopolis RPC III 1100; uncertain mint (Prusias?) RPC III 1123, 1128–1130, 1132–1133, 1137–1140, 1144; Amastris RPC III 1201–1202; Abonoteichos RPC III 1213.

<sup>707</sup> Uncertain mint (Nicaea?) RPC III 1141–1143; Amastris: RPC III 1203.

<sup>708</sup> Uncertain mint (Nicaea?) RPC III 1146–1147.

<sup>709</sup> Prusias ad Hypium RPC III 1102; uncertain mint RPC III 1124, 1152–1153, 1155, 1158–1160; Amastris RPC III 1103.

<sup>710</sup> Prusias ad Hypium RPC III 1103; uncertain mint (Nicaea?) RPC III 1121–1122, 1148–1152, 1154, 1156–1157, 1159.

<sup>711</sup> Cf. Tab. 2a.

<sup>712</sup> Nicomedia RPC I 2062 – Eirene standing to the left, holding the caduceus.

<sup>713</sup> Heraclea: RPC I 2088 – Athena standing to the left, holding a patera, spear, and shield.

<sup>714</sup> Apamea RPC I 2004–2006 – Victoria standing on the globe, holding a wreath and a palm tree; 2016 – Victoria standing to the left, holding a shield; Nicaea RPC I 2026–2027 – Nike walking, holding a palm tree and a wreath; Nicomedia RPC I 2084 – Nike walking, holding a palm tree and a wreath; Amisus RPC I 2145, 2154; RPC II 729 – Nike walking, holding a palm tree and a wreath.

<sup>715</sup> Prusa RPC I 2019 – eagle with a wreath in its beak.

<sup>716</sup> Nicaea RPC I 2049, 2053, 2055, 2059; Prusias ad Hypium RPC II 670.

<sup>717</sup> Carradice, Cowell 1987; Amandry, Burnett *et al.* 1999: 87–91; Burnett 1999.

that area.<sup>718</sup> Researching the museums of northern Turkey, no imperial issues minted between 80–82 were found, which in turn may confirm the hypothesis that the mint functioned in Thrace.<sup>719</sup> Of course, future finds might well provide evidence of these issue types; or it may well be that the state of preservation of existing coins prevents any precise determination. It should also be remembered that, due to the duplicated motifs, coins from the imperial mint were inflows into Bithynia, and hence simply finding them does not necessarily indicate the presence of a mint there.

We should also consider at this point possible reasons for the establishment of an imperial mint in the region, which it is estimated, would function for only two years. In this regard, there are not many sources that can answer this question; perhaps one might be the location associated with the connection to the provinces in Asia Minor and East.

The above-mentioned bronze imperial coins struck between 80–82, probably at an unidentified mint in Thrace, bear the characteristic images and legends of imperial coins minted in Rome, not referring to the local tradition or culture. Among their motifs we have Pax, Mars, a palm tree with personifications of the people of Judea, Spes, Roma, Ceres, and a poppy between two cornucopia.<sup>720</sup> Restitution coins were also issued with effigies of Victoria, the altar, the eagle standing on the globe, Neptune, Spes, Minerva, and the poppy between two cornucopia.<sup>721</sup> Many of these motifs became prototypes of coin images issued at the Bithynia and Pontus mints during the reigns of Domitian and Trajan. Only the effigy with the IVDAEA CAPTA legend was omitted,<sup>722</sup> which in turn may lead to the conclusion that a given motif, concerning the conquest of Judea in AD 70, was not easily recognisable, and, therefore, important for the local society, especially in the time of Trajan.

The motifs on the coins from Domitian's time were reproduced and spread during the reign of Trajan. During the times of Domitian, the Greek equivalent of the Pax (Eirene) personification was found on the coins of Nicaea, Prusias, and (probably) Nicomedia,<sup>723</sup> on denominations similar to the Roman sestertii.<sup>724</sup> During the reign of Trajan, the same effigy appeared on the coins of Apamea, Iuliopolis, and Prusias. This image is also present on the coins without the ethnic, which may be attributed to the Amastris and Nicaea mints.<sup>725</sup> As during the reign of Domitian, this motif was placed on the larger coins. The figure of a walking Mars, holding a tropaion and a spear, on sestertii issued between 80–82 also features on coins of

<sup>718</sup> Cahn 1984–1985.

<sup>719</sup> Zajac 2021.

<sup>720</sup> Pax Cahn 1, 4, 20, 24; BMCRE 309, 315; RIC 181; RPC II 501, 504, 526, 530; Mars Cahn 2, 5, 21, 25; BMCRE 310; RIC 182; RPC II 502, 527, 531; palm tree with personifications of the people of Judea Cahn 3; RPC II 503; Spes Cahn 6; RPC II 506; Roma Cahn 7, 22, 26; BMCRE 314; RPC II 507, 528, 532; Ceres Cahn 8–9, 23, 27; RPC II 508–509, 529, 533; the poppy between two cornucopia RPC II 510.

<sup>721</sup> Victoria Cahn 11; RPC II 512, 534; BMCRE 266; altar Cahn 12, 28; RPC II 513, 535; eagle standing on the globe Cahn 13, 29; RPC II 514, 536; Neptune Cahn 14; RPC II 520; Spes Cahn 18, 34; RPC II 521–22, 541; Minerva Cahn 19, 35; RPC II 523, 542; the poppy between two cornucopia RPC II 543.

<sup>722</sup> Or a coin of this type has not yet been registered. The territory of the former province of Bithynia and Pontus have not yet been very well researched archaeologically.

<sup>723</sup> Some iconographic elements on the coin are illegible.

<sup>724</sup> Some of the types are represented only by single coins, hence it is impossible to give a constant weight or diameter that would characterise all the issues. These values also do not strictly correspond to the denominations of imperial coins and some coins are a little lighter. One should also bear in mind the problem of monetary systems in the provinces, which cannot be included in one pattern. Table 1a and 1b show the ranges in which the given coins are, rather than mean values of weights and diameters. Cf. Zajac 2020: tab. 1.

<sup>725</sup> Zajac 2019a: 43–45.

Nicaea, Nicomedia, and Prusias in the times of Domitian,<sup>726</sup> and on those of Nicaea, Iuliopolis, and Amastris during the reign of Trajan.<sup>727</sup> This motif was also depicted on the larger denominations. Personifications of Spes on the imperial sestertii appear on Nicaean coins of Domitian,<sup>728</sup> and then on those of Amastris and Abonoteichos during the reign of Trajan.<sup>729</sup> Emissions with this image but lacking an ethnic should probably be attributed to Amastris or Nicaea.<sup>730</sup> All coins with the personification of Elpis were struck in the larger denomination. The dupondii issued between 80–82 show images of a seated Roma holding a wreath and Ceres with ears of corn and a long sceptre. Asses were also struck with the personification of Ceres. During the reign of Domitian, Nicaea placed both the Roma and Demeter motifs on its own coins, while Prusias and Bithynium Claudiopolis show only Demeter.<sup>731</sup> Coins without an ethnic were probably struck in Prusias. Almost all centres issued denominations similar to the imperial ones. Only the mint in Bithynium Claudiopolis minted smaller coins with the image of Demeter (24 mm, 7–9 g). During the reign of Trajan there was no motif of Roma on the issues of Bithynia and Pontus, while the personification of Demeter, as one of the universal cults, features on the coins of Prusa, Iuliopolis, Amastris, and Abonoteichos.<sup>732</sup> Many coins without an ethnic with the personification of the goddess of fertility were also minted, which most likely can be assigned to the mints of Nicaea and Prusias.<sup>733</sup> Compared to the previous period, this motif appears already on the three different denominations. In terms of metrological values, coins from Iuliopolis, Amastris, and Nicaea and/or Prusias, are the most similar in nominal terms to imperial issues.<sup>734</sup> The dupondii issued between 80–82 also have images of Victoria holding a shield, whereas on the asses she is depicted holding a wreath and a palm tree. Both these motifs appear on the coins of Bithynia and Pontus struck during the reign of Domitian. The former effigy was shown on Nicaean coins in the same denomination as the Roman ones; and the latter appears on coins without an ethnic, but in the denomination corresponding to the Greek assarion. During the reign of Trajan, the image of Nike holding a shield or globe was found on coins with the same denomination as the Roman dupondius, which may be attributed to the mint in Nicaea.<sup>735</sup> The coins with a walking Minerva, holding a spear and a shield, feature on asses issued between 80–82. During the reign of Domitian this motif was depicted only on Prusias coins. As we have only one currently registered specimen, it is very difficult to say whether a given issue, especially in terms of weight, corresponded to the imperial ones. During the Trajan period this motif appears on Amastris coins, and possibly those of Nicaea as well (coins without an ethnic).<sup>736</sup> The personifications of Athena were issued in two different and lighter denominations than the imperial ones. Another issue of asses from the (possibly) Thracian mint also shows the eagle standing on the globe. In Domitian's time this was the motif depicted on Nicaean coins issued in a lighter denomination than the imperial ones. During the reign of Trajan the effigy of an eagle on the globe appeared

<sup>726</sup> Nicaea RPC II 632; Nicomedia RPC II 653; Prusias RPC II 671.

<sup>727</sup> Nicaea RPC III 1059; Iuliopolis RPC III 1098; Amastris RPC III 1198.

<sup>728</sup> Nicaea RPC II 634.

<sup>729</sup> Amastris RPC III 1199; Abonoteichos RPC III 1211.

<sup>730</sup> Amandry, Burnett *et al.* 2015: 136; Zajac 2019a: 43–44.

<sup>731</sup> Nicaea RPC II 636; Prusias RPC II 673–674; Bithynium Claudiopolis RPC II 694–695.

<sup>732</sup> Prusa RPC III 1038; Iuliopolis RPC III 1100; Amastris RPC III1201–1202; Abonoteichos RPC III 1213.

<sup>733</sup> Zajac 2019a: 42–48.

<sup>734</sup> Metrological similarity to the Roman as: Iuliopolis RPC III; Amastris RPC III1201–202; uncertain mint (perhaps Nicaea and/or Prusias) RPC III 1128, 1132, 1133, 1137.

<sup>735</sup> Amandry, Burnett *et al.* 2015: 136; Zajac 2019a: 45–46.

<sup>736</sup> Zajac 2019a: 45–46.

on the coins of Prusias, Amastris and (probably) Nicaea (coins without an ethnic).<sup>737</sup> However, these coins may have been struck in perhaps four or five different denominations. An image of an altar shrine was also placed on asses. Nicaea issued coins of the same type in Nero's time.<sup>738</sup> Prusias represented a shrine on her coins during the reign of Vespasian, which could correspond to two assarion.<sup>739</sup> During the reign of Domitian this motif shows on issues from the same mint that are close to the Roman denomination. It is likely that coins without an ethnic should also be assigned to this mint as well, but struck in the same denomination as the coins from the earlier period. In Trajan's time coins with the image of the shrine, probably in two or three denominations, were issued by Prusias and Nicaea (coins without an ethnic).<sup>740</sup>

The figure of Neptune holding a dolphin and a trident, which also appears on asses between 80–82,<sup>741</sup> was probably not on any Bithynia and Pontus coins issued during Domitian's reign.<sup>742</sup> This same image, however, is found on Heracleian coins minted in two different denominations (23–24 mm, 14–15 g and 19–21 mm, 4–6 g) during the reign of Trajan.<sup>743</sup> The presence of this motif is unsurprising given the centre's coastal location. The image is quite standard for both imperial and provincial coins. During the reign of Domitian Poseidon was depicted with a dolphin and a trident on coins of Roman colonies, i.e. Corinth and Patras, and the local centre in Dorylaeum.<sup>744</sup> In the times of Trajan images of Poseidon feature on the coins of Corinth, Magnetes, Rhodes, Dorylaeum, Aradus, and Alexandria,<sup>745</sup> however we are not always dealing with the same iconographic type. In this case the coins with the image of Poseidon of Heraclea were not modelled on imperial coins but referred to some common and well-known tradition. In addition, coins with this effigy appear in the city already during the reign of Claudius.<sup>746</sup> In the reign of Trajan the mint of Tium also issued coins with the image of Poseidon,<sup>747</sup> but with a different iconographic type than the effigies we find on the coins of Heraclea. Interestingly, on the obverse the emperor appears in a radiate crown, while the denomination resembles the Roman dupondius, but it seems lighter (26 mm, 8–11 g).

The smallest denominations (17 mm, 4–6 g) of imperial coins (possibly semis) issued between 80–82 show a poppy between two cornucopia.<sup>748</sup> We do not have exactly the same iconographic type on coins of Bithynia and Pontus from the Domitian era, only a very similar one. The coins of Nicomedia, Tium, and Calchedon depict a poppy between two ears of corn, with a similar denomination to the imperial coins.<sup>749</sup> During the reign of Trajan, only one series of coins with this image was probably issued, which perhaps should be assigned to the mint in Nicomedia

<sup>737</sup> Zajac 2019a: 42–43, 50.

<sup>738</sup> RPC I 2049, 2053, 2055, 2059.

<sup>739</sup> RPC II 670.

<sup>740</sup> Amandry, Burnett *et al.* 2015: 136; Zajac 2019a: 42–43, 48–49.

<sup>741</sup> Cahn 14, 30; RPC II 520, 540.

<sup>742</sup> So far, no coins have been registered in Bithynia and Pontus with this iconographic type.

<sup>743</sup> RPC III 1170, 1174.

<sup>744</sup> Corinth RPC II 138, 182 (standing deity figure); 139–141, 150, 188–191 (sitting deity figure); 142–143, 192–193 (deity in biga); 148 (leg on rock); 183–187; 149 (leg on dolphin); Patras RPC II 244–246 (leg on rock); Dorylaeum RPC II 1414.

<sup>745</sup> Corinth RPC III 111–113; Magnetes RPC III 465; Rhodes RPC III 2184; Dorylaeum: RPC III 2637; Aradus RPC III 3818; Alexandria: RPC III 4318, 4690, 4747, 4978.

<sup>746</sup> RPC I 2090.

<sup>747</sup> RPC III 1180.

<sup>748</sup> RPC II 510, 543.

<sup>749</sup> Nicomedia RPC III 663A (18–19 mm, 3–5 g); Tium RPC III 703A (19 mm, 3–4 g); Calchedon RPC III 370A (22 mm, 4–5 g).

(coins without an ethnic).<sup>750</sup> It is worth noting that according to a mentality of using particular iconographic types on provincial coins certain motifs were selected, e.g. only on the smallest denominations.<sup>751</sup> However, it should be remembered that this was not a permanent rule for all mints. The motif of a poppy between ears of corn could have been an image characteristic of the smallest denominations.

During the reign of Domitian at least seven types of iconographic provincial coins were modelled on the imperial issues minted between 80–82. These motifs were reproduced on the coins struck mainly in Nicaea, Nicomedia, and Prusias. Moreover, conforming to imperial emissions could also ensure similar parameters<sup>752</sup> in terms of diameter and weight. In the times of Trajan the same motifs were reproduced on coins not only from the same mints, but also from other centres in the province, something that also indicates the spread of individual images. The mint of Amastris placed on its issues five iconographic types taken from imperial coins,<sup>753</sup> similar to the Roman denominations, but lighter. One of the issues – an eagle standing on the globe – was minted in a larger denomination (32 mm, 24 g). The mint at Iuliopolis issued coins with the same images of Eirene, Ares, and Demeter in denominations very close to those of imperial issues. The Abonoteichos mint placed on their coins the same image of Elpis and Demeter, however, only the issue with the Elpis motif is similar in diameter to sestertii. The mints of Apamea and Prusa placed on their coins only single motifs known from the imperial issues struck between 80–82. Only Apamea used the same design on coins with a very similar denomination in diameter to imperial issues.

Perhaps the provincial coins of Bithynia and Pontus issued during the reign of Trajan, on which the ethnic was not placed (probably struck mainly by Nicaea and Prusias), with images of Demeter, Elpis, Eirene, Nike, Athena, an altar shrine, or an eagle standing on a globe, were supposed to imitate, in a way, imperial coins that were commonly in circulation and recognised in all cities throughout the Empire. Thus, these coins could circulate more widely in the province, not only in the production centre, and satisfy the needs of cities that, for example, could not issue their own coin in a given period, i.e. Bithynium Claudiopolis or Cius.

The above motifs on some coins of Bithynia and Pontus belonged to the common iconographic types known to the people of the provinces but not always reflected on the coins of all local cities. The common motifs accounted for 33.7% of all iconographic types seen on coins Bithynia and Pontus, both imperial coins issued between 80–82 and some from Domitian's time, and 39.5% during the reign of Trajan. In the Hadrian era we find images of Demeter only on the coins of *koinon*, Bithynium Claudiopolis, and Amisus,<sup>754</sup> and Athena only on issues from Apamea, Cius, Bithynium Claudiopolis, and Amisus.<sup>755</sup>

<sup>750</sup> Uncertain mint RPC III 6548 (19 mm, 4–5 g).

<sup>751</sup> E.g. on the smallest denominations were placed motifs such as lyre (Sestus RPC III 756; Apollonia ad Rhyndacum RPC III 1598A; Thyatira RPC III 1830), a figure of Telesphorus (Cyzicus RPC III 1530; Hadrianotherae RPC III 1625; Pergamum RPC III 1733–1734), or grapes (Tium RPC III 1184; Sala RPC III 2433, 2436A; Philadelphia RPC III 3214).

<sup>752</sup> Not always the same.

<sup>753</sup> Ares RPC III 1198; Elpis RPC III 1199; Demeter RPC III 1201–1202; Athena RPC III 1203; eagle standing on globe RPC III 1204–1205.

<sup>754</sup> Koinon RPC III 966; Bithynium Claudiopolis RPC III 1104; Amisus RPC III 1256–1257, 1260, 1289–1291.

<sup>755</sup> Apamea RPC III 1034; Cius RPC III 1052; Bithynium Claudiopolis RPC III 1106; Amisus RPC III 1249–1250.

In the imperial coinage of Domitian the most common motif was Minerva – the emperor’s patron deity.<sup>756</sup> The next most frequently found type was Victoria. The remaining motifs appear mainly on restitution coins struck during the Flavian era. In the provincial coinage of that period the most common of the above types were Athena (4.8%), Nike (4.2%), eagle (3%), Demeter (2.5%), less often Eirene (0.7%), Ares (0.7%), and Elpis (0.5%). The motifs on imperial coins in Trajanic times were much more varied. Among the duplicated designs from imperial coins issued between 80–82, the most common type reflected on imperial coins from that period was Victoria (11.8%), less frequently Pax (5.3%), Mars (4.2%), and Roma (2.52%). These iconographic types were not always very common on provincial coinage of this period. The most frequently appearing images are Athena (4.5%), Victoria (4.2%), Demeter (4.1%), less often Ares (1.3%), Eirene (1.07%), and Elpis (0.69%). It should also be emphasised that they were not always identical iconographic types.

Were the coins modelled on imperial issues failed attempts to introduce a monetary system modelled on Rome? Could such attempts be related to central intervention in Bithynia and Pontus and the arrival of the imperial legate? There are no certain answers yet to these questions such as these. As for our first question, similar images and denominations might support such a hypothesis, however, it seems that it might apply only in a regional sense, for individual towns, not within the entire province. Perhaps only because of the dominance of iconographic types, mainly in the west of the province, we are witnessing cooperation between local centres only, mainly in Nicaea, Nicomedia, and Prusias. Unfortunately, it is impossible to trace the circulation of these coins, as well as those issued locally during the reign of Trajan, due to the limited published data on these finds, the lack of more intensive archaeological research, resulting from local conditions and problems, as well as the small numbers of coins from the analysed periods in the museum collections of northern Turkey.<sup>757</sup> On the other hand, in the case of our second question above, it can be noted that the modelling of Bithynia coins on imperial issues from 80–82 began in the time of Domitian. Hence, both the central intervention of Trajan and the arrival of Pliny were not direct reasons for the minting of these types of coins; yet it cannot be excluded that they might have contributed to the intensification and spread of this custom. We must also bear in mind that, with a few exceptions, in Hadrian’s time individual centres no longer issued coins with the same images. Therefore what was the reason for stopping this type of activity? Here the financial policies of the emperors come to mind, which, in both the reigns of Domitian and Trajan, were aimed towards centralisation, while in the times of Hadrian we are dealing with the opposite policy. Due to the extension of the Empire, as well as the variety of monetary systems and traditions, the introduction of a single monetary system applicable to all provinces seems impossible. Thus, perhaps the common motives and denominations, as well as the cooperation of some cities in Bithynia and Pontus, were reflections of the financial policies of contemporary emperors on a smaller, regional scale within the province. Perhaps such actions were deliberate, and used to please, so that some benefit might be obtained in return. A similar procedure might also be a request to the emperor to send a legate and control the funds, and at the same time draw attention to regional problems and carry out reforms. Another suggestion might be that imperial coins were imitated because their values were greater and more certain than local issues.

<sup>756</sup> Carradice 1983; 2012: 385–386; Mrozewicz 2012.

<sup>757</sup> Cf. Amandry, Rémy and Özcan 1994; Arslan 2012; 2014; Casey *et al.* 2010; Zajac 2021.

## Coins without an ethnic with uncertain attributions

Among the coins of Bithynia and Pontus from the time of Trajan there are issues with uncertain attributions, with no ethnics to indicate the mint in which they were struck.<sup>1</sup> Some elements, such as images, dies, legends, denominations, countermarks, or coin finds, which can be compared to other issues from individual cities or periods can help determine the appropriate attribution. However, the correct attribution of these issues is not a simple task, especially when some of the images shown on the coins are popular motifs and duplicated on the issues of other cities. On the coins of Bithynia and Pontus struck during the reign of Trajan a very common and standard effigy is the figure of the goddess of the harvest – Demeter.<sup>2</sup> Where this occurs sometimes certain ‘determinants’ are revealed, not always present on all the coins, e.g. the same dies or countermarks. In the case of these it should be remembered that the mint stamping the coin with a countermark was not always the same struck issue.<sup>3</sup> When trying to analyse correct attributions of issues from individual mints, the findspots of these coins, if known, must also be considered. For Bithynia and Pontus a significant number of registered issues from Trajan times are now in various collections, and it is impossible to determine their exact place of finding. Similarly, coins in the museum collections in Turkey were in most cases purchased or donated to individual institutions.<sup>4</sup> A significant percentage of the Bithynia and Pontus coins from the reign of Trajan in these collections are issues with uncertain attributions. Only a small number of coins from this period were recovered during archaeological excavations, e.g. in Tium, Iuliopolis, and Konuralp.<sup>5</sup> Thus attributing coins without an ethnic on the basis of recorded finds is much more difficult.

For coins with uncertain attributions there is also another problematic issue to consider. Coins without an ethnic could also have been issued on behalf of the *koinon*, i.e. federation of several provincial or regional localities. The main duty of the *koinon* was the worship of the imperial cult. Coins minted on behalf of the federation were very often placed within the temple.<sup>6</sup> These coins were distinctive because of the legends related to the union, and without the ethnic indicating the specific mint that had struck them. The issues of the Bithynian *koinon* were minted during the reign of Vespasian, and then of Hadrian.<sup>7</sup> As for coins without an ethnic struck in the times of Flavians and Trajan, as K. Regling has pointed out, did not necessarily have to be minted on behalf of the *koinon*, due, inter alia, to making no reference to a federation.<sup>8</sup> However, as evidenced from many studies and auction portals,<sup>9</sup> coins without an ethnic from these periods are attributed to this *koinon*.

<sup>1</sup> Amandry, Burnett *et al.* 2015: 136–139; Schultz 1968: 214–216; Zajac 2019a.

<sup>2</sup> Prusa ad Olympus RPC III 1038; Iuliopolis RPC III 1100; uncertain mint RPC III 1123, 1128–1130, 1132–1133, 1137–1140, 1144; Amastris RPC III 1200–1202; Abonoteiochos RPC III 1213.

<sup>3</sup> Butcher 1988: 37–38; Howgego 2005b: 3–4.

<sup>4</sup> Museum inquiries were carried out in individual Turkish centres (Edirne, Kocaeli, Istanbul, Karadeniz Ereğli, Amasra, Sinope, Konuralp, Iznik). Information on the origin of the coins based on the data included in the inventory.

<sup>5</sup> Arslan 2012; 2014; Atasoy and Yıldırım 2015. Information about the research, also unpublished, obtained during the conducted queries.

<sup>6</sup> Butcher 1988: 35–36; Heuchert 2005: 30; Ostrowski 2005: 110.

<sup>7</sup> Vespasianus *koinon* RPC II 601–618; Hadrian *koinon* RPC III 960–1025.

<sup>8</sup> Amandry, Burnett *et al.* 1999: 111–112; 2015: 119–120, 136; Regling 1930: 34; Schultz 1968: 216.

<sup>9</sup> Cf. Naumann 80, 4 Aug. 2019, lot 330; Agora Auctions Numismatic 32, 12 May 2015, lot 88; Savoca 11, 18 Dec. 2016, lot 428.

BETWEEN ROMAN CULTURE AND LOCAL TRADITION

Table 4: Coins without an ethnic – possible attributions

|   | Possible attributions                               | Indicators   |
|---|---|--|
| Coins with name of C. Iulius Bassus                 | Nicaea  | <ul style="list-style-type: none"> <li>• Themes on previous issues</li> <li>• Similar coin sizes</li> <li>• Countermark TONZOY also on two Nicaea coins struck in the Flavian dynasty</li> <li>• In legends, the traditional form of the Greek sigma</li> <li>• Production of coins without ethnic</li> </ul>  |
| Coins with legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ/<br>ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ | Amastris ?<br><br>Nicaea ?                          | <ul style="list-style-type: none"> <li>• Stylistic similarities of images</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Figure of Elpis on previous issues</li> <li>• Both motifs on earlier coins of similar size</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of the coins without ethnic</li> </ul>   |
| Coins with legend ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ/<br>ΟΜΟΝΟΙΑ       | Prusias (sub-group 1)<br><br>Nicaea (sub-group 2-3) | <ul style="list-style-type: none"> <li>• Figure of Demeter on previous issues</li> <li>• Dating at the beginning of Trajan's reign</li> <li>• In legends, a simplified form of the Greek sigma</li> <li>• The same dies</li> <li>• Figure of Demeter on earlier issue of similar size</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Ligature on coins</li> <li>• Production of coins without ethnic</li> </ul> |
| Coins with the legend ΝΕΙΚΗ ΣΕΒΑΣΤΟΥ<br>ΔΑΚ/ΑΡΜΕ    | Nicaea  | <ul style="list-style-type: none"> <li>• The same dies</li> <li>• Figure of Nike on previous issues</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of coins without ethnic</li> </ul>  |
| Coins with legend ΔΗΜΗΤΡΑ ΣΕΒΑΣΤΗ                   | Nicomedia   | <ul style="list-style-type: none"> <li>• Stylistic similarities of images</li> <li>• Figure of Demeter on previous issues</li> <li>• In legends, a simplified form of Greek sigma</li> <li>• One of the main cults in the city</li> </ul>  |
| Coins with legend ΣΕΒΑΣΤΗ/ΣΕΒΑΣΤΗ                   | Nicaea  | <ul style="list-style-type: none"> <li>• The same dies as coins with legend ΔΙΟΚ</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of coins without ethnic</li> <li>• Coins of this type in the Izmit and Iznik museum collections</li> </ul>   |

COINS WITHOUT AN ETHNIC WITH UNCERTAIN ATTRIBUTIONS

|  |  |   |
|--|--|---|
| <p>Coins with legend<br/>CEBACTOY/ΣΕΒΑΣΤΟΥ</p> | <p>Prusias (Demeter, Nike)</p> <p>Amastris (Nike, Tyche ?)</p> <p>Nicaea (Tyche ?)</p> | <ul style="list-style-type: none"> <li>• Stylistic similarities of images</li> <li>• Figure of Demeter on previous issues</li> <li>• Figure of Nike on coins with legend OMONOIA CEBACTH, which can be assigned to Prusias</li> <li>• Dating at beginning of Trajan's reign</li> <li>• In legends, a simplified form of Greek sigma</li> <li>• Countermark AYTK</li> <li>• The same dies</li> <li>• Figure of Demeter previous issues</li> <li>• Dating of issue also after AD 114</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Coins with legend ΣΕΒΑΣΤΟΥ on earlier issues assigned to Nicaea</li> <li>• Figure of Tyche in a different iconographic type on earlier issues</li> <li>• Dating after AD 114</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of coins without ethnic</li> </ul> |
| <p>Coins with legend<br/>ΔΙΟC</p>              | <p>Nicaea</p>  | <ul style="list-style-type: none"> <li>• The same dies as coins with legend CEBACTH/ΣΕΒΑΣΤH, KTICTHC</li> <li>• Motifs on previous issues</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of coins without ethnic</li> <li>• Countermark TONZOY also on two Nicaea coins struck during Flavian dynasty</li> <li>• Coins of this type in the Izmit and Iznik museum collections</li> <li>• One of the main cults in the city</li> </ul>   |
| <p>Coins with legend<br/>KTICTHC</p>           | <p>Nicaea</p>  | <ul style="list-style-type: none"> <li>• The same dies as coins with legend ΔΙΟC</li> <li>• Motifs on previous issues</li> <li>• Word KTICTHC in legends of earlier issues</li> <li>• Countermark TONZOY also on two Nicaea coins struck during Flavian dynasty</li> <li>• One of the main cults in the region</li> <li>• Production of coins without ethnic</li> </ul>   |
| <p>Coins with legend<br/>ΔΗΜΗΤΡΟC</p>          | <p>Nicomedia</p>   | <ul style="list-style-type: none"> <li>• Stylistic similarities of images</li> <li>• Figure of Demeter on earlier issue of similar size</li> <li>• In legends, a simplified form of Greek sigma</li> <li>• One of the main cults in the city</li> <li>• Coin in the Izmit museum collection</li> </ul>  |
| <p>Coins with cornucopia</p>                   | <p>Nicaea</p>  | <ul style="list-style-type: none"> <li>• Motif on previous issues of similar size</li> <li>• Both traditional and simplified forms of sigma in legends</li> <li>• Production of coins without ethnic</li> </ul>   |
| <p>Coins with serpent<br/>staff</p>            | <p>Amastris ?</p>  | <ul style="list-style-type: none"> <li>• Cult of Asclepius on city coins</li> <li>• Production of coins without ethnic</li> </ul>   |

It was customary for cities to stamp their names on the coins they issued, but there were exceptions.<sup>10</sup> Roman provincial coins without an ethnic assigned to mints in Paphlagonia and Pontus were struck as early as the end of the 1st century BC.<sup>11</sup> There are coins from the times of Augustus with images of a seated Livia holding two cornucopias, bearing a Latin legend referring to the proconsul Marcus Granius Marcellus.<sup>12</sup> The next issues with uncertain attribution come from the time of Claudius. On the reverse of these coins we have images of a seated or standing Zeus, as well as a bust of Agrippina.<sup>13</sup> On the other hand, coins without an ethnic minted during the reign of Nero show a poppy with ears of corn and the emperor on a horse.<sup>14</sup> Many more issues of this type date from the time of the Flavians. Coins without an ethnic were issued by Bithynian *koinon* in the time of Vespasian.<sup>15</sup> Also from this period there are several other issues of uncertain attribution depicting ears of corn, Heracles, Athena, and with a caduceus between the two cornucopias.<sup>16</sup> From the times of Domitian, five groups with uncertain attributions have been distinguished, indicating the probability of coming from mints in Prusias<sup>17</sup> and Nicaea.<sup>18</sup> There are also issues unattributed to any of mints, with images of Arete holding a sceptre and spear, and Nike with a wreath and tropaeum.<sup>19</sup> For the provinces of Bithynia and Pontus during the reign of Trajan nine groups of coins with uncertain attributions were identified.<sup>20</sup> It seems, however, that a few other coins classified by RPC researchers as uncertain from the totality of Roman provincial issues of this period should be added to this category.<sup>21</sup>

Coins with uncertain attributions have already been the subject of analysis by the present author;<sup>22</sup> however, as a result of newly collected material, corrections and additions to the previous conclusions should be made.

### Group I: Coins with the name of the proconsul Gaius Julius Bassus

The first group comprises coins with the name of the proconsul of Bithynia and Pontus, Gaius Julius Bassus, struck between 101 and 102. Provincial cities occasionally minted coins on behalf of the administrator for local propaganda.<sup>23</sup> On the reverse of the larger issues (21–23 mm, 6–8 g) there are images of an altar shrine, Demeter holding ears of corn and a long sceptre, as well as an eagle standing on the globe.<sup>24</sup> On smaller coins (18 mm, 2–3 g) we find the cornucopia.<sup>25</sup>

<sup>10</sup> Butcher 1988: 35–36.

<sup>11</sup> RPC I 2155–2156.

<sup>12</sup> RPC I 2097.

<sup>13</sup> Zeus sitting on the throne, holding Nike and a long sceptre: RPC I 2098; Zeus sitting on the throne, holding a long sceptre: RPC I 2101A; Zeus standing, holding lightning and a long sceptre: RPC I 2099; a bust of Agrippina: RPC I 2100–2101.

<sup>14</sup> A poppy with ears of grain: RPC I 2102; emperor on horseback: RPC I 2103–2104.

<sup>15</sup> RPC II 601–618.

<sup>16</sup> Ears of grain: RPC II 705; Heracles: RPC II 706; Athena: RPC II 707; a caduceus between two cornucopias: RPC II 708.

<sup>17</sup> RPC II 675–687.

<sup>18</sup> RPC II 709–710.

<sup>19</sup> Arete: RPC II 711; Nike: RPC II 711A.

<sup>20</sup> Amandry, Burnett *et al.* 2015: 136–139; RPC II 1121–1160.

<sup>21</sup> These are coins placed within the ‘uncertain’ category for all Roman provincial coins dated between 96–138, see Amandry, Burnett *et al.* 2015: 785–767; RPC III 6536–6578; electronic database Roman Provincial Coinage ([www.rpc.ashmus.ox.ac.uk/](http://www.rpc.ashmus.ox.ac.uk/)). Accessed: 21.03.2020.

<sup>22</sup> Zając 2019a.

<sup>23</sup> Amandry, Burnett *et al.* 1992: 337; Schultz 1968: 216–217.

<sup>24</sup> Altar: 1121–1122; Demeter: 1123; eagle: 1124.

<sup>25</sup> Cornucopia: 1124A.

The images were accompanied by a legend referring to the current proconsul managing, ΕΠΙ Γ ΙΟΥ ΒΑΣΣΟΥ ΑΝΘΥΠΑΤΟΥ.

Motifs on the reverses of coins bearing the name of Bassus were known to the inhabitants of individual cities. All types appeared on Nicaean coins in earlier periods. The effigy of the altar is found on coins of similar size during the reign of Nero,<sup>26</sup> and the altar shrine in the time of Domitian.<sup>27</sup> Also in Domitian's era we find depictions of Demeter (25 mm, 7 g), the eagle on the globe (27 mm, 12 g), and the cornucopia on the smallest units (15–17 mm, 2–3 g).<sup>28</sup>

The mint at Prusias also placed the effigy of the altar shrine and Demeter on its coins during the Flavian dynasty,<sup>29</sup> however the characteristic feature was the Π Ρ monogram, indicating the place of issue. The first of the images appears on coins of the same size as those with the Bassus name, but the next one was probably on larger denominations (27 mm, 10–13 g). The image of the altar shrine was still placed on coins in Trajan times, but on the issue sized at 18–19 mm, 5–7 g. There is also a motif of an eagle standing on a globe on coins of the same size.<sup>30</sup> In turn, the type with a cornucopia has not been registered on the issues of this city to date.

Demeter appears on the coins of Nicomedia in the time of Claudius,<sup>31</sup> and in the Flavian era on issues from Prusias, as mentioned above, as well as Bithynium Claudiopolis and Nicomedia.<sup>32</sup> During the reign of Trajan, the effigy of Demeter was one of the most popular motifs on the coins of individual centres of Bithynia and Pontus, e.g. Prusa, Iuliopolis, Amastris, and Abonoteichos.<sup>33</sup>

The image of the eagle features on the coins of a greater number of cities in Bithynia and Pontus. This motif was reflected already in the reign of Nero on the Prusa issues,<sup>34</sup> and then in the Bithynium Claudiopolis in the Vespasian period,<sup>35</sup> and also in Nicaea and Nicomedia during the reign of Domitian.<sup>36</sup> In the time of Trajan the eagle appears on the coins of Prusa and Amastris.<sup>37</sup>

Among the coins with uncertain attributions from the period of the Flavians there are issues with an effigy of the altar and the legend ΔΙΟΣ ΛΙΤΑΙΟΥ,<sup>38</sup> which are likely to be associated with the mint at Nicaea. In turn, during the reign of Trajan this motif was also found on other issues without an ethnic,<sup>39</sup> like the figure of Demeter<sup>40</sup> or the image of the eagle.<sup>41</sup>

<sup>26</sup> RPC I 2049, 2053, 2055, 2059.

<sup>27</sup> RPC II 640A, 644–645.

<sup>28</sup> Demeter holding ears of grain and a long sceptre: RPC II 636; eagle standing on the globe: RPC II 641–641A. Altar: RPC II 670; Demeter: 673–675, 679–682, 684.

<sup>29</sup> Altar: RPC III 1103; eagle standing on the globe: RPC III 1102.

<sup>31</sup> RPC I 2073

<sup>32</sup> Nicomedia RPC II 656–657; Bithynium Claudiopolis RPC II 694–695.

<sup>33</sup> Prusa RPC III 1038; Iuliopolis RPC III 1100; Amastris RPC III 1200–1202; Abonoteichos RPC III 1213.

<sup>34</sup> RPC I 2019.

<sup>35</sup> RPC II 692.

<sup>36</sup> Nicaea RPC II RPC II 641–641A; Nicomedia RPC II 658A, 658C.

<sup>37</sup> Prusa RPC III 1048; Amastris RPC III 1204, 1205

<sup>38</sup> RPC II 710.

<sup>39</sup> Cf. group with the legend ΔΙΟC (RPC III 1148–1151A, 1152A, 1154–1154A, 1156–1157, 1159).

<sup>40</sup> Cf. group with the legend ΟΜΟΝΟΙΑ CΕΒΑCΤΗ (RPC III 1128–1130, 1132–1133); ΔΗΜΗΤΡΑ CΕΒΑCΤΗ (RPC III 1137–1138); CΕΒΑCΤΗ (RPC III 1139–1140); ΣΕΒΑCΤΟΥ (RPC III 1144).

<sup>41</sup> Cf. group with the legend ΔΙΟC (RPC III 1152–1153, 1155, 1158–1158C, 1159A); ΚΤΙCΤΗC (RPC III 1160).

The smallest units with the name of Bassus also depict the cornucopia. In earlier periods this motif appeared on the coins of Apamea,<sup>42</sup> Sinope,<sup>43</sup> and, during the reign of Domitian, Nicaea.<sup>44</sup> In Trajan times the cornucopia appears on coins struck in Nicomedia.<sup>45</sup> All coins with this image represent the same smallest denomination, which may suggest a certain tendency to show a given motif on issues of this size.

One of the coins has a TONZOY countermark.<sup>46</sup> The name itself indicates the Thracian river Tonzos, the personification of which was found on coins minted in Hadrianopolis in Thrace.<sup>47</sup> In addition, this countermark is also found on one coin from Prusa, as well as on coins without an ethnic with an altar and the legend ΔΙΟC, and an eagle with the legend ΚΤΙCΤΗC.<sup>48</sup>

Coins with the name of Bassus are stylistically similar to issues struck in some centres during the reigns of Vespasian and Domitian. It was the Bithynian *koinon*, Caesarea Germanica, Cius, Nicomedia, Iuliopolis, Prusias, Heraclea, and Bithynium Claudiopolis.<sup>49</sup> Coins with uncertain attributions from the Flavian era also have a similar style.<sup>50</sup> The legends of the coins are very clear and the letters are large. These issues mainly feature the names of individual proconsuls. Perhaps some of the dies were made by one engraver, perhaps with a workshop in Nicomedia, which could also be confirmed by the coins issued for that city, even those without the names of the proconsul.<sup>51</sup> After all, individual towns had their own engravers who made coin dies for local needs. To avoid mistakes with changing provincial administrators, it seems easier for one skilled engraver to make dies with the names of the proconsul. In turn, due to the lack of knowledge of the local cults and traditions of individual centres, it was necessary to choose motifs that would be standard and easily recognisable by all residents. This could also explain the presence of the same iconographic types on the coins of many places. Such a procedure might also indicate cooperation with the main provincial mint in the Flavian era, as well as confirm the general theory regarding cooperation between individual cities.<sup>52</sup>

Coins with the name Bassus were probably issued by the Nicaea mint.<sup>53</sup> F. Imhoof-Blümer, H.-D. Schultz, and researchers from the RPC project have suggested attributions to Nicomedia,<sup>54</sup> the seat of the *koinon*, but, as has been pointed out, during the reign of Trajan there is no traditional sigma in the legends of coins minted in the city. Only the legends of coins with reference to Bassus is a traditional sigma found.<sup>55</sup> At the beginning of the 2nd century, the standard Greek sigma (Σ) was replaced by a somewhat simplified notation (C). In addition,

<sup>42</sup> RPC I 2002, Rec 33.

<sup>43</sup> RPC I 2114.

<sup>44</sup> RPC II 647.

<sup>45</sup> RPC III 1091–1092.

<sup>46</sup> RPC III 1124 (2).

<sup>47</sup> Howgego 2005b: 217; GIC 568.

<sup>48</sup> Prusa RPC III 1047 (3); uncertain mint RPC III 1148 (2), 1154 (7, 12, 15); 1160 (3).

<sup>49</sup> Koinon RPC II 601–618; Caesarea Germanica RPC II 620; Cius RPC II 622; Nicomedia RPC II 648–652, 654–664; Iuliopolis RPC II 665–667; Prusias RPC II 668–670; Heraclea RPC II 688–689; Bithynium Claudiopolis 690–692.

<sup>50</sup> RPC II 705–707.

<sup>51</sup> RPC II 654–664.

<sup>52</sup> Amandry, Burnett *et al.* 1999: 92–93.

<sup>53</sup> Cf. Tab. 4.

<sup>54</sup> Amandry, Burnett *et al.* 2015: 136; Imhoof-Blümer 1830: 81; Schultz 1968: 217.

<sup>55</sup> At the beginning of the 2nd century, the traditional Greek sigma is slowly replaced by a simplified form (C). On the coins of Bithynia and Pontus from the reign of Trajan, there is a tendency to simplify or use both forms of the letter.

the image of the altar does not appear on the coins of Nicomedia recorded so far, while on Nicaean issues from the times of the Flavians it is present on all coins with the name of Bassus. The same motif also reoccurs in later periods.<sup>56</sup> There are also similarities in terms of some denominations.<sup>57</sup> Moreover, in legends on Nicaean coins the traditional form of the Greek sigma appears, as evidenced by the single registered coin we have with an ethnic from the reign of Trajan. Perhaps the attributions could also be confirmed by countermarks found on other coins without an ethnic, as well as on the issues of Vespasian and Domitian from Nicaea.<sup>58</sup> It is also worth paying attention to the production of that centre, which was very intense at different times. The city was one of the most important among those competing for priority in the province with Nicomedia.<sup>59</sup> It is therefore surprising that from the period when many building projects were carried out, as is known from Pliny's correspondence, that only a few coins attributable to the centre have been registered. It is thanks to one of the surviving issues that references Nicaea, and the links between the dies,<sup>60</sup> that we know coins without an ethnic were struck there.

### Group II: coins with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ/ΕΙΡΗΝΗ CEBACTH

The second group distinguished by researchers comprises coins with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ CEBACTH. The obverse depicts a portrait of the emperor in a laurel wreath, and the legend ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ or ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ CΕΒΑ ΓΕΡΜ, issued after 98. The features of the effigy of the emperor indicate the beginning of Trajan's reign. The legends employ both the traditional Greek sigma as Σ and its simplified form C. On the similarly sized denominations (30–34 mm, 20–25 g) were Eirene with an olive branch and cornucopia with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ CEBACTH,<sup>61</sup> or Elpis, holding a flower and raising the hem of her dress, with the CEBAC legend.<sup>62</sup> The attribution of both iconographic types with different legends to one group is based on the use of the same die.<sup>63</sup>

The figure of Eirene is also one of the most popular motifs on coins from individual centres. During the reign of Augustus, the personification of peace was reflected on Nicomedian issues,<sup>64</sup> while in the time of Domitian she appears on the coins of Nicomedia, Nicaea, and Prusias.<sup>65</sup> Researchers have also assigned some coins from Prusias, with no ethnic, depicting Eirene and the legend ΣΕΒΑΣΤΗ ΟΜΟΝΟΙΑ, from the period of the Flavians.<sup>66</sup> In the time of Trajan, the motif became more popular. Her Roman personification, Pax, is on Apamean coins.<sup>67</sup> Eirene also appears on the issues of Iuliopolis, Prusias,<sup>68</sup> as well as on other coins with uncertain attributions from this period.<sup>69</sup> The legend ΕΙΡΗΝΗ CEBACTH appears exclusively

<sup>56</sup> Demeter: RPC IV 5917, 6004; altar: RPC IV 5496–5497, 5111–5112, 6239, 8425, 9680; eagle: RPC IV 5957.

<sup>57</sup> Coins of the Flavian dynasty: with an altar (23 mm, 6–7 g), eagle (25 mm, 7–8 g), cornucopia (17 mm, 2–3 g).

<sup>58</sup> Vespasianus: Nicaea RPC II 628/17; Domitian: Nicaea RPC II 634, CNG Electronic Auction 439, 06.03.2019, no. 236.

<sup>59</sup> Dio Chrys. *Or.* 38–39; Dio Cass. 51.20.6–7; Waddington, Reinach and Babelon 1904–1912: 395.

<sup>60</sup> RPC III 1059/1 1131/3, 6–7, 1134/2–3.

<sup>61</sup> RPC III 1125–1126.

<sup>62</sup> RPC III 1127. There is a typing error in the recorded emissions – instead CEBAC – CERAC.

<sup>63</sup> Amandry, Burnett *et al.* 2015: 136. The same dies: 1126 (1) and 1127 (1, 3); 1126 (4, 5) and 1127 (4, 5).

<sup>64</sup> RPC I 2062.

<sup>65</sup> Nicomedia RPC II 654; Nicaea RPC II 633; Prusias RPC II 672.

<sup>66</sup> RPC II 676–678.

<sup>67</sup> RPC III 1029.

<sup>68</sup> Iuliopolis RPC III 1099; Prusias RPC III 1101.

<sup>69</sup> Cf. group with a legend ΟΜΟΝΟΙΑ CEBACTH (RPC III 1131).

on issues from Prusias, with a monogram indicating the mint. Almost all coins with depictions of Eirene were struck in a similar size, with the exception of smaller ones (25 mm, 9–10 g) from Nicomedia from Augustan times.<sup>70</sup>

Images of Elpis were placed on Nicaean coins during the reign of Domitian,<sup>71</sup> and those of Amastris and Abonoteichos during the reign of Trajan.<sup>72</sup> As with the coins depicting Eirene, issues showing Elpis were struck in a similar size.

Numismatists from the RPC project suggest that coins with the legend ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ ΚΕΒΑΧΘΗ might possibly be assigned to the mint at Amastris, where the *koinon* was also located.<sup>73</sup> Attribution is based on a similar style of the imperial portrait, moreover, it may be confirmed by the presence of Elpis on other issues from there from this period.<sup>74</sup> However, there is no reference to Eirene on coins from the time of Trajan, or earlier periods. Her effigy perhaps appears on Amastris's issues during the reign of Maximinus Thrax and Gordian III.<sup>75</sup> Another mint to consider is that of Nicaea. Both motifs appeared on the emissions of the same size struck in the centre in earlier periods. Based on the dies and the different types of individual coin groups of uncertain attribution that can be associated with the Nicaean mint, the legends of the city's issues from the time of Trajan used both the traditional and simplified sigma notations. However, the same legend is missing on other Nicaean coins. Doubts may also be raised by the location of the legend on coins with the image of Elpis, however, a similar notation of a different type of legend appears on issues with the figure of the walking Ares from the times of Domitian and Trajan.<sup>76</sup> Some coins from the Flavian period with uncertain attributions have been assigned to the mint at Prusias, but although the same legend appears, it seems that it should be excluded. Among the placed motifs there is no image of Elpis, moreover, in the legends of coins minted at Prusias from the times of Trajan there is only a simplified sigma notation. This is similar to the situation with issues from Nicomedia, and, furthermore, there is also no type of ΕΙΡΗΝΗ ΚΕΒΑΧΘΗ legend. In turn, for smaller cities, e.g. Iuliopolis or Abonoteichos, emphasising the possibility of being to strike its own coinage was of great importance, hence the placing of an ethnic that pointed to the mint seems significant.<sup>77</sup> Thus, coins from the above group should be assigned to Amastris or Nicaea.

### Group III: Coins with the legend ΟΜΟΝΟΙΑ ΚΕΒΑΧΘΗ/ΟΜΟΝΟΙΑ<sup>78</sup>

Another identified group involves coins with the legend ΟΜΟΝΟΙΑ ΚΕΒΑΧΘΗ / ΟΜΟΝΟΙΑ, the production of which began during the reign of Domitian. Despite being a separate category, three sub-groups can be distinguished within it. The first coins from Trajan times bearing the legend ΟΜΟΝΟΙΑ ΚΕΒΑΧΘΗ were struck after 98, as indicated by the titles on the coins. On

<sup>70</sup> RPC I 2062.

<sup>71</sup> RPC II 634.

<sup>72</sup> Amastris RPC III 1199; Abonoteichos RPC III 1211.

<sup>73</sup> Hill 1989: 82; Marek 1996: 574. Cf. Tab. 4.

<sup>74</sup> RPC III 1199–1125. Amandry, Burnett *et al.* 2015: 136.

<sup>75</sup> Maximinus Thrax RPC VI 3635 (temporary number); Gordian III RPC VII.2 ID 20050, 20053.

<sup>76</sup> Domitian RPC II 632; Trajan RPC III 1059.

<sup>77</sup> Cf. Butcher 1988: 26–27, 35–36.

<sup>78</sup> Researchers from the RPC have identified a group ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ / ΟΜΟΝΟΙΑ ΚΕΒΑΧΘΗ, however, no such legend has been registered with a traditional Greek sigma; another legend that appears is ΟΜΟΝΟΙΑ. For this reason, our analysis was limited only to the legends appearing on the coins.

issues of size 25–27 mm, 9–11 g there is a Demeter image with ears of corn and a long sceptre, as well as Nike with a globe;<sup>79</sup> Demeter also appears on issues of 20–21 mm, 5–7 g.<sup>80</sup> The legends have only a simplified sigma notation. Another sub-group includes coins issued after 102 (31–35 mm, 21–26 g) with the legend OMONOIA CEBACTH and depicting Eirene holding an olive branch and cornucopia.<sup>81</sup> Perhaps, judging by the features of the emperor's portrait, the coins were issued after 105.<sup>82</sup> Additionally, the legends show standard sigma notations on the obverse and simplified ones on the reverse. The last sub-group also involves issues minted after 102 (24–27 mm, 11–13 g) with the image of Demeter and the legend OMONOIA.<sup>83</sup> As with the previous sub-group, the legends on the obverse have the traditional Greek sigma. Due to the diversity of individual issues, the RPC researchers hypothesise that these coin types were minted by several mints.

The figure of Demeter found on the coins of many cities was a popular motif. Issues of this type have been discussed in detail covering coins without an ethnic, with the name of proconsul Gaius Julius Bassus, and with the image of Eirene, for the issues bearing the legend EIRHNH ΣΕΒΑΣΤΗ / EIRHNH CEBACTH.

However, attention should also be paid to the legend OMONOIA CEBACTH on Prusias coins from the times of Domitian,<sup>84</sup> and from Iuliopolis during the reign of Trajan.<sup>85</sup> In this case, it is correct to attribute the coins of the first sub-group to the Prusias mint. The images of Demeter with the same accompanying legend appear on issues of the same size from an earlier period, with the centre identifier being the monogram ΠΡ ΥΠ.<sup>86</sup> The same type also appeared on coins without an ethnic of the same size, also minted in the time of Domitian, assigned on the above basis to the same mint.<sup>87</sup> Perhaps the type with the image of Nike and the globe was only introduced in this period following the emperor's military successes. In addition, attribution can also be supported by the lack of a traditional sigma notation, which no longer appears in the legends of Prusias in Trajan times. In this case, the mint at Iuliopolis, which had images of Eirene on coins with this legend, should be excluded; moreover, only the traditional sigma appears in the notation.

The second sub-group of coins with the legend OMONOIA CEBACTH was struck by the mint at Nicaea, as deduced from the use of the same dies.<sup>88</sup> Moreover, the same legend also appears on issues without an ethnic with the legend NEIKI CEBACTOY ΔΑΚ, coming from the same centre as well.<sup>89</sup> Perhaps those coins with the legend OMONOIA should also be attributed to Nicaea, which may suggest the presence of a traditional sigma in the legend, as well as a ligature made of the letters in the name NEP(ουαϛ). In addition, the attributions could be confirmed by an

<sup>79</sup> RPC III 1128–1128A.

<sup>80</sup> RPC III 1129–1130.

<sup>81</sup> RPC III 1131.

<sup>82</sup> An image bearing the features of a B-type portrait created by B. Woytek.

<sup>83</sup> RPC III 1132–1133.

<sup>84</sup> RPC II 672–673, 675–684.

<sup>85</sup> RPC III 1099.

<sup>86</sup> RPC II 673–674.

<sup>87</sup> RPC II 679–682.

<sup>88</sup> Amandry, Burnett *et al.* 2015: 136. Die links: RPC III 1059/1 and 1131/3, 6–7. Cf. Tab. 4.

<sup>89</sup> RPC III 1134 (2–3).

issue from the time of Domitian with the image of Demeter of the same size with a legend referring to the status of the city.<sup>90</sup>

#### Group IV: Coins with the legend NEIKH CEBACTOY ΔAK/APME

The next group includes coins depicting Nike with the legend NEIKH CEBACTOY ΔAK / APME. The obverse features an image of the emperor with a reference to the titles of *Dacicus* or, additionally, *Optimus*. On the reverse of the larger coins (31–32 mm, 20–24 g) there is an image of Nike crowning the tropaeum<sup>91</sup> while on the smaller units (24–27 mm, 8–11 g) there is an olive branch and a palm tree.<sup>92</sup> The legends highlight the emperor's victories in the Dacian war (NEIKH CEBACTOY ΔAK) and the conquest of Armenia (NEIKH CEBACTOY, APME in the exergue).<sup>93</sup> Based on the titles accompanying the portraits of the emperor on the obverse, the coins were struck after 102 and 114. The issues with the first epithet depict Trajan, which, based on his features, may indicate the minting of these coins after 105.<sup>94</sup> The legends feature both the standard and simplified sigmas (Σ and C).

The figure of Nike appears on the coins of Apamea and Nicaea at the end of the 1st century AD,<sup>95</sup> on those of Apamea and Nicomedia during the reign of Nero,<sup>96</sup> and on Amisus coins in the times of Claudius and Vespasian.<sup>97</sup> The image of Nike holding the shield and the palm was also placed on coins (26 mm, 11–12 g) without an ethnic, with the legend ΣΕΒΑΣΤΟΥ; they were issued during the reign of Domitian and are assigned to the Nicaea mint.<sup>98</sup> A slightly different type shows Nike with a wreath and a tropaeum, also known from another series of coins of uncertain attribution minted in the Flavian era.<sup>99</sup> Images of Nike appeared on issues struck at Amastris and Amisus during the reign of Trajan.<sup>100</sup>

As for the NEIKH CEBACTH legend, only the mints of Nicomedia (under Nero) and Amastris (under Trajan) featured it on their coins – along with the image of Nike holding a wreath and a palm tree.<sup>101</sup>

Coins with the legend NEIKH CEBACTOY ΔAK / APME were issued in the Nicaea mints, based on the use of the same dies, on larger coins.<sup>102</sup> It seems that smaller issues should also be attributed to this city. The figure of Nike may have been placed on the city's coins during the period of the Flavian dynasty, however, effigies from Trajan's time represent new types of imagery. The coexistence of both the traditional and simplified sigma in the legends is also noticeable, as seen in issues with the legend OMONOIA CEBACTH. Some coins from both groups were struck using the same dies.<sup>103</sup> This tendency is also evident on some coins from

<sup>90</sup> RPC II 636.

<sup>91</sup> RPC III 1134, 1136.

<sup>92</sup> RPC III 1135.

<sup>93</sup> Cf. Schultz 1968: 214–215.

<sup>94</sup> An image bearing the features of a B-type portrait created by B. Wojtek.

<sup>95</sup> Apamea RPC I 2004–2006; Nicaea RPC I 2026–2027.

<sup>96</sup> Apamea RPC I 2016; Nicomedia RPC I 2084.

<sup>97</sup> RPC I 2145, 2154; RPC II 729.

<sup>98</sup> RPC II 709–709A.

<sup>99</sup> RPC II 711A.

<sup>100</sup> Amastris RPC III 1206, Amisus RPC III 1231–1233, 1237, 1240.

<sup>101</sup> Nicomedia RPC II 2084; Amastris RPC III 1206.

<sup>102</sup> Amandry, Burnett *et al.* 2015: 136. Die links: RPC III 1059 (1) and 1134 (2–3). Cf. Tab. 4.

<sup>103</sup> RPC III 1134 (2–3) and 1131 (3, 6–7).

Amastris, where the image of Nike is accompanied by the legend NEIKH CEBACTH, but in a different iconographic type and with a different style of execution than the above coins without ethnics.

#### Group V: Coins with the legend ΔΗΜΗΤΡΑ CEBACTH

The next group is that of coins (22–24 mm, 6–11 g) with the image of Demeter, holding ears of corn and a long sceptre, and the legend ΔΗΜΗΤΡΑ CEBACTH.<sup>104</sup> The title indicates they were struck after 98.

The coins have been attributed to Amastris and Megalopolis Sebasteia in Paphlagonia,<sup>105</sup> however the latter mint seems incorrect due to the legends and images featured during Trajan's reign.<sup>106</sup> So far, no coins with this legend have been registered in any town from this region from earlier periods, or from the times of Trajan, although the motif itself was one of the most popular. A similar legend (ΔΗΜΗΤΡΟΣ) appears on coins of uncertain attribution with a poppy and ears of corn, which should also probably be associated with one of the centres of Bithynia and Pontus.<sup>107</sup>

Coins with the legend ΔΗΜΗΤΡΑ CEBACTH were probably struck in the Nicomedia mint, as evidenced by a similar style of effigies.<sup>108</sup> The coin legends also show only a simplified sigma notation, which is one of the features of Nicomedia issues from the time of Trajan. Demeter appears on the city's coins in the times of Claudius and Domitian.<sup>109</sup> Hers was one of the main cults worshipped in the town, as emphasised by the epigraphic sources.<sup>110</sup> The cult relates to the city's foundation: Demeter, in the form of a serpent, together with the eagle of Zeus, indicated where Nicomedia was to be founded.<sup>111</sup>

The Prusias mint also quite often placed Demeter on its coins of a similar size, and in Trajan's time used only a simplified sigma in the legends. For these coins, attributions to specific emissions is based on similarities to the Nicomedia issues.

#### Group VI: Coins with the legend CEBACTH/ΣΕΒΑΣΤΗ

Another coin group of coins of uncertain attribution includes issues of 21–23 mm, 5–7 g with the legend CEBACTH / ΣΕΒΑΣΤΗ and images of Demeter holding ears of corn and a long sceptre,<sup>112</sup> as well as depictions of Athena with a shield and spear.<sup>113</sup> Based on the title, the coins were minted after 102.

<sup>104</sup> RPC III 1137–1138.

<sup>105</sup> Amandry, Burnett *et al.* 2015: 322.

<sup>106</sup> RPC III 2937–2939.

<sup>107</sup> RPC III 6548.

<sup>108</sup> RPC III 1089 (3) and 1138 (3). Cf. Tab. 4.

<sup>109</sup> Claudius RPC I 2072A; Domitian RPC II 656–657.

<sup>110</sup> TAM IV, 21, 53, 54. Cf. Boyana 2017: 162.

<sup>111</sup> Boyana 2006; Güney 2015d: 44–45; Nollé 2015: 36–37.

<sup>112</sup> RPC III 1139–1140.

<sup>113</sup> RPC III 1141–1143.

Initially the issues were assigned to Megalopolis-Sebasteia or Sebaste in Samaria,<sup>114</sup> however, one of the mints in Bithynia and Pontus is more likely, based on the effigies and legends, and, for Sebaste, due to the absence of coins from the times of Trajan.<sup>115</sup> In earlier periods the image of Athena was depicted on the coins of Heraclea Pontica and Amisus.<sup>116</sup> It was also a motif known from coins struck in Nicomedia in the time of Claudius.<sup>117</sup> An analogous effigy was placed on coins without an ethnic that were issued during the reign of Domitian, assigned to the mint at Prusias.<sup>118</sup> The bust of Athena also appears on another issue of uncertain attribution from Vespasian era.<sup>119</sup> This motif features on the coins of Prusa, Heraclea, Amastris, and Amisus during the reign of Trajan,<sup>120</sup> however, only on the Amastris issues is there an iconographic type similar to the image of the coins without an ethnic.

Based on the different styles and axes of some coins, researchers have suggested that issues with the legend CEBACTH / ΣΕΒΑΣΤΗ might have been struck at two mints.<sup>121</sup> However, due to the same dies of coins with both the images of Demeter and Athens, it is clear that the issues of both types were struck by one mint.<sup>122</sup> Some coins have the same dies, or their images are very similar in style to coins, without an ethnic, with the legend ΔΙΟC, with an eagle, and an altar shrine.<sup>123</sup> The likely mint is Nicaea, despite the lack of an effigy of Athena on the earlier issues. It should be noted that both types appeared in Nicomedia and Amastris. In the former the motifs appear on coins of various sizes, with Athena depicted in bust form. It should be noted that in the legends of Nicomedian coins from Trajanic times registered so far, there is a simplified form of sigma, and the above issues have both letter forms. On the other hand, a probable candidate for mint is Amastris, where both types were stamped on coins of similar or slightly larger size. Additionally, both traditional and simplified forms of sigma appear in the legends. In this case, the attribution to Nicaea is based both on the assignment to the same mint of issues with the legend ΔΙΟC, as well as those coins depicting Demeter and Athena in museum collections in Izmit and Iznik.<sup>124</sup> The presence of such emissions in the areas of western Bithynia in a way excludes Amastris as a potential mint.

### Group VII: Coins with the legend CEBACTOY/ΣΕΒΑΣΤΟΥ

Another group identified includes coins with the legend CEBACTOY / ΣΕΒΑΣΤΟΥ instead of the ethnic. Issues of 21 mm, 6–7 g with the image of Demeter with ears of corn and a long sceptre, and featuring the legend ΣΕΒΑΣΤΟΥ, were struck after 98.<sup>125</sup> Coins (22–24 mm, 8–9 g) with the image of Tyche holding the rudder and cornucopia, and with the legend CEBACTOY, can be dated perhaps to after 102 and 114.<sup>126</sup> Issues with Nike and a globe and a palm tree with

<sup>114</sup> Amandry, Burnett *et al.* 2015: 322; De Saucy 1874.

<sup>115</sup> RPC III 2937–2939.

<sup>116</sup> Heraclea RPC I 2088; Amisus RPC I 2147, 2151.

<sup>117</sup> RPC II 2065–2067.

<sup>118</sup> RPC II 684A.

<sup>119</sup> RPC II 707.

<sup>120</sup> Prusa RPC III 1040–1040A; Heraclea RPC III 1176; Amastris RPC III 1203; Amisus RPC III 1233, 1239, 1244.

<sup>121</sup> Amandry, Burnett *et al.* 2015: 136. Cf. Tab. 4.

<sup>122</sup> RPC III 1139 (3, 16) and 1142 (5).

<sup>123</sup> RPC III 1141 (3), 1156 (4) and 1158 (1); 1139 (19) and 1151 (1); 1141 (1) and 1148 (13); 1142 (6) and 1148 (17). Cf. the group VIII: coins with the legend ΔΙΟC.

<sup>124</sup> Izmit inv. no. 2009–143; Iznik inv. no. 1053.

<sup>125</sup> RPC III 1144. The legend is illegible, making it impossible confirm the emperor's titles.

<sup>126</sup> RPC III 1145.

the legend CEBACTOY or ΣΕΒΑΣΤΟΥ, of size 25–27 mm, 11–13 g, can be dated after 98 and 102.<sup>127</sup>

The presence of images of Demeter and Nike on coins from individual mints has been discussed above. The figure or bust of Tyche was placed on the coins of Apamea during the reign of Caligula<sup>128</sup> the and Flavian dynasty,<sup>129</sup> of Nicomedia in the times of Claudius<sup>130</sup> and the Flavians,<sup>131</sup> and of Nicaea also during the reign of Domitian.<sup>132</sup> Tyche also appears on issues without an ethnic, struck in the times of Domitian, with the legend OMONOIA ΣΕΒΑΣΤΗ; they are assigned to the mint in Prusias.<sup>133</sup> Coins with this image were issued by Nicomedia, Amastris, and Amisus during the reign of Trajan.<sup>134</sup>

Individual coins with the legend CEBACTOY / ΣΕΒΑΣΤΟΥ were probably issued by the different mints. Amastris was one, as confirmed by the same dies of coins.<sup>135</sup> It is an issue of Nike holding the globe. So far, only three coins of similar size have been registered; they have the same image type and legend, differing from the notation as CEBACTOY or ΣΕΒΑΣΤΟΥ. Only one of the three finds was minted at Amastris; the other two are from Prusias. Attribution to Prusias is indicated by a similar image style of the images, i.e. the Nike motif on one of the coins without an ethnic,<sup>136</sup> legends with a simplified form of sigma (dated after 98), as well as the AYTK countermark stamped on the city's coins.<sup>137</sup> Coins with the same image of Nike and the legend ΣΕΒΑΣΤΟΥ, minted in the times of Domitian, have also been assigned by researchers to the Nicaea mint.<sup>138</sup> Judging by its type and legend, a coin from this group could also have been struck at Amastris; it depicts an effigy of Demeter with the ΣΕΒΑΣΤΟΥ notation, including the use of the traditional sigma. The attribution of issues from one mint with the image of Tyche, struck perhaps at the beginning of Trajan's reign and after 114, remains to be resolved. The title ΑΡΙΣΤΟΣ on some coins of Heraclea, Amastris, and probably Nicaea, might provide a clue here, due to issues bearing the legend ΔΙΟC. We know Amistris issued coins with the same legend, however the image of Tyche has not been registered; emissions from Nicaea depict Nike and the legend ΣΕΒΑΣΤΟΥ.<sup>139</sup> Tyche is also shown on Nicaea's coins from the times of Domitian, although the motif differs iconographically from coins analysed from the reign of Trajan. Thus, issues with the legend CEBACTOY / ΣΕΒΑΣΤΟΥ minted in the times of Trajan may be assigned to two or even three mints.

### Group VIII: Coins with the legend ΔΙΟC

The largest group of coins without an ethnic found so far includes issues with an altar shrine, or an eagle standing on a globe, with the legend ΔΙΟC, probably minted in two sizes: 19–21

<sup>127</sup> RPC III 1146–1147.

<sup>128</sup> RPC I 2015

<sup>129</sup> RPC II 619A.

<sup>130</sup> RPC I 2069–2072

<sup>131</sup> RPC II 651–652, 658, 658B.

<sup>132</sup> RPC II 635

<sup>133</sup> RPC II 675, 678A, 683.

<sup>134</sup> Nicomedia RPC III 1089; Amastris 1204A; Amisus 1241–1243.

<sup>135</sup> Amastris RPC III 1201 (1) and 1147 (1). Cf. Tab. 4.

<sup>136</sup> RPC III 1128A.

<sup>137</sup> RPC III 1101–1103; Price 1967: 37–38 (on the obverse 1–5); Howgego 2005b: 226, no. 608.

<sup>138</sup> Amandry, Burnett *et al.* 1999: 112; RPC II 709–709A.

<sup>139</sup> RPC II 709–709A.

mm, 3–7 g and 24–25 mm, 8–9 g.<sup>140</sup> The portraits of the emperor have legends referring to individual epithets (*Germanicus*,<sup>141</sup> *Dacicus*,<sup>142</sup> *Optimus*<sup>143</sup>), indicating emissions from several periods; coins with the eagle motif were struck after 102. Due to the differences in the legends, eight types can be distinguished with the altar shrine, and four with the eagle.

Coins (19–22 mm, 4–5 g) with altar motifs referencing Dionysus Ktistis and Zeus Litaioi were struck at Nicaea in the time of Nero.<sup>144</sup> Issues of this type, emphasising the cult of Zeus, in a similar denomination and also without an ethnic, were struck during the reign of Domitian.<sup>145</sup> During this period the altar shrine motif was also placed on Nicaean coins of size 26 mm, 9–10 g.<sup>146</sup> The same type of shrine appeared during the reign of Vespasian on Prusias coins (22 mm, 5–7 g).<sup>147</sup> It was also reproduced on that city's issues in the time of Trajan.<sup>148</sup>

Some of the coins with the legend ΔΙΟC from Trajan times have countermarks. One is stamped ΤΟΝΖΟΥ,<sup>149</sup> which has also been found on a coin from Prusa, and there are issues with the name of Bassus and the legend ΚΤΙCΤΗC.<sup>150</sup> Moreover a few coins reveal other countermarks, i.e. an abbreviation ΤΟΜ (Tomis),<sup>151</sup> which might indicate a wider circulation than the local centre, or contacts between individual cities, in this case located in Thrace and Moesia. Enquiries to Turkish museums revealed five coins with the legend ΔΙΟC in the collection in Izmit (former Nicomedia), and two in Iznik (former Nicaea).<sup>152</sup>

Coins with the legend ΔΙΟC were presumably struck in the mint in Nicaea, based on earlier issues of this type from there.<sup>153</sup> For the inhabitants of the city, as well as the whole of southern Bithynia, it was a very recognisable symbol of the local cult of Zeus, worshipped in these areas with various epithets. Coins of this type probably circulated much more widely than the centre where they were issued. It is not surprising that they are present in the museum collection of nearby Nicomedia, the capital and port city. Additionally, it should be remembered that no coins from Caesarea Germanica, Cius, or Bithynium Claudiopolis from the time of Trajan have been registered so far. Also coins depicting the altar shrine and an eagle, probably in the same denomination, were also issued with the name of proconsul Bassus. The only problem that complicates any definite assignment thus far is the archaeometric research, which suggests the coins were minted in a different metal than the ones from Nicaea,<sup>154</sup> however, some changes in the alloy used cannot be excluded.

<sup>140</sup> RPC III 1148–1159.

<sup>141</sup> RPC III 1148–1149, 1153, 1157.

<sup>142</sup> RPC III 1150–1152, 1152A, 1154, 1158A.

<sup>143</sup> RPC III 1155.

<sup>144</sup> RPC I 2049, 2053, 2055, 2059.

<sup>145</sup> RPC II 644–645, 710.

<sup>146</sup> RPC II 640A.

<sup>147</sup> RPC II 670.

<sup>148</sup> RPC III 1103.

<sup>149</sup> RPC III 1148 (2), 1154 (7, 12, 15).

<sup>150</sup> Prusa RPC III 1047 (3); uncertain mint 1124 (2).

<sup>151</sup> GIC 567; RPC III 1154 (23).

<sup>152</sup> Izmit inv. nos 2918, 2949, 3845, 4130, 4644; Iznik inv. nos 1990, 2020. Perhaps there are more issues of this type in the Iznik collection. Unfortunately, due to the renovation of the museum, only a small part of the coins were available (c. 3000 coins out of c. 10,000). The author would like to thank the authorities of the museum and employees who, despite the difficult working conditions, made it possible to access some of the collections.

<sup>153</sup> Coins from the reign of Nero: RPC I 2049, 2053, 2055, 2059; Domitian: RPC II 640A, 644–645; uncertain attribution: RPC II 710. Cf. Güney 2016: 416; Zając 2017b.

<sup>154</sup> Amandry, Burnett *et al.* 1999: 112.

Due to the type of the building depicted, attributions to the Prusias mint can also be considered: the structure was already appearing on the city's coins in the time of Vespasian, although no reference to a deity was made. The accompanying legends point to the office of the proconsul Marcus Plancius Varus and the name of the city.<sup>155</sup>

Perhaps attributions could also be confirmed by the countermark with the notation TONZOY which were stamped on several issues with the legends ΔΙΟC, the name Bassus, and ΚΤΙCΤΗC. The countermark was also placed on at least two coins of Vespasian and Domitian from Nicaea.<sup>156</sup> It is true that the same mark was also found on a single coin from Prusa from Trajan times, however, due to the nature of the coins issued in the centre, the city can be excluded as a potential mint. In addition, it is worth noting that the Nicomedans and the Nicaeans were among the main inhabitants settling in Moesia.<sup>157</sup> Returning to Nicaea, it should be remembered that, after all, it was one of the most important towns with active coin production, emphasising its priority over other cities on its issues. It is therefore rather strange that to date only one Nicaean coin from the time of Trajan has been registered. It is very likely, due to the number of coins and the die-links, that large numbers of coins without an ethnic were minted in this centre. The same dies, or very similar ones stylistically, with which some of the coins with the legend ΔΙΟC were minted are visible on individual issues without an ethnic bearing the legends CEBACTH / ΣΕΒΑΣΤΗ<sup>158</sup> and ΚΤΙCΤΗC.<sup>159</sup>

It should also be mentioned that the same obverse dies of one of the coins with the legend ΔΙΟC was found on an issue from Midaeum, in the Synnada conventus, in the Asia province.<sup>160</sup> The type of image with an altar and the legend ΜΙΔΑΕΩΝ, ΔΙΟC appeared on the coins of this city in the time of Domitian, however the image shows only the altar, i.e. without the shrine.<sup>161</sup> Images of this type from Midaeum are not known from the Trajan period. In this case, perhaps this has something to do with die-links between two cities. In the time of Trajan such relationships were limited, but possible, such as those between Dardanus and Ilium and Metropolis and Colophon in the Asia province.<sup>162</sup> Based on the images from earlier periods, certain stylistic similarities, and the presence of such coins in the Iznik collection (formerly Nicaea), the correct attribution should be seen as being from this centre.<sup>163</sup>

### Group IX: Coins with the legend ΚΤΙCΤΗC

Only single coins of size 22 mm, 5 g represent this group without an ethnic. They depict the eagle standing on the globe and the ΚΤΙCΤΗC legend,<sup>164</sup> and were struck after 98 and, due to the same dies, probably after 114.<sup>165</sup> The word *ktistis* means founder, and the title was placed on

<sup>155</sup> RPC II 670.

<sup>156</sup> Vespasianus: Nicaea RPC II 628/17; Domitian: Nicaea RPC II 634, CNG Electronic Auction 439, 06.03.2019, no. 236.

<sup>157</sup> Avram 2013.

<sup>158</sup> RPC III 1141 (3), 1156 (4) and 1158 (1); 1139 (19) and 1151 (1); 1141 (1) and 1148 (13); 1142 (6) and 1148 (17).

<sup>159</sup> RPC III 1155 (4) and RPC III 1160 (3).

<sup>160</sup> RPC III 1156A (1) the same obv. die 2646 (2) (Midaeum).

<sup>161</sup> RPC II 1416.

<sup>162</sup> RPC III 1572 (1) (Ilium) same obv. die as 1564 (1-2) (Dardanus); RPC III 2005 (7) (Colophon): same obv. die as 2010 (1) (Metropolis).

<sup>163</sup> Cf. Tab. 4.

<sup>164</sup> RPC III 1160.

<sup>165</sup> The coin is poorly preserved, the legend is illegible, but due to the same dies from another issue it can be understood that the title *Optimus* was there. The same dies RPC III 1155 (4) and 1160 (3).

Tium's coins in the times of Trajan,<sup>166</sup> and those of Nicaea during the reign of Domitian,<sup>167</sup> but in this case the eagle motif appears only on the Nicaea coins.<sup>168</sup> The epithet on the Tium coins refers to Dionysus, while for Nicaea it refers to the tradition of the foundation by Dionysus and Heracles. Both coins with the legend  $\text{KTICTHC}$  and  $\text{\Delta IOC}$  were probably issued by the same centre, supported by the fact that two coins used the same dies.<sup>169</sup> The tradition of the images, as well as the form of worship, validated by various sources, strongly suggest that the issue can be assigned to the Nicaea mint.

### Group X: Coins with the legend $\text{\Delta HMHTPOC}$

Among the coins from Bithynia and Pontus struck during the reign of Trajan after 98 we should probably also include issues depicting a poppy and ears of corn.<sup>170</sup> This motif was placed on the coins of Nicomedia during the reign of Claudius,<sup>171</sup> followed by Nicomedia and Tium in the reign of Domitian.<sup>172</sup> The image also appears on issues without an ethnic struck during Nero's time.<sup>173</sup> All coins with this effigy probably represent the same unit (19–20 mm, 3–5 g), while the image itself could have been a characteristic indicator of denomination.

The issue with the legend  $\text{\Delta HMHTPOC}$  was most likely minted in Nicomedia, which is known from coins of earlier periods. This attribution may also be confirmed by the similarity of the images placed on the coins of the same mint, and the issue without an ethnic, with the legend  $\text{\Delta HMHTPA CEBACTH}$ .<sup>174</sup> Thus both groups of coins were probably struck in the same town. An additional confirmation of the attribution could also be a coin of this type from the museum collection in Izmit (formerly Nicomedia).<sup>175</sup>

### Group XI: Coins with the cornucopia

Another group of coins without ethnic, probably originating in the Bithynia and Pontus mints, are coins depicting the cornucopia.<sup>176</sup> The issues, based to the emperor's epithets, were minted after 98 and 102. The image on the reverse is not accompanied by any legend. All coins represent a small denomination (15–18 mm, 3–5 g).

In earlier periods the motif appeared on the issues of Apamea,<sup>177</sup> Sinope,<sup>178</sup> and, in the time of Domitian, in Nicaea.<sup>179</sup> The cornucopia was also placed on coins in Nicomedia during the reign of Trajan.<sup>180</sup> The coins with the same image and the name Bassus, discussed above, also are from this period.

<sup>166</sup> RPC III 1181–1182.

<sup>167</sup> RPC II 637–639.

<sup>168</sup> RPC II 641–642.

<sup>169</sup> RPC III 1155 (4) and RPC III 1160 (3). Cf. Tab. 4.

<sup>170</sup> RPC III 6548.

<sup>171</sup> RPC I 2079.

<sup>172</sup> Nicomedia RPC II 663A; Tium RPC II 703A.

<sup>173</sup> RPC I 2102.

<sup>174</sup> RPC III 1089 (3), 1138 (3).

<sup>175</sup> Izmit, inv. no. 2007.

<sup>176</sup> RPC III 6550–6551.

<sup>177</sup> RPC I 2002, Rec 33 (15 mm, 2–3 g).

<sup>178</sup> RPC I 2114.

<sup>179</sup> RPC II 647.

<sup>180</sup> RPC III 1091.

Attention should be paid to the type of effigy, as they differ from each other in the position of the cornucopia, or their additional elements, i.e. the globe. Some of the images are very similar to ones on Nicaean coins from Domitian's time, struck in the same size and with the legend ΝΕΙΚ ΠΡΩΤΟΙ ΠΟΝΤ ΚΑΙ ΒΕΙΘΥ. In addition, among the motifs placed on the city's coins there is a cista with a cornucopia with a globe, horned goat and thyrsus, and a cornucopia with a panther skin.<sup>181</sup> The legends of the coins from this group contain both the traditional and the simplified form of the sigma. For this reason, and because of the differences in the effigies on Nicomedian issues, attributions to this mint should be excluded. Thus, it must be assumed that the cornucopia coins were minted in Nicaea.<sup>182</sup>

### Group XII: Coins with the serpent staff

Coins depicting a snake coiled around a staff, the symbol of Asclepius, also most likely from the mints of Bithynia and Pontus. From the title Germanicus, they were minted after 98. Issues with this motif were also struck in a small denomination (17 mm, 3–4 g).<sup>183</sup>

Coins with this motif of similar sizes appear at Hyrcanis in Asia with the image of Plotina, then Sabina, and from Cos in the eras of Trajan and Hadrian.<sup>184</sup> From the style of the coin effigies, however, they should probably be assigned to one of the centres in Bithynia and Pontus. So far, only one issue of this type is known, struck by the mint at Bithynium Claudiopolis during the reign of Domitian.<sup>185</sup>

Many towns made reference to the cult of Asclepius on their coins. In the time of Trajan these were Heraclea, Tium, and Amastris. The first two probably did not strike coins without an ethnic, so Amastris may have been the mint in question. There are no grounds, however, for attributing the issue to it.

Probably the mint that struck mostly coins without an ethnic during the reign of Trajan was Nicaea. Based on various factors, i.e. the dies, similar styles of effigies, types of images and denominations from earlier periods, trends in the notation of legends, countermarks, and the few coins in museum collections in northern Turkey, it can be assumed that coins with the legend ΟΜΟΝΟΙΑ ΣΕΒΑΧΘΗ, ΝΕΙΚΗ ΣΕΒΑΧΤΟΥ ΔΑΚ / ΑΡΜΕ, ΣΕΒΑΧΘΗ / ΣΕΒΑΣΤΗ, ΔΙΟΚ, ΚΤΙΧΤΗΚ, accompanied by the name of Bassus and the cornucopia, were minted there. Perhaps from the same mint comes the issue with ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ ΣΕΒΑΧΘΗ / ΣΕΒΑΧΘΗ / ΕΙΡΗΝΗ ΣΕΒΑΧΤΟΥ, and possibly ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ / ΕΙΡΗΝΗ ΣΕΒΑΧΘΗ / ΣΕΒΑΧΘΗ, may be assigned to the Amastris mint. In Prusias some issues with the legend ΟΜΟΝΟΙΑ ΣΕΒΑΧΘΗ and ΣΕΒΑΧΤΟΥ were minted, while Nicomedia probably produced coins with the legend ΔΗΜΗΤΡΑ ΣΕΒΑΧΘΗ and ΔΗΜΗΤΡΟΚ.

Some of the coin types without an ethnic already appeared during the reign of Domitian. Due to the similarity and duplication of individual motifs and legends, it seems that this could have been related to cooperation between particular cities. Perhaps due to the lack of an

<sup>181</sup> Nero RPC I 2050, 2052A, 2056–2057A; Vespasianus RPC II 631.

<sup>182</sup> Cf. Tab. 4.

<sup>183</sup> RPC III 6559C.

<sup>184</sup> Hyrcanis RPC III 1953–1954, 1959; Cos RPC III 2162, 2164.

<sup>185</sup> RPC II 696.

ethnic and the common motifs, the issues did not have to be limited in terms of circulation only to the market of the town where they were struck.

However not all the provincial centres participated in possible cooperation between the cities of Bithynia and Pontus. Apamea and Sinope had the status of Roman colonies in the time of Trajan. The character of these issues minted at that time differed from that of the other provincial coins. Other mints located in this administrative area, such as Byzantium, Calchedon, Prusa, Heraclea, Tium, and Amisus, had their own rhythm and traditions, and because of the coins struck by them it should be assumed that they did not participate in cooperation.

One should also pay attention to the meanings of the images, which were among the most popular and easily recognisable by the inhabitants of the province.

## Pseudo-autonomous coins of Bithynia and Pontus dated to the beginning of the 2nd century

One of the most mysterious categories of coins are the pseudo-autonomous issues, called by A. Johnston simply coins without imperial heads.<sup>1</sup> The category itself, describing the coins as pseudo-autonomous, suggests the autonomy of individual centres, and thus production, which was not confirmed in reality.<sup>2</sup> Coins without imperial heads were struck in both Greek cities and Roman colonies, mainly in Greece, Asia Minor, and Palestine. Currently it is estimated that between the reign of Augustus and the mid 3rd century, c. 10,000 types of pseudo-autonomous coins were minted in provincial cities. In Asia, one of the most important provinces, only 29 mints (out of 163) did not issue coins of this type.<sup>3</sup> At the beginning of the 2nd century AD, coins without imperial heads were struck in 60 cities of the Asia province,<sup>4</sup> 12 in Cilicia,<sup>5</sup> eight in Achaëa,<sup>6</sup> eight in Syria,<sup>7</sup> four in Bithynia and Pontus,<sup>8</sup> as well as in single cities in Macedonia,<sup>9</sup> Thrace,<sup>10</sup> Moesia,<sup>11</sup> Lycia,<sup>12</sup> Cappadocia,<sup>13</sup> Judea,<sup>14</sup> and Arabia.<sup>15</sup> In the first

<sup>1</sup> Johnston 1985: 106.

<sup>2</sup> Despite the more appropriate name introduced by Ann Johnston, the name 'pseudo-autonomous coin/s' is used in this text because of its familiarity.

<sup>3</sup> Bennett 2017: 185; Johnston 1985: 89, 97–100; Zajac 2018: 75–76.

<sup>4</sup> Cyzicus RPC III 1497, 1529–1532; Ilium RPC III 1576–1577; Hadrianeia RPC III 1623; Hadrianothrae RPC III 1635; Pionia RPC III 1665–1666; Adramyteum RPC III 1671–1672, 1675–1676; Mytilene RPC III 1684, 1696; Pergamum RPC III 1725, 1739–1741, 1748–1751; Germe RPC III 1770–1771; Stratonicea-Indepediatae-Hadrianopolis RPC III 1774–1775; Nacrassa RPC III 1811–1814; Thyatira RPC III 1833–1838; Hierocaesarea RPC III 1848–1869; Hermocapelia RPC III 1877–1879; Pitane RPC III 1881–1882; Elaea RPC III 1890–1891; Chios RPC III 1892–1914; Cyme RPC III 1938–1939; Hyrcanis RPC III 1960; Clazomenae RPC III 1989–1990; Erythrae RPC III 1997; Hypaepa RPC III 2016–2018, 2023, 2026–2027, 2030; Samos RPC III 2100–2103; Magnesia ad Meandrum RPC III 2130–2131; Cos RPC III 2173–2175; Rhodes RPC III 2185–2191; Ceramus RPC III 2195–2196; Euromus RPC III 2210–2214; Harpasa RPC III 2228–2229; Neapolis ad Harpasum RPC III 2232–2235; Bargasa RPC III 2238–2239; Antioch ad Meandrum RPC III 2243–2245; Aphrodisias RPC III 2249–2255; Attuda RPC III 2260–2261; Trapezopolis RPC III 2263–2265; Heraclea Salbace RPC III 2275; Apollonia Salbace RPC III 2278–2283; Colossae RPC III 2313–2317; Hierapolis RPC III 2348–2352; Hydrela RPC III 2362–2365; Philadelphia RPC III 2385; Sardis RPC III 2391, 2393, 2409–2413; Maeonia RPC III 2419–2422, 2426–2428; Sala RPC III 2430–2433; 2435–2439, 2443–2444, 2448; Bagis RPC III 2453–2454, 2457, 2459; Trajanopolis RPC III 2466–2468, 2472–2480; Grimenothyrae RPC III 2482–2488, 2493–2496; Cadi RPC III 2502; Aezani RPC III 2510; Tiberiopolis RPC III 2512–2514, 2520–2524; Synaus RPC III 2526–2527, 2529–2530; Ancyra RPC III 2537, 2542; Iulia Gordus RPC III 2556; Tripolis RPC III 2557–2572; Dionysopolis RPC III 2576; Eucarpia RPC III 2588, 2590–2593; Bruzus RPC III 2595; Sebaste RPC III 2597–2603; Alia RPC III 2614–2615; Appia RPC III 2627–2629.

<sup>5</sup> Philadelphia RPC III 3214; Seleucia ad Calycadnum RPC III 3234, 3237; Pompeiopolis RPC III 3246; Tarsus RPC III 3298–3310; Adana RPC III 3311–3313; Augusta RPC III 3317–3318; Aegeae RPC III 3330–3331, 3339, 3342; Mopsus RPC III 3362; Anazarbus RPC III 3367–3368, 3372–3375; Epiphanea RPC III 3392; Alexandria ad Issum RPC III 3400–3401; Rhosus RPC III 3404–3406.

<sup>6</sup> Corinth RPC III 243–259; Epidauros RPC III 396–399; Athens RPC III 406–407; Megara RPC III 408–411; Delphi RPC III 447–449; Anticyra RPC III 450; Koinon of Thessaly RPC III 455–464; Nicopolis RPC III 579–584.

<sup>7</sup> Antioch RPC III 3729–3755; Seleucia RPC III 3789–3794; Ladicea RPC III 3800–3802; Aradus RPC III 3823–3824; Marathus RPC III 3825–3827; Berytus RPC III 3857–3864; Sidon RPC III 3865, 3871–3874, 3877–3878; Tyre RPC III 3879–3910.

<sup>8</sup> Byzantium RPC III 1088; Amastris RPC III 1209–1210; Sinope RPC III 1230; Amisus RPC III 1231–1233, 1235, 1239, 1259–1261, 1297.

<sup>9</sup> Dium RPC III 614; Thessalonica RPC III 621–625; 627–630; Heraclea Sintica RPC III 667.

<sup>10</sup> Perinthus RPC III 720–727; Bizya RPC III 736–738.

<sup>11</sup> Tomi RPC III 785–786.

<sup>12</sup> Syedra RPC III 2771.

<sup>13</sup> Caesarea RPC III 3129–3131, 3133–3136, 3139–3142, 3144; Cybistra RPC III 3180.

<sup>14</sup> Gaba RPC III 3945, 3953; Ascalon RPC III 3998, 4014, 4018; Gaza RPC III 4027, 4038, 4042, 4049.

<sup>15</sup> Philadelphia RPC III 4097–4098.

two centuries AD, their importance grew. During the Antonine dynasty, pseudo-autonomous coins accounted for c. 30% of all issue types struck in the Roman provinces.<sup>16</sup> Some of these cities issued pseudo-autonomous coins very regularly (Hierapolis in Phrygia or Smyrna) and some not at all (Ephesus and Nicomedia).<sup>17</sup>

On the obverse of pseudo-autonomous coins, mainly images of deities or personifications appear. Very often the effigies derived from the motifs of the Hellenistic period, referring to the history and tradition of the centre, well recognisable to local inhabitants. The coins also featured city symbols. The main types were personifications, i.e. Tyche in the *corona muralis*,<sup>18</sup> and institutions or entities, i.e. Demos, Bule, Gerousia, or the Senate.<sup>19</sup> The images of the latter were often placed on coins of the Asia province.<sup>20</sup> It would seem that one of the reasons for the dominance of certain images was the status of the province as imperial or senatorial, however this was not a general trend, as the coins of Bithynia and Pontus lack coins with this personification. Another popular image was Athena. A. Johnston has suggested that perhaps this is a representation of Roma. It was also one of the most popular coin motifs within the Asia province,<sup>21</sup> while in Bithynia and Pontus it has been found only at Amisus.<sup>22</sup>

According to one hypothesis, pseudo-autonomous coins were issued only in small denominations, thus reflecting a similar tradition present in imperial coinage, i.e. the lack of an imperial portrait on coins smaller than the as. Numismatic sources, however, reveal that pseudo-autonomous emissions were struck in all denominations, both large and small.<sup>23</sup> In the years between 96 and 138, coins of this type were issued with diameters between 11 mm, 2–3 g in Laodicea in Syria,<sup>24</sup> and up to 34 mm, 23–25 g on Rhodes and Chios.<sup>25</sup>

It is also worth emphasising that the circulation of pseudo-autonomous coins was very similar to other provincial coins, i.e. mainly locally. There were probably exceptions to this due to the different contacts and travels of citizens from individual towns.<sup>26</sup>

One of the problems with pseudo-autonomous coins is often the exact chronology of their issue. Unfortunately, due to the lack of an image of the emperor or members of the imperial family, and in many cases also legends, it is very difficult to understand both the meaning and production of pseudo-autonomous coins in individual centres.<sup>27</sup> In turn, elements helpful for the proper identification of mints include the stylistic features of representations, legends, and the uniquely placed names of magistrates.<sup>28</sup> Countermarks can also be used to define a better chronology, but for the reign of Trajan and the Bithynia and Pontus region no pseudo-autonomous coins with countermarks have been registered so far.

<sup>16</sup> Bennett 2017: 189; Heuchert 2005: 47.

<sup>17</sup> Bennett 2017: 189; Johnston 1985: 95.

<sup>18</sup> Johnston 1985: 89, 91; Sartre 1997: 503–504.

<sup>19</sup> Johnston 1985: 89, 91; Martin 2013.

<sup>20</sup> Cf. Hadrianeia RPC III 1623; Pionia RPC III 1665; Pergamum RPC III 1725, 1748–1751; Germa RPC III 1770–1771.

<sup>21</sup> Johnston 1985: 92–94.

<sup>22</sup> RPC III 1239, 1261, 1297.

<sup>23</sup> Johnston 1985: 97.

<sup>24</sup> RPC II 2033.

<sup>25</sup> RPC III 1901.

<sup>26</sup> Johnston 1985: 96, 104.

<sup>27</sup> Exceptions: Chios – pseudo-autonomous coins, but with exact chronology on the coins (cf. Lagos 1998; Mavrogordato 1918); Amisus – cf. this Chapter on Amisus: Athena, below.

<sup>28</sup> Bennett 2014: 19–40; Bennett 2017: 193; Johnston 1985: 89.

The function of pseudo-autonomous coins is not completely certain. Earlier researchers have looked for special meanings, i.e. political factors,<sup>29</sup> the independence of the city, and certain privileges. The free city in the Hellenistic or Roman periods was self-governing, with its own laws. This status was granted by the emperor, although the city was supervised through his officials. The centres were able to mint their own coin, although these were not always pseudo-autonomous issues.<sup>30</sup> A. Bellinger saw economic benefits in the production of these type of coins.<sup>31</sup> Another hypothesis was the particular individuality of the city. M. Dräger has suggested that pseudo-autonomous coins might indicate agreements between cities, i.e. Hierapolis and Laodicea. Emissions without images of the emperor in these places were struck on behalf of the proconsul Marcellus during the reign of Vespasian.<sup>32</sup> A. Johnston opposes the hypotheses relating to the special nature of these coins, suggesting that they should be treated equally with other provincial issues. The same researcher showed that some features of pseudo-autonomous coins, such as the lack of an imperial portrait, could be a determinant of a different denomination, and could circulate longer, without the need to produce new dies with a change of emperor (especially in the 3rd century). According to this theory, pseudo-autonomous coins were a more universal currency than other provincial coins.<sup>33</sup> R. Bennett, in the light of current research, some thirty years following the article by A. Johnston, suggested a certain proclamation of independence regardless of the city's status.<sup>34</sup> To strike your own coins was also a privilege,<sup>35</sup> hence perhaps issues without portraits of the imperial family could be a certain manifestation against Roman authority.<sup>36</sup>

Based on the current research, it is estimated that 70 of the 1731 iconographic types in Bithynia and Pontus in the Roman period are images of pseudo-autonomous coins. They accounted for just 4% of all coin motifs issued in the province.<sup>37</sup> This suggests perhaps the low popularity of such effigies, however the number of coins with such images should also be taken into account. Only a detailed study of the entire coinage of Bithynia and Pontus in the Roman period, and all its issues, can indicate whether these motifs were in the minority. Some mints may have issued large numbers of coins of the same type, which in turn may have had a bearing on the popularity, and thus the importance, of a given category of coins. In the first half of the 2nd century there were probably only four cities in Bithynia and Pontus that struck pseudo-autonomous emissions, mostly in the eastern part of Pontus. Amastris placed on their coins the head of Dionysus and Helios,<sup>38</sup> Sinope chose Priapus and Diogenes,<sup>39</sup> and Amisus opted for Nike, Dionysus, Aphrodite, Athena, and Tyche.<sup>40</sup> It is worth noting, however, that some of the coins without the image of the emperor could possibly be assigned to the period of Trajan's reign on the basis of legend references, i.e. the Amisus issues with the effigy of Athena (ΘΕΟΥ CEBACTOY ΤΡΑΙΑΝΟΥ), or the date, i.e. a coin from Sinope with the figure

<sup>29</sup> Lenormant 1878: 166–177; MacDonald 1904: 105–135; Regling 1927: 13.

<sup>30</sup> Sartre 1997.

<sup>31</sup> Bellinger 1956: 148.

<sup>32</sup> Amandry, Burnett *et al.* 1999: 32; Dräger 1993: 44–50; RPC II 970–971, 1271, 1305–1307, 1371–1373.

<sup>33</sup> Johnston 1985: 101–106.

<sup>34</sup> Bennett 2017: 193.

<sup>35</sup> According to the inscriptions from Sestus, see Butcher 1988: 25.

<sup>36</sup> Bennett 2017: 193.

<sup>37</sup> Bennett 2017: 189.

<sup>38</sup> Dionysos: RPC III 1209; Helios: RPC III 1210.

<sup>39</sup> Priap: Manisse 243, Dalaison Sinope 6; Diogenes: RPC III 1230.

<sup>40</sup> Nike: RPC III 1231–1233; Dionysos: RPC III 1235; Aphrodite: RPC III 1239; Athena: RPC III 1231–1233, 1239, 1261, 1297; Tyche: RPC III 1259.

of Priapus (ANN CLIX – year 159–113/114), and examples from Amisus (a kneeling Aphrodite (ΕΤΟΥΚ ΠΑΗ – year 138–106/107); an image of Dionysus (ΑΜΙΣΟΥ ΕΤΟΥΣ ΠΛ – year 130–98/99); an image of Tyche (ΕΤΟΥΚ ΡΞΕ – year 165–133/134)). Due to the dating of some coins without the head of the emperor, are analysed in terms of the iconography placed on the provincial issues from the times of Trajan, while pseudo-autonomous coins with possible, but still uncertain, attributions to this period are the subject of separate analysis below.

### **Amastris: Dionysus and Helios**

Perhaps two types of pseudo-autonomous coins were issued in Amastris during the reign of Trajan. The first included coins (18–21 mm, 4–6 g) with the image of Dionysus in an ivy wreath on the obverse and a bunch of grapes on the reverse, with a legend identifying the deity (ΔΙΟΝΥΚΟΚ ΚΕΒΑΚΤΟΚ), as well as the mint (ΑΜΑΚΤΡΙΑΝΩΝ ΜΗΤΡΟΠΟΛΕΙΤΩΝ).<sup>41</sup> The second type (17–18 mm, 3–5 g) depicts Helios and a star with a crescent moon, with legends referring to the centre (obverse: ΜΗΤΡΟ ΑΜΑΚΤΡΙΑΝΩΝ, reverse: ΜΗΤΡΟ / ΑΜΑ).<sup>42</sup> Unfortunately, due to the small number of issues registered so far, it is not known whether they were minted in the same denomination. It is worth noting, however, that in this period most of the coins represent rather larger denominations. There are a few issues with a nominal value similar to pseudo-autonomous coins, including the effigies of Tyche or Asclepius.<sup>43</sup> This, in turn, could suggest a certain similarity to the monetary system of Rome and the placement of images other than the portrait of the emperor (or other family member) on the smallest units.

The attribution of the coins to the times of Trajan is based, *inter alia*, on the images and the reference, in the legend, to the city as a metropolis, appearing mainly in this period, on coins struck after 114. The next issues are known only from the times of Antoninus Pius. The status of a metropolis no longer appears on the later coins registered so far, and among other images placed on the obverse of the group of pseudo-autonomous coins from this centre appear Homer, Zeus, and Tyche.<sup>44</sup> Probably the coins with portraits of deities represented one very universal denomination (18–21 mm, 4–6 g). The issues with the bust of Homer were heavier compared to other pseudo-autonomous coins (21–23 mm, 13 g).

For this reason it can be assumed that the issues with effigies of Dionysus and Helios were issued after 114. The later traditions may also be confirmed by the presence of a simplified form of the sigma within the legends. The traditional form still appears in the legends of issues struck after 114, but not on coins dated after 116 registered so far. It is worth repeating that we still do not have very many pseudo-autonomous coins, or those minted after 116.

The effigy of Dionysus is also found on Amastris coins from the times of Domitian and, possibly, Marcus Aurelius.<sup>45</sup> Helios appears on issues struck *c.* 300 BC, with the personification of the city and Eros,<sup>46</sup> while the star and crescent motif also features, with the bust of Faustina

<sup>41</sup> RPC III 1209; Dalaison 2017a: 265–267, no. 1.

<sup>42</sup> RPC III 1210.

<sup>43</sup> Tyche: RPC III 1204A; Asclepius: RPC III 1207.

<sup>44</sup> Homer: RPC IV.1. 4902–4908, 4910, 4913, 5477, 10200, 10959, ID 20046–20048, 26719 (temporary numbers); Zeus: RPC IV.1. 4895–4900; Tyche (was also included in this type of issue from the times of the Republic: RPC I 2105; August: RPC I 2106); RPC IV.1. 4911–4912 (temporary numbers).

<sup>45</sup> Domitian RPC II 713; Marcus Aurelius RPC IV.1. 8420 (temporary number).

<sup>46</sup> Rec Amastris 1.

the Younger.<sup>47</sup> Perhaps both types should be associated with the old tradition from the time of Mithridates VI. The ruler took the name of Dionysus, and he was also identified with Helios. Particular astral symbols became distinctive ancestral identifiers, among the most recognisable in the region, probably deriving from the cult of the god Ma.<sup>48</sup>

As mentioned previously when analysing the images on provincial coins, the cult of Dionysus was extremely popular: his effigy and related attributes were placed on the coins of many centres.<sup>49</sup> The deity was associated with guarantees of a better, richer life, related with the fertility of the region,<sup>50</sup> in this case with fertile soils and frequent rainfall. For Amastris this cult could be associated, inter alia, with the city's natural wealth and economy, based on the transport of wood, the cultivation of nuts, and the production of wine and olive oil.<sup>51</sup> Helios, on the other hand, was closely related to the worship of the sun. Similarly, the stars and the crescent, symbols of heaven, cosmos, or Luna, completed his image. The accompaniment of Luna has been often interpreted as a symbol of eternity.<sup>52</sup> The effigy of Helios was also placed on the coins of Rhodes,<sup>53</sup> Apollonia Salbace,<sup>54</sup> Colossae,<sup>55</sup> Tripolis,<sup>56</sup> and Aradus.<sup>57</sup> Both images could also refer to the older tradition related to the propaganda of Mithridates VI. Thus they could be associated with the period when the kingdom of Pontus was a great power. In addition, at the beginning of the 2nd century, consciousness of history and important historical figures, whose images were also found on the coins, increased.<sup>58</sup> However, placing the person of Mithridates VI, the enemy of Rome, on the issues of any of the cities would not be received favourably by the authorities, and could even be treated as incitement to rebellion. So, could this type of image also refer the local populations to past times? Hypotheses such as this need only to be implied. Occasionally the emperor might be identified as one of the gods – Zeus, Dionysus, or Helios, less often Asclepius or Apollo. This treatment was used particularly by the *koinon*, the federation responsible for religious and cultural organisation in the province or individual cities, which was also located in Amastris.<sup>59</sup> In this case perhaps the images on the pseudo-autonomous coins might be another form of showing the ruler, as with Mithridates VI.

### Sinope: Diogenes

Sinope probably also issued pseudo-autonomous coins (14 mm, 2–3 g) with a bust of Diogenes and a reference to the colony during the reign of Trajan or Hadrian.<sup>60</sup> Unfortunately, due to

<sup>47</sup> Faustina the Younger RPC IV.1 5435 (temporary number).

<sup>48</sup> Cf. Fulińska 2015: 105, 107, 168–169; Price 1968: 3–4; Olshausen 1990: 1880–1881, 1905.

<sup>49</sup> Thrace: Perinthus RPC III 721; Bizya RPC III 736; Asia: Adramyteum RPC III 1672, 1676; Smyrna RPC III 1968; Aphrodisias RPC III 2253–2254; Sardis RPC III 2393; Tripolis RPC III 2561; Sebaste RPC III 2597–2600; Cilicia: Epiphanea RPC III 3392; Syria: Laodicea RPC III 3801; Sidon RPC III 3865, 3873.

<sup>50</sup> Gasparri and Veneri 1986: 496–497; Sartre 1997: 501, 512–515; Shlesier 1997: 651–660.

<sup>51</sup> Madsen 2009: 21–22.

<sup>52</sup> Letta 1988: 592–625; Sartre 1997: 130; Sichtermann 1960b: 1140–1142.

<sup>53</sup> RPC III 2186–2191.

<sup>54</sup> RPC III 2281–2283.

<sup>55</sup> RPC III 2313–2314; 2317.

<sup>56</sup> RPC III 2562.

<sup>57</sup> RPC III 3817, 3823.

<sup>58</sup> Heuchert 2005: 52.

<sup>59</sup> Marek 1996: 574; Sartre 1997: 130.

<sup>60</sup> RPC III 1230.

the small number of coins and the lack of possible diagnostic features, it is not possible to determine more precisely in which period this issue was struck.

The Greek philosopher Diogenes was born in Sinope in the 5th century BC. He owed his fame to his radical rejection of the pleasures of life: both the philosopher and his father were banished from the city.<sup>61</sup> Placing his images on the coins was associated with a return to the historical tradition and important and famous inhabitants.<sup>62</sup>

At the end of the 1st century BC, on the obverse of the city's coins sized at 25 mm, 14–15 g, 22–25 mm, 6–9 g, and 13 mm, 2–3 g, were effigies of Tyche, possibly Ceres, and a bull.<sup>63</sup> In the reign of Claudius coins sized at 17 mm, 4–5 g were issued with a bust of Sol,<sup>64</sup> while in the times of Vespasian and Domitian an unknown object and a herm were placed on the smallest denominations of 14–16 mm.<sup>65</sup> During the reign of Trajan the city probably issued five denominations, with pseudo-autonomous coins representing the smallest of them. Another image also replacing the portrait of the emperor was Priapus, the deity of fertility and plants, accompanied by a kantharos and thyrsus. Hence, perhaps one should see again a reflection of a certain tradition present in the imperial system, especially since the coins were issued by a centre with the status of a Roman colony.

For periods later than the times of Trajan, no pseudo-autonomous coins have been recorded so far, while the bust of the emperor is found on issues of similar size.<sup>66</sup> Thus it can be assumed that the coins with the image of Diogenes may have been the last pseudo-autonomous coins struck in Sinope.

### **Amisus: Athena**

Amisus was a city blessed with the privilege of freedom.<sup>67</sup> Coins with many images were issued in this town, including pseudo-autonomous coins with effigies of Apollo, Hermes, Tyche, herms, and Dionysus,<sup>68</sup> minted in a various sizes. Probably during the Trajan period, due to a similar effigy from the beginning of the emperor's reign, issues of 16 mm, 5–6 g and 22 mm, 7–8 g were struck with a portrait of Athena on the obverse and a standing Nike, holding a wreath and a cornucopia.<sup>69</sup>

<sup>61</sup> Goulet-Caze 1997: 598–600.

<sup>62</sup> Heuchert 2005: 52.

<sup>63</sup> RPC I 2107–2108, 2111.

<sup>64</sup> RPC I 2133.

<sup>65</sup> RPC II 718, 725.

<sup>66</sup> Sabina RPC III 1227; Marcus Aurelius RPC IV.1. 4938, 9385, 9679, 10479; Lucius Verus RPC IV.1. 9579; Severus Alexander RPC VI 6494; Maximinus Thrax RPC VI 6502–6507 (temporary numbers).

<sup>67</sup> Plin. *HN*. V, 108.

<sup>68</sup> Apollo: RPC I 2143–2145; Hermes: RPC I 2525; Tyche: RPC III 1259; RPC IV.1. 5331, 5322, 5329, 5326, 5449; Herma: RPC IV.1. 5328 (temporary numbers); Dionysos: RPC IX 1233.

<sup>69</sup> RPC III 1297.

It is worth noting that Athena was one of the most popular images on pseudo-autonomous coins.<sup>70</sup> The bust of Athena appears on issues in the times of Tiberius, Trajan, and Hadrian.<sup>71</sup> The same effigies are found on coins from the Mithridatic era, imitating the stater of Alexander the Great.<sup>72</sup> During the reign of Mithridates VI, Pontic cities, e.g. Amisus, Amastris, and Sinope, issued common types of coins. These issues featured images of Nike, Zeus, the eagle, Ares, Athena, and Dionysus.<sup>73</sup>

Nike appears on some coins from the very beginning of Trajan's reign, with the personifications of Roma and Amisus, the temple, and Athena. The images of the goddess could symbolise the legitimacy of the new ruler, or his victories over the Germanic tribes. Nike accompanied by Athena very often referred to military successes.<sup>74</sup> Did the placement of Nike on the obverses, because of the dates they were struck, relate to the absence of a portrait of the emperor? Perhaps, due to their production date, the busts of Athena should be identified with Roma,<sup>75</sup> and the images shown should be associated with emphasising good relations with the Empire? Nike also appears on coins of other cities, including Thessalonica and Berytus.<sup>76</sup> In the light of an earlier tradition, the presence of a given motif may be a deliberate duplication of earlier, well-known trends. On the other hand, perhaps it should be interpreted as a sign of the city's freedom and independence.

### **Byzantium: Artemis, Poseidon, Hermes, Dionysus**

Pseudo-autonomous coins were also issued in Byzantium in the Roman period. At the end of the 1st century BC, coins were minted with images of Apollo, and probably also two torches and a lyre,<sup>77</sup> while in the times of Hadrian, and then Marcus Aurelius, the bust of Byzas appears.<sup>78</sup> Probably in Byzantium in the middle of the 2nd century, whether in the times of Trajan or Hadrian we do not know, pseudo-autonomous coins were issued with images of Artemis, Poseidon, Hermes, and Dionysus.<sup>79</sup> Researchers from the RPC project point to such a possibility due to repeated images from issues of similar nominal value from that period, minted after 102. They are included, however, in the database of coins from the times of Antoninus Pius, Marcus Aurelius, and Commodus. And perhaps, because of the style of the effigies and other legends, they should be dated later than the reign of Trajan. Due to the size of the issue it seems that some of them could be identical with the assarion, but only in terms of the image of Dionysus, perhaps on the coins with larger denominations, interpreted today as one and a half assarion (20 – 21 mm, 7 g).

<sup>70</sup> Asia: Ilium RPC III 1576–1577; Pionia RPC III 1661; Adramyteum RPC III 1671, 1675; Pergamum RPC III 1741; Pitane RPC III 1882; Elaea RPC III 1890–1891; Cyme RPC III 1938–1939; Smyrna RPC III 1967; Hypapaea RPC III 2018; Harpasa RPC III 2228; Bargasa RPC III 2238; Attuda RPC III 2261; Trapezopolis RPC III 2265; Apollonia Salbace RPC III 2279–2280; Hydrela RPC III 2364–2365; Maeonia RPC III 2422, 2427; Sala RPC III 2431, 2435, 2438, 2443; Traianopolis RPC III 2468, 2478–2479; Tripolis RPC III 2559; Cilicia: Philadelphia RPC III 3214; Aegae RPC III 3330–3331, 3339, 3342; Mopsus RPC III 3362; Rhodus RPC III 3404–3405; Syria: Laodicea RPC III 3800; Arabia: Philadelphia RPC III 4097–4098.

<sup>71</sup> Tiberius RPC I 2151; Hadrian RPC III 1261.

<sup>72</sup> Rec Rois de Pont 1.

<sup>73</sup> Erciyas 2006: 116.

<sup>74</sup> Sherf 2000: 907.

<sup>75</sup> Cf. Johnston 1985: 92–94.

<sup>76</sup> Thessalonica RPC III 622, 629; Syria: Berytus RPC III 3859, 3861.

<sup>77</sup> Apollo: RPC I 1772–1773; torches: RPC I 1776; lyre: RPC I 1777.

<sup>78</sup> Byzas: RPC III 1088; RPC IV.1. 3910, 8718–8719, 8720–8731 (temporary numbers).

<sup>79</sup> Artemis: RPC IV.1. 3908; Poseidon: RPC IV.1. 3909, 3911; Hermes: RPC IV.1. 1932; Dionysus: RPC IV.1. 10363–10364.

Due to the diversity of the pseudo-autonomous coins, both in terms of images and size, minted in the individual centres, issues of this type should be interpreted individually in light of other coins and traditions of a given city. Hence, despite many theories regarding the function and meaning of coins without imperial images, all may be right in some places. As can be seen from the example of the cities of Bithynia and Pontus, some of the pseudo-autonomous coins alluded to certain historical figures (Sinope), local cults (Amastris, Amisus), perhaps to political significance and imperial worship (Amisus), or perhaps to earlier traditions (Amastris, Amisus).

## Production in the provincial centres

Production in the provincial centres was mainly aimed at supplying the local market with coinage. The minting of the issues for all regions by one central mint in Rome was problematic and even impossible. The permission to strike coins was granted by the emperor, but it probably happened more than once that local initiative was involved. Wealthy local officials, who also supported the financing of various construction projects or activities, could undertake the obligation to supply the city with coins. This type of intervention was also called *epimeleia* ('caring'). When it comes to the production process itself, the images placed, or the number of coins – then these decisions were made by the city.<sup>1</sup> The production of coins could not only have economic character, but also reflect prestige and commemoration.<sup>2</sup> The reasons for minting in individual cities, very often on an irregular basis, could have been related to local market demand, transactions, possible price increases, and city development. In addition, the production was also influenced by the personal arrival of the emperor, city status, anniversaries, cult, and stays by the army.<sup>3</sup> Some of the issues may have been struck to meet the needs of the province by the capital mint. During the reign of Trajan, some silver and bronze coins were issued in Rome and then sent to the individual provinces, e.g. Cyprus, Syria, Cyrenaica, Cappadocia.<sup>4</sup>

Monetary production in Bithynia and Pontus began in the late Republican period.<sup>5</sup> Some of the cities issued very similar bronze coins with the name of the proconsul and the image of Roma on the reverse, i.e. Amisus, Apamea, Bithynium Claudiopolis, Nicaea, Nicomedia, Prusa and Tium, during the office of the proconsuls Papirius Carbo (61–59 BC), Caecilius Cornutus (56 BC), and Vibius Pansa (47–46 BC). During the early Empire, the number of provincial centres issuing their own coin increased.<sup>6</sup> The coins were struck during the reigns of Augustus, Claudius, and Nero, however it is assumed that monetary production during these periods was not very great.<sup>7</sup> It is interesting that the coins from Bithynia and Pontus in some way resemble coins from the Thrace area (especially from Perinthus). The similarities are visible in the style of images, types of effigies and legends themselves, as well as metal, in this case brass, and similar denominations struck during the reigns of Claudius and Nero. Many localities, both on the western and northern coasts of the province, issued coins of a similar size to Roman imperial coins, mainly sestertii.<sup>8</sup> During the Flavian era, as before, there was a difference between the issues in the western and northern parts of Bithynia. Similar coins in the times of Vespasian were issued by centres such as Bithynium Claudiopolis, Iuliopolis,

<sup>1</sup> Amandry, Burnett *et al.* 1992: 1–3; 1999: 1–6; Butcher 1988: 23–25; Elkins 2015: 143–144; Kunisz 1971: 65–66.

<sup>2</sup> Cf. Butcher 1988: 23–25; Kunisz 1971: 26.

<sup>3</sup> Cf. Amandry, Burnett *et al.* 1992: 16–17; 2015: 868–873; Mitchell 1993: 134; Salmeri 2005: 196.

<sup>4</sup> Amandry, Burnett *et al.* 2015: 870–871.

<sup>5</sup> This statement refers to the Roman period. Coins in individual centres were struck in earlier periods, however, due to the chronological scope of this present work and the subject matter, some coins or issues will be mentioned only in general terms.

<sup>6</sup> Amandry, Burnett *et al.* 1992: 15, 22–23; Marek 2003: 40, 52.

<sup>7</sup> Cf. Amandry, Burnett *et al.* 1992: 22–23. The conclusion is based on the registered coins, however, it should be remembered that little archaeological research has been carried out in the former territory of the province, Bithynia and Pontus. In addition, the small numbers of coins registered today may also be explained by events in antiquity, e.g. coins could have been melted down to strike new ones.

<sup>8</sup> Amandry, Burnett *et al.* 1992: 22–23, 35, 338.

BETWEEN ROMAN CULTURE AND LOCAL TRADITION

Table 5a: Numbers of dies used to strike the coins of individual cities in Bithynia and Pontus during the reign of Trajan (n – the number of coins; d – the number of obverse dies; r – the number of reverse dies)

|                   | n  | d  | r  |
|-------------------|----|----|----|
| Apamea Myrlea     | 4  | 4  | 4  |
| Prusa             | 55 | 28 | 39 |
| Nicaea            | 1  | 1  | 1  |
| Calchedon         | 7  | 3  | 7  |
| Byzantium         | 82 | 77 | 79 |
| Nicomedia         | 10 | 10 | 9  |
| Iuliopolis        | 9  | 5  | 8  |
| Prusias ad Hypium | 11 | 11 | 11 |
| Heraclea Pontica  | 61 | 57 | 58 |
| Tium              | 41 | 29 | 40 |
| Amastris          | 26 | 22 | 25 |
| Abonoteichos      | 3  | 3  | 3  |
| Sinope            | 8  | 8  | 8  |
| Amisus            | 58 | 52 | 55 |

Table 5b: Numbers of dies used to strike the coins without an ethnic in Bithynia and Pontus during the reign of Trajan (n – the number of coins; d – the number of obverse dies; r – the number of reverse dies)

|                             | n  | d  | r  |
|-----------------------------|----|----|----|
| I. C. Iulius Bassus         | 22 | 16 | 21 |
| II. ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ          | 13 | 6  | 13 |
| III. ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ        | 24 | 21 | 24 |
| IV. ΝΕΙΚΗ ΣΕΒΑΚΤΟΥ ΔΑΚ/ΑΡΜΕ | 8  | 6  | 8  |
| V. ΔΗΜΗΤΡΑ ΣΕΒΑΣΤΗ          | 5  | 4  | 5  |
| VI. ΣΕΒΑΣΤΗ                 | 38 | 33 | 37 |
| VII. ΣΕΒΑΚΤΟΥ               | 7  | 7  | 7  |
| VIII. ΔΙΟΚ                  | 94 | 77 | 86 |
| IX. ΚΤΙΣΤΗΚ                 | 3  | 3  | 3  |
| X. ΔΗΜΗΤΡΟΚ                 | 3  | 3  | 3  |
| XI. Cornucopia              | 10 | 10 | 10 |
| XII. Serpent staff          | 1  | 1  | 1  |

Table 5c: Numbers of dies used to strike the pseudo-autonomous coins of individual cities in Bithynia and Pontus possibly dated to the reign of Trajan (n – the number of coins; d – the number of obverse dies; r – the number of reverse dies)

|          | n | d | r |
|----------|---|---|---|
| Amastris | 6 | 5 | 5 |
| Sinope   | 1 | 1 | 1 |
| Amisus   | 2 | 2 | 2 |

PRODUCTION IN THE PROVINCIAL CENTRES

Table 6a: Numbers of coins, obverse and reverse dies, and the estimated numbers of issued coins in individual centres of Bithynia and Pontus during the reign of Trajan (markings from the Carter tests and formulas are left to assist easier adjustment or verification of individual data: n – number of coins; d – number of obverse dies; r – number of reverse dies; D – number of original number of dies; – owing to single examples the estimates were abandoned)

|                           | n  | d  | r  | n/d | D ±s          | Estimated numbers of coins |
|---------------------------|----|----|----|-----|---------------|----------------------------|
| <b>Prusa</b>              |    |    |    |     |               |                            |
| 30–33 mm, 18–25 g         | 15 | 10 | 7  | 1.5 | 24.04±8.42    | 360,000                    |
| 24–26 mm, 10–14 g         | 11 | 6  | 11 | 1.8 | 10.7±3.5      | 165,000                    |
| 22–24 mm, 7–9 g           | 5  | 2  | 5  | 2.5 | 2.79±1.17     | 45,000                     |
| 20–22 mm, 4–6 g           | 15 | 7  | 12 | 2.1 | 10.77±2.52    | 165,000                    |
| 16–18 mm, 3–4 g           | 9  | 7  | 7  | 1.3 | 24.73±15.37   | 375,000                    |
| <b>Calchedon</b>          |    |    |    |     |               |                            |
| 19–20 mm, 4–5 g           | 1  | 1  | 1  | 1   | –             | –                          |
| 22–24 mm, 6–8 g           | 6  | 2  | 6  | 3   | 2.55±0.81     | 45,000                     |
| <b>Byzantium</b>          |    |    |    |     |               |                            |
| <b>Magistrate: Trajan</b> |    |    |    |     |               |                            |
| 29–30 mm, 13–17 g         | 3  | 1  | 2  | 3   | 1.27±0.72     | 15,000                     |
| 25–29 mm, 9–12 g          | 14 | 14 | 14 | 1   | 129.63±113.53 | 1,950,000                  |
| 22–24 mm, 7–10 g          | 17 | 17 | 17 | 1   | 157.41±123.43 | 2,370,000                  |
| <b>Magistrate: Nike</b>   |    |    |    |     |               |                            |
| 29–31 mm, 13–17 g         | 3  | 3  | 3  | 1   | –             | –                          |
| 25–29 mm, 9–12 g          | 12 | 12 | 12 | 1   | 111.11±106.47 | 1,665,000                  |
| 22–24 mm, 7–10 g          | 7  | 7  | 7  | 1   | 64.81±86.96   | 975,000                    |
| 18–21 mm, 4–7 g           | 15 | 13 | 13 |     | 73.61±45.11   | 1,110,000                  |
| 18 mm, 3–4 g              | 1  | 1  | 1  | 1   | –             | –                          |
| <b>Heraclea Pontica</b>   |    |    |    |     |               |                            |
| <b>after AD 102</b>       |    |    |    |     |               |                            |
| 30–33 mm, 17–21 g         | 10 | 10 | 10 | 1   | 92.59±98.99   | 1,395,000                  |
| 22–24 mm, 7–9 g           | 4  | 3  | 4  | 1.3 | 9.49±9.74     | 135,000                    |
| 18–21 mm, 4–6 g           | 30 | 28 | 28 | 1   | 289.26±169.64 | 4,335,000                  |
| 16 mm, 2–4 g              | 2  | 2  | 2  | 1   | –             | –                          |
| <b>Tium</b>               |    |    |    |     |               |                            |
| <b>after AD 98</b>        |    |    |    |     |               |                            |
| 31–35 mm, 19–24 g         | 6  | 5  | 6  | 1.2 | 23.09±22.19   | 345,000                    |
| 25–28 mm, 8–12 g          | 8  | 7  | 8  | 1.1 | 42.01±38.90   | 630,000                    |
| 23–24 mm, 5–7 g           | 2  | 2  | 2  | 1   | –             | –                          |
| 13–18 mm, 2–3 g           | 5  | 5  | 5  | 1   | 46.3±78.76    | 690,000                    |
| <b>after AD 102</b>       |    |    |    |     |               |                            |
| 31–35 mm, 19–24 g         | 17 | 10 | 10 | 1.7 | 19.61±5.43    | 300,000                    |
| 23–24 mm, 8–9 g           | 1  | 1  | 1  | 1   | –             | –                          |
| 20–21 mm, 5–7 g           | 4  | 4  | 4  | 1   | 37.04±75.14   | 555,000                    |

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|                   | n  | d  | r  | n/d | D ±s          | Estimated numbers of coins |
|-------------------|----|----|----|-----|---------------|----------------------------|
| <b>Amisus</b>     |    |    |    |     |               |                            |
| <b>AD 98</b>      |    |    |    |     |               |                            |
| 20–25 mm, 6–10 g  | 18 | 18 | 17 | 1   | 166.67±126.57 | 2,505,000                  |
| <b>AD 98/99</b>   |    |    |    |     |               |                            |
| 28–30 mm, 8–13 g  | 6  | 5  | 6  | 1.2 | 23.09±22.19   | 345,000                    |
| 24–25 mm, 6–8 g   | 7  | 7  | 7  | 1   | 64.81±86.96   | 975,000                    |
| <b>AD 106/107</b> |    |    |    |     |               |                            |
| 28–30 mm, 8–13 g  | 8  | 8  | 8  | 1   | 74.07±91      | 1,110,000                  |
| 19–23 mm, 5–10 g  | 7  | 7  | 7  | 1   | 64.81±86.96   | 975,000                    |
| <b>AD 113/114</b> |    |    |    |     |               |                            |
| 33–34 mm, 17–23 g | 5  | 5  | 5  | 1   | 46.3±78.76    | 690,000                    |
| 17 mm, 2–4 g      | 3  | 2  | 3  | 1.5 | –             | –                          |

Nicaea, Nicomedia, and Prusias. Due to the few issues we have from Apamea, Caesarea Germanica, and Iuliopolis, it can be assumed that their production was not substantial.<sup>9</sup> It can be concluded that in some cities there are some production similarities or increases in the number of denominations, compared to the reigns of previous emperors. In the time of Trajan, monetary issues were presumably resumed in some cities of Bithynia and Pontus (Apamea, Prusa, Iuliopolis, Heraclea, Amisus).

In the provincial centres mainly bronze coins were issued, with a greater or lesser admixture of lead, depending on the traditions in the city, the ore, and minting activities. Some of the cities also struck silver coins. More rarely, one city minted gold issue, i.e. Ephesus in the Republic, or the Bosphoran kingdom.<sup>10</sup> In the times of Augustus the imperial coinage was subject to an introduced standardisation of individual values and the monetary system. Individual bronze coins, depending on the denomination, were minted from various ores, among which one can distinguish sestertii and dupondii struck from brass, and copper asses and quadranses.<sup>11</sup> At the same time, it should be remembered that the data of dependencies changed in particular periods. For provincial bronze coinage there is no strict and uniform division of coin denominations according to the metal used.<sup>12</sup> Some of the coins of Bithynia and Pontus, from the 1st century, including the time of Trajan, were struck from brass.<sup>13</sup> The ruler who introduced the use of this alloy to the issue of coins in this region was Mithridates VI,<sup>14</sup> and thus a continuation in further periods is also possible. Perhaps the influence of the Roman monetary system, where larger denominations were struck in brass, should be considered. Moreover, the coins corresponding to the size of the sestertii were introduced, which could additionally confirm this thesis.<sup>15</sup>

<sup>9</sup> Amandry, Burnett *et al.* 1999: 16–17.

<sup>10</sup> Amandry, Burnett *et al.* 1992: xvii, 6–15, 30; 1999: 8–12; 2015: 797, 816–817.

<sup>11</sup> Mattingly 1967: 120–122; Smekalova 2009: 234.

<sup>12</sup> Amandry, Burnett *et al.* 1992: xvii; 1999: 30–37; 2015: 813–815.

<sup>13</sup> Amandry, Burnett *et al.* 1992: 22–23, 339–340; 1999: 16–17, 24; 2015: 817.

<sup>14</sup> Smekalova 2009: 234.

<sup>15</sup> Amandry, Burnett *et al.* 1992: 22–23.

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Table 6b: Numbers of coins, obverse and reverse dies, and the estimated numbers of issued coins without an ethnic in Bithynia and Pontus during the reign of Trajan (markings from the Carter tests and formulas were left to assist easier adjustment or verification of individual data: n – number of coins; d – number of obverse dies; r – number of reverse dies; D – number of the original number of dies)

|   | n  | d  | r  | n/d | D ±s         | Estimated numbers of coins |
|---|----|----|----|-----|--------------|----------------------------|
| <b>C. Iulius Bassus</b>   |    |    |    |     |              |                            |
| 20–24 mm, 6–8 g   | 19 | 15 | 18 | 1.3 | 55.76±23.13  | 840,000                    |
| 18 mm, 2–3 g  | 3  | 1  | 3  | 3   | 1.27±0.72    | 15,000                     |
| <b>EIPHNH ΣΕΒΑΣΤΗ</b>   | 13 | 6  | 13 | 2.2 | 9.16±2.31    | 135,000                    |
| <b>ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ</b>  |    |    |    |     |              |                            |
| <b>after AD 98</b>  |    |    |    |     |              |                            |
| 23–28 mm, 9–13 g  | 7  | 6  | 7  | 1   | 31.91±30.04  | 480,000                    |
| 21–23 mm, 5–7 g   | 5  | 5  | 5  | 1   | 46.3±78.76   | 690,000                    |
| <b>after AD 102</b>   |    |    |    |     |              |                            |
| 33–35 mm, 24–26 g   | 7  | 5  | 7  | 1.4 | 13.93±8.67   | 210,000                    |
| 24–27 mm, 10–13 g   | 5  | 5  | 5  | 1   | 46.3±78.76   | 690,000                    |
| <b>ΝΕΙΚΗ ΣΕΒΑΣΤΟΥ ΔΑΚ + ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ (33–35mm, 24–26g) + ΝΙΣΑΕΑ</b>  |    |    |    |     |              |                            |
| 30–32 mm, 20–23 g   | 11 | 8  | 11 |     | 23.29±11.24  | 345,000                    |
| <b>ΝΕΙΚΗ ΣΕΒΑΣΤΟΥ ΔΑΚ</b>   |    |    |    |     |              |                            |
| 24–27 mm, 8–11 g  | 4  | 3  | 4  | 1.3 | 9.49±9.74    | 135,000                    |
| <b>ΣΕΒΑΣΤΗ</b>  | 38 | 34 | 38 | 1.1 | 237.76±99.08 | 3,570,000                  |
| <b>ΔΙΟΚ</b>   |    |    |    |     |              |                            |
| <b>after AD 98</b>  |    |    |    |     |              |                            |
| 19–22 mm, 5–7g  | 41 | 32 | 34 | 1.3 | 114.39±30.59 | 1,710,000                  |
| <b>after AD 102</b>   |    |    |    |     |              |                            |
| 19–22 mm, 5–7g  | 13 | 12 | 13 | 1.1 | 110.01±96.15 | 1,650,000                  |
| <b>after AD 114 + ΚΤΙΧΤΗΚ (1 coin with the same die from this year)</b> |    |    |    |     |              |                            |
| 19–22 mm, 5–7 g   | 35 | 31 | 32 | 1.1 | 201.56±84.16 | 3,030,000                  |
| <b>Cornucopia</b>   | 10 | 10 | 10 | 1   | 92.59±98.99  | 1,395,000                  |

Some of the coins from Bithynia from different periods were also tested for the chemical composition of the alloy used.<sup>16</sup> In the case of brass, two types can be distinguished depending on the zinc content. Primary brass, resulting from cementation, has c. 20% – 25% zinc, while alloys containing a lower admixture have probably been mixed with lead bronze or bronze. The use of the former metal was characteristic for Phrygia and Bithynia. The examined brass

<sup>16</sup> Some of the coins with individual catalogue numbers were analysed (information based on the electronic database Roman Provincial Coinage): RPC I 2023, 2026, 2030, 2032, 2035, 2043–2044, 2047, 2951–2052, 2058, 2076, 2081, 2088, 2094, 2099, 2112, 2114, 2116, 2118, 2121, 2128, 2129, 2132, 2135, 2136, 2139, 2140, 2141, 2143, 2145, 2148, 2151, 2152, 2154, 2156, 2158, 2160, 2161 (general overview of individual coin alloys: Amandry, Burnett *et al.* 1992: 339–340); RPC II 602, 604–605, 610, 612, 615, 620, 626–632, 634–642, 648, 651, 652A, 654, 658, 659, 662, 666, 677–680, 684, 689–690, 700, 704, 709–710, 714, 717, 728.

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Table 7a: Die axes of individual cities of Bithynia and Pontus during the reign of Trajan

|                    | Die axis | Number | Proportion |
|--------------------|----------|--------|------------|
| Prusa              | VI       | 16     | 33%        |
|                    | VII      | 9      | 18%        |
|                    | XII      | 12     | 25%        |
| Calchedon          | VI       | 3      | 43%        |
|                    | VII      | 3      | 43%        |
| Byzantium          |          |        |            |
| Magistrate: Trajan | VI       | 8      | 27%        |
|                    | XII      | 11     | 37%        |
| Magistrate: Nike   | VI       | 17     | 52%        |
|                    | VII      | 5      | 15%        |
| Nicomedia          | VI       | 6      | 75%        |
| Iuliopolis         | I        | 2      | 40%        |
|                    | VII      | 3      | 60%        |
| Prusias ad Hypium  | VI       | 3      | 37.5%      |
|                    | XII      | 3      | 37.5%      |
| Heraclea Pontica   |          |        |            |
| after AD 102       | VI       | 26     | 65%        |
|                    | VII      | 8      | 20%        |
| after AD 114       | VI       | 7      | 58%        |
|                    | XII      | 4      | 33%        |
| Tium               |          |        |            |
| after AD 98        | VI       | 5      | 28%        |
|                    | VII      | 6      | 33%        |
|                    | XII      | 5      | 28%        |
| after AD 102       | VI       | 11     | 52%        |
|                    | VII      | 6      | 29%        |
| Amastris           |          |        |            |
| after AD 98        | VI       | 4      | 31%        |
|                    | VII      | 4      | 31%        |
|                    | XII      | 4      | 31%        |
| Amisus             |          |        |            |
| AD 98              | VI       | 7      | 29%        |
|                    | XII      | 4      | 50%        |
| AD 98/99           | XII      | 8      | 80%        |
| AD 106/107         | VI       | 6      | 64%        |
|                    | XII      | 4      | 36%        |

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Table 7b: Die axes of coins without an ethnic of Bithynia and Pontus struck during the reign of Trajan

|                  | Die axis | Number | Proportion |
|------------------|----------|--------|------------|
| C. Iulius Bassus | I        | 7      | 35%        |
|                  | VI       | 4      | 20%        |
|                  | XII      | 6      | 30%        |
| EIPHNH ΣΕΒΑΣΤΗ   | VI       | 4      | 33%        |
|                  | XII      | 4      | 33%        |
| OMONOIA ΣΕΒΑΣΤΗ  |          |        |            |
| after AD 102     | VI       | 3      | 30%        |
|                  | VII      | 6      | 60%        |
| CEBACTH          |          |        |            |
| after AD 102     | VI       | 22     | 71%        |
|                  | VII      | 6      | 19%        |
| ΔΙΟC             |          |        |            |
| after AD 98      | I        | 7      | 22%        |
|                  | VI       | 9      | 28%        |
|                  | XII      | 14     | 44%        |
| after AD 102     | VI       | 7      | 54%        |
| after AD 114     | VI       | 14     | 47%        |
|                  | XII      | 6      | 20%        |
| Cornucopia       | VI       | 4      | 50%        |
|                  | XII      | 4      | 50%        |

coins struck in Rome during this period had c. 13% zinc.<sup>17</sup> The remaining coins were minted from bronze with a greater or lesser admixture of lead. It seems that coins struck only from copper were omitted.<sup>18</sup> In the various provincial centres during the reign of Trajan issues of both bronze and brass were minted, although it seems that Nicaea may have been an exception in this regard. Probably some of the coins without an ethnic were struck there, with large units (the size of six assarion or sestertius) being brass, and the smaller ones (less than 25 mm) presumably of bronze. On the basis of the other coins registered so far, it seems that brass coins were not minted during this period in Calchedon, Sinope, Abonoteichos, or Amisus; while they are in a minority, this metal was used to strike issues in Amastris, Heraclea, and Tium. These assumptions, however, may well change following new tests and finds.

Ore was probably obtained from the nearby iron, gold, and silver mines in the Pharnakea region, while copper was obtained from Bithynia and Pontus, Paphlagonia, Pharnakea, and Lesser Armenia. Mixed deposits of copper, lead, and zinc have been found in Phrygia and south of Pharnakea. Silver and polymetallic deposits were also mined near Balya Maden (Balıkesir province), which may be identified with the Andeira mentioned by Strabo.<sup>19</sup>

<sup>17</sup> Amandry, Burnett *et al.* 2015: 829.

<sup>18</sup> Carradice and Cowell 1987: 49.

<sup>19</sup> Strab. 12.3.19, 13.56; Smekalova 2009: 239–240.

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Table 8: Countermarks on coins of Bithynia and Pontus struck during the reign of Trajan

| Countermark                                 | GIC | City                                  | Chronology                             | Coins of Bithynia and Pontus   | Other coins   | Interpretation   |
|---|-----|---------------------------------------|--|--|---|--|
| Portrait of Apollo                          | 2   | Calchedon, Bithynia and Pontus        | c. AD 98 –117                          | Calchedon RPC III 1061   | -   | Religious character. Both the effigies on coins and the countermarks refer to the local cult in the city. Perhaps another reason for counter-marking the issues was some special occasion related, e.g., to ceremonies linked to the cult of Apollo. |
| Portrait of Heracles?                       | 13? | ?                                     | ?                                      | Coin with the legend ΔIOC (Nicaea?)<br><br>RPC III   | Coin of Claudius of uncertain mint, perhaps in Thrace<br><br>RPC I 1957   | A special occasion celebrated in a given city or a specific cult?  |
| The head of the emperor in a laurel wreath? | 64? | ?                                     | 2nd/3rd century?                       | Coin with the legend OMONOIA CEBACTH (Prusias?) RPC III 1128 (6)   | Coins of <i>koinon</i> of Bithynia from the reign of Hadrian?   | Honorary character. Perhaps they were placed for merit, the emperor's arrival, or the benefits obtained on his behalf.   |
| TOM   | 567 | Tomis, Moesia                         | 2nd century?                           | Coin with the legend ΔIOC (Nicaea?)<br><br>RPC III 1154 (22)   | Unreadable coins  | Thanks to the countermark, coins from other cities could also circulate on the local Tomis market.   |
| TONZOY                                      | 568 | Tonzos (later Hadrianopolis?), Thrace | 1st/2nd century<br><br>(after AD 114)? | Prusa RPC III 1047 (3); coins with the name of C. Iulius Bassus RPC III 1124 (2); coins with the legend ΔIOC RPC III 1148 (2), 1154 (7, 12, 15); coin with the legend KTICTHC RPC III 1160 (3) | Dupondius with CA monogram, coin of Augustus, bronze coins of Vespasian and Domitian of Nicaea, three illegible coins probably minted in the time of Domitian and at the beginning of the 2nd century | Tonzos was one of the rivers in Thrace. Personifications were shown on the coins of Hadrianopolis. Should we connect the countermark with this city? If yes, then the centre used all the coins that came in on its market?                          |

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| Countermark  | GIC  | City   | Chronology            | Coins of Bithynia and Pontus   | Other coins                                 | Interpretation  |
|--|------|--|-----------------------|--|---|---|
| AYTK   | 608  | Prusias, Bithynia and Pontus                     | c. 81–138 AD?         | Prusias RPC III 1101 (1–2), 1102 (1), 1103 (1–4); coin with the legend CEBACTOY RPC III 1146 (2) | Coins of Domitian from Prusias              | The monogram itself, as noted by M.J. Price, has something official about it (αὐτοκράτωρ Τραιαν?), which could indicate, in some assumptions, the confirmation of the coin by the imperial authority. Probably its placement was due to some important event for the local society, in which perhaps another military success of the ruler should be seen, as in the case of the Dacian wars. It should also not be ruled out that the countermark was placed in honour of the next emperor, Hadrian. |
| PME monogram   | 635  | Amisus, Bithynia and Pontus                      | Year 145 – 113/114 AD | Amisus RPC III 1231 (3), 1234 (1, 5), 1236 (3, 5–6)  | -   | Among the possible reasons for placing the monogram is their confirmation on the local market or a change in the value of emissions in a given year; however, due to the functioning of coins from earlier periods in circulation, this type of action is not entirely clear.   |
| Letter M<br>or Σ?  | 673? | Abonoteichos/<br>Ionopolis?, Bithynia and Pontus | after AD 161?         | Coin with the legend ΔIOC (Nicaea?)<br>RPC III 1148 (11)   | Coin with the image of Faustina the Younger | Perhaps the value of close-in-nominal emissions from different periods could be confirmed by placing a countermark. Unfortunately, it is not possible to define more precisely whether the letter itself can refer to a number and what it might mean. In the Greek system, the letter M stands for 40, and Σ 200. In the 3rd century, single letters referred mainly to the value of the coins. Another hypothesis that comes to mind is the reference to dating.                                    |
| Men on a crescent? / a bearded man in a high tiara / Phrygian cap? | -    | ?  | 2nd century?          | Coin with the legend ΔIOC (Nicaea?)<br>RPC III 1154 (9)  | -   | Perhaps placed at the center of his cult, such as Comana, in memory of some religious festival.   |
| Five-pointed star  | -    | ?  | after AD 114          | Coin with the legend ΔIOC (Nicaea?)<br>RPC III 1154 (14)   | -   | Countermarks in the form of stars were very popular and appeared on coins of various cities and at different times.   |

A centre's productivity may be demonstrated not only by individual issues struck in specific years, but also by the number of types of images placed on the coins.<sup>20</sup> One way to provide new information about the organisation of the mint and the possible number of coins, and thus the economy in a given region, is to study the dies and their links, requiring very patient and tedious work, not always providing results of interest. It is similar to estimations of the number of issues on this basis. One should approach this type of research with caution and take into account the imperfections of the applied mathematical formulas and other methods that may give some approximate values, but not necessarily corresponding to the reality of

<sup>20</sup> Cf. de Callatay 2011b.

that time. Nowadays, we only have a small part of the surviving coins, sometimes even single finds for individual mints.<sup>21</sup>

The number of coins minted in the series also depended on many factors, including the size and metal of the flans or the skills and experience of the moneyers. Experiments done by the team of Th. Faucher, consisting of recreating the production process of Athenian owls, provided estimates of the minting of a series of coins from a pair of dies at between 10,000 and 15,000.<sup>22</sup> Earlier calculations assumed *c.* 20,000 or *c.* 10,000–30,000.<sup>23</sup> Each pair of dies could usually be struck with a similar number of coins, but it should be remembered that the obverse dies wore more slowly than the reverse dies. Hence we also have different estimates of the numbers of coins minted from obverse dies (M. Thompson: 6,000; M.H. Crawford 13,000; D.G. Sellwood: 16,000; F. de Callataj: up to 40,000) and from reverse dies (D.G. Sellwood: with ‘hot’ minting 8000 coins, and ‘cold’ 4000).<sup>24</sup> F. de Callataj in his research on the coinage of Mithridates VI states that a maximum of four obverse dies could be used in a month, of which *c.* 30,000 coins were probably struck, which indicates *c.* 4000 per day and *c.* 120,000 for a month. On the other hand, in the case of *solidi*, he puts forward the hypothesis that *c.* 3000 coins were minted per day, and *c.* 7140 with one die on the obverse.<sup>25</sup> G.F. Carter in his analyses of *Crepusius denarii* similarly estimates the production at *c.* 3600 coins a day, assuming 12 hours of work, and new coins being minted at a rate of one every 12 seconds.<sup>26</sup>

This type of research for the Roman provincial coinage from centres in Pontus and Paphlagonia was carried out by M. Amandry. Monetary production was traced for the cities in particular periods, and then the possible number of coins was estimated for the years AD 112/113, 113/114, 161/162 and 205/206, which coincide with more important historical events related to Roman expansion. The analyses assumed an average number of 20,000 coins by one die obverse. Taking into account the individual coin values, as well as the value of the *denarius* into *asses*, the results were 56,876 *drachmas/denarii* for the years AD 112/113, 113,125 *drachmas/denarii* for 113/114, 110,375 *drachmas/denarii* for 161/162, and 768,750 *drachmas/denarii* for 205/206. The results were compared to the annual maintenance costs of the army and soldiers, which in this case would be in the main insufficient and modest. Hence, production in individual Pontic cities in these periods should be associated rather with local demand.<sup>27</sup>

Among the methods for estimating the original numbers of dies, on the basis of which the coin volumes can be estimated, two basic methods should be distinguished, as proposed by the authors, G.F. Carter and W. Esty.<sup>28</sup> F. de Callataj evaluates the first method as simpler, and

<sup>21</sup> Buttrey 1993: 342; 1994: 343–346, 352; de Callataj 1995; 2011a: 13–14; Esty 2006: 361–364. It is worth noting that the author provided only general issues related to the estimation of production based on the number of dies, although more detailed aspects of this issue are given in the works cited.

<sup>22</sup> Faucher *et al.* 2009. Cf. de Callataj 1999; Carter 1983; Sellwood 1963.

<sup>23</sup> Crawford 1974; Kinns 1983: 18–19; Walker 1988: 301–305. Cf. de Callataj 1995: 290–291, 296–298.

<sup>24</sup> de Callataj 2011a: 9; Crawford 1974: 694–695; Sellwood 1963: 217–231; Thompson 1961: 709–710. Cf. de Callataj 1995: 297. However, it should be remembered that these are quite general estimates, which, due to various factors, may be very variable.

<sup>25</sup> de Callataj 1995: 301–302. Other calculations also in de Callataj 2011a: 9, 18–19.

<sup>26</sup> Carter 1981: 202–203; Esty and Carter 1991–1992: 168, 170, 172. Cf. de Callataj 1995: 301.

<sup>27</sup> Amandry 2008; 2011. Cf. de Callataj 2011a: 17–18.

<sup>28</sup> de Callataj 1995: 294–295; Carter 1983; Esty 1984; 1986; 2006; Esty and Carter 1991–1992. In individual works, other methods of emission estimation were also presented.

the second better from the theoretical point of view; the results obtained from both methods are similar to each other.<sup>29</sup> Thus to estimate the presumed minimal amount of coins of only some types and denominations minted in the individual cities of Bithynia and Pontus in the time of Trajan, the Carter method was used. The original number of dies (D) is obtained by applying three possible equations determined by linear regression, depending on the number of dies on the obverse (d) and the number of coins (n), keeping in mind the standard deviation (s).<sup>30</sup> Then the number of dies (D) should be multiplied by the average estimated number of coins struck by one obverse die, i.e. in this case 15,000 can be assumed, due to estimates from the research undertaken by M. Amandry (20,000), H. Güney (10,000) and F. Faucher (10,000–15,000).<sup>31</sup> However, it should be remembered that the given values will change due to future new registered coins.

### Production in the centres of Bithynia and Pontus during the reign of Trajan

The first Roman coins in Apamea were issued at the end of the Republic, with the next coins being struck in the days of Augustus, Caligula, Nero, and Vespasian.<sup>32</sup> So far, only four Apamean coins from the time of Trajan have been recorded, which perhaps should be dated to the years 98 and 100. Thus, it might be possible to distinguish at least two production periods, but there is no certainty about this. The coins were probably minted from bronze, brass and possibly copper.<sup>33</sup> Among them there are three different types of images, of which four different obverse and reverse dies should be distinguished. The coin axes are oriented to one, six, and 12 o'clock, similar to the earlier periods.

Monetary production in Prusa began during the reign of Nero;<sup>34</sup> by Trajan's time it was intense. So far, 55 coins have been registered, among which nine types of issue can be distinguished. All were struck after 102, based on the use of the emperor's epithet in the legends. Unfortunately it is impossible to say exactly when the coins were issued. Ore, generally bronze, brass and copper, from which units of various sizes were minted, was not an indicator of nominal value. On the basis of the available examples and their condition, it is possible to distinguish at least 31 different dies of the obverse and 40 of the reverse.<sup>35</sup> The same obverse dies can be noticed both on one issue with one type of image,<sup>36</sup> and on other issues with different types of effigies. This proves that the dies were made by one engraver, as well as the minting of coins in the same period. The links between the dies of the issues can be seen on the coins with images of seated Zeus and standing Demeter,<sup>37</sup> as well as reclining Olimpos and standing Aphrodite Anadyomene.<sup>38</sup> On the other hand, some of the obverse dies of the various issues were stylistically similar to each other, which may also perhaps suggest one engraver and a

<sup>29</sup> de Callataj 1995: 294–295.

<sup>30</sup> Carter 1983. Cf. Amandry 2008: 255–257; Güney 2015d: 41, 44; van Alfen 2010: 258–259. In the summarised results in the Tables (6a and 6b), Carter's indications from the article and formulas were left, so as to easily check or adjust other values.

<sup>31</sup> Amandry 2008: 255–257; Faucher *et al.* 2009; Güney 2015b: 41, 44.

<sup>32</sup> Amandry, Burnett *et al.* 1992: 340–343; 1999: 99; Dalaison 2017b.

<sup>33</sup> The statement is based on the appearance of the individual specimens. Only some of the coins were tested for their chemical composition.

<sup>34</sup> Amandry, Burnett *et al.* 1992: 344.

<sup>35</sup> Cf. Tab. 5a, 6a.

<sup>36</sup> Coins with effigy of Zeus: RPC III 1035 (1, 3–6); Demeter: RPC III 1038 (1–2); Olimpos: RPC III 1041 (1–5), 1042 (1–2); Aphrodite: RPC III 1045 (1–3, 5); Artemis: RPC III 1046 (3–5, 7, 9–10), 1047 (1–4); eagle: RPC III 1048 (1, 4–5).

<sup>37</sup> RPC III 1035 (1, 3–6) and 1038 (1–2).

<sup>38</sup> RPC III 1042 (1–2) and 1045 (1–3, 5).

similar period of production, if any. In this case, we are talking about coins with the image of seated Zeus and reclining Olimpos.<sup>39</sup>

On the basis of the surviving examples it can be estimated that during the reign of Trajan, c. 1,110,000 coins could have been minted in the city, including c. 360,000 with a size corresponding to six assaria, and c. 375,000 with a face value of ½ assarion.<sup>40</sup>

The axes of coins in various issues from the times of Trajan are oriented to one, five, six, seven, eight, and 12 o'clock, with six (33%), 12 (25%), and seven (18%) dominating.<sup>41</sup> In turn, a few coins from the period of Nero's reign have axes at six and 12 o'clock. Greater variability in orientation may indicate high production and carelessness during the issuing process.

The first Roman coins in Nicaea were minted at the end of the Republic, with a bust of Caesar, and the next units issued during the reigns of Augustus, Claudius, Nero, Vespasian, and Domitian.<sup>42</sup> The mint was very active until the times of Trajan. Perhaps during this period the centre released several issues, but only one, made of brass, bore the name of the city. Coins without an ethnic can also be associated with the mint, struck with the same die as units with the Nicaean ligature.<sup>43</sup> Probably other issues without a name should also be associated with the city, due to the same dies.<sup>44</sup> Presumably these coins were minted in one period. In addition, it is possible that bronze coins with the legend CEBACTH, KTICTHC and ΔIOC were also minted there.<sup>45</sup> On this basis it might be assumed that Nicaea tried to keep the division between the ore used depending on the struck value. No coins have been registered so far from the Hadrian period. The axis of the coin is oriented to seven o'clock. In turn, issues without an ethnic, which can also be assigned to this mint, have axes at one, six, seven, and 12 o'clock.<sup>46</sup> Coins from the Julio-Claudian dynasty are oriented to six or 12 o'clock. During the Flavian era the axes were also oriented to one and seven o'clock, and even eight or nine o'clock. However in both periods the coins were mainly oriented on axes of six and 12 o'clock, which may indicate due diligence in the minting process and experience.

Coins minted at the end of the Republic are also known from Calchedon. The mint functioned in the times of Tiberius, Claudius, and Domitian.<sup>47</sup> However production does not seem to have been very high. From the reign of Trajan there are, so far, seven struck bronze coins with two types of images. At least three obverse and seven reverse dies can be distinguished. It seems that some of the coins known so far depicting Apollo on a swan have the same obverse die.<sup>48</sup> The number of issues of the second type can be estimated at c. 45,000 coins.<sup>49</sup> The only coin with a tripod motif registered so far is oriented at 12 o'clock. On the other hand, the axes of

<sup>39</sup> RPC III 1036 (1) and 1039 (1-3).

<sup>40</sup> Cf. Tab. 5a, 6a.

<sup>41</sup> Cf. Tab. 7a.

<sup>42</sup> Amandry, Burnett *et al.* 1992: 345-349; 1999: 101-103.

<sup>43</sup> RPC III 1059 (1) and 1131 (3, 6-7), 1134 (2-3).

<sup>44</sup> RPC III 1059/1 and 1131/3, 6-7; 1131/3, 6-7 and 1134/2-3; 1131/2 and 1134/1.

<sup>45</sup> RPC III 1141 (3), 1156 (4) and 1158 (1); 1139 (19) and 1151 (1); 1141 (1) and 1148 (13); 1142 (6) and 1151A (1); 1139 (12) and 1152 (2, 4); 1155 (4) and 1160 (3).

<sup>46</sup> Cf. Tab. 7a.

<sup>47</sup> Amandry, Burnett *et al.* 1992: 323; Domitian RPC III 370A.

<sup>48</sup> RPC III 1061 (1-5).

<sup>49</sup> Cf. Tab. 5a, 6a.

the second type of specimens are mainly at six or seven o'clock.<sup>50</sup> During the Julio-Claudian dynasty the minted coins have axes at five and six o'clock.

Byzantium began to issue the first Roman coins at the end of the Republic, with the next ones being struck in the times of Tiberius (silver and bronze), Caligula, Nero, Vespasian, and Domitian.<sup>51</sup> However so far only single specimens have been registered from particular imperial periods. From the reign of Trajan we have more coins in brass and bronze. The diversification of the types of depiction of particular issues and dies could indicate an increase in production in relation to the previous periods.<sup>52</sup> To date 79 coins issued on the basis of the legends in two periods have been registered. Based on the variety of themes on the coins in terms of iconography and denominations, it seems that the production could have been more intense during the Nike magistracy. For this period at least 10 types of images can be distinguished, and only four in the Trajan magistracy. Among the 14 types of coins, 78 obverse dies and 79 reverse can be distinguished. Only in some issues can the same dies be distinguished.<sup>53</sup> This is largely due to the state of preservation of individual coins, on which individual parts of legends or images are not visible. Some of the effigies representing different types are stylistically similar to each other, which may indicate they were struck in a similar period, and perhaps by the same engraver. These are coins from the times of the Nike magistracy with images of the prow, crescent and star, as well as a dolphin and a trident, then a dolphin and a trident, and a caduceus, as well as a caduceus, a crescent and a star.<sup>54</sup> Among the coins assigned to the mint in Byzantium there are also issues that differ in style from the others, which perhaps should be identified as antique imitations.<sup>55</sup> The placed legends referred to the times of Trajan's magistracy, but if they were indeed imitations they could have been struck at a later date. Despite the similarity, it seems that all the registered coins of this type were issued with three dies. During Trajan's magistracy coins with the portrait of Plotina were also issued. Among the known specimens with one type of image there are nine obverse and reverse dies. Some of the examples are in such a bad condition that it is impossible to state whether we are dealing with the same die. So far, no coins with a portrait of Plotina from the second period, i.e. the Nike magistracy, have been recorded. Some coins from Trajan's magistracy show traces of a hole in the centre of the flan.<sup>56</sup>

Only for individual Byzantium coins from both periods is it possible to try estimating the number of the issue. During Trajan's magistracy c. 4,335,000 coins were minted, taking into account only the emissions of 29–30 mm, 13–17 g, 25–29 mm, 9–12 g, and 22–24 mm, 7–10 g, and, based on the preserved examples, the largest issue concerns units corresponding to 2 assaria (c. 2,370,000). In the next period, in the Nike magistracy, c. 3,750,000 might have been minted, which could indicate a slightly lower production than before. In addition, slightly more coins were struck in the size of 3 assaria, however possible new finds might change these assumptions.<sup>57</sup>

<sup>50</sup> Cf. Tab. 7a.

<sup>51</sup> Amandry, Burnett *et al.* 1992: 320–322; 1999: 78–79.

<sup>52</sup> However, it should be remembered that we do not have many coins from earlier periods of the imperial rule, which does not necessarily confirm the thesis about increasing production in the city.

<sup>53</sup> RPC III 1067 (1–3); 1180 (5, 8).

<sup>54</sup> RPC III 1078 (1), 1180 and 1181 (1); 1180 (7) and 1181 (2); 1083 (1) and 1083A (1).

<sup>55</sup> RPC III 1069 (6, 11, 15).

<sup>56</sup> RPC III 1068 (2), 1069 (1, 9–10).

<sup>57</sup> Cf. Tab. 5a, 5b, 5c, 6a and 6b.

The axes of coins from both periods from the time of Trajan are oriented at one, two, five, six, seven, eight, and 12 o'clock. Emissions in the Trajan magistracy have axes mainly at six (27%) and 12 o'clock (37%), while in the Nike magistracy it is 6 o'clock (52%).<sup>58</sup> Among the examples with the portrait of Plotina, it seems that they have axes mainly at six and 12 o'clock. A large part of the Julio-Claudian coins do not have specific axes;<sup>59</sup> some, however, have axes at one and 12 o'clock. In turn, a few coins from the Flavian dynasty were oriented at six, seven, and 12 o'clock. Hence, at this stage of our research it is not possible to accurately determine the orientation of the coins from previous periods and compare them to issues from the times of Trajan.

The first Roman coins in Nicomedia were issued during the reign of Augustus, followed by issues from the times of Tiberius, Claudius, Nero, Vespasian, and Domitian.<sup>60</sup> In the reign of Trajan no less than six different denominations were minted, however, from this period, only few coins from this mint have been registered so far. Among the 10 brass and bronze finds there are issues with three types of images, including 10 different obverse dies and 10 reverse. The portraits of the emperor from some coins with the image of Tyche and the legend referring to the centre are similar to each other, which indicates perhaps the same engraver and a similar time of issue.<sup>61</sup> In Nicomedia, perhaps, coins without an ethnic were also struck, such as those issued with the name of the proconsul Gaius Julius Bassus or with the Demeter effigy. The latter can be attributed to the mint because of the similar dies.<sup>62</sup> Coin axes are oriented to five, six, and seven o'clock, but mainly at six (75%). Both from the Julio-Claudian and Flavian dynasties the coin axes are mainly at six and 12 o'clock. This may indicate a similar process as well as diligence and experience in monetary production. It is also probably related to the status of the centre as provincial capital. However one should also bear in mind the small number of coins that have survived and been analysed.

Thus far the first Roman coins from Iuliopolis recorded date from the time of Vespasian.<sup>63</sup> From the Trajan period we have only nine specimens made of brass and bronze. Among them we can distinguish three types of effigies on the issues, including five obverse dies and eight reverse. The same dies can be seen on the coins of the same issue,<sup>64</sup> i.e. the coins with the images of the walking Ares and the standing Eirene, which may indicate a similar striking time for both series.<sup>65</sup> The axes of some coins are oriented at one (40%) and seven (60%) o'clock.<sup>66</sup> The few specimens from the Flavian period are oriented on the axes of five and 12 o'clock.

In Flavian times the mint at Prusias also started production.<sup>67</sup> From the reign of Trajan, only 11 bronze coins with four different types of images are known, of which 11 obverse and 11 reverse dies can be distinguished. The AYTK countermark has been stamped on many of the examples known to date. The same mark also appears on one of the coins with uncertain

<sup>58</sup> Cf. Tab. 7a.

<sup>59</sup> Data based on Roman Provincial Coinage database available online <https://rpc.ashmus.ox.ac.uk> (accessed 09.11.2020).

<sup>60</sup> Amandry, Burnett *et al.* 1992: 349–352; 1999: 103–105.

<sup>61</sup> RPC III 1089 (3) and 1090 (1).

<sup>62</sup> RPC III 1089 (3) and 1138 (3).

<sup>63</sup> Amandry, Burnett *et al.* 1999: 106.

<sup>64</sup> RPC III 1100 (1–3).

<sup>65</sup> RPC III 1098 (1) and 1099 (1); 1098 (2) and 1099 (2).

<sup>66</sup> As many coins are now in private collections it is not possible to verify certain data.

<sup>67</sup> Amandry, Burnett *et al.* 1999: 106–109.

attribution, which suggests their minting at the local mint. The axes of the Prusias coins are oriented at five, six (37.5%), and 12 (37.5%) o'clock, as in the case of the preserved issues from the earlier period.

Perhaps the first Roman coins in Heraclea were struck in the time of Augustus;<sup>68</sup> emissions minted during the times of Claudius, Nero, and Vespasian have been recorded to date.<sup>69</sup> Compared to earlier periods, from the time of Trajan so far we have a large number of brass and mostly bronze coins, with various iconographic types. Perhaps production at that time was much greater than before. There are 60 known coins from the Trajan period, including 57 obverse and 58 reverse dies. Going by the legends the coins were minted within at least three major production periods. At the beginning of the emperor's reign only three coins were struck with two types of effigies and three different dies on the obverse and reverse. Much more issues come from the period after 102, with the then preferred title *Dacicus*. Among these we can distinguish nine types of images on issues, 41 obverse and 44 reverse dies. Some of the coins with different images are stylistically similar, which may suggest one engraver and a similar monetary production period. We are referring here to coins featuring a bust of Athena and a walking goddess, who also seems to be identifiable with Athena.<sup>70</sup> Among the 12 known so far with the nickname *Optimus*, struck after 114 in this centre, we can distinguish six different types of images, including 12 obverse and reverse dies.

Judging by the individual coins from particular periods one can attempt an estimate of the numbers of some coins for the period after 102, i.e. c. 5,865,000 specimens, taking into account the emissions corresponding to 6, 2, and 1 assarion, with the last units dominating (c. 4,335,000 coins).<sup>71</sup>

The axes of the coins are oriented at one, five, six, seven, 11, and 12 o'clock, however, among the surviving specimens, minted after 102, there are issues with the axis at six o'clock (65%), while in 114 they are at six (58 %) and 12 (33%) o'clock.<sup>72</sup> Coins from the Julio-Claudian and Flavian dynasties have axes mainly at six and 12 o'clock. This may indicate a certain amount of care and experience in minting coins during these periods.

The first Roman coins in Tium were issued in the Flavian period.<sup>73</sup> From the reign of Trajan we know of 41 coins so far. Based on the emperor's epithet at least two production periods can be distinguished, producing a similar number of brass and mostly bronze coins. Among 19 issues minted after 98 with the title *Germanicus*, there are seven types of images, including 17 obverse and 19 reverse dies. Only some coins with the same effigy were struck with one die.<sup>74</sup> The rest come from the period after 102, constituting a less diverse group in terms of the types of effigies distinguished. This, in turn, may suggest that perhaps production was more intense at the beginning of Trajan's reign; future finds, however, might affect this assumption. Coins from this period were minted with four different images, including 16 obverse and 22 reverse

<sup>68</sup> It is uncertain whether the coins were struck during the reign of Augustus, they are pseudo-autonomous issues. Cf. RPC I 2087–2088.

<sup>69</sup> Amandry, Burnett *et al.* 1992: 352–353; 1999: 109.

<sup>70</sup> RPC III 1167 (5, 10) and 1169 (2).

<sup>71</sup> Cf. Tab. 5a, 6a.

<sup>72</sup> Cf. Tab. 7a.

<sup>73</sup> Amandry, Burnett *et al.* 1999: 110–111.

<sup>74</sup> RPC III 1178 (2–3), 1182 (1–2).

dies. The same obverse dies can be distinguished within one issue with one type of effigy, with Zeus and Hera and with Zeus Syrgastes himself.<sup>75</sup>

For coins struck in Tium from both periods, an attempt can be made to estimate the number of individual issues. After 98, perhaps c. 1,665,000 coins were minted, with both the 3 and ½ assarion being of comparable size (c. 630,000 and c. 690,000). After 102, c. 855,000 coins may have been struck. The results obtained could suggest greater production in the first period, however, one should still take into account possible new finds and uncertainty over the volumes of emissions.

The axes of the coins are oriented at one, six, seven, and 12 o'clock, including the dominating axes at six (28% after 98, 102% – 52% each) and 12 (98% – 28% after 98) o'clock,<sup>76</sup> similar to the Flavian era.

Single Roman coins from Amastris were recorded for the end of the Republic, the times of Augustus and Domitian.<sup>77</sup> During the reign of Trajan, at least four production periods can be distinguished based on the coin titles. So far there are 26 specimens (some brass but mainly bronze), among which 23 obverse and 26 reverse dies can be distinguished. The greatest number of surviving coins comes from the beginning of the emperor's reign, minted with six different types of images, of which among the known 15 specimens there are 14 obverse and 15 reverse dies. The same die was used for minting coins with the images of Demeter and Athena.<sup>78</sup> Only one of the coins comes from the period after 102. A few examples (4 coins), in two types, were minted after 114, while two coins with one type of effigy were struck with the same die.<sup>79</sup> The coins were also issued after 116. Two specimens of one type can be distinguished among them, struck with the same obverse die.<sup>80</sup> The centre also issued coins with the image of Plotina with two different motifs on the reverse, but only four have survived. It is not possible to determine the exact period of the issue. Presumably, due to the placement of the portrait of the empress on imperial coins after 112, it may be assumed that they were minted after that year. The pseudo-autonomous coins, based on stylistic similarities,<sup>81</sup> were probably also issued in the city during the reign of Trajan, however this is not completely certain. The coin axes are oriented at two, six, seven, nine, and 12 o'clock.<sup>82</sup>

Monetary production began in Abonoteichos in the time of Trajan,<sup>83</sup> although, unfortunately, only three bronze coins from this period are known so far. Among them we can distinguish three different types of images, three different obverse and reverse dies.<sup>84</sup> The coin axes are oriented to six and seven o'clock.

<sup>75</sup> RPC III 1185 (2–4, 6), 1188 (1, 5–7).

<sup>76</sup> Cf. Tab. 7a.

<sup>77</sup> Amandry, Burnett *et al.* 1992: 355; 1999: 113.

<sup>78</sup> RPC III 1202 (1) and 1203 (3).

<sup>79</sup> RPC III 1206 (1–2).

<sup>80</sup> RPC III 1207 (1–2).

<sup>81</sup> Amandry, Burnett *et al.* 2015: 144; RPC III 1209–1210.

<sup>82</sup> In the case of coin axes from earlier periods, information on one of them is given only for the specimen from Domitian's period.

<sup>83</sup> Amandry, Burnett *et al.* 2015: 145.

<sup>84</sup> RPC III 1211–1213.

Certain similar styles of images, especially portraits of the emperor, appear on the coins of both Abonoteichos and Amastris<sup>85</sup> from the beginning of the reign. Perhaps the dies were made by one workshop or engraver.

The first Roman coins in Sinope were issued at the end of the Republic, and then later during the reigns of Augustus, Tiberius, Caligula, Claudius, Nero, Vespasian, Domitian, and Nerva.<sup>86</sup> Only eight bronze coins have been registered so far for the Trajan period. Based on the dating, four production periods can be distinguished: 103/104, 107/108, 109/110, and 113/114.<sup>87</sup> Two coins are poorly preserved and thus it is difficult to date them, but they may suggest the years 104/105 and 114/115.<sup>88</sup> Perhaps during this period the pseudo-autonomous coins with the image of Diogenes were also issued.<sup>89</sup> The surviving coins represent single issues,<sup>90</sup> among which eight obverse and eight reverse dies can be distinguished. The coin axes are oriented to five, six, seven, and 12 o'clock. Emissions from the reign of the Julio-Claudian dynasty have axes at three, five, six, seven, and 12 o'clock. The few coins from the time of the Flavians are oriented at six and 12 o'clock.

The mint at Amisus issued the first Roman coins as early as the end of the 1st century BC, with later issues known from the times of Augustus, Tiberius, Claudius, and Vespasian.<sup>91</sup> 58 bronze coins have been registered so far from Trajan's reign. Based on the dating, five production periods can be distinguished. The coinage probably from the beginning of the reign of the emperor (98) was issued with three types of images, of which 18 obverse and 18 reverse dies can be distinguished among 18 coins. In many cases, due to the state of preservation, it is not possible to precisely define the links between the dies. Two types of coins were issued between 98 and 99. To strike the 14 finds known so far, 13 obverse and 14 reverse dies were used. Probably the same dies can be seen in the issue with one type of image.<sup>92</sup> As in the case of the previous examples, some of the coins are in bad condition, which makes any links difficult. The next production period is dated between 106–107. During this time at least four types of effigies were placed on the coins. Among the 16 issues there are 14 obverse and 16 reverse dies. It is not possible to determine the relationship of individual dies due to the state of preservation; the same dies can be seen only on the coins with the image of seated Zeus and walking Nike.<sup>93</sup> Only one of the known Amisus coins from the time of Trajan is dated to the years 108–109. Eight specimens come from the last production period in the years 113–114, of which the same dies can only be seen among one type.<sup>94</sup>

Only for individual issues it is possible to make some estimates of the number of minted coins in given periods: in 98, perhaps c. 2,505,000 coins were minted; in 98/99 c. 1,320,000; in 106/107 c. 2,085,000; and in 113/114 c. 690,000.<sup>95</sup> Such results seem to suggest that the greatest production in this period took place at the beginning of Trajan's reign, and then began to

<sup>85</sup> Abonoteichos RPC III 1211–1213; Amastris RPC III 1198–1204.

<sup>86</sup> Amandry, Burnett *et al.* 1992: 355–359; 1999: 113–115; 2015: 145–146.

<sup>87</sup> Amandry, Burnett *et al.* 2015: 145–147.

<sup>88</sup> Casey 334, 336.

<sup>89</sup> RPC III 1230 (1).

<sup>90</sup> Two coins of the same type with the image of Nemesis (RPC III 1217 (1–2)).

<sup>91</sup> Amandry, Burnett *et al.* 1992: 359–360; 1999: 115–116.

<sup>92</sup> RPC III 1234 (2, 6).

<sup>93</sup> RPC III 1236 (1, 4) and RPC III 1237 (2).

<sup>94</sup> RPC III 1244 (1–2).

<sup>95</sup> Cf. Tab. 5a, 5b, 5c, 6a and 6b.

decline. However, one must, again, bear in mind possible new finds, incomplete data, and the problems of estimating emission numbers.

The axes of Amisus coins are oriented at one, five, six, seven, and 12 o'clock, with the dominating axes being six (98: 29%, 106/107: 64%) and 12 (98: 50%, 98/99: 80%, 106/107: 36%) o'clock.<sup>96</sup> Coins from the Julio-Claudian and Flavian dynasties have their axes at one, six, and 12 o'clock.

As mentioned in Chapter 6, coins without ethnics were issued at several different mints of Bithynia and Pontus. For this reason they will be discussed separately so as not to confuse the above analysis of the mint production of individual centres. The production of coins without an ethnic began during the reign of Domitian. In Trajan times there are nine categories for this province, including coins with images of a poppy and ears of corn, cornucopia, and the staff of Asclepius. This is indicated by the stylistic similarities of the coins, however, there is no certainty about it.

For the first group of coins, those with the name of the proconsul Bassus, minted between 101–102, 22 specimens have been registered so far, struck with four image types, among which 16 obverse and 21 reverse dies can be distinguished. The same dies appear among the issues of one type,<sup>97</sup> and on different ones with effigies of the altar shrine and eagle.<sup>98</sup> Coin axes are oriented at one (35%), 6 (20%), seven, and 12 (30%) o'clock. Perhaps the number of issue of this type, with both denominations in mind, can be estimated at c. 855,000 coins.<sup>99</sup>

In the second group of issues with the legend EIPHNH CEBACTH, 13 bronze coins, struck in two types of images, are known to date. Some have the same dies,<sup>100</sup> but there are six obverse and 13 reverse dies. This may indicate that coins with both effigies were issued in one period. The axes of the coins are oriented at five, six (33%), seven, 11, and 12 o'clock (33%).<sup>101</sup> The estimated total number of coins is c. 135,000.<sup>102</sup> Perhaps due to the stylistic similarities with the Amastris examples, as well as the ore, the issues should be assigned to the local mint,<sup>103</sup> although because of the similarity of imagery from the earlier period, and the tendency to not include an ethnic, perhaps coins of this type were minted in Nicaea.

The specimens with the legend OMONOIA CEBACTH / OMONOIA were minted after 98 and 102. To date 22 bronze and brass coins have been registered, among which two groups can be distinguished. Emissions minted after 98, possibly from Prusias, have their axes oriented at two, six, seven, eight, and 12 o'clock. Among the issues bearing the surname *Dacicus* there are coins with the same obverse dies,<sup>104</sup> one of them having the same die as the Nicaean issue.<sup>105</sup> The emission axes are oriented at six and seven o'clock, while the axes of coins with the legend OMONOIA have axes oriented at five, six, seven, and 12 o'clock. Taking into account

<sup>96</sup> Cf. Tab. 7a.

<sup>97</sup> RPC III 1121 (1, 4), 1124 (3–4), 1124A (1–2).

<sup>98</sup> RPC III 1121 (5) and 1124 (3–4).

<sup>99</sup> Cf. Tab. 5b, 6b.

<sup>100</sup> RPC III 1125 (1–3), 1126 (4–5) and 1127/4–5, 1126 (1) and 1127 (1, 3).

<sup>101</sup> Cf. Tab. 7b.

<sup>102</sup> Cf. Tab. 5b, 6b.

<sup>103</sup> RPC III 1199–1125. In addition, the effigy of Elpis on the city's coins – RPC III 1127.

<sup>104</sup> RPC III 1131 (1, 4), 1131 (3, 6–7).

<sup>105</sup> RPC III 1059 (1) and 1131 (3, 6–7).

the division into both groups, after 98, it was possible to strike c. 1,170,000 coins, while after 102, c. 900,000.<sup>106</sup>

Another group of coins without an ethnic are the issues with the legend NEIKH CEBACTOY ΔAK or APME,<sup>107</sup> minted after 102 and 114. Only eight brass and bronze coins with different dies are known in this group. Some of them were struck with the same obverse die as part of the issue with the legend OMONOIA CEBACTH,<sup>108</sup> hence presumably both types of coins were struck in one mint, probably at Nicaea, in a similar period. The coin axes are oriented at six and seven o'clock. Due to the dies with which some of the issues with the legend OMONIA CEBACTH and Nicaea were minted, all the above-mentioned types were compiled for size estimation, which gave a number of c. 345,000 coins; in turn, the issue corresponding to the 3 assaria suggested c. 135,000 specimens.<sup>109</sup> This could mean a small level of production, perhaps related to the commemoration of the victory over the Dacians, in the case of the coins with Nike. However, one must be alert to possible new finds.

The next group are items with the legend ΔHMHTPA CEBACTH, of which five bronze coins are known, with four obverse and five reverse dies. Two of the registered coins were probably struck with one die.<sup>110</sup> The axes of some of the surviving coins are oriented to 12 o'clock. The images on some issues have stylistic features similar to those on Nicomedian coins,<sup>111</sup> which may indicate a possible attribution.

The category of coins with the legend CEBACTH is much more numerous, currently numbering 38 bronze pieces, including 34 obverse and 38 reverse dies. The axes of the coins are oriented at one, six, seven, and 12 o'clock, with emissions with the axis at six o'clock dominating (after 102: 71%).<sup>112</sup> The same obverse dies were used to strike some of the coins with the images of Demeter, as well as Demeter and Athena,<sup>113</sup> thus indicating issues from the same mint in a similar period. Moreover, some of the images show similar stylistic features, which may additionally confirm this hypothesis.<sup>114</sup> On the basis of the preserved specimens of this group it is possible to estimate the size of the issue at c. 3,570,000 coins, which is not surprising given the face value of the coin, which was probably one of the basic units for everyday transactions.

The coins of the next group, with the legend CEBACTOY, represent three different types of effigy that may have been minted by several mints. Bronze coins with the image of Nike and possibly Demeter probably date from the period after 98, while those with the figure of Tyche, due to the epithet of the emperor, date after 114. So far only seven coins with different dies are known, of which only one has the same obverse die as the Amastris example.<sup>115</sup> On another one there was a countermark used on issues from Prusias. A possible assignment to this mint may

<sup>106</sup> Cf. Tab. 5b, 6b.

<sup>107</sup> RPC III 1134 (2–3).

<sup>108</sup> RPC III 1131 (3, 6–7) and 1134 (2–3); 1131 (2) and 1134 (1).

<sup>109</sup> Cf. Tab. 5b, 6b.

<sup>110</sup> RPC III 1137 (1–2).

<sup>111</sup> RPC III 1089 (3) and 1138 (3).

<sup>112</sup> Cf. Tab. 7b.

<sup>113</sup> The same dies: Demeter: RPC III 1139 (1, 7); Demeter and Athena: RPC III 1139 (16) and 1142 (5).

<sup>114</sup> RPC III 1139 (1, 7), 1142 (3–4, 7, 9–11).

<sup>115</sup> RPC III 1201 (1) and 1147 (1).

also be confirmed by stylistic similarity.<sup>116</sup> The axes of the coins with Demeter are oriented at seven and 12 o'clock, Nike at six, and Tyche at six and seven o'clock.

The most numerous group of coins without an ethnic are coins with the legend ΔΙΟC, made of bronze, with effigies of an eagle and an altar shrine. We currently know 93 coins, minted after 98, 102 and 114. Among them 78 obverse and 85 reverse dies can be distinguished. 38 coins come from the beginning of Trajan's reign. Among them, there are 33 obverse and 37 reverse dies.<sup>117</sup> Some of them were struck using the same dies. In addition, we can see connections or similarities between the emperor's portraits and the images in the issues with the legend of CEBACTH.<sup>118</sup> This points to the production of both groups of coins in the same mint, presumably in Nicaea, and in a similar period. Some of the specimens (13 coins) bear the title *Dacicus*, struck with 12 obverse and 13 reverse dies. Only two coins have the same obverse die, which was also minted with one of the issues depicting Athena and the legend CEBACTH.<sup>119</sup> Among the coins struck after 114, 30 obverse and 32 reverse dies can be distinguished. Only some of these were struck using the same dies.<sup>120</sup> There are three more coins in this group, the exact dating of which cannot be determined due to the state of preservation and illegibility of the legends. The axes of the coins are oriented at one, two, five, six, seven, and 12 o'clock, with emissions with the axis at six and 12 o'clock dominating.<sup>121</sup>

From the period when the individual issues were struck one can try to assess the number of minted coins, which after 98 could be estimated at c. 1,710,000, after 102 at c. 1,650,000, and after 114 at c. 3,030,000.<sup>122</sup> On this basis it can be concluded that the largest production of this type of issue took place after 114. A possible assumption might be to associate the increase in production due to the Parthian campaign, although perhaps more prosaic reasons might be sought, e.g. the city's everyday need for more coin.

It should also be mentioned that the same obverse die used for one of the coins with the legend ΔΙΟC was found on the specimen issued in Midaeum, in the Synnada conventus, in Asia province.<sup>123</sup> The image of the altar with the legend ΜΙΔΑΕΩΝ, ΔΙΟΣ appeared on coins of this city in the time of Domitian, however it represents a different type of image.<sup>124</sup> Perhaps this has to do with the die-links between the two centres, or the transfer of the workshop/engraver from, presumably, Nicaea to Midaeum. During the reign of Trajan, such connections are few, but possible, and have so far been noticed in cities such as Dardanus and Ilium and Metropolis and Colophon in the Asia province.<sup>125</sup> Based on the images from earlier periods, the stylistic similarities of the effigies, as well as the presence of this type of coin in the collections in Izmit and Iznik (respectively the old Nicomedia and Nicaea), the correct attribution might be to Nicomedia or Nicaea.

<sup>116</sup> RPC III 1146 (1–2).

<sup>117</sup> RPC III 1148 (13, 17); 1148 (4, 11); 1148 (5, 15); 1148 (6, 8–9); 1153 (1–2); 1154 (20, 22); 1155 (2, 5); 1156A (1–2).

<sup>118</sup> RPC III 1141 (3), 1156 (4) and 1158 (1); 1139 (19) and 1151 (1); 1141 (1) and 1148 (13); 1142 (6) and 1151A (1).

<sup>119</sup> RPC III 1139 (12) and 1152 (2, 4).

<sup>120</sup> RPC III 1154 (1, 6), 1154 (20, 22), 1155 (2, 5).

<sup>121</sup> Cf. Tab. 7b.

<sup>122</sup> Cf. Tab. 5b, 6b,

<sup>123</sup> The same dies: RPC III 1156A (1) and 2646 (2) (Midaeum).

<sup>124</sup> RPC II 1416.

<sup>125</sup> RPC III 1572 (1) (Ilium) the same obverse dies as RPC III 1564 (1–2) (Dardanus); RPC III 2005 (7) (Colophon): the same obverse dies as RPC III 2010 (1) (Metropolis). The issue of die links and possible workshops, mainly in the 3rd century, was discussed in Kraft 1972; cf. Johnston 1974.

Coins with the legend KTICTHC, minted probably after 98 and 114, are currently represented by only three bronze specimens, with different dies; one of the coins, however, despite the bad condition and countermark, was probably struck using the same die as one of the coins with the legend ΔIOC.<sup>126</sup> This also indicates a common mint for both groups of coins and the possible production time of one of them after 114. Axes of coins with the KTICTHC legend are oriented at two, five, and 12 o'clock.

The category of issue without ethnic, which probably should be assigned to one of the cities of Bithynia and Pontus, is represented by bronze coins with the legend ΔΗΜΗΤΡΟC and the image of a poppy and ears of corn. Among the three coins, three different obverse and reverse dies can be distinguished, however, one of these is stylistically similar to the issue known from Nicomedia.<sup>127</sup> A possible attribution might also be confirmed by a coin in the local museum collection. Coin axes are oriented at one, six, and 12 o'clock.

The second additional group comprises bronze coins with the cornucopia: to date 10 specimens, struck with different dies, have been registered. The coin axes are oriented at six (50%) and 12 (50%) o'clock. The size of the issue can be estimated at c. 1,395,000 coins.<sup>128</sup>

The last group, coins without an ethnic depicting the staff of Asclepius, currently represented by only one issue, can be assigned to Bithynia and Pontus because of their general stylistic similarity. Unfortunately it is not possible at this time to link the coin to a specific centre.

The few pseudo-autonomous emissions struck in Amastris, Sinope and Amisus, among which various dies can be distinguished, may also come from the reign of Trajan. The axes of the Amastris and Amisus coins are oriented at six and 12 o'clock. However, due to the uncertainty regarding the chronology and small number of coins registered, no attempt to estimate the number of coins was undertaken.

Only in some cases of coins from the cities of Bithynia and Pontus can an attempt be made to estimate the production in a given period. However the small number of issues preserved to date means that the estimates made are incomplete and will change if and when new coins appear. Based on the currently registered emissions, the greatest production and number of minted coins are estimated in Byzantium, Tium, and Amisus. If in Nicaea coins without an ethnic, with the legend ΔIOC, were issued, then the mint in this city also probably had a large production, which is not surprising compared to the earlier and later periods with abundant production.

### Countermarks

Countermarks are marks placed on the coins that can define their value, user, and territory of circulation. Initially they were private marks but from the Hellenistic period they were stamped on behalf of royal authorities or cities. They could have been applied by mints issuing their own coinage, or other centres which, for example, did not produce issues in particular periods, or their production was insufficient. Occasionally they were stamped on behalf of

<sup>126</sup> RPC III 1155 (4) and 1160 (3).

<sup>127</sup> RPC III 1089 (3), 1090 (1).

<sup>128</sup> Cf. Tab. 5b, 6b.

Roman authority, as in the case of legionary countermarks; thus the circulation of ‘foreign currency’ within the local market could occur. At other times they were struck on the coins from earlier periods, often badly preserved, thus in this case their value was confirmed and/or they returned to circulation,<sup>129</sup> e.g. in the 2nd and 3rd centuries, countermarks were stamped on coins from the 1st century.<sup>130</sup> It should be pointed out that this was not a permanent custom for all provincial towns. It is very often impossible to determine whether a coin from another city found at an archaeological site, without a countermark, functioned within the local market. The reasons for employing such marks could be various, as emphasised above, i.e. insufficient production and market demand, change or confirmation of the value of the coin, as well as its ‘updating’, in the case of an emperor’s short reign, etc. Among the occasions where countermarks could also be stamped were imperial visits, victories, change of titles, death, and the *damnatio memoriae* of the emperor. Many reasons were based on local factors, including the awarding of a title, winning games, religious festivals, or the changing status of the centre.<sup>131</sup> The countermarks themselves could take the form of names and portraits of emperors, names of officials, names or symbols of legions, images of deities, dates, or designation of coin value.<sup>132</sup>

In his research, Ch. Howgego noticed several trends of countermarks for provincial coins. The mint might stamp such marks only on its own coins, or only on issues from another city, or both. Sometimes the image of the same emperor was placed on the coin in whose name it was struck. The countermarks did not always change the legends or the type of the coin, and its meaning was reflected in the given issue. The coin might also sometimes be countermarked at the same time as it was minted.<sup>133</sup>

There are countermarks struck during the reign of Trajan on coins of several cities of Bithynia and Pontus, i.e. Calchedon, Prusa, Prusias, Amisus, and on emissions without an ethnic.<sup>134</sup> On the coins of Calchedon, on the back of the bust of the emperor, we have countermarks with the image of Apollo.<sup>135</sup> Both the coin effigies and countermarks refer to the local cult in the city.<sup>136</sup> In the Roman period only Trajan’s coins of one type and similar size are known, perhaps to be interpreted as 1½ one or 2 assaria. The countermark, probably also with the likeness of Apollo, appears in the city on the tetradrachms of Alexander the Great between 240 and 220 BC.<sup>137</sup> Perhaps the reason for these countermarks in Trajan’s times should be seen in the confirmation or change of the value of the coins, similar in nominal value to the assarion. The issues with countermarks registered to date were issued after 102. From the very beginning of the emperor’s reign only one coin is known, on which no additional mark was placed. Hence there is no certainty as to the interpretation of the possible reason for these stamps. Perhaps another reason for countermarking the issue was some special occasion related, for example, to ceremonies linked to the cult of Apollo. Countermarks with his likeness were also placed on

<sup>129</sup> Baker 1984; Howgego 2005b: IX; 1–16; Price 1967. Cf. Martini 2018.

<sup>130</sup> Cf. Bodzek 2020: 386–387, fig. 27; Evans 2018: 6; Parks 2004: 98–99, 105–106, 111–112, 134–135, 154–156.

<sup>131</sup> Baker 1984; Howgego 2005b: 4–7. Cf. Paunov 2013; Stancomb 2007.

<sup>132</sup> Baker 1984; Howgego 2005b: 3–23. Cf. Bodzek 2020: 386–387, fig. 27; Martini 2018; Paunov 2013; Price 1967; Stancomb 2007; Talmatçı 2008; Thompson 1954: 18–20.

<sup>133</sup> Howgego 2005b: 8.

<sup>134</sup> Cf. Tab. 8.

<sup>135</sup> GIC 2. RPC III 1061.

<sup>136</sup> Howgego 2005b: 104. Cf. Dion. Byz. 111; Luc. Alex. 10; Strab. 12.3.7; 12.4.2; IK Kalchedon 12; Türkoğlu 2014: 597–598.

<sup>137</sup> Stancomb 2007: 27–28; Thompson 1954: 18–20.

emissions of other cities, i.e. Thessalonica in the time of Claudius and Miletus, starting from the reign of Caracalla.<sup>138</sup>

On the coins with the image of the altar chapel, probably minted in Nicaea, there was also a countermark depicting a bearded head, identified by Marin and Ioniță with Asclepius.<sup>139</sup> These authors refer to this type of countermark, which is also known from a Pergamum find struck in the time of Trajan.<sup>140</sup> However, when looking at both types of countermarks – the Pergamum image and the one on the coin, which probably should be assigned to the Nicaean mint – it is clear that it is not the same image. On the coins with the altar shrine the bearded head resembles the image of Heracles. Countermarks with a similar effigy also feature on the coins of Erythrae in Ionia, Tyre in Phoenicia, and Abila and Philadelphia in Syria.<sup>141</sup> The same image, perhaps, also appears on one of Claudius' coins issued from an uncertain mint, perhaps a Thracian one.<sup>142</sup> In this case, due to the lack of more coins with this type of countermark from the region, it is not certain whether it was punched for a special occasion celebrated in a given city or a specific cult, or another reason.

On one of the coins without the ethnic, with the legend OMONOIA CEBACTH, there is a countermark with the image of the emperor's head in a laurel wreath.<sup>143</sup> Marks of this type are also known from Bithynian *koinon* coins from the reign of Hadrian, however, they are not the same effigies.<sup>144</sup> Countermarks with a portrait of the ruler were quite popular, especially in the 3rd century. In Bithynia during this period similar markings are known from coins struck in Nicaea, Caesarea Germanica, Cius, Iuliopolis, Nicomedia, Prusa, and Prusias.<sup>145</sup> Unfortunately, due to the size of the countermark, and sometimes its illegibility, only the gender of the individual can be determined. Hence exact dating or association with other possibly similar effigies is very uncertain. Countermarks with images of various people, some of which probably should be interpreted as members of the imperial family, seem to have had an honorary character.<sup>146</sup> Perhaps they were stamped in recognition of particular merits, the emperor's arrival, or benefits obtained on his behalf. Their appearance on coins in this period is probably linked to the popularity of this type of countermark in the 3rd century in the centres of Bithynia and Pontus. Such an option cannot be excluded, especially when they were in poor condition. Thus, the countermark made further circulation of a coin struck in an earlier period possible within the local market.

On one of the coins with the legend ΔΙΟC there was the countermark TOM on the bust of the ruler, stamped in Tomis (Moesia province).<sup>147</sup> Several scratched coins with this mark were also registered,<sup>148</sup> indicating that they could still have been in circulation locally.<sup>149</sup> There is no

<sup>138</sup> GIC 1, 3.

<sup>139</sup> Cf. Marin and Ioniță 2019: 71.

<sup>140</sup> GIC 4, RPC III 1722.

<sup>141</sup> Erythrae in Ionia: GIC 14, Tyre in Phoenicia: GIC 15, Abila and Philadelphia in Syria: GIC 16–17.

<sup>142</sup> GIC 13, RPC I 1957.

<sup>143</sup> GIC 64? RPC III 1128 (6).

<sup>144</sup> Howgego 2005b: 117; RPC III 991 (3), 1024 (5).

<sup>145</sup> GIC 64–68. Baker 1984: 57; Howgego 2005b: 117–118.

<sup>146</sup> Cf. Price 1967: 40.

<sup>147</sup> GIC 567. AMNG 615; RPC III 1154 (22).

<sup>148</sup> Cf. [www.wildwinds.com/coins/greece/thrace/tomis/countermark\\_examples.jpg](http://www.wildwinds.com/coins/greece/thrace/tomis/countermark_examples.jpg) (accessed: 01.01.2021). Cf. AMNG 615; Howgego 2005b: 217.

<sup>149</sup> Cf. Howgego 2005b: 11.

certainty when exactly the countermark was struck. In Trajan's time a designation referring to the emperor (TRA) was probably stamped on several coins of Titus, Domitian, Nerva, and pseudo-autonomous coins.<sup>150</sup> One of the illegible coins also had a countermark with the letter B, which perhaps indicated the value of the issue; this type of denomination became popular in the 3rd century.<sup>151</sup> Judging by the state of preservation of both countermarks, it seems that the abbreviation TOM was placed on the coin earlier than the letter B, perhaps in the 2nd century. The presence of this type of marking on issues from Bithynia means that coins from this region also flowed into the areas of Moesia. Contacts between cities are also attested by other sources, such as inscriptions. The citizens of Bithynia who settled there came mainly from Nicomedia and Nicaea.<sup>152</sup> Thanks to the countermark, emissions from other cities could also circulate in the local market. This tradition of introducing coins to the circulation of Tomis from individual centres is also confirmed by other finds from earlier periods. This could indicate insufficiency in production<sup>153</sup> or simply some updates, or perhaps legalisation resulting from the influx of emissions from different cities.

On some Prusa issues, as well as coins with the name of Bassus and the legend ΔIOC and KTICTHC, there is a sign with the word TONZOY.<sup>154</sup> The countermark was stamped along the bust on the right side, or at the bottom of the portrait. The titles in the legends of some coins indicate that countermarks were placed after 114. They are also found on the dupondius with the CA monogram, as well as on one of Augustus' coins,<sup>155</sup> bronzes of Vespasian and Domitian from Nicaea,<sup>156</sup> and on three illegible coins, probably struck in the reign of Domitian and at the beginning of the 2nd century.<sup>157</sup> Tonzos was one of the rivers in Thrace. His personifications were shown on the coins of Hadrianopolis in the times of Antoninus Pius, Marcus Aurelius, Commodus, and Gordian III.<sup>158</sup> The countermark was stamped on issues of various sizes, so it perhaps had something to do with introducing the coins to the local market, and not changing their value. Among the legible names one can probably distinguish at least four different dies of countermarks placed on the Trajan coins, and an additional two from Domitian issues. Probably the same countermark dies are visible on one of the worn coins from the reign of Domitian or Trajan and Trajan with the legend ΔIOC.<sup>159</sup> Different dies could also indicate that the markings were placed over a wider timeframe. If the name Tonzoy can be associated with the later Hadrianopolis (?) founded by Hadrian,<sup>160</sup> which began to strike its coins from the reign of Antoninus Pius, then presumably in earlier periods the centre used all the coins that

<sup>150</sup> GIC 569; RPC II 403 (6), 405 (9), 412A (10), 412B (9); RPC III 774 (5, 9, 11).

<sup>151</sup> GIC 751. Johnston 2007; Soutzo 1900: 135.

<sup>152</sup> Alexandrescu-Vianu 2008–2009; Avram 2013; Ward-Perkins 1980.

<sup>153</sup> Cf. Talmaçhi 2008: 155–156, 172–177.

<sup>154</sup> GIC 568. Prusa: RPC III 1047 (3); coins with the name of Bassus: RPC III 1124 (2); coins with the legend ΔIOC: RPC III 1148 (2), 1154 (7, 12, 15); coins with the legend KTICTHC: RPC III 1160 (3).

<sup>155</sup> Howgego 2005b: 217, no. 568.

<sup>156</sup> Vespasianus RPC II 628 (17); Domitian: Nicaea RPC II 634; CNG Electronic Auction 439, 06.03.2019, no. 236.

<sup>157</sup> Domitian (Philippolis? coin badly preserved): CNG Electronic Auction 115, no. 513; Domitian (coin badly preserved): Ebay 6.12.2020; beginnings of the 2nd century: CNG Electronic Auction 440, 20.03.2019, no. 299.

<sup>158</sup> Antoninus Pius RPC IV.1 10591, 10601, 10606 (temporary numbers); Marcus Aurelius RPC IV.1 10610, 10531 (temporary numbers); Commodus RPC III IV.1 10457 (temporary number); Gordian III RPC VII.2 ID 67355, 69226, 67360, 67359. Cf. Howgego 2005b: 217; Youroukova 1981–1982.

<sup>159</sup> Distinguishing the dies of the countermarks based on the photographic documentation and legibility of the inscriptions. Perhaps the same dies of countermarks: Trajan: RPC III 1154 (7) and Domitian/Trajan: CNG Electronic Auction 115, no. 513.

<sup>160</sup> Cf. Youroukova 1981–1982.

came into its market,<sup>161</sup> and hence the variety of the coins themselves, as well as the dies of the countermarks.

Most of the coins from Prusias from the reign of Trajan registered so far, as well as on one of the issues without an ethnic, with the CEBACTOY legend, have a countermark AYTK.<sup>162</sup> The countermark was placed on the obverse, both at the bottom of the bust and at the back of the head. It was probably stamped in Prusias as the monogram appears only on emissions from this city.<sup>163</sup> The countermark is also found on coins struck in the reign of Domitian.<sup>164</sup> On some issues from Prusias, some very worn, there are also other countermarks from different periods, which is confirmed by the long circulation of individual coins.<sup>165</sup> The AYTK monogram was stamped on many coins of various sizes, hence countermarking was intended to introduce an issue, or confirm their value in circulation, and not to change it.<sup>166</sup> Depending on the size and state of preservation, at least six dies of the countermarks can be distinguished, and with the same dies used for the coins of both Trajan and Domitian,<sup>167</sup> indicating that the mark appears in the same period. The monogram itself, as noted by M.J. Price, has the air of something official (αὐτοκράτωρ Τραϊαν?), which might indicate, as some suggest, the confirmation of the coin by the imperial authority.<sup>168</sup> It is also worth noting that Dio Chrysostom always uses this phrase when referring to Trajan, while for Domitian it is καισᾶρ.<sup>169</sup> From the titles on the Prusias coins it can be supposed that their issues were at the beginning of Trajan's reign. In later years, as well as in the time of Hadrian, no coins were struck in this city, and the next emissions are known from the period of Antoninus Pius.<sup>170</sup> M.J. Price, who was mainly studying the Domitian issues, suggested that the countermark was stamped at the beginning of Trajan's reign; however for the Prusias coins from that period, which also had a monogram, it seems unlikely. The coin with the legend CEBACTOY, which also only refers to the *Germanicus* title in the legend, does not help in establishing the dating of the countermark. It is worth emphasising that not all coins from Prusias from the reign of Trajan have a monogram. They were probably used for some significant event for the local society – perhaps another military success of the ruler, i.e. the Dacian wars. Marin and Ioniță suggest a countermark was punched after Trajan's monetary reform in 107.<sup>171</sup> It should also not be excluded that the countermark appeared in honour of the next emperor, Hadrian. Such a solution could also be suggested by the lack of issues in this period. However it is worth paying attention once again to the definition of the emperor as a αὐτοκράτωρ by Dio Chrysostom, which could presumably point to the reign of Trajan.

<sup>161</sup> Cf. Marin and Ioniță 2019: 70.

<sup>162</sup> GIC 608. Prusias: RPC III 1101 (1–2); 1102 (1); 1103 (1–4); coins with a legend CEBACTOY: RPC III 1146 (2).

<sup>163</sup> Two coins without an ethnic and with the legend CEBACTOY were probably struck by this mint, based on their stylistic similarity. Probably their attributions can also be confirmed by the countermarks.

<sup>164</sup> Howgego 2005b: 226; Price 1967: 37.

<sup>165</sup> Price 1967: 38–40, pl. 3.

<sup>166</sup> Cf. Price 1967: 38.

<sup>167</sup> Types of dies of countermarks: 671 (3); 1103 (1); 1103 (3); 1146 (2); Domitian and Trajan: 685 (3) – 686 (2) – 1102 (1) – 1103 (2, 4); 687 (4) – 1101 (1).

<sup>168</sup> Price 1967: 38.

<sup>169</sup> Dio Chrys. *Or.* Cf. Szarmach 1979: 75, footnote 7 – A. Wifstrand drew attention to the detail, suggesting that the term was more positive.

<sup>170</sup> RPC IV 11182 (temporary number).

<sup>171</sup> Marin and Ioniță 2019: 71.

On some Amisus coins a PME monogram was stamped.<sup>172</sup> The countermark was placed mainly at the bottom of the emperor's bust. The line placed above the monogram refers to the number, in this case the year according to the local chronology, when such a mark was probably stamped (year 145 = 113/114 AD).<sup>173</sup> All countermarked coins are from earlier production periods, struck in 98, 98/99 and 106/107 at Amisus. So far there no issues are known with the same marks from other centres, which may indicate that the countermark was placed only on coins issued by the city. The emission from the very beginning of the reign is sized at 22–23 mm, 6–7 g, with the subsequent ones probably representing the same nominal value (28–30 mm, 8–12 g). Between 113 and 114 coins of a different size than the countermarked coins were issued. Thus among the possible reasons for the monogram is their confirmation within the local market or a change in the value of issues in a given year. However, since coins from earlier periods continued in circulation, this can be difficult to interpret. Some of the countermarked coins are badly preserved, which could explain the necessity of their marking, but we have no way of knowing what condition the coins were in when the monograms were placed on them.

On one of the coins with the legend ΔIOC there is a countermark resembling the letter M or Σ on the obverse at the bottom of the bust of the emperor on the right.<sup>174</sup> A few coins with a similar designation have been registered to date, including examples with the image of Faustina the Younger from Ionopolis Abonoteichos,<sup>175</sup> Claudius of Lycia,<sup>176</sup> and Claudius and Tiberius with the letters SC.<sup>177</sup> Perhaps both the coin without an ethnic and the issue with the portrait of Faustina were countermarked in one mint, possibly Ionopolis Abonoteichos.<sup>178</sup> Based on the second coin, the mark could have been stamped after 161. The issue with Faustina's portrait is 25 mm, 9–10 g,<sup>179</sup> and with the legend ΔIOC is 23 mm, 5–6 g. Perhaps the value of close-in-nominal emissions from different periods might be confirmed by the countermarks. Unfortunately it is not possible to define more precisely whether a letter itself can refer to a number and what it could mean. In the Greek system, the letter M stands for 40, and Σ 200.<sup>180</sup> In the 3rd century, single letters referred mainly to the value of the coins.<sup>181</sup> Another hypothesis that comes to mind is a reference to dating.

Also on one of the coins with the legend ΔIOC, on the obverse at the back of the emperor's head, there is a countermark with the image of a bearded man in a tiara or a Phrygian cap.<sup>182</sup> One theory is that the effigy is the head of the god Men and the crescent.<sup>183</sup> This type of countermark is known only from a few coins, including a Marcus Aurelius issue of unknown provenance. The cult of Men Askenos is known from Pisidian Antioch, suggesting one of

<sup>172</sup> GIC 635. RPC III 1231 (3), 1234 (1, 5), 1236 (3, 5–6).

<sup>173</sup> Howgego 2005b: 231.

<sup>174</sup> RPC III 1148 (11).

<sup>175</sup> GIC 673.

<sup>176</sup> GIC 674.

<sup>177</sup> GIC 675.

<sup>178</sup> The name of the city was changed during the reign of Marcus Aurelius. Cf. Waddington, Reinach and Babelon 1904–1912: 129; Wilson 1976a: 4.

<sup>179</sup> RPC IV.1 5361 (temporary number).

<sup>180</sup> Cf. Sear 2001: xxv.

<sup>181</sup> Cf. Baker 1984: 57; Johnston 2007.

<sup>182</sup> RPC III 1154 (9).

<sup>183</sup> Cf. [rpc.ashmus.ox.ac.uk/coins/3/1154](http://rpc.ashmus.ox.ac.uk/coins/3/1154) (accessed 01.01.2021).

the places where this type of mark could probably have been issued,<sup>184</sup> although the deity was also popular in other regions of Anatolia, including Pontus, where Men Pharnakos was worshiped.<sup>185</sup> The figure of the deity appears on Nicaean coins from the times of Antoninus Pius and Gordian III,<sup>186</sup> Iuliopolis during the reigns of Commodus, Elagabalus, Severus Alexander, Maximinus Thrax, Gordian III, and Philip the Arab,<sup>187</sup> as well as the city of Cius under Trajan Decius.<sup>188</sup> One of these cities might have favoured a countermark with the image of Men. The effigy itself, however, is problematic, as the god's traditional crescent horns are not visible; the deity is depicted in a high tiara or Phrygian cap, which in turn are known from countermarks from eastern areas, such as Syria or Mesopotamia.<sup>189</sup> However the image does not seem to be exactly the same one used, and a mark known from Eastern regions seems an unlikely choice for Bithynia coins. In this case it seems that the image of Men is the more correct interpretation, perhaps stamped in a centre of his cult, e.g. Comana, in memory of some religious festival or other event. Such suggestions, however, remain uncorroborated at present.

One of the coins with the legend ΔΙΟC has a five-pointed star countermark.<sup>190</sup> Unfortunately it is not possible to specify the exact place and period of the marking. Based on the title in the legend it can be stated that it was after 114. Countermarks in the form of stars were very popular and appeared on the coins of various cities and at different times.<sup>191</sup> Several coins with this type of mark have been registered from northern Turkey, inter alia, from Amisus with a portrait of Agrippina and Claudius,<sup>192</sup> Germanicopolis from the times of the Severan dynasty,<sup>193</sup> and Parion, Lampsacus and Ilium from the Julio-Claudian dynasty.<sup>194</sup> It seems, however, that these are different countermarks, e.g. from the number of points on the star.

The names of cities, titles, dates, busts of deities and emperors, as well as symbols of unknown meaning, can be distinguished among countermarks stamped on the coins of Bithynia and Pontus. Some of the cities seem to have only their own marks on their coins, e.g. Calchedon and Prusias. In turn, towns such as Hadrianopolis and Tomis introduced coins from Bithynia, probably from Nicaea, and Prusa to their market. It is worth noting that most of the countermarked issues from this region from Trajan times were coins without an ethnic, 18–20 mm, 4–6 g in size, which, as one of the basic and popular small denominations, could be easily adapted to the system valid in other centres. Also useful for this was the lack of a reference to the city where the coin was struck.

Among the significances of countermarks on the coins of Bithynia and Pontus from the reign of Trajan, one should probably distinguish the change in the value of individual coins in different periods, as in the case, perhaps, of Calchedon and Amisus, or the reintroduction into

<sup>184</sup> GIC 18–19; RPC IV 11648. Cf. Howgego 2005b: 107–108.

<sup>185</sup> Cf. Marek and Adak 2016: 71–72; Olshausen 1990: 1887–1888, 1895–1896; Öztürk 2010: 45; Summerer and Atasoy 2002.

<sup>186</sup> RPC IV.1 5877; VII.2 ID 19818 (temporary numbers).

<sup>187</sup> RPC IV.1 4787–4788; VI 3703, 10934, 10783, 10780; VII.2 ID 19748; VIII ID 19755 (temporary numbers).

<sup>188</sup> RPC IX 229.

<sup>189</sup> Cf. GIC 25–27; RPC II 2023; Howgego 2005b: 109–110.

<sup>190</sup> RPC III 1154 (14).

<sup>191</sup> GIC 431–461; Howgego 2005b: 188–193.

<sup>192</sup> GIC 437; RPC I 2154.

<sup>193</sup> GIC 438.

<sup>194</sup> GIC 440–442.

circulation, and thus confirmation of the value, of some coins, i.e. the issue with the legend OMONOIA CEBACTH, ΔΙΟC (countermark M or Σ), or Amisus coins. Some of the countermarks could have an honorary character (i.e. the portrait of the emperor or perhaps the AYTK monogram), or a religious one (i.e. the effigy of Apollo, or perhaps Men). Most of these were stamped in the 2nd century, and it can be assumed that in its first half, or in Trajan's time, countermarks were stamped at Calchedon, Prusias, Amisus, and Hadrianopolis. On the other hand, the markings, presumably those with the image of the emperor in a laurel wreath, or Men, with the abbreviation Tomis, the letter M or Σ, or a five-pointed star, could have appeared in the second half of the 2nd century, or even in the 3rd century. In this case, future coin finds may help to determine more accurately the timing and significance of individual countermarks.

## Circulation

Within individual provincial cities the coins in circulation were those that were primarily issued locally. However, based on coin finds and the similarity of the emissions, it seems likely that some could have circulated much more widely.<sup>1</sup> In one of his works, Ch. Howgego emphasised that this question should be approached primarily contextually, rather than creating general assumptions that could not be confirmed in all provincial centres. It should be remembered that production in many mints was irregular, and sometimes insufficient for the needs of the entire town; and hence the possible acceptance on the market of coins from different cities, with similar sizes, depending on the place, time, and demand.<sup>2</sup> It should also be noted that it was a quite normal for many centres not to issue their own coins, and, therefore, a nearby mint could have met local demands.<sup>3</sup> The average estimated distance of coin circulation from the mint where they were struck is c. 100–200 km.<sup>4</sup>

The above hypothesis may also be confirmed by the coin finds. During archaeological research in Sardis, c. 50% of the coins recorded so far from the Roman period have come from other cities.<sup>5</sup> A similar situation can be seen among the finds in Aphrodisias.<sup>6</sup> On the other hand, among the centres that did not issue their own coins one can distinguish Allianoi, a spa town, where most of the emissions found from the Roman period came from nearby Pergamum, with coins from Alexandria Troas, Adramyteum, Pitane, Myrina, and Mytilene also recorded.<sup>7</sup> Nevertheless, it should be remembered that the find of a coin does not clearly confirm its use within the local market of a particular place. Such an opportunity could have been made possible by the countermarks discussed in Chapter 8.<sup>8</sup>

Finds, as well as archaeological sites, can help determine the function or use of individual coins, or indicate connections between some towns. However one should be careful in formulating such assumptions, largely due to the material found, which reflects only a fragment of the past reality. Archaeological research in provincial cities has recovered large numbers of different coins, especially in those centres with long histories. Some of the issues, however, are represented only by single finds, while others are illegible due to poor condition. Another problem is the context of the find itself, which does not always make it possible to precisely determine the time of deposition or indicate the roles of the finds in a given place.<sup>9</sup> It should also be remembered that not every discovered coin was necessarily in circulation.<sup>10</sup> A majority of the numismatic finds are small-value issues which were easy to lose because of their size;<sup>11</sup> their value was not as significant as the silver issues, however such coins were

<sup>1</sup> Caccamo Caltabiano, Carroccio and Puglisi 2014: 139–156; Çizmeli-Ögün and Marcellesi 2011: 297–342; Delrieux 2016: 6–15; Jones 1963: 317–323; Katsari 2011: 28–29; Klose 1987: 122–124; Schachinger 2014: 525–540.

<sup>2</sup> Various views on this have been presented by Howgego 2014. Cf. Kunisz 1971: 122–124.

<sup>3</sup> Burnett 2005: 175.

<sup>4</sup> Katsari 2011: 226.

<sup>5</sup> 40% Aphrodisias; 30% Ephesus; 25% Side; 6% Athens (Johnston 2007: 5–6).

<sup>6</sup> MacDonald 1976: 40–50.

<sup>7</sup> Cf. Tekin and Erol-Özdizbay 2012: 351–354; 2014: 295–299; 2016: 125–126.

<sup>8</sup> VIII.2. Countermarks. Cf. Howgego 2005b.

<sup>9</sup> Casey 1986 – discoveries of only c. 0.003% of Roman coins. Cf. Evans 2018: 5–8, 49–53; Katsari 2012: 1.

<sup>10</sup> Howgego 2014: 309.

<sup>11</sup> Cf. Bellinger 1961: 188; Evans 2018: 7, 26–27; Newton 2006: 211–227.

mainly used in everyday transactions. Unfortunately very many of the coins are single finds without a specific context to indicate their exact role in the lives of the inhabitants.<sup>12</sup> Some of the issues, due to their denomination, could only be used for hoarding, while others were struck to commemorate such events as visits by emperors, the giving of a title (e.g. *neokoros*), or games.<sup>13</sup>

Another problem is the speed of coins in circulation,<sup>14</sup> i.e. bronze provincial coins circulated longer than bronze imperial coins.<sup>15</sup> Production in provincial mints was irregular, a factor that also impacted on the use of the issue. Estimating the time of circulation of individual coins is difficult, however some attempts are made for some issues.<sup>16</sup> Certain provincial coins were in circulation for much longer, as evidenced by the stamped countermarks, e.g. on coins from the 1st century with countermarks placed in the 2nd, or even 3rd century.<sup>17</sup>

Most of the bronze provincial coins are single finds. Because of their relatively low values they were not frequently hoarded, compared to silver or gold coins, and hoard finds are quite rare, although deposits of provincial coins are known from the Balkan territories dated after 238.<sup>18</sup>

In addition to local coins, imperial currency also circulated in the provinces.<sup>19</sup> Among the published coin finds from Bithynia and Pontus, mention should be made of a hoard of imperial coins from the town of Koçoğlu (Manyas district, Balıkesir province, Turkey), mostly denarii issued in Rome during the reign of Trajan and Hadrian.<sup>20</sup> Imperial bronze coins discovered during research at provincial sites represent the minority of all coin finds, an larger deposits are rare.<sup>21</sup> One exception is the hoard of 1200 sestertii, dated from the reigns of Marcus Aurelius to Gallienus, found near Antalya.<sup>22</sup> Determining the exact circulation in Bithynia and Pontus during the reign of Trajan is problematic for various reasons, e.g. the low number of finds, or the illegibility of the coins. The territories of northern Turkey have not yet been thoroughly researched archaeologically – the main difficulties being modern infrastructure preventing large-scale excavations (e.g. Istanbul, Izmit), and financing. Some researches have been conducted in specific cities, but not all of them have been published. In studies at certain centres (e.g. Iuliopolis and Tium) only single coins from the 1st and 2nd centuries have been recovered; issues from the 3rd century or later are relatively more common. As one might expect, archaeological research in Istanbul has uncovered many coins, including some hoards, but mainly from the Byzantine period.<sup>23</sup> Most of the coins recorded from the time of Trajan come probably from the territory of Bithynia and Pontus and are now in regional

<sup>12</sup> Evans 2018: 49–53; Howgego 2014: 308–309, 312–314.

<sup>13</sup> Johnston 1997: 207.

<sup>14</sup> Duncan Jones 1998: 180–192; Hopkins 1980: 101–125; Howgego 1992: 12–16.

<sup>15</sup> Harl 1997: 224–225.

<sup>16</sup> Cf. 'Average Annual Coin Loss', 'Chi-Square Fitness Test', 'Mean Coin Date', individual methods, and further bibliography, see Evans 2018: 7–8, 115–117.

<sup>17</sup> Cf. Bodzek 2020: 386–387, fig. 27; Evans 2018: 6; Parks 2004: 98–99, 105–106, 111–112, 134–135, 154–156.

<sup>18</sup> Kunisz 1971: 103–104.

<sup>19</sup> Cf. Arslan 2014; Bodzek 2020: 383–385; Butcher 1988: 15; Evans 2018: 148–160; Howgego 1994; Lenger and Atasoy 2015: 388–391; Lightfoot 2012: 112–116; Schachinger 2014.

<sup>20</sup> Arslan 1996: 31.

<sup>21</sup> Jones 1963: 318. Kunisz 1971: 120. Cf. Bodzek 2020: 383–385.

<sup>22</sup> MacDonald 1989: 120.

<sup>23</sup> HENDY 1986; GÖKYILDIRIM 1993; 1999; ÖZTOPBAŞ 2013a; 2013b; 2014; TEKİN 2009; 2013a; 2013b. Researchers have focused on later periods of the former Byzantium/Constantinople. Due to the dynamic development of the city the extensive remains from the Roman period are now seemingly beyond reach.

museum collections. Bearing in mind the various problems relating to analysis of provincial coin circulation focused on one period only, in order to avoid some errors of interpretation it would be necessary to try and determine the circulation in a given city across the entire Roman period, and then compare the results with other cities located, e.g., in a province or a specific region. The coin finds from the reign of Trajan from Bithynia and Pontus are presented, but they are therefore restricted to a degree by some general assumptions. Moreover, we need to be aware that the possible circulation of any issue may have continued past the limits of the emperor's rule.

There are some fairly obvious aspects in terms of circulation in Bithynia and Pontus. First of all, there were issues struck in the earlier periods among the circulating coins. Their values can be confirmed by countermarks, as in the case of Domitian coins with the AYTK monogram, stamped in the times of Trajan.<sup>24</sup> Many trade routes met on the Black Sea coast and harbour cities (i.a. Byzantium, Calchedon, Apamea, Nicomedia, Heraclea, Tium, Amastris, Abonoteichos, Sinope, Amisus) were awash with coins from various centres (some of which not necessarily indicating factors such as trade contacts or relations between individual cities). The presence of the inhabitants of the province in the territories of Thrace, Moesia, the northern shores of the Black Sea, as well as citizens of these regions living in Bithynia and Pontus, are confirmed by inscriptions and other remains.<sup>25</sup> It is also no wonder that there are issues from neighbouring towns, due to the proximity of the location and population movements, e.g. Byzantium and Calchedon, Tium and Heraclea, Nicaea and Nicomedia, etc. Can individual coin finds in these cities, without no countermarks, be proof that they also functioned in both local markets? We cannot be sure. Perhaps, due to the similar sizes of individual coins, and thus perhaps also their value, it cannot be excluded that they did indeed fulfil such a function. In addition, in the time of Trajan, some of the cities of Bithynia and Pontus, due to possible cooperation, did issue similar coins in terms of their images and denominations. This, in turn, allowed for a wider circulation and use of such units beyond the centres in which they were struck, and the possibility, therefore, of conducting transactions within the markets of cities that might represent part of a kind of union. Such a currency, therefore, might have been valid in Nicaea, Prusias, Iuliopolis, Amastris, and Abonoteichos. In addition, circulating within the province, based on the duplication of images, were also bronze imperial coins from the reigns of Titus and Domitian, probably minted in Thrace between 80–82.<sup>26</sup> It should also be mentioned that some cities from this region probably did not issue their own coin at all (e.g. Erytinoi, Krobialos, Cytorus, Aigialos, Abana<sup>27</sup>), or did not do so in the Trajan period (e.g., presumably, Caesarea Germanica, Cius, Bithynium Claudiopolis). In the case of the former group of cities, a currency issued in a nearby mint could circulate within their markets, whereas for the latter group it would have been possible in everyday transactions to use the currency struck in previous years, and/or, perhaps, that issued by other nearby mints. Other inflowing emissions should not be excluded either. Clearly more research in several disciplines is needed to resolve such specific issues.

<sup>24</sup> Howgego 2005b: 226; Price 1967: 37.

<sup>25</sup> See Avram 2013.

<sup>26</sup> One of the scientists (Cahn 1984–1985: 22) made a suggestion about the possible location of the mint in Bithynia and Pontus, but, as mentioned, it is not possible to confirm this theory.

<sup>27</sup> Umar 2007: 55–63; 65–67.

Some information about the circulation in the Roman period is provided by coin finds from the sites already mentioned previously, i.e. Iuliopolis, Tium, etc. Between 2009 and 2014 208 coins were discovered in the cemetery at Iuliopolis; of these perhaps 203 served as ‘Charon coins’, having been recovered in or near the mouths of the dead.<sup>28</sup> Coins were discovered in similar contexts within the Calchedon necropolis. A few Roman coins minted in Byzantium and Pergamum, mainly from the second half of the 2nd and the 3rd century, have also been found in a several sarcophagi in Calchedon.<sup>29</sup>

Focusing on the finds from Iuliopolis, among the coins there are 105 denarii, six antoniniani, and 92 bronze coins, struck mainly in provincial cities. Among the last group can be distinguished issues from the cities of Bithynia, including 28 coins from Iuliopolis, nine from Nicaea, six from Nicomedia, three of the *koinon* of Bithynia, one from Bithynium Claudiopolis, one from Creteia Flaviopolis, one from Prusias, one from Amastris, and also single coins from Ancyra, Pompejopolis, and Pisidian Antioch. Only a small number of the bronze coins (15) are illegible. The bronze issues are dated from the time of Trajan (one coin from Iuliopolis) to the 3rd century, including 13 coins from the reign of Antoninus Pius and seven with a portrait of Julia Domna.<sup>30</sup> The silver issues recorded range from the times of Augustus to Gordian III (238–244), the greatest numbers coming from the periods of Domitian (six), Trajan (15), Hadrian (21), and Antoninus Pius (14).<sup>31</sup> It is worth recalling that Iuliopolis was a transit city, a status also emphasised in Pliny’s correspondence.<sup>32</sup> It seems likely that the reigns of Trajan, Hadrian, and Antoninus Pius combined to form one of the most prosperous periods for the town. Given the location of Iuliopolis it is unsurprising that we have coins there from various other centres. In the analysis of the finds, M. Arslan suggested that the coin from Antioch of Pisidia could perhaps have arrived from a journey related to the cult of the god Men, who was worshipped both in Iuliopolis, where he was also featured on coins, and Pisidian Antioch, where there was an important site of worship for the deity.<sup>33</sup> The finds from the necropolis may well indicate the period of the city’s greatest development, which seems also to be confirmed by Pliny’s correspondence, as well as showing various contacts and the influx of coins, and in this case their functions related to payments on behalf of the deceased to assist their journeys in the afterlife. It is worth stressing here that there was no standard custom and both silver and bronze coins of different origins and periods were deposited. Once again, we should acknowledge that future research and new finds may change the above hypotheses.

Ancient Tium is another site that has been intensively researched recently. During archaeological investigations on the acropolis and in the former centre (lower town) between 2009–2012, 173 coins were discovered. 22 issues were registered in 2012 at the Ateş Tuğla factory during rescue work. In the same year a further 67 coins were discovered when heavy rainfall washed away earth deposits 40 km south of Üçburun (Gökçeşey district). Subsequent archaeological activities recovered 173 registered issues: 165 bronze, five silver and three billon coins. The emissions came from different periods – eight Hellenistic, 23 Roman, and 20 Byzantine. Some of the issues are illegible. Among the coins from the Roman period, 17

<sup>28</sup> Arslan 2014.

<sup>29</sup> Asgari and Firatlı 1978: 83–85.

<sup>30</sup> Arslan 2014: 15–17, 22, figs. 2–3, 6.

<sup>31</sup> Arslan 2014: 16–17, 23, figs. 4–6.

<sup>32</sup> Plin. *Ep.* 10.77–78.

<sup>33</sup> Arslan 2014: 16. Cf. Devicioğlu 2014: 222; 2016.

are from Tium, three from nearby Amastris, two from Nicaea, and one from the *koinon* of Bithynia. One of the Nicaea issues is that of the proconsul Gaius Papirus Carbo, while the coin struck on behalf of the *koinon* comes from the times of Vespasian. One of the Amastris coins was minted in Trajan's time. The remaining coins have portraits of Antoninus Pius (seven), Marcus Aurelius Caesar (two), Lucius Verus (one), and Commodus (two). The 3rd century is represented by coins of Caracalla and Geta. The silver issues date from the times of Julia Domna and Caracalla. In turn, among the registered coins from Üçburun, mostly in bronze (with the exception of the Hadrian denarius) from the Roman period, 17 coins were struck in Tium, three in Amastris, two in Heraclea, and one in Midaeum. These are emissions dated mainly from the times of Antoninus Pius to Maximinus Thrax. Also from Üçburun comes one of the smaller denomination coins of Trajan with a torch and a reference to Artemis. The rest of the registered coins are unreadable.<sup>34</sup>

Some of the coins from both Iuliopolis and Tium derive mainly from neighbouring centres. The *koinon* emissions may have circulated more widely, including within the cities belonging to the union. Unfortunately it is not known whether the coins found could also have been used within the local markets, but some, as was the case at Iuliopolis, could have served as grave gifts.

Analysis of coin circulation in Bithynia and Pontus should include, if possible, reference to material from museums in northern Turkey. Information on 383 coins (45 provincial and 338 imperial) from the Trajan period was obtained from local numismatic collections during this present research.<sup>35</sup> The provincial issues include mainly bronze coins; of the imperial issues, 314 are denarii, three aurei, and 21 are bronze coins. Unfortunately most of the coins were donated or purchased by the museum, hence it is not possible to define possible archaeological contexts. It seems, however, that some of the coins may have been found in nearby areas, which may also be indicated by the state of preservation of some of them. The local origin of the coin finds was also confirmed by some of the donors.<sup>36</sup>

Among the registered provincial coins from the time of Trajan, 17 were struck in the cities of Bithynia and Pontus. Most are issues without an ethnic indicating the mint. Single coins come from Prusa, Prusias, Heraclea, and Sinope.

Some of the coins, e.g. from Prusias<sup>37</sup> or Sinope<sup>38</sup>, were registered in the collections of the centres where they were struck, or, as in the case of emissions from Heraclea<sup>39</sup> and Prusa,<sup>40</sup> located in their vicinity (collections in Amasra and Izmit). During inquiries carried out in the

<sup>34</sup> Lenger 2012; Lenger and Atasoy 2015.

<sup>35</sup> April – November 2019, with kind permission of the TC Kültür ve Turizm Bakanlığı, Kültür Varlıkları ve Müzeler Genel Müdürlüğü (no. 64298988-155.02-E.283214 (2019.13.ZAJAC)). The museums in Edirne, Izmit, Istanbul, Karadeniz Ereğli, Amasra, Sinope, Konularp, and Iznik were visited. The numismatic collections during this research period held between 1300 and 10,000 coins from various periods, with Byzantine and Islamic issues dominating. The collection at Edirne contains c. 5000 coins, Izmit – 6000, Karadeniz Ereğli – 6000, Amasra – 1300, Sinope – 6000, Konularp – 6000, Iznik – 10,000 (of which only c. 3900 coins were available to the present author due to restoration work in the museum).

<sup>36</sup> Geyer, Lefort and Planet 1991: 117.

<sup>37</sup> Konularp 45.

<sup>38</sup> Casey *et al.* 2010: 30–31, nos. 333–336.

<sup>39</sup> Amasra 2.72. S.31/224.

<sup>40</sup> Izmit inv. no. 2009-487; Izmit Inv. No. 287.

1990s by French archaeologists, 625 ancient coins were identified in the museum in Iznik, 50 supposedly from Prusa, probably from the Roman Empire period.<sup>41</sup> Unfortunately, due to the small number of coins and the unknown possible archaeological context, it is not possible to confidently and more accurately determine the means by which these coins reached the city, nor how they functioned with the local market.

In the numismatic collections of some museums, mainly in Izmit (Nicomedia) and Iznik (Nicaea), there are coins without an ethnic.<sup>42</sup> Among these appear the legend ΣΕΒΑΣΤΗ / CEBACTH, with the images of Demeter and Athena, as well as ΔΙΟC and the altar. The probable mint that struck these coin types is Nicaea, which might be confirmed by the examples held in the local museum. Unfortunately their exact findspots and archaeological contexts are unknown (as in the case of coins of this type from the collections in Edirne (the former Hadrianopolis in Thrace) and Izmit). As mentioned previously, Nicaea and Nicomedia were located close to each other and competed for priority among other centres within the province. Nicomedia, as the capital and harbour, was then one of the most visited cities; thus coins from nearby Nicaea could also be found circulating within Nicomedia. Moreover the lack of an ethnic on the coin, and the image referring to popular cults, could have facilitated the circulation of the issue within another market.

One of the coins with the legend ΔΙΟC was struck with the same die as one of the issues from Midaeum, at the Synnada conventus, in the Asia province;<sup>43</sup> it is probably a die link of both cities. Unfortunately, the present author is unaware of other emissions from this centre within the numismatic collections in Iznik or other cities in northern Turkey. The only Midaeum from the reign of Caracalla registered so far comes from the rescue research in the above-mentioned town of Üçburun, near the former Tium.<sup>44</sup> It is not possible, therefore, to state or define the relationship between the two cities; perhaps the Nicaea workshop was just moved to Midaeum.

Another group of coins registered in the centres of northern Turkey is represented by issues coming mainly from neighbouring regions, including the provinces of Asia, Thrace, and Galatia-Cappadocia. The exceptions are coins from Perge and Aspendus in Pamphylia, now within collections held in Sinope<sup>45</sup> and Edirne<sup>46</sup> respectively. Among the issues from Asia there are coins from Cyzicus, Parion, and Apollonia ad Rhyndacum, i.e. cities located near the southern border of the province. An issue from the colony in Parion is now in Sinope,<sup>47</sup> the other two coins were registered in the numismatic collection in Iznik.<sup>48</sup> It is worth mentioning that inquiries made in the local museum by French researchers in the 1990s revealed numerous emissions from various periods from Cyzicus.<sup>49</sup> Only one of the registered coins from the reign of Trajan in the Edirne museum comes from the Thracian Perinthus.<sup>50</sup> In Izmit and Karadeniz Ereğli there were two coins from the provinces of Galatia and Cappadocia, minted on behalf of

<sup>41</sup> Geyer, Lefort and Planet 1991: 116. The authors mistakenly use the name Prusias instead of Prusa.

<sup>42</sup> Edirne Inv. No. Y67/67; Izmit inv. nos. 2009-143, 2918, 2949, 3845, 4130, 4644; Iznik inv. nos. 1053, 1990, 2020.

<sup>43</sup> RPC III 1156A (1) the same die as a RPC III 2646 (2) (Midaeum).

<sup>44</sup> Lenger and Atasoy 2015: 402, no. 197.

<sup>45</sup> Casey *et al.* 2010: 42, no. 441.

<sup>46</sup> Edirne R1706/4623.

<sup>47</sup> Sinope 3-189-70.

<sup>48</sup> Iznik 2163, 2048.

<sup>49</sup> Geyer, Lefort and Planet 1991: 116.

<sup>50</sup> Izmit inv. no. 605.

the *koinon* during the magistracy of T. Pomponius Bassus.<sup>51</sup> One of the coins in the collection in the former Heraclea is from Amasea,<sup>52</sup> while in Amasra, Iznik and Sinope there are three, including two drachmae and one didrachma from Caesarea.<sup>53</sup> The latter had a much wider range of circulation than other provincial coins. Due to the metrological similarity of the drachma to the denarius, finds of these are also known from other areas of the Roman Empire, as well as the *Barbaricum*.<sup>54</sup>

Another group of coins in the museums in northern Turkey includes issues from cities that are more distant than Asian centres, i.e. there are finds from Hierapolis<sup>55</sup> and Antioch,<sup>56</sup> located in Syria. Some of these, now in collections in Izmit, Iznik and Istanbul, were struck in the mint in Rome for the needs of the province there. Most of the coins were issued at the end of the emperor's reign, between 114 and 117, in connection with the Parthian campaign. The mint in Hierapolis also minted coins during this period to meet the demands of the army. The presence of such finds in Bithynia may be related to troops returning from the East.<sup>57</sup> One of these is stamped with the characteristic countermark of a laurel wreath, dated before 132–135, known from issues with portraits of Nerva, Trajan, and Hadrian.<sup>58</sup> Among the coins circulating in Syria there were also issues struck in Rome for the needs of Arabia.<sup>59</sup> Perhaps the presence of one of this type of coins in the Edirne collection<sup>60</sup> should also be associated with the return of troops from the Parthian campaign, however, as already emphasised, we also have no data regarding possible archaeological context.

Coins from Cyprus from this period in the museum collections in Amasra and Edirne<sup>61</sup> probably had a circulation range similar to the bronze coins of Antioch. Issues of this type were also registered in other numismatic collections in Turkey, Syria, Egypt, and Judea.<sup>62</sup>

Issues minted in 80–82 in an imperial branch mint, probably in Thrace, represent a final category of coins our research inquiries attempted to obtain information on. Due to the similarity of individual images on the coins of Bithynia and Pontus during the reign of Domitian and Trajan, it was necessary to take into account the possible location of the mint in this province also.<sup>63</sup> Some of the finds of this type of imperial coins were found in collections in Sofia, Belgrade and Istanbul, hence the conclusion regarding the location of a mint in Thrace, perhaps at Perinthus.<sup>64</sup> The lack of this type of coins within collections in northern Turkey could perhaps confirm this view. However it should be borne in mind that, as images

<sup>51</sup> Izmit inv. no. 4015; Karadeniz Ereğli inv. no. S.95.5.41. Cf. Arslan 1997; Amandry, Burnett *et al.* 2015: 361–367.

<sup>52</sup> Karadeniz Ereğli inv. no. S.95.4.4. Cf. Amandry, Burnett *et al.* 2015: 368; Dalaison 2008: 181–188.

<sup>53</sup> Amasra inv. no. 2.3. S.95/639; Iznik Inv. No. 2469; Sinope inv. no. 1-1-2003. Cf. Amandry, Burnett *et al.* 2015: 376–389, 802; Metcalf 1996: 55–62, 83.

<sup>54</sup> See, i.a., Bar 1985; Bodzek 2004; Zajac 2016; 2017a.

<sup>55</sup> Edirne inv. no. R333/457; Iznik inv. no. 930.

<sup>56</sup> Edirne inv. no. R925/2956; Amasra inv. no. 4.7. S.07/1178; Iznik inv. nos. 661, 1662, 2571; Istanbul inv. no. KD2048/44; Izmit inv. nos. 2009-480, 3241, 4100, 4127.

<sup>57</sup> Amandry, Burnett *et al.* 2015: 436, 441–442, 444–473; Butcher 2004: 35–37, 267, 445; Carradice and Cowell 1987: 28, 38–43; McAlee 2007: 191, 193.

<sup>58</sup> GIC 378. Cf. Howgego 2005b: 177; McAlee 2007: 193–194. Cf. Butcher 2004: 187, 190, 268; Metcalf 1977: 69.

<sup>59</sup> Amandry, Burnett *et al.* 2015: 528, 534–535; McAlee 2007: 194.

<sup>60</sup> Edirne inv. no. R2549/5941.

<sup>61</sup> Edirne inv. no. R2227/5143; Amasra Inv. No. 5.10. S.02/852.

<sup>62</sup> Butcher 1988: 27; Parks 2004: 159, footnote no. 49.

<sup>63</sup> Cahn 1984/1985: 22.

<sup>64</sup> Burnett 1999: 95–101.

of this type were duplicated, they were also circulated in the province. Possible single coin finds in individual regions of Bithynia and Pontus do not necessarily indicate the location of the mint in that region.

Imperial coins from the time of Trajan dominate in the numismatic collections of museums in northern Turkey, being those struck during the V and VI consulates (103–111 and 112–117), with 95 coins from 106–109, and 80 from 113–116. Imperial coins also circulated in the provinces, confirmed by single finds or hoards,<sup>65</sup> however we do not have many discoveries or deposits of this type from the areas of northern Turkey.<sup>66</sup> The above-mentioned hoard of imperial coins from Koçoğlu, a town located near the southern border of Bithynia and Pontus, deserves attention. The find consisted of at least 208 denarii and two drachmae from the times of Otho to Antoninus Pius, of which 66 were issued from the reign of Trajan. Most come from the V and VI consulates of the emperor (which is unsurprising given that these periods overlap with the majority of the ruler's reign). It should be emphasised, however, that it is not known how many coins were in this hoard, nor what they represented, as only a part of the deposit was intercepted.<sup>67</sup> A larger number of coins from the times of Trajan, struck mainly after the Dacian wars, would seem to indicate a more intense influx, and thus the possibility of modelling some portraits of the emperor placed on provincial coins on later issues.<sup>68</sup> It is also worth bearing in mind the quite obvious issue that more coins may have come from later periods than the beginnings of the emperor's rule, e.g. due to the conquest of Armenia in 114, or the Parthian campaign carried out from 115. Unfortunately, as already mentioned above, in most cases, nothing is known about the archaeological context of the coins; however it can be assumed that some were found in nearby areas, perhaps also reinforced by their state of preservation.

As mentioned above, one of the ways to accept a foreign currency into the local market was countermark stamping, and this solution was used for many emissions from different cities, e.g. in Sardis.<sup>69</sup> Some coins from Bithynia and Pontus from the time of Trajan also have several countermarks, both from the centre of issuing, e.g. Amisus or Prusias, and from the cities into which they were introduced, i.e. Tomis in Moesia, and Hadrianopolis in Thrace. Unfortunately some of the countermarks remain unidentified. Moreover, as mentioned above, during the reign of Trajan there were also coins from the time of Flavian in circulation, and probably also a lesser amount from the Julio-Claudian dynasty. Countermarks with the AYTK monogram, probably placed under Trajan, appear on coins of Prusias minted in the time of Domitian.<sup>70</sup>

The presence of inhabitants from the province in the areas of Thrace, Moesia, and the northern shores of the Black Sea is confirmed, *inter alia*, by inscriptions and various documents. A. Avram distinguishes three territories in terms of the movements of the citizens of different cities. In his division he distinguishes the following groups: one includes Amastris, Tium, Sinope, and Amisus; another has Ionopolis Abonoteichos and perhaps Heraclea and Prusias;

<sup>65</sup> Cf. Arslan 2014; Butcher 1988: 15; Evans 2018: 148–160; Lenger and Atasoy 2015: 388–391; Lightfoot 2012: 112–116; Schachinger 2014.

<sup>66</sup> Possibly, coin finds took place while the study was in progress or are within the collections, but the present author is unaware of them.

<sup>67</sup> Arslan 1996.

<sup>68</sup> Zajac 2020.

<sup>69</sup> Evans 2018: 101–103; Howgego 2014: 307–308.

<sup>70</sup> Howgego 2005b: 226; Price 1967: 37.

and the third Nicomedia and Nicaea. The citizens of Sinope, Amisus, and Amastris travelled to the Bosporan Kingdom, Olbia, and Chersonesus. Inhabitants of Tium and Abonoteichos travelled to Tomis. Men from Nicomedia played a significant role in the marble trade, for which they were well known, while some of the inhabitants of Nicaea were known as architects. On the basis of various sources it can be concluded that the Bithynians, mainly from Nicomedia and Nicaea, settled in Philippopolis, Serdica, Augusta Traiana, and Nicopolis ad Istrum. Presumably the people of Nicomedia became one of the main business partners of Tomis. In addition, the citizens of these regions settled in the areas of Bithynia and Pontus, as indicated by inscriptions from tombstones and other evidence. Heraclea, for example, was inhabited by people from Mesambria, Odessus, Callatis, Tomis, Istria, Chersonesus, and Panticapaeum; in Nicaea there were residents from Philippopolis, Topeiros, Augusta Traiana, and Serdica.<sup>71</sup>

The pseudo-autonomous coins are also of interest; without portraits of the emperor, or one of his family members, they were able to have a much more universal role within monetary circulation.<sup>72</sup> Presumably these could have circulated over a much wider area, and for longer; coins of this type, struck in Pergamum, have been found in an Allianoi, a nearby spa town,<sup>73</sup> as well as the necropolis of Maymun Sekisi Tepesi.<sup>74</sup> Unfortunately, in their case it is not always known when they were struck. The same applies to the issues that were probably struck in the early or mid 2nd century, but their assignment to the time of Trajan remains uncertain. We are unaware so far of pseudo-autonomous coins found in northern Turkey that come from this period.

The study of the possible structure of monetary circulation in a centre or region requires analysis of a longer chronological sequence, not limited, as in this case, only to the period of Trajan's reign. However it is possible to notice some trends and directions, or shares of emissions from individual regions or mints. In the case of Bithynia and Pontus, in general, it can be said that, in the times of Trajan, emissions from earlier periods circulated in the cities. In addition, coins from neighbouring cities could inflow there, due to its location, and thus there could have been possible transactions. Also, due to the provincial location, issues from more distant regions, such as in this case from Syria, could appear in its territories, i.e. following the return of the army from individual campaigns. Another aspect is the political situation and the expansion of Roman influence, which also determined imperial issues in the Roman provinces. It is worth emphasising, however, that in many cases it is not possible to say more about the possible function of coins from different centres, if any.

We should also look at the circulation of the coins of Bithynia and Pontus outside the areas of the cities that issued them, or even the provinces. Some finds, e.g. coins from Byzantium, Nicomedia and Nicaea, are also known from other regions. As already mentioned, coins from the mints of Bithynia and Pontus struck during the reign of Trajan were circulating within the territories of Moesia and Thrace. Concentrations of their emissions from later periods are visible in the Balkans, especially in deposits from the 3rd century. Single finds are also recorded from the territories of the Empire and the *Barbaricum*.<sup>75</sup>

<sup>71</sup> Alexandrescu-Vianu 2008-2009; Avram 2013; Ward-Perkins 1980.

<sup>72</sup> Johnston 1997.

<sup>73</sup> Cf. Tekin and Erol-Özdizbay 2012: 351-354; 2014: 295-299; 2016: 125-126.

<sup>74</sup> Yaraş and Lenger 2009: 401-403.

<sup>75</sup> Calomino 2019; Crnobrnja and Vasić-Derimanović 2017; Güney 2014; 2016: 417-418, fn. 13; Myzgin and Sidarovich 2020; Schönert-Geiss 1972: 24-25; Vojvoda 2017.

# The coinage of Bithynia and Pontus and issues of the neighbouring Roman provinces

Bithynia and Pontus was adjacent to three other Roman provinces, to the west to Thrace, to the south to Asia, and to the east to Galatia and Cappadocia. It is worth paying attention, therefore, to some general similarities and differences between the provinces, especially border towns, as the traditions of individual regions and centres were not limited only to administrative borders. Emissions from different cities might perhaps indicate mutual relations or common customs.

## The coinage of Thrace

Thrace was incorporated into the Empire in AD 46 in the time of Claudius, and it was managed by the Roman procurator.<sup>1</sup> Trajan changed the organisation of the province, appointing a *legatus Augusti propraetore*. New cities were also founded, e.g. Trajanopolis, Plotinopolis, and Ulpia Nicopolis ad Mestum.<sup>2</sup>

In Thrace in the time of Trajan coins were issued by centres such as Abdera, Deultum, Perinthus, Philippopolis, and Sestus. Most cities minted their coins as early as the Julio-Claudian and Flavian dynasty. The colonies of Deultum were established during the reign of Vespasian, but the first emissions come from the time of Trajan. Going by the small numbers of coins we have to date it seems that production in many centres during this period was not intensive: only the mint at Perinthus appears to have struck its coins quite regularly.<sup>3</sup> In Hadrian's time coins were also issued by cities such as Thasos, Abdera, Maronea, Bizya, Mesambria, and Coela. Many more coins have been preserved from that period, suggesting that the cities had a similar monetary system, something that cannot be said in relation to the times of Trajan.<sup>4</sup>

From this period, Abdera struck coins with sizes corresponding to 1½, 1 and ½ assaria, the first of the denominations being introduced in the time of Trajan.<sup>5</sup> Two types of images were placed on reverses in the times of Tiberius, Claudius, Nero, Vespasian, and Trajan, i.e. a male bust, probably the emperor, and from the time of Trajan also possibly Timesios of Clazomenai, the founder of the city, and Nike.<sup>6</sup>

Philippopolis minted a limited amount of coins in Trajan times, probably in two different sizes: 18–19 mm, 3–5 g, with the image of Dionysus, and 16–17 mm, 2–3 g, with the figure of Artemis on the reverse, dated on the basis of the legend referencing the V consulate, i.e. the

<sup>1</sup> Amandry, Burnett *et al.* 1999: 311; Parissaki 2009: 320; Sartre 1997: 45.

<sup>2</sup> Amandry, Burnett *et al.* 2015: 85 (there is also commentary on the coins from Trajanopolis); Parissaki 2009: 350.

<sup>3</sup> Amandry, Burnett *et al.* 1992: 311–320; 1999: 76–78; 2015: 816; Schönert 1965: 5–7.

<sup>4</sup> Amandry, Burnett *et al.* 2015: 86, 816, tab. 28.

<sup>5</sup> Amandry, Burnett *et al.* 2015: 817, tab. 28. Cf. 1992: 315; 1999: 77.

<sup>6</sup> Amandry, Burnett *et al.* 2015: 86; RPC I 1727–1731; RPC II 355–357; RPC III 669–673.

years 103–111.<sup>7</sup> The effigy of Dionysus was also placed on coins of the same size in Perinthus during this period.<sup>8</sup>

Only coins that are probably  $\frac{1}{2}$  assarion are known from Sestus.<sup>9</sup> Issues from this city were similar to those from Abydus, located on the other side of the Hellespont, both in terms of size and certain features on individual finds, e.g. legends and portraits/motifs.<sup>10</sup> The main motif was the lyre on many coins, probably from the times of Augustus.<sup>11</sup>

From the Roman colony at Deultum we know so far one coin from the times of Trajan (18 mm, 3–4 g) with the head of an ox and the legend of COS III, indicating it was struck in the year 100.<sup>12</sup>

The mint at Perinthus, the capital of Thrace, stood out among the other centres of the province. Since the times of the Julio-Claudian dynasty it has issued large brass coins resembling Roman sestertii. It is likely that issues with Latin legends were minted there under Nero, and then a similar series under the Flavians.<sup>13</sup> A simplified sigma appears in the legends on coins struck in Nero's time.<sup>14</sup> During the reign of Trajan the mint probably issued five different denominations corresponding in size to 1,  $1\frac{1}{2}$ , 2, 3, and 4 assaria.<sup>15</sup> In the first period, dating back to the years 98–102, the largest coins had images of Nerva, Homonoia or Concordia, and Zeus; the 29 mm, 15–17 g coins had a standing Tyche. Emissions corresponding to 2 and  $1\frac{1}{2}$  assaria showed Demeter, Zeus and Heracles, respectively, as well as Tyche and Homonoia or Concordia.<sup>16</sup> On both units the emperor is depicted in a radiant crown, as in Philippopolis under Domitian.<sup>17</sup> In the following period, dating from 102, the mint issued coins corresponding to the size of 1 assarion with the image of Dionysus.<sup>18</sup> On the coins minted during the office of Iuventius Celsus, i.e. the years 109–112, Tyche was placed on the largest units; issues of 26–29 mm, 9–11 g feature Plotina, and coins of 18–22 mm, 4–6 g depict a lion skin on a club and Homonoia or Concordia.<sup>19</sup> These motifs were relatively popular and universal, appearing also on the coins of many other centres in Bithynia and Pontus in the times of Trajan.

The mint also issued various pseudo-autonomous coins in three different sizes (23–25 mm, 7–9 g; 17–20 mm, 3–5 g; 14–17 mm, 3–4 g) dating from the end of the 1st and beginning of the 2nd century. On the obverses there were busts of Heracles, Dionysus, Demeter, and Apollo, and the reverses featured either figures (Zeus, Demeter, Artemis) or motifs (cornucopia, lyre, baskets with poppies and ears of corn).<sup>20</sup>

<sup>7</sup> RPC III 744–745.

<sup>8</sup> RPC III 696–703.

<sup>9</sup> Amandry, Burnett *et al.* 2015: 817, tab. 28.

<sup>10</sup> Amandry, Burnett *et al.* 1992: 311, 317.

<sup>11</sup> Amandry, Burnett *et al.* 1992: 317–318. Cf. RIC I 1739–1744; RIC II 358–359; RIC III 756.

<sup>12</sup> RPC III 743; Yourukova 1.

<sup>13</sup> Amandry, Burnett *et al.* 1992: 311, 318–319; 1999: 76, 78.

<sup>14</sup> Amandry, Burnett *et al.* 1992: 318.

<sup>15</sup> Amandry, Burnett *et al.* 2015: 88, 817.

<sup>16</sup> Schönert 1965: 144–153. RPC III 682–695.

<sup>17</sup> RPC II 352–353.

<sup>18</sup> RPC III 696–703.

<sup>19</sup> Schönert 1965: 6–7, 151–152. RPC III 704–709.

<sup>20</sup> Schönert 1965: 23–26. RPC III 720–727.

Previous chapters have mentioned the similarities between the coins of individual cities of Bithynia and Pontus and Perinthus in terms of metrology, the ores used, and the images depicted on them.<sup>21</sup> Imperial coins were probably also minted in Perinthus between 80–82, becoming the model for the issues of individual cities of Bithynia and Pontus in the times of Trajan.<sup>22</sup> This, in turn, shows that various tendencies coming from the west are spreading.<sup>23</sup>

### The coinage of Asia

Asia was one of the oldest and richest Roman provinces in the Empire. Its special status meant that its management was a prestigious distinction that could only be awarded to a former consul.<sup>24</sup> Due to its size it was divided into smaller administrative units (*conventus*);<sup>25</sup> at the beginning of the 2nd century there were 14 of them.<sup>26</sup>

During the reign of Trajan 99 cities in Asia issued coins, with the mints of Pergamum, Sardis, Ephesus, and Alabanda producing large amounts.<sup>27</sup> During this period perhaps as many as eight different denominations were struck in the province.<sup>28</sup>

From the era of the Julio-Claudian dynasty there was a gradual spread of certain trends related to the size of individual coins or the images placed on them. Some larger denominations were introduced during this period in Mytilene (29 mm, 16–17 g), Parium (27–28 mm, 13 g), Cos (31 mm, 21 g), Rhodes (35 mm, 23–24 g), Alabanda (31–33 mm, 18–20 g, 24 g), and Cotiaenum (30 mm, 20 g),<sup>29</sup> and, during the reign of Flavians, also in Cyzicus (30 mm, 16–17 g), Pergamum (30 mm, 17 g), Ephesus (30 mm, 19–23 g), Magnesia ad Meandrum (33 mm, 30 g), Samos (32 mm, 20–25 g), Laodicea (33 mm, 21 g), Aezani (32 mm, 19 g), and Midaenum (34 mm, 25–26 g).<sup>30</sup> During the reign of Trajan there was a large variation in coin sizes, and thus presumably different denominations. Occasionally neighbouring cities issued coins that were very similar in size, e.g. Elaea and Pitane (the *conventus* of Pergamum)<sup>31</sup> or Clazomenae and Erythrae (the *conventus* of Smyrna).<sup>32</sup> This, in turn, may indicate different, not always known, contacts and connections between the centres, as well as a possible common circulation. We can also see the popularity of certain coin sizes in individual cities during the time of Trajan: in Poemanenum (*Adramyteum* *conventus*), Ephesus, Colophon, Metropolis, Hypapea (*Ephesus* *conventus*), Ancyra, Maeonia (*Sardis* *conventus*), and Alia (*Apamea* *conventus*), coins appear sized at 26–30 mm, 16–19 g, 21–24 mm, 7–10 g, and 17–20 mm, 4–6 g.<sup>33</sup>

<sup>21</sup> Production in the Provincial Centres (chapter VIII), Metrology and denominations (chapter IV) and Iconography of Coins of Bithynia and Pontus during the Reign of Trajan (chapter V.3). Cf. Amandry, Burnett *et al.* 1992: 22–23, 35, 311, 338.

<sup>22</sup> Burnett 1999; Zajac 2019b: 132–133. RPC I 1758–1762.

<sup>23</sup> Tsetschladze 1999.

<sup>24</sup> Magie 1950: 376, 415–416; Mitchell 1993: 29; Sartre 1997: 24.

<sup>25</sup> Burton 1975: 92, 94; Habicht 1975: 67–70.

<sup>26</sup> *Conventus*: Cyzicus, *Adramyteum*, Pergamum, Smyrna, Ephesus, Miletus, Halicarnassus, Alabanda, Cibyra, Philadelphia, Sardis, Apamea, Synnada, Philomelium.

<sup>27</sup> Zajac 2020: 36–37, fig. 1b.

<sup>28</sup> Cf. Amandry, Burnett *et al.* 2015: 817–819, tab. 32, 36.

<sup>29</sup> Mytilene RPC I 2343; Parion RPC I 2260; Cos RPC I 2724–2731; Rhodes RPC I 2748–2767; Alabanda RPC I 2817–2818, 2822–2823; Cotiaenum RPC I 3218.

<sup>30</sup> Pergamum RPC II 920; Cyzicus RPC II 883; Ephesus RPC II 1070–1073, 1078–1080; Magnesia ad Meandrum RPC II 1145; Samos RPC II 1128–1129; Laodicea RPC II 1281–1285; Aezani RPC II 1362, 1369; Midaenum RPC II 1415.

<sup>31</sup> Elaea RPC III 1883–1884; Pitane RPC III 1880–1881. Cf. Zajac 2020: 41.

<sup>32</sup> Clazomenai RPC III 1984–1986; Erythrae RPC III 1991–1994. Cf. Zajac 2020: 42.

<sup>33</sup> Amandry, Burnett *et al.* 2015: 199 (*Poemanenum*); 251 (*Ephesus*); 245–248 (*Colophon*, *Metropolis*, *Hypapea*); 315–

Several cities also issued coins highlighting the agreements made between the centres, with images of this type appearing also on larger issues. In the time of Trajan Pergamum issued such coins (25–30 mm, 13–15 g), referring to the alliance with Ephesus and Thyatira.<sup>34</sup> In turn, in Hadrian's time, images of this type were placed on coins of Myrina (29 mm, 13–14 g), Laodicea (27–30 mm, 17–19 g), Magnesia ad Meandrum (35 mm, 23–25 g) and Hierapolis (27–30 mm, 17–19 g and 35 mm, 20–24 g).<sup>35</sup>

Most of the coins minted in Asian centres during the reign of Trajan showed images of the emperor and members of the imperial family, including Plotina, Marciana and Matidia, although pseudo-autonomous coins were also issued in many cities. 74% of the portraits of women from this period, placed on the coins of 13 centres, were on issues of size 18–19 mm, 4–6 g, i.e. corresponding to the assarion.<sup>36</sup>

In the case of the Asian provinces, only 29 cities out of 163 did not issue pseudo-autonomous coins. At the beginning of the 2nd century there were probably 60 centres striking coins of this type, most of them coming from the mints in the *conventus* of Pergamum and Sardis. It is worth emphasising, however, that gaps in our information on the coins are also related to the state of research in these regions, as well as to the importance of various cities within them. Very popular types on obverses were the personification of the Senate (24%), referring to loyalty to the Empire,<sup>37</sup> and the image of Athena (14%).<sup>38</sup> Other motifs on coins of various sizes and minted in many centres were Heracles, Tyche, Artemis, and Demos.<sup>39</sup>

The most frequent motifs appearing on the reverses of the coins of Asian cities were Artemis,<sup>40</sup> Apollo,<sup>41</sup> Zeus,<sup>42</sup> Nike,<sup>43</sup> Tyche,<sup>44</sup> and Demeter,<sup>45</sup> but the sizes of the coins with the given types are still very diverse.

The locations of individual mints near the borders of Bithynia and Pontus are relevant in terms of cities such as Cyzicus, Apolonia ad Rhyndacum, Dorylaeum, and Midaeum.

At Cyzicus during this period, coins were probably issued in five different denominations with images of Athena, Demeter, Asclepius, Zeus, Apollo, the altar, torch and caduceus.<sup>46</sup> In Apolonia coins were minted in four or five sizes with the motifs of Apollo and lyre,<sup>47</sup> while in Dorylaeum, Zeus, Cybele, Poseidon and Apollo were placed on coins struck in four denominations.<sup>48</sup> Coins of five or six sizes with different images were issued at Midaeum, including Zeus, Cybele,

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316 (Ancyra); 300–302 (Maeonia); 327 (Alia).

<sup>34</sup> Kampmann 1996: 28–29, 101, no. 3, 77–79, 126, no. 154

<sup>35</sup> Myrina RPC III 1918; Laodicea RPC III 2340–2342; Hierapolis RPC III 2356; Magnesia ad Meandrum RPC III 2127.

<sup>36</sup> Zajac 2020: 44–45.

<sup>37</sup> Katsari 2012: 35; Zajac 2020: 49–51.

<sup>38</sup> Zajac 2020: 49–51.

<sup>39</sup> Cf. Zajac 2020: 49–51.

<sup>40</sup> Mytilene RPC III 1683; Thyatira RPC III 1820; Hierocaesarea RPC III 1845–1847.

<sup>41</sup> Germa RPC III 1763, 1765; Nacrassa RPC III 1789–1790, 1796; Thyatira RPC III 1815, 1818–1819.

<sup>42</sup> Attaea RPC III 1752, 1754; Stratonicea RPC III 1772; Thyatira RPC III 1816–1817; Pitane RPC III 1881.

<sup>43</sup> Stratonikeja: RPC III 1773; Nacrassa: RPC III 1800; Tiatyra: RPC III 1825; Pitane RPC III 1880.

<sup>44</sup> Pergamum RPC III 1720–1724; Thyatira RPC III 1826, 1828, 1831; Hierocaesarea RPC III 1849–1850.

<sup>45</sup> Mytilene RPC III 1684; Hermocapelia RPC III 1872.

<sup>46</sup> RPC III 1485–1497.

<sup>47</sup> RPC III 1595–1598A.

<sup>48</sup> RPC III 2635–2638.

the personification of the Tembris River, Asclepius, Men, Hygieia, and Athena.<sup>49</sup> Among the common motifs of the above cities, as well as in the border centres of Bithynia and Pontus, i.e. Prusa, Iuliopolis, and probably Nicaea (coins without an ethnic), there are the altar, the figure of Demeter and Athena on the coins of Cyzicus, Zeus on the Dorylaeum emissions, and Zeus, the river deity and Athena on finds from Midaeum. Both on the Prusa, Dorylaeum and Midaeum coins, Zeus was placed on the largest denominations, probably corresponding to 6 assaria.<sup>50</sup> In Midaeum coins sized at 34 mm, 23–25 g appear already in the times of Domitian,<sup>51</sup> while in Apollonia and Dorylaeum they probably occur during the reign of Trajan.<sup>52</sup> Most denominations in the centres follow the general tendency to strike coins of certain sizes during this period. In Midaeum during the reign of Domitian there is also the above-mentioned altar motif, which may reflect the cult popular in the region.<sup>53</sup> Earlier, the same coin dies from the city were also mentioned as well as probably Nicaea, which may suggest that the workshop was moved to Midaeum.<sup>54</sup>

Because of the locations of these cities their inhabitants maintained various contacts with the populations in the centres of Bithynia and Pontus. As previously noted, coins from Cyzicus, probably from different periods, as well as from Apollonia, are registered in the Iznik museum (formerly Nicaea).<sup>55</sup> It is also worth emphasising the importance of individual cities, such as Iuliopolis, which was once an important transit point.

### The coinage of Galatia and Cappadocia

Galatia was annexed to the Empire in 25 BC after the death of King Amyntas, and Cappadocia in 17 BC after the death of King Archelaus. Vespasian connected the two lands that were to be ruled by the imperial legate. Probably in the years 112–113 the province was divided, with Cappadocia co-creating the newly created province of Armenia. After the emperor's death the two lands were reunited.<sup>56</sup>

There were 14 mints in the province in Trajan's time.<sup>57</sup> Seven coin sizes are known, with individual cities very often issuing mainly three different denominations (30–32 mm, 19–22 g; 24–26 mm, 10–12 g; 16–19 mm, 4–6 g).<sup>58</sup> The standard popular motifs were featured, especially Zeus and Tyche.<sup>59</sup>

<sup>49</sup> RPC III 2643–2652.

<sup>50</sup> Prusa RPC III 1035–1037; Dorylaeum RPC III 2635; Midaeum RPC III 2643.

<sup>51</sup> RPC II 1415–1415B.

<sup>52</sup> Apollonia RPC III 1596; Dorylaeum RPC III 2635.

<sup>53</sup> RPC II 1416.

<sup>54</sup> Cf. chapter Production in the Provincial Centres (chapter VIII) and page 170.

<sup>55</sup> Zając 2021; Iznik Inv. No. 2163, 2048.

<sup>56</sup> Amandry, Burnett *et al.* 2015: 350; Sartre 1997: 31–32, 40, 49.

<sup>57</sup> Adada, Pednelissus, Neoclaudiopolis, Amasea, Sebastopolis, Comana, Neocaesarea, Trapezus, Zela, Megalopolis, Nicopolis, Tyana, Cesarearea, Cybistra.

<sup>58</sup> Amandry, Burnett *et al.* 2015: 351, 819, 825, tab. 38.

<sup>59</sup> Zeus: Adada RPC III 2809; Pednelissus RPC III 2812–2813; Zela RPC III 2935; Megalopolis-Sebasteia RPC III 2937A; Nicopolis RPC III 2941; Tyche: Neoclaudiopolis RPC III 2907–2908; Neocaesarea RPC III 2926; Tyana RPC III 2946–2949.

An important centre was Caesarea, which also issued silver coins, including didrachmas, drachmas and hemidrachmas, which, due to their metrological similarity to denarii, circulated much more widely than the areas of Galatia and Cappadocia.<sup>60</sup>

On behalf of the *koinon* of Galatia in the time of Trajan, coins were issued in four sizes (30–31 mm, 22–23 g; 22–26 mm, 10–12 g; 20 mm, 7–8 g; 18 mm, 5–6 g) with images of the temple, the figure of Cybele, Zeus, Demeter, Mena, and Tyche.<sup>61</sup> The largest denomination has so far been registered in collections in Izmit (formerly Nicomedia) and Karadeniz Ereğli (the former Heraclea Pontica).<sup>62</sup>

As mentioned earlier, only a small part of historical Pontus fell within the administrative boundaries of Bithynia and Pontus. During the reign of Mithridates VI the mints of various cities issued similar coins.<sup>63</sup> For this reason it is also necessary to look at other towns in this region, such as Neoclaudiopolis, Amasea, Comana, Neocaesarea, Sebastopolis, Trapezus, Zela, Megalopolis-Sebasteia, and Nicopolis ad Lycum, which were located in the provinces of Galatia and Cappadocia, when making comparisons with the mint in Amisus.

All of the above-mentioned cities issued coins with dates according to the local eras. Neoclaudiopolis began minting its own coins in Trajan's time, in two different sizes (24–27 mm, 11–12 g and 21–22 mm, 6–8 g), with images of Tyche, Asclepius, and a shield.<sup>64</sup> Amasea issued coins in two units (22–23 mm, 6–7 g and 19–20 mm, 5–6 g) with a funeral pyre, a temple, and a serpent on an altar.<sup>65</sup> Sebastopolis issued three denominations (27–28 mm, 18–20 g, 21–22 mm, 8–10 g, and 18 mm, 5–6 g), depicting a laurel wreath and a reference to the Julius Frontinus, a club and a lion skin, and a club with arrows (perhaps), thus referring to the mythical founder of the city.<sup>66</sup> We know so far from Comana coins sized at 30–32 mm, 20–21 g, with the figure of Enyo/Ma standing in the temple; 23 mm, 10–11 g with Apollo; and 20 mm, 6–7 g with a club. All emissions uniquely do not relate to the local era.<sup>67</sup> In Neocesaerea, emission in sizes of 30–31 mm, 19–22 g, and 25–26 mm, 10–12 g were minted with motifs of Athena Promachos, Tyche, a serpent on the altar, and a legend.<sup>68</sup> In Trapezus, where production was resumed during Trajan's reign, three denominations (30–32 mm, 16–18 g, 20–22 mm, 6–7 g, and 20 mm, 4–5 g) were issued with images of Mithra, a thyrsus, and a reference to the city's name and dating. The coins were minted between 113 and 114.<sup>69</sup> The cult of Mithra was one of the main beliefs in the city, as indicated, among others, by various effigies on coins struck in particular periods.<sup>70</sup> Zela is known for coins with Anahita-Anaitis, Zeus Epikarpos, and a serpent on the altar, respectively 32–33 mm, 19–20 g, 24–25 mm, 10–11 g and 19 mm, 5–6 g.<sup>71</sup> In Megalopolis-Sebastea, probably four different units were struck (35 mm, 25–26 g, 31 mm, 23 mm, 10–11 g,

<sup>60</sup> Amandry, Burnett *et al.* 2015: 351, 376–379. Some coins were probably also struck at the mint in Rome, based on certain stylistic features. For a comment on this issue: Amandry, Burnett *et al.* 2015: 375–379.

<sup>61</sup> Amandry, Burnett *et al.* 2015: 372. RPC III 2840–2904.

<sup>62</sup> Zajac 2021; Izmit inv. no. 4015; Karadeniz Ereğli inv. no. S.95.5.41.

<sup>63</sup> de Callataÿ 2014; Olshausen 1990.

<sup>64</sup> Amandry, Burnett *et al.* 2015: 367. RPC III 2905–2908.

<sup>65</sup> Amandry, Burnett *et al.* 2015: 368; Dalaison 2008: 67–68. RPC III 2909–2912.

<sup>66</sup> Amandry, Burnett *et al.* 2015: 369. RPC III 2918–2919A.

<sup>67</sup> Amandry, Burnett *et al.* 2015: 369–370; Amandry and Rémy 1999. RPC III 2921–2921B.

<sup>68</sup> Amandry, Burnett *et al.* 2015: 370; Çizmeli 2006. RPC III 2922–2926.

<sup>69</sup> Amandry, Burnett *et al.* 2015: 371–372; de Callataÿ 2007: 1–2; 2011b: 458–459, fig. 2; Wojan 2006: 191–192, 195–197. RPC III 2929–2933A.

<sup>70</sup> Wojan 2006: 189–190.

<sup>71</sup> Amandry, Burnett *et al.* 2015: 372; Dalaison, Rémy and Amandry 2009. RPC III 2934–2936.

and 19 mm, 4–5 g) depicting Zeus, altar and ears of corn, and a horse and bull.<sup>72</sup> Finally, four denominations were minted in Nicopolis (33–35 mm, 23–26 g, 25–26 mm, 13–14 g, 23–24 mm, 8–9 g, 18–19 mm, 3–5 g) with the images of Zeus, Nike walking, serpent on the altar, conquered Armenia, and a reference to the city's name and dating. The individual themes refer to the imperial propaganda of the emperor, his campaigns and conquests. The serpent motif, in turn, could refer to the popular cult of Asclepius. In the time of Trajan the coins were minted in the years 104–105, 112–113, and 113–114.<sup>73</sup>

On the basis of the coins registered so far, it can be assumed that this is only a small part of all the minted coins from the times of Trajan. The dating of these individual issues is quite diverse. There is also uncertainty about all the denominations struck at that time. However there are similar tendencies that are related, for example, to placing Pontic dates on coins according to local eras, or the popularity of certain cults, such as Zeus (Zela, Megalopolis-Sebasteia) or Asclepius (Amasea, Neoclaudiopolis, Neocaesarea, Zela, Nicopolis), as referenced previously. In the case of Asclepius, this is mainly represented by images of the serpent on the altar,<sup>74</sup> depicted primarily on coins corresponding to the assarion. The exception is Neocaesarea, where this motif was found on emissions of 25 mm, 10–11 g. On the coins of individual cities there are also other motifs common to the Amisus centre, such as Tyche (Neoclaudiopolis, Neocaesarea), Athena (Neocaesarea), Nike (Nicopolis), a reference to Heracles (Sebastopolis), and Dionysus (Trapezus), placed on different sizes.

In terms of the provinces and individual mints we have looked at, the existence of certain general trends in various periods should be highlighted, although these are not always present in all cities, i.e. the prevalence of small denominations during the Julio-Claudian dynasty, and the introduction of larger units during the Flavian era. Some of the centres issued coins similar to the imperial ones, but each mint had its own system and traditions related to the images placed on it. During the reign of Trajan, many cities minted more denominations. In the case of Bithynia and Pontus some similarities can be seen in the emissions from Perinthus and Pontic cities. Border centres had various relationships with each other due to their proximity or importance. In turn the motifs we find in that period are among the most popular and were certainly easily recognisable by the inhabitants of various towns. It is also worth noting that some cities struck brass coins, which was quite typical for the north-western part of Anatolia.<sup>75</sup>

<sup>72</sup> Amandry, Burnett *et al.* 2015: 372–373. RPC III 2937–2939.

<sup>73</sup> Amandry, Burnett *et al.* 2015: 373–374; Dalaison 2007: 17, 20–24, 28–29, 34–37. RPC III 2940–2945.

<sup>74</sup> Amandry, Burnett *et al.* 2015: 372–373.

<sup>75</sup> Cowell *et al.* 2000.

## Summary

In the times of Trajan, bronze coins were issued by 14 centers in Bithynia and Pontus. A tradition introduced mainly under the Flavians was largely repeated. Some of the mints, perhaps due to titles and portraits, only minted coins at the beginning of the emperor's reign, as it seems in the case of Prusias, Abonoteichos, Iuliopolis and Nicomedia. However it should be remembered that we currently only have a small part of the surviving coins. Most of the issues probably come from the period after 102. It is known from Pliny's correspondence that various building projects were carried out in the cities. Only a few cities issued coins after 114 and 116. Presumably the production of coins in individual centres was dictated by the local demand for emissions and had nothing to do with the presence of the army or the Parthian campaign.

The cities that issued five or six different denominations during Trajan's reign can perhaps be considered prosperous in terms of trade and economy; these include Prusa, Byzantium, Heraclea, Tium and Amisus, most of which are harbours. In this case we should also remember that Nicomedia, the provincial capital, and Nicaea, were competing for priority in the province. The minted denominations were dominated by units corresponding to 1, 2, 3 and 6 assaria, but it is worth noting that a large part of the coins without ethnicity probably represent the value of 1½ assaria. Larger denominations (6 assaria) were introduced in Apamea under Caligula, in Nicaea and Nicomedia under Claudius, possibly in Heraclea under Nero, in Iuliopolis and Prusias under Vespasian, in Tium and Amastris under Domitian, and also at Prusa and Abonoteichos under Trajan. Abonoteichos, beginning its production in this period, seems to have been able to issue the most basic units operating on the market, i.e. 1, 3 and 6 assaria. There are also some tendencies between the denomination and the coin images appearing in different cities depending on the period, although sometimes these were also 'one-off' themes, not repeated on later coins, or appearing sporadically. Pseudo-autonomous coins, possibly assigned to the beginning/middle of the 2nd century, tended to be units of small value. On the other hand coins with the portrait of Plotina correspond mainly to the size of 3 assaria.

Most often on the coins of this period we find motifs related to local cults. Some types could be read in several ways, bearing in mind the history or economy of the town, as well as possible imperial propaganda. The effigies also referred to universal values, i.e. prosperity, fertility, and peace. The Mithridatic cults were still present in Trajan times on the northern shores of Anatolia, and they intertwined with the traditions of the Roman period. It is also worth emphasising that while the Greek culture, which had been adopted in the earlier process of Hellenisation, was dominant in the provinces, it was more advantageous to 'be a Roman', associated with certain advantages.<sup>1</sup>

Some of the images were also related to the Roman tradition, duplicating the motifs from the imperial coins minted probably in Thrace between 80–82. Individual images were placed on the coins of Nicaea, Iuliopolis, Prusias, Amastris, Abonoteichos, as well as on issues without

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<sup>1</sup> Cf. Harris 1980; Marek 2009; Veyne 2008.

an ethnic. These motifs appeared for the first time on the city coins of Bithynia and Pontus in the times of Domitian. They were universal and popular effigies, easily recognisable to both Roman citizens and local inhabitants. Due to the similarity of motifs, legends, and coin sizes, it seems that there could have been cooperation between some centres. Perhaps because of the lack of ethnicity and the common types and denominations, the issues did not have to be limited to a circulation only within the market of the city in which they were issued. Probably only some of the cities in the province took part in such possible cooperations. Apamea and Sinope in the time of Trajan had the status of Roman colonies, but their emissions were of a completely different nature. In turn, centres such as Byzantium, Calchedon, Prusa, Heraclea, Tium, and Amisus had their own rhythm and local traditions, which were emphasised on the coins.

Because of the duplicated motifs from imperial issues, and possible similar sizes, although not in all cases, one might consider the possibility that the imperial monetary system was adapted in individual cities, but adapted to the needs of the inhabitants of a given centre. Perhaps such units were introduced in some cities of Bithynia and Pontus during the reign of Claudius and Nero, and then spread during the times of the Flavians and Trajan. Thus it should be stressed that the issues minted in the manner of imperial coins were not related to the central intervention of Trajan or the arrival of the legate, presumably in 109. As we have seen, such units appeared in earlier periods. In this case it seems that, instead of looking for the adaptation of a purely imperial or purely provincial system, one might conclude that there was a certain synthesis of both, creating one monetary system suitable for the inhabitants.

It should also be noted that in Hadrian's time, with a few exceptions, individual centres no longer issued coins with the same images. Why were coins of this type stopped? Perhaps the explanation should be found in the financial policies of Domitian, and then Trajan, seeking to centralise the system. In Hadrian's time the trend is reversed. Because of the range of the Roman Empire, as well as the variety of monetary systems and traditions, the introduction of a single monetary system applicable to all provinces seems impossible. Perhaps, therefore, the common motifs and denominations, as well as the cooperation of some centres in Bithynia and Pontus, could have been a reflection of the financial policy of the then emperors, on a smaller, regional scale, or an unsuccessful attempt to introduce it. The mint in Thrace, and its short operation, remain a mystery. Perhaps we might hypothesise that there was possible liking of the provincial cities of Bithynia and Pontus to the emperor in return for certain benefits. Something similar might also be seen in requests to Trajan to send a governor and control the funds, and at the same time to draw attention to regional problems and carry out renovation. In this case one should also bear in mind the provincial situation and, for example, the trials for abuses.

Bithynia and Pontus, as a province situated between today's Europe and Asia, controlled a strategic and important location. Its inhabitants conducted various transactions both within the Black Sea basin and other areas nearby, mainly Thracian. The presence of the inhabitants of individual regions, as well as the citizens of Bithynia and Pontus, is confirmed by various sources, including epigraphic. The contacts made by individual centres are also indicated by countermarks placed on some coins. Among them one can distinguish the names of cities, titles, dates, busts of deities and emperors, as well as symbols of unknown meaning. Some of the cities seem to have placed countermarks only on their own emissions, such as Calchedon

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or Prusias. In turn, such centres as Hadrianopolis and Tomis introduced coins from Bithynia, probably from Nicaea and Prusa, to their markets. In most cases countermarks were probably stamped in the 2nd century, but in Calchedon, Prusias, and Amisus this could have occurred already in the time of Trajan. Some of the countermarked coins of Bithynia and Pontus from this period are issues without an ethnic, sized at 18–20 mm, 4–6 g, which appear to have been the most basic and popular units, easily adaptable to the systems of other centres. Perhaps the purpose of the individual countermarks was to change the value of the coins, or return them to circulation. Some of them could also have been of an honorary nature.

Studying the structure of monetary circulation in a centre or region requires an analysis of a longer chronological period, not limited, as in this case, only to the time of Trajan's rule. In individual cities of Bithynia and Pontus coins minted during the Flavian era were also used, and, although less frequently, those from the Julio-Claudian dynasty. In addition, coins from neighbouring cities could also flow between each other, and thus be used in transactions. Also, due to the geography of the province, emissions from more distant centres, i.e. in this case from Syria, may have appeared in its territories, carried back by troops returning from various campaigns. It should be remembered, however, that in many cases it is not possible to define a purpose, other than a monetary function, of coins from different centres. They could simply be souvenirs brought back from a long journey to foreign lands. Presumably some of the coins were used as obols for Charon, as we saw at Iuliopolis.

To sum up, the monetary policy in Bithynia and Pontus in the times of Trajan depended mainly on individual cities, which, due to different needs or possible relationships (possible cooperation of centres), issued their coinage in specific periods, denominations, and with selected images. The coins of Bithynia and Pontus from the times of Trajan are primarily a visible reflection of the interpenetration of both Roman traditions and local cultures.

## Plates



Fig. 1. Apamea RPC III 1029. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02512.



Fig. 2. Apamea RPC III 1031. Münzkabinett, Staatliche Museen zu Berlin, No. 18228961. Photographs by: Reinhard Saczewski.



Fig. 3. Prusa ad Olympus RPC III 1045. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02577.



Fig. 4. Prusa ad Olympus RPC III 1047. Münzkabinett, Staatliche Museen zu Berlin, No. 18296775. Photographs by: Bernhard Weisser.



Fig. 5. Prusa ad Olympus RPC III 1047. Countermark TONZOY (GIC 568). CGT Collection.



Fig. 6. Prusa ad Olympus RPC III 1048. Archaeological Museum in Izmit Inv. No. 287. Permission no. 64298988-155.02-E.283214.

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Fig. 7. Prusias ad Hypium RPC - Archaeological Museum in Izmit Inv. No. 45.  
Permission no. 64298988-155.02-E.283214.



Fig. 8. Byzantium RPC III 1068. Münzkabinett,  
Staatliche Museen zu Berlin, No. 18235194.  
Photographs by: Reinhard Saczewski.



Fig. 9. Byzantium RPC III 1068. Münzkabinett,  
Staatliche Museen zu Berlin, No. 18235197.  
Photographs by: Reinhard Saczewski.



Fig. 10. Byzantium RPC III 1069. Münzkabinett,  
Staatliche Museen zu Berlin, No. 18235202.  
Photographs by: Reinhard Saczewski.



Fig. 11. Byzantium RPC III 1069. Münzkabinett,  
Staatliche Museen zu Berlin, No. 18235203.  
Photographs by: Reinhard Saczewski.

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Fig. 12. Heraclea RPC III 1175. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02572.



Fig. 13. Byzantium RPC III 1077. Münzkabinett, Staatliche Museen zu Berlin, No. 18235206. Photographs by: Reinhard Saczewski.



Fig. 14. Nicomedia RPC III 1089. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02573.



Fig. 15. Iuliopolis RPC III 1100. Münzkabinett, Staatliche Museen zu Berlin, No. 18233367. Photographs by: Reinhard Saczewski.



Fig. 16. Iuliopolis RPC III 1100. Münzkabinett, Staatliche Museen zu Berlin, No. 18233369. Photographs by: Reinhard Saczewski.



Fig. 17. Heraclea RPC III 1168. Münzkabinett, Staatliche Museen zu Berlin, No. 18296761. Photographs by: Bernhard Weisser.



Fig. 18. Tium RPC III 1180. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-2581.



Fig. 19. Tium RPC III 1185. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02578.



Fig. 20. Tium RPC III 1188. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02579.



Fig. 21. Amastris RPC III 1210. Münzkabinett, Staatliche Museen zu Berlin, No. 18214082. Photographs by: Lübke und Wiedemann.



Fig. 22. Abonoteichos RPC III 1212. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02569.



Fig. 23. Amisus RPC III 1232. Münzkabinett, Staatliche Museen zu Berlin, No. 18296747. Photographs by: Bernhard Weisser.



Fig. 24. Coin with legend CEBACTH OMONOIA/ΣΕΒΑΣΤΗ ΟΜΟΝΟΙΑ RPC III 1131. Münzkabinett, Staatliche Museen zu Berlin, No. 18296745. Photographs by: Bernhard Weisser.



Fig. 25. Coin with legend OMONOIA. RPC III 1133. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-3561.



Fig. 26. Coin with legend NEIKH CEBACTOY RPC III 1135. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-03565.



Fig. 27. Coin with legend NEIKH CEBACTOY ΔΑΚ/ΑΡΜΕ RPC III 1136. Münzkabinett, Staatliche Museen zu Berlin, No. 18296746. Photographs by: Bernhard Weisser.



Fig. 28. Coin with legend ΔΗΜΗΤΡΑ ΚΕΒΑΚΤΟΥ RPC III 1138. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-02571.



Fig. 29. Coin with legend ΚΕΒΑΚΤΟΥ RPC III 1139. Archaeological Museum in Izmit Inv. No. 2009-143. Permission no. 64298988-155.02-E.283214.



Fig. 30. Coin with legend ΔΙΟΚ RPC III 1152. National Numismatic Collection, De Nederlandsche Bank, Amsterdam, No. SC-03571.



Fig. 31. Coin with legend ΔΙΟΚ RPC III 1154. Countermark TOM (GIC 567). With permission of wildwinds.com, Lowe Coll. 1306.

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Fig. 32. Coin with legend ΔΙΟC RPC III 1154.  
Archaeological Museum in Izmit Inv. No. 2918.  
Permission no. 64298988-155.02-E.283214.



Fig. 33. Coin with legend ΔΙΟC RPC III 1157.  
National Numismatic Collection, De  
Nederlandsche Bank, Amsterdam,  
No. SC-02575.



Fig. 34. Coin with legend ΔΗΜΗΤΡΟC RPC III 6548.  
Archaeological Museum in Izmit Inv. No. 2007.  
Permission no. 64298988-155.02-E.283214.

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## Abbreviations

- AMNG I/II = B. Pick and K. Regling 1910. *Die antiken Münzen von Dacien und Möesien, Die antiken Münzen Nord-Griechenlands*, Vol. I/II. *Moesia Inferior: Odessos and Tomis*. Berlin: Reimer, de Gruyter.
- BMC Alexandria = S.R. Pool 1982. *A Catalog of the Greek Coins in the British Museum, Alexandria*. London: British Museum Press.
- BMC Thrace = R.S. Poole, B.V. Head and P. Gardner (eds) 1877. *A Catalog of the Greek Coins in the British Museum, The Tauric Chersonese, Sarmatia, Dacia, Moesia, Thrace, etc.* London: British Museum Press.
- BMCRE = H. Mattingly and R.A.G. Carson 1923–1963. *Coins of the Roman Empire in the British Museum*. London: British Museum Press.
- Cahn = H.A. Cahn 1984/1985. An Imperial Mint in Bithynia. *Israel Numismatic Journal* 8: 14–26.
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- ICallatis = A. Avram (ed.) 2000. *Inscriptiones Daciae et Scythiae Minoris antiquae. Series altera: Inscriptiones Scythiae Minoris graecae et latinae*. Vol. III. *Callatis et territorium*. Bucharest: Academy of Sciences.
- ID = P. Roussel (ed.) 1961. *Inscriptiones Deli Liberae. Decreta. Foedera. Catalogi. Dedicaciones. Varia*. Berlin: de Gruyter.
- IGRR = *Inscriptiones Graeci ad res Romanas pertinentes*.
- IHeraclea = L. Jonnes 1994. *The Inscriptions of Heraclea Pontica, with a Prosopographia Heracleotica by Walter Ameling*. Inschriften griechischer Städte aus Kleinasien 47. Bonn: R. Habelt.
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- INicaea = S. Şahin 1979. *Katalog der antiken Inschriften des Museums von Iznik (Nicaea) I*. Inschriften griechischer Städte aus Kleinasien 9. Bonn: R. Habelt.
- INicaea II = S. Şahin 1982. *Katalog der antiken Inschriften des Museums von Iznik (Nicaea) II*. Inschriften griechischer Städte aus Kleinasien 10. Bonn: R. Habelt.
- IPrusa ad Olympum I = Th. Corsten (ed.) 1991. *Die Inschriften von Prusa ad Olympum I*. Inschriften griechischer Städte aus Kleinasien 39. Bonn: R. Habelt.
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- IPrusias = W. Ameling (ed.) 1985. *Die Inschriften von Prusias ad Hypium*. Inschriften griechischer Städte aus Kleinasien 27. Bonn: R. Habelt.
- ISinope = D.H. French (ed.) 2004. *The Inscriptions of Sinope*. Inschriften griechischer Städte aus Kleinasien 64. Bonn: R. Habelt.
- LIMC = *Lexicon Iconographicum Mythologiae Classicae* 1981–2009. Vols. 1–8 and Supplement: 1. Museums, Collections, Sites, 2. Literary and Epigraphical Sources Mentioning Lost Works. Mythological Names, 3. Supplementum 2009. Zürich–München–Düsseldorf: Artemis & Winkler Verlag.
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- OGIS = *Orientalis Graeci Inscriptiones Selectae*. Access: <http://www.attalus.org/docs/ogis/index.html>. Available: 08.01.2021
- Rec = W.H. Waddington, T. Reinach and E. Babelon (eds) 1904–1912. *Recueil général des monnaies grecques d'Asie Mineure*. I.1. *Pont et Paphlagonie*; I.2. *Bithynie (jusqu'à Iuliopolis)*; I.3. *Nicée et Nicomédie*; I.4. *Prusa, Prusias, Tius*. Paris: Ernest Leroux.
- RIC = H. Mattingly, E. Sydenham *et al.* 1926–2020. *The Roman Imperial Coinage*. London: Spink and Sons.
- RIC II = H. Mattingly and E.A. Sydenham 1926. *Roman Imperial Coinage*. Vol. II. *Vespasian–Hadrian (69–138)*. London: Spink and Sons.

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- RPC II = M. Amandry, A. Burnett and I. Carradice 1999. *The Roman Provincial Coinage*. Vol. II. *From Vespasian to Domitian (AD 69–96)*. London–Paris: British Museum Press–Bibliothèque Nationale de France.
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- SNG BM = 1993. *Sylloge Nummorum Graecorum, Great Britain, Volume IX, British Museum, Part 1: The Black Sea*. London: British Museum Press.
- SNG France = J. Dalaison 2015. *Sylloge Nummorum Graecorum. France 7: Département des Monnaies, Médailles et Antiques (Paphlagonie, Pont, Arménie Mineure)*. Numismatica Anatolica 5. Bordeaux: Ausonius Éditions.
- SNG Stancomb = A. Burnett, A. Meadows, K.A. Sheedy and U. Wartenberg 2000. *Sylloge Nummorum Graecorum British Isles XI. The William Stancomb Collection of Coins of the Black Sea Region*. Oxford: The British Academy.
- SNG vAulock = 1957–1968. *Sylloge Nummorum Graecorum Deutschland, Sammlung v. Aulock*. Berlin: Mann, Gebr.
- TAM IV = F.K. Dörner and M.B. von Strisky 1978. *Tituli Asiae Minoris*. Vol. IV. *Tituli Bithyniae, linguis graeca et latina conscripti*, fasc. 1. *Paeninsula Bithynica praeter Calchedonem, Nicomedia et Ager Nicomediensis cum septentrionali meridiano que litore sinus Astaceni et cum lacu Sumonensi*. Wien: Österreichischen Akademie.
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## Appendix 1

# Legends on the coins of Bithynia and Pontus during the reign of Trajan

### APAMEA MYRLEA

IMP CAES NERVA TRAIAN AVG GERM  
IMP CAES NERVA TRAIAN AVG GERM  
IMP NERVA CAES TRAIAN AVG GERM [P M]

COS III, D D  
T•R • P•O•T • CO•S I • C•I•C•A, D D (in field)  
RM•IR D•OI C I C Λ COS II, D D (in field)

### PRUSA AD OLYMPUS

AV NEP TRAIANOC A KAI CE ΓEP ΔA  
AV NEP TRAIANOC K C Γ Δ  
AV NEP TRAIANOC KAI C Γ Δ  
AV NEP TRAIANOC KAI CE ΓEP Δ  
AY NEP TRAIANOC A KAI CE ΓEP ΔA  
AY NEP TRAIANOC K C Γ Δ  
AY NEP TRAIANOC K C Γ Δ  
AY NEP TRAIANOC KAI C Γ Δ  
AY NEP TRAIANOC KAI CE ΓEP Δ  
AY NEP TRAIANOC KAICAP CE ΓEP ΔA  
AYT NEPOYAG TRAIANOΓ KAIΓAP ΓE ΓE Δ

ΠΡΟΥΣΑΕ  
ΠΡΟΥΣΑΕΙΣ ΔΙΑ ΟΛΥΜΠΙΟΝ  
ΠΡΟΥΓΑΕΙΓ ΔΙΑ ΟΛΥΜΠΙΝ  
ΠΡΟΥΣΑΕΩΝ  
ΠΡΟΥΣΑ  
ΠΡΟΥΣΑΕΙΣ ΔΙΑ ΟΛΥΜ  
ΠΡΟΥΣΑΕΙΣ ΔΙΑ ΟΛΥΜΠΙΟΝ  
ΠΡΟΥΓΑΕΙΓ ΔΙΑ ΟΛΥΜΠΙΟΝ  
ΠΡΟΥΣΑΕΩΝ  
ΟΛΥΜΠΟΣ ΠΡΟΥΣΑΕΩΝ  
ΟΛΥΜΠΟΣ ΠΡΟΥΣΑΕΩΝ

### NICAEA

AYT NEPOYAS TRAIANOC KAICAP CE ΓEP Δ  
NK ΠP (in field)

**CALCHEDON**

AVT NEP TRAIANOC KAI CEB GE Δ  
AVT NEP TRAIANOC KAICAP  
AY NEP TRAIANOC KAI CEBA GE Δ

ΚΑΛΧΑΔΟΝΙΩΝ

**BYZANTIUM**

AV NE TRAIANOC KAICAP CB Γ ΔAK  
AVT NEP TRAIANOC KAICAP CB Γ ΔA  
AVT NEP TRAIANOC KAICAP CB GE ΔKI  
AVT NEP TRAIANOC KAICAP CB ΓM Δ  
AVT NEP TRAIANOC KAICAP CB ΓM ΔAKI  
AVT NEP TRAIANOC KAICAP CB ΓP ΔA  
AVTO NEP TRAIANOC KAI CEB ΓPM ΔAKI (ancient imitation?)  
AY NE TRAIANOC KAICAP CB Γ ΔAK  
AYT NEP TRAIANOC KAI CBA ΓEPMA ΔKI  
AYT NEP TRAIANOC KAI CBA ΓERM ΔAKI  
AYT NEP TRAIANOC KAI ΓM ΔAKI  
AYT NEP TRAIANOC KAICAP CB GE ΔKI  
AYT NEP TRAIANOC KAICAP CB ΓM ΔAKI  
AYT NEP TRAIANOC KAICAP CBA ΓM ΔKI  
AYT NEP TRAIANOC KAICAP CEB ΓEP ΔAKI  
AYT NEP TRAIANOC KAICAP CEB ΓPM ΔAKI  
AYTO NEP TRAIANOC KAI CEB ΓERM ΔAKI  
AYTO NEP TRAIANOΓ KAI ΓEB ΓERM ΔAKI

CEBACTHN ΠΛΩTEINAN  
ΓEBACTHN ΠΛΩTEINAN  
ΓEBAΓTHN ΠΛΩTEINAN

BYZANTIΩN EΠI TRAIANOT KAI TO Γ  
BYZANTIΩN EΠI TRAIANOV KAI TO (ancient imitation?)  
BYZANTIΩN EΠI TRAIANOY KAI TO Γ  
BYZANTIΩN EΠI TRAIANOY, KAI TO Γ (in field)  
EΠI NEIKHC TO Δ BYZANTIΩN  
EΠI NEIKHC TO Δ BYZANTIN  
EΠI NEIKHΣ TO Δ BYZANTIΩN  
NEIKHC TO Δ BYZANTIN  
NEIKHC TO Δ BYZANTIΩN

**NICOMEDIA**

AVT NEP TRAIANOC KAICAP CEB ΓEP  
AVT NEP TRAIANOC KAICAP CEBA ΓERM

ΑΥΤ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ  
ΑΥΤΟ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ

Η ΜΗΤΡΟΠΟΛΙΣ ΚΑΙ ΒΙΘΥΝΙΑΣ ΚΑΙ, ΝΙΚΟ ΜΗ (in field)  
Η ΜΗΤΡΟΠΟΛΙΣ ΚΑΙ ΠΡΩΤΗ ΒΙΘΥΝΙΑΣ, ΝΙΚΟ ΜΗ (in field)  
Η ΜΗΤΡΟΠΟΛΙΣ ΚΑΙ ΠΡΩΤΗ ΒΙΘΥΝΙΑΣ, ΝΙΚΟ ΜΗ (in field)  
ΚΑΙ ΠΡΩΤΗ ΒΙΘΥΝΙΑΣ, Η ΜΗ/ΤΡΟΠΟ/ΛΙΣ/ ΝΙΚΟ (in four lines)  
ΚΑΙ ΠΡΩΤΗ ΠΟΝΤΟΥ ΚΑΙ ΒΓΙΘΥΝΙΑΣ, Η ΜΗ/ΤΡΟΠΟ/ΛΙΣ/ ΝΙΚΟ (in four lines)  
ΝΕΙΚΟΜ ΠΡΟ ΠΟΝΤ ΒΙΘΥ  
ΝΕΙΚΟΜ ΠΡΟΤ ΒΙΟΥ  
ΝΕΙΚΟΜ ΠΡΩΤ ΒΙΘΥ

### IULIOPOLIS

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜΑ  
ΑΥΤ ΝΕΡΒΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕ  
ΑΥΤ ΝΕΡΟΝΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ

ΙΟΥ-ΛΙΟΠ (in field)  
ΙΟΥΛΙΟΠΟΛΙΤΩΝ  
ΟΜΟΝΟΙΑ ΣΕΒΑΣΤΗ, ΙΟΥ-ΛΙΟΠ (in field)

### PRUSIAS AD HYPRIUM

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡΜ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ

ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ, Π-Ρ (in field)  
Π-Ρ (in field)

### HERACLEA PONTICA

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑΣΤΟΣ  
ΑΥ ΝΕΡ ΤΡΑ ΚΑΙΣ Σ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙ ΣΕΒΑ [ΓΕΡΜ ΔΑΚ]  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ ΣΕ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ ΣΕΒ ΓΕΡ ΔΑΚ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ ΣΕΒ ΓΕΡΜ ΔΑΚ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ ΣΕΒ ΓΕΡΜ ΔΑΚΙΚ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ ΣΕΒΑ ΓΕΡΜ ΔΑΚΙΚ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡ Δ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑΣΤΟΣ  
ΤΡΑΙΑΝΟΣ ΚΑΙΣ[ ]

ΑΥΤ Κ ΝΕΡ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟ ΓΕΡ Δ

LEGENDS ON THE COINS OF BITHYNIA AND PONTUS DURING THE REIGN OF TRAJAN

ΑΥΤ Κ ΝΕΡ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟΣ C Γ Δ  
ΑΥΤ ΚΑΙC ΝΕΡ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟΣ CEB Γ Δ

ΗΡΑΚΛΕΩΤΑΝ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛΙ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛΙΟΣ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛΙΤΑΝ  
ΗΡΑΚΛΕΩΤΑΝ ΜΑΤΡΟΠΟΛΕΙΤΑΝ

**ΤΙΥΜ**

ΑΥΤ ΝΕΡΒ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕ ΔΑ  
ΑΥΤ ΝΕΡΒ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡ ΔΑΚ  
ΑΥΤ ΝΕ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ CEB ΓΜ Δ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑ[]  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ C Γ Δ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ CEB ΓΕΡΜ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ CEB ΓΕΡΜ ΔΑΚ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ CEB ΓΜ Δ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙCΑΡ CΕΒΑ ΓΕΜ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕ  
ΑΥΤ ΝΕΡΒ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ Γ Δ  
ΑΥΤ ΝΕΡΒ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡ ΔΑΚ  
ΑΥΤ ΝΕΡΒ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ ΔΑΚ  
ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ

ΑΡΤΕΜΙΔΟΣ  
ΑΣΚΛΗΠΙΟΣ ΤΙΑΝΩΝ  
ΑΣΚΛΗΠΙΟΣ ΣΩΤ ΤΙΑΝΩΝ  
ΔΙΟΝΥCOC ΚΤΙCΤ ΤΙΑΝΩΝ  
ΔΙΟΝΥCOC ΚΤ ΤΙΑΝΩΝ  
ΔΙΟΝΥCOC ΚΤΙCΤ ΤΙΑΝΩΝ  
ΤΕΙΑΝΩΝ  
ΤΕΙΑΝΩΝ ΕΤΟΥC ΙC  
ΤΕΙΑΝΩΝ ΙL?  
ΖΕΥC CΥΡΓΑCΤΙΟC ΤΕΙΑΝΩΝ  
ΖΕΥC CΥΡΓΑCΤΕΙΟC ΤΙΑΝΩΝ  
ΖΕΥC CΥΡΓΑCΤΕΙΟC ΤΕΙΑΝΩΝ  
ΖΕΥC CΥΡΓCΤΕΙΟC ΤΙΑΝΩΝ  
ΖΕΥC CΥΡΓΑCΤΕΙΟC

## AMASTRIS

AVT NER TRAIANOC KAICAP CEB GER  
AVT NER TRAIANOC KAICAP CEBA GER  
AYT•NER TRAIN•C KAICAP CEB Γ•Δ  
AYT NER TRAIANOC KAICAP CEB [ ]  
AYT NER TRAIANOC KAICAP CEB GER  
AYT NER TRAIANOC KAICAP CEB GERM  
AYT NER TRAIANOC KAICAP CEB GE  
AYT NER TRAIANOC KAICAP CEB GER

[ ] TRAIANOC APIC [ ]  
AYT NER TRAIANOC APICOC KAICAP CEB GERM  
AYT NER TRAIANOC APICOC KAICAP CEB GERM

AY KAI NER TRA APIC CE GER DA PAP

ΠΛΩΤΕΙΝΑ ΣΕΒΑΣΤΗ  
ΠΛΩΤΕΙΝΑ ΘΕΑ ΣΕΒΑΣΤΗ

ΔΙΟΝΥΣΟΣ ΣΕΒΑΣΤΟΣ  
ΜΗΤΡΟ ΑΜΑΣΤΡΙΑΝΩΝ

AMA-CTP  
ΑΜΑΣΤΡΙΑΝΩΝ  
ΑΜΑΣΤΡΙΣ ΜΗΤΡΟΠΟΛΙΣ [ ]  
ΑΜΑΣΤΡΙΑΝΩΝ ΜΗΤΡΟΠΟΛΕΙΤΩΝ  
ΑΜΑΣΤΡΙΑΝΩΝ  
ΜΗΤΡΟ / AMA  
ΝΕΙΚΗ ΣΕΒΑΣΤΗ, AMA (in field)

## ABONOTEICHOS

AVT NER TRAIANOC KAICAP CEB GER  
AYT NER TRAIANOC KAICAP CEB GER

ABO-NO (in field)  
ΑΒΩΝΟΤΕΙΧΙΤΩΝ  
ΖΕΦΥΡΙΟΣ ΑΒΩΝΟΤΙΧΕΙΤΩΝ

## SINOPE

[ ] AVG GER DAC  
IMP CAES NER TRAIANO AVG GER DA  
IMP CAES TRAIAN [ ]  
IMP NERVAE TRAIANO [ ] IMP VI COS V P P

C I F ANN CXLIX  
C I F ANN CXLIII  
C I F ANN CLV  
C I F ANN [CL]X?

### AMISUS

AMICOY ΕΛΕΥΘΕΡΑC  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕ ΓΕΡ Δ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒ ΓΕΡΜ ΔΑΚΙΚΟC  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒ ΓΕΡΜ ΔΑΚΙΚΟC  
ΘΕΟΝ CΕΒΑCΤΟΝ ΤΡΑΙΑΝΟΥ  
ΘΕΟΥ CΕΒΑCΤΟΥ ΤΡΑΙΑΝΟΥ  
ΤΡΑΙΑΝΟC CΕΒΑCΤΟΥ

AMICOV ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΚΘ  
AMICOV ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΜΕ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤ ΡΚΘ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΚΘ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΚΘ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΚΘ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΛΗ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΜΡ  
AMICOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΜΕ  
AMICCOY ΕΛΕΥΘΕΡΑC ΕΤΟΥC ΡΛ  
AMICCOY ΕΤΟΥC ΡΛ  
ΕΤΟΥC ΡΛΗ

CΕΒΑCΤΟΥ

### Coins without an ethnic with uncertain attribution

#### 1. *Coins with the Name of the Proconsul Gaius Julius Bassus*

ΑΥΤΟ Ν ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑC ΓΕΡΜ  
ΑΥΤΟ Ν ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑC ΓΕΡΜΑ  
ΑΥΤΟ Ν ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑC ΓΡΜ  
ΑΥΤΟ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑC ΓΕΡΜ  
ΑΥΤΟ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑC ΓΡΜ

ΕΠΙ Γ ΙΟΥ ΒΑCCΟΥ ΑΝΘΥΠΑΤΟΥ

#### 2. *Coins with the legend ΕΙΡΗΝΗ CΕΒΑCΤΗ/ΕΙΡΗΝΗ CΕΒΑCΤΗ*

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒ ΓΕΡΜ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟC ΚΑΙCΑΡ CΕΒΑ ΓΕΡΜ

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ

ΕΙΡΗΝΗ ΣΕΒΑΣΤΗ  
CE-RAC

**3. Coins with the legend ΟΜΟΝΟΙΑ ΣΕΒΑΧΤΗ/ΟΜΟΝΟΙΑ**

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑΧ ΓΕΡ  
ΑΥΤ ΝΕΡΟΥΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡΟΥΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ Δ  
ΑΥΤΟ ΝΕΡΟΥΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕΡ ΔΑ

ΟΜΟΝΟΙΑ  
ΟΜΟΝΟΙΑ ΣΕΒΑΧΤΗ

**4. Coins with the legend ΝΕΙΚΗ ΣΕΒΑΧΤΟΥ ΔΑΚ/ΑΡΜΕ**

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕ Δ  
ΑΥΤ ΝΕΡΟΝΑΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ Δ  
ΑΥΤ ΝΕΡΟΥΣ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ Δ  
ΑΥΤ ΝΕΡΟΥΑ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ Δ  
ΑΥΤ ΚΑΙΣΑΡ ΝΕΡ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟ ΣΕΒ ΓΕ Δ

ΝΕΙΚΗ ΣΕΒΑΧΤΟΥ  
ΝΕΙΚΗ ΣΕΒΑΧΤΟΥ, ΔΑΚ (in exergue)  
ΝΕΙΚΗ ΣΕΒΑΣΤΟΥ, ΑΡΜΕ (in exergue)

**5. Coins with the legend ΔΗΜΗΤΡΑ ΣΕΒΑΧΤΗ**

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡΜ

ΔΗΜΗΤΡΑ ΣΕΒΑΧΤΗ

**6. Coins with the legend ΣΕΒΑΧΤΗ/ΣΕΒΑΣΤΗ**

ΑΥ ΝΕ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑΚ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ Δ

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙΣΑΡ ΣΕ Γ Δ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ Σ  
ΑΥ ΝΕ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡ ΔΑ  
[ ] ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕ Δ

ΣΕΒΑΚΤΗ  
ΣΕΒΑΣΤΗ

**7. Coins with the legend ΣΕΒΑΚΤΟΥ/ΣΕΒΑΣΤΟΥ**

ΑΥΤ Κ ΝΕ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟΣ ΓΕΡ ΔΑ  
ΑΥΤ Κ ΝΕ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟΣ ΓΕΡ ΔΑ  
ΑΥΤ ΚΑΙ ΝΕ ΤΡΑΙΑΝΟΣ ΑΡΙΣΤΟΣ ΓΕΡ ΔΑ  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕΒ ΓΕΡΜΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ [ ]  
ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΓΕΡΜ ΔΑ  
[ ] ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣ[ ]

ΣΕΒΑΚΤΟΥ  
ΣΕΒΑΚΤΟΥ  
ΣΕΒΑΣΤΟΥ  
ΣΕΒΑΣΣΤΟΥ

**8. Coins with the legend ΔΙΟΚ**

Α[ ] ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝ[ ] Ε ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡΜ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ Σ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ ΓΕ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝ[ ] Ε ΓΕΡ ΔΑ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙ ΣΕ ΓΕΡ Δ  
ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ Σ

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝ ΚΑΙΣΑΡ ΣΕΒΑ ΓΕΡ



**11. Coins with cornucopia**

ΑΥ ΝΕ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ

ΑΥ ΝΕ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ Γ Δ

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙ [ΣΕ Γ Δ]

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ Γ Δ

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ Γ Δ

ΑΥΤ ΚΑΙ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ Γ Δ

ΑΥ ΝΕΡ ΤΡΑΙΑΝΟΝ ΚΑΙ ΣΕ Γ Δ

**12. Coins with the serpent staff**

ΑΥΤ ΝΕΡ ΤΡΑΙΑΝΟΣ ΚΑΙΣΑΡ ΣΕ Β Γ

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