PECUNIA OMNES VINCIT



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Introduction

We would like to present ten articles by young researchers from Italy, Greece, Austria, Spain, Turkey, Hungary, and Poland concerning particular aspects of numismatics. The present publication is a summary of the Fifth and Sixth International Numismatic and Economic Conference, *Pecunia Omnes Vincit*, held at the Emeryk Hutten-Czapski Museum and Institute of Archaeology, Jagiellonian University in Krakow, Poland, 18–19 May 2018 and 31 May – 1 June 2019.

The articles direct the reader's attention to various issues involving aspects of numismatics such as propaganda, coin finds, circulation in certain territories, and denominations. Due to the broadening of the subject of the conference, the publication includes articles dealing with issues related to economics. The subject matter of this publication focuses mostly on aspects of antiquity, the mediaeval and modern ages periods.

The first group are articles about propaganda and iconographic motifs on coins. One of the paper examines the animal figures that were depicted on the coins of the Greek colonies of the Chalcidice and briefly analyses the hidden symbolism behind these depiction. The iconographic types projected aspects of the citizens' identity, their religion, their economic prosperity, the social norms established in their society, while they were also used as a political propaganda. One of the paper concerns the rivalry between Sidon and Tyre under Elagabalus reflected on its coins. An unprecedented amount of iconographic types was introduced at that time. The changes of civic status of both cities determined the selection of iconographic motives, highlighted their colonizing achievements.

The author of another texts touch the problem of the bronze denominations in Asia province between 96–138 AD. Due to the different weights, sizes and iconographic types of coins, it is not possible to create one single monetary system corresponding to all provincial mints. The best solution is to find common and repetitive tendencies. This indicates the presence of certain traditions in the monetary space, thanks to which perhaps the denominations of bronze coins are not as chaotic as it seems.

The other group of texts concern coin finds from various territory. Egnazia was an important municipium along *via Traiana*. More than 1400 bronze coins (Roman, Byzantine, Ostrogoth, Vandal), and a tremissis of Justinian I, have been found there, which help us to outline the currency in use and to document an intense retail activity. The general analysis of Roman provincial coin finds in east and central Europe is a concern of another article. It focuses mainly on statistical and geographical comparisons of the finds, showing that through their prevalence in central Europe they are less of a peculiarity than previously thought. Another text presents the study of the Byzantine numismatic findings in Sardinia by the interpretation of coin as a "settlement marker". The analysis has been focused on the main cases of suburban findings, generally in relation to the five viae of the Iter Sardiniae of the wider Itinerarium Antonini (3rd century AD). Coin finds from the southern coast of Kuşadası/Aydın, Kadıkalesi/ Anaia, which used to be an important harbour castle of the Byzantine Empire with a dominating position to the cost, are analysed in another paper. More than 1000 coins have been found there, mostly belong to the Byzantine Empire period. The coin finds from Austrian province of Burgenland, which was part of the Roman province- Pannonia, are discussed as well. The paper examining coin circulation, currency policies, and the economic and migration history of money. The grave coins indicate another importance of money in funeral context.

Another subject of the article is Polish-Hungarian coin circulation in the 16th century. It has hitherto been ignored, but the rising number of the recent finds of Polish coins made the revision of older literature necessary. This paper tries to give an update about the current phase of studies regarding this topic.

The subject matter related to the economy in the Middle Ages at the Septentrional Border (La Rioja, Navarra and the Basque Country in Iberian Peninsula) is taken up by another article, thus illustrating an economy based on the agricultural system since the 1st century but from the 7th to the 15th centuries, there were new lucrative business. The main towns and villages had a regional code of laws with new taxes for wine, bread or tolls to cross gates or bridges. Finally, in article, the castles and forts where the Lords and Nobles controlled the administration and the society were analysed as well.

The articles presented here constitute careful analysis of various numismatic aspects of the ancient, mediaeval and modern periods. We are certain that these papers offer an opportunity to expand and supplement existing knowledge, as well as to stimulate discussion and to draw attention to certain issues. We would like to express our gratitude to Dr hab. Jarosław Bodzek, Prof UJ for academic mentoring, as well as to our reviewers, Dr hab. Arkadiusz Dymowski, Dr Dario Calomino, Dr Antonino Crisà, Dr Witold Garbaczewski, Dr Krzysztof Jarzęcki, Dr Kamil Kopij, Dr Kirylo Myzgin and Dr Luis Pons Pujol for substantive correction of individual papers.

The Editors

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THE ANIMAL FIGURES ON THE COINAGE OF THE GREEK CITIES ON THE CHALCIDIC PENINSULA

Abstract: The city-states that were built on the Chalcidic peninsula by southern Greeks grew very prosperous during the Archaic and Classical periods. This prosperity allowed the states to start a wide monetary production from as early as the mid-6th century BC. The paper examines the animal figures that were depicted on the coins of the Greek colonies of the Chalcidice and briefly analyses the hidden symbolism behind these depictions; as we shall see, the iconographic types projected aspects of the citizens' identity, their religion, their economic prosperity, the social norms established in their society, while they were also used as a political propaganda.

Keywords: Animal figures, Chalcidice, Greek colonies

The Chalcidic peninsula is located in northern Greece in the region of what we call today Macedonia. In antiquity, northern Greece was a very rich area with diverse geomorphology, with mountain ranges and wide plateaus, large fertile plains, numerous rivers and lakes, as well as a long coastline; in addition, the region offered great abundance of timber and mineral resources.¹ Under these favourable conditions, it is not surprising that the area attracted dwellers from the Prehistoric times. Over the years an increasing number of tribes and peoples settled in northern Greece creating a mosaic of diverse cultures and "ethnic" groups that coexisted for a long time – certainly not always in a peaceful manner – until the Macedonian kingdom became the undisputed power, in the mid-4th century BC, and incorporated all independent cities and tribes of the region. Among the people that settled in the area were southern Greeks who discovered a suitable environment to build new cities that were founded mainly alongshore; the Chalcidic peninsula became a favourite destination for the Greek colonisers.

The Greek cities of the Chalcidice met great prosperity and wealth during the 6th and 5th centuries BC, and this wealth is reflected on their coins that were issued from the mid-6th century BC. During the late Archaic and Classical periods, the animal

¹ For the rich natural environment and resources of northern Greece see: Kremydi 2011: 159–161; Stefani 2015: 121–122.

figures were in general the predominant iconographic type on coins, which should come as no surprise since the animals played an important and pluralistic role in the agrarian societies of the antiquity. The depicted animals were related to the citizens' religious beliefs, their mythological and historical background, while they also projected significant aspects of the city's socioeconomic context. Of great importance is the evaluation of the differences and similarities between the iconographic types on the coins of the colonies and those on the coins of their mother-cities; some colonies copied the types of their hometown, others chose utterly different depictions, while in some cases we encounter a unique combination of local elements with elements that the people had brought along from their place of origin.

Colonies that adopted types from their mother-cities

Out of the ten cities on the Chalcidice that depicted animal figures on their coins, only Dicaea, located probably somewhere between Aenea and Potidaea,² adopted completely unaltered the iconographic type of its mother-city Eretria. The Dicaeans started minting coins at the end of the 6th century BC and on their tetradrachms they depicted an ox with its head reverted and its rear foot lifted, scratching itself with its hoof and having a swallow sitting on its rump on the obverse, while the reverse bore a cuttlefish³ Both depictions derived directly from Eretria⁴ with the only difference being the inscribed letters that indicate the name of the city; ΔI for Dicaea⁵ and E for Eretria.⁶ The tetrobols had the same obverse type⁷ with some later issues bearing only the head of a bull on the reverse,⁸ while the lower denominations depicted a standing ox or just the forepart of the animal.⁹

The ox on the Eretrian coins could be related to the very name of Euboea (Eú β oia, Eu+ β ou ς , meaning the land of fine cattle¹⁰), or the worship of Artemis Amarynthia whose sanctuary was located near Eretria,¹¹ or even to the myth of Io who was transformed into a cow by the furious Hera and who, according to Strabo, gave birth to her son Epaphus in a cave that was named Boos (Boó ς) and that was located on a beach

² Plin. *HN*. IV.36; IG IV² 1.94.10–12. See also: Vokotopoulou 2001: 745–746; Tiverios 2008: 24–26; Voutiras, Sismanidis 2007: 253–256.

³ AMNG III (2): pl. XIII. 24, 27; Price, Waggoner 1975: 55.

⁴ HN: 360–363; Seltman 1933: 83,84; Wallace 1962: 38–42; Price, Waggoner 1975: 53–55; Kraay 1976: 91–92; Tsourti 1999: 15.

⁵ AMNG III (2): pl. XIII.27.

⁶ Wallace 1962: 38-39; Price, Waggoner 1975: 54-55.

⁷ AMNG III (2): pl. XIII.16-17; SNG Ashmolean 2254; SNG Copenhagen 156; SNG ANS 241-242.

⁸ Tsagari 2009: n. 64.

⁹ AMNG III (2): pl. XIII.25-26.

¹⁰ Pape 1898: 502.

¹¹ Babelon 1907: 680-681; HN: 361.

in the east coastal area of Euboea; based on Strabo's narration the island of Euboea took its name from that cave.¹² Nevertheless, Eretria's rich husbandry certainly played a significant role in the choice of the ox and it is quite possible that the whole scene with the swallow sitting on the animal's rump referred to the bucolic and peaceful daily interactions with nature. As for the cuttlefish on the reverse, it seems that it was a well-known civic badge of Eretria;¹³ Plutarch quoted Themistocles' phrase who mocked the Eretrians by comparing them with cuttlefish: "what argument can ve make about war, who, like the cuttlefish, have a long pouch in the place where your heart ought to be?".¹⁴ The use of the civic badge on coins was a guarantee for the purity of the metal and weight.¹⁵ The fact that Dicaea adopted Eretria's iconographic types could only mean that the ties between the colony and the metropolis were very tight and that the Dicaeans cared to project their Euboic "identity". The latter is further supported by the fact that some of Dicaea's tetrobols instead of an ox depicted a rooster¹⁶ which was a type copied from Carystus,¹⁷ another important city in Euboea; the rooster was Carystus' civic badge – a reference, maybe, to its name ($\kappa \eta \rho \nu \xi$ – $\kappa \alpha \rho \nu \xi$ from the verb $\kappa \alpha \rho \nu \sigma \sigma \omega$ that means to declare).¹⁸ This must be an indication of the presence of Carystians in the colony¹⁹ who, just as the Eretrian colonisers, wished to keep their origins alive.

Apart from Dicaea, Potidaea also adopted the iconographic type of its mother-city Corinth. Potidaea lay on the narrowest part of the isthmus of Pallene, a very important location from where it could control the entrance to the rest of the prong.²⁰ The city started minting coins in the last quarter of the 6th century BC. Despite the tight ties with Corinth,²¹ until ca. 432 BC Potidaea had its very own iconographic types with the main being a marching horse ridden by Poseidon who is holding his trident, that is Poseidon Hippios.²² The lower denominations bore a sole marching horse or just the forepart of the animal, which should also be related to Poseidon. Even though the types had not been adopted from the Corinthian coins, Poseidon had deep roots in Corinth where the evidence shows old cult activities at the Isthmus,²³ the site where later, in 582 BC, the Corinthians founded the Pan-Hellenic games of *Isthmia* that were celebrated

¹² Strab. *Geography* X.I.3.

¹³ HN: 362; Seltman 1933: 84.

¹⁴ Plut. Them. XI.5.

¹⁵ Sutherland 1940: 66.

¹⁶ AMNG III (2): pl. XIII.19–20; SNG Ashmolean 2255; SNG ANS 243.

¹⁷ HN: 356-367; Seltman 1933: 84; Kraay 1976: 92.

¹⁸ Tsourti 1999: 16.

¹⁹ Kraay 1976: 134.

²⁰ Thuc. I.56.2; Xen. Hell. V.2.15.

²¹ Thuc. I.56.2. See also: Alexander 1963: 20–23

²² AMNG III (2): 103–105; SNG Ashmolean 2361–2362, 2369; SNG Copenhagen 312–315; SNG ANS 686–698; Tsagari 2009: n. 66–68.

²³ Gebhard 1993: 154-177. See also: Larson 2007: 59-60.

every two years, honouring the god.²⁴ Hence, it is apparent that the cult of Poseidon passed from Corinth to Potidaea and that the Potidaeans considered it an important part of their identity. In fact, they chose to honour the god in many ways including the dedication of a temple and a statue built outside the city;²⁵ the image of Poseidon on his horse found on the city's coins was most probably a representation of that statue.²⁶ In addition, the very name of the city derived from Poseidon, who was generally considered the mythical ancestor and founder of several cities, including Potidaea.²⁷

The issues with Poseidon were minted until ca. 432 BC, the dawn of the Peloponnesian War. During that period, Athens raised the tribute payments to the Athenian/ Delian League that, in combination with Pericles' demands for the city to send away the Corinthian higher officials and demolish its northern walls, resulted in the revolt of Potidaea and the subsequent Athenian siege of the city. It was exactly during that period that the relations between Corinth and Potidaea were tightened further, since the Corinthians could not abandon the Potidaeans to their fate.²⁸ The colony's new ties and alliance with Corinth and the rest of the Peloponnesians are reflected on the new iconographic type; for the first time, we encounter tridrachms bearing the flying horse Pegasus ridden by Bellerophon.²⁹ Pegasus was depicted on the Corinthian coins from the very beginning of Corinth's monetary production, however, without Bellerophon.³⁰ As C. M. Kraay wrote, the Potidaeans might have adjusted the Corinthian type to the city's own taste; the previous depiction of Poseidon on a horse was replaced by Bellerophon on Pegasus.³¹ It is obvious that the citizens of Potidaea followed the flow of the events. Initially they chose to depict their own types, yet these types projected beliefs that they had brought along from their hometown, which accords with the fact that they kept tight relations with Corinth; only when they found themselves in an ominous situation and they were in great need of assistance did they adopt the iconographic type of their metropolis, transforming in this way the coins into a means of political propaganda.

Another city that followed the types of its hometown was Olynthus. Olynthus was located at the head of the Toronaic Gulf and it was initially inhabited by the Bottiaeans, a tribe that used to live in the region of the lower Haliacmon and Ludias rivers and that later was expelled by the Macedonians.³² In 479 BC the city was conceded

²⁴ For information about the Pan-hellanic Isthmian games see: Valavanis 2004: 281-303.

²⁵ Hdt. VIII.129.3.

²⁶ Alexander 1953: 203.

²⁷ Valavanis 2004: 275; Larson 2007: 57-58.

²⁸ Errington 1990: 15–20; Bengtson 1991: 199–201.

²⁹ Kraay 1976: p l.14, n. 249; Tsagari 2009: n. 69.

³⁰ For the Corinthian coinage see: Kraay 1976: 78–88.

³¹ Kraay 1976: 85.

³² Thuc. II.99.3.

to the Chalcidians³³ and from then on played a very important role in the region, eventually becoming the leading member of the Chalcidic Federation.³⁴ Before minting the coinage in the name of the Federation that bore iconographic types related to Apollo,³⁵ Olynthus struck some issues that bore two animal figures, the horse and the eagle. The horse was depicted on the obverse, bound to an Ionic column in the background, while the eagle was depicted on the reverse flying upwards and holding a snake in its claws and beak;³⁶ on some tetrobols the horse was depicted leaping and there was no Ionic column.³⁷ These coins are dated to ca. 432 BC³⁸ and their attribution to Olynthus is certain as they bear inscriptions (*OAYN*).

The reverse type was clearly influenced by Chalcis that depicted on its coinage an eagle flying to the left or right and, at a later variant, carrying a serpent.³⁹ The eagle was the sacred animal and the symbol of Zeus and in Chalcis the type should be related to Zeus Olympios since there was a sanctuary dedicated to him in the city;⁴⁰ the Chalcidian eagle can also be compared with the one depicted on the coins of Elis in the Peloponnese where the connection with Zeus Olympios is beyond any question.⁴¹ The very existence of the coins makes it likely that the Chalcidians of Olynthus adopted, apart from the type, the cult of Zeus Olympios too. The horse on the obverse could be related to Poseidon⁴² who was the tamer of horses and the protector of riders⁴³ and who was worshipped with the epithet Hippios, as we have already seen above in the case of Potidaea; even though the excavations have not revealed any sanctuary dedicated to Poseidon, his worship in the city is indirectly implied by the name of the month Hippios in the Olynthian calendar.⁴⁴ An established cult of Poseidon in Olynthus would not be strange since the god was very popular in the region of Chalcidice; furthermore, the Chalcidians of Olynthus could have carried Poseidon's worship from Euboea

³³ Hdt. VIII.126-127.

³⁴ Thuc. I.58; Xen. Hell., V.12-18. For information about the Chalcidic Federation see West 1973: 14-31.

³⁵ AMNG III (2): 85–89; Robinson, Clement1938: 298–299.

³⁶ AMNG III (2): pl. XVII.3,4; Robinson 1933: 221; SNG Copenhagen 233; SNG ANS 464–465.

³⁷ AMNG III (2): pl. XVII.2; SNG Ashmolean 2336; SNG Copenhagen 234; SNG ANS 466.

³⁸ AMNG III (2): 84; Robinson, Clement1938: 297–298; Psoma 2001a: 200; Tsagari 2009: 74.

³⁹ Kraay 1976: 89–90; Tsourti 1999: 15. In Homer the eagle with the snake is described as an inauspicious omen for the Troyans, not only because the bird did not manage to kill the serpent that was carrying, but also because it appeared flying to the left instead of upwards or right; the left direction meant that the eagle headed towards the West which symbolised the doom, while the upward and the right directions symbolised the sun and the dawn respectively, both auspicious portents (See: Hom. *Il.* XII.195–250). However, we must not seek any similar symbolic meaning behind the different directions of the eagle on the coins of Olynthus and Chalcis.

⁴⁰ Hicks, Hills 1901: 63, n. 40 lines 35–36, 61–62.

⁴¹ Kraay 1976: 91, 103–107, pl. 18, n. 323–325.

⁴² Psoma 2001a: 198; Tsagari 2009: 74.

⁴³ Hom. Hom. Hymn Pos.

⁴⁴ Hatzopoulos 1988: 65.

where his cult is attested.⁴⁵ However, chariot-horses appeared on Chalcis' coins, both as an obverse as well as a reverse type, while on later issues the city depicted just a single wheel, an allusion to the previous iconography.⁴⁶ E. Babelon, considering the quadriga an agonistic type, had also attributed an agonistic character to the Olynthian horse that was bound to the Ionic column, as he associated the column with the pillar (*meta*) that set the turning-point for the chariots in the hippodrome.⁴⁷ No matter what the symbolism behind the depictions on these early issues was, soon after the creation of the Chalcidic Federation, Olynthus abandoned the coinage bearing the name of the city and struck coins with completely new iconographic types and inscriptions with the name of the Federation, which means that the identity of the Chalcidians mattered much more than the identity of the city.

Colonies with types that projected the local economy

Moving on to the other Greek cities on the Chalcidic peninsula, the cases of Mende and Torone are of particular interest. Mende was located on the west side of the peninsula of Pallene⁴⁸ and it was founded by Eretrian colonists.⁴⁹ The monetary production of the city started at the end of the 6th century BC, and the main iconographic type was the donkey that appeared until the mid-5th century BC in an ithyphallic state, sometimes with a crow sitting on its rump.⁵⁰ After ca. 460/450 BC, the donkey remained on the obverse of the coins and it was depicted walking in a non-ithyphallic state, but this time also the god Dionysus was illustrated reclining on its back holding a *kantharos* or a *rheton* in his right hand.⁵¹ On some tetradrachms a crow appeared in front of the donkey while on some others a dog walking below the animal was also added.⁵² There are also some tetrobols depicting on the obverse a standing ass, this time accompanied by a Silenos who is standing right beside it; the reverse depicts a crow.⁵³

⁵³ AMNG III (2): pl.XV.27; SNG Ashmolean 2307; SNG Copenhagen 210–212; SNG ANS 352, 353; Tsagari 2009: n. 74. The change of the type on the obverse with the addition of god Dionysus reclining on the donkey is believed to have happened in ca. the mid-5th century BC. An initial suggestion was that the beginning of the new series started after a break that occurred due to the Athenian Coinage Decree in 449 BC, however, apart from the fact that the date of the Decree is not certain, the discovery of a coin in Gela that was overstruck upon a coin from Mende with the type of Dionysus sets a *terminus ante quem* to around 440 BC. Also, J. Kagan associated the dog depicted underneath the donkey on the tetradrachms with that on the octadrachms of Alexander I and dated the beginning of the new series in Mende to ca.

⁴⁵ Strab. *Geography* IX.2.13, X.1.7.

⁴⁶ Kraay 1976: 89–90, pl. 15, n. 262–266; Tsourti 1999: 15.

⁴⁷ Babelon 1907: 1155–1157.

⁴⁸ Vokotopoulou 2001: 751.

⁴⁹ Thuc. IV.123.

⁵⁰ AMNG III (2): 72–75; Noe 1926: 6–12; Tsagari 2009: n. 71, 72.

⁵¹ AMNG III (2): 75–76; Noe 1926: 12–33; Tsagari 2009: n. 73.

⁵² AMNG III (2): pl.XV.29; SNG Ashmolean 2299; Tsagari 2009: n. 73

The Mendaeans decided not to follow the types of Eretria; instead, they wished to advertise the rich production of their famous wine which was praised by ancient authors like Demosthenes⁵⁴ and Athenaios.⁵⁵ and to exalt the god with the help of whom this rich production was possible. The donkey was closely related to the Dionysiac cult; according to a myth, the god along with Hephaestus and the Satyrs fought against the Giants riding a donkey whose yowls scared away the foes.⁵⁶ There is also Pausania's story of a donkey in Nauplion that nibbled the shoots of the vines creating in this way a more plenteous crop; the people then carved the depiction of an ass on a rock precisely because they learned the pruning of vines from the animal.⁵⁷ Furthermore, the god himself was illustrated on pottery riding a donkey.⁵⁸ The fact that on the earlier issues the animal was depicted in an ithyphallic state falls within the context of the Dionysiac cult and the great importance of the various phallic rituals⁵⁹ that associated the god with the concept of fertility.⁶⁰ The ithyphallic state of the animal is also related to the Silenoi, the companions of Dionysus who also appeared on some tetrobols, as mentioned above, and who were very often depicted with sexual arousal.⁶¹ Even though there is no archaeological evidence of a sanctuary dedicated to Dionysus in Mende, the fact that it was a very famous centre of wine production and the existence of the coins leave absolutely no doubt that his worship was well-established in the city.⁶²

⁵⁹ Ar. *Ac.* 260–261; Farnell 2010b: 197.

⁶² The dog that appears on some tetradrachms walking below the donkey bears similarities with the dog walking below the horse on the coins of the Macedonian king Alexander I (498-454 BC) (Tsagari 2009: n. 13). It has been suggested by J. Kagan that the dog on Mende's coins was an homage to the Macedonian king or maybe just a more playful version of Alexander's type (Kagan 2014: 4). As for the crow that appears on the donkey on the early issues and later on in front of the animal or as a reverse type, it remains rather enigmatic. First of all, it has not always been identified as a crow; J. Kagan suggested that the bird is either a jay or a magpie which both had the name κίττα (or κίσσα in the Ionic dialect) during the Byzantine period, a name that resembles that of the sacred plant of Dionysus, namely the ivy ($\kappa \iota \sigma \sigma \delta \varsigma$) (Kagan 2014: 23-25). In addition, jay was mentioned as a sacred bird of Dionysus (Cornutus, Theol. 30). However, we could also turn our attention to Eretria's coins with the ox and the swallow sitting on its rump; maybe Mende took the aforementioned depiction and readjusted it in order to fit the daily scenery of their own land where, as S. P. Noe informed us, the scene of crows sitting on animals' backs, including donkeys was a very common scene (Noe 1926: 62-63). It may be that the Mendaeans chose to advertise their famous and lucrative wine production by depicting the donkey as an allusion to Dionysus, but at the same time they wished to keep a trait deriving from the city of their origin. Unfortunately, none of the aforementioned suggestions can be certain and all we can do for the moment is speculate.

⁴⁶⁰ BC, a date also suggested by C. M. Kraay who followed a similar reasoning (See: Kraay 1976: 137; Kagan 2014: 3–4. Also, for Alexander I and his octadrachm: Kraay 1976: 142–143, n. 496).

⁵⁴ Dem. 35.35.

⁵⁵ Ath. Deipnosophistai I.29 d-f, I.31 a, IV.129 d-e, IV.146 e.

⁵⁶ Eratosth. Cat. I.11.

⁵⁷ Paus. II.38.3.

⁵⁸ For example: Beazley 1956: 530, n. 83; *Idem* 1971: 263; Carpenter 1986: pl. 23.B; Boardman 1974: fig. 181.

⁶⁰ Lloyd 1994: 220–221.

⁶¹ For example: Carpenter 1986: pl. 19. A-B, pl. 20. A-B, pl. 23. B; Hedreen 1992: 17.

Similar to Mende was the case of the Chalcidic city of Torone, located on the SW part of the peninsula of Sithonia.⁶³ Torone's coin production started at the end of the 6th century BC and its types were also related to its wine production; the obverse bore a wine vessel - an amphora, an oenochoe or a hydria - and the reverse had the depiction of a walking goat to the right or left,⁶⁴ while the lower denominations bore just the head and the neck of the animal.⁶⁵ As a type, the goat was not unknown in northern Greece; we found it on the coins of Ainus,66 on issues of Alexander I (498-454 BC)67 and Archelaus (413–399 BC).⁶⁸ In Ainus the animal was connected with the god Hermes whose head was depicted on the obverse,⁶⁹ while in the case of the Macedonian kings it was most likely connected with their foundation myths.⁷⁰ In Torone, however, the goat was certainly related to Dionysus.⁷¹ The god had the epithets M $\epsilon\lambda\alpha\alpha\alpha_1\kappa^{72}$ (the god with the black goat-skin) and Αιγοβόλος⁷³ (the goat-shooter), while he was quite often depicted on pottery accompanied by a goat.⁷⁴ Many festivals were celebrated across Greece honouring Dionysus, as the Anthesteria, the Linaia, the Agronia, the Rustic Dionysia, the Katagogia and the Great Dionysia, all of which had a common ecstatic character and were related to wine-drinking whereas they also included sacrifices of bulls and goats.75

72 Paus. II.35.1

⁷³ Paus. IX.8.1–2.

⁷⁴ For example: Beazley 1956: 242.34; Boardman 1975: pl. 4.1–2, pl. 5.1–4; Laurens, Touchefeu 1979: pl. 14.1–2; Pfisterer-Haas 1993: pl. 4.1–5.

⁷⁵ Burkert 1985: 163. See also: Larson 2007: 126–142; Farnell 2010b: 150–239.

⁶³ Torone was not founded by the Chalcidians; the excavations showed a permanent settlement from the Early and Middle Bronze Ages, which produced local pottery and had extended contacts with the NE Aegean and Thessaly, while evidence from the fortress of Lekythos showed contacts also with the Mycenaeans (Vokotopoulou 2001: 758.)

⁶⁴ AMNG III (2): pl. XXII.16–17; Hardwick 1998: 120.

⁶⁵ AMNG III (2): pl. XXII.13–15; SNG Copenhagen 338.

⁶⁶ Kraay 1976: 159–160, pl. 31.553–555.

⁶⁷ Tsagari 2009: n. 12. Apart from these tetradrachms, there are also some tetrobols, obols, and hemiobols depicting the forepart of a goat on the obverse, which were previously attributed to Aegae but are now attributed to Alexander I (Papaefthimiou 2000: 37–44).

⁶⁸ Tsagari 2009: n. 16.

⁶⁹ Loukopoulou 2014: 876.

⁷⁰ Diod. Sic. VII frag. 16; Hyg. Fab. 219; Just. Epit. VII.1.7-12.

⁷¹ Apart from the aforementioned coins, there were also some other issues bearing a goat; it is difficult to identify the exact place of their origin, however, they do derive from northern Greece and their connection with the Dionysiac cult remains the most plausible scenario (Psoma 2003: 227–242). From Herodotus we learn in fact about the existence of a sanctuary dedicated to Dionysus that was located in the region of Mount Pangaeon (Hdt. VII.109–111). There is also a diobol attributed to Perdikkas II (454–413 BC) which depicts the forepart of a goat on the obverse and an incuse square with the letters II-E and two ivy leaves on the reverse, a yet another indication of the connection between the ram and Dionysus (Papaefthimiou 2000: 42–43). N. G. L. Hammond also supported this connection; as he writes, "*the coins depicting a goat projected another aspect of the Dionysiac cult that was widespread in the region of Krestonia*" (Hammond, Griffith 1979: 86).

Dionysus was particularly popular in northern Greece; it had been supported that the Greeks received his cult from Thrace which was later disproved by the discovery of Linear B Plates in Pylos bearing Dionysus' name, as well as the discovery of his sanctuary in Kea that provided evidence dated to the 15th century BC.⁷⁶ Nevertheless, it is certain that *Bacchus*, who was responsible for the divine madness and the ecstatic state of the *Maenadae*, had indeed Thracian origins;⁷⁷ let us not forget that the tragedy *Bacchai* was written when Euripides was in Macedonia, in Archealus' court, a fact that gives us an insight into the roots of *Bacchism* in northern Greece. Mende and Torone are both excellent examples of the popularity of the Dionysiac cult in northern Greece, especially in areas with profitable viniculture.

Colonies with types that projected the religion

Mende and Torone used iconographic types related to their religious beliefs in order, however, to project their local economy. On the other hand, Skione and Aphytis used types that projected their religion itself. Skione has been identified with the hill of Mitikas, situated approximately three kilometers SE of the modern village of Skione,⁷⁸ and its founders have said to be the Pellenes from the Peloponnese,⁷⁹ or the Thessalian hero Protesilaos whose head appears on the Skionian coins.⁸⁰ The city started minting coins at the end of the 6th century BC and its iconographic types varied a lot; we find depictions of a helmet, a human eye, a stern of a ship, and grapes.⁸¹ Apart from these, Skione also depicted on the bronze issues and on some tetrobols a standing dove to the right⁸² or two standing doves facing one another.⁸³

The doves were often related to Aphrodite⁸⁴ whose head seems to appear on the obverse of the bronze coins⁸⁵ and whose origins were possibly oriental;⁸⁶ she was identified with the Semitic goddess Astarte who was the goddess of love, the queen of heaven, and the divine partner of God.⁸⁷ The pigeons were known for their high fertility, their

⁷⁶ Burkert 1985: 162; Caskey 1964: 315-335.

⁷⁷ Simon 1996: 287.

⁷⁸ Sismanidis 1994: 319.

⁷⁹ Thuc. IV.120.1. See also: Polyaenus, VII.47.

⁸⁰ Kraay 1976: 134; See also: Hill 1926: 120–122.

⁸¹ AMNG III (2): 108–109; SNG Ashmolean 2371–2379; SNG Copenhagen 318–320; SNG ANS 702–715; Tsagari 2009: 73.

⁸² SNG ANS 711; Tsagari 2009: n. 81.

⁸³ AMNG III (2): pl. XXI.16–21; Robinson, Clement1938: 227–228; SNG Copenhagen 322–324; SNG ANS 718.

⁸⁴ For example: LIMC II (2): pl. 349, 350; Larson 2007: fig. 9.1.

⁸⁵ SNG Copenhagen 322–324.

⁸⁶ Hdt. I.105.2.

⁸⁷ See: Burkert 1985: 152–153; Larson 2007: 114; Farnell 2010a: 618–626.

loyalty, their chastity and their affectionate nature,⁸⁸ characteristics that match Aphrodite's world, while their association with the goddess also had Eastern origins. The connection of Aphrodite with the pigeons is also attested in the West. In Eryx, in Sicily, people celebrated the *Embarkation*, an annual festival that was held at the time when Aphrodite would depart for Libya; the festival coincided with the local movement of the pigeons and people believed that the birds were the companions of the goddess on her journey. After approximately nine days, exactly at the time when the pigeons would reappear in the sky, the people held another festival, the *Return*, celebrating the return of the goddess.⁸⁹ The relation between Aphrodite and the doves is attested in Athens as well; in her sanctuary in the SW slope of Acropolis, remains of an architrave depicting doves standing in a row were found. Furthermore, the Athenians had a festival honouring Aphrodite *Pandemos*, during which the purification of her sanctuary and the washing of the statues was done with the blood of a dove.⁹⁰ Unfortunately, the few excavations in Skione have not given enough information to ascertain the existence of an established cult of Aphrodite, yet, the coinage points towards that direction.

Aphytis was located on the NE coast of Pallene at the site of the modern village of Aphytos,⁹¹ and despite the fact that we do not have preserved sources regarding the identity of its citizens, we should assume that it was a Greek city;⁹² Strabo wrote that the cities in Pallene were founded by the Eretrians,⁹³ while Pseudo-Skylax mentioned Aphytis among the Greek cities in Pallene.⁹⁴ The city started minting coins in the mid-5th century BC and the iconographic types that prevailed were related to the gods worshipped by its people; they depicted the heads of Ammon Zeus, Ares, and Apollo Karneios on the obverse, and representations related to Dionysus – a *kantharos* or grapes – on the reverse. However, on the bronze coins the depiction that prevailed as a reverse type was the eagle;⁹⁵ the bird is depicted mostly standing, sometimes stepping on a snake⁹⁶ or a thunderbolt,⁹⁷ but we also find depictions of an eagle flying upwards⁹⁸ or with the wings open,⁹⁹ while on another series two eagles are standing

⁸⁸ Pollard 1977: 90.

⁸⁹ Ibidem: 146.

⁹⁰ Simon 1996: 248–249, fig. 242; Larson 2007: 118–119.

⁹¹ Vokotopoulou 2001: 749; Tiverios 2008: 38.

⁹² Vokotopoulou 2001: 749; Tiverios 2008: 39.

⁹³ Strab. Geography X.1.8.

⁹⁴ Ps.-Skylax, *Periplous* 66. Yet, the archaeological evidence indicates that the site was occupied since the Bronze and Early Iron Ages (Vokotopoulou 2001: 749; Tiverios 2008: 39).

⁹⁵ AMNG III (2): 44-46; Robinson, Clement1938: 273; SNG Copenhagen 123-128.

⁹⁶ AMNG III (2): pl. XI.19.

⁹⁷ AMNG III (2): pl. XI.20.

⁹⁸ AMNG III (2): pl. XI.23.

⁹⁹ AMNG III (2): pl. XI.22.

and facing one another.¹⁰⁰ The eagle was obviously connected with the cult of Ammon Zeus whose horned head was an obverse type and whose sanctuary was discovered by the excavations in Aphytis.¹⁰¹ The cult of Ammon was most probably established in Aphytis after the siege of the city in 404/405 BC by the Spartan general Lysander that was terminated after a dream in which the god ordered the general to end the siege and told him that the Aphytians should sacrifice to Ammon.¹⁰²

Apart from the eagle, two other types of birds made their appearance on the Aphytian bronze coins, the pigeon¹⁰³ and the owl.¹⁰⁴ The latter was depicted on a single specimen found in Olynthus and assimilated the famous Athenian Owls. According to D.M. Robinson and P.A. Clement, the coin must be dated to the period when the Athenian influence in Pallene was strong, namely ca. 364 BC; an Athenian influence in Aphytis should come as no surprise since the city was a very loyal ally of Athens - which was not the case for most of the cities in northern Greece. As for the pigeons, they were depicted standing and facing each other, just like the ones on the coins of Skione that were struck at the same period; Skione was situated not far away from Aphytis, which means that the Aphytian issues must have been inspired by the Skionian coins. If this was the case, then possibly the depiction of the eagles facing each other on some Aphytian coins was also influenced by Skione; seldom does one encounter eagles represented in this way, which is not the case for the pigeons that are very often depicted in an affectionate way in pairs, even until today. No matter where the settlers of Aphytis had come from, it seems that their religious beliefs played a significant role in their lives and they projected them intensely as part of their identity.

The Andrian colonies in the eastern Chalcidice

Acanthus and Stageira, both colonies of Andros, were founded in the mid-7th century BC¹⁰⁵ and they were located in the eastern Chalcidice. Acanthus started minting coins in the last two decades of the 6th century BC; its mint was one of the most important in the Chalcidice with a large production of coins that circulated widely

¹⁰⁰ AMNG III (2): pl. XI.16.

¹⁰¹ Leventopoulou-Giouri 1971: 356–361; Voutiras 2000: 631–640; Vokotopoulou 2001: 749; Tiverios 2008: 39. Zeus Ammon was a deity that derived from the blending of Amun-Ra – the main deity of Thebes in Egypt – and an indigenous Libyan god who was the supreme deity of the Pantheon, which led the Greeks to identify him with Zeus as early as the 6th century BC; he was an oracular deity and his cult made its way into Greece through the Greek colonists of Kyrene (See: Larson 2007: 175–176).

¹⁰² Plut. Lys. 20.5.

¹⁰³ AMNG III (2): pl. XI.15.

¹⁰⁴ Robinson, Clement 1938: 273–274.

¹⁰⁵ Panayotou 1991: 127; Trakosopoulou-Salakidou 1998: 93; Graham 2001: 224; Vokotopoulou 2001: 760. Albeit most of the scholars accepted the foundation date given by Eusebius, namely on the 31st Olympiad (ca. 655–654 BC), D. W. Bradeen suggested a later date, in ca. 635 BC, since he believed that Eusebius' chronology was based on a forty-year generation (Bradeen 1952: 378).

from Egypt, Syria and Persia in the East, to Sicily in the West.¹⁰⁶ As for the iconographic types, on the obverse of the tetradrachms the city chose to depict a combat scene between a lion – or in some cases a lioness¹⁰⁷ – and a bull.¹⁰⁸ The scene of a lion attacking a bull was in fact very old and it had eastern origins; the first examples come from the 4th millennium BC and are related to Mesopotamia.¹⁰⁹ During the 7th century BC, the Greek art was influenced to a large extent by the artistic production of the East, which was the result of the commercial activities between the Greeks and eastern peoples that intensified in the 8th century BC.¹¹⁰ Hence, the combat scene between a lion and its quarry passed from the East into Greece where it became particularly cherished, especially in sculpture; among few examples are the limestone figures of a lion and a lioness devouring a bull that once belonged to the pediments of the archaic temple on the Acropolis in Athens,¹¹¹ as well as the marble figures of lions attacking quarries from the east pediment of the archaic temple of Apollo at Delphi.¹¹² Apart from sculpture, the scene was also well known through pottery¹¹³ and gems.¹¹⁴

The combat scene on Acanthus' tetradrachms seems to have been a civic emblem for the city, which is also confirmed by two other interesting findings. The first one is a unique piece, a gold coin or medal with a small hole on it which was struck with the same die used for the tetradrachms and bore the exact same scene This unusual piece might have been a coin that eventually became simply a valuable object preserved by its craftsman which could also explain the hole in it, or it could have been a jewellery for the neck.¹¹⁵ The second finding is a marble relief with the same combat scene that was probably an architectural part of the city's central gate and it is dated to the first half of the 5th century BC.¹¹⁶

Stageira followed the example of the neighbouring Acanthus; the early uninscribed tetradrachms of the city bore on the obverse the combat of a lion with a boar.¹¹⁷ Knowing that the name of the city's port was *Kapros* (i.e. boar) and that the small island located near Stageira also bore the same name, we should assume that the boar was in fact the civic

¹⁰⁶ Trakosopoulou-Salakidou 1998: 97–98.

¹⁰⁷ Desneux 1949: n. 16-21; Price, Waggoner 1975: n. 153-158.

¹⁰⁸ AMNG III (2): pl. VI.6–19, pl. VII.1–10; SNG Ashmolean 2195–2204; SNG Copenhagen 1–2, 14–15; SNG ANS 1–15; Tsagari 2009: n. 95, 99.

¹⁰⁹ Desneux 1960: 6. See also: Legrain 1921: n. 163, 179.

¹¹⁰ Boardman 1998: 83–140; *Idem* 2001b: 13–23.

¹¹¹ *Idem* 2001b: fig. 190–191.

¹¹² *Ibidem* 2001b: fig. 203.1–2.

¹¹³ For example: Beazley 1963: 60, n. 65; Callipolitis-Feytmans 1974: pl. 2.80; Boardman 1998: fig. 243; *Idem* 1974: fig. 68, 120; Green 1979: pl. 28.1–4; Moignard 1989: pl. 12.4–5.

¹¹⁴ For example: Boardman 2001a: pl. 297, 389, 391, 393, 414.

¹¹⁵ Rhomiopoulou 1999: 57-61.

¹¹⁶ Evans 1935: 537; Trakosopoulou-Salakidou 1998: 99, fig. 7.

¹¹⁷ Tsagari 2009: n. 103.

badge of the city. The latter assumption is also supported by the fact that the animal was illustrated alone on the lower denominations.¹¹⁸ In Acanthus where the civic emblem was the whole combat scene and not just one of the two animals, the lower denominations, whose small space did not allow the deployment of the whole scene, depicted separately both the lion and the bull;¹¹⁹ by contrast, Stageira depicted on its smaller coins only the boar and not the lion. Hence, the city projected its civic badge, yet, it was deeply influenced by Acanthus' combat scene that was adopted not only for its tetradrachms but also for the main gates of its walls as we can deduce from the discovery of two parts of a lintel that bore the representation of a boar confronting a lion.¹²⁰

Both colonies of Andros chose completely different types than those of their metropolis and the fact that the scene depicted on their heaviest issues was also depicted on the main entrances of the cities leaves absolutely no doubt of their importance as renowned emblems. The Acanthian influence on the tetradrachms of Stageira indicates close relations between the two colonies and highlights the impact that Acanthus' rich coin production had in the region. In fact, this impact was not confined to the eastern part of the peninsula; a similar type was chosen for the earliest tetradrachms of Skione depicting a lion attacking a stag.¹²¹ H. Gaebler and J. Desneux suggested that the tetradrachms of Acanthus and Stageira derived from the hand of the same engraver,¹²² which was also accepted by H.A. Cahn who noticed a common technique with certain Ionian influences not only on the coins of Acanthus and Stageira, but also of Skione.¹²³ There is also a disputed issue depicting a lion attacking a donkey that has been attributed by S.Psoma to Mende.¹²⁴ In a relevant article, P. Tselekas makes no mention of Mende as a possible candidate for the minting of this coin, yet, he also suggests that the similarities of the four aforementioned types could mean that the artist who created the depictions worked for all four mints.¹²⁵

Sermyle: types related to social customs

Sermyle was located on the NE coast of the Toronaic Gulf and its exact location should be sought three kilometres south of modern Ormylia, in Platia Toumba.¹²⁶

¹¹⁸ AMNG III (2): pl. XXVI.16; SNG ANS 733–735; Tsagari 2009: n. 104, 105. See also: Gaebler 1930: 294–304.

¹¹⁹ AMNG III (2): pl. VI.8–9; SNG Ashmolean 2205–2215, 2219, 2221–2222; SNG Copenhagen 3–10, 16–21; SNG ANS 16–32; Tsagari 2009: n. 96, 96, 100.

¹²⁰ Sismanidis 1998: fig. 31–32.

¹²¹ Bloesch 1957: 7; Price, Waggoner 1975: 43; Tsagari 2009: n. 78.

¹²² Gaebler 1930: 300; Desneux 1949: 114.

¹²³ Cahn 1973: 11–13.

¹²⁴ Psoma 2006: 69; Tsagari 2009: n. 70.

¹²⁵ Tselekas 2000: 51–52.

¹²⁶ Zahrnt 1971: 225; Tiverios 2008: 48.

The city was included in the territory of the Chalcidians, however, the available information regarding the exact time of its foundation is very limited. Sermyle started minting coins in the late 6th century BC and the iconographic type that prevailed on the silver issues was a rider on a cantering horse – to the right or left – brandishing his spear, sometimes with a hound running below the horse.¹²⁷ On some issues a galloping horse was depicted without the rider,¹²⁸ while on smaller fractions we find the forepart or just the head of a horse in profile.¹²⁹ There was also a series of tetradrachms – only two specimens are known – that must have been struck awhile before 500 BC and that bore the inscription Σ TATEP MAXON;¹³⁰ the great importance of these coins lies in the fact that they name their value, a phenomenon that was rather rare.¹³¹

The horse was a particularly popular iconographic type in northern Greece. The octadrachms of Alexander I (498–454 BC) depicted a male figure on a walking horse, dressed in fine clothes and carrying two spears, while on later issues a dog was also depicted below the horse;¹³² similar depictions we find on the tetradrachms of the Odrysian ruler Sparadokos¹³³ (450–431 BC), as well as on coins of Perdikkas II (454–413 BC)¹³⁴ and Archelaus (413–399 BC).¹³⁵ Both the issues of Alexander I and those of Sparadokos are dated to the years following the Persian Wars, making in this way the Sermylian series with the inscription Σ TATEP MAXON the oldest depictions of horsemen in northern Greece; S. Psoma suggested that the horseman on Alexander I's coins could have been inspired by the Sermylian issues.¹³⁶

¹²⁷ AMNG III (2): 106–107; SNG Ashmolean 2380–2382; SNG ANS 721–726; Tsagari 2009: n. 90. Some issues bearing Sermylian types were considered as modern forgeries by H. Gaebler (AMNG III (2): 211, n. 33–35). However, it was suggested by others that these issues should be considered as contemporary imitations (Schwabacher 1939: 8–10; Price, Waggoner 1975: 46–47).

¹²⁸ AMNG III (2): pl. II.6; Tsagari 2009: n. 91.

¹²⁹ Gatzolis, Psoma 2012: 618.

¹³⁰ Tsagari 2009: n. 89. For the dating of the tetradrachms – both the ones bearing the inscription Σ EPMYAIAON and those bearing the inscription Σ TATEP MAXON – S. Psoma presented a thorough comparison between the incuse squares on the reverse of the Sermylian coins, and the ones inscribed on the reverse of other coins from northern Greece (Psoma 2001b: 33–35).

¹³¹ S. Psoma pointed out that the term Σ TATEP was not found on any other coin. The word itself appeared on inscriptions in many places and it was used to describe gold, silver and electrum coins; even though the term was used to describe different weights, in all cases it referred to the heaviest weight of each weight system. Thus, in the case of Chalcidice the word Σ TATEP was used to indicate the heaviest coins, that is the tetradrachms of the "Euboic/Attic" standard. As for the second word, MAXON, the most plausible explanation is that it was the name of the magistrate or the person responsible for the mintage (Psoma 2001b: 37–40. Also: Tsagari 2009: 74).

¹³² Tsagari 2009: n. 11-13.

¹³³ Taceva 1992: 69-74.

¹³⁴ Tsagari 2009: n. 15.

¹³⁵ *Idem* 2009: n. 16.

¹³⁶ Psoma 2001b: 42.

In the world of the ancient Greek aristocracy, the horseman was a general and wellknown concept, and the horse became a special symbol of wealth and status distinction. From the Mycenaean period, men who owned horses were considered the noblest and they gained great reputation. The aristocrats used horses in war, hunting, and races; Xenophon refers to hunting as the also "noblest occupation", for both adults and young men.¹³⁷ Warfare and hunting were two activities closely related; the skills of confronting a wild animal were very useful in times of wars when the men were obliged to fight the enemies, and hunting was considered the best training for the future warriors because by practicing it they acquired discipline, strength, bravery and comradeship, all mandatory characteristics for great combatants.¹³⁸ In fact, in quite a few places in Greece hunting was an initiation, namely a procedure through which the young men were accepted into the adults' society after they had proved themselves ready to assume their military duties. Ancient sources, dated from the 5th century BC, refer to such initiations in Sparta, Crete, and of course Macedonia.¹³⁹ In the latter case, the available sources provide us significant information about royal hunting and its long tradition within the Macedonian court and elite.¹⁴⁰ On a stater of Amyntas III (393-370 BC) the depicted scene is beyond doubt a hunting scene unfolding on both sides of the coin; the obverse bears a rider on a cantering horse brandishing his one spear, while the reverse depicts a standing lion facing the rider and having its front right paw raised, ready to attack the second spear that the hunter had just launched and that seems to be broken The identification of Amyntas III's rider as a hunter equals the same identification for the riders on the coins of the previous Macedonian kings too,¹⁴¹ which also leads to the identification of the Semylian horseman as a hunter; in fact, one can clearly notice the resemblance between the horseman on the Sermylian issues and the one depicted on Amyntas III's stater, regarding mainly the posture and the armament. The hound below the horse on some Sermylian tetradrachms is yet another proof that the scene is indeed a hunting scene. Let us also not forget that there are numerous depictions on Athenian vases, dated from the late 6th century BC, which illustrate hunters in action either on foot or on horses where we can easily trace similarities with the Sermylian rider.¹⁴² Within the Macedonian court, war and hunting were two elementary royal activities and the excellent performance was not

¹³⁷ Xen. Lac. IV.7.

¹³⁸ Barringer 2001: 10–59 and especially 11–14, 42–46.

¹³⁹ Ibidem 2001: 11–15. See also: Hatzopoulos 1996: 87–111.

¹⁴⁰ Sawada 2010: 399–403. Most of the available sources give us information about hunting – particularly of lions – mainly from the period of Alexander III (356–323 BC) onwards. However, there are few sources that refer to royal hunting before the reign of Alexander the Great (e.g. Diod. Sic. XIV.37.6) as well as other evidence, such as the coins of Alexander I (498–454 BC) or the stater of Amyntas III (393–370 BC).

¹⁴¹ Greenwalt 1993: 515.

¹⁴² For example: Barringer 2001: fig. 1, 19, 21, 29, 29.

just an obligation for the king, but the way to legitimise his regal power.¹⁴³ It is important to underline, however, that Sermyle was a Greek autonomous *polis*, which means that we should automatically disregard any political propaganda behind the Sermylian horseman; instead, we should seek a social symbolism and hence link the Sermylian horses with the well-established norms of the aristocratic society.

Epilogue

Amid the many peoples and tribes that lived in the northern shores of the Aegean Sea, the southern Greeks managed to create strong and prosperous cities that maintained their sociopolitical structure intact even though located in a region that favoured political forms that the Greeks generally scorned and were opposed to. The rich coin production of these cities that started as early as the mid-6th century BC reflected their wealth, while the iconography used on the coinage projected important aspects of the citizens' identity. During the late Archaic and Classical periods, the animal figures generally predominated as iconographic types on the coins of the Greek cities on the Chalcidic peninsula with the inspirational sources ranging from religion and social customs to simple images taken from nature. The table that follows is an overview of only the main inspirational sources for the aforementioned types.

	Types copied from the metropolis	Types related to religious beliefs	Civic emblems	Types that projected the local economy	Types related to social customs
Potidaea	+	+			
Dicaea	+				
Mende		+		+	
Acanthus			+		
Stageira			+		
Skione		+			
Aphytis		+			
Sermyle					+
Olynthus	+	+			
Torone		+		+	

¹⁴³ Prestianni-Giallombardo, Tribodi 1996: 326–327.

The first thing that attracts the attention is the fact that most of the cities did not follow the iconography of their metropolis; in fact, only Dicaea copied all of its types from Eretria and Carystus, while Olynthus borrowed only its reverse type from Chalcis, and Potidaea was "forced" by the circumstances to abandon its own types and adopt the Corinthian ones. This is in accordance with the very nature of the Greek polis. The Greeks passed from monarchy to aristocracy and from there to tyranny before the establishment of a new political system where the decisions were made by the citizens; each polis was an independent city-state and the people cared to maintain and protect this independence with plenty of zeal.¹⁴⁴ The same philosophy seems to have been preserved by the Greek colonists in their new homes and hence, despite the close ties that the colonies maintained with their mother-cities, they preserved their independence and were governed by their own people.¹⁴⁵ Therefore, the very political organisation of the Greeks can justify the independent character of the monetary types of the colonies on the Chalcidic peninsula. At this point, it is also worth mentioning what C.M. Kraay wrote about the inscribed name and the depicted types on the Greek coins; as he stated, "the genitive in which the ethnic is normally expressed, is not simply an informative statement; it is a statement of ownership... Similarly the design stamped on the coin is the state seal which marks it as a state property".¹⁴⁶ Taking all these into consideration, we should also attribute a political character to the choice of the Andrian colonies of Acanthus and Stageira to depict on their coins their civic emblems; the city badges were well-known and easily recognisable and they were a proclamation of the political independence of the city.

The second thing that is noticeable on the table above is that most of the animal figures on the coins were related to religion; Potidaea, Olynthus, Mende, Skione, Aphytis and Torone, they all used types associated with the gods worshipped by their citizens. Potidaea and Olynthus depicted beliefs that they had brought along from their homes, which was a phenomenon that occurred quite often among the colonists;¹⁴⁷ Aphytis and Skione projected their cults per se, while Mende and Torone promoted through the Dionysiac iconographic types their successful local economies. Religion played a multifarious role in the daily lives of the ancient societies and it was considered a significant trait of the citizens' identity, thus it is not at all surprising that the types related to cults prevailed on most cities' coinage. Finally, the case of Sermyle that projected on its coinage the deep-rooted social stratum adds up to the vast variety of inspirational sources for the Greeks of the Chalcidic peninsula.

¹⁴⁴ See: Bengtson 1991: 104–116, 122–128, 145–146.

¹⁴⁵ *Idem* 1991: 93–99.

¹⁴⁶ Kraay 1988: 444.

¹⁴⁷ Bengtson 1991: 94.

Abbreviations

AEMTH - Archaeological Excavations in Macedonia and Thrace

AMNG – Gaebler H. 1906. Die Antiken Münzen Nord-Griechenlands, Band III (2) Makedonia und Paionia. F. Imhoof-Blumer (dir.). Kgl. Akademie der Wissenschaften (ed.). Berlin.

HN - Head B.V. 1911. Historia Numorum. Oxford.

IG - Inscriptiones Graecae

LIMC - Lexicon Iconographicum Mythologiae Classiche. Zurich 1981 (Artemis).

- SNG ANS Sylloge Nummorum Graecorum: The Collection of the American Numismatic Society. New York 1987.
- SNG Ashmolean Sylloge Nummorum Graecorum: Ashmolean Museum Oxford. London 1976.
- SNG Copenhagen Sylloge Nummorum Graecorum: *The Royal Collection of Coins and Medals Danish National Museum*. New Jersey 1982.

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SMALL CHANGE IN THE ROMAN PROVINCIAL WORLD. BRONZE DENOMINATIONS IN THE PROVINCE OF ASIA BETWEEN 96 AND 138 AD

Abstract: The denominations of bronze coins remain one of the most problematic issues in Roman provincial coinage. Due to the different weights, sizes and iconographic types of coins, it is not possible to create one single monetary system corresponding to all provincial mints. For this reason, it seems that the best solution is to find common and repetitive tendencies for the smaller region, in this case the Asia province, taking into account a narrower period of time, like 96–138 AD. The same denominations could have been issued by centers located in close proximity to each other, which could indicate regional trends, common transactions or cooperations. Some iconographic types, such as portraits of members of the imperial family, were placed primarily on one type of denomination. This in turn indicates the presence of certain traditions in the monetary space, thanks to which perhaps the denominations of bronze coins are not as chaotic as it seems.

Keywords: Asia, bronze coinage, denominations, Nerva, Trajan, Hadrian

The denominations of bronze coins remain one of the most problematic issues in Roman provincial coinage. Individual centers issued coins of various sizes and weights, which often deviated from the adopted system. Hence the questions arise with what denomination we have, how the transactions looked like, how people recognized the value of individual coins. When we look at the whole Roman coinage in a province like Asia, the number of coins can be overwhelming. Sometimes, this also applies to some centers that in the narrow period issued more coins of various sizes. However, if we look more pragmatically at that issue it does not seem so difficult. Coins were struck in different periods, but unfortunately very often it is not possible to specify the exact date, except for the years of the reign of individual emperors. However, if the denominations entered the market at certain intervals, were, e.g. coins with a new value or were continuations of current issues, they did not seem to be a problem for the ordinary customer. In addition, it should be remembered that the availability and circulation of some units was limited (e.g. large denominations). Recognition of coins remains another problem, especially in the absence of names or characters specifying the value of the coin. One of the centers placing denominations on coins was Chios. This element facilitated identification due to the relatively large number of units struck by the city, as well as standard and similar images. Why, then, the large variety of coins, generally no names or signs were placed on other provincial issues, mainly from the first and second century AD? The simplest explanation seems to be that they were not needed. Perhaps this was due to the tradition that no such solutions were used earlier, while the use of individual coins on the market did not cause much difficulty to the citizens. Perhaps also the value of some bronze coins was simply variable.

Several papers have been devoted to the analysis of this problem and will be verified below. Usually, in general elaborations of mints, the series of denominations and the effigies appearing on them throughout the entire production period are traced. Visible differences and changes in some times are emphasized, and units based on their metrology are assigned to particular generally occurring denominations. As far as possible, units within one iconographic type are analyzed at different period.¹ On the Germe coins the same image was repeatedly placed probably on the same denomination during the reign of individual emperors.² Let's take a look at the individual units struck by the cities of the Roman Asia province in a narrower time.

Asia possessed a special status among Roman provinces. It was one of the oldest and richest province in the Empire under control of the Senate. The proconsulship of Asia was a prestigious reward that only a former consul could receive.³ Territories belonging to the province were quite extensive, comprising particular regions such as Mysia, Troad, Aeolis, Ionia, Lydia, Caria, part of Phrygia, and the Aegean Islands with the exclusion of Crete.⁴ Hence, to facilitate the management and judicial procedures of the province, it was divided into smaller administrative units called *conventus*. In the second century AD the Asia province was divided into 14 smaller units (Cyzicus, Adramyteum, Pergamum, Smyrna, Ephesus, Miletus, Halicarnassus, Alabanda, Cibyra, Philadelphia, Sardis, Apamea, Synnada, Philomelium).⁵ Between 96 and 138 AD, 129 cities in Asia province issued coins.⁶ Minting activity increased during the Flavian dynasty.⁷ The aim of the present paper is to look more closely at denominations

¹ Klose 1987; Bellinger 1961: 47–49, 185–195; Ehling 2001: 24–33; Delrieux 2007: 57–86; Karwiese 2016: 72–92; Türkoğlu 2019: 183–184.

² Ehling 2001: 33.

³ Magie 1951: 376, 415-416; Sartre 1997: 24.

⁴ Mitchell 1993: 29.

⁵ Burton 1975: 92, 94; Habicht 1975: 67–70.

⁶ Map of the province of Asia including mints and *conventus* http://rpc.ashmus.ox.ac.uk/maps/1.2/; Amandry, Burnett et al. 2015: Map 3.

⁷ Ibidem: 817–819.

of individual centers and *conventus* in this region and noticing existing trends during this period. Due to the large amount of coin variations in terms of size and the images appearing on them, it is very problematic to create a unified system or regulations corresponding to all centers. There will always be departures from these assumptions in this topic. Therefore, perhaps a certain step forward is to notice some popular repetitive trends that may not necessarily be reflected in all mints. The analysis is focused primarily on the period of the reigns of Nerva, Trajan and Hadrian, 96–138 AD, but in order to draw the correct conclusions one should follow the denominational traditions of earlier periods. This topic was researched during the 64th Eric P. Newman Graduate Numismatic Summer Seminar of the American Numismatic Society.⁸

Provincial denominations - overview

We know quite little about the functioning of individual monetary systems in the eastern centers of the province. Based on the available sources and recorded coins, it can be seen that systems and exchange rates differed according to period and region. Monetary systems depended on the individual histories, status, demand and possibility of centers. Coin production in coin-issuing centers was extremely irregular. Many cities didn't struck their own coin, what was much more standard issue.⁹ Due to this wide variety, any attempt to identify a homogeneous system or pattern corresponding to all cities is impossible. Transactions were based mainly on silver and bronze coins.¹⁰ The *Salutaris Inscription*¹¹ from Ephesus, 104 AD, informs us about denominational units and their values.¹² Based on the Pergamum inscription from the reign of Hadrian, we know that some products could be bought only with bronze coins, others only with silver.¹³ In this period a moneychanger bought a *denarius* for 17 *assaria* and sold it for 18. This, may indicate a change in the rate of exchange in relation to earlier periods. This rule may have applied in most provinces in the East.¹⁴ Moreover, it means that exchange tables need more bronze coins for change.¹⁵

⁸ I would like to thank our supervisor Dr Peter van Alfen for the opportunity to participate in the seminar; Dr Lucia Carbone, supervisor of the presented project; Dr hab. Jarosław Bodzek, supervisor of my PhD Thesis, for all remarks and hints to this article; Dr Mariangela Puglisi, for sharing information about coin finds from archaeological research from Cyme.

⁹ Jones 1963: 308-309; Harl 1997: 224; Weiss 2005; Burnett 2011: 7-8.

¹⁰ IvE 27; Butcher 1988: 31–33; Johnston 2007: 1–2; Burnett 2011: 8.

¹¹ IvE 27.

 ¹² 1 cistophorus = 4 drachmai = 3 denarii (but from the reign of Hadrian – 4?); 1 denarius = 8 obols =
 16 assaria = 96 chalkoi; 1 drachma = 6 obols – 12 assaria = 72 chalkoi (Amandry, Burnett et al. 2015: 814).
 ¹³ OGIS 484.

¹⁴ Crawford 1970: 42; Melville Jones 1971: 104; Butcher 1988: 26.

¹⁵ Harl 1997: 24–25; Katsari 2011: 214.

The system was based on the Roman as or assarion, but a certain distinction should be made. The inscriptions include a reference to Italian asses, which suggests a difference from the local assarion.¹⁶ Similarly, the value of the denarius in asses and assaria was completely different in Rome and in the provinces.¹⁷ And, in fact, if we look at the metrological parameters of both units at the beginning of the second century AD, Roman as was a heavier and larger coin (av. 26–27mm, av. 11g) than the unit struck in Chios (av. 20-23mm, av. 5-6g) or other basic units (18-20mm, 4-6g) (Tab. 1). The issue of distinguishing and identifying individual bronze denominations is quite problematic, due to the wide variety of weights, sizes, alloys, and iconographical types. Usually, no denominational names or marks were placed on bronze coins in the first and second centuries AD, indicating that no such necessity existed.¹⁸ These names or marks were placed much more regularly in the third century AD.¹⁹ For the period 96–138 AD, we know of several exceptions consisting of coins issued in Chios, Rhodes, Cyme, and, perhaps Alexandria. Here there is also a wide variety.²⁰ In some regions, as many as nine denominations are have been distinguished on the basis of metrological values,²¹ but is it correct? Due to the absence of unit names and differences in dimensions, it is very difficult to say what a particular denomination and value actually was, for inhabitants of different centers.²² Bronze coins had a fiduciary character.²³ Perhaps the idea of changes in the nominal structure, and hence in the value of individuals coins, which would not necessarily be reflected in the coinage, should also be taken into account.²⁴ RPC researchers have created very accurate coin combinations of similar weights and sizes,²⁵ however, in reality of the ancient world some of these units may have had the same value. This can also be confirmed by the values within individual emissions. Therefore, one should look with caution at very accurate combinations of this type. Looking at the coins from this period, the rather general assumption is that mainly two or three types of coins were used mainly in daily transactions. Katsari said that "smaller denominations are probably the most important indication of the extent of the use of coins and the velocity of cash transactions within a specific urban centre".²⁶ Harl emphasized that smaller denominations were needed for

¹⁶ IGRR III 1056; Butcher 1988: 33; MacDonald 1989: 121.

¹⁷ Melville Jones 1971: 99–100.

¹⁸ Johnston 1997: 205; Amandry, Burnett et al. 2015: 814.

¹⁹ Johnston 2007: 1-2.

²⁰ Jones 1963: 309; Amandry, Burnett et al. 2015: 814.

²¹ Smyrna (Amandry, Burnett et al. 2015: 238).

²² Johnston 1997: 205.

²³ Crawford 1970: 40–41; Melville Jones 1971: 104; MacDonald 1989: 122; MacDonald 1992: 18; Katsari 2011: 72–75.

²⁴ Howgego 1990: 261.

²⁵ Amandry, Burnett et al. 2015: 819–825.

²⁶ Katsari 2012: 1.

the conversion of silver and bronze coins, or distribution during festivals or the arrival of the emperor.²⁷ First of all, the units are 18–20mm, 4–6g and 15–18mm, 3–4g, which seems to be the most frequently struck in almost all centers. They served in everyday transactions to purchase the most basic products. The largest emissions were mainly used for thesaurization, larger transactions or for some commemorative function,²⁸ as it seems in the case of some coins with the image of Antoninus.

Changes in the value of coins, resulting from various phenomena such as e.g., inflation, can also be observed today, but these changes do not involve a very strict transformation of the entire monetary system which would generate additional costs.²⁹ As well, there is still a question about the adoption of the Roman system in particular areas of the Roman Empire.³⁰ The introduction of a larger number of denominations in some cities can be related to an attempt to assimilation to this particular system? There will probably never be a certain answer in this matter, but this option should not be excluded either. On the other hand, historical and epigraphic sources inform us about the circulation of individual units.³¹ One can agree with researchers that certain problems, such as the use of individual denominations or their nomenclature, cannot be solved.³² It seems that the striking of some units indicates that their use and value depended on place and the relevant period.

Many centers issued only a few bronze denominations, so that the idea of their use in everyday transactions seemingly involves no problems. Sometimes, however, the number of denominations is quite overwhelming and poses questions about their identification and use. Nowadays, the correct identification of the value of individual units is facilitated by several determinants. We have, above all, indications of value on coins, moreover, each denomination is a certain size or was struck from a certain alloy. In the Roman Empire, it can be seen that a distinction was made between denominations struck in brass and in copper.³³ However, the provinces lack that pattern. A great many bronze coins were struck with a lead admixture, which additionally increased the weight of the coin. The lack of a clear distinction between units and metals prevents identification of coins on the basis of the relevant alloy.³⁴ How then the denominations and values of coins were recognized?

³¹ Messene tax inscription – obols and chalkoi; Thessalian inscription – obols for the smaller denominations, Athens inscriptions – leptou drachma (Amandry, Burnett et al. 1992: 32); Bible – assarion, xodrantis, lepton (Mark 12.42); Ephesus – tetrachalkia (Habicht 1975: 64).

³² Amandry, Burnett et al. 1992: 30.

33 Crawford 1970: 43-44.

³⁴ Coins from brass in some cases could emphasizing some special character of them, not exactly indicate denominations. Use of various metal was fashion (Amandry, Burnett et al. 1992: 371–372; Amandry, Burnett et al. 1999: 122–123; Amandry, Burnett et al. 2015: 814).

²⁷ Harl 1997: 224–225.

²⁸ Johnston 1997: 207.

²⁹ Ibidem: 205–206.

³⁰ Ibidem; Burnett 2011.

Researchers from the *RPC project* are inclined to accept distinguishing factors involving weight and type.³⁵ Johnston, a researcher of, *inter alia*, Greek denominations in Roman provinces, has emphasized the importance of diameter and image.³⁶ Klose, in his study of Smyrna coins, stated that weight and size were not enough.³⁷ MacDonald in the elaboration coins from Aphrodisias believed that the size of the coin is a more significant distinguishing factor than its weight.³⁸ Katsari sees the correct identification in the size and image on the obverse or reverse. She also claims that weight fluctuations did not change people's attitude towards the coin until it remained the same size.³⁹ In the opinion of the author of this article, the determinants enabling correct identification encompass all three features combined, depending on the place and time.

Denominations in the Asia province

The reign of Augustus was revolutionary for provincial monetary production. The changes made at that time were the subject of research by A. Burnett,⁴⁰ and L. Carbone.⁴¹ Perhaps an attempt was made to introduce a uniform denomination system, however, as can be seen from numismatic sources, unsuccessful. A. Burnett claims 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'.⁴² In the first century AD, a pattern can be discerned, despite many exceptions, in which two denominations dominated in the provinces, the larger 18–20mm, 4–6g and smaller 15–17mm, 3–4g.⁴³ Continuation of these denominations is observed in the period of Flavian and at the beginning of the second century AD.⁴⁴ Like the emissions from Chios, their metrology corresponds to the values of the *assarion* and *hemiassarion*. Larger standards were introduced as early as the time of Augustus;⁴⁵ these became more popular in southern Asia during the reign of Nero.⁴⁶ During the reign of Flavian, the "fashion" for larger denominations (more than 30mm) proliferated in many centers. During

³⁵ Amandry, Burnett et al. 2015: 814.

³⁶ Johnston 1997: 207.

³⁷ Klose 1987: 108.

³⁸ MacDonald 1976: 28-31; *Idem* 1992: 18.

³⁹ Katsari 2012: 48.

⁴⁰ Burnett 2011.

⁴¹ Carbone 2014.

⁴² Dio 52.30.9; Amandry, Burnett et al. 1992: 37; Burnett 2011: 25–27, 30.

⁴³ Amandry, Burnett et al. 1992: 372–373.

⁴⁴ Thyatira, Magnesia-ad-Sipylum, Apollonia Salbace, Heraclea Salbace, Tripolis, Hierapolis, Eumenea, Acmonea and Aezani, Adramyteum, Perperene, Hierocaesarea, Pitane, Elaea, Aegae, Cyme, Phocaea, Temnus, Mostene, Erythrae, Maeonia, Philadelphia, Blaundus, Julia, Dionysopolis, Appia, Cadi, Coiaeum and Amorium (*Ibidem*).

⁴⁵ Magnesia ad Sipylum, Tralles, Cos, Chios, Aezani.

⁴⁶ Amandry, Burnett et al. 1992: 375.

this period, the number of iconographic types also increased.⁴⁷ The assumptions of both the denominational and iconographic structure were continued in the early second century AD. During the reign of Hadrian, the number of denominations increased; moreover, in many centers heavier and larger coins appeared.⁴⁸ In the later reigns of the Antonine dynasty, perhaps the denomination structure is continued with a greater variety of iconographic types.⁴⁹ The introduction of larger denominations certainly facilitated their distinction, in particular cases where the differences between them were quite small. In addition, larger denominations facilitated transactions and the storage of wealth.

Between 96-138 AD mint production in Asia province increased compared to earlier periods (106 cities struck coins during the Julio-Claudian dynasty, 93 centers during the Flavian period). In short reign of Nerva, only eight mints struck coins with his name, compared to 99 in Trajan's and 104 in Hadrian's times, giving us 129 mints as a whole. To date, at least 5,765 coins have been recorded for the period 96–138 AD,⁵⁰ including pseudo-autonomous coins.⁵¹ Among the Asian *conventus*, it can be seen that the largest numbers belong to the conventus of Pergamum (1398 coins) and Sardis (1112 coins), representing 25% and 20%, respectively, of coins recorded from the province of Asia (fig. 1).⁵² This is no unusual given the state of research in these regions and the importance of the centers themselves. Other conventus with slightly smaller numbers of recorded coins are Alabanda (493 coins) and Ephesus (428 coins). The reasons for coin production are often reflected in the history of individual cities. Coins were issued to commemorate special events, such as a visit of the emperor, to receipt of privileges or foundations. Increased production could be due to military expeditions. Still, one of the main reasons was simply local demand in the relevant center.⁵³ Due to the short reign of Nerva, we have a small number of coins recorded with the portrait

⁵⁰ The analyses were based on the data collected from the *Roman Provincial Coinage* database and supplements, information included in archaeological reports (Ersoy, Önder and Turan 2014; Tekin and Erol-Özdizbay 2012; Tekin and Erol-Özdizbay 2014; Tekin and Erol-Özdizbay 2016; Yanik 2015; Öztopbas 2010; Puglisi 2018; Auctions: Artemide eLive Auktion, Agora Auctions, Numismatik Naumann, Leu Numismatik, CNG, Savoca Numismatik, Obolos; information from group of Roman Provincial Coinage on the Facebook) [accesed 2018–2020].

⁵¹ Coins dated mainly for this period were included in the analysis. Coins with uncertain, very wide chronology were not taken into account. Due to the nature of pseudo-autonomous coins, they were discussed in a separate sub-chapter.

⁵² It should be emphasized that this number will change due to new noted coin finds.

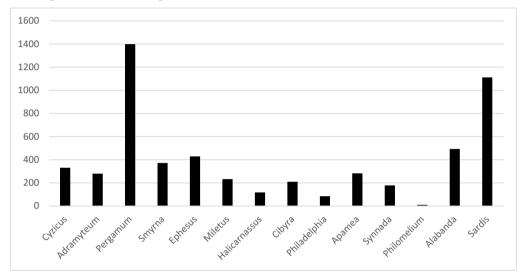
⁴⁷ Amandry, Burnett et al. 1999: 24, 17, 124.

⁴⁸ Idem 2015: 818-819.

⁴⁹ 3526 iconographic types in this period. Between 96–138 AD distinguished 1232 iconographic types, but could be more based on the new registered coins. Data according to electronic database available rpc. ashmus.ox.ac.uk.

⁵³ Butcher 1988: 25–26; Katsari 2011: 48–54; Amandry, Burnett et al. 2015: 868–873.

of this emperor.⁵⁴ However, there is no rule here that would indicate the same pattern in these cities. On the other hand, such a short period of reign may reveal the production nature, the number of struck denominations, as well as the likely regional demand during the two years of the reign of Nerva. Minting activity during the reign of Hadrian was slightly greater than in the previous period; this was certainly influenced by the emperor's visit to the province.



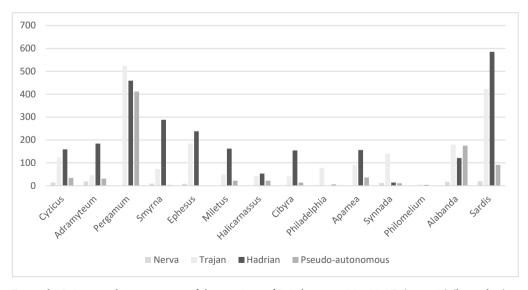


Fig. 1a-b. Coins struck in *conventus* of the province of Asia between 96–138 AD (n=5,765) (by author)

⁵⁴ 112 coins – mints Parium, Apollonia ad Rhyndacum, Cyme, Ephesus, Synnada, Rhodes, Sardis, Ancyra.

When one compares the denominations struck during the reigns of Nerva, Trajan, and Hadrian in the province of Asia generally, the similarity and continuation of standards can be clearly seen.

If we look more closely at denominations from particular periods, we can see the gradual dissemination of trends in some regions. First of all, the higher standard coins pay attention, which appeared in Mytilene (29mm, 16–17g), Parium (27–8mm, 13g), Cos (31mm, 21g), Rhodes (35mm, 23–4g), Alabanda (31–33mm, 18–20g, 24g), and Cotiaeum (30mm, 20g) during the Julio-Claudian dynasty.⁵⁵ In the next period, the reign of Flavian dynasty, larger coins were struck in Cyzicus (30mm, 16–17g) by the *strategos* Ti Klaudios Hagnios, Pergamum (30mm, 17g) by *strategos* Kephalion, in Ephesus (30mm, 19–23g), Magnesia ad Meandrum (33mm, 30g), Samos (32mm, 20–25g), Laodicea (33mm, 21g), Aezani (32mm, 19g), and Midaeum (34mm, 25–26g).⁵⁶ The greater number of denominations in some cities may indicate the development of individual centers, and thus of demand. During the reigns of Trajan and Hadrian we see an even greater variety and range of denominations. Some of them may have been connected with a visit by the emperor to the province.

A new denomination of 35–39mm in diameter was spreading during the reign of Hadrian, but the first one was introduced during the reign of Trajan in Miletopolis (37mm, 25g).⁵⁷ Larger new denominations were introduced in such cities as Mytilene (37–39mm, 34–38g and 43–45g), Stratonicea (36mm, 32–33g), Hadrianotherae (37mm, 24–25g), Smyrna (35–8mm, 38–45g), Ephesus (34–6mm, 27g), Tralles (34mm, 29g), Magnesia ad Meandrum (35mm, 24g – alliance), Mylasa (32–35mm, 27–28g), and Laodicea (35–6mm, 26–30g; 40mm, 25–32g).⁵⁸ It seems that the larger denomination, the greater the problem with maintaining a standard weight. This is evident both with the Chios denominations and with larger units from other cities. Due to the fiduciary character of coin and higher value because of its size, weight in this case did not play a major role.⁵⁹ Perhaps some of them, in view of major differences in weight and images (alliance coins or portrait of Antinous), could had medallic character and served commemorative functions.⁶⁰

⁵⁵ Mytilene RPC I 2343; Parium RPC I 2260; Cos RPC I 2724–2731; Rhodes RPC I 2748–2767; Alabanda RPC I 2817–2818, 2822–2823; Cotiaeum RPC I 3218.

⁵⁶ Pergamon 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; Midaeum RPC II 1415.

⁵⁷ Miletopolis RPC III 1642.

⁵⁸ Mytilene RPC III 1686; Stratonicea RPC III 1786–1788; Hadrianotherae RPC III 1631–1632; Smyrna RPC III 1972, 1975–1983; Ephesus RPC III 2073; Tralles RPC III 2086; Magnesia ad Meandrum RPC III 2127; Mylasa RPC III 2206; Laodicea RPC III 2329–2330.

⁵⁹ Cf. Katsari 2012: 1.

⁶⁰ Amandry, Burnett et al. 2015: 856.

The names of individual denominations were placed on the coins of Chios during this period.⁶¹ If we look at individual denominations, we can see differences in size and weight (up to 10g) (fig. 3, tab. 1). Hence, it seems more appropriate to distinguish coins on the basis of diameter rather than weight.⁶² However, you should also take into account the use, and thus the state of preservation of registered coins. The images on the coins were not very diverse, which may further complicate correct identification. Moreover, there are pseudo-autonomous coins, so their chronology is not very certain. Thus, the names simply indicate the correct value of the coin, especially in cases where six units existed.⁶³ In the first century AD Chios issued larger and heavier denominations, which could were perhaps related to the great earthquake in 17 AD in Asia. However, this theory is not confirmed in relation to other cities.⁶⁴

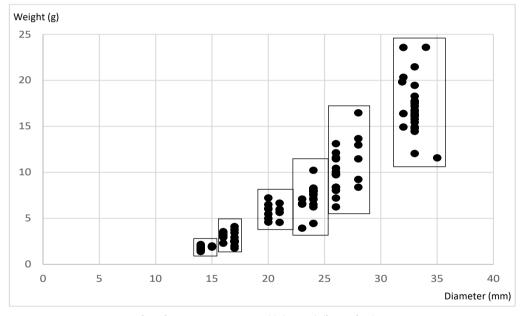


Fig. 2. Denominations in Chios between 96-138 AD (?) (n=122) (by author)

If we compare units issued during the reign of Trajan and Hadrian, we find a notable increase in the weight and diameter of some coins during Hadrian's reign. Researchers at the *RPC project* have suggested the possible introduction of a new alternative monetary system related to this phenomenon.⁶⁵ Assignment of appropriate denominational

⁶⁴ Johnston 1997: 219.

⁶¹ Lagos 1998; Mavrogordato 1918.

⁶² Johnston 1997: 207.

⁶³ Tria assaria (32–35mm, 11.57–21.46g); obolos (26–28mm, 7.21–16.47g); assarion hmicy (22–24 mm, 3.3–10.22 g); assarion (20–23mm, 4.57–6.66g); hemiassarion (16–17mm, 1.77–4.39g); dichalkon (15–17 mm; 1.88–3.33g).

⁶⁵ Amandry, Burnett et al. 2015: 818-820.

values to individual coins is problematic due to a lack of references or confirmation of the actual standards functioning in the everyday transactions of each city. We can assign denominations to specific schemata, but their real value may have been completely different. If we look at the standards of the general, Chian and alternative system (tab. 1), we can see that individual values overlap; hence it is difficult to determine (except in the case of Chios) the actual denominations in question. Based on the heavier weight of individual coins, the alternative system may find confirmation, but evidently not for all cities. Perhaps, it can be introduced e.g. in Cyzicus. During the rule of the Julian-Claudian dynasty, as in many Asian centers, the city struck two or three units, corresponding to 1, ¹/₂, and ¹/₄ assarion. During the Flavian dynasty, the new denominations appeared, with values possibly corresponding to 2, 3, and 6 assaria. During the reign of Trajan, perhaps a coin valued at 1 1/2-assaria was introduced. Pseudoautonomous coins with bust of Kore also represent this denomination.⁶⁶ Later, a denomination with the portrait of Antinous was struck, corresponding to 2 assaria, but heavier compared to the general system.⁶⁷ It seems that in many cities there may have been an increase the weight of 2 assaria to 10–12g, which may have already occurred in earlier periods. Denominations of this type dated to the Augustan period are recorded in Tralles, Philomelium, Iasus, Bargasa, and Aezani,68 and in Philadelphia and Hierapolis during the reign of Flavian dynasty.⁶⁹ Other cities where certain denominations are heavier include Abydus, Miletopolis, Clazomenae, Tabae, Doryleum, and Nacolea during the reign of Trajan,⁷⁰ Stratonicea in the Pergamum conventus, and Ephesus, Dardanus, Eresus, Tralles, Alabanda (although denominations with increased weight appeared already in the period of Flavian dynasty), and Colossae during the reign of Hadrian.⁷¹ It should also be emphasized here that the differences are visible only in some denominations issued. Due to the increase of some coin standards, especially during the Hadrian period, perhaps traces of the new system should be seen in the centers funded then, such as Hadrianeia, Hadriantherae, and Hadriani ad Olympum. Unfortunately, the denominations issued at that time seem to contradict any changes.

⁶⁶ Many pseudo-autonomous coins were issued in a unit corresponding to *assarion*, which is the basic denomination. Due to the absence of the emperor portrait, this type of coin could have been circulate much longer. Johnston 1985: 96–106.

⁶⁷ Amandry, Burnett et al. 1992: 382–384; Amandry, Burnett et al. 1999: 135–136; Amandry, Burnett et al. 2015: 179–185.

⁶⁸ Tralles RPC I 2633–2634; Philomelium RPC I 3246; Iasus RPC I 2797; Bargasa RPC I 2827; Aezani RPC I 3066.

⁶⁹ Philadelphia RPC II 1332; Hierapolis RPC II 1304.

⁷⁰ Abydus RPC III 1553; Miletopolis RPC III 1637, 1641; Clazomenae RPC III 1985; Tabae RPC III 2290; Doryleum RPC III 2635; Nacolea RPC III 2653, 2655.

⁷¹ Stratonicea RPC III 1785; Ephesus RPC III 2057, 2063; Dardanus RPC III 1563; Eresus RPC III 1679; Tralles RPC III 2087; Alabanda RPC III 2220; Colossae RPC III 2309–2310.

To sum up, despite the larger size and heavier weight of coins, it is very difficult to say whether we are actually changing the system, especially if we observe a similar phenomenon in different cities in different times. It can be result of various period monetary production and alloy from which the coins were struck. On the other hand, there is also the thought that increasing or overestimating certain standards could have a more practical reason related to the differentiation of individual values and easier identification of coins, especially with a larger number of denominations.

Nominal structure of nearby cities

Nominal diversification is influenced by many different factors. The center that issued the coin had particular status, size and demand. Therefore, each mint should be looked at individually, its history and traditions taken into account. Very often cities competed with each other (in Asia province, *inter alia*, Ephesus, Smyrna and Pergamum, Laodicea and Smyrna, Sardis and Smyrna⁷²), hence finding connections becomes problematic. This issue is also not facilitated by scanty information from historical sources.⁷³ Some of the centers conducted extensive transactions,⁷⁴ however, this was not necessarily reflected in the same monetary systems. One of the reasons explain some similarities denominations is small distance between cities. Some of them could also draw on the traditions of other centers.

If following a certain production sequence for particular periods and centers, we can see a consistent tradition modified to accommodate needs or beliefs. During the reign of Trajan, production in the cities was mostly continued from earlier times. Let's look at the similarities in the nominal structure of the nearby cities.⁷⁵ Some of them used some coins with the same metrological parameters. Elaea, the harbour of Pergamum, was adjacent to Pitane, and both issued smaller denominations. The same denominations struck Apollonis and Came (27–29mm, 12–13g), which began monetary production during the period of Hadrian.⁷⁶ It is visible that this denomination is more popular in this period. There are only two die-links between cities in this period, among them one for Ilium and Dardanus (*conventus* of Cyzicus).⁷⁷ Perhaps both cities issued two of the same denominations (18–21mm 5–6g and 16–17mm, 4–5g). In addition, Dardanus also struck larger denomination, the equivalent of 2 *assaria*. Some of the motives placed by both cities on coins are

⁷² Klose 1987: 51-53; Kampmann 1996: 20-47; Franke, Nollé 1997.

⁷³ Inter alia, Strabo, Polybius, Pliny the Elder or Herodotus. Cf. Jones 1971: 28–95.

⁷⁴ Cf. Klose 1987: 55–63. Laodicea, Hieropolis and Colossae in trade of wool and clothes – Strabo, 12.8.16 and 13.4.14; Armstrong 1998: 5–6.

⁷⁵ The similarities of some denominations in neighbouring centers have also been described in the characteristics of the systems in individual *conventus*.

⁷⁶ Apollonis RPC III 1839; Came RPC III 1841.

⁷⁷ Amandry, Burnett et al. 2015: 865.

the same (Athena, Aeneas, the eagle).⁷⁸ Perhaps some similarities between denominations are visible in the period of Trajan, when Clazomenae and Erythrae (Smyrna conventus) may have struck equivalents of 1, 3, and 6 assaria (20mm, 5-7g; 25-27mm, 11-14g and 30-33mm, 16–18g). During the reign of Hadrian, both cities struck units of 22–25mm, 7–8g. Additionally, the nearby Teos also began to strike coins, the production of which was focused on denominations of 20-21mm, 5-7g and 30mm, 19g, similar to those of Erythrae and Clazomenae. The effigies on the cities' coins are quite diverse. The only common element is the placement of images of Sabina and Asclepius albeit on different denominations. Perhaps Teos and Erythrae placed a figure of Dionysus on the same denominations (30-3mm, 17–19g), but in two different periods.⁷⁹ The same units were issued by a larger number of cities. The occurrence of the same three denominations (26-30mm, 16-19g; 21-24mm, 7-10g and 17-20mm, 4-6g) is visible in Poemanenum (Adramyteum conventus), Ephesus, Colophon, Metropolis, Hypapea (Ephesus conventus), Ancyra, Maeonia (Sardis conventus), and Alia (Apamea conventus) during the reign of Trajan,⁸⁰ as well as in Cyzicus, Samos, and Priene (Miletus conventus), Nicaea Cilbianorum (Ephesus conventus), Tmolus (Sardis coventus), and Dorylaeum (Synnada conventus) during the reign of Hadrian.⁸¹ It should be emphasized, that similarities in denominational systems of individual cities can be much greater. We do not have information on all coins issued during this period. In conventus of Pergamum or Sardis, where thanks to the large number of registered coins, large similarities in monetary systems are visible. As in other cases, there is no consistency in terms of the effigies placed on coins. Thus, it can be seen that the trend related to the issue of these three major denominations proliferated locally in this period. Greater numbers of denominations, including those above, were struck by Philadelphia, Cos, Halicarnassus, Attuda, Laodicea, Hierapolis, Sardis, Trajanopolis, Eumenea, Eucarpia, Appia, Smyrna, Miletopolis, Nacrasa, Germe, and Pergamum.⁸² During the reign of Trajan units of standard 30–32mm, 15-19g and 18-19mm, 4-5g were issued by Assus (Cyzicus conventus), and by Nysa (Ephesus conventus), Blaundus, Saitta (Sardis conventus), Bruzus (Apamea conventus), Teos, Mostene (Smyrna *conventus*) in the following period.⁸³ Four identical denominations (30–34mm,

⁷⁸ Ibidem: 188–190.

⁷⁹ *Ibidem*: 240–243.

⁸⁰ *Ibidem:* 199 (Poemanenum); (Ephesus); 245–248 (Colophon, Metropolis, Hypaepa); 315–316 (Ancyra); 300–302 (Maeonia); 327 (Alia).

⁸¹ *Ibidem:* 181–185 (Cyzicus); 257–259 (Samos and Priene); 248–249 (Nicaea Cilbianorum); 297 (Tmo-lus); 331–332 (Dorylaeum).

⁸² Ibidem: 293-295 (Philadelphia); 264-267 (Cos, Halicarnassus); 279-280 (Attuda); 287-292 (Laodicea, Hierapolis); 297-300 (Sardis); 306-308 (Trajanopolis); 322-324 (Eumenea, Eucarpia); 329-330 (Appia); 238-240 (Smyrna); 197-199 (Miletopolis); 217-219 (Nacrasa); 214-215 (Germe); 206-212 (Pergamum).

⁸³ *Ibidem*: 190 (Assus); 255 (Nysa); 304 (Blaundus); 316 (Saitta); 324–325 (Bruzus); 242–243 (Teos); 237–238 (Mostene).

23–26g; 24–26mm, 9–13g; 20–22mm, 5–7g and 15–18mm, 3–4g) were by struck Appia, Doryleum, Midaeum and Nacolea in Synnada *conventus*, Antioch in Alabanda *conventus*, and Miletopolis and Apollonia ad Rhyndacum in Adramyteum *conventus*.⁸⁴ Coins with the same metrological parameters, 30–31mm, 16–18g; 24–26mm, 12–13g; 19–20mm, 5–7g and 15–18mm, 3–4g were issued by Cotiaeum (Synnada *conventus*), Hierocaesarea (Pergamum *conventus*), and Sardis.⁸⁵

Sometimes centers formed alliances among themselves that could be commemorated on coins. Usually, titles referring to cities and a standard image of two standing figures, e.g. deities, symbolizing the cults of both centers were placed on such issues.⁸⁶ During the reign of Nerva, Cyme issued assaria emphasizing alliance with Myrina. In the times of Trajan homonoia coins (ca. 25–30mm, 13–15g) struck Pergamum emphasing alliance with Ephesus and Thyatira.⁸⁷ During the reign of Hadrian, this motive was probably placed on three larger denominations. Myrina issued coins of 29mm, 13-14g, Laodicea (alliance with Nysa and Hierapolis) struck denominations of 27-30mm, 17-19g. Hierapolis probably issued one denomination which was the same as Laodicea's, as well as one larger denomination of 35mm, 20-24g. Magnesia ad Meandrum (alliance with Ephesus) also struck the same denomination as Hierapolis.⁸⁸ Pergamum also struck homonoia coins commemorating good relationship with Laodicea.⁸⁹ There is no one rule for alliance coins in denomination, but is visible tendency to emphasizing this relation on larger ones with the same type of effigy. Some agreement in terms of the denominational structure in allied cities can be seen between Laodicea and Hieropolis (30-1mm, 16g; 24-5mm, 11-3g and 18-20mm, 4-6g)⁹⁰ and between Ephesus and Magnesia ad Meandrum (34-6mm, 24-27g; 30-2mm, 16-19g; 22-5mm, 5-9g and 18-20mm, 4-6g).91

It is also worth noting the coins of some *strategoi*/civic magistracy of individual cities.⁹² Visible tendency is struck some coins in slightly larger and heavier standards than general ones.⁹³ It may have indicated some willingness to emphasize a new administration in the city.

⁸⁴ *Ibidem:* 329–334 (Appia, Doryleum, Midaeum, Nacolea); 277–278 (Antioch); 197–199 (Miletopolis); 192–194 (Apollonia ad Rhyndacum).

⁸⁵ Ibidem: 330-331 (Cotiaeum); 223-225 (Hierocaesarea); 297-300 (Sardis).

⁸⁶ Kampmann 1996: 1–5; Franke, Nollé 1997; Dönmez-Öztürk 2006; Amandry, Burnett et al. 2015: 839.

⁸⁷ Kampmann 1996: 28–29, 101, No. 3, 77–79, 126, No. 154.

⁸⁸ Cyme RPC III 1928; Myrina RPC III 1918; Laodicea RPC III 2340–2342; Hierapolis RPC III 2356; Magnesia ad Meandrum RPC III 2127.

⁸⁹ Without information about weight or diameter: Kampmann 1996: 48–50, 110, No. 55.

⁹⁰ Amandry, Burnett et al. 2015: 287–292.

⁹¹ *Ibidem*: 250–254, 260–261.

⁹² Butcher 1988: 24-25.

⁹³ For instance *conventus* of Pergamum: Came: Iou. Tryphon (27mm, 12g); Pergamum: Cl. Cepahlion (28–30mm, 17g), A. Quadratus (30–1mm, 15g); Cl. Aismos (30mm, 23g); I. Pollion (30–1mm, 26g); Mytilene: Lesbonax (37–9mm, 45g); Perperene: Bassos (24mm, 12g); Germe: Iou. Artemidoros (28–32mm,

In summary, due to the large variety of denominations throughout the province, it's worth looking more locally at smaller microregions. Similar or even the same denominations were struck by centers located close to each other, sometimes in different regions of the province. This demonstrates the gradual spread and adaptation of individual trends. Some tendencies in the nominal structure can also be seen with coins issued by *strategoi* and cities related by alliances. Correlations between local cities maybe much more similar, but many centers are represented by a small amount of material that does not allow for more profound analysis or comparison.

Denominations and iconography

One of the determinants of the value could be portraits or iconographic types placed on them. Sometimes, within one denomination were several images, which in turn may indicate a greater popularity of the unit, demand and its market position, especially in a narrower period of time. It seems that the larger variety of iconography is found among 18–20mm, 4–6g and 15–18, 3–4g coins, which does not seem strange especially due to the popularity of these units.

At the very beginning we will look at the portraits of members of the imperial family. One of the rule for distinguishing a denomination may involve the placement of busts or various portraits other than of the emperor on the obverse (e.g. pseudo-autonomous coins).⁹⁴ Some portraits were placed only on the one denomination in the particular city. During the reign of Trajan, provincial coins included portraits of Plotina, Marciana, and Matidia. During the Hadrian's reign, they depicted Sabina, Aelius, and Antinous.⁹⁵ Effigies of women from the families Trajan and Hadrian were usually placed on denominations of 18–19mm, 4–6g. Coins with portraits of Plotina, Marciana or Matidia issued in this unit account for 74%, while with the image of Sabina 50%. It should be emphasized, however, that only 13 cities placed on their coins representations of women from the Trajan family, while 51 portraits of Sabina in the next period.

Larger denomination with portrait of Plotina was struck in Cotiaeum (25mm, 10–14g);⁹⁶ smaller denominations were issued only by Thyatira (15–17mm, 2–4g)⁹⁷ and Hyrcanis (16mm, 3–4g).⁹⁸ Portraits of the emperor's sister, Ulpia Marciana, and her daughter Mat-

¹⁵g); Stratonicea: Candidus (30mm, 17g; 36mm, 32g); Nacrasa: Iou. Artemidoros (27mm, 14g); Thyatira: Cn. Pedanius Fuscus Salinator (28–31mm, 21g); L. Dasumius Hadrianus (28–30mm, 13–14g); L. Baebius Tullus (28–30mm); Apollonis: Gab. Longeinos (27–9mm, 12g); Hierocaesarea: Ti. Iulius Fierox (27mm, 12g); Hermocapelia: Po archon (33mm, 14g).

⁹⁴ Amandry, Burnett et al. 1999: 122; Heuchert 2005: 45–46; Amandry, Burnett et al. 2015: 844. See for instance Perperene, Pergamum, Thyatira, Hierocaesarea, Elaea.

⁹⁵ Amandry, Burnett et al. 2015: 843-845; 848-856.

⁹⁶ Synnada *conventus*: RPC III 2634.

⁹⁷ Pergamum conventus: RPC III 1829-1830.

⁹⁸ Smyrna conventus: RPC III 1953–1954.

idia were placed on the coins of the some cities which also issued portraits of the emperor's wife. A portrait of Marciana was found as well on denominations corresponding to the *assarion*, issued by Sardis.⁹⁹ Matidia was one of the motives on the smaller denominations of Thyatira (15–18mm, 2–5g),¹⁰⁰ and the *assaria* of Laodicea¹⁰¹ and Cotiaeum.¹⁰² A portrait of the empress Sabina was placed significantly more often on the coins of various cities than the bust of Plotina.¹⁰³ The denominational differentiation was also much greater compared to the previous period. The question then arises whether, due to the tendency of placing empress busts on coins corresponding to *assarion*, the coins of some cities should be interpreted as emissions corresponding to this unit, but struck in heavier standard?

As already mentioned above, the portrait of empress Sabina was placed on many different units. Denominations corresponding to perhaps 4-*assaria* were struck by Ephesus and Miletus,¹⁰⁴ 3-*assaria* by Cyzicus, Attaos, Lebedus, Tralles, Dorylaeum, Attuda, and Sardis,¹⁰⁵ to 2-*assaria* by Hadriani ad Olympum, Mytilene, Stratonicea, Temnus, Erythrae, Eucarpia, Sardis,¹⁰⁶ and 1 ½-*assaria* by Hermocapelia, Hierocaesarea and Iulia Gordus.¹⁰⁷ Extremely large denominations (36–40mm, 22–26g) with a portrait of Hadrian's wife issued by Laodicea.¹⁰⁸ Smaller units were struck by mints in only two *conventus:* Smyrna, in Aegae, Hyrcanis, and Mostene, and Sardis, in Daldis, and Iulia Gordus.¹⁰⁹ The coin reverses reflect a very wide iconographic diversity;¹¹⁰ however, some of the types attributed and reproduced among them can be seen. Very often,

¹⁰⁴ Ephesus RPC III 2081; Miletus RPC III 2146–2146A.

¹⁰⁵ Cyzicus RPC III 1522–1525; Pergamum *conventus*: Attaos RPC III 1760; Ephesus *conventus*: Lebedus RPC III 2002; Tralles RPC III 2087; Synnada *conventus*: Doryleum RPC III 2641; Alabanda *conventus*: Attuda RPC III 2259; Sardis RPC III 2403–2404.

¹⁰⁶ Adramyteum *conventus*: Hadriani ad Olympum RPC III 1611; Pergamum *conventus*: Mytilene RPC III 1691–1692; Stratonicea RPC III 1782; Smyrna *conventus*: Temnus RPC III 1944; Erythrae RPC III 1996; Apamea *conventus*: Eucarpia RPC III 2589; Sardis RPC III 2405.

¹⁰⁷ Pergamum *conventus*: Hermocapelia RPC III 1876; Hierocaesarea RPC III 1850A; Sardis *conventus*: Iulia Gordus RPC III 2554.

¹⁰⁹ Smyrna *conventus*: Aegae RPC III 1923–1925; Hyrcanis RPC III 1959; Mostene RPC III 1962; Daldis RPC III 2415A; Iulia Gordus RPC III 2555.

¹¹⁰ Amandry, Burnett et al. 2015: 861-862.

⁹⁹ RPC III 2398.

¹⁰⁰ RPC III 1831.

¹⁰¹ Cibyra conventus: RPC III 2322–2323.

¹⁰² RPC III 2632.

¹⁰³ 51 cities: Cyzicus, Assus, Hadriani ad Olympum, Hadrianeia, Hadrianotherae, Mytilene, Pergamum, Attaos, Stratonicea, Came, Hermocapelia, Hierocaesarea, Aegae, Cyme, Phocaea, Temnus, Magnesia ad Sipylum, Hyrcanis, Mostene, Smyrna, Clazomenae, Erythrae, Teos, Lebedus, Hypaepa, Ephesus, Tralles, Magnesia ad Meandrum, Miletus, Cibyra, Colossae, Laodicea, Hydrela, Eumenea, Eucarpia, Doryleum, Harpasa, Attuda, Heraclea Salbace, Tmolus, Sardis, Daldis, Sala, Blaundus, Grimenothyrae, Cadi, Tiberiopolis, Ancyra, Saitta, Iulia Gordus, Aezani.

¹⁰⁸ Cibyra conventus: RPC III 2335–2336.

images of Isis,¹¹¹ Artemis,¹¹² Asclepius,¹¹³ Demeter,¹¹⁴ Tyche,¹¹⁵ Cybele,¹¹⁶ and Apollo¹¹⁷ were placed on the reverse of coins bearing the portrait of Sabina. However, there is no consistency among denominations for each type. Similarities can be seen between individual cities. Perhaps the same denominations, with a portrait of Sabina and the same images on the reverse, were issued by Hadrianeia and Hadrianotherae, Aegae and Cyme, Clazomenae and Erythrae.¹¹⁸

During the reign of Hadrian, effigies of Antinous and the son of the emperor, Aelius, also found their reflection on coins. The person of Antinous was quite well known, despite his lack of official affiliation with the imperial family. A portrait of the emperor's lover appeared on the coins of many cities, most of which were located in the northern part of province.¹¹⁹ Antinous effigy was usually placed on large denominations above 30mm (41% of all denominations then struck). Large denominations were issued in Hadrianotherae (33–37mm, 15–20g; 34mm, 22–30g), Adramyteum (33mm, 26–27g), Pergamum (33mm, 20–21g), Stratonicea (36mm, 30–36g), Cyme (33–35mm, 15–30g), Smyrna (38mm, 30–52g – due to the different weight of coins of the same type, it is not known if they represent a single denomination?) and Ephesus (30mm, 14–16g).¹²⁰ Denominations with an effigy of Antinous, of 23–24mm, 9–11g, which may indicate an heavier weight standard, were struck in Cyzicus, Hadrianotherae and Tmolus.¹²¹ Assaria were issued in Sardis and Sala,¹²² smaller units in Mytilene and Philadelphia.¹²³ The reverse of the coins were quite

¹¹⁶ Laodicea RPC III 2336; Eucarpia RPC III 2589; Dorylaeum RPC III 2641; Sala RPC III 2445.

¹¹¹ Aegae RPC III 1920A, 1925–1926; Cyme RPC III 1932–1935; Lebedus RPC III 2002.

¹¹² Hadrianeia RPC III 1622; Hadrianotherae RPC III 1630; Mytilene RPC III 1691; Hierocaesarea RPC III 1850A; Tiberiopolis RPC III 2519; Colossae RPC III 2310–2311.

¹¹³ Temnus RPC III 1944; Clazomenae RPC III 1988; Erythrae RPC III 1996; Tralles RPC III 2087; Cibyra RPC III 2301; Attuda RPC III 2259.

¹¹⁴ Hermocapelia RPC III 1876; Mostene RPC III 1963; Magnesia ad Sipylum RPC III 1948; Tralles RPC III 2089; Blaundus RPC III 2450; Cyzicus RPC III 1524.

¹¹⁵ Miletus RPC III 2146; Cibyra RPC III 2303; Laodicea RPC III 2332; Hydrela RPC III 2361; Eumenea RPC III 2584; Cyzicus RPC III 1523.

¹¹⁷ Daldis RPC III 2415A; Tmolus RPC III 2388; Miletus RPC III 2146A; Hypaepa RPC III 2031; Mytilene RPC III 1692.

¹¹⁸ Hadrianeia RPC III 1622; Hadrianotherae RPC III 1630; Aegae RPC III 1926; Cyme RPC III 1932– 1935; Clazomenae RPC III 1988; Erythrae RPC III 1996.

¹¹⁹ 13 cities: Cyzicus, Hadrianotherae, Adramyteum, Mytilene, Pergamum, Stratonicea, Cyme, Smyrna, Ephesus, Philadelphia, Tmolus, Sardis, Sala. Amandry, Burnett et al. 2015: 855 (Antinous was born in Bithynia).

¹²⁰ Hadrianotherae RPC III 1631–1632; Adramyteum RPC III 1677; Pergamum RPC III 1738; Stratonicea RPC III 1786–1787; Cyme RPC III 1936–1937; Smyrna RPC III 1975–1983; Ephesus RPC III 2084.

¹²¹ Cyzicus RPC III 1528; Hadrianotherae RPC III 1633; Tmolus RPC III 2389.

¹²² Sardis RPC III 2407; Sala RPC III 2447.

¹²³ Mytilene RPC III 1693; Philadelphia RPC III 2386.

diverse; however, bull¹²⁴ and panther¹²⁵ motives are more common. Probably the same denomination with the same images were struck by Stratonicea and Smyrna. Very often, images of Antinous were placed on the reverse as a personification of the city or of the hero.¹²⁶ A portrait of Aelius was placed on the coins of seven cities,¹²⁷ usually on large denominations. Units of more than 30mm were issued by Mytilene, Pergamum, Laodicea and Ephesus.¹²⁸ *Assaria* with this effigy struck only Eresus, Pergamum, Cibyra, and Tmolus.¹²⁹ Coins with standard measurements of 25mm, 6–10g were issued by Cibyra and Laodicea.¹³⁰ Very often the portrait of one of the members of the imperial family was placed on only one denomination, but during the reign of Hadrian, portraits of individual people were placed on several units of the same city.¹³¹ An interesting case is Laodicea in Cibyra *conventus*, which issued three denominations (36mm, 25–27g; 30mm, 13–17g; 25mm, 7–9g) with a bust of Aelius,¹³² perhaps for the future emperor's propaganda purposes.

A specific iconographic type were facing heads that were placed on the coins of the cities in seven *conventus*, Pergamum, Adramyteum, Smyrna, Ephesus, Sardis, Apamaea, and Alabanda, in the western and southern part of the Asia province. This motive became much more popular in the period of Hadrian, and hence presents mainly the emperor and his wife, or the emperor and his son Aelius. However, there is no single common denomination pattern. The same denomination (25mm, 9–11g) was issued in Mytilene with effigies of Plotina and Matidia,¹³³ and Trajan and Nerva in Apollonia ad Rhyndacum with effigies of Trajan and Nerva.¹³⁴ It was popular to place facing heads of Hadrian and Sabina on the coins in standard 20–22mm, 5–9g, by cities like Elaea, Myrina, Ephesus, Nicaea Cilbianorum, Nysa, Dionysopolis and Eresus.¹³⁵ The same motive was also placed on denominations of 25–27mm, 10–5g of Attuda, Heraclea Salbace in the Alabanda *conventus*, and Apollonia ad Rhyndacum in the Adramyteum *conventus*.¹³⁶ The facing heads of Hadrian and Aelius was placed only on larger denomi-

¹²⁴ Hadrianotherae RPC III 1633; Stratonicea RPC III 1786; Smyrna RPC III 1975–1976.

¹²⁵ Stratonicea RPC III 1787; Smyrna RPC III 19770–1978.

¹²⁶ Cyzicus RPC III 1528; Pergamum RPC III 1738; Ephesus RPC III 2084; Sala RPC III 2447.

¹²⁷ Eresus, Mytilene, Pergamum, Cibyra, Laodicea, Ephesus.

¹²⁸ Mytilene RPC III 1695; Pergamum RPC III 1742–1743; Laodicea RPC III 2337–2338; Ephesus RPC III 2083.

¹²⁹ Eresus RPC III 1680; Pergamum RPC III 1744; Cibyra RPC III 2306; Tmolus RPC III 2387.

¹³⁰ Cibyra RPC III 2305; Laodicea RPC III 2339.

¹³¹ Sabina: Cyzicus, Aegae, Laodicea, Sardis, Iulia Gordus; Antinous: Hadrianotherae, Mytilene; Aelius: Pergamum, Cibyra and Laodicea.

¹³² RPC III 2337-2339.

¹³³ RPC III 1683.

¹³⁴ RPC III 1595.

¹³⁵ Elaea RPC III 1888–1889; Myrina RPC III 1919; Ephesus RPC III 2078; Nicaea Cilbianorum RPC III 2033; Nysa RPC III 2091; Dionysopolis RPC III 2575; Eresus RPC III 1679.

¹³⁶ Attuda RPC III 2258; Heraclea Salbace RPC III 2273; Apollonia ad Rhyndacum RPC III 1595.

nations. Stratonicea in the *conventus* of Pergamum struck these coins in standard 33mm and 36mm, 31–32g, Mylasa in the *conventus* of Alabanda in 32–35mm, 27–28g, Ephesus in 33mm, 24–25g, and Tmolus in the *convetus* of Sardis in 28–29mm, 14–17g.¹³⁷

The various images and denominations depends only from the city that had its own rules related to the identification and function of coins. When we look more closely at the images of certain coins, we can see that some issues have common images on the reverse, thus differing only in the image on the obverse (Perperene - a bunch of grapes;¹³⁸ Thyatira - the double axe;¹³⁹ Elaea - a poppy between two ears of corn¹⁴⁰). This, in turn, means that the obverse image remains the only one iconographic determinant of the denomination. Usually extreme iconographic diversity can be observed on the reverses of coins. For instance, if we take a closer look at the images on the coins of the *conventus* of Pergamum during the reign of Trajan, we find more variation in relation to earlier periods; however, some general common trends are evident. While they are dominated by images of Artemis,¹⁴¹ Apollo,¹⁴² Zeus,¹⁴³ Nike,¹⁴⁴ Tyche,¹⁴⁵ or Demeter¹⁴⁶ the denominations on which the types were placed are still greatly varied. A similar situation applies to the coins of other cities and conventus. Looking at the reverse of coins, it can be seen that the cult statue of Artemis Ephesia was also a more popular type. Between 96–138 AD, this motive was depicted on the coins of 33 centers in Asia.

In terms of iconography, the same motives appear on many coins of different centers, however, it is very difficult to find one relationship for denominations. Some trends can be seen on coins with portraits of various members of the imperial family. It is much difficult to find a common pattern for images on the reverse of coins. Depending on the centre's tradition, it can be seen that some denominations have different images, and some common. According this perhaps one should look more broadly at individual motives throughout the whole mint production period. A good example is the mint in Germe, which repeatedly placed the same image on coins, probably on the same denomination during the reign of individual emperors.¹⁴⁷

¹³⁷ Stratonicea RPC III 1783; Mylasa RPC III 2206; Ephesus RPC III 2082; Tmolus RPC III 2387.

¹³⁸ RPC I 2350-2353.

¹³⁹ RPC I 2379, 2381–2382.

¹⁴⁰ RPC I 2398-2409.

¹⁴¹ Mytilene RPC III 1683; Thyatira RPC III 1820; Hierocaesarea RPC III 1845–1847.

¹⁴² Germe RPC III 1763, 1765; Nacrasa RPC III 1789–1790, 1796; Thyatira RPC III 1815, 1818–1819.

¹⁴³ Attaos RPC III 1752, 1754; Stratonicea RPC III 1772; Thyatira RPC III 1816–1817; Pitane RPC III 1881.

¹⁴⁴ Stratonicea RPC III 1773; Nacrasa RPC III 1800; Thyatira RPC III 1825; Pitane RPC III 1880.

¹⁴⁵ Pergamum RPC III 1720–1724; Thyatira RPC III 1826, 1828, 1831; Hierocaesarea RPC III 1849–1850.

¹⁴⁶ Mytilene RPC III 1684; Hermocapelia RPC III 1872.

¹⁴⁷ Ehling 2001: 33.

Pseudo-autonomous coins in Asian conventus

Coins without imperial heads also deserve special attention during this period.¹⁴⁸ The pseudo-autonomous coins of the Roman Empire were struck from the reign of Augustus until the third century AD. Accurate dating of these coins without portraits and without detailed legends is problematic, thus impeding understanding of their pattern of production and significance in particular regions. A comparison of certain fabric features, styles of effigies, or changes in letters or legends, and, in certain exceptional cases, in the names of magistrates, is very helpful in proper attribution.¹⁴⁹ The pseudo-autonomous coins are represented by all denominations: small, medium and large. The hypothesis has been put forward that these coins represented only smaller denominations in line with Roman practice, as Roman coins did not use imperial portraits on coins smaller than an as. The material contradicts this practice, but is must be emphesize that smaller units dominated (67%). The pseudo-autonomous coins for this period in standard 18–20mm, 4–6g constitute ca. 30%, and in 16–17mm, 3-4g it's ca. 37%. Johnston indicated two advantages of the placement of different effigies on the obverse: to serve as denominational markers, and as a practical feature enabling prolonged use of the relevant dies rather than producing especially in the third century AD - a new die for each new emperor. According to this hypothesis, pseudoautonomous coins may have enjoyed more universal use as, e.g. currency in provinces.¹⁵⁰ Robert Bennett, in his revision, thirty years later, of Ann Johnston's article, suggested their use in the proclamation of civic independence, irrespective of the status of the city.151

In terms of the coin production of the province of Asia, only 29 of 163 mints did not strike pseudo-autonomous emissions during the period of the Roman Empire. At the beginning of the second century AD, coins without imperial heads were struck by 60 centers in Asia.¹⁵² The majority of such as coins were issued especially by mints in the Pergamum (34%) and Sardis (31%) *conventus* (in Pergamum, Hierocaesarea, Tripolis, Sala, Trajanopolis, and Grimenothyrae (except Rhodes and Chios, whose production was based on these types of coins)).¹⁵³ Other *conventus*, in which cities often placed portraits of deities or personification on coins were located in the south and east of the province of Asia, such as those Alabanda and Apamea. It can be seen that quite popular practice in the Greek provinces was placed on the coins

¹⁴⁸ MacDonald 1976: 33–34; Amandry, Burnett et al. 2015: 857–858.

¹⁴⁹ Johnston 1985: 89, 106; Bennett 2017: 193.

¹⁵⁰ Johnston 1985: 101–106.

¹⁵¹ Bennett 2017: 193.

¹⁵² Johnston 1985: 89, 97–100; Amandry, Burnett et al. 2015; Bennett 2017: 185.

¹⁵³ Based on the registered coins: Pergamum (67 coins), Hierocaesarea (89 coins), Tripolis (53 coins), Sala (95 coins), Trajanopolis (103 coins), Grimenothyrae (78 coins).

the head of the Senate (24%).¹⁵⁴ The second most popular iconographic type placed on the obverse of coins was Athena (14%). The first motive symbolized both loyalty to Roman power and the development of imperial cult.¹⁵⁵ Depending on the monetary policy of the cities, this representation may have been placed on five different denominations. The smallest denominations, at 15–17mm, 2–4g, were issued by mints in the conventus of Pergamum, in Pergamum, Germe, Stratonicea, Nacrasa and Hierocaesarea; in the conventus of Smyrna in Hyrcanis, and in the conventus of Sardis in Sardis, Tiberiopolis, and Aezani.¹⁵⁶ Hadrianeia and Hadrianotherae in the conventus of Adramyteum struck assaria, as did Thyatira in Pergamum conventus, Neapolis ad Harpasium and Aphrodisias in Alabanda conventus, Cadi, Tiberiopolis, Synaus, Bagis and Sala in Sardis conventus.¹⁵⁷ Coins with an image of the Senate, characterized by the standard 22–23mm, 5–8g were issued by Pionia, Nacrasa, Ancyra, Grimenothyrae, Trajanopolis, and Hydrela.¹⁵⁸ Smyrna and Clazomenae in the *conventus* of Smyrna struck denominations of 25-27mm, 10-12g, as did in Philadelphia, Tripolis, Appia, and Sardis.¹⁵⁹ The largest denomination (30mm, 14–16g) of coins with this image was issued by Hierapolis in the *conventus* of Cibyra.¹⁶⁰ Due to the denominational structure, great diversity is present; however, similarities can be seen on a local scale between individual centers. According to Johnston's ideas, in reality this effigy was helpful as a denomination marker. But maybe not only? Due to the existence of popular issues, very often of the same denomination, these coins may have been characterized by a very universal, wide range of use in transactions in many cities. Placement of the image of the Senate on the coins may have referred to administrative control; however, this theory has not been confirmed on the coins of other senatorial provinces. Nevertheless, considering the different individual character of each province, this view need not be rejected completely and may be correct, especially

¹⁵⁴ 30 cities: Hadrianeia, Hadrianotherae, Pionia, Pergamum, Germe, Stratonicea, Nacrasa, Thyatira, Hierocaesarea, Hyrcanis, Smyrna, Clazomenae, Hierapolis, Hydrela, Philadelphia, Tripolis, Alioi, Appia, Neapolis ad Harpasium, Aphrodisias, Sardis, Sala, Bagis, Trajanopolis, Grimenothyrae, Cadi, Aezani, Tiberiopolis, Ancyra, Synaus.

¹⁵⁵ Katsari 2012: 35.

¹⁵⁶ Pergamum RPC III 1748–1751; Germe RPC III 1771; Stratonicea RPC III 1775; Nacrasa RPC III 1813–1814; Hierocaesarea RPC III 1864–1866; Hyrcanis RPC III 1960; Sardis RPC III 2410; Tiberiopolis RPC III 2512; Aezani RPC III 2510.

¹⁵⁷ Hadrianeia RPC III 1623; Hadrianotherae RPC III 1635; Thyatira RPC III 1833–1838; Neapolis ad Harpasium RPC III 2233; Aphrodisias RPC III 2252; Cadi RPC III 2499A; Tiberiopolis RPC III 2522; Synaus RPC III 2526; Bagis RPC III ; Sala RPC III 2438.

¹⁵⁸ Pionia RPC III 1665; Nacrasa RPC III 1793; Ancyra RPC III 2542; Grimenothyrae RPC III 2482; Trajanopolis RPC III 2472; Hydrela RPC III 2362.

¹⁵⁹ Smyrna RPC III 1966; Clazomenae RPC III 1989; Philadelphia RPC III 2380; Tripolis RPC III 2563; Appia RPC III 2627; Sardis RPC III 2391.

¹⁶⁰ Hierapolis RPC III 2348.

for the province of Asia. Other images very often placed on the coins of this period include those of Heracles,¹⁶¹ Tyche,¹⁶² Artemis,¹⁶³ Demos,¹⁶⁴ or Athena.¹⁶⁵ Some of these were very common and popular in various centers.¹⁶⁶ Effigies of Athena were mainly placed on small denominations (16-17mm, 2-4g), which can be seen on the coins of Ilium, Pionia, Pergamum, Pitane, Elaea, Cyme, Smyrna, Hypapea, Hydrela, Harpasa, Bargasa, and Trapezopolis. The same tradition encompassed an image of Heracles placed on small denominations in Nacrasa, Hypapea, Neapolis ad Harpasum, Maeonia, Trajanopolis, and Grimenothyrae. Tyche was the motive on the denominations corresponding to assarion in Pionia, Hierocaesarea, Smyrna and Eucarpia. A personification of Demos was popular in the central and eastern parts of the Asia province; this motive was placed on many different denominations. On the other hand, some effigies were characteristic only in particular cities. Cyzicus issued coins without imperial heads, bearing only effigy of Kore Soteira, known from earlier periods and the city's tradition in two denominations (22mm, 6-8g; 16-18mm, 2-4g).¹⁶⁷ Coins with images of Artemis Persica enjoyed popularity in Hierocaesarea, as she had special importance for the residents and the center itself.¹⁶⁸ The use of some of the images may have been due to the growth of interest in the local history of cities and their well-known citizens.¹⁶⁹ The reproduction of many motives in different centers, even on the same denominations (Senate, Athena or Heracles), may reflect current trends, modified to suit the needs of the city.

¹⁶¹ Nacrasa RPC III 1810, 1812; Hypaepa RPC III 2023, 2026–2027; Sebaste RPC III 2603; Bargasa RPC III 2239; Heraclea Salbace RPC III 2275; Sardis RPC III 2411–2413; Maeonia RPC III 2419–2421, 2428; Sala RPC III 2433; Trajanopolis RPC III 2480; Grimenothyrae RPC III 2488; Cos RPC III 2173; Appia RPC III 2629.

¹⁶² Pionia RPC III 1666; Hiercaesarea RPC III 1849–1850; Magnesia ad Meandrum RPC III 2130–2131; Cos RPC III 2174; Eucarpia RPC III 2591; Attuda RPC III 2260; Iulia Gordus RPC III 2551, 2556; Antioch RPC III 2245.

¹⁶³ Nacrasa RPC III 1808A; Hierocaesarea RPC III 1851–1863; Tripolis RPC III 2565–2567; Grimenothyrae RPC III 2486; Iulia Gordus RPC III 2556A.

¹⁶⁴ Martin 2013: 93–106. Demos: Cadi RPC III 2502; Erythrae RPC III 1997; Colossae RPC III 2316; Hierapolis RPC III 2358A; Tripolis RPC III 2557, 2564; Eucarpia RPC III 2590; Bruzus RPC III 2595; Appia RPC III 2628; Aphrodisias RPC III 2249–2251; Trapezopolis RPC III 2263; Sala RPC III 2432, 2436; Trajanopolis RPC III 2474–2477; Tiberiopolis RPC III 2523; Ancyra RPC III 2537; Hypaepa RPC III 2016; Grimenothyrae RPC III 2493.

¹⁶⁵ Ilium RPC III 1576; 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; Hypaepa RPC III 2018; Hydrela RPC III 2364–2365; Tripolis RPC III 2559; Harpasa RPC III 2228; Bargasa RPC III 2238; Attuda RPC III 2261; Trapezopolis RPC III 2265; Apollonia Salbace RPC III 2279; Sala RPC III 2431, 2435; Trajanopolis RPC III 2468, 2478–2479; Maeonia RPC III 2422, 2427.

¹⁶⁶ Heuchert 2005: 47.

¹⁶⁷ RPC III 1497, 1529.

¹⁶⁸ Petrides 1910.

¹⁶⁹ Heuchert 2005: 52; Howgego 2005: 5.

Coin finds and circulation

Answers regarding the use of individual denominations or links with other centers could yield coin finds and sites, but often due to various factors there is a possibility of making many mistakes. During archaeological research we can find a very large number of coins, especially if the place was used for a long time. If the coins represent single finds from different periods and mints, then the analysis will be limited to quite general statements regarding possible production or contacts. Another problem impeding trace time of coins circulation is the context of the find, often later than the period of their production or its extensive dating, which in turn can distort the correctness of any statements.¹⁷⁰ In addition, the not always discovered coin could actually function in circulation.¹⁷¹ A lot of coin finds represented smaller denominations.¹⁷² In this case, it should be remembered that coins of this type were easy to lose due to their size. In addition, they did not constitute such a large loss, as in the case of a silver coin. Unfortunately, the coins discovered to a large extent in the sites of former cities are mainly single finds, sometimes without a more specific context, hence their role in everyday life is difficult to determine.¹⁷³ For example, some coins of a certain denomination could once be used only as a means of thesaurization or have only a commemorative function, due to games, imperial visits or new civic titles.¹⁷⁴ One of the problematic issues is velocity of coin in circulation.¹⁷⁵ Bronze provincial coins circulated for a long time, more rapidly than Roman imperial aes.¹⁷⁶ Some of the coins may have remained in circulation for a long time, as evidenced by, e.g. coins from the first century with countermarks from the second or even third century.¹⁷⁷ Currently, attempts are being made to use various methods and calculations that would determine the possible circulation time.178

The large variety of types within even a single city, their reproduction in other regions, and the existence of similar denominations would enable their circulation in other centers as well. The issue related to the circulation of local and foreign coins should be approached contextually than universally, as Christopher Howgego emphasized. It should be remembered that the production of many mints was irregular, sometimes insufficient for the needs of the center. Therefore, it should be assumed that

¹⁷⁰ Katsari 2012: 1; Evans 2018: 5–8, 49–53.

¹⁷¹ Howgego 2014: 309.

¹⁷² Cf. Bellinger 1961: 188; Newton 2006: 211-227; Evans 2018: 7, 26-27.

¹⁷³ Howgego 2014: 308–309, 312–314; Evans 2018: 49–53.

¹⁷⁴ Johnston 1997: 207.

¹⁷⁵ Hopkins 1980: 101–125; Duncan-Jones 1998: 180–192.

¹⁷⁶ Harl 1997: 224-225.

¹⁷⁷ Evans 2018: 6.

¹⁷⁸ E.g. Average Annual Coin Loss, Chi-Square Goodness of Fit test, Mean Coin Date, for the methods and futher bibliography see *Idem:* 7–8, 115–117.

acceptance of bronze coins of different origin on individual markets could be possible, but it depended on the place, time and demand.¹⁷⁹

Sometimes countermarks, such as in many coins from Sardis excavation, were struck to allow foreign coins to circulate.¹⁸⁰ During archaeological research locally units predominate, however, coins from various other centers are discovered as well.¹⁸¹ In the research in Sardis, 50% of coins recorded from the Roman period had come from other towns.¹⁸² Similar situation was recorded in Aphrodisias.¹⁸³ In Ilium, some of the coins came from the nearby mint of Alexandria Troas.¹⁸⁴ Perhaps due to its universality, both in images and, to a large extent of denomination, some of the pseudoautonomous coins could more often circulate more widely. This could also be confirmed by finds, e.g. in Allianoi or the necropolis of Maymun Sekisi Tepesi, near Pergamum.¹⁸⁵ Monetary production in many centers was very irregular, hence some of the coins could be used much longer. Quite normal situation was the lack of coin production in many centers. Hence, the mint could provide coins to neighbouring cities,¹⁸⁶ according to Kastari, located about 100–200 km from the mint.¹⁸⁷ It seems that the production of similar denominations does not exclude the possibility of their use in other cities. However, more precise determination of the circulation of bronze coins for individual centers in the period 96–138 AD may be problematic due to the small number of coins found from that period, or to their illegibility. Items from the third century AD are recorded with much greater frequency. In addition, imperial bronze coins have also been found in the territory of the province, although these have been rather sporadic finds.¹⁸⁸ One exceptions may be a hoard of 1200 sestertii, dated from Marcus Aurelius to Gallienus found near Antalya.189

¹⁷⁹ Other views about it presented Howgego 2014.

¹⁸⁰ *Idem*: 307–308; Evans 2018: 101–103.

¹⁸¹ Jones 1963: 317–323; Cf. Klose 1987: 122–124; Katsari 2011: 28–29; Çizmeli-Ögün, Marcellesi 2011: 297–342; Caccamo Caltabiano, Carroccio, Puglisi 2014: 139–156; Schachinger 2014: 525–540; Delrieux 2016: 6–15.

¹⁸² 40% Aphrodisias; 30% Ephesus; 25% Side; 6% Athens (Johnston 2007: 5–6); Cf. Bell 1916: vii, 19–36; Evans 2018: 25–31.

¹⁸³ MacDonald 1976: 40–50; *Idem* 1992: 15–16.

¹⁸⁴ Bellinger 1961: 153-183; MacDonald 1976: 45-46.

¹⁸⁵ Yaraş, Lenger 2009: 401–403.

¹⁸⁶ Burnett 2005: 175.

¹⁸⁷ Katsari 2011: 226.

¹⁸⁸ Jones 1963: 318.

¹⁸⁹ MacDonald 1976: 46; *Idem* 1989: 120.

Conclusions

Looking at the denominations of bronze coins struck in the centers of the Asia province between 96–138 AD, the following general conclusions can be drawn:

- 1. There is a visible increase in denominations issued and iconographic types placed on coins compared to earlier periods. Individual trends gradually spread throughout the province. Perhaps a unification of the standards of certain cities took place during the Trajan period (mints in conventus of Synnada), but gradually spread during the reign of Hadrian (mints in conventus of Adramyteum, Smyrna, Miletus, Halicarnassus, Cibyra, Sardis). Generally, the units issued at the time in the province are quite similar to each other, so maybe "the denominational structure of the provincial coinage was not as chaotic as it might superficially appear to have been".¹⁹⁰
- 2. The determinants helpful for correct identification denomination encompass all three features combined - size, weight and effigy on the coin, depending on the place and time.
- 3. It seems that primarily two or three denominations were used in everyday transactions. These are mainly about 18-20mm, 4-6g and 15-18mm, 3-4g units, which seems to be the most frequently struck in almost all centers. Large denominations were mainly used for thesaurization, larger transactions or had a kind of commemorative function.
- 4. If the larger denomination, the greater problem with maintaining a standard weight. Similar situations it is visible in Chios coins struck in the largest denomination. Due to the fiduciary character of bronze coins and greater value because of their size, it seems that the weight of the coin did not significantly affect on its value. Thus, it seems that in this case size was more important.
- 5. Despite the larger size and heavier weight of coins, it is very difficult to say about an alternative system proposed by RPC researchers, especially if we observe a similar phenomenon in different cities at different times. Other standards can simply result from the difference in time and alloy from which the coins were struck. On the other hand, there is also the thought that increasing or overestimating certain units could have a more practical reason related to the differentiation and easier identification of coins, especially with a larger number of denominations.
- 6. The division into smaller administrative units of the province (conventus) did not affect the monetary systems of individual centers. First of all, there is no uniformity for all cities within one conventus. It seems that the most similar nominal structure had cities in the conventus of Pergamum. Sometimes larger similarities or even the same denominations are visible in centers close to each other. This may suggest joint transactions or cooperations, and thus possible wider circulation.

¹⁹⁰ Amandry, Burnett et al. 1992: 36.

- Alliances between cities (*homonoia* coins) were mostly emphasized on large denominations, maintaining the same type of effigy. Some agreement in nominal structure in allied cities in this period can be seen between Laodicea and Hieropolis (30–1mm, 16g; 24–5mm, 11–3g and 18–20mm, 4–6g) and between Ephesus and Magnesia ad Meandrum (34–6mm, 24–27g; 30–2mm, 16–19g; 22–5mm, 5–9g and 18–20mm, 4–6g). In turn some coins in slightly larger and heavier standards than general ones struck cities in the name of strategoi/civic magistries. It may have indicated some willingness to emphasize a new administration in the city.
- 8. A larger number of iconographic types within one denomination suggests greater popularity, demand and market position of unit.
- 9. Portraits of women from the families of Trajan and Hadrian were usually placed on denominations of 18–19mm, 4–6g. Coins with busts of Plotina, Marciana or Matidia issued in this unit account for 74%, while with the image of Sabina 50%.
- 10. Some of the motives were more often placed on coins with a portrait of Sabina. Belonged to them Isis, Artemis, Asclepius, Demeter, Tyche, Cybele, and Apollo. Perhaps the same denominations, with a portrait of Sabina and the same images on the reverse, were issued by Hadrianeia and Hadrianotherae, Aegae and Cyme, Clazomenae and Erythrae. Another visible trend is placed facing heads of Hadrian and Sabina on the coins in standard 20–22mm, 5–9g, like in Elaea, Myrina, Ephesus, Nicaea Cilbianorum, Nysa, Dionysopolis and Eresus.
- 11. The effigy of Antinous was usually placed on large denominations above 30mm (41% of all denominations then struck). The reverse of the coins were quite diverse; however, bull and panther motives are more common. Probably the same denomination with the same images were struck in Stratonicea and Smyrna.
- 12. According to actual registered coins some regional tendencies can be observed. A portrait of the emperor's lover appeared on the coins struck in cities located mostly in the northern part of province. Tendency placed effigy of facing heads on the coins occurred in the cities mostly located in the western and southern part of the province Asia.
- 13. Cities placed on the coins various images of deities or personifications, however, it is very difficult to find one common pattern for denominations. Dominated types were Artemis, Apollo, Zeus, Nike, Tyche, or Demeter, however not always on the same denominations. Looking at the reverse of coins, it can be seen that the cult statue of Artemis Ephesia was also a more popular type. Between 96–138 AD, this motive was depicted on the coins of 33 centers in Asia. Depending on the centre's tradition, it can be seen that some denominations have different and some common images. In this respect, perhaps one should look more broadly at individual motives, throughout the entire period of coin production, as in Germe.

- 14. Many centers issued pseudo-autonomous coins. A large part of this type of issue was registered in the cities of *conventus* of Pergamum and Sardis, however, it should be emphasized that these are areas with the largest number of coins registered in the Asia province. It seems that the tendency to mint pseudo-autonomous coins is more popular in centers located in the southern and eastern part, such as those Alabanda and Apamea. The dominant part of coins without an imperial portrait are small denominations (67%). The presence of various images on coins could serve to make a distinction. Due to the existence of popular issues, very often of the same denomination, these coins may have been characterized by a very universal, wide range of use in transactions in many cities. In addition, one of the popular tendencies regarding pseudo-autonomous coinage for this period was placing images of the Senate, Athena or Heracles on many of the same units of different cities.
- 15. It seems that due to similar coin parameters, images and fiduciary character, the bronze coins could circulate much more widely, however, depending on the place, time and demand. It should be remembered that the production of many mints was irregular, sometimes insufficient for the needs of the center. Archeological research and coin finds may not fully confirm the wide circulation of bronze provincial coins, but neither do they contradict it, especially given the limited number of coin finds for the period 96–138 AD.

Some of the problems associated with the denominations of bronze provincial coins will never be fully resolved. The use of units in everyday transactions and their value to citizens of individual centers are still an enigma to contemporary researchers. It should be emphasized that in many cases the minting activities of some centers of this period are confirmed by single coins. Thus, the number of denominations in a particular city could be larger and the monetary system more varied. Therefore, some of theses and conclusions will be verified in the future. Perhaps a new coin finds or epigraphic sources will enable to become better acquainted with, and to solve, the unknown aspects of the life of the inhabitants of the Roman provinces.

Abbreviations

RPC III – Amandry M., Burnett A. et al. (eds.) 2015. *The Roman Provincial Coinage, vol. III: Nerva, Trajan and Hadrian (AD 96–138).* London-Paris.

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Tab. 1. Bronze Monetary Systems	ms in Individu	ial Territ	ories i	n early seco	nd century A	D (alterr	native sy	stem accore	ding to Aman	dry, Burnett e	in Individual Territories in early second century AD (alternative system according to Amandry, Burnett et al. 2015: 820)
IMPERIAL MONETARY SYSTEM – ROME	Quadrans		Semis	nis	As			Dupondius	dius	Sestertius	8
Diameter	15-8mm		18-	18-20mm	26-	26-7mm		27-8mm	ш	32-4mm	
Weight	2–3g		3–5g	ğ	11–2g	2g		12–3g		25-8g	
GENERAL PROVINCIAL MONETARY SYSTEM	½ assaria	1 assarion		1 ½ assaria	2 assaria	3 assaria		4 assaria	6 assaria	8 assaria (?)	10 assaria (?)
Diameter	16-7mm	18-20mm		19–21mm	22-4mm	25-7mm		28–30mm	31-4mm	34–5mm	35-9mm
Weight	3–5g	4-6g	<u> </u>	5–7g	7-9g	10–3g	14	14-6g	17–20g	26–7g?	38-40g?
PROVINCIAL MONETARY SYSTEM - CHIOS	Dichalkon	Ξ Π	Iemias	Hemiassarion	Assarion		Assario	Assarion Hmicy	Obolos	Tria	Tria Assaria
Diameter	15-7mm	16	16–7mm	я	20-21mm		22-4mm		26-8mm	32–5mm	nm
Weight	2–3g	3	3–5g		5-6g		7–9g		10–2g	16-8g	20
NEW ALTERNATIVE PRO- VINCIAL MONETARY SYSTEM	¼ assarion(?)	1/3 assa- rion (?)		5 assarion	1/2 assarion 1 assarion	2 assaria		3 assaria	4 assaria	6 assaria	8 assaria
Diameter	12-3mm	15-6mm		16-9mm	19-23mm	24-7mm		28-30mm	30-4mm	34-5mm	35–9mm
Weight	2–3g	2–3g	4	4–5g	6–7g	10-1g	15	15–6g	19–20g	26–7g	38–9g

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NUMISMATIC COMPETITION BETWEEN TYRE AND SIDON UNDER ELAGABALUS

Abstract: Coinage of Sidon and Tyre flourished under Elagabalus. An unprecedented amount of iconographic types was introduced at that time. As Sidon gained colonial title, Tyre seems to have lost it. The changes of civic status of both cities determined the selection of iconographic motives; Tyre demonstrated it glorious mythical past and contribution in development of Mediterranean world. Sidon manifested Romanitas and the local tradition. Both cities highlighted their colonizing achievements.

Keywords: Roman Provincial Coins, Cultural Identity, Tyre, Sidon

The neighbouring cities of similar status and size are natural rivals. The phenomenon that beginnings date back to dawn of urbanization (Sumerian city-states) is broadly represented in Roman Empire.¹ Despite Maecenas' vision to eradicate mutual enmities and rivalries,² cities competition in Roman times can be perceived on a few levels. Military conflicts were rather sporadic events, however civil wars provoked such situations. In 69 AD people of Oea attacked Lepcis Magna.³ In time of conflict between Severus and Pescennius Niger, Laodiceans supported the first one in opposition to Antiochians who favoured the latter. Consequently Septimius Severus transformed Antioch into a village.⁴ However, generally cities quarrels were rather peaceful, but fierce phenomena stimulated by Roman policy. Dio Chrysostomos using the example of competition between Nicaea and Nicomedia, expressed how Roman governors took advantage of cities rivalry.⁵ The most common issue that cities in Roman East could compete was titulature.⁶ *Neokorate, metropolis, colonia* were objects of cities' desire. Consequently these titles were proudly presented on civic coins. Aforementioned Nicaea in times

¹ Magie 1950: 635–639; Robert 1977: 1–39; Burrell 2004: 348–358.

² Dio 52.37. 10–11.

³ Tac. *Hist.* 4.50.

⁴ Hdn. 3.6.9.

⁵ Dio Chr. Or. 38. 36–38.

⁶ Burrell 2004: 352.

of Commodus proclaimed imperial sacred games with an inscription regarding 'prosperous world in the reign of Commodus' (KOMO Δ OY BACI Λ EYONTOC O KOCMOC EYTYXEI).⁷ However, when Nicaea was deprived of *metropolis* status by Septimius Severus for supporting Pescennius Niger, Nicomedia highlighted it with a cynic inscription on coins: in the reign of Severus the world is prosperous, blessed are the Nikomedians, twice *neokoroi* (CEVHPOV BACI Λ EYONTOC O KOCMOC EYTYXI MAKAPIOI NIKOMH Δ EIC Δ IC NE Ω KOPOI).⁸ A similar 'numismatic clash' took place between Tyre and Sidon in times of Elagabalus.

Ancient Sidon and Tyre were magnificent cities with a great contribution to history and mythology. The distance between them is less than 40 kilometres; therefore, the tradition of rivalry between neighbouring cities seems to be everlasting. Even the civic coinages of Tyre and Sidon became the propagandist battlefield.

The beginning of rivalry between Sidon and Tyre blurs at the dawn of history. It is even hard to determine which city is older.⁹ Strabo called Tyre the largest and the oldest city in Phoenicia.¹⁰ To the contrary, in the Bible, Tyre is called the "virgin daughter of Sidon".¹¹ The opinions of ancients were divided.¹² The rivalry between the cities became serious when Sidonians supported Alexander the Great against Tyre.¹³ However, Sidonians decided to save 15 thousand of Tyrians after Macedonian troops ransacked the city, because as Q. Curtius noted *they believed that Agenor founded both cities.*¹⁴ Despite this merciful gesture, the rivalry between the cities was not over. Shared history, legendary heroes and myths were frequently used by both sides to manifest cultural predominance.

Both cities were eventually annexed by the Roman Empire, later under the Severan dynasty became Roman colonies. It triggered a new chapter of competition. The most striking example of the rivalry between Tyre and Sidon is the local coinage in time of Elagabalus. The rivalry in coins can be traced on a few levels. First, cities presented civic status that obtained (*metropolis, colonia*). Another thing is the foundation myth, that was essential identity bond of the ancient community. Therefore Tyre summoned legends of Ambrosial Rocks, Melqart and discovery of purple, while Sidon highlighted importance of Europe-Astarte. Next, both cities contributed to ancient colonization with heroes such as Kadmos, Dido, and aforementioned Europe. The competition is obviously connected with games organized by Tyre (*Actia Eraclia*) and Sidon (*Iera*)

⁷ RPC IV.1 6059 temp.; Robert 1977: 31; Nollé 1998: 346.

⁸ Nollé 1998: 346.

⁹ Eiselen 1907: 16-26.

¹⁰ Strab. 16.2.22.

¹¹ Isaiah 23.12.

¹² Hdt. 2.44; Dionys. Per. 911; Virgil, Aen. 4.670.

¹³ Arr. Anab. 2.19.

¹⁴ Curt. 4.4.15.

Oecumenica Periodica Iselastica). Finally, they competed in expressing *Romanitas* by presenting *aratrum ritual*, military standards, Marsyas and Aenaes. The author of the current paper perceives the coinages of Tyre and Sidon in the reign of Elagabalus as a fascinating example of ancient cities' numismatic rivalry.

The city status of Tyre and Sidon under Elagabalus

The Severan period transformed the region of Levant on a cultural and political level. Septimius Severus in process of power consolidation defeated Pescennius Niger who resided in Syria. Consequently cities that supported the latter were punished. The cases of Antioch and Nicaea have been summoned in the introduction. Similar fate affected, Berytus which was deprived of Bekaa valley, emancipated as an independent colony- *colonia Iulia Augusta Felix Heliopolitana*.¹⁵ In contrary, Tyre, among other cities such as Laodicea Maritima and Sebaste, were granted the status of a Roman colony, as a reward for siding with Septimius Severus.¹⁶ Grateful city authorities introduced new issues with Latin inscriptions and iconographic motives known from regular colonies (eagle+ military standard,¹⁷ foundation scene¹⁸). However, local themes such as Astarte,¹⁹ Hercules-Melqart²⁰ supplemented the colonial issues. Later, under the aforementioned emperor, the colonial title disappeared from the Tyrian coinage. In the meantime, Sidon acquired the colonial status too.²¹ The neighbouring cities competed once again, this time in a "numismatic clash".

According to F. Millar, the colonial status under the Severi became just another title that cities could aspire for.²² Therefore, it is a crucial coincidence that at the same time when Sidon became a colony, Tyre stopped to highlight the status on its coins. The regular legend (e.g. SEP TVRVS METRO COLON²³) was used from time of Septimius Sever until Elagabalus. Then, after his enthronement, some Tyrian coins lacked the title of *metropolis* (e.g. SEPTIM TVRO COLO²⁴). Subsequently, legends became deprived of the colonial status (TVRIORVM²⁵). Furthermore, all of the coins struck in the name

²¹ Jones 1971: 287; Millar 2006: 213.

²³ Rouvier 2340.

²⁵ Rouvier 2381–2383, 2385–2391, 2393–2394.

¹⁵ Jones Hall 2004: 49–50; Millar 2006: 193.

¹⁶ Millar 1993: 123; Sartre 1997: 375; Butcher 2003: 229; Millar 2006: 191.

¹⁷ Rouvier 2300.

¹⁸ Rouvier 2303.

¹⁹ Rouvier 2301, 2298, 2310.

²⁰ Rouvier 2299.

²² Millar 2006: 165.

²⁴ Rouvier 2348.

of Aquilla Severa²⁶ (2nd and 4th wife of Elagabalus), which bear simplistic *ethnikon* TVRI-ORVM support an assumption that Tyre did not reclaim its colonial status until Alexander Severus. Parallel to disappearance of the colonial status (usually expressed as C/ COL/ COLONI), the statue of Marsyas which used to be placed commonly on earlier Tyrian colonial coins²⁷ was replaced by a palm tree²⁸ (fig. 1–2). The figure of satyr is a distinctive feature of colonial coins, associated with freedom (*signum libertatis*).²⁹ The simplistic inscription TVRIORVM was never juxtaposed with other typical colonial motives such as foundation type and *vexillum*. To sum up, numismatic evidence seems to prove that Tyre lost its colonial status at some point under Elagabalus.³⁰

Another coincidence (or more appropriate expression is convergence) is the activity of *legio III Gallica* preserved in historical and numismatic sources. It is known that legionnaires supported Varius Avitus' (future Elagabalus) claims to throne against Macrinus.³¹ However, later they rebelled against Elagabalus.³² Rejecting the often repeated belief of Severan colonies as pure titular enterprises,³³ we shall perceive Tyre as a colony inhabited by the veterans or vexillatio of legio III Gallica.³⁴ The vexillum inscribed LEG III GAL is presented on coins of Septimius Severus,³⁵ Julia Domna,³⁶ Geta,³⁷ and eventually of Elagabalus (fig. 7).³⁸ Later when the colonial status disappeared from Tyrian coins, as it is mentioned above, the motive of legionary standard was abandoned too. These two phenomena seems to be related. The obvious explanation of the lack of the colonial status on Tyrian coinage is a loss of privileges in consequence of mutiny against emperor. Meanwhile, there are two possibilities concerning the situation in Sidon. On the one hand, Sidon for supporting the emperor in the time of the rebellion could have been granted a colonial privilege. On the other hand, a group of colonists had already been settled in Sidon and remained loyal toward Elagabalus. The inscription referring to legio III Gallica (L III GAL) occurs on coins of Sidon too (fig. 12).³⁹ However, there is also an example from the collection of Münz-

- ³⁰ Butcher 2003: 229; Millar 2006: 196; Hirt 2015: 196–197.
- ³¹ Cass. Dio 39.31; Hdn. 5.3.1-12.

³⁴ Dąbrowa 2000: 314; *Idem* 2004b: 218-219; *Idem* 2005: 40; Hirt 2015: 196.

- ³⁶ Rouvier 2303.
- ³⁷ Rouvier 2330.
- ³⁸ Rouvier 2392.
- ³⁹ Rouvier 1508.

²⁶ Rouvier 2395-2404.

²⁷ Rouvier 2358.

²⁸ Rouvier 2350.

²⁹ Small 1982: 77-83; Klimowsky 1989: 93-94; Basso, Buonapane 2008: 146.

³² Cass. Dio 80.7.1-2.

³³ Cf. Watkins 1983: 321; Howgego 2005: 12; Millar 2006: 165.

³⁵ Rouvier 2300.

kabinett in Staatliche Museen zu Berlin on which LEG III PAR is inscribed.⁴⁰ There is evidence that troops of *legio III Parthica (vexillation)* occupied the colonies of Nisibis and Rhaesaena.⁴¹ However hitherto there is no connection of this legion with Sidon. Could that be an attempt of changing the legion's identity after their members fell out of the emperor's favour? There is a common belief (recently contested by E. Dąbrowa⁴²) that *legio* of *III Gallica* was dissolved after a rebellion and the remaining soldiers were divided into various legions.⁴³ In the light of the current research all conclusions remain uncertain. Nevertheless, Sidonian government decided to highlight the new status and emperor's favour on its coins.

Flourishing Coinage of Tyre and Sidon under Elagabalus

Despite that the political situation of Tyre and Sidon, coin production in both centres became more abundant than before. In Sidon there were some single bronze issues struck under Pescennius Niger⁴⁴ and tetradrachms emitted under Caracalla.⁴⁵ After Sidon obtained the status of a Roman colony around 26 new iconographic types were introduced.⁴⁶ Surprisingly, a similar situation happened in the degraded Tyre, where iconographic repertoire was the most multifarious of all time.⁴⁷ Increased activity

⁴⁶ Sidon: **Agonistic table** – BMC 279–286, 306, Rouvier 1514–1516, 1546; **Amalthea + Zeus**- BMC 261, Rouvier 1539; **Argo ship**- BMC 309; **Astarte + Nike + Marsyas**- BMC 242, 298, Rouvier 1489–1490; **bust of Zeus** – Rouvier 1485; **car of Astarte**- BMC 250–252, 299–300, Rouvier 1494–1502, 1529–1533; **Demeter** Rouvier 1534; **Dido** – BMC 263–265, Rouvier 1526–1537; **Dionysos**- BMC 310; **Dionysos + Apollo** – Rouvier 1528; **Elagabalus + Nike** – CNG ID 31230; **Europe + Bull** – BMC 229–235; **Europe on bull** – BMC 293, 295, 311–312, Rouvier 1481, 1487, 1503–1505; **Foundation scene + vexillum** – BMC 301, Rouvier 1544, 1508; 1576; **hexastyle + Astarte** – Rouvier 1486; **Kadmos + lion** – BMC 262; **Kadmos on galley** BMC 235–241, 296–297, 312–315, Rouvier 1482, 1488, 1506–1507; **Marsyas** – Rouvier 1569; **modius** – BMC 274–278, Rouvier 1518–1522; **Naumachia?** – Rouvier 1542; CNG ID 91144; **sanctuary of Europe** – Rouvier 1550; **tetrastyle + Astarte** – BMC 243, Rouvier 1491–1492; **Zeus, enthroned** – Rouvier 1559; **12 zodiac + car of Astarte** – BMC 260, Rouvier 1527; **3 military standards** – BMC 266–273, 302–305, Rouvier 1523, 1593; **CERT| SAC PER| OECVME| IOELA in wreath** – BMC 294, 307–308, Rouvier 1524–1525;

⁴⁷ Tyre: Aeneas + Anchises + Ascanius – Rouvier 2383; Ambrosial Rocks – Rouvier 2391, 2403, 2411; Artemis – Rouvier 2412; Astarte + Nike + Marsyas – BMC 388–392, Rouvier 2348–2349, 2357; Astarte + Nike + palm tree – BMC 396, 403, 416, Rouvier 2350–2356, 2395–2397; Baetyl + serpent – BMC 413, Rouvier 2390, 2402; clasped hands – CNG ID – 377067; Dido – Rouvier 2374; Dido + Carthage – BMC 409, Rouvier 2375–2376; Dido on galley – BMC 410, Rouvier 2377–2379, 2400; Dionysos – BMC 406, Rouvier 2366; Elagabalus in quadriga – BMC 412, Rouvier 2387; foundation scene+ vexillum – BMC 394–395, Rouvier 2392; galley – Rouvier 2393; Harpocrates – Rouvier 2370; Heracles – Rouvier 2365, 2399; Heracles, bust – Rouvier 2407; hexastyle + Astarte – BMC 404–405, Rouvier 2360–2364, 2394; Kadmos – Rouvier 2380–2382; Kadmos on galley – BMC 411; Kadmos + serpent – Rouvier 2372;

⁴⁰ Berlin Cat. No. 18242053.

⁴¹ Castelin 1946: 23–27; Pollard 2000: 273–274; Dąbrowa 2004b: 217–218.

⁴² Dąbrowa 2005: 42-43.

⁴³ *Ibidem*: 316.

⁴⁴ Rouvier 1477.

⁴⁵ Rouvier 1478-1480.

of mints is noticeable from other Phoenician colonies such as Berytus and Heliopolis.⁴⁸ Eastern origin of the emperor and his exceptional favour toward Syrian cults and cities could be an assumption. Caesarea ad Libanum was another town granted the colonial status because of Julia Mammaea husband, who came from there.⁴⁹ The connections of imperial family with Levant are significant. Another example is the famous baetyl from Emesa (hometown of the emperor) which was transported to Rome with a splendid procession.⁵⁰ The journey was illustrated on imperial and provincial coins.⁵¹ Therefore, Elagabalus relations with the East could be a factor stimulating productivity and creativity of Phoenician mints.

Tyre and Sidon decided to manifest on civic coins local myths and cults. Both cities vividly promoted their origins and contributions to the Mediterranean mythology. Tyre focused on its origins (Ambrosial Rocks, Heracles- Melqart, Murex shell) and heroes who were famous around the ancient world (Kadmos, Dido, Pygmalion). Meanwhile Sidon promoted its devotion to Europa – Astarte. Furthermore, despite that typical colonial issues played rather supporting role, Sidon was frequently indicating colonial rank by placing the figure of Marsyas in local scenes. An everlasting competition between neighbouring cities entered the next level.

Foundation Myths

The cultural identity of the ancients originates from shared ancestors and it did not really matter if they were actual or mythic predecessors.⁵² Therefore, Roman Empire emphasised the She-wolf, Romulus and Aeneas on imperial propaganda.⁵³ Hence, cities propagated hero-founders or foundation myths on civic coins.⁵⁴ As it was mentioned above, Sidon and Tyre competed for the title of the most ancient city in Phoenicia. Consequently, the officials of Tyre decided to highlight the legendary beginnings of their hometown. A frequent motive on coins are Ambrosial Rocks. In the age of Elagabalus,

⁵² Gruen 2013: 2-3.

53 Zanker 1988: 201–210; Rissanen 2014: 335–360; Kluczek 2017: 295–321; Idem 2019.

Marsyas + palm – Rouvier 2371; **Nike + palm tree –** BMC 407, 417, Rouvier 2385–2386; **Pygmalion**- BMC 408, Rouvier 2388; **prize crown –** BMC 414, 418, Rouvier 2394, 2404; **Roma** – Rouvier 2369; **tetrastyle + Astarte –** BMC 393.

⁴⁸ Sawaya 2009: 253–257.

⁴⁹ Millar 2006: 213–214.

⁵⁰ Cass. Dio. 80.11; Hdn. 5.5.3; 5.6.6–5.6.7; Beard, North, Price 1998a: 255–256; Icks 2006: 169–178.

⁵¹ Imperial aurei: RIC 61, 196; Imperial denarii: RIC 144, 195; provincial – Aelia Capitolina: BMC 85; Laodicea ad Mare: Meshorer 149.

⁵⁴ Swimming ox in Buthrotum – RPC I 1390; Cyzicus in Cyzicus – RPC II 886; Gortys in Gortyn – RPC III 58; Parius in Parium – RPC IV.2 11256, 11263, 3019, temp.; Myrlos in Apamea – RPC III 1031; RPC IV.2 4720 temp.; Amphilochus in Mallus – RPC III 3325; RPC IV.3 4982, 11738,6897, temp.; Alexander the Great in Alexandria Troas – RPC IV.2 154, temp.; RPC VI 4033 temp.; RPC IX 406.

they are presented as a main theme of the reverse (fig. 6),⁵⁵ later they played also a mintmark function.⁵⁶ Semicircular Ambrosial Rocks are flanking an olive tree. They are inscribed -AMBPOCIC ПЕТРЕ. It is worth to highlight that the inscription is in Greek. According to Philo of Byblos there were two brothers living in Phoenicia- Hypsouranios and Ousoos. The first one had supposedly founded Tyre, while the latter had invented sailing and during one of his cruises discovered two baetyls which were later erected in Tyre.⁵⁷ Another version of the myth is reported by Nonnus in Dionysiaca,⁵⁸ in which Heracles-Melqart (patron of Tyre) explained how settlers found a city of Tyre. They discovered in the sea two floating rocks with a burning olive tree inhabited by an eagle and a snake. The people captured the eagle and later sacrificed it. Consequently the Ambrosial Rocks settled by the shore and Tyre was located on top of them. The image of an olive tree surrounded by Ambrosial Rocks presented on Elagabalus' coins seems to be related with the second myth.⁵⁹ They are an allusion to the topography of Tyre which was originally located on two islands.⁶⁰

The mentioned Heracles worshiped in Phoenicia under the name of Melqart shall be perceived as the founder of Tyre. As Nonnus reported, Heracles-Melqart had foretold how Tyre should be established. The allusion to the myth had been presented earlier on coins of Julia Domna⁶¹ and later repeated in the times of Elagabalus.⁶² Melqart is presented with lion skin and a cube, sacrificing over an altar. Next to him depicted are Ambrosial Rocks.

Another legend is hidden in an exergue of the mentioned coin containing Ambrosial Rocks (fig. 6).⁶³ There is a scene, where a dog is biting a murex shell. It is an illustration of a history explaining the discovery of purple dye. According to the myth, the dog of nymph Tyros once returned to her with a purple- coloured snout. The nymph demanded a dress in this very colour from her lover, Heracles- Melqart. The god realized that purple came from specific species of snail- murex.⁶⁴ Tyre became one of the most famous production centres of purple in ancient times,⁶⁵ and the name *Tyrian purple (dibromoindygo)* is used even today.⁶⁶ Murex shell became a mintmark frequently presented on Tyrian coins.⁶⁷

⁵⁵ Rouvier 2391.

⁵⁶ Eg. Valerian – BMC 468; Bijovsky 2005: 829.

⁵⁷ Euseb. Praep. Evang.1.10. 6-14.

⁵⁸ Nonn. *Dionys*. 40. 427–537.

⁵⁹ Hirt 2015: 201.

⁶⁰ Bijovsky 2005: 829.

⁶¹ Rouvier 2313.

⁶² Rouvier 2365, 2399.

⁶³ Rouvier 2391.

⁶⁴ Poll. 1.45; Bonnet 1988: 74-77.

⁶⁵ Plin. HN. 9.60-65.

⁶⁶ Baker 1974: 11-17; Cooksey 2001: 736-738; Verapoulidou 2012: 103-106.

⁶⁷ Bijovsky 2005: 829.

A similar role in Sidon was played by the cart of Astarte.⁶⁸ Two wheeled cart is presented with four columns. On the roof there are four palm leaves. In the middle there is a circular cult statue. The cart was presented as the main motive (fig. 11) or as a mint mark.

Phoenician colonization

Promoting own mythological origins was not enough for Sidonian and especially Tyrian officials. Both went further by manifesting Phoenician contribution to ancient cosmogony. The "export" mythology of Tyre and Sidon started with an abduction of the Phoenician princess- Europa by Zeus. The myth is illustrated on two series of Sidonian coins. First, the sitting Europa is holding horn of a bull (Zeus in disguise).⁶⁹ The other scene presents a running bull with the kidnapped princess mounted on its back (fig. 17).⁷⁰ Lucian confirmed that the act of abduction was presented on Sidonian coins and in the sanctuary of Europe.⁷¹ Furthermore, the temple complex is presented on one issue (fig. 15).⁷² The composition consists of two panels. On the bottom one, there are two massive columns decorated with floral scrolls surrounding two Nikai and a small statue of Marsyas. On the upper panel, there is a hexastyle temple with a scene of the abducted Europe presented in the middle, while two other figures are depicted in intercolumn. It seems that the Phoenician princess was worshipped also as Astarte in Sidon.⁷³

After Zeus kidnapped Europe and dragged her out of Phoenicia, her father – king Agenor send his son – Kadmos with a mission of rescuing Europe. The moment when Kadmos is stepping on the prow is depicted on coins of Sidon (fig. 18)⁷⁴ and Tyre (fig. 3).⁷⁵ On some issues, the head of the hero is turned back, and he looks pensively as if he already knew that he could never come back to Phoenicia. Although Kadmos did not complete the mission, his contribution to the mythology of Mediterranean world is significant. He delivered the alphabet to Greeks⁷⁶ and founded Thebes.⁷⁷ Actually, both events were presented on later coins of Tyre.⁷⁸ However, from the time of Elagabalus another myth connected with foundation of Thebes is presented. During the rituals of founding a new city, Kadmos needed some fresh water from a spring belonging to Ares, which was protected by a giant serpent. The monster attacked a few Phoenician

72 Rouvier 1550.

⁶⁸ E.g. Rouvier 1494.

⁶⁹ BMC 229–235.

⁷⁰ BMC 293, 295, 311-312; Rouvier 1481, 1487, 1503-1505.

⁷¹ Lucian Syr. D. 4.

⁷³ Price, Trell 1977: 156-157.

⁷⁴ BMC 235-241, 296-297, 312-315; Rouvier 1482, 1488, 1506-1513.

⁷⁵ BMC 411.

⁷⁶ Hdt. 5. 58–59.

⁷⁷ Ovid. Met. 3. 19; Nonn. Dionys. 4. 319-347.

⁷⁸ Kadmos founding Thebes – RPC VIII 58995 temp.; Kadmos giving alphabet to Greeks – RPC IX 1987.

comrades before Kadmos ultimately managed to defeat it.⁷⁹ On the mentioned issue, the naked hero is throwing a stone at the serpent.⁸⁰ Eventually Kadmos became the mythic founder of Thebes and a hero who delivered the alphabet to Greeks, while Europe gave birth to Cretan princes Minos, Sarpedon, and Rhadamanthys,⁸¹ in this way starting a new branch of Greek heroes.

Thebes were not the only town established by the settlers coming from Tyre/ Sidon. Another famous colony was Carthage which had been founded by another Phoenician princess - Dido. Again, the ancient sources are not in agreement from which city Dido came,⁸² and both cities claimed her heritage. According to Justin, after the death of Dido's father, she fell in conflict with her brother – Pygmalion, who secretly killed her husband planning to gain his wealth.⁸³ Dido decided to collect her husband treasures and escape with her followers from Phoenicia. Pygmalion chased her, but refugees tricked him by throwing overboard sand which her brother perceived as gold. Eventually, the Phoenicians arrived in North Africa where Dido founded a new city of Carthage. Again, the myth is depicted on coins of Sidon and Tyre but in different manner. In Sidon, Dido is depicted as enthroned queen.⁸⁴ On Tyrian coins she is presented on two scenes related to the myth. The flee is presented by Dido standing on a galley (fig. 4).⁸⁵ Phoenician princess is holding cornucopia and a small sceptre. She is pointing at the sea with a gesture of order. On one example,⁸⁶ a sailor on the right is bending and accordingly to Dido's command is pouring out sand grains from the vessel as it was reported in the myth. In exergue, there is a murex shell to remind the coin user that Dido was a Tyrian princess. Finally, the act of Carthage foundation is presented on Tyrian coin. Dido is standing in front of the city gate which is under construction by a mason (fig. 9).⁸⁷ It is worth to mention that the scene occurred for the first time under Elagabalus on coins inscribed TVRIORVM. Obviously, it is not coincidence that when Tyre lost the colonial and metropolitan status, the civic mint started to commemorate its achievements in colonization.88

Since the Phoenician inscription <<PGMLYON>> occurred on coins of Gordian III⁸⁹ a naked hero holding harnesses tied to four stags, one would identify this figure

⁷⁹ Nonn. *Dionys* 4. 356–417; Edwards 1979: 31–32; Hirt 2015: 194.

⁸⁰ Rouvier 2372.

⁸¹ Hom. Il. 14. 321.

⁸² Eiselen 1907: 100-101.

⁸³ Justin Epit. 18.4-6.

⁸⁴ BMC 263-265; Rouvier 1526-1537.

⁸⁵ Tyre – BMC 410; Rouvier 2377–2379, 2400.

⁸⁶ Rouvier 2377.

⁸⁷ BMC 409; Rouvier 2375-2376.

⁸⁸ Hirt 2015: 197.

⁸⁹ Bijovsky 2000: 319-332; Gitler, Bijovsky 2002: 317-324; Rouvier 2434; RPC VII.2 6553 temp.

as a brother and oppressor of Dido. The same visualization, but without an inscription appeared for the first time under Elagabalus (fig. 5).⁹⁰ However, the Phoenician king is rather a negative hero in Phoenician mythology; therefore, G. Bijovsky suggested that the presented figure is commonly known as Adonis, while Phoenicians called him Pygmalion.⁹¹ Adonis originated from Phoenicia; however, he was born on Cyprus, which was colonized by Phoenicians, thus it could be another allusion pointing to Tyre as a colonizing metropolis.

An extraordinary maritime scene is presented on coins of Sidon (fig. 14).⁹² There are juxtaposed two galleys driven by multiple oarsmen. There is a female figure holding a long sceptre on the board of the left ship, who was interpreted by Löbbecke as Athena but by Rouvier and Hill as Astarte.⁹³ Next to the female, there is a figure resembling the hunched Marsyas. Since Satyr used to be juxtaposed with Astarte on Sidonian and Tyrian coins, the latter identification seems to be correct. There are more puzzling aspects of this issue. On the right ship, there is a male figure with a hand extended to left and with his head turned back. With the very same posture, Kadmos was depicted on the mentioned coins.⁹⁴ Furthermore, in field, there is a cart of Astarte indicating Sidon as the mint, and another barely legible object resembling a murex shell. Therefore, that could be a self-evident example of the clash of Tyre and Sidon on coins. However, the object is not visible enough to draw a conclusion. It seems rather that this issue was an answer to Tyrian policy of manifesting colonization achievements by presenting Sidonian point of view.

To sum up, both cities manifest its contribution to the development of the Mediterranean mythology. Europe, Dido, Kadmos, and Pygmalion were well known heroes in the ancient world originating from Phoenicia. Furthermore, they took part in colonization, what is especially highlighted on coins of Tyre after it lost the status of a colony and a metropolis. Tyrian elites pointed out the mythical significance of their city. It should be recalled that the audience of the civic coinage were mostly the local residents who used them in every day transactions,⁹⁵ reminding them of the achievements of the city that they inhabited was an expression of local patriotism.

Roman identity expressed on coins

Apart from the mythical foundations and contribution to colonization, both cities manifested Roman identity too. As it was mentioned they switched the language

⁹⁰ BMC 408; Rouvier 2388.

⁹¹ Bijovsky 2000: 323-324.

⁹² Rouvier 1542; CNG ID 91144; Berlin Cat. No. 18242140, 18242142, 18242143.

⁹³ Löbbecke 1890: 24; Rouvier 1542; BMC cxi- cxii.

⁹⁴ BMC 235–241.

⁹⁵ Butcher 2005: 143-144; Heuchert 2005: 40; Elkins 2015: 3.

from Greek to Latin. Furthermore, the highlighted colonial title (Tyre- e.g. SEP TVRVS METRO COLON; Sidon- e.g.- COL AVR PIA METR SIDON) were always present. However, the most striking examples are colonial types. The author of the presented paper distinguished three main colonial issues. 1.) veiled priest ploughing the first furrow (*sulcus primigenius*) with a yoke of oxen is often described as foundation type. 2.) military emblems presented as standards (*vexilla*), eagles (*aquilae*), signs (*signa*). 3.) Statue of Marsyas which symbolized colonial liberty. All of them were introduced on coinage of Tyre and Sidon.

First, Tyre became a Roman colony under Septimius Sever. Soon after that grant Tyrian mint released an issue presenting a pair of oxen driven by a priest.⁹⁶ In the background, *vexillum* inscribed LEG III GAL is depicted. Tyrian mintmark – a murex shell is shown on a field. Later, in the times of Elagabalus, the same motive was repeated (fig. 7).⁹⁷ In Sidon, an almost identical scene is illustrated (fig. 12).⁹⁸ A priest, presented on the coins, conducting an *aratrum* ritual, should be regarded as an act of colonial foundation.⁹⁹ Roman colonies were founded as imitations of Rome.¹⁰⁰ Therefore, they were established with the same method as Rome had been created by Romulus, who had ploughed the original furrow (*sulcus primigenius*) with a bronze blade (*aratrum*), determining in this way original borders of Rome.¹⁰¹ This motive appeared on imperial coins a few times and became especially popular on the colonial coinage.¹⁰² The authorities manifested the connection with Rome and commemorated foundation of their city by emitting coins depicted with the priest conducting an *aratrum* ritual.

Another symbol related to the colonial foundation is a military sign. Actually, there were three main types – eagles (*aquilae*), standards (*vexilla*), and signs (*signa*).¹⁰³ Generally, the colonies were settled by veterans coming from various legions. As it was mentioned, legionnaires from *legio III Gallica* inhabited both Sidon and Tyre. *Vexillum* inscribed LEG III GAL is placed behind the yoke of oxen on the recalled above foundation types.¹⁰⁴ The reference to legion disappeared from Tyrian coins simultaneously with the colonial title. While in Sidon, another type containing three *signa* was introduced (fig. 13).¹⁰⁵ The decoration of military signs is very extensive. There are two medallions (*phalerae*) and a tablet (*tabula*) with two dots on each shaft. They are crowned with eagle

⁹⁶ Rouvier 2300, 2303-2304.

⁹⁷ BMC 394-395; Rouvier 2392.

⁹⁸ BMC 301; Rouvier 1508, 1544, 1576.

⁹⁹ Eckstein 1979: 93-94; Sisani 2014: 379.

¹⁰⁰ Gell. NA 16. 13. 9 - Coloniae quasi effigies parvae simulacraque.

¹⁰¹ Plut. Rom 11.; Tac. Ann 12.24.; Varro. Ling. 5.14.

¹⁰² Jellonek 2018: 105–110.

¹⁰³ Dąbrowa 2004a: 396; D'Amato 2018: 9–16.

¹⁰⁴ Tyre - Rouvier 2300, 2303- 2304; Sidon - BMC 301; Rouvier 1508, 1544, 1576.

¹⁰⁵ BMC 266–273, 302–305; Rouvier 1523, 1593.

(*aquilae*) mounted on a crescent (*lunulae*). The signs belonged to military troops, carrying them was a great privilege. They were placed on special altars in military camps; thus, in colonies they were treated in a similar way. Therefore, issues containing military standards manifest the pride of veterans and their descendants. Consequently, while the priest with oxen demonstrates civilian foundation, legionnaires *signa, aquilae* and *vexilla* highlight military origins of colonists.¹⁰⁶

The third colonial type is the statue of Marsyas from Forum. The original story of a bold Satyr who dared to compete with Apollo seems not to be related to Roman colonies.¹⁰⁷ The bronze figure of the hunched Marsyas carrying on its back a wine-sack was placed on Forum Romanum next to ficus Ruminalis and office of praetor peregrinus which is confirmed on Anaglypha Traiani.¹⁰⁸ Servius Honoratus in his comments of Aeneid mentions that the statue of Marsyas had usually been erected in fora of free cities.¹⁰⁹ Popularity of this motive on the colonial coinage confirms that observation.¹¹⁰ Marsyas was presented in both analysed colonies. The statue of the hunched Satyr is presented on the Sidonian issue¹¹¹ while in Tyre, the Satyr is juxtaposed with a palm tree.¹¹² However, more significant is the presence of Marysas in the context of Astarte from Tyre.¹¹³ The city-goddess is crowned by the flying Nike, while she is crowning trophy. Between them, a small figure of Marsyas and a murex shell are added (fig. 2). SEPTIM TVRO COLO surrounds them all. The same scene was later repeated; however, some details are changed (fig. 1).¹¹⁴ Tyre is no longer a colony, therefore, single TVRI-ORVM appeared. Marsyas is substituted with a palm tree, which is a clear reference to the loss of the colonial status. Meanwhile, in Sidon a similar scene was introduced (fig. 10).¹¹⁵ There is Astarte holding a long sceptre crowned by Nike. In some versions the scene is placed inside a tetrastyle temple.¹¹⁶ On her left side, a small figure of Marsyas is depicted. Sidon emphasized colonial status by using an almost identical iconographic motive that was presented earlier on Tyrian coins.

Despite losing its colonial status, Tyre kept expressing its Roman identity, by continuing the Latin legends on its coins and introducing another typical Roman theme

¹⁰⁶ Dąbrowa 2004a: 399.

¹⁰⁷ Klimowsky 1988: 88–89.

¹⁰⁸ Small 1982: 72-80; Klimowsky 1989: 90-91; Ostrowski 1999: 336; Basso, Buonapane 2008: 141.

¹⁰⁹ Serv. Ad Aen 3 20.

¹¹⁰ Small 1982: 132–138.

¹¹¹ Rouvier 1569.

¹¹² Rouvier 2371.

¹¹³ BMC 388-392; Rouvier 2348-2349, 2357.

¹¹⁴ BMC 396, 403, 416; Rouvier 2350–2356, 2395–2397.

¹¹⁵ BMC 242, 298; Rouvier 1489–1490.

¹¹⁶ BMC 243; Rouvier 1491-1492.

– the escape from Troy.¹¹⁷ Aeneas is carrying his father – Anchises and holding the hand of his son- Ascanius. Though this motive became popular on the provincial coinage in the 2nd and 3rd Cent., its occurrence was limited (but for Tyre and Berytus¹¹⁸) to the neighbourhood of ancient Troy.¹¹⁹ One could assume that these two Phoenician cities could express their connection with a primogenitor of Roman emperors through the colonial status. However, Tyre decided to highlight Aeneas at the time when he fell out of Elagabalus favour; therefore, it seems that the intertwined fate of Dido and Aeneas is a motive.¹²⁰

Games

Apart from the analysed three contexts, there is another level of competition between cities. It was a great privilege, distributed by emperors, to organize games. Septimius Severus established Capitolian games in loyal Laodicea in order to counterbalance Olympian games hosted by Antioch.¹²¹ It seems that similar situation concerns Tyre and Sidon. Tyre was a hosting venue of games called ACTIA ERACLIA in the times of Caracalla.¹²² Despite the fact of losing its colonial status, local goverment continued organizing games dedicated to Heracles, what is confirmed by coins (fig. 8).¹²³ Privilege of hosting games was granted to Sidon in the times of Elagabalus and it was celebrated on its coins too (fig. 19).¹²⁴ The reverses bear legend IER OECV PER ISE which can be decoded as *Iera Oecumenica Periodica Iselastica*, what means that the games were sacred, worldwide, periodic and the winner was granted with a quasi- triumphal entry to his hometown.¹²⁵ Although Dio Chrysostom condemned city's desire to outrank local rival by gaining new titles and festivals,¹²⁶ it seems obvious that such competition stimulated civic coinage.

Conclusion

Unprecedented, miscellaneous iconographic program of both cities in times of Elagabalus contained also other motives. Sidon highlighted the astrological prosperity and significance of Astarte by presenting her cart surrounded by twelve signs

¹¹⁷ Rouvier 2383.

¹¹⁸ Sawaya 102.

¹¹⁹ Kluczek 2019: 183-184.

¹²⁰ Ibidem: 368.

¹²¹ Graf 2015: 97

¹²² Sawaya 2009: 243.

¹²³ BMC 414, 418; Rouvier 2394, 2404.

¹²⁴ Graf 2015: 97; BMC 294, 307–308; Rouvier 1524–1525.

¹²⁵ Klose 2005: 196-197

¹²⁶ Dio Chr. Or. 38. 22–23

of Zodiac (fig. 16).¹²⁷ Tyre attempted to regain the emperor's favour by presenting him as the triumphator in quadriga.¹²⁸ Parallelly, both cities summoned the most common and significant Greek-Roman deities on their coins.¹²⁹

Summarizing the coinage of the ancient cities of Tyre and Sidon under Elagabalus, it should be noted that both cities emitted unprecedented amounts of iconographic types. Obviously, the reason of such intensified activity is rivalry between cities. On the one hand act of Sidon's elevation as a Roman colony and the privilege of organizing games stimulated local coinage. On the other hand Tyre's discoordination effected in losing colonial status was another impulse to point out Sidonian predominance. However Tyre answered by highlighting its contribution in Mediterranean colonization.

Nevertheless in both cases coins manifested local patriotism by summoning ancient myths and heroes. Furthermore they reminded that their own legendary citizens contributed to colonizing Mediterranean world, which indicates the communities of Tyre and Sidon as progenitors of Greek-Roman culture.¹³⁰ Simultaneously Sidon gladly demonstrated its colonial status and affiliation with Roman military and civilian tradition by presenting an *aratrum* ritual, Marsyas, and *signa* on its coins. However, deprived of its colonial status Tyre kept the Latin language, pretending to be equal to the neighbouring Sidon in the level of Roman culture.

Finally, the significance of coins receivers must be emphasized. The coins of Sidon and Tyre were intended for local inhabitants; thus, the message was sent from the officials to the civic audience. Therefore, the government of Tyre through the disaster that undoubtedly was the loss of its colonial status tried to demonstrate the merits of Tyrian legendary ancestors to the municipal community in order to spread local pride. Meanwhile, the officials of Sidon promoted the new title by a mixture of indigenous tradition and Roman profits. Despite of Maeceneas' vision and Dio Chrysostom's warning the competition between cities evoked vivid emotions among local audience.

130 Hirt 2015: 208.

¹²⁷ BMC 260; Rouvier 1527.

¹²⁸ BMC 412; Rouvier 2387.

¹²⁹ Sidon: Amalthea + Zeus – BMC 261, Rouvier 1539; bust of Zeus – Rouvier 1485; Demeter – Rouvier 1534; Dionysos – BMC 310; Dionysos + Apollo – Rouvier 1528; Zeus, enthroned – Rouvier 1559; Tyre-Artemis – Rouvier 2412; Dionysos – BMC 406, Rouvier 2366; Harpocrates – Rouvier 2370; Heracles – Rouvier 2365, 2399; Heracles, bust – Rouvier 2407; Roma-Rouvier 2369.

Iconographic Motive:	Tyre	Sidon
Agonistic crown	+	-
Agonistic table	-	+
Aeneas+ Anchises+ Ascanius	+	-
Amalthea + Zeus	-	+
Ambrosial Rocks	+	-
Argo Ship	-	+
Artemis	+	-
Astarte + Nike + Marsyas	+	+
Astarte+ Nike+ Palm tree	+	-
Baetyl+ Serpent	+	-
Cart of Astarte	-	+
Clasped hands	+	-
Demeter		
Dido	+	+
Dido + Carthage	+	-
Dido on galley	+	-
Dionysos	+	+
Dionysos+ Apollo	-	+
Elagabalus+ Nike	-	+
Elagablus in quadriga	+	-
Europe+ Bull	-	+
Europe on bull	-	+

Festival inscription in wreath	-	+
Foundation scene+ vexillum	+	+
Galley	+	-
Hexastyle+ Astarte	+	+
Harpocrates	+	-
Heracles- Melqart	+	-
Heracles, bust	+	-
Kadmos	+	-
Kadmos+ lion	-	+
Kadmos + serpent	+	-
Kadmos on galley	+	+
Marsyas	+	-
Marsyas+ palm	+	-
Modius	-	+
Naumachia	-	+
Nike+ palm tree	+	-
Pygmalion	+	-
Roma	+	-
Sanctuary of Europe-Astarte	-	+
Tetrastyle+ Astarte	+	+
Zeus, enthroned	-	+
Zeus, bust	-	+
3 military standards	-	+

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Figures





3. Tyre, Rouvier 2372



4. Tyre, Rouvier 23504. Tyre, Rouvier 2377



5. Tyre, Rouvier 2388



6. Tyre, Rouvier 2391



7. Tyre, Rouvier 2392



8. Tyre, Rouvier 2404



9. Tyre, Rouvier 2406



10. Sidon, Rouvier 1489



11. Sidon, Rouvier 1494



12. Sidon, Rouvier 1508



13. Sidon, Rouvier 1523



14. Sidon, Rouvier 1542



15. Sidon, Rouvier 1550



19. Sidon, BMC 279

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ROMAN PROVINCIAL COINS IN CENTRAL EUROPE – A BRIEF UPDATE¹

Abstract: In 1973 Andrzej Kunisz presented a pioneering article on the subject of Roman Provincial Coins (RPC) (then known as "autonomous coins"²) finds in east and central Europe. The materials for a single-state research were very scarce, but by broadening the scope of the research to a multi-state area of Barbaricum, he was able to draw some interesting general conclusions. In this paper, that research was built upon by updating and expanding the scope of research to Roman limes area of Rhine and upper Danube, and by supplementing it with a significant rise of the find materials.³ This paper will focus mainly on statistical and geographical comparisons of the finds. The aim of this paper being bringing more attention to these finds by showing that through their widespread in central Europe they are less of a peculiarity than previously thought.

Keywords: Roman Provincial coins, AES, Barbaricum, Roman East, multi-state area distribution comparison

Introduction

Coins officially produced in the Roman empire in the years 44 BC – 296 AD, fall into three main categories – Roman imperial coins (RIC), Senatorial coins (bronze coins bearing letters "SC"), and Roman provincial coins (RPC).⁴ Roman imperial coins were produced under imperial supervision, mainly in the mint of Rome, they were the main currency of the empire (struck in all three metals – gold, silver, bronze). Senatorial coins (only bronzes) were produced under senatorial supervision. The Roman provincial coins can be generally described as coins struck by a city of a Roman province that obtained the emperor's permission for coin production. Provincial coins were mainly bronze issues (exceptionally silver or gold), inscribed in Greek or Latin, using a denominational

⁴ General division by: Kunisz 1984: 14–15. Most up to date definition on Roman Provincial Coinage: Burnett, Amandry, Ripolles 2006.

¹ This paper is a part of my PhD.

² Kunisz 1984: 14-15.

³ Like Kunisz, I focused only on coins from the Eastern part of the Empire in an attempt to show their distribution in a common background (trying to underline similarities in their distribution patterns). Similar process should be applied to the coins from the Western part of the empire.

system of local or Roman origin, production was small in volume (much smaller than RIC). After obtaining coin production privilege, it lasted up to the end of the rule of the current emperor and then it was revoked, and the next emperor had to be asked anew for such a permission.⁵ Such a production was often highly irregular. Production of this category of coins in the Western part of the empire was mostly ended by the times of Caligula (41 AD),⁶ while in the Eastern part of the empire, this happened during the 3rd century (mostly up to Gallienus rule (253–268), but there are exceptions – e.g. Alexandria in Egypt struck coins until 296 AD).

State of Research

In this paper, only Roman Provincial bronzes are discussed,⁷ the only exception are billon coins of Egyptian Alexandria. In the last decades, the amount of papers about these coins has been steadily growing⁸ and the need for a creation of an updated catalogue of finds of these coins is thus increasing. This seems partially to be caused by the influence of high standard publications (as FMRD), but also of re-corroboration of main catalogues of Roman Provincial Coins (RPC vol. I published in 1992). Other important factor is the mass availability of (relatively) cheap metal detectors, laws that cannot keep up with technical progress, and low income problems in some parts of Europe – making metal detecting not so much a hobby but a way of survival.⁹ This brings up massive amounts of coins into hands of researchers and their proper identification becomes crucial.

The state of research – generally, is the best in western Europe. *The United Kingdom* has splendid law¹⁰ and well-made digital system¹¹ for registering new finds. *Belgium* and *parts of France* near to it have a relatively new catalogue of finds (Bar 1991, 1996, 2002), finds from other parts of France are scattered in many local publications.¹² *Germany* has the high standard publication series of FMRD, which is yet unfinished¹³ (parts of North Rhein-Westfalen and Rheinland-Pfalz). *Poland* – finds were

⁵ RPC I, part I: 3, paragraph 2 (and chapter 1 in general).

⁶ Exceptions include: issues of Ebusus during Claudius like RPC I nr 482.

⁷ Roman Provincial silver coins found in examined area contains issues of: *Caesarea* (Cappadocia), *Lycia* [see: Kunisz 1979; Zając 2017], *Antiochia ad Orontes* (Syria), *Amissos* (Pont) [see: Kunisz 1983].

⁸ E.g. see bibliography.

⁹ This is particularly true for South and South-Eastern Europe but also other areas. Actual objectives of these people are mostly WWII medals – especially of the Third Reich – as they have highest prices (as 1 medal = 1 month of survival).

¹⁰ So called "Treasure Trove" or since 1996 the Treasure Act.

¹¹ Portable Antiquities Scheme [finds.org.uk/database; accessed 1 October 2018]

¹² Geneviève 2017: 301: "Un tel ouvrage n'existe pas en France et nombre de régions de notre territoire restent encore vierges de toute information sur ce sujet mais que viennent ponctuellement combler quelques articles de recensions".

¹³ www.adwmainz.de/index.php?id=425; [accessed 1 October 2018]

collected in the older literature,¹⁴ and recently updated in Bursche 1996, Kaczanowski & Margos 2002, Dymowski 2011 (also a series of papers of this author) and for parts of the country published in FMRPL¹⁵ in paper and in digital edition. Additional data are scattered in many smaller publications.¹⁶ The Czech Republic – has a newly published catalogue of all Roman era coins.¹⁷ Slovakia has a series similar to FMRD.¹⁸ Slovenia has a high standard FMRSL series of publications.¹⁹ Lithuania has a recent high standard catalogue.²⁰ Kaliningrad area has only old publications,²¹ supplemented by data on its partially lost museum collection.²² Belarus has a few newer papers on the subject.²³ Ukraine has a series of newer papers on the subject.²⁴My main source of data are coin-find catalogues of FMRD series for the Western and Central Europe,²⁵ while for the Eastern Europe the data are collected from an outdated but still useful catalogue of Kropotkin (1961, 1966, 2000), which is supplemented by numerous single papers.²⁶ The main focus of this paper is the area of Poland, and that is why the other areas got somehow less attention. Checking the source publications was primarily done for Poland, especially if plates or readings of the coin legend²⁷ were available. On a lesser scale, this was also done for Lithuania, Slovakia, the Czech Republic, and eastern parts of Germany.

When approaching the subject of finds of Roman provincial coins in central Europe, the starting problem is the verification of Kunisz finds catalogue, because it was cripticly published in his work, there were only general references to main catalogues that he used to create a summary table for his paper.

²⁴ Beidin 2012; Myzgin 2013; Idem 2015; Idem 2016; Idem 2018.

²⁵ See shortened bibliography. e.g. FMRD = Die Fundmünzen der römischen Zeit in Deutschland; FMRPL = Die Fundmünzen der Römischen Zeit in Polen. Etc. Polish finds: FMRPL = in printed editions: Ciołek 2007; *Idem* 2008; Romanowski 2008; and as digital database: coindb-prod.ocean. icm.edu.pl/AFE_ PL/ accessed 1 October 2018]; for *Belgium and parts of France*: Bar 1991, with suppl. I (1996), II (2002).

²⁶ E.g. see above.

²⁷ E.g. cases where coin was properly identified in source publication but the secondary publication had printing errors that made the coin description dubious, but it was more easily obtainable so the errors persisted.

¹⁴ Kunisz 1973; Kubiak 1978.

¹⁵ In paper: Ciołek 2007; *Idem* 2008; Romanowski 2008; digital database: coindb-prod.ocean. icm.edu. pl/AFE_PL/ [accessed 1 October 2018].

¹⁶ E.g. Antoniewicz 1955; Bursche 1984; Bodzek, Madyda-Legutko 1999. For further data see: Bodzek, Jellonek, Zając 2019: 52f.

¹⁷ Militký 2013.

¹⁸ E.g. Kolníková, Hunka 1994; Budaj, Hunka 2018.

¹⁹ Cf. Kos 1988.

²⁰ Michelbertas 2001.

²¹ Bolin 1926a, *Idem* 1926b.

²² Bitner-Wróblewska 2008.

²³ Sidarovich 2008; Idem 2010; Idem 2013; Idem 2014.

This particular selection of countries was made with the intention of checking the geographical location of finds on a broader scope, as a possible clue to the directions of inflow of these coins to Poland. Three main directions were distinguished – western (*The United Kingdom, Belgium, France,* and *Germany*), southern (*Czech Republic, Slovakia,* and *Slovenia*) and eastern (*Lithuania, Kaliningrad area, Belarus,* and *Ukraine*). This wide scope of areas within the Roman Empire and outside of it – may also show us similarities or peculiarities of some areas (if they exist).

The list of examined countries – ones by me are the first five countries in the list, followed by those of Kunisz: *United Kingdom, Belgium, France, Germany, Slovenia, Poland, Ukraine, Belarus, former "USSR Central zone"(= Ukraine, Belarus, South-West Russia²⁸), former "USSR Baltic zone" (= Russia's Baltic area (Kaliningrad area), Lithuania), Lithuania, the Czech Republic (Bohemia, Moravia).* This means that the list of 8 areas (7 countries) examined by Kunisz was expanded to 12 countries.

Table 1. Total number of Roman Provincial Coins (mint by mint) known in finds in the Central and Eastern Europe (known to Kunisz in 1973), but divided according to current countries²⁹ (by author)

Province:	No.:	o.: Mint:		Slovakia:	Poland:	Ukraine:	Belarus:	Lithuania:	Kaliningrad Russia:	South-west Russia:
Upper Moesia	Ι	Viminacium	6	9	3	3				
	II	Dionysopolis	1							
Lower	III	Marcianopolis	1		1	6			1	
Moesia	IV	Nicopolis							1	
	V	Tomis						2		1
	VI	Anchialus				2	1			
	VII	Augusta Traiana					1			
Thrace	VIII	Deultum			1					
	IX	Hadrianopolis				1				
	Х	Perinthus			1					
	XI	Philippopolis	2			1				

²⁸ Not examined here.

²⁹ This was done by a reconstruction of data used in Kunisz 1973, table I – performed by the Author.

Illyricum	XII	Apollonia			1				
Dul i	XIII	Cius	1						
	XIV	Nicaea	1				16		
Bithynia	XV	Nicomedia							1
	XVI	Prusias=PRUSA!		1					
Ionia	XVII	Ephesus			1				
Pisidia	XVIII	Antiochia			44				
Cilicia	XIX	Tarsus					1		
Caracita	XX	Antiochia		2					
Syria	XXI	Laodiceia						1	
Egypt	XXII	Alexandria	68	18	6	1			
Provinces (undeter- mined)	XXIII	Unspecified	15	3					1?

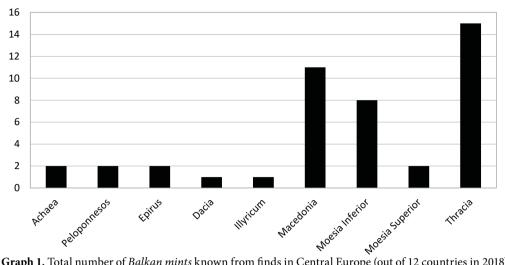
The Balkan mints are marked here with numbers I-XII, and Near East ones with XIII-XXII, with the exception of unspecified mint(s) XXIII.

The division of the material to the Balkan area and Near East is done by the author and is arbitrary. Both these bigger areas should be further sub-divided and studied in depth, but for the sake of clarity of the general comparison of all the material, this imperfect division was sufficient.

Main criterion for the division was the geographical location of Roman provinces. Balkan mints were separated because of their geographical connection by Danube with other parts of (western) Europe, and Near East because of its interconnectedness with the Mediterranean Sea.

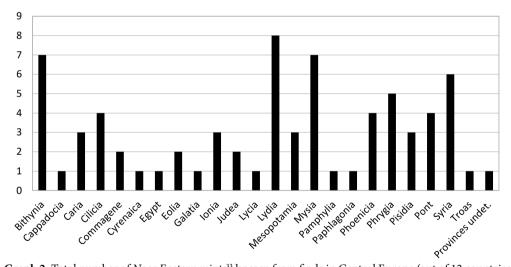
The number of finds from Balkan mints (4) for the *Czech Republic* was higher than from Near East mints (2). *Slovakia* had only finds from a Balkan mint (1), and none from Near East. *Poland* had a similar number of Balkan finds (3) like the Czech Republic and a lower number from Near East mints (2). *Ukraine* had higher number of Balkan mints (6) than Near East (2) mints. *Belarus* had coins only from Balkan mints (2). *Lithuania* had coins from Balkan (1) and Near East (2) mints. And finally in *Russia's Kaliningrad area* we had representation of only (1) Near East mint and (2) Balkan mints.

The interpretation of these data will be compared with our current knowledge.



Graph 1. Total number of *Balkan mints* known from finds in Central Europe (out of 12 countries in 2018) (by author)

On graph 1, we see the current list of Balkan provinces (IX) represented in finds. The number of provinces represented doubled compared to the ones known to Kunisz. Most represented by number of mints are as previously provinces of Thrace (with a rise from 6 to 15 mints³⁰) and Moesia Inferior (with a rise from 4 to 8 mints³¹), but also Macedonia (with 11 mints³²).



Graph 2. Total number of *Near Eastern mints*³³ known from finds in Central Europe (out of 12 countries in 2018) (by author)

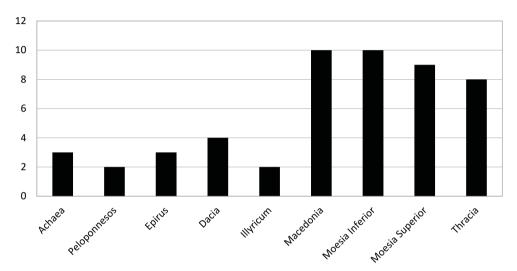
³⁰ Ulpia Anchialos, Apollonia Pontica, Augusta Traiana, Bizya, Byzantium, Coela (Koila), Deultum, Hadrianopolis, Messembria, Nicopolis ad Mestum (Nestum), Pautalia, Perinthus, Philippopolis, Plotinopolis, Serdica.

³¹ Callatis, Dionysopolis, Istros, Nicopolis ad Istrum, Odessos, Tomis, Tyras, Marcianopolis.

³² Amfipolis, Beroia/Beroea, Dium, Koinon Macedonon, Pella, Stobi, Thessaloniki, Edessa, Philippi, Magnetes (Demetrias), 1 undetermined mint.

³³ Meaning Asia Minor, Syria, Judea, Phoenicia, Mesopotamia, Egypt, Cyrenaica.

On Graph 2, we see the current list of Near East provinces (XXIII) represented in finds. The number of represented mints almost quintupled. Most represented by number of mints are provinces of Lydia (8),³⁴ Bithynia (7),³⁵ Mysia (7),³⁶ Syria (6),³⁷ and Phrygia (5).³⁸ Cappadocia and Lycia³⁹ are represented by a single bronze coin each (from Ukraine⁴⁰ and France⁴¹ accordingly).



Graph 3. Finds from Balkan provinces registered up to 2018 (out of 12 countries) (by author)

On graph 3, we see the number of Balkan provinces finds in 12 countries. The most widely represented is the coinage of Moesia Inferior (10), Thrace (8), Macedonia (10), and Moesia Superior (9). The biggest number of coins from Balkan provinces is found respectively in Germany, Slovakia, Slovenia, Ukraine, Poland and Czech Republic. On the other hand, by the number of Balkan mints represented in finds the leader is Ukraine.

³⁴ Acrasus, Sardis, Cilbiani, Dioshieron, Hierocaesarea, Thyatire, Apollonis, Philadelphia.

³⁵ Koinon Bithynia, Cius, Nicaea, Nicomedia, Prusa ad Olympum, Tios, Caesarea Germanica.

³⁶ Pergamum, Alexandria Troas, Asos, Cyzicus, Germe, Hadrianoi, Parion.

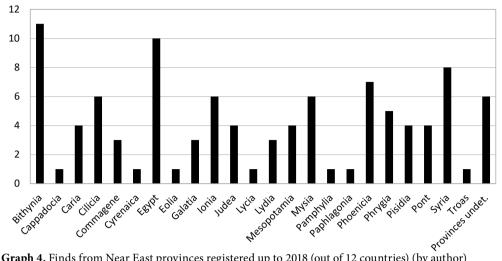
³⁷ Antiochia ad Orontes, Apamea, Heliopolis, Hieropolis, Emesa ad Orontes, Laodicea. Part of the coins from the mint of Antiochia ad Orontes in Syria were made of silver – they are not included here.

³⁸ Bruzus, Eumeneia, Hierapolis, Lysias, Midaeum, Laodicea ad Lycum.

³⁹ We are excluding silver coins of Lycia here (which are numerous!) because of their metal.

⁴⁰ Of Tiana.

⁴¹ Of Balbura.

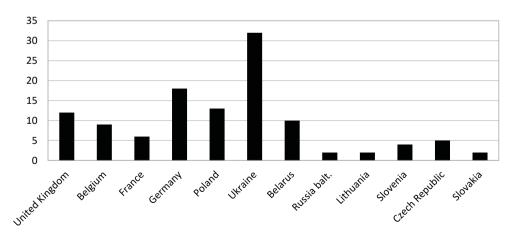


Graph 4. Finds from Near East provinces registered up to 2018 (out of 12 countries) (by author)

On graph 4, we see the number of Near East provinces finds from 12 countries. The most widely represented are Bithynia (11), Egypt⁴² (10), Syria (8), Phoenicia (7), Mysia (6), Ionia (6) and Cilicia (6).

Most coins were registered in Germany, less in Ukraine, France, Poland, Belgium and United Kingdom. The highest number of mints is represented in Germany, then Belgium, Ukraine, France, Poland and United Kingdom, less in Slovenia, Slovakia, and least in Czech Republic, Lithuania, Russia's Kaliningrad area, and Belarus.

Also the numbers of "undetermined provincial mints" are high. Their chronological analysis could not be performed here because it would have to point to particular finds.⁴³

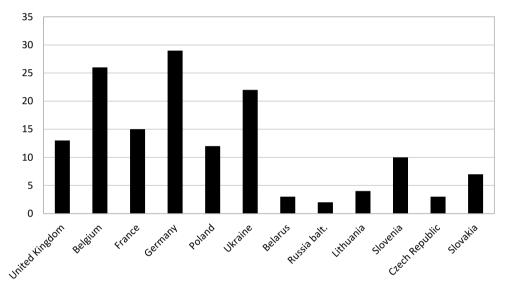


Graph 5. Number of Balkan mints represented by find-spot countries (out of 12 countries in 2018) (by author)

⁴² More on this see Milutinović 2017 and below.

⁴³ Such a catalogue with an wider analysis will be published in my PhD thesis.

On graph 5, we see the number of Balkan mints represented by find-spot countries.⁴⁴ For the sake of convenience Russia's Baltic area has been shortened to "Russia balt". We should notice the comparable high numbers for areas of the Roman Empire (*United Kingdom, Belgium, and Germany*) and *Barbaricum* (*Poland, Ukraine,* and *Belarus*). We should take information of the highest numbers of finds for Ukraine realizing that the numbers for Ukraine are specially high thanks to the detectorists boom in the last decade that sparked a drastic increase in find materials (from total of 50 pieces of both Near East and Balkans to 476 pieces⁴⁵).



Graph 6. Number of Near East mints represented by find-spot countries (out of 12 countries in 2018) (by author)

On graph 6, we see the number of Near East mints represented by find-spot countries. Yet again there are high numbers for areas of the Roman Empire (*United Kingdom, France, Belgium*, and *Germany*) and *Barbaricum* (*Poland* and *Ukraine*). Especially interesting are similar values for Belgium, Germany, and Ukraine.

Conclusion

We have an increase in registered provincial coins in relation to the Kunisz study. The coins come from various provincial mints, mostly from Balkans and Near East. All these data show us that circulation of Roman Provincial Coinage was similar for areas of Roman provinces (area of *United Kingdom, Germany, and Belgium*) and of *Barbaricum (Poland* and *Ukraine*).

⁴⁴ The Netherlands should also be added to the graph, but at the time I did not have access to the literature.

⁴⁵ Preliminary data published in Myzgin 2016.

Last two graphs showed us also a general trend of Balkan mints being more often represented in Central and Eastern Europe, while coins of Near East mints were more often represented in Western Europe. How to explain this? The latter case can be explained by transport of these coins by Roman troops which were stationed in areas of circulation of these coinages and then moved to Western Europe. From army camps, the coinage could move to local areas. This can be partially confirmed through sheer numbers of issues of Egyptian Alexandria (amassed mainly in German part of Roman Danube limes⁴⁶). There are some exceptions here – namely coinage of Bithynia, which in large quantities circulated in the Balkan area in 230's and 240's.⁴⁷

Bursche⁴⁸ shows problems of trade-inflow theories,⁴⁹ and points to the political nature of inflow of Roman Provincial Coins. Meaning specifically, Gothic wars (256–270AD) as loot⁵⁰ and Germanic/Gothic auxiliary troops in Roman army (especially in the East). Germanic population being connected with Przeworsk culture, while Goths being connected with Wielbark culture, Masłomęcz Group, and Cherniakhov culture. Possible is also the redistribution of these coins in the *Barbaricum* itself, e.g. among tribal elites or warriors. Coins of Dacia, Thrace and Upper Moesia (Viminacium) and Bithynia may have mainly inflowed in 225–275 AD.⁵¹ Some of the 1st and 2nd century issues may have been brought to *Barbaricum* with the 3rd century issues. Coins of Egyptian Alexandria arrived mostly in the late 3rd and the early 4th century⁵² from the Danube limes areas to which they were brought by Roman troops, and from there spread to *Barbaricum*.⁵³

The goal of this preliminary review of finds of RPC coins in a multi-state perspective is to point out the general wide spread of these coins in Europe (inside and outside of the Roman Empire). It should be kept in mind that data presented here are based on published finds and reflect the state of publication of these coins in different countries which is not even. Data collection for such purpose is a long and meticulous task requiring digging through a jungle of literature to obtain the data – which makes it very

⁴⁶ For details see: Milutinović 2017. None the less this coinage stretches out also to significant areas of *Barbaricum*.

⁴⁷ Balkan area was in dire need of small change at the time and the coins from Bithynian Nicaea were imported here and circulated en-masse, as this measure was insufficient the mints of Viminacium (in 239) and Apulum (in 246) were opened. More details in Vojvoda, Branković 2016.

⁴⁸ Bursche 1984: 241f.

⁴⁹ In context of 3rd c. crisis in the empire, a long-distance trade was practically impossible. Trade could exist only in fragmented state, and these contacts would have to be time limited to short periods.

⁵⁰ E.g. Bursche, Myzgin 2015: 249–250 – mention seizing coins and mint equipment and personnel. Also Jordanes (Getica, 110), which in ending information on Gothic wars in 3rd c. mentions the return of Goths to their homeland (see Bursche 1984).

⁵¹ Kunisz 1973: 27, 31, 37; Myzgin 2018: 97.

⁵² Kunisz 1973b: 35.

⁵³ Bursche 1996: 128.

easy to miss some finds and cause distortions in the general picture that we obtain. None the less, the sheer volume of currently obtained data is representative enough to be credible and provides us with a better knowledge on the subject. Fuller analysis of the material was not possible here, but the main direction has been briefly signalized.

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ALTERNATIVE USES OF COINS IN THE LATE ROMAN CEMETERY OF UNTERLOISDORF/AUSTRIA

Abstract: The project "Fundmünzen der römischen Zeit in Österreich" (FMRÖ) of the Austrian Academy of Sciences started in the 1970s to itemise all of the coins found in Austria from the Roman period. In 1984, volume three of this book series focused on the finds in Burgenland.¹ The Austrian province of Burgenland, which was part of the Roman province Pannonia, belonged to the Roman currency area, and Roman coins circulated there regularly, forming the basis of the monetary economy. The book in question separated the hoards and single finds into different categories depending on how they were found, for example, grave coins. In addition to examining coin circulation, currency policies, and the economic and migration history of money, the grave coins indicate another importance of money when used in graves.

My Master's thesis focused on grave finds up until 2014 and described 420 Roman coins from graves in Burgenland. For the most part, these coins are now in the museum in Eisenstadt, but also in two local Austrian museums and in museums in Mosonmagyaróvár and Budapest in the neighbouring Hungary. Grave coins usually come from archaeological excavations, therefore they end up in museums.

Coins found in the graves of the Late Roman cemetery of Unterloisdorf, a site near the Hungarian border, express their "afterlife", when they left the monetary circulation to be placed in graves by the survivors of the deceased.

Keywords: Late Roman Empire, Pannonia, grave coins, third-siliqua, folles packages

Introduction

Burgenland, Austria's youngest province, was formed after World War I in 1922/23. Its area of nearly 4,000 km² has been densely populated since antiquity, which is reflected in the amount and diversity of the finds housed in the Burgenland State Museum in Eisenstadt (BLM). This museum was established in 1926, after Eisenstadt became the capital of Burgenland.

Coins as a part of the trade in Burgenland were found from the middle of the late La Tène period, approximately from 120 BC. The oldest coins of the Celts originate from local production and are known as the Kroisbacher tetradrachms and drachms (Rákosi

¹ Dick 1984.

típus), followed by such coins of the Velemer type. The two eponymous localities are situated only a few kilometres from the border to Hungary.²

While Burgenland is attributed to the influence of the *Regnum Noricum* at this time, the iron occurred in central Burgenland and its processing created strong trade relations with Rome, hence republican denarii can be found in Burgenland. With the foundation of the Roman province of Pannonia in the first half of the 1st century AD, the territory of Burgenland received part of this provincial administrative unit of the Roman Empire and took over its monetary economy until its end because of the invasion of the Marcomanni in 397.

The graves left behind in the soil of Burgenland from the Roman period of over 400 years are very personal and document the last vestiges of people's lives. Coins had been placed in the graves as personal companions on the final journey. Although the coins are inscribed and illustrated in contemporary documents, a comprehensive and analytical compilation of the ancient burial coins of Burgenland was still missing. The first graves containing coins were found in 1851³ in Burgenland, the theme was first taken up in the context of the presentation of the Late Roman burial ground of Halbturn (excavations 1988–2002), where a separate chapter was dedicated to the 45 grave coins.⁴

A total of 420 coins have been found in Burgenland's ancient graves; the majority of the coins are not made of precious metal; some are silver, and recent archaeological investigations in 2014 also revealed a golden coin, a solidus of Theodosius II.⁵

The denominations of the silver coins are denarii, antoniniani, a siliqua, and, a rarity, a third-siliqua. In Roman Imperial bronze, such denomination as asses, dupondii, sestertii, folles, maiorinae as well as centenionales and half-centenionales were added and, also rarities such as provincial coinage of Pautalia in Thrace, Alexandria, and Viminacium. Furthermore, "Limesfalsa" (locally produced large coins of bronze) and suberate denarii, which probably originated from local money transactions, accompanied the deceased.

The minting period of the grave coins extended over a period of 460 years. The oldest coin deposited in a sarcophagus was a republican legionary denarius of Marcus Antonius (31 BC), and the most recent one was the solidus in a brick slab tomb, struck for Theodosius II (AD 430–440). Mostly Roman coins made up the content of Roman graves. However, some of the goods in Roman graves point to a partial Germanic influence. Moreover, in the graves of the Lombards (3 times), Avars (28 coins), and even from the Early Árpádian age (1 piece), Roman coins were found right up to the 11th century.

² Pink 1939: 73ff.

³ Freiherr v. Sacken 1851: 1–4.

⁴ Vondrovec-Winter 2014: 237.

⁵ Franz-Schwarzäugl-Tögel 2017: 95.

At first, their occurrence in early medieval graves of the Burgenland point up the continuing usage for reasons of decoration, than later in the Árpádian graves 'the renaissance of the Charon's obol'.

The post-monetary use of coins - division of tomb coins

Since grave coins gave up their role in money traffic and became mere pieces of metal in the grave, the usual division into nominal value is no longer relevant, and the function of the coin shifts into the spotlight. Thus, a classification based on the issue is unthinkable because a cash supply to certain recipients and consequently propagandistic dissemination of image and text, no longer existed.

Since more than two coins were deposited next to the body, a given cash differed from the usual Charon's obol (= ferryman's money). The number of coins could be high, which can differ quite widely in the temporally issues. In exceptional cases, cash was also found on the body and was kept in clothing or found hanging in a bag.

The composition of such coin stacks lets the numismatist see what kind of old and new money was in circulation at the time or used in everyday life.

The aforementioned Master's thesis outlines five types of grave coins based on their location in the grave and their condition,⁶ supplemented by a special type, which goes beyond the spectrum of a grave coin as a carrier body of antique textiles.

Type A: amulet, good luck charm

Characteristics of these coins are technical changes to the coin introduced with a hole and the attachment of eyelets. They compete with the jewellery coins (type D), which is why the actual purpose of the other additions can be inferred. The holes are placed in such a way that the image is largely preserved. These coins are found in the neck and upper body areas. Their presence in the grave denotes individual imagery and personal preference (buried man or descendants?) which is difficult to prove and corresponds with their rarity in graves. Sometimes, this thought is supported by iconographic sources found on coins.⁷

Type B: cash

By depositing more than two coins next to the body, a deviation of the given cash from the usual Charon's obol is made. The deposited coins, usually more than two, are located beside the body. In exceptional cases, a coin can also be found on the body, which was kept in clothing or hanging in a bag.

⁶ Gorecki 1975: 179–256 (he partly divided differently).

⁷ Gazdac 2014: 99f.

Type C: Charon's obol, ferryman's money

Type C coins are by far the most common in the Roman graves of antiquity, based on the religious concept of the afterlife, which was assimilated from the Greek region and has been established over centuries. In this case, a single coin or a maximum of two coins is deposited in the area of the head (eyes, mouth, and forehead) or at the hand of the dead. Another characteristic of these coins is their low value.

Type D: decor, jewellery

If tampering with a coin consists in an eyelet loosening or multiple puncturing, it may indicate that it was attached to clothing or used as a tag. In post-Roman times this is the most common coin type, in keeping with the disappearance of the Roman notion of the afterlife. In this period, Roman bronze coins were mainly seen as an object of art and considered as jewellery.

Type E: commodity

In the post-Roman period, coins were converted into everyday objects, often as coin weighing cups or balance weights.

Special type: carrier of textile elements

Today, the textile and fabric remnants of the ancient world found on metals are being examined in detail. Metal objects such as fibulae or weapons, which are mainly attached to garments, are carefully examined. Only recently has research expanded to analyse coins and residues of clothing or bag fabrics.

The individual post-monetary coin types are explained in detail based on the most recent finds made in Unterloisdorf in central Burgenland.

The cemetery of Unterloisdorf

During roadworks (the connection from Oberpullendorf/A to Köszeg/H) a Late Roman cemetery with a total of 29 cremation and body graves was uncovered and excavated in May and June 2014. The burial ground is located about 7 km from Amber Road and about 5 km from the early Roman camp of Strebersdorf-Frankenau. The cemetery should have been on a small path. Coins have been found in 12 body tombs, or in 40% of graves, which is unusually high. Due to the soil condition, bone was no longer available, so no body position could be determined. Determining the exact post-monetary purpose of the coin in its function as a burial object is made possible in graves containing bodies by marking the find location.⁸ A clear distinction based on the detection circumstances of grave coins often fails on factors like earth movements, illicit

⁸ Thüry 2016: 107.

excavations, and mistakes in the recovery phase. Consequently, the place of deposition is not the only specification.

When it comes to coins in cremation graves, the focus is on their condition to see if they were put in the grave before or after cremation. In the treated cemetery, it was not possible to make these determinations.

In Pannonia, burial by fire was more common in the 1st to the middle of the 3rd century, then the burial of bodies followed. In our case, the predominance of body graves is reflective of a typical Roman provincial cemetery at the end of the 3rd and at the beginning of the 4th century AD. This circumstance is explained in literature mainly with religious belief. The coins found in the tombs correspond to this time. Except for one or two older pieces, the folles from the first three decades of the 4th century AD are usual. When it comes to determining the deposit purpose of a grave coin, a body grave provides a higher source of information.

The cemetery of Unterloisdorf is related to other Roman burial grounds, as regards the number of tomb coins, which were highly asymmetrical. Usually coins have been found in 17 to 32% of the burial grounds in Burgenland with only one or two coins per grave. Here the percentage jumped to 40. There are 47 coins in 12 different body graves, which were also concentrated in two areas of the burial ground together (map 2).

Grave 1 (type A):

In this tomb with a roof-like cover of tegula, a *terra sigillata* imitation was beside a perforated coin, which suggests based on the find location (thread in the hole) and by the perforation that it was used as a talisman for a longer time. Interesting is the position of the perforation at 3 o'clock, which does not obstruct the image. The antoninianus of Trebonian Gallus (251–253) with Felicitas on the obverse is one of the three older coins in the graveyard of Unterloisdorf. Characteristics of these coins include technical changes to the coin through a hole and the attachment of eyelets. The real motivation of the survivors for giving this coin to the deceased – as an amulet on the neck or jewellery on the cloths – remains unclear.

Grave 2 (type D):

The location of the coin in tomb 2 – found in the middle of the wooden remains of a jewellery box on green porphyry that obviously served as a base plate of this casket – suggests that the coin functioned as jewellery. This kind of porphyry with a size of 47 x 89 mm and a polished surface was an imported luxury from the Peloponnese. The coin itself is also a gem, denominated as a silver third-siliqua from AD 330. Silver coins in tombs of the 4th century are hardly found, and this coin nominal was found in Austria for the first time in an archaeological excavation.⁹ It was issued to com-

⁹ Szabo 2019: 27.

memorate the elevation of Constantinople to the capital on 11 May 330 for the cities of Constantinople (kappa) and Rome, the older capital (rho). After different interpretations of female members of the imperial house, this is the result of the latest research by Bendall and Ramskold. The Roman third-siliqua with a weight of 1.06 g is a bit underweight due to the well recognizable material circumcision.

The portrait of the tile from the 6th century periodically referred to as the thirdsiliqua in the present case, is from the early period of the 4th century. As a special feature of a queen's presentation, the duplicate diadem of pearls with the round bulge above appears only on this Roman third-siliqua. Further finds in the grave included a glass necklace and three vessel accessories, which all point to the grave of a female.

Grave 7 (type C):

Besides several pottery pieces of different colours (grey, red, and yellow orange) and sizes (handle bottle, jug, and storage jar) which were "everyday dishware", this grave contained two blue glass pearls and an unknown follis from the 4th century. This coin was very fragmented and still had a weight of 0.14 g. As a single low value coin in the grave combined with an unknown place of landfill, it can be described as a Charon's obol.

Grave 8 (type C):

In combination with a grey plate, the so-called "*soldiers plate*" from the 4th century there is an onion button fibula pointing to the 4th century. The follis inside this grave can be pinpointed to the last years of Constantine I, thus it shows the combination Constantinopolis/Victory. This fragmented coin with a weight of 0.68 g is also a Charon's obol.

Grave 9 (type C):

The third fragmented coin weighing 1.46 g is a follis of Licinius from Antioch. Grey pottery, a "*soldier*'s *plate*", and metal pieces complete the ensemble of the 4th century. The reverse of the coin shows the typical Iovi Conservatori scene: Jupiter standing left holding Victory and sceptre, eagle at foot with wreath in its beak. This ferryman's money has an oval form.

Grave 12 (type B and special type):

In this grave, two packages of folles from Licinius – Constantine I were found side by side. They probably belonged together and were separated into two parts. One contains nine, the other five folles, so we have, before breaking in two pieces a package of four-teen folles from the period from AD 308 to 324. The position of the coins indicates that there was a shelf next to the upper body. Beside these coins, pottery like a pot, a cup,

and *terra sigillata* imitation fragments were found at one end of the grave, presumably at the feet.

Grave 14 (type C):

Fragments of pottery and bracelets of bronze accompany the ceramic pot. The coin in this grave was recovered during inventory work in December 2018 in the find bag among pieces of pottery and metal. Because of its small size, the coin had been overlooked. The back of the follis of Constantine I shows the emperor standing to the left and given a wreath by Victory.

Grave 15 (type B and special type):

This wooden calf grave contains not only a handle pot and pottery fragments, but also some jewellery like a large finger ring brooch with deposits of silver and a finger ring made of bronze. Finally, a needle of iron and a fire bat were placed in the grave. This iron bat hints at the presence of Germanic elements in the graves.¹⁰

Of the six folles in the grave, three were caked. In addition, three more folles of Constantine I were found scattered in the immediate proximity in the tomb. They were struck between 308 and 324 and all of them had the Sol Invictus image. The three corroded coins were covered by tissue. Sheathed by the remains of textile cloth, the coins surfaces are unreadable. As already mentioned, some coins functioned as a carrier corpus of organic remains – here antique remnants of a bag or a container.

The microscopic examination shows a medium-fine, canvas-binding textile, which covers the entire stack of coins and also strikes over the edge, but is not located between the coins. The fabric is very good and even organically preserved and not fully mineralised. The fibres are still elastic, making this piece of fabric the best-preserved antique fabric to date. The material is flax, which used to be "naturally light", but is now partly brownish in colour.¹¹

Grave 16 (type B):

Grave 16 will also referred to a so-called vampire grave and shows the burial of a man who had been tied up and buried weighed down by a ploughshare. In addition to a pile of money, there were still three belts, a finger ring, iron remnants of scissors, knives and weapons, and a crossbow brooch together with three storage vessels in the grave. One of the belts can be dated to the 4th century. The iron scissors consider a German input in this grave.¹²

¹⁰ Dürr 2019: 21.

¹¹ Grömer 2018: 3.

¹² Dürr 2019: 22.

The corroded folles in a package of nine coins indicate added cash. This stack contains coins of Licinius and Constantine I with the Iovi Conservatori image from the 2nd and 3rd decade of the 4th century. Due to the carelessness of a museum employee, this package, which has been shown in the BLM's exhibition, fell to the ground in September 2019 and broke into two parts. The two now recognizable coins from the inside of the package confirm the mentioned reverse pictures.

Grave 20 (type C):

The contents of this grave include two coins and objects of glass, like a vessel and an unguentarium. The common occurrence of an older antoninianus of Gordian III with a follis of Constantine I confirms the later use of ancient coins. Here, the period is nearly 90 years. Unfortunately, they are in a bad condition; the antoninianus is broken into two pieces, and the follis is fragmented.

Grave 21 (type B and special type):

This grave with a wooden coffin has a rich inventory, such as different harness shapes, a glass bead necklace with blue and green beads, a silver ring with a glass gem, and a disk-shaped pendant with a brown amber bead. An iron knife and 9 folles coins date the grave to the middle of the 4th century. One follis is separated and identified as a Constantine I coin struck in 330 with a wreath on the obverse. The other 8 folles are caked and surrounded by another piece of ancient cloth, which makes them unidentifiable. But the packages were not scattered, and the corrosion proves that they belong together.

Grave 25 (type C):

In the brick tomb 25, a man was buried with the oldest coin of the cemetery, a sestertius of Maximinus Thrax, struck between November 236 and March 238. The sestertius can be placed later due to the ceramic addition and the grave nature. The finding in the middle of the body implies they are ferryman's money.

Summary

Usually, the significance of coins found in body graves can be determined based on their location in the grave. It was not possible to determine the significance of the grave coins found in the body graves of Unterloisdorf because there were no skeletal parts that can reconstruct a body position. Thus, the purpose derives from the other factors and the value and number of coins. Table 2 provides an overview. In this way, their deposit purpose can be understood without closer body position of the coins.

A grave is part of a nearby residential dwelling of inhabitants of a villa, a vicus, or a colonia, and their traces can be found in the remains of their textiles, dishware,

jewellery, and the money packages. This shows a widespread use of grave coins in the Late Roman period, by differing from the usual Charon's obol of former times. In this context, coins can also shed some light on Roman burial customs and everyday life.

The grave coins in the cemetery of Unterloisdorf testify to a rich population in the late Roman period at this rural area, which was unexpected. This period did not last longer than the destruction of Savaria.¹³

Abbreviation

BLM - Burgenländisches Landesmuseum/Eisenstadt

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¹³ The nearby located Savaria was seriously destroyed by an earthquake on September 7, 456 AD.

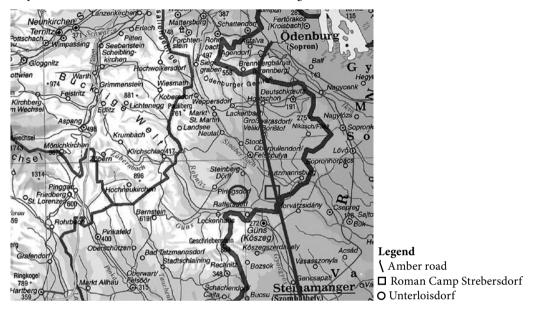
Tombs	Number of coins	Nom. value	Ruler	Time	Туре	Image on reverse	Dating of the grave
Grave 1	1	Ant	Treb. Gallus	251-253	А	Felicitas	End of the 3 rd cent.
Grave 2	1	1/3 Sil	Constantine	330-337	D	Constanti- nople	Middle of the 4 th cent.
Grave 7	1	Fol	Constantine	306-337	С	unknown	Middle of the 4 th cent.
Grave 8	1	Fol	Constantine	330-337	С	Constanti- nople	Middle of the 4 th cent.
Grave 9	1	Fol	Licinius	321-324	С	Iovi Conse- rvatori	Middle of the 4 th cent.
Grave 12	14	Fol	Licinius Constantine	308-324	В	Soli In- victo/Iovi Conserva- tori	Middle of the 4 th cent.
Grave 14	1	Fol	Constantine	308-324	С	unknown	Middle of the 4 th cent.
Grave 15	6	Fol	Constantine	308-324	В	unknown	Middle of the 4 th cent.
Grave 16	9	Fol	Licinius Constantine	308-324	В	Soli In- victo/Iovi Conserva- tori	Middle of the 4 th cent.
Grave 20	2	Ant Fol	Gordian III. Constantine	238–244 306–337	С	unknown Iovi Conse- rvatori	Middle of the 4 th cent.
Grave 21	9	Fol	Constantine	308-337	В	Soli In- victo/Iovi Conserva- tori	Middle of the 4 th cent.
Grave 25	1	S	Maximinus I. Trax.	236-238	С	Fides mili- tvm	Middle of the 3 rd cent.

Table 1: Catalogue of the grave coins in the Late Roman cemetery of Unterloisdorf

Туре	Graves	Description	Coins in the graves of Unterloisdorf	<u>Σ</u> (47)
Α	1	Amulet, lucky charm	1 Ant	1
В	4	Bargain, cash	38 Fol	38
С	6	Charon's obol	1 S, 1 Ant, 5 Fol	7
D	1	Decor, jewellery	1 third-siliqua	1
Ε	None	Commodity		
Special type	3	Carrier of textile elements	20 Fol	20

Table 2: Types of grave coins

Figures



Map 1. The location of the site of Unterloisdorf (at the Hungarian border)

Map 2. Late Roman cemetery of Unterloisdorf (by H. Herdits 2018)

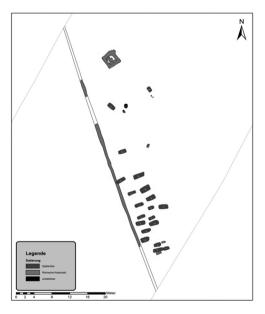




Fig. 1. Constantine I. (306–337), third-siliqua, Constantinople, up 330, Constantinople/K in beaded circle Bendall Nr. 4, Ramskold pic. 11, RIC, 1.06 g; 12 mm; 5 h (grave 2) (photos by E. Szabo 2019; painting by P. Gerstl; photo of porphyry by H. Herdits 2018)



Fig. 2. Constantine I. and Licinius (308–324), folles package with 9 folles, unknown mints, total weight: 27.45 g, 18–22 mm (grave 16) (photos by E. Szabo 2019)

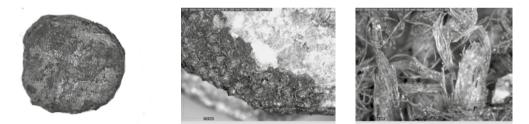


Fig. 3. Folles package with 3 folles wrapped by textile, unknown rulers and mints, total weight: 6.68 g, 20–22 mm (grave 15) (photos by E. Szabo and K. Grömer – microscope 2018)

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EXCAVATIONS OF EGNAZIA (BRINDISI, ITALY). COINS AND MONETARY CIRCULATION FROM THE 4TH TO THE 6TH CENTURY AD

Abstract: Egnazia lies on the Adriatic coast of South West Italy; it was an important municipium along via Traiana and remained inhabited until the Middle Ages. Since 2001 the University of Bari has continued with research activities with 'Progetto Egnazia: dallo scavo alla valorizzazione', covering the areas of the acropolis, harbour, baths, bishop's basilica and Via Traiana, but also the market square along Via Traiana and close to the port. This is an important field of study which can be useful to help understand the historical and economic dynamics which affected the city in the late antique age. More than 1400 bronze coins (Roman, Byzantine, Ostrogoth, Vandal), and a tremissis of Justinian I, have been found here, which help us to outline the currency in use and to document an intense retail activity. From the end of the 4th century AD to the 6th century the urban landscape changed dramatically, mirroring the rise of bishop's influence not only in promoting the construction of religious buildings but also in encouraging local productions and trade. Due to its location on the main route connecting East and West, Egnazia played a strategic role in the pilgrimages.

Keywords: Egnazia, coins, archaeology, market, square

Introduction

The history of Egnazia, an ancient city of southern Puglia in the province of Brindisi (Map. 1), has a centuries-old tradition (fig. 1). In order to trace its history, this paper aims to provide an overview of coin circulation in the city in Late Antiquity. The first settlement, consisting of a village of huts, arose in the 16th century BC. Egnazia lived a long Messapian phase which, like the whole region of Salento, ceased with the Roman occupation occurring at the beginning of the 3rd century BC. It could have been *'civitas foederata'* after the 267–266 BC and *'municipium'*¹ after the social war, a thriving city during the Empire, which fell apart with it. It was called *Gnathia* by Messapians, and *Egnatia* or *Gnatia* by Romans. The city had great importance in the ancient world due to its geographical position. The presence of *Via Traiana* (fig. 2), which runs through the centre for a long stretch along with the presence of natural creeks, equipped for

¹ Grelle et al. 2017: 83–84, 109.

the anchoring of boats since the 3rd century BC, made it an important commercial stopping off point along the south-Adriatic coastline and improved frequent contacts with the eastern side of the Mediterranean Sea.²

Since 2001 a comprehensive research project, '*Progetto Egnazia: dallo scavo alla valorizzazione*' ('*Egnazia Project: from excavations to valorisation*'), set up by the Department of Human Sciences of the University of Bari under the scientific direction of Prof. Maria Raffaella Cassano, has been working on archaeological evidence from the city. The research involves several areas of Egnazia: in particular, the market square, the Episcopal Basilica to the south of Via Traiana,³ the sanctuary of Acropolis, the Thermal Baths of Forum and various residential areas.⁴

The intention is to retrace the complex history of the city, shedding light on its uninterrupted life from the Bronze Age to the Early Middle Ages. Indeed, the first phases of the urban settlement of the site during the protohistoric age have been traced, as well as its transition from a Messapian settlement to a Roman town, up to the intensive urban and architectural renovation which took place during Augustus' Principate. The most extensive urban development took place in the period between the Augustan Age and the 4th century AD with the construction of many monumental buildings. From this last period (the 4th century), the entire urban area underwent intense transformation, linked to the political-institutional changes of Late Antiquity with major implications for the inhabited areas of the city on both an economic and social level, as is also well-documented by archaeological evidence.⁵

Between the sixth and seventh centuries, while the urban areas were in decline, the artisanal-productive district seems to have survived on the acropolis until at least the early Middle Ages, when a massive collapse wiped out the entire area, maybe due to the struggle between the Byzantines and Longobards. Therefore, the village became concentrated, as it was at its origin, on the peninsula of the acropolis, now defended by a fortification⁶ and equipped with a small Byzantine church. From here come the traces of the final and sporadic inhabitation dating back to the 13th century.⁷

Moreover, the continuity of the population process between the late Bronze and Early Middle Ages with the subsequent abandonment of the settlement recorded, makes this archaeological site an area of high interest, not only for stratigraphic excavations, but also a notable multi-layered centre for numismatic studies.⁸ It was, therefore, decided

² Cassano, Mastrocinque 2016: 33-124.

³ Cassano et al. 2007: 7–136; Fioriello 2012: 13–30.

⁴ Cassano 2011: 91-106.

⁵ Cassano 2007: 1259–1282; Volpe 2007: 85–106; Cassano 2017: 201–221; Mastrocinque 2017: 223–239.

⁶ Campese, Cuccovillo, Caggese 2013: 242–245; Cassano, Campese, Cuccovillo 2015: 377–382.

⁷ Cassano et al. 2008: 417-441; Cassano 2009: 15-37.

⁸ Travaglini 1997: 187–198; Travaglini, Camilleri, Maci 2003: 189–195; Travaglini et al. 2017: 273–275.

to highlight the porticoed square of the market (fig. 3), near the harbour and located along the important road, *Via Traiana*. This is an area which has proved to be of crucial interest bringing new knowledge regarding the numerous aspects of the chronological sequence and settlement of one of the most important urban areas, also considering the great volume and variety of new information provided by the chronological sequences and related population process, also considering the large volume and variety of numismatic evidence available.⁹

Results of research on numismatics

From 2001 to 2006, in the W-part of the market square, which was not investigated up until the last century (fig. 4), 1416 coins were unearthed during archaeological investigations (fig. 5). The floor is made up of parallel large stone-paved blocks of limestone.

Its W, S, and N limits are defined by the rainwater gutter. The complex canalization system of the square is just one of the monumental water-system components, connected to the large trapezoidal cistern, which is located in the S-area. The complexity and specific features of this water system seems to confirm its public utility.

The monumental architectural structure of the square includes – along with the gutters – the stylobate with the intercolumniation.

The square with its Doric portico was externally closed by an NS *analemma* with a monumental entrance from NW, consisting of a massive limestone threshold and a standing structure of four ionic columns, measuring 55 cm in diameter (fig. 5).

An *as* of Nerva (97 AD) and an *as* of Trajan (98–117 AD) have been discovered below the paved floor. The Trajan *as* was recovered with a lamp (of the *Loeschke VIII* type) dated to the 1st-2nd centuries AD (fig. 6).

The two coins (*asses*) along with pottery finds can provide a fundamental '*termi-nus post quem*' to date the paved plateaus area, at least to the 2nd century AD, and – to be more accurate – the general organization of the square area can be dated to the middle years of the Trajan Empire. It is plausible to believe that, with its monumental entries from SE and NW, the square participated in the great urban reorganization initiated by the emperor with the construction of *Via Traiana* (which reorganized the ancient *Via Minucia*).¹⁰

The monumental architecture of the square remained unaltered throughout the 3rd century and up until the middle of the 4th century.

The number of coins which predate the Constantinian age is relatively low, especially if we observe the quantity of specimens of the subsequent chronological period, including the entire 4th century. 70% of 'readable' documentation is made up of 4th

⁹ Cassano, Travaglini, Crispino 2011: 576-579.

¹⁰ Silvestrini 2013: 133-144.

century series and almost 50% of the specimens are attributable to the issuing mint. The mints of the Eastern 'pars' of the empire prevail in Egnazia with the most commonly found being that of Constantinople; whereas for the western side of the Empire, Rome is the mint most commonly found. Starting from the 4th century, the port cities along the southern Adriatic coasts, and especially those of Puglia, were included in a preferential trade networks, which converge towards Rome from the producing cities. Egnazia, therefore, represented an important commercial centre in the connection between East and West.¹¹

On the entire paved area of the square several coins have been found, some of the last to be minted include some AE3 of the Valentiniani family, issued between 364 and 383 AD. These coins give us a useful '*post quem*' definition of the continuity of the area's original function.

The square was affected by a major collapse in the second half of the 4th century AD and which involved the high standing structures. The area underwent an important transformation, resulting in it being de-functionalized and reorganized into a different environment. The collapse did not affect the paved area of the 'open-air' square because there were no standing structures here.

In the context of the collapse, it is important to consider the fictile oil lamps, of which there are many fragments of imitation 'tripolitana' production, such as the lamp of *Forma Atlante VIII* with a hexapetal disk, dated to at least 325 AD.

The stratum, although only located in the western entrance, has revealed 36 coins, issued chronologically over a period of fifty years, from 330 to 383 AD.

Only 24, and therefore 66%, of these coins are legible. This is a significant finding, which is unique in the whole stratigraphic sequence of the square, also considering the excellent conservation state of many specimens, denoting a rather limited circulation over time.

Finds include an AE2 of the 'usurper' emperor Vetranion dating to 350 AD and produced in the mint of Siscia.

The collapse has also returned three coins (AE3): two of which can be attributed to the emperor Valens, with the legend SECVRITAS REIPVBLICAE and type 'victory with crown and palm', minted between 364 and 383 AD.

This find is fundamental to link the collapse of the standing structures of the 'square' to this twenty-year period, probably determined by a traumatic event and explains the clear and evident reorganization of the area during the last decades of the 4th century.

An earthquake seems plausible as a possible violent cause of the destruction. It could hypothetically be the earthquake with resulting tsunami occurring in northern Crete

¹¹ Fioriello 2008: 157–185.

on 21st July 365 AD, documented by *Ammianus Marcellinus*,¹² *Athanasius* and *Gerolamus*.¹³ This natural event struck the entire Mediterranean area from Egypt to Cyprus, from Greece to northern Africa, up to the southern Adriatic side.¹⁴

Before the collapse, the square showed a considerable, or at least consistent, economic vitality, considering the number of coins found (56 in total, adding both the coins scattered in different points of the entire surface of the square, and those of the collapse, which are likely to refer to the flourish and active period of the area). For this latter phase, the readable specimens are 36 out of 56 (64,2%): this is a high percentage, especially when compared with data relating to the following phases.

The square and its portico underwent a reorganization during the final years of the 4th century. Numerous buildings were constructed, and the walls of the standing structures and their architectural fragments were partly reused for their reconstruction, such as building materials, capitals, frames and the column boulders of 'porticus' with a direct, or at least comfortable, entry to the square; the surviving central space now had a dirt floor in place of the original paved surface.

The number of coins retrieved from the dirt floor, comes to 64 specimens, although only 29,6% of these are readable. The percentage drop of legible coins, compared to the previous period, is therefore clearly very significant. The panorama of monetary circulation in Late Antiquity perfectly reflects imperial monetary policy between the 4th and 5th centuries which was characterized by a substantial emission of bronze, which gradually decreased.

For the first half of the 5th century, the square has returned many specimens, all AE4 of the emperors Honorius – authority who is not attested for the period referred to the previous century – Theodosius II and Valentinian III.

There are the CONCORDIA AVG-AVGGG series (cross in crown), VICTORIA AVGG, GLORIA ROMANORVM (two emperors holding a globe), VOT PVB (gateway with turrets), and also some specimens with the obverse without a legend, with the type of the 'cross within a crown', dated between 425 and 455 AD.

As regards the second half of the 5th century, in addition to Marcian's coins, there is a major presence of 'cones' of Emperor Leo I 'the Thracian', dated between 457 and 474; some coins were issued in honour of Empress Verina, while only one coin shows the monogram of the emperor, dated to the years of the co-regency with his nephew Leo II (473–474 AD).

The novelty for this century is that the emissions tend to gradually decrease, even if they still amount to 20% of the total of legible and accurately dated coins.

¹² *Historiae* XXVI, 10, 15–19.

¹³ Jacques, Bousquet 1984: 423-461.

¹⁴ Jacques, Bousquet 1984: 423-461; Guidoboni 1989: 725-738; Traina 1989: 449-451.

There was, therefore, a widespread use of money in the square at least up until the end of the 5th century, which also saw the use of coins minted in the barbarian kingdoms. Items of note include coins which come from the Vandal kingdom in Africa but which are incorrectly attributed to the Carthage mint. Some of the Vandal-imitations coins can be attributed to Valentinian III, bearing in the R/ the type of 'Standing Victory'.

In addition to the Vandal coins, there are also some bronze coins of Emperor Odoacer, minted in Rome.¹⁵ Moreover, among the Ostrogothic coinage, we find a small bronze coin with the monogram of King Athalaric, minted in Rome between 526 and 534.¹⁶

It now seems clear that the Puglia region enjoyed favourable economic conditions during the second half of the 5th century, under the kingdom of Odoacer (476– 493 AD). Indeed, during his reign, Puglia, with its advantageous position in the middle of the Mediterranean, was not involved in the military conflict for a long period and was affected less than other regions by barbarian invasions. Therefore, the region enjoyed a situation of an almost uninterrupted peace.

In Late Antiquity, especially during the 5th century, the use of monogrammatic types spread in particular among small coins. The imperial monogrammatic series of the second half of the 5th and 6th centuries are attested in the stratigraphy of the 'square'. Regarding emissions of this type, some late-antiquity environments have provided some bronze coins of Marciano, Leo I, Libius Severus, Zeno I, and especially Anastasius I.

Numismatic data seem to confirm the vitality of the Egnathian community at the beginning of the 6th century during the empire of Anastasius I and the reign of Theodoric. The same years saw an active diocese along with the presence of the '*Rufentius episcopus Egnatinae ecclesiae*'.¹⁷

However, the use of the monetary system appears to gradually wane in the first half of the 6th century, up to the definite standstill occurring towards the end of the same century: this phenomenon is evident not only in the area in and around the square, which is the subject of this essay, but also in the entire central zone of the town.

During the 6th century, the square was struck by another – but this time, definitive – disaster, which led to a sporadic frequentation of the area before its final abandonment. Among the specimens recovered from the collapse, dated to the 6th century, there are three coins of Emperor Justinian I and one of Emperor Justinus II:¹⁸ three of these are bronze coins and the other is a *tremissis* of Justinian I (fig. 7). One of the bronze coins shows a lion facing right on the reverse, the other a monogram of the emperor;¹⁹

¹⁵ Asolati 2016, ex *RIC X* n. 3785.

¹⁶ COI 116 n. 88.

¹⁷ Otranto 2005: 89–96, 295.

¹⁸ *MIBEC* n. 84; *DOC I* n. 209.1.

¹⁹ *MIBE* n. 232; *DOC I* n. 232.

the *tremissis* is in an excellent state of conservation, and was minted in Ravenna.²⁰ These coins testify to a possible relationship between *Egnatia* and Ravenna, an important town on the northern Adriatic coast which was the capital of the early Ostrogoth kingdom (493 AD), seat of the Byzantine exarchy (540).

This provides further evidence confirming the de-structuring process of the area at the end of the 6th century, as reported from the stratigraphic analysis and study of materials.

The *tremissis*, together with a *solidus* (fig. 8), found in the acropolis – again in the final collapse of the standing structures – is representative of the city's thriving economic life, which provided, in terms of trade, also valuable currency.

This significant numismatic evidence is linked to the '*nundinae*',²¹ the periodic rural markets which acquired a particular vitality during Late Antiquity and which took place within episcopal or ecclesiastical centres.

Considering this scenario and the consistent ceramic artefacts of African and oriental amphorae, Egnazia is considered a very important trade centre in Late Antiquity within the Mediterranean markets, integrating them with local artefacts, to control a wider demand.

Due to a further devastating but unknown event which probably occurred between the end of the 6th and early 7th century, the area of the 'ancient' portico and paved square of Egnazia was from then on only frequented sporadically, and then abandoned.

Conclusion

The complex monetary system and the prolific documentation discovered between 2001 and 2006 have provided the opportunity to retrace the varied phases of the city of Egnazia between the second and the 7th centuries AD. 1416 coins along with a study of stratigraphy and materials provide useful information for the dating of the standing structures of the porticoes square from its origin to its abandonment. The Cretean earthquake with subsequent tsunami on 21st July 365 AD was the turning point which changed the original aspect of the city and, in particular, that of the square. A reconstruction of the standing structures was soon carried out, and Egnazia's trade networks were restored. While Europe was affected by the so-called Barbarian Invasions, during the 5th century AD. Egnazia was enjoying its own golden age thanks both to the presence of great Christian communities and to centrality position of Egnazia's in the centre of the Mediterranean. Lastly, the Gothic War (535–553) between the Byzantine Empire and the Ostrogothic Kingdom of Italy during the reign of Emperor Justinian I most probably brought an end to the great vitality of the market square and its surrounding area.

²⁰ *MIB* n. 41; *MIBE* n. 39.

²¹ Siciliano 1994: 261–285; Siciliano 1998: 251–259; Arthur 1999: 176–177; Volpe 1999: 267–329; *Idem* 2000: 532; Cassano et al. 2004: 88.

Abbreviations

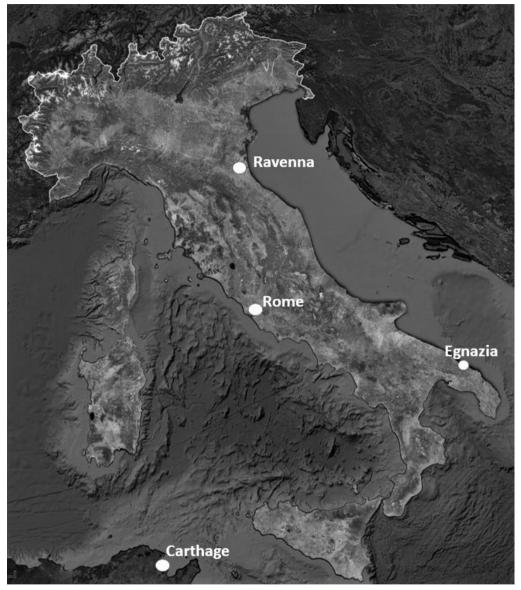
- DOC 1 = Bellinger A.R. 1966. Catalogue of the Byzantine coins in the Dunbarton Oaks collection and in the Whittemore Collection, vol. I, Anastasius I to Maurice (491–602). Washington.
- MIB = Hahn W. 1973-1981. Moneta Imperii Byzantini. Vols. I-III. Wien.
- MIBE = Hahn W., Metlich M.A. 2000. *Money of the Incipient Byzantine Empire (Anastasius I-Justinian I, 491–565)*. Wien.
- MIBEC = Hahn W., Metlich M.A. 2009. Money of the Incipient Byzantine Empire Continued (Justin II Revolt of the Heraclii, 565–610). Wien.

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Figures



Map. 1. Location of Egnazia on the Adriatic coast of South West Italy (by Crispino 2019)



Fig. 1. Egnazia (Brindisi, Italy): aerial photography of the archaeological site (from Cassano et al. 2015: 16). 1. Acropolis; 2. Market Square; 3. *Via Traiana*; 4. The residential area; 5. Episcopal Basilica; 6. Baths; 7. Harbour (by Archive Progetto Egnazia)



Fig. 2. Egnazia: Via Traiana which runs through the site (photo by Crispino 2019)

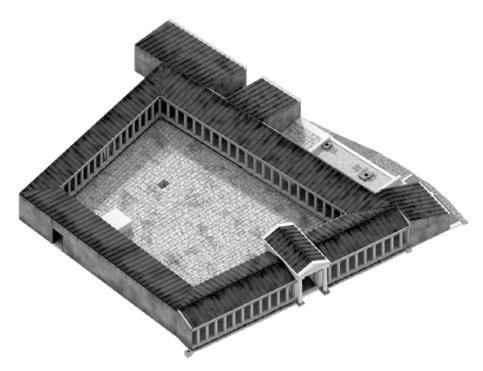


Fig. 3. Egnazia: 3-D reconstruction of the market square (by Massimo Caggese, ALTAIR s.r.l.)

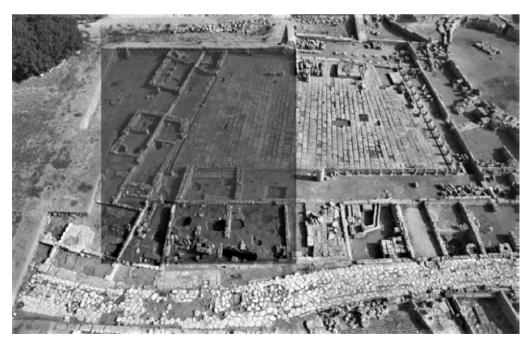


Fig. 4. Egnazia: the W-part of the market square which was investigated from 2001 to 2006 (from Cassano et al. 2015: 126)

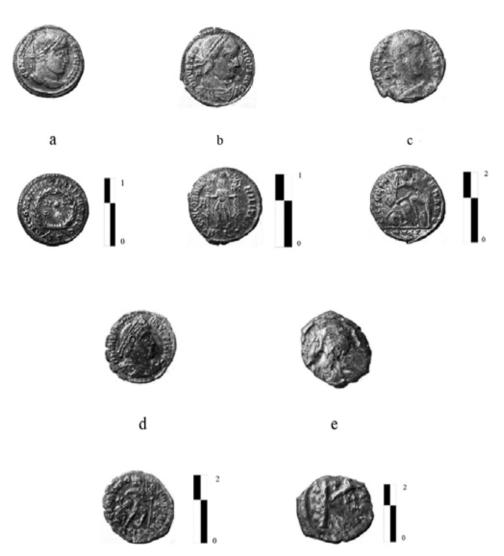


Fig. 5. Egnazia: coins unearthed, during archaeological investigations (2001–2006), of Constantine I (a); Vetranion (b); Constantius II (c); Valentinian I (d); Justinian I (e) (photo by Crispino 2019)

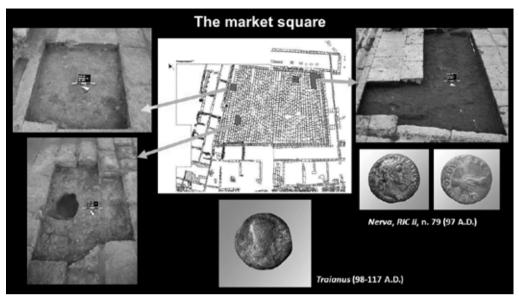


Fig. 6. Egnazia: the *as* of Nerva (97 AD) and the *as* of Trajan (98–117 AD) discovered below the paved floor of market square (by Crispino 2019)



Fig. 7. Egnazia: the *tremissis* of the Emperor Justinian I (MIBE, n. 39) (photo by Crispino 2019)



Fig. 8. Egnazia: the solidus of the Emperor Justinian I (from Cassano et al. 2015: 177)

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SILENT WITNESSES OF THE CENTURIES: SELECTIONS OF BYZANTINE COINS FROM KUŞADASI, THE KADIKALESI/ANAIA EXCAVATION

Abstract: Rising on a proto-historic tumulus on the southern coast of Kuşadası/Aydın, Kadıkalesi/Anaia is an important harbor castle of the Byzantine Empire with a dominating position to the cost. Kadıkalesi, with its central location as a strategically important commercial harbor, used to protect the harbor of the coastal city, Anaia, and it dates back to the period of the Lascarid Dynasty (1204–1261), based on the technique used on the walls. Apart from that, it is important to note that Kadıkalesi is a home to a magnificent church complex. In the excavation work that continued until 2001, the archeological findings belonging to the Byzantine Empire reveal that after the castle had been used for religious purposes, it was then used for commercial glass and ceramic production. In the excavations performed with all the findings on the surface of Kadıkalesi/Anaia region, more than 1000 coins have been found between 2001 and 2017. Most of the coin findings that belong to the Byzantine Empire period are categorized with a wide period of time from the 5th century to the 14th century.

In this paper, examples of the copper coin findings that date back to the Byzantine period from Kadıkalesi/Anaia 2001–2017 excavation season will be evaluated and presented chrono-logically.

Keywords: Coin, Kadıkalesi/Anaia, Byzantine

The Kadıkalesi/Anaia Excavation has been conducted since the year 2001 under the presidency of Prof. Dr Zeynep Mercangöz who is the head of the Byzantine Art Programme in the Department of the History of Art at Ege University. Kadıkalesi/ Anaia, which is located uphill on a proto-historical tumulus on the southern shore of Kuşadası in Aydın province, is an important port of the Byzantine Empire as it dominates the shore (fig. 1).¹

Kadıkalesi/Anaia, which is also an important commercial port center as for strategy, has been used to protect the port of the coastal town of Anaia and it dates back to the period of the Lascarid Dynasty (1204–1261), according to the technique on the walls.² The detailed work of W. Müller-Wiener includes the plan of the castle

¹ Mercangöz 2013: 13.

² Ibidem.

in those years. In line with this plan, it can be seen that there is an entrance on the east of the castle and 16 bastions (fig. 2).³

The sections carried out and expanded inside the castle show that these thick walls also have a monumental religious structure. In the works done in and around the church inside the castle, narthex and exo-narthex have begun to emerge as the sections have been expanded and deepened since the year 2007. Furthermore, a cistern added to the eastern corner of the church has been uncovered in the works of this period. The archeological finds of the excavations maintained since the year 2001, belonging to the Byzantine Empire show the production and the usage of commercial glass and ceramic.⁴

Coins have also been found on the surface around the castle and in the excavations done between the years 2001 and 2017 in Kadıkalesi/Anaia; more than 1000 coin finds have been uncovered. The majority of the coin finds belong to the period of the Byzantine Empire, and they are classified into a large timeline from the 5th century to the 14th century. The coin finds are made up of nearly 100 Turkish period coins, and 150 Hellenistic and Roman period coins. Among approximately 900 Byzantine coins, there are coin finds of the Lascarid and Palaeologan Period coin finds which date back to later periods, and the coin group which is frequent in Kadıkalesi/Anaia Byzantine dating back to after the year 1204. Approximately 70 Early Byzantine coins and 250 Middle Byzantine coin finds are currently being studied (fig. 4).

Among the main coin finds, as far as the metal of the coin is concerned, the copper finds are intense. In addition to these, there are 1 Persian silver coin, and 17 Byzantine gold coins called hyperpyron, which are collective finds from 2009, and 2 Byzantine Electron trakhea, a lot of silver coins dating back to the Turkish period, and 3 silver Western Medieval coins. The coin finds obtained during the excavations conducted since 2001 are photographed and documented by doing inventory works after being cleaned in the Kadıkalesi/Anaia excavation house and excavation storage.

Within the scope of my study, certain samples from Kadıkalesi/Anaia finds are going to be presented from this point on. The earliest dated Byzantine coin among the finds is the folles struck in Constantinople and it dates back to the period of Iustinianos I (527–565). In the Kadıkalesi/Anaia Excavation, Anonymous Folles group coins stand out in different types. The revival beginning from the end of the 10th century in the Byzantine Empire is observed in Kadıkalesi/Anaia coins, especially in the Anonymous Follis group together with 22 coins of different classes. From these different Anonymous Follis groups, examples of classes A2, B and F are presented in the catalog.

³ Müller-Wiener 1961: 5–122.

⁴ Mercangöz 2013: 16.

The gold, electron, and copper coin samples of the emperors, who were on the throne in a politically and economically important period of the Byzantine Empire and members of Komnenos and Angelos Dynasties, are the most important coin finds of the Kadıkalesi/Anaia Excavation. After the invasion in 1204, the Western rulers of the capital Constantinople struck the imitations of the Byzantine coins and put them in circulation. Among Anaia coin finds, there are the Latin Empire large module coin samples as well. Besides them, our research into the presence of the coins belonging to the Latin and Bulgarian imitative groups that copy the Byzantine coins known to be in the circulation intensely in the northern regions of the Balkans and northern Greece in the 13th century is in progress. The works on the presence of the Bulgarian imitations in the Western Anatolia are still on-going.

On the other hand, the Nicaean Empire is the sequent state that strongly claims to be the successor of the Byzantine Empire after the invasion in 1204. In the Kadıkalesi/ Anaia Excavation, there are important copper coin samples belonging to the Nicaean emperors. When they are evaluated all together, Anaia, with the Latin imitations, Bulgarian imitations, and the Nicaean Empire coin finds in the 13th century, proves that it is one of the most important trade centers in the Western Anatolia.

The most valuable and frequent group of the Kadıkalesi Excavation is the Palaeologan Period coin finds that date back to the late 13th century and the early 14th century. The late Byzantine period coins historically match up with other different find samples of the Anaia Excavation. In this sense, it can be understood that Anaia maintained its importance of being as a trade center between those centuries.

Finally, since the finds obtained after the 17 year study of the Kadıkalesi/Anaia excavation have been evaluated, the coin finds unearthed are considered to be the most valuable finds. Studies on coin finds from the Kadıkalesi / Anaia excavation are continuing. This article, includes ten coins that have the qualities of study and inventory characteristics, and presents examples of coins from the Early, Middle and Late periods of the Byzantine Empire. The ten coins of the study were uncovered during the excavation seasons between 2001 and 2017. After the coins in question were documented and the emperor to which they belonged was determined, statistical information was created chronologically according to the periods and supported with graphics. Within the scope of this study, completed in 2019, out of the coin finds in the master thesis study titled *The* 5th *to* 13th *Centuries Byzantine Coin Finds From Kadıkalesi/Anaia Excavation (2001–2017)* certain original examples in the coin finds, which include the first 17 years of excavation, were selected, presented and aimed to be introduced.⁵

⁵ Toy 2019.

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Figures



Fig. 1. Geographical position of Kadıkalesi/Anaia (by Kadıkalesi/Anaia Excavation Archive)

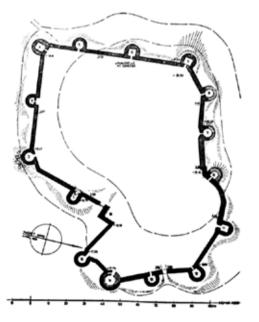


Fig. 2. W. Müller-Wiener's plan of the castle in those years (Müller-Wiener 1961)

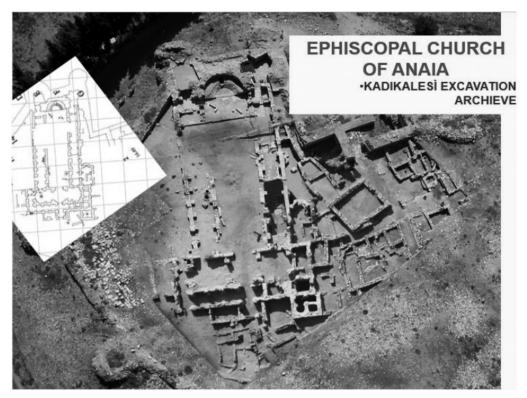


Fig. 3. The monumental church situated in Kadıkalesi/Anaia (by Kadıkalesi/Anaia Excavation Archive)

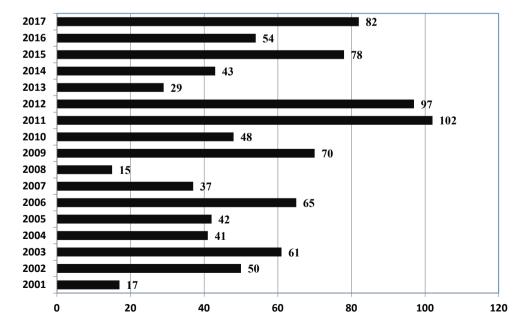


Fig. 4. Kadıkalesi/Anaia Excavation (2001-2017) coins studied upon and the registered finds (by author)

CATALOGUE (Photos by the author)

Iustinianos I (527-565)
Folles (528/529), Constantinople
Obv.: Frontally bust, a globus cross on the palm. Pendilian crown.
[DNIVSTINI ANVS]PPAV
Rev.: M, on the left [A/N/N/O], coin's minting year on the right II, Mint name on the bottom CON.
Ref: DOC I: 84–95(?), Pl XV-XX.
1. Æ, 26 mm, 7.38 gr. Inventory No: 2012/30.

II. Tiberios Konstantinos (578–582)

Folles (584–585), Constantinople

Obv.: Bust facing, wearing crown with cross and pendilia and consular robes. In right hand mappa, in left scepter with eagle surmounted by a cross.

ΌΠΤΙΙ ΟΝΥ ΤΑΝ ΤΡΡΑΥΙ

Rev.: \mathbf{M} , above cross, to left $\mathbf{A}/\mathbf{N}/\mathbf{N}/\mathbf{O}$, to right \mathbf{H} , Mint name on the bottom **CON**, workshop sign \mathbf{E} .

Ref: DOC I: 270–271, Pl LXI, 13e.

2. Æ, 32 mm, 11.79 gr. Inventory No: 2009/45.

VI. Leon (886–912)

Folles, Constantinople

Class 3 (886-912)

Obv.: Bust of Leo VI with short beard, facing, wearing chlamys and crown with cross. On right shoulder, roundel with central pellet. In left hand akakia.

[+LEONB]AS ILEVSRS OM'

Rev.: +LEOn

ENOEOBA SILEVSR OMEON

Ref: DOC III/2: 518–521, 8.51; Berk and England 198:, 56, No. 331; Ireland 2000: 110, No. 3756–3760. **3.** *Æ*, **26 mm, 5.87 gr. Inventory No:** 2012/ 47.

Anonymous Folles (970–1092) A2 CLASS Variation 25 Obv.: +EMMA [NOVHA], nimbus cross with two pellets. Book with 🖾. IC XC. Rev.: Inscription with – 🕂 – above and beneath. +IhSYS XRISYS [bASIL]EY bASILE Ref: DOC III/2: 661, A2.25.1–3; Ünal 2012: 75, Plate 36, 175. 4. Æ, 36 mm, 16.23 gr. Inventory No: 2012/ 16.

B CLASS

Obv.: +CMMA NOVHA, Frontally, the bust of Jesus bearded wearing tunic and himation that has single-point adornment on the top cross arm and \Box ornament on the side cross arms. His right hand rising in the position of sanctification into his chlamys; on the left hand, he holds Gospel from below that has \therefore ornament on its cover. IC XC.

Rev.: Cross rising on a pedestal and two steps and having point ornaments on the cross arms.

IS XS bas ile bas ile

Ref: DOC III/2: 676–681, B.1–64; Ünal 2012: 79–80, Plate 41–44, 195–207; Demirel-Gökalp 2009: 234–239, Cat. No. 203–353; Bulgurlu 2018: 400–402, No. 37–43. **5.** Æ, **31 mm, 10.10 gr. Inventory No:** 2006/49.

F CLASS

Obv.: Jesus sitting on the backless throne. Bearded, cross nimbate consisting of single-point ornament on each cross arm, wearing tunic and humation. His right hand into his chlamys in the position of sanctification; on the left hand, he holds Gospel from below that has :: ornament on its cover. No legend. **IC XC**.

Rev.: Triserial scripture. At the top of the scripture: - + -, and at the bottom of the scripture + ornaments are seen.

- + -IS XS bas ile bas il' +

Ref: DOC III/2: 690–691, F.1–15. 6. Æ, **25 mm**, **7.56 gr. Inventory No:** 2008/11.

Aleksios Angelos III (1185–1203) Aspron Trachy Nomisma, Constantinople Variation C(b) (?)

Obv.: Christ bearded and nimbate, wearing tunic and kolobion seated upon throne without back, right hand raised in benediction, holds Gospels in left pellet, or pellets normally in each limb of nimbus cross.

[KEPO HOEI, IC XC]

Rev.: Full-length figure of emperor on left and of St. Constantine nimbate holding between them labarum, surmounting triangular decoration on long shaft. Emperor and Saint wear stemma, divitision, collar piece and jeweled loros of simplified type; both hold scepter cruciger, emperor in right hand, Saint in left. Inscription obscure.

[ΑΛΕ3ΙΨΔΕΟΠ Ο ΚΨΝΤΑΝΤΙ]

Ref: DOC IV/1: 413, Plate XXIV, 3g.1–7.

7. Æ, 25 mm, 3.44 gr. Inventory No: 2011/93.

Ioannes Doukas Vatatzes III (1221–1254) Aspron Trachy Nomisma, Magnesia Type D (1221–1254)

Obv.: IC XC in upper field. + + in lower. Full-length figure of Christ, bearded and nimbate, wearing tunic and kolobion. Right hand raised in benediction, holds Gospels in left.

Rev.: Figure of emperor on left and pf Virgin nimbate, holding between them patriarchal cross on long shaft. Empreror wears stemma, divitision, jeweled loros of simplified type, and sagion, holds in right hand labarum-headed scepter. Virgin wears tunic and maphorion.

[IWΔ Π[?] NP (=MP?)]

Ref: DOC IV/2, 500, Pl XXXII, 38.1–2; Lianta 2009, 126, no. 226–227. **8**. Æ, **26 mm, 3.45 gr. Inventory No:** 2014/11.

Tetarteron Noummion

Type C (1221-1254)

Magnesia

Obv.: Frontally, the bust of St. Georgios, beardless and nimbated, wearing tunic, cuirass and sagion. Holding a shield on the left hand and spear on the right hand.

Rev.: Frontally, full length figure of the Emperor with stemma, divetesion, collars and loros ornamented with jewels in a basic form and wearing sagion. Hoding anexikakia on the left hand, and a long labarum scepter on the right hand. Scripture with two columns.

ΙϢ ΔΕΟΠΟΤΗΟ Ο Δ8ΚΑΟ

Ref: DOC IV/2, 509–510, Pl XXXIV, 58.9–12. **8.** Æ, 20 mm, 2.57 gr. Inventory No: 2013/26.

Mikhail Palaiologos VIII (1259–1282) Constantinople

Obv.: Virgin sitting on a high backed throne, nimbated, holding a Jesus medallion on her chest. There is an X motif on the two sides of the throne that Virgin sits, and 4 point ornaments are situated among each cross arms of this motif. There is **MP OV** monogram at the top of the description. Virgin wearing tunic and maphorion. Obscure legend.

Rev.: Archangel Michael introducing the emperor kowoting on his knees, to Jesus holding a roll on his left hand and crowning on the right hand. Wearing tunic and kolobion, the emperor kneeling down before Christ, sitting on throne, and waiting to be crowned by him. The emperor wearing loros that has a simple style including stemma, divetesion and jewelry. As the emperor's right hand is on his chest, it is introduced by Archangel Michael depicted behind it, nimbated and winged, to Jesus. The legend cannot be read.⁶

Ref: Ünal 2008, 115–158.

10. Æ, 26mm. 3.33 gr. Inventory No: 2004/12.

⁶ Ünal 2008: 115–128.



Aleksios Angelos III (1185-1203)



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Ioannes Doukas Vatatzes III (1221-1254)







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Mikhail Palaiologos VIII (1259-1282)



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THE COIN AS AN ARCHAEOLOGICAL 'SETTLEMENT MARKER' TO RECONSTRUCT THE ORGANISATION OF BYZANTINE SARDINIA (6TH-11TH CENTURY CE)¹

Abstract: The present essay aims to enrich the study of the Byzantine numismatic findings in Sardinia by the interpretation of coin as a "settlement marker". The analysis has been focused on the main cases of suburban findings, mainly in relation to the five viae of the Iter Sardiniae of the wider Itinerarium Antonini (3rd c. CE), which was still in use when the island was included in the Byzantine Western domains.

Keywords: Byzantine Sardinia, Routes, Coin, Byzantine Archaeology

The interpretation of the coin as a "settlement marker" to reconstruct the landscape peculiarities of Sardinia – one of the major islands of the Western Mediterranean – when it was included in the Byzantine Empire or at least was influenced by its culture, is by no means easy. Compared to the other artifacts, the coins offer a wide range of interpretation possibilities about social, economic and cultural phenomena of a certain place or context, despite that it is clear that a percentage of discovered items does not match with the total percentage of struck, lost or hidden coins in the past.² Starting from those assumptions, the coin circulation in Sardinia during the Byzantine centuries and less specifically the High Middle Age is capable of enlightening many demographical, political, and cultural changes, starting from the relationship between cities and countryside.

Introduction

The awareness of the existence of a such a complex variety of examples and the necessity to primarily focus the interpretation on the relation with the landscape asset led to the choice of a common 'medium' to understand their significance: their location within the ancient road map developed in Sardinia during Imperial Age and Late

¹ The author would like to thank the Arts and Humanities Research Council whose funding of the project 'Power, society, and (dis)connectivity in medieval Sardinia' (AH/S006273/1) has generously supported this research.

² Grierson 1984: 187–188; Barello 2006: 134.

Antiquity,³ the *Iter Sardiniae* of the *Itinerarium Antonini* (3rd c. CE), which consisted of five roads:

- The via *A Tibulas Caralis* (fig. 1, a) was 213 miles long (km 315) and partly developed on older routes, connected Gallura to the lowlands of Campidano, passing through ten stations with an average respective distance of nineteen miles.⁴ The road crossed the Island's inner regions and still nowadays corresponds mostly to the S.S. (national roads) n. 131 (which goes from Porto Torres to Sanluri) and n. 196 (from Sanluri to Cagliari).
- The *Aliud iter ab Ulbia Caralis* (fig. 1, b) was 172 miles long (km 254) and followed the internal road to the mountainous lands of Barbagia. The road had only five stations, even as profoundly anthropized during the Roman and Byzantine age (see below) as its first portion crossed the fertile hills of Trexenta, and connected the harbour city of Olbia with the main centre of *Carales* (Cagliari) passing through the mountain massif of Gennargentu.⁵
- The *A Tibulas Sulcis* (fig. 1, c) was articulated for 351 miles (km 419) and supplemented by two further paths, *a Sulcis Nura* (mp 69, three stations) and *a Caralis Nura* (mp 22 miles) through seventeen stations. It mainly corresponds to the contemporary S.S. nn. 126 and 292.⁶
- The *A Caralibus Olbiam* (fig. 1, d) consisted in a relatively brief bifurcation to the North-Northeast which went inside Monteacuto and Gallura, from the *A Tibulas Caralis* to Olbia. Like the other routes, it still exists today as a junction between the S.S. 131 and 128bis, towards the villages of Mores and Ozieri.⁷
- Finally, the *A Portu Tibulas Caralis* (fig. 1, e) had a length of 246 miles (km 364) and went through fourteen stations with a respective average distance of nineteen miles. The road crossed the landscapes of many eastern historical regions, such as Sarrabus, Ogliastra, Baronia, and Gallura and nowadays matches almost perfectly with the S.S. 125.⁸ Starting from the coastal *viae*, while the *A Tibulas Sulcis* shows a greater concentra-

tion of urban centres and of coin findings in its inlands, particularly the Sinis, its eastern counterpart – A Portu Tibulas Caralis – features a reduced number of attestations.

The via A Tibulas Caralis

As for the inland routes, the *A Tibulas Caralis* reveals a more homogeneous territorial arrangement, while the potential relation between coin finds and settlement

³ Muresu 2018.

⁴ Mastino 2005: 339, 358–359.

⁵ *Ibidem*: 352–353.

⁶ Ibidem: 373–374.

⁷ Ibidem: 370.

⁸ Ibidem: 343; see also Pinna 2008.

positions along the *Aliud iter ab Ulbia Caralis* seems to be concentrated in its first section, corresponding to the fertile low/midlands not affected by excessive geomorphological roughness, and then undergoes a significant "decrease" as it breaks through the mountains.⁹

During Byzantine Age, the archaeological identification of coins in the urban centres on the road *A Tibulas Caralis* (fig. 2) has been recognized in *Carales*,¹⁰ *Turris Libisonis*,¹¹ and *Forum Traiani*,¹² while the remaining findings have been related to rural settlements, most agro-pastoral and interested – wherever possible to determine scientifically – by previous anthropic phases.

The geographical location of the settlements points towards the attention to the internal road and the proximity to the waterways: this is precisely the case for the site of Cuccuru Proceddus, near the village of Decimoputzu, within the Flumini Mannu (Main River) river basin. According to the traditional studies, the only element capable to "recall" a Byzantine phase of the settlement was a tremissis of the Emperor Phocas (602–610) found inside a burial mound in its turn part of a larger necropolis inside an area interested by superficial findings of pottery shreds.¹³ It must be clear that no proper archaeological investigation was conducted; alas, it seems interesting to acknowledge a deep anthropization of the territory of Decimoputzu during Late Antiquity and Early Middle Ages, since were identified many numerous settlements united by a strategic position aware of the oro/hydrographic landscape peculiarities.¹⁴ The choice of location near or above the highest places is the common element of the settlement where nowadays stands the church of S. Giorgio, inside the modern urban texture of Decimoputzu¹⁵ (fig. 3, a).

The area of the Romanesque church was interested by human activity since the Protohistory, and during Roman Imperial Age was connoted by a building adorned with

⁹ Muresu 2018: 445-452.

¹⁰ Byzantine coins have been found in the archaeological sites of St. Eulalia (Martorelli, Mureddu 2002: 329, nn. 6, 56), Vico III Lanusei (Mureddu 2002a: 243; Mureddu 2006: 68; Martorelli 2006: 342–344, nn. 18–30) and Via Caprera n. 8 (M. Muresu in D'Orlando, Muresu 2019: 585–596, n. 37).

¹¹ Several Byzantine *solidi* of Theophilus (829–842) and Basil I (868–879), were found with Muslim Aghlabid *dananirs* (late 9th century) and 23 gold plates inside a jar near the ruins of a Roman thermal complex traditionally known as "*Palazzo di Re Barbaro*" (Taramelli 1922: 294; Muresu 2018: 129, with previous references).

¹² A half *follis* of Justinian II (685–695), struck in Sardinia, was found in the superficial layers of the archaeological excavation inside the Amphitheatre, outside the city (QQ G9III, H811I-IV, US 35; P.B. Serra in Bacco et al. 2010). A Byzantine tremissis of Tiberius III (698–705) was found during the excavation of a necropolis near the current Rosa Sanna and Grazia Deledda streets (Zucca 2004: 198, n. 69; Serra, Bacco 2014: 10, n. 15).

¹³ Taramelli 1911: 348; Diana 1958–1959: 325–326, 328.

¹⁴ Diana 1958–1959: 328; Ugas 1990: 30; Terrosu Asole 1974: 85; Coroneo 1993: 29–30.

¹⁵ Ugas 1990: 18; Basciu 1997: 85–87; Mureddu 2002b: 453.

a mosaic floor, subsequently abandoned and obliterated by a high-medieval *ecclesia*¹⁶ (fig. 3, b); at a later time, a partially hypogeal chamber tomb was built behind the apse of the church.¹⁷ The latter elements allow considering a continuity of life bound together by the exploitation of the heights, as a strengthening of the strategic role of the place and its relative settlement (fig. 3, c), which would also may be favorable for the development of mutual trade activities between the surrounding communities, also by virtue of the proximity of the site to the routes leading to the Cixerri river basin, which led into the fertile lands and mineral resources (primarily lead) of the Sulcis-Iglesiente.¹⁸ Decimoputzu was, therefore, close to the crossroad between the latter river and the already known Flumini Mannu, as a particularly suitable feature for settlements development, thus it does not seem unusual to acknowledge an almost continuous anthropic presence throughout the Byzantine age until the Middle Age (testified by the building of a Romanesque church).¹⁹

The potential function of the Flumini Mannu as a "centre of gravity" seems to be consistent even through the continuation of the *A Tibulas Caralis*, which crossed the lowlands of Campidano following – quite precisely – the northern course of the river and developed a rationalized anthropic system, devoted to the exploitation of the surrounding valleys and the potential development of mutual synergies between the settlements along the way. Another river, tributary of the Flumini Mannu, was the Rio Mannu, which courses at ten *mp* southeast of *Aquae Neapolitanae*, while the way continued towards the Marmilla, constituted a sort of connection between the *A Tibulas Caralis* and the *Aliud iter ab Ulbia Caralis*, the latter directed to the West near the end of the river, possibly near the Roman settlement of *Valentia*, and then to the East to pass through midlands and mountains.²⁰

An interesting settlement developed along the Rio Mannu was the late nuraghe Su Mulinu di Villanovafranca, which was subjected to multiannual archaeological excavation and topographical researches. The latter allowed recognizing a continuity from the Protohistory to the 8th-9th century CE (fig. 4, a), when the site would progressively change its peculiarities from an agro-pastoral vocation to a tomb of armed warriors, with interesting grave goods composed by bronze and iron weapons, clothing accessories, glass paste necklaces and, most important, an imitative Lombard tremissis of Maurice Tiberius²¹ (fig. 4, b).

¹⁶ Spanu 1998: 150–154; Mureddu 2002b: 453–464; Casagrande 2015, with updated references.

¹⁷ Casagrande 2015: 810.

¹⁸ Ugas 1990: 25–26; Basciu 1997: 17; Muresu 2018: 59. On the road system of the Cixerri river basin see also Atzori 2006: 94–102.

¹⁹ Muresu 2018: 60-63.

²⁰ Mastino 2005: 354–355.

²¹ Saba 2015: 113; Ugas, Saba 2015: 113–116; Muresu 2018: 76–78.

The settlements and finds located along the centre and northern part of the *A Tibulas Caralis* – such as the one near the Nuraghe Losa of Abbasanta,²² the sporadic coin discovered near the Nuraghe Aiga, also near Abbasanta,²³ the settlement related to the reused prehistoric necropolis (*Domus de janas*) of Lochele (Sedilo)²⁴ and those suggested by the sporadic findings of Nughedu Santa Vittoria and Neoneli (an *exagium*)²⁵ (fig. 5), could also be included in a river basin, precisely related to the main river of Sardinia, the Tirso, which was interestingly related also to *Forum Traiani* and through which it was possible, in ancient times, to head towards the interior by going North-East, along the mountainous reliefs of Marghine and Goceano, or, eventually, to reach the Sinis and the Sea of Sardinia by proceeding West, to the shores and landings along the *A Tibulas Sulcis*. The latter's high exploitation potential was further enhanced by the connection with the *A Tibulas Caralis* by a road from *Forum Traiani* to *Othoca*,²⁶ as a privileged route for the passage of goods between the coast and the midlands, suggested also by the discovery of Byzantine coins in Ollastra, which is still today located near the LXII Roman mile.²⁷

An interesting hypothesis based on the contextual comparison would concern the reuse of the still existing (pre-existing) currency for the midland and mountainous settlements, for – most likely – they would be regulated by a less monetized economy, in compliance with the laws, as the presence of the *exagium* of Neoneli would suggest.²⁸

On the other hand, the much currency-structured economy of the settlements closer to the river (the Tirso, specifically) could suggest more dynamic trends, favoured by the proximity to the sea and its relative harbours (which still today are reachable by following the river course) and, simultaneously, the significance of the road as an encouragement for the exchanges and the development of hybrid settlements. In this sense, one of the primary features of the multi-layered settlement built around the Nuraghe Losa of Abbasanta would have been the composite character of its economy, linked both to the agriculture and the favourable position near the road.²⁹ The artifacts found within archaeological excavations conducted at the site had confirmed its economic vitality, testified by several coin finds and enriched with imports as well as local products.³⁰

²² Serra 1993: 123; Santoni 2001: 14, 32.

²³ Taramelli 1929: 318; Muresu 2018: 105, 111, with previous references.

²⁴ Serra 2001: 355-356, nn. 41-48; Serra 2006: 318-319.

²⁵ Salvi, Serra 1990 (Nughedu Santa Vittoria); Serra 1989: 54, n. A1/2 (Neoneli).

²⁶ Mastino 2005: 356-357.

²⁷ Spano 1860: 28; Muresu 2018: 86.

²⁸ Muresu 2018: 104, 453-455.

²⁹ Mastino 2005: 354, 358–359, 361; Atzori 2010: 152–159.

³⁰ Guido 1993a; Serra 1993.

Proceeding to the north, another economic hybrid settlement would have been placed in the location called S. Lucia,³¹ near Bonorva, already connoted by a strong anthropic presence since the Roman age and throughout the Byzantine age, primarily in the sites known as Rebeccu and S. Andrea Priu.³² Despite the recurring difficulty in obtaining results from scientific archaeological investigations, the known material documentation suggested the presence of a settlement, frequented at least until the 7th century CE – this from the stylistic dating of the found objects – and potentially, yet hypothetically, linked to the agro-pastoral and economic management of the surrounding landscape,³³ also by the "role" of wealthy personalities specifically named from the discovery of workshops stamps (*Antonia Rouphina*) and sealing rings (*Lucretia*).³⁴ They would have managed their funds in a landscape of small settlements, connected to a larger village even during the Middle Byzantine age, if it were plausible to consider the paintings identified inside the walls of the "Tomba del Capo" – a *Domus de Janas* reused as a Roman grave and thus became a church from the end of the Late Antiquity – of S. Andrea Priu as a marker of settlement continuity, at least until the 8th century CE.³⁵

The Aliud iter ab Ulbia Caralis

If the settlement arrangement along the *A Tibulas Caralis* is generically homogeneous, the analogue network along the *Aliud iter ab Ulbia Caralis* in the Byzantine age reveals different – yet not less interesting – population dynamics (fig. 6). The first part of the route which connected *Carales* and Olbia by crossing the Barbagia presents a significant number of evidences, primarily related to the fertile valleys of Parteolla, the central-eastern lowlands of Campidano and the hilly reliefs of Trexenta, upwards from the first slopes of the reliefs.³⁶ Such density, if related to the dramatic decrease of evidence for the mountainous settlements, allows structuring many interpretative hypotheses of the economic evolution of the landscape and its relations with the routes. The discovery of numerous manufactured products in the territory of Siurgus Donigala, for example, could be interpreted as the marker of a complementarity between currency and material exchange in small transactions, although this is yet to be clarified.³⁷ The exchange would seem to be primary in the mountains, which settlements seem to present a lack of currency. The latter absence would not necessarily mean a general decline but, rather, the development of a peculiar system focused, for example,

³¹ Fiorelli 1881: 71; Serra 1990: 149 and also 142, 153–154; Serra 1998: 372.

³² Taramelli 1919; Ialongo et al. 2007; Deriu, Chessa 2014: 54, 79.

³³ Sotgiu 1988: 656; Zucca 2003: 45–47; Serra 2004: 339–340.

³⁴ Serra 2004: 321; Ibba 2010: 411-412.

³⁵ Coroneo 2011: 71–78, n. 2.19.

³⁶ Mastino 2005: 352-355; Mele 2011: 169-180.

³⁷ Muresu 2018: 167–174, 457, with previous references.

on the commerce of local pottery products, which had been found within the late antique and early Byzantine archaeological layers of the many low and midland settlements along the road.

The via A Tibulas Sulcis

Compared to the *A Tibulas Caralis*, the *via A Tibulas Sulcis* presents a higher concentration of coin finds in the proximity of urban centres or their immediate hinterland (proceeding from Cagliari: *Nora*,³⁸ *Sulci*,³⁹ *Neapolis*,⁴⁰ *Tharros*,⁴¹ *Cornus*,⁴² *Bosa*,⁴³ and the above-mentioned *Turris Libisonis*) (fig. 7). The rest of the findings, at different levels, refer to areas potentially interested by a settlement network, i.e. the area near the temple of Antas – which in Roman Age was connected to the town of *Metalla* and its relative role as the economic fulcrum of the mining district of the high Sulcis⁴⁴ – or the plain of the Sinis. The high density of numismatic finds, concentrated in the area of S. Giorgio, and the superficial discovery of a significant amount of Roman, Late Antique and Byzantine manufactured products allowed to hypothesize the existence of a complex settlement with a necropolis⁴⁵ and a commercial role, testified by the discovery of *exagia* and scales.⁴⁶

The area would have been densely populated (or, at least, frequented) from the Protohistory, without breaks through the Punic,⁴⁷ Roman, Late Antique and Early Byzantine age, at least until the 8th century CE, with many settlements, such as S. Salvatore, S. Giorgio, Sa Pedrera and many others, since the research is going.⁴⁸ The high incidence of coin findings in the area allows for a predominantly commercial economy to prosper, favoured by the proximity to the coast and the wide subsistence possibilities offered by the landscape and its strategic topographical position, not only near the *A Tibulas Sulcis*, but also to the road network connecting the central places of *Othoca* and *Tharros* and, further North, *Cornus*.⁴⁹ The urban centres showing numismatic evidence are *Neapolis* and *Tharros*, while from the territory of Oristano – still not certainly attributable to the ancient towns of *Aristianis* or *Othoca* – come sporadic coins and *exagia*.⁵⁰

³⁸ Albanese 2007: 64; Pera 2007: 69.

³⁹ Spano 1867: 32–33; Biamonti 1998.

⁴⁰ Lilliu 2010: 111, n. 114; Usai et al. 2012.

⁴¹ Pesce 1955–1957: 359, nn. 49–50; Barnett, Mendleson 1987: 241; Serra 1998: 345–346.

⁴² Spano 1858: 187–188; Mastino 1979: 20–21; Martorelli 2000, with previous references.

⁴³ Spano 1870: 30; Guido 1993b: 98, n. 59; Biccone et al. 2015: 295, n. 15.

⁴⁴ Cecchini 1969: 153–158; Serra 1976: 16, n. 27; Lilliu 1984a: 296; Serra 1989: 55, n. B/1.

⁴⁵ Panico, Spanu 2015.

⁴⁶ Spanu, Zucca 2004; Spanu, Zucca 2007.

⁴⁷ Tore, Stiglitz 1987; Tore et al. 1988; Del Vais et al. 2015.

⁴⁸ Panico et al. 2015a; Panico et al. 2015b.

⁴⁹ Mastino 2005: 270; Satta 2006: 18–19. See also Muresu 2018: 452.

⁵⁰ Sebis, Zucca 1987: 128; Spanu, Zucca 2004: 68, n. 13. On the *exagia* see Serra 1998: 349, 374, n. 228, 230–232, with previous references; Spanu 1998: 64; Zucca 2013: 98.

The coins discovered in the immediate hinterland of *Neapolis*, found during a survey near the "Grandi Terme" allow envisaging a phase of continued attendance from the age of *Antonini* to the full 7th century CE, with different finding percentages during the different historical phases.⁵¹ Considering the total number of identified coins, it is possible to consider a frequentation continuity which, economically, interested Sinis and the *Ager Tharrensis*, mainly for the constant presence of the half *folles* of Constans II (641–668) struck in Carthage and attested in S. Giorgio, Putzu Idu and *Tharros*.⁵²

The Compendium A Caralibus Olbiam

The settlement network along the Compendium A Caralibus Olbiam between the A Tibulas Caralis and A Portu Tibulas Caralis (fig. 8) is also worthy of attention: the positioning of the finds seems to follow a road from Ittireddu to Ozieri, between the landscapes of Logudoro and Monteacuto, inside the lower river basin of Coghinas, this reconstructs a path which is most suggestively correspondent to the contemporary national road S.S. 128bis.53 In addition, many archaeological evidences of Byzantine and Early Medieval Age suggest the negative of a route system focused on a "focal point of interest" such as, for example, the rural churches, nowadays often recognizable as the last trace of an older settlement, sometimes within a continuity from the Roman Age to at least the *Giudicati* Age. This would seem to be the case for the church of S. Elena, in the rural landscape of Ittireddu,⁵⁴ which Paola Basoli connected to the forgotten medieval village of *Terquiddo*,⁵⁵ or the more known example of Bisarcio and its adjacent pertinences. The latter can be observed as another case of continuity, possibly one of the most interesting, for it lasted from the Protohistory to the Roman, Byzantine, Medieval Ages and it lasts still until today (the church is still the titular seat of its homonymous diocese).

It would be interesting and suggestive to imagine the reasons behind the choice to build a church – destined to be a cathedral, by the way – in such a strategic context: in this sense, the high presence of Byzantine numismatic findings⁵⁶ allows admitting a proper economic importance of the site, enhanced by the proximity and the mutual development of a highly monetized "trade route", continuous from the 6th up to the 11th century CE. At that point, the first documents of the (probably already existing) Diocese of Bisarcio began to spread.⁵⁷

⁵¹ Usai et al. 2012.

⁵² Muresu 2018: 207–237, with relative bibliography.

⁵³ Mastino 2005: 370.

⁵⁴ Caprara 1988: 407–408; Coroneo 2011: 325.

⁵⁵ Basoli 2002: 196.

⁵⁶ Guido 1994: 309-314; Idem 2002: 167.

⁵⁷ Muresu 2018: 275–280, with previous references.

The via A Portu Tibulas Caralis

The last road, the *A Portu Tibulas Caralis* (fig. 9), shows a lower level of numismatic evidences compared to its counterparts, although it would not necessary be related to a crisis. As already noted elsewhere, there is the possibility to recognize network settlements connected to river basins, i.e. the Cedrino,⁵⁸ with a generical shortage of numismatic evidence and, at the same time, a remarkable level of material documentation as a testament to a lively market economy.⁵⁹ Along the road, moreover, there are also a few contexts that seem to show a proximity both to a river and a pre-existing urban centre, as it is shown by the examples of the tomb of Is Cirredis, near Villaputzu –near the Roman city of *Sarcapos* – and S. Stefano/Parte Sole of Posada, the latter next to an *ecclesia*, a *necropolis sub divo* and, most likely, not far from the harbour of *Portus Liguidonis*.⁶⁰ The above-mentioned context present common favourable geographic features, guaranteed connections and supply, thanks to their position at the base of a relief interested, during the Middle Ages, by the construction of a castle – Quirra for Villaputzu, Fava for Posada – and their close proximity to the river mouths, namely Flumendosa-*Saeprus flumen* and Rio Posada.⁶¹

Conclusions

The vision of Sardinia from above with the diachronic overlap of routes from the Roman Age and Late Antiquity to the present day, with the relative effects on the geomorphological characteristics of the landscape, allows assuming that the topographical disposition of the coin finds, interpreted as "settlement markers", unites the threads of a clear continuity of occupation (visible also for the quite accurate overlay of the contemporary routes), while Byzantine Sardinia was interested by an intensive exploitation of coasts, lowlands and hydrogeological resources. The ancient road system, thanks to its effectiveness, lasted in its function of connectivity also during the Byzantine Age, in conjunction with the progressive development of new paths (such as the medieval road from Mores to Ozieri, see above) which existence is nowadays admissible also for the topographical disposition of coins. Aside from those clearly identifiable as "Byzantines", as in emitted directly by the Byzantine Government, the research also considered coins which were made previously (e.g. Punic or Roman Coins) but archaeologically found with items and artifacts connected to the Byzantine centuries (hence, in a sense, potentially considered as Byzantine for they were already used centuries after their mintage). This choice proved, in conclusion, to be efficient: the final result

⁵⁸ Mastino 2005: 346-347.

⁵⁹ Delussu 2008; Delussu, Ibba 2010.

⁶⁰ Mastino 2005: 342–343.

⁶¹ Muresu 2018: 461, for further hypotheses.

of the research has been the demonstration of a complexity of settlement persistence, from the continuity of use of buildings, graveyards, sacred places, etc. to their relation to the landscape, within the *Itinerarium Antonini*.

Abbreviations

QuadCA = Quaderni della Soprintendenza Archeologica per le province di Cagliari e Oristano NotSc = Notizie degli Scavi di Antichità StS = Studi Sardi

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Figures

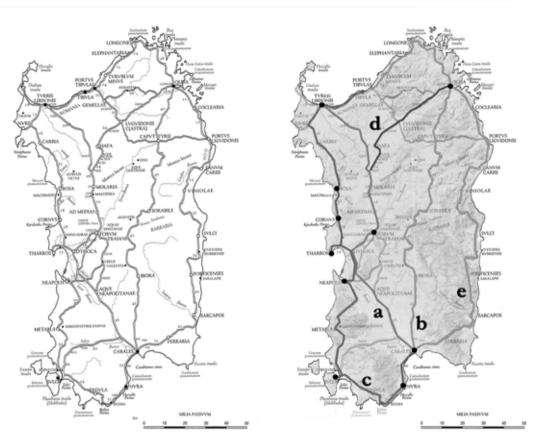


Fig. 1. Roads of the *Itinerarium Antonini* in Sardinia, original (left, Mastino 2005: 340) and Author elaboration (right, © M. Muresu 2018)

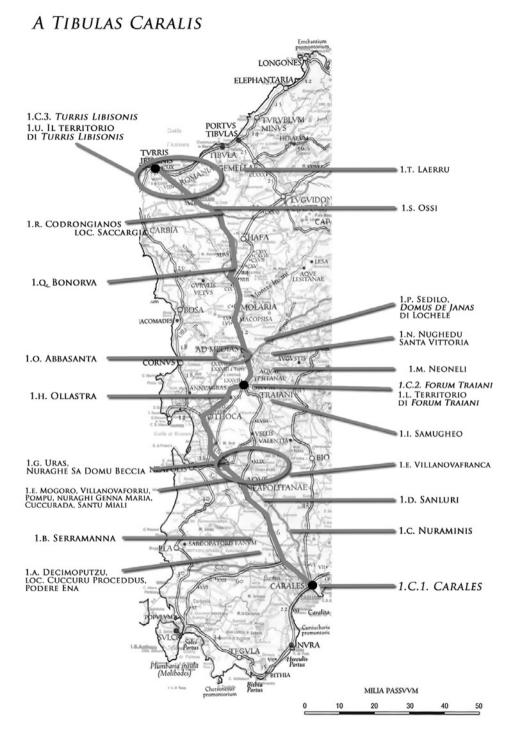
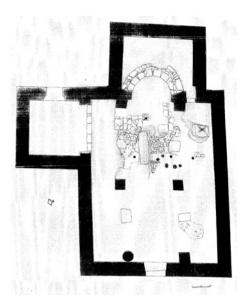


Fig. 2. Via A Tibulas Caralis (© M. Muresu 2018)



Fig. 3. Decimoputzu (Cagliari), San Giorgio, Romanesque church (a, photo by M. Muresu, 2014); early Christian ecclesia (b, Mureddu 2002b: 462, fig. 14); position within the landscape (c, elaboration from *it-it.topographic-map.com/places/Sardegna-905051*)





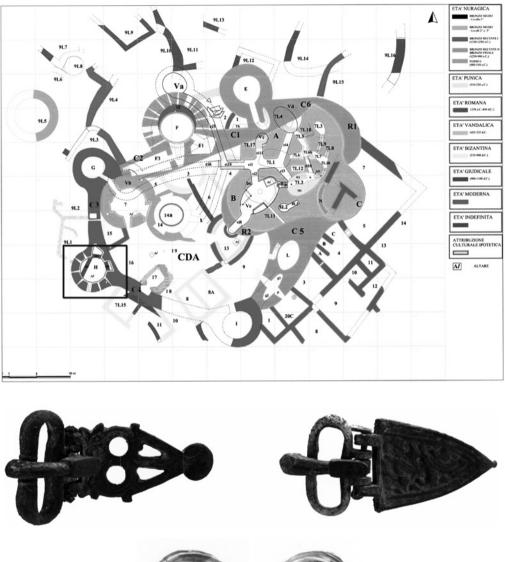




Fig. 4. Villanovafranca (Cagliari), Nuraghe Su Mulinu, planimetry of the archaeological excavations (a, elaboration from Ugas 2006: 150, Map VI); "Corinto" and Ogival byzantine belt buckles and Lombard imitative coin (Maurice Tiberius) from Tower H tomb (b, Ugas, Saba 2015: 116–117, figs. 16–19)

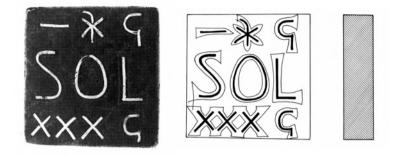


Fig. 5. Neoneli (Oristano), exagium (Serra 1989: 72)

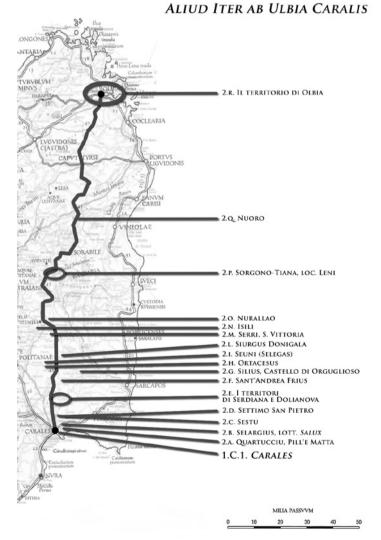


Fig. 6. Aliud iter ab Ulbia Caralis (© M. Muresu 2018)

A TIBULAS SULCIS

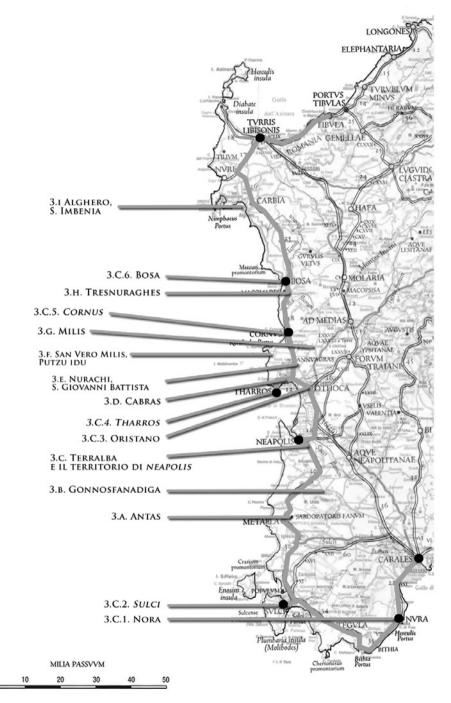


Fig. 7. Via A Tibulas Sulcis (© M. Muresu 2018)

A CARALIBUS OLBIAM DIRAMAZIONE

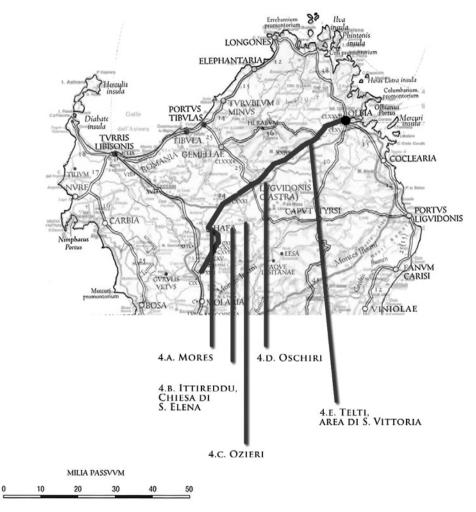


Fig. 8. Compendium A Caralibus Olbiam (© M. Muresu 2018)

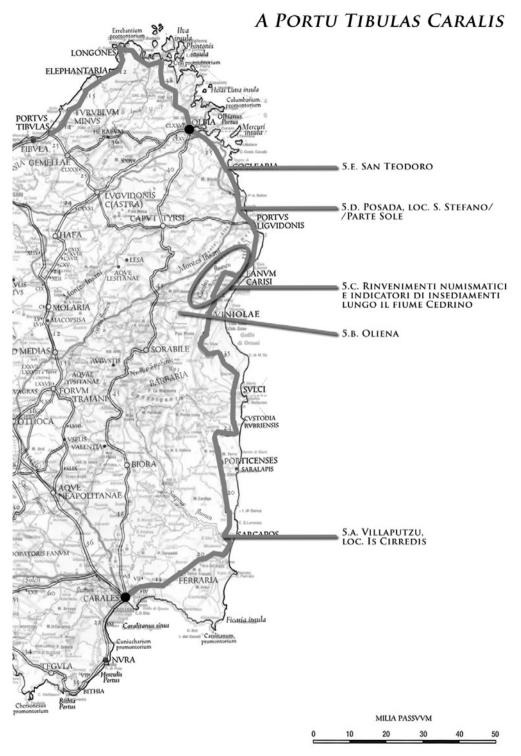


Fig. 9. Via A Portu Tibulas Caralis (© M. Muresu 2018)

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THE ECONOMY IN THE SEPTENTRIONAL BORDER

Abstract: The aim of this essay is to conduct a review of the economy in the Middle Ages at the Septentrional Border (La Rioja, Navarra and the Basque Country in Iberian Peninsula). It was an economy based on the agricultural system since the 1st century but from the 7th to the 15th centuries, there were new lucrative business. The main towns and villages had a regional code of laws with new taxes for the wine, the bread or the crossing of the gates or bridges. "New Christians" (Muslims and Jews) held the commerce and the weekly market. The churches and the monasteries made an intensive trade with the relics and the codex. Places such as San Millán de la Cogolla, San Martín de Albelda or San Prudencio de Monte Laturce had several scriptoria to make codex, books and Bibles and they earned a lot of money with the sales. Finally, the castles and forts were the places where the Lords and Nobles controlled the administration and the society. Moreover, the construction of these buildings had a positive impact in the economy of the region.

Keywords: Business, economy, comerce, lands, weekly market, Middle Ages, 7th- 15th centuries

Introduction

The Middle Ages is a very broad period in which there were different economic systems within the same society. It is a society very divided in estates and hierarchized within them. Although this economy cannot be understood in a fragmented way, it is necessary to make divisions to cover such a vast subject.

The Ebro Valley (Central Northern Iberia) and its tributaries delimit the space. The main terrestrial and fluvial communication routes run on the valley, on which the main towns have economic activities such as agrarian work and livestock breeding. The inhabitants of cities, towns, and villages were subject to the tax burden of taxes and fees and their needs were resolved thanks to markets and fairs.

The clergy had a special status exempted from these payments and their economy depended on the receipt of tithes and prebends granted by kings, nobles, and the third state. In addition, we must consider other two large businesses that were present in religious centers of various kinds such as relics and *codex*.

Finally, we must take into consideration the economic activities typical of the upper classes that will be well reflected in the construction of castles that will serve to strengthen economic, administrative, political, and social control.

Geographical and Historical Contexts

Before tackling the economy in La Rioja during the Middle Ages, it is necessary to make a brief geographical and historical context to better understand the idiosyncrasy of the territory in which our object of study is framed. On the one hand, in the geographical context, we will briefly discuss the types of soils and materials, altitudes, tributaries of the Ebro, and vegetation cover. To do this, some maps have been prepared with which to illustrate the different medieval roads, areas, monasteries, and the main cities. On the other hand, in the historical context, a summary of the different centuries with their main facts will be made, accompanied by their schematic diagram.

Geographical context

The current Autonomous Community of La Rioja of Spain (the Iberian Peninsula) is a geographical space of enormous contrasts in which everything revolves around the depression that makes the Ebro River and all its tributaries, where the main economic activities have been vertebrated.

The whole valley has been influenced for centuries because it has always been a ford space; in fact, the very name of Logroño, comes from a Germanism, Illo Gronio or Gronnio that would come to have that same meaning of step and crossroads, which reinforces that character. It has also been a border space, an interchange of people, cultures, artistic and architectural styles and of great commercial activity.

Since remote times these transit routes have been fortified, although of Roman origin, many of them were already used previously. Thanks to the Greco-Roman historians, we know that we had a series of indigenous peoples who occupied what is now the Middle Valley of the Ebro, giving them the names of Vascones, Berones, Autrigones, Turmugos and Pelendones. With the arrival of the Romans, there were two reorganizations. First, La Rioja was included in the *Hispania Ulterior* and later in the *Tarraconensis* province, legally dependent on the *Conventus Caesaraugustanus*.

During the Middle Ages there were two main roads of communication and commerce, the Road to Santiago run on the known Roman 1–32 in which not only these roads are marked, but also other secondary roads that remained active until the 15th century are also well defined.¹ When we elaborate on the representation of the different roads, we see how little has changed with respect to the primitive roads.

The most significant change is found in the slight displacement towards the north that makes the path in the area of *Tritium Magallum*. In the medieval period, the Pilgrimage Route to Santiago de Compostela would ascend about five kilometers to nearby Nájera since it was an enclave of enormous importance, better defended and rising

¹ Franco, Merino 2000.

as the capital of the Nájera-Pamplona Kingdom for a century and a half, although it never ceased to have its great importance throughout the Middle Ages.

It entered *Gracurris*, the present Alfaro, until arriving at *Vareia* (happening through *Calagurris Iulia Nassica*, both monetary mints) where it turned towards the south in search of the great producer of terra sigillata of the moment, *Tritium Magallum* (present Tricio) to leave towards Castilian lands by *Libia*. We also see, just north of it, the parallel to the Ebro that would cross the valley from east to west until you reach *Bilibium* where a branch that leads back to 1–32 would open.

Within the Middle Ages, there were new territorial divisions. During the Visigoth period, there was a new reordering that led to this entire area falling within the duchy of Cantabria with Leovigildo and the division of the peninsula into eight provinces. From the Muslim period and until the definitive incorporation to Castile in the year 1076, La Rioja is a space in which the fluctuation of the lines and in which disputes, first between Muslims and Christians and later between Castilians and Navarrese, defined a period of great dispersion as far as borders are concerned. There are natural borders having great relevance, but creating a heterogeneous space allowed population movements with ease and provided the main communication channels of great importance throughout the Middle Ages since they became spaces for social, economic, cultural, and religious exchanges of all kinds.

The Ebro Valley and its tributaries occupy a good part of the upper third of the area and run between the Sierra de Cantabria and the Iberian System. The part of the Ebro corridor will have its highest point in the area of Haro and the lowest in Zaragoza, with an approximate difference in altitude of 250 meters. The differences are quite pronounced with respect to some of the highest peaks such as Moncayo and San Lorenzo, which are around 2,300 meters above sea level. The great extensions of the main channel and the tributaries, together with the benefits of the Mediterranean-Continentalized climate (with mild winters in the valley and cold in the mountainous areas and very hot summers in the valley area).

The soft composition of the soils and the slopes of the mountains make the valleys an ideal space for the creation of caves in which to develop different human activities, among them the first defensive architecture that covered the communication routes. Both the river courses and the mountain ranges were formed during the Tertiary and the Quaternary periods and mainly large quantities of clays, conglomerates, limestones, marls, gypsums and, above all, sandstone were formed.

Nowadays, the vegetation cover does not differ much from what we could find in the medieval period. On this occasion, we must also make a zonal distinction between the Depression of the Ebro and the mountain systems due to relief, altitude, water resources, and soil types. In the valley and transition areas, the most fertile soils for cultivation are found, mainly, irrigated orchards and fruit trees in the areas close to the water resources offered by the Ebro river and its tributaries, as well as the network of irrigated channels well extended throughout the region. Although it is the Romans who initiated the La Rioja irrigation network, it will be the Muslims who will give it a great boost in all the areas in which they were present, especially in La Rioja Baja² and the Ribera Navarra. During the Middle Ages, there were different confrontations on water among others the one known as the Mazo Lawsuit, on the regulation of the waters of the Iregua that extend from 1146 when Alfonso the Seventh of Castile granted the inhabitants of Varea the control of its waters until the 19th century.³ There was a great interest throughout the environment to regulate the use of water, through the *fueros* and royal dispositions to decisions made by the ecclesiastical elites.⁴

Also, very important from the cultural, economic, and social point of view was the production of the Mediterranean triad composed of cereals (mainly wheat and barley), olive trees and, above all, vineyards that extend throughout the valley. The most outstanding forests are holm oaks, rebollares, poplar groves (typical of groves and banks), hazel trees, and ash trees. From the 1,700 meters above sea level, the landscape changes since we are not facing that fertile soils and there are large deforested areas. We no longer have horticultural crops and forests of beech, quejigal and pine forests predominate, as well as meadows, mosses, and lichens. From the 16th century until the 19th century, and due to the decline in livestock activity and the abandonment of the mountain areas, an increase in forest resources has been improved by the repopulation of the second half of the 20th century.⁵

Livestock has been another of the main pillars of La Rioja's economic support since Roman times. From the Middle Ages and until the 20th century, the Mesta was a great boost for the farmers of the region who practiced transhumance between the Rioja mountains and the pastures of Extremadura and Andalusia. The main herds are horses, caprids, cattle, and sheep. The most important sheep species are the merines, later, the churras, and the chamaritas by the qualities of their wool.

Historical context

Undoubtedly, when discussing the period between the 5th and 15th centuries in the Middle Valley of the Ebro one must talk about the disputes between Christians

² Ibidem.

³ Ibidem.

⁴ Ibidem.

⁵ Ibidem.

and Muslims first and between the Castile and Navarre kingdoms (and even Aragón to a lesser extent) later.

Due to these disputes, the entire territory is considered a great ford, a frontier territory in which there is an exchange of people, products, and cultures takes place. They are, therefore, very permeable and very dynamic border areas in which the existence of the Pilgrimage Route to Santiago de Compostela is of great importance to the understanding of the richness and social, economic, political, artistic, cultural and religious diversity of the region.

The Muslim occupation took place between the 8th and 11th centuries. Javier García Turza⁶ affirms that this space is where the contingencies arose between the Muslims who wanted to reach the north and the Christians who wanted to recover the territories occupied by the former. The borders and the castles that defended them were shaped like those of Nájera and Viguera, dependent on the Navarrese kingdom and whose fortresses Muhammad ibn Lubb were reconstructed in the second half of the 9th century.⁷ The delimited space between Calahorra and Zaragoza will be known as the Septentrional Border and the control of the passage of the Cidacos that communicates the plateau with the valley became something of vital importance. They highlighted castles like those of Arnedo, Cornago, Nájera, Tudela, Ablitas or Cortes and places like Albelda between Asturian King Ordoño I and Musa ben Musa, known as the "Third King of Spain" in the 9th century.

During the 10th century, the kingdoms of Castile, León, Navarre, and Aragón intended to control the entire Septentrional Border gradually moving from a Muslim control of the territory to a Christian one, that of *Tenencias*⁸ that would later be transformed into the manors. The dominant family of the area between Calahorra and Zaragoza was the clan of the Banu-Qasi, which establish the border area and its influence around the Ebro tributaries of the area, where they build several fortresses to control the old Roman Road that communicated the Duero with the Ebro and that ran through that valley. Important cities will develop such as Logroño, Calahorra, Tudela, Tarazona or Nájera, which will become the capital of the kingdom. One of the most important moments was the definitive recovery of Calahorra by the Christians in 1045. It will be the 10th and 11th centuries when the layout of the Pilgrimage Route to Santiago de Compostela and the expansion of the *fueros* are promoted.

The 11th century is the time when the borders between the Christian kingdoms begin to be well defined, establishing the Ebro as the dividing line. The southern side

⁶ Pascual 2006: 10-13.

⁷ Moya Valgañón, Ruiz-Navarro Pérez, Arrúe Ugarte 1992: 16.

⁸ This practice will be widely used by the Navarrese kings during La Rioja campaign. In front of the *tenencias* were the tenentes that could depend on the kings or other lords; at his side there will be administrative officials such as *Merinos*.

of the border will remain almost entirely in the hands of Castile and Aragón except for a small strip in the surroundings of Fitero, Murchante, and Cascante. The northern part will remain Castile to Logroño and Navarre from that place to the east. A strengthened Aragón wanted villages of La Rioja Baja and the area of the Ribera in Navarra. In this period, there will be a cession of territorial powers towards García Ordóñez and Urraca based in Nájera, under which other minor holdings will be submitted. On many occasions, the tensions would not be between the lords and kings in the name of obtaining of the power in a certain place, but the Lords would be fighting between themselves (reaching alliances with own friendly parties or enemies of the rival if it was necessary) to dominate a concrete area. The family of López de Haro was the most influential at the time and had dominions in what is now the Rioja Alta and its periphery.⁹ Next to them were the Lords of Cameros who controlled Arnedo, Jubera or Ocón;¹⁰ they will be the two most powerful clans in the area at the time. This diversification of power provoked territorial disorders and struggles between the fortresses of realengo and some of the manors that will remain until the 13th century.

In the 12th century, there will also be various incidents in the region, both due to pressures from the Navarrese kingdom from the north, and from the Muslim that will come from the east, which will cause the birth of new holdings in the Rioja Baja, the Ribera and the Moncayo area. The monasteries of San Prudencio de Monte Laturce in Clavijo, San Martín in Albelda, Santa María la Real in Nájera, San Millán de la Cogolla or Santa María la Real in Fitero will become places where religious, political, cultural, and administrative powers converge.

Since the 12th century, the Christian kingdoms continue their expansion to the south, the current Castilla La Mancha, Madrid, Andalusia and Extremadura; hence, there will be a migration from north to south and that will cover various social strata. From nobles who will invest assets for the chance to obtain greater power or benefits, to villains and outcasts in search of a better future for their families and themselves.

During the 13th century, virtually the entire region was controlled by the López de Haro, especially when the Señorío de Cameros fell back to this family, thus assimilating part of the competition, but not to any other Castilian lineage that occupied the gaps thanks to the approval of Alfonso the Seventh and Alfonso the Eighth.¹¹ The camerano lordship was controlled by Pedro and Diego Jiménez and their holdings in Bureba, Calahorra, Logroño, Tudela, and Soria. Their relationship with the Castilian monarchy will not always be friendly and they will sometimes end up allying with the Navarrese king during

⁹ Ibidem: 27.

¹⁰ Ibidem: 26.

¹¹ With Alfonso VII, we will hear about families like the Castro, Manzanedo or the Gutierrez Fernández and thanks to Alfonso VIII, we will do it about the Lara or Ladrón.

the second half of the 13th century. In the last part of this century, the four most important families in the area are excluded from the successions in the crown of Castile, which is a huge unease among the predominant classes that is aggravated by the murder and confinement of some members of the López de Haro family, as well as the subsequent difficulty in gaining control of their strengths. These facts became the precedent of the Castilian Civil War a few years later. During the reign of Alfonso the Tenth, the importance of local councils will be strengthened by giving power to the lower nobility and the bourgeoisie, generating a new power that joins the existing ones. The system of Tenencias is also affected and little by little, it is degraded, although families like the López de Haro will maintain power until the beginning of the next century.

In the 14th century we are facing a convulsive time for the Castilian Civil War between Pedro the First of Castile (known by his detractors as the *Cruel* and his affines as the *Justiciero*) and Enrique the Second of Castile (of the Trastámara house) in which there were struggles between different estates such as royalty, the nobility, and the clergy. The hostilities will begin a few years before, with Alfonso the Eleventh and the disputes between his lover Leonor de Guzmán (mother of Enrique the Second de Trastámara) and his wife María de Portugal. These circumstances led to a war of succession that ended with Enrique the Second as the monarch after the battle of Montiel in 1369, the establishment of the house Trastámara in Castilla and the end of the dynasty of Burgundy. It is the moment of some of the most important and well-known families of medieval La Rioja since the Velasco, the Guevara, the Zúñiga or the Jubera among the most outstanding, coinciding during the 14th century; some of them coming from lineages mentioned in previous paragraphs such as the López de Haro or the Ladrón. Among some of these families also reflected was the tensions of war with disputes well into the Modern Age.

The Economy on the Septentrional Border in the Middle Ages

In this part, we will focus on dividing the different main economic activities that are developed in the different estates. Although we must bear in mind that we are facing an economy mainly agricultural and livestock, it is true that there are other economic activities away from the primary ones within different estates. We will divide the following issue in agriculture and peasants, cities and markets, ecclesiastical economy and privileged economy. The shortage of documents allows us to get a general idea of the situation of the economy of the Middle Valley of the Ebro, but, given the nature of this work, we will not make a very strict view of it since it is not the objective.

Agriculture and peasants

The peasants will be the majority of the population in the entire region under study. The entire valley will have a marked rural character regardless of the fact whether we are in front of cities, towns, or villages. Mostly they are small owners who have a small vineyard, a cereal field and a vegetable garden to survive with their families. These farmers will cause a change in the ecological landscape of the region, but it is also motivated by general climatic changes that changed the old ecological equilibria.¹²

From the 8th century until the end of the Muslim period, the fertility of the lands of the Middle Valley of the Ebro¹³ appears in Muslim documents. The main crops were fruit trees, orchards, cereals, olive groves, vineyards and pastures that, during the disputes between Christians and Muslims, were razed. These products will remain throughout the Middle Ages.

During the 8th and 9th centuries, the Alhama lands, which had a good irrigation system created and developed by Muslims that took advantage of some Roman structures and aquifers, seem especially fertile. The *Fuero* of Cornago of 1128 speaks about the irrigation practices and water distribution structures as in the delivery of the Villa de Corella to the Count of Perche.¹⁴

The agrarian activity will remain practically intact until the 10th and 11th centuries when, gradually, the Christians are recovering the territories and a system of Tenencias¹⁵ is being imposed, with the emergence of the Kingdom of Viguera first, and that of Nájera-Pamplona later. At this time they also begin to form the first councils (at the head of which was the mayor), at the beginning, it was still a rudimentary manifestation of the local regime that contributes to the formation of a collective conscience and intervenes in the organization of local life.¹⁶ They served to validate different jurisdictional acts and control aspects such as the uses of water for irrigation and the application of *fueros*. They will be the nucleus of the future municipal regimes.

During the period of Navarrese dominance, we see a decrease of importance in the horticultural crops for the benefit of the Mediterranean triad that is popularized from the Roman *villae* that will continue working as agricultural and cattle exploitations. These villages will be modifying their ergonomics and growing in importance until some of them, through donations by the Navarrese kings, end up falling into the hands of the monasteries. The inhabitants of these villages will carry out the production of products and assets of the first sector in a balanced way among them, although this is not always the case since, depending on the area, there is a specialization towards

¹² Contamine et al. 2000: 17.

¹³ Sesma Muñoz 1994: 25.

¹⁴ Ibidem: 26.

¹⁵ Alberite, Arnedo, Autol, Azagra, Azofra, Bilibio, Burandón, Calahorra, Cameros, Cantabria, Cañas, Cerezo, Clavijo, Desojo, Grañón, Ibrillos, Jubera, Lerín, Logroño, Madriz, Marañón, Matute, Meltria, Nájera, Ocón, Pancorbo, Punicastro, Quel, Resa, Santa Coloma, Sartaguda, Tobía, Turrillas y Viguera.

¹⁶ Sesma Muñoz 1994: 43.

activities of one kind or another such as grazing or forestry operations to the detriment of agriculture.¹⁷

The population that lived there was not always the same, it varied depending on the type of farm, from those that appear in the documents simply as *villae* to those that specify the type of production¹⁸ and the number of pieces of land they control, over which the cultivation of cereals predominates. In Álava, Navarra, and Aragón, there are documents that define territories as *ortus*, fruit trees such as apple or pear trees predominate, but in the case of La Rioja, garden path, cereal, olive groves and, above all, vineyards prevail. These orchards need very specialized hands and a full dedication since the works had to be meticulous to obtain good yields.

The documents do not offer much information about the cattle activity in the region (mainly cows, pigs, sheep and birds), but its existence was predominant in the mountain areas (from 700 m.) To the south and north of the valley, where pastures predominate facing the valley, the orchards and fruit trees dominated. The livestock populations of the south of the region have larger extensions due to the need for pastures, which are separated and fenced to delimit the areas and avoid clashes with other villages, and forests, while the enclousers of the valley are smaller. There were few stables since they needed fodder and straw to feed the animals.

Since the 11th century and especially since 1045 when the king of Nájera Don García recovers Calahorra, different *fueros* and royal dispositions are being established that favor the repopulation of the Middle Valley of the Ebro. In those laws, many of French inspiration, the process of agrarization of the entire valley is favoured with the clearing of forest areas and the creation of new farmland. In addition, a series of infrastructures such as mills and ovens are added to attract people.

Among the new lands that are beginning to be gradually broken up, the sernas stand out, which are very fertile spaces close to the rivers and towns and that once belonged to the kings. The cultivation of the vineyard will be predominant in the whole area and, to a lesser extent cereal and olive trees will be planted, although in times of need more vineyards will be planted to the detriment of the cereal, reaching 46% of the crops. The kings will grant new territories and sernas to civil lords and monasteries to strengthen their power and allow them to control the territory. Donations include all the territories and assets that contain those lands.

We must also take into consideration the need to maintain a balance between the new cultivated land and the conservation of forests and pastures. When there are more areas of crops, the spaces devoted to livestock are reduced. There will be areas where livestock is largely discarded, such as La Rioja Baja, Ribera Navarra, and Valle

¹⁷ Ibidem: 76.

¹⁸ Vinea, ortus, serna, argum, terra (for cereals), pascuis, serna, pieza and pratis.

del Ebro in Aragón. The monasteries will control the vast majority of the donated land, with those of Nájera, Valvanera, San Millán, Cañas and Albelda as the most important.

The control of water resources will be of great importance as well. The Middle Valley of the Ebro has been an area in which the control of water resources has been decisive for the large number of crops that have been cultivated on this land, and there have been disputes over its control.¹⁹ Although the first aquifer infrastructures are of Roman origin, it was the Muslims who improved, largely, the irrigation system and channels that we continue to use today. The irrigation network was associated with the creation of mills²⁰ that used the force of water to carry out their grinding work.

The proximity of water resources will not be necessary only for the foundation of towns and cities, it will also be necessary for the creation of monasteries and hermitages. To control the flow of the tributaries and channels, small dams were created that regulated the amount of water they received, especially the orchards, cereals and vineyards. The capital Logroño is already related to the navigability of the Ebro to the vicinity of the last river port in Roman times, Varea. Logroño was located a few meters from that port, next to the mouth of the Iregua, one of the Ebro tributaries and some of its natural irrigation canals.

It is difficult to know the economic potential of peasants, farmers, or ranchers since we lack documentation that certifies the assets they owned. What we can say with certainty is that it would be a subsistence economy for the family nucleus in which more hands mean more food. Their possessions would be scarce, a house, a vineyard, a small field of cereal, some cattle, a garden path and the possibility of gathering firewood in the forests of the lords and kings. The donations that would be made to the clergy could be very scarce, just some vineyard, cereal field or some cattle besides the tithes that they paid as they are deducted from the documents found in the monasteries.²¹

When the situation was dire, the sale replaced the donation or the assets were replaced by the granting of a loan. Despite these loans, many smallholders lived in a subsistence economy in which communal lands and infrastructures such as mills were paramount. Occasionally, the monasteries managed to get a hold of these communal properties by subjecting the population in an absolute manner, leaving the local economy in the hands of the clergy and the large owners, making the manor dependence evident. These subjects also had to provide services to the secular and religious lords of those who were exempt only in the case when the king requested them for himself.

Already in the 12th century, with the system of Tenencias implemented, it can be seen that the conditions for small owners are going to be worse than those of years before.

¹⁹ Aqua ad rigandum.

²⁰ Sesma Muñoz 1994: 102.

²¹ Ibidem: 125.

The properties will be, largely, in the hands of monasteries and large owners who will subjugate the day laborers, small landowners, and several farmers. The properties begin to be transferred within the family nucleus by means of the *infantazgos* by which properties that were previously collective²² were ceded individually, creating in this way the plots, cultivable or uncultivated, that served as family nucleus. Some lords wished these lands for themselves by entering into quarrels between secular and ecclesiastical lords and the owners in which, even, the king must have intervened. From this moment on, there will be problems with controlling the communal lands on which several bordering populations sometimes had to live and this generated numerous conflicts.

In the 13th century, a little social balance was lost due to disputes between the upper classes, clergy, lords and vassals, causing some lords to cede a part of their property to monasteries and councils to work and sell their vineyards, fields, pastures and take advantage of the firewood. We will also see at this time the development of the *Cañadas Reales*, livestock roads that communicated the north with the south of the peninsula (from the Cantabrian Sea to Andalusia) and that were very important and became communication channels between the valley and the mountain. The Mesta is established as the backbone of the transhumance in search of the meadows, especially Extremadura in the cold months and the slopes of the Iberian System in the warm ones. Farmers, on the other hand, intend to establish restrictive legislation to avoid foreign interference and revalue the local product.

The next century will be plagued by lawsuits over the payments that satellite villages had to make to the cities they depended on. The need for economic growth meant that practically all of the available farmland was put to use, which gives us the idea that we are facing a period in which quantity over quality prevails. In addition, due to several bad harvests, the humblest farmers are forced to sell their vines to pay their debts.

Urban economic activities and markets

We can see how, although the exchange is still in force, society tends to increasingly rely on a monetary system, but alternative exchange currencies such as oxen are still maintained. The use of the monetary economy will begin in the valley area, a space in which the vast majority of regional economic activities develop, gradually moving towards the mountain areas.

The most important towns and cities had a set of laws called *fuero*. The most important of the existing ones in the Middle Valley of the Ebro is the one of Logroño (1095) by the importance that it had in all the peninsular north; they were heirs of the French *fueros* that entered by the Pilgrimage Route to Santiago de Compostela and that will influence notably in the *fueros* of later repopulation of all Spain. They were granted by

²² Ibidem: 141.

the kings to strengthen the populations for which they were destined. They had mercantile, fiscal, judicial and administrative dispositions, as well as rights and duties for citizens. Throughout the area, these documents had the task of helping to repopulate territories that had been emptied during the disputes between Christians and Muslims. This *fuero*, with its updates, was extended: first to nearby towns such as Navarrete or Laguardia and, later, to some more distant ones such as Vitoria, Corres or Bilbao for more than three centuries. These *fueros* were what determined the differences between towns and cities. In the region, we do not find populations of between 5,000 and 10,000 inhabitants as in the rest of the peninsula;²³ in this environment, Logroño would have about 3,500 inhabitants according to the ecclesiastical books, with what the difference between a city and a village would not be massive.

From the economic point of view, the *Fuero* de Logroño (articles 26–44) and the derivatives thereof, establish norms on the exemption of some seignorial charges (secular and religious), lower taxes and grant exemptions to the neighbors that facilitate trade as well as the implement some new fees such as payments when going through bridges and doors that were charged to outsiders. In some texts, as in this case, tithes were included in the new taxes that had to be paid to monasteries such as Santa María la Real de Nájera or San Millán de la Cogolla, towns on which they had depended years prior. They also regulated collected donations of land and sernas to the kings, as well as the collection of certain taxes that the crown received.

The *fueros* and the occupation of new farmland, make us think that these repopulation policies were adequate and there was an increase in population since the 11th century. The sample, as we have seen previously, not only shows it in the use of the sernas, but we can also look for it in the growth of the urban space, the creation of new neighborhoods and new spaces of commerce as markets.

Although they are eminently agricultural cities, we are in a guild society that has been referenced in the names of the streets of the different cities such as: blacksmith shops, merchants, shoe stores, wineskins or butcher shops. This makes us think of a specialized and economically active society towards economic activities as well as a spatial, administrative and social organization of urban spaces. From the beginning of the 11th century, we have documents that testify to the diversity of trades developed by the inhabitants of the main cities and that would come to complete the communities composed of clerics, shepherds, peasants, and the military. The best documented case is that of Logroño which, due to its strategic location between Nájera and Pamplona and Calahorra and Santo Domingo de la Calzada, will become a village dependent directly on the mayor appointed by the king.

²³ Alvar Ezquerra 2004: 158.

We found neighborhoods that had water infrastructures such as water pipes, fountains and assets and organized around work activities that were placed on the ground floor of their owners' houses. There were before shoemakers, carpenters, builders, gardeners, tanners, millers, masons, butchers, merchants, money changers, artisans or blacksmiths in addition to other liberal professions (usually exercised by Jews and Muslims "new Christians" or not), knights, military, clergy and administrative. Already at that time, the prices of the houses determined the organization of the population in the medieval Logroño, having the well-off people in the north and the humblest in the south. In this sense we must mention the primitive wall of the city that would not only have a defensive function, but also separated the urban territory from the countryside and even defined the outer neighborhoods where people with fewer resources lived. Due to the increase in population, new places were established such as marketplaces (inside and outside the cities) for economic transactions, thus altering the shape of the cities.

The weekly market is regulated by means of *fueros* since the 11th century and will be one of the great economic and social activities of the city. We have the first markets documented in the cities of Nájera, Viguera and Grañón and later in Cerezo and Logroño,²⁴ reaching the latter being of a very great importance. The emergence of markets leads to an increase in the circulation of people, assets, and the mobility of wealth, creating a new non-agricultural specialization such as merchandising and the appearance of the first stores. Again, we have to mention the walls, the bridges and the access gates to the cities that served as security controls for people and merchandise where, in addition, the income from the taxes for crossing them was obtained. Many of the merchants who came to the markets were of Jewish or Muslim origin who could convert to Catholicism throughout the Middle Ages, becoming a large part of the population of La Rioja.

The fairs (the first in 1254 in Miranda de Ebro²⁵), like the weekly market, would be regulated by local laws and regulations. They consisted of markets prolonged in time to which special tax exemptions were added and which were celebrated every six months or annually. There was a strong flow of fairs between the Cantabrian Sea and the Castilian Plateau, causing the internal border areas to become places conducive to the development of them and active in the local and regional market with bordering communities promoting the trade of cloth and salt.

From the point of view of the trade, until the end of the Middle Ages, these will be the two main pillars that will sustain the system and supposedly be a huge advance in the economy of the towns with market or fair. Tax exemptions were basic pillars on which a good part of this mercantile economy was based. All this will be reflected

²⁴ Sesma Muñoz 1994: 114.

²⁵ Ibidem: 300.

in the commercial development of the entire Middle Valley of the Ebro between the 13th and 15th centuries, between which the market model will not change, but the volume of products exchanged, growing exponentially.

One of the main drivers of the market will be, especially from the 12th century, the Pilgrimage Route to Santiago de Compostela. Thanks to this European route, we see how there are numerous influences that reach Spain. We are talking about a total artistic, cultural, social, administrative, fiscal and legal connection that will permeate all strata of society. New businesses and infrastructures related to the Road are established, such as hostels, taverns, shelters, mercantile stalls, and warehouses for itinerant merchants and even pilgrims who brought with them assets from different places, among others.

Calahorra, Logroño, Nájera, and Santo Domingo de la Calzada in La Rioja, Tudela in Navarra and Zaragoza in Aragón will be the great beneficiaries of the impact of the Pilgrimage Route to Santiago de Compostela in the Middle Ebro Valley, developing numerous local businesses, strengthening pre-existing powerful cities such as Zaragoza, Tudela, Calahorra and Nájera and developing some as Logroño and Santo Domingo de la Calzada, eminently linked in their development to the Road. The *fueros* will play an extraordinary role in the development of the Jacobean Route since it varied the original layout that would run along the north side of the Ebro and, thanks to Alfonso the sixth, will begin to have its current layout.

During the 12th and 13th centuries and until the end of the Middle Ages, due to the importance of the Pilgrimage Route to Santiago de Compostela and the *fueros*, we will see a large increase in the French population (and in other countries such as Belgium, Germany, and England) and in nearby regions. They came in search of better living conditions, bringing with them new ways of understanding business and life, giving rise to a more plural and open society than in other areas. These new inhabitants had greater economic power and it allowed them to become very powerful families and to participate almost from the first moment in contracts of purchase and sale, inheritance and mercantile activities of greater importance.

In the villages, there was a group of marginalized neighbors, the poor and the sick. This group was exempt from contributing any amount of money or assets, as well as from strengthening the military establishment. Despite everything, they were in an economic and social limbo since they were not integrated in the society nor did it accept them.²⁶

Ecclesiastical economic activities

Clerics were a social group of great importance throughout the Middle Ages. The entire Middle Valley of the Ebro was plagued by large monasteries, churches,

²⁶ Ibidem: 253.

cathedrals, and religious buildings of various kinds, which speaks of a large population. They were a privileged group since they were exempt from paying a good part of the taxes and, in addition, were depended directly from the bishop and not from other secular administrative figures.

Obviously, it was a very heterogeneous group since the priests of humble people or the regular clergy did not live the same as those who held a superior power as bishops, cardinals, abbots, and priors. The former would come from the lower part of society, while the latter would come from the upper classes and the nobility. As we will see later, these wealthy clerics will own physical assets, up to a third of the land, and economic assets, enjoying high rents and living in central locations within the towns. The humble clergy did not possess as many lands²⁷ and properties; hence, they were forced to subsist thanks to the rents they obtained from the lands that their parishes possessed, as well as from the work of their neighbors. They did not live in large houses like the previous ones, but they used to do it in the neighborhood of those who were spiritual guides. It was that microcosm that was in charge of managing the parish, lay people and clergy participated in it.

The Church in general and the monasteries in particular were spaces of great economic dominance that based much of their power on tax exemptions and the reception of royal and stately tithes and perks that made them rise in the medieval economy, especially to the monasteries of San Martín de Albelda, San Millán de la Cogolla, Nuestra Señora de Valvanera and Santa María la Real de Nájera. In addition to these economic benefits received, either through land, physical money or agricultural or livestock raw materials, many monasteries ensured control of barns, forges, mills, ovens, trujales and presses, in the same way that their land was they are locating near the network of terrestrial communication routes that are increasing. The more economic power the institution had, the greater its territorial power.

The domain space of these four monasteries would cover an area of up to 200 kilometers around in each case, finding properties as far away as in Cantabria, the Basque Country and Soria. The donations of lands and assets that are granted, grant the monasteries a huge ascendant power that will be reflected until the Disentailment of Mendizábal in the 19th century. They will also be reflected as intermediaries in property purchase and sale transactions.²⁸

Until the *fueros* that allow the development of the weekly markets weregeneralized, there was a collection and trade of two elements by the monasteries, that the Middle Valley of the Ebro lack, the iron and the salt. Above all, the monasteries from

²⁷ Ibidem: 336.

²⁸ Ibidem: 124.

the beginning were dedicated to obtaining these materials so important for the day to day life in the society.

Kings, nobles, and lords drove the construction, foundation or refoundation of monasteries. Families like the López de Haro, characters like Fernán González or the kings of León, Castilla, and Navarre, seek, from patronage, to establish or strengthen their power.

On this original site, which may be a noble or royal donation, a process of patrimonial accumulation is initiated through three forms of acquisition: donations, purchases and swaps. In this context, there are three agents that will carry out this type of transactions: the monarchy, the nobility and individuals.²⁹

Within these monasteries, we have the *scriptoria*, authentic machines perfectly greased for the elaboration of the *codex*, the most lucrative business of the Spanish monasteries. It is the Abbot who decides the number of *codex* that are elaborated and the theme of them, since it controls the finances of the monastery, with the exception of the *codex* that are made at the request of other religious or lay clients. Since the 10th century, it is an enormously lucrative business but it required many people to make a single book. To prepare it first, the parchment which would be worked on had to be prepared and once it was finished, work that could last several weeks began, the notebooks were made by sewing them together. Next, they were written and decorated with monochromes or polychromies, the work was finished by placing wooden tops with leathers and bronze rivets on them. The *codex* has been able to sustain some fifty people (lay and religious) with work; hence, its trade was enormously lucrative since, the expense, was massive. Possession of a book was another symbol of status, as was the possession of relics.

The traffic and the purchase-sale of relics was the other of the great businesses in which the Spanish monasteries were involved. We will not start the debate about the truth or falsity of the relics, but it is necessary to understand that their possession allowed the monasteries to become authentic centers of pilgrimage and that they came to determine which monasteries were more economically powerful and which were not. Obviously, this caused a part of the clergy to be corrupted to obtain greater economic benefits. These relics generated social cohesion³⁰ within the community in which they were worshiped, generating a sense of identity to which the neighbors clung, granting greater economic amounts for the cause. They came to pay real fortunes for their transit from one monastery to another or for the purchase of the same.

²⁹ Paz Moro 2013: 31.

³⁰ Martínez Pérez 2016.

In addition to the trade of relics and the elaboration of *codex*, we see how private donations increase the ecclesiastical treasure and employment of silversmiths, carvers and goldsmiths in the process.

The economy of the lords and Fort-Towers as a symbol of power

From the 11th century there is an increase in property movements and we see how the classes with economic power accumulate assets and wealth. Many times, we do not have direct documents of the economic power of certain civil lords, but we do know it thanks to the documents of donations made to the monasteries. Due to this fact we can determine that more than 95% of the lands belonged to civil or ecclesiastical lords, with the communal lands being scarce, the power over the lands being what determines the power over the men. But it was not only the possession of the lands that determined the power of the privileged estates, it was also the exemption from taxes associated with the ruling classes and the members of the church, perpetuating the medieval model for almost eight centuries. The privileged ones have to receive a greater economic amount in the case of murder or injuries by their neighbors or strangers, creating a huge gap with respect to the rest of the inhabitants.

The kings and lords will be ordained, by means of the *fueros*, to distribute lands and dispositions of repopulation to gain the favor of the local elites, who controlled the excellent positions in the villages in which they lived, and ecclesiastics. These measures will arrive between the 10th and 12th centuries as the reconquest progresses from west to east, beginning in the area of La Rioja Alta and ending in the surroundings of Aragón. To perpetuate them, they will have a hereditary character and will not be limited to land alone, but include buildings of different kinds, such as dwellings and fortresses of different magnitudes. Sometimes, the concessions were made for life, that is, in usufruct and there were disputes because the lords wantedthose advantages to remain as an inheritance, an aspect that the monarch had not granted. That is to say that, with this act of perpetuating the state of privilege for their relatives, what the lords are doing is laying the foundations for the future nobility.

Between the 11th and 15th centuries, we will have an architecture that will become an icon of unification between the military, administrative, social, political, and economic powers, the Fort-Tower; what determines that the ostentation of the military power will be an enormous source of income for the lords who maintained themselves thanks to the common people in exchange for protection.

The Fort-Towers is a defensive-military architecture that develops in the Middle Valley of the Ebro. They will be more popular from the mid-14th century before the Castilian Civil War and their construction will last until the late 15th and early 16th. The area with the highest concentration of Fort-Towers is La Rioja, where there are thirty-five of these towers. When the borders of the Christian kingdoms already have their limits in the southern zone, the Riojan strengths will lose importance and will gradually be abandoned. From the 12th century, the Tenencias model was popularized and a *Merino* would be put in charge of the administrative and economic control of the area (from which, sometimes, we cannot get to know its extension). Many of those *Merinos* will install their nerve center in those Fort-Towers.

They are built in the interior or in the vicinity of small towns, although they are part of the set of fortresses, acting as intermediate castles. Despite retaining their defensive function, we must not forget that they are the emblem of a new way of understanding fortifications, that is, as a point of military, administrative, economic, social and judicial control of an area and of the lord or family that owns it. It is well reflected in the following paragraph:

They intend to demonstrate their economic power and the distinction of their social status against the common people through the collection of taxes and rents. The simpler and cheaper bill than that of the great strengths allows the proliferation of this typology. Although there were restrictions for the construction of new fortresses and limitations for the repair of existing ones, the lords did not hesitate to do so by deliberately overcoming the royal dictates; forcing his vassals to work in deplorable conditions, even going against the fueros and other provisions that protected them. Like all fortifications, they will lose importance from the 16th century, although a large part of them continued with a prolonged use over the centuries, unfortunately it was not always with its original purpose.³¹

From these places the collection of the different taxes and fees which had to be contributed in each city was centralized and in the end they would serve as an investment both in the public coffers of the town and in the private ones of each lord.

During the 12th and 13th centuries, because of the *fueros*, the villages were attracting people of different nationalities and regions with greater economic power. There are documents where appear senior, dominus or prefectus who will be large owners who occupied the highest echelons of society, exercising political power on behalf of the king.³² As a measure to attract them, they are granted vineyards, sernas, lands and orchards for which they will have to contribute a tithe. These privileged men, with the passage of the centuries, will give place to the Hidalgos.

The knights were free men who were given some economic power to keep their horses and the weapons they needed for war. They could have a service at their charge to help them with the care of their assets. Some were exempt from paying some local

³¹ Martínez Espinosa 2016: 17.

³² Sesma Muñoz 1994: 124.

taxes and their power leads them to try to occupy the highest positions within local corporations. Those maintained their servants who enjoyed a better economy than the common people did.

In the 13th century, when the population was more settled, disputes began to appear between the high personalities of monasteries, cities and towns for the control of land and infrastructures such as mills and ovens. In the same way, there were also confrontations between the lords and vassals due to the increase in the pressure of the latter and the changes in the incomes that had to be paid, thus breaking the balance between all the pieces that made up the social mosaic. Despite everything, those families that had a superior status years ago, will continue to maintain it until the end of the Middle Ages in the 15th century, being in the positions of the local councils or in that of the dependent villages of the towns and cities, granting lands, properties, and strengths.

Conclusions

As we have seen throughout the previous pages, the medieval economy in the Middle Valley of the Ebro has an eminently agrarian base or rather the primary sector. We can distinguish two large separate areas, although not isolated from each other. In the zone of the valley, we will have greater importance of the agriculture and in the zone of the south, in the mountains, the cattle will prevail.

At first, it is a subsistence economy in which practically the entire population is occupied. Due to the increase of neighbors, they are forced to occupy new lands to maintain food production. The most cultivated products are the typical Mediterranean ones; olive trees, cereals, and vineyards, to which we must add the orchards and fruit trees. Irrigation systems such as ditches and canals, as well as mills and ovens were created to supply and process them.

Gradually, we will move from a system of small owners in which each family had a small vineyard, a cereal field, an orchard, and a dwelling, to a more unbalanced one in which large owners are generated that will aggregate the possession of the lands next to the kings and secular and religious lords. This gradual change will lead to discontent greatly increasing the number of lawsuits between lords and vassals.

The economy of the city will not differ in its base from that of the villages, since they remain eminently agricultural, but we must add a series of defining elements of them.

A series of royal provisions called *fueros* will be established through which economic, social and legal aspects will be regulated in the cities. One of the great novelties will be the appearance of the weekly market and the fairs that will dynamize the urban economy, attracting population and allowing the repopulation of the nucleus that had been depleted during the Muslim period. The main work activities will be grouped into guilds that will influence even the ergonomics of the city, creating specific streets or neighborhoods for the development of these professions.

The other great impulse of the cities and towns of the Middle Valley of the Ebro will be the Pilgrimage Route to Santiago de Compostela that brings with it the culture, art, society, and the existing economy in Europe, aspect that will be of great importance to understand the greater development of these towns compared to those that are not crossed by the Jacobean Road and the arrival of new neighbors who are trying to take root through exemptions.

The church, one of the privileged estates will accumulate a power that will not abandon throughout the Middle Ages and the Modern Age, becoming the estate in which others rest spiritually and economically.

They will base their wealth on the collection of some taxes and the exemption of others. They will be great owners, either through donations, or through purchases of land. They madre a complex structure, the monasteries were the elements that articulate the entire region. The most lucrative businesses that they will have will be the elaboration of *codex* and the relics with which they will obtain enormous benefits.

Finally, we have reviewed the economy of the lords who base their economic power on the possession of lands and forests that will accumulate along with the clergy 95% of the total of them. Like the previous ones, they will be exempt from taxes and will find in the defensive architecture called Fort-Towers the way to show their economic, social, administrative, cultural and political dominance in the area in which they are located. They are those that would occupy the main positions in the local administrations.

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SOME NEW THOUGHTS ON THE POLISH – HUNGARIAN COIN CIRCULATION IN THE 16TH CENTURY

Abstract: This paper tries to open up the discussion about the Polish-Hungarian coin circulation. It was a bit ignored topic in the near past, but the rising number of the newly found Polish coins made the revision of older literature necessary. We have faced a problem that Polish-Hungarian coin circulation is not that simple and well-known that we had thought earlier. However, this paper is not a solution for the above mentioned problem, it tries to give an update about the current phase of the studying of this topic.

Keywords: coin circulation, Polish-Hungarian, dating with coins, monetary history

The 16th century was a very important period in the history – especially economic history – of Europe. It was the age when the emergence of the "central-perimeter" order of regions had taken place. This process has created the situation that forced countries to figure out and perform their economic strategies. The rise of arts and sciences, the experience of the new discoveries opened new horizons. However, Central-Europe faced other challenges – the Ottoman threat, expansion of the Habsburg-dynasty etc., we must treat Europe as a whole economic system. The active international coin circulation was an important part of this system. Hoards are signs of the above mentioned coin circulation.

Although, the rise of European economy had obvious advantages, it created many other problems either. The so called Price Revolution and the increasing international trading started to move away from political structures. Governments had to reinvent themselves. In the following paper, we would like to give a short brief of the Polish-Hungarian coin circulation and its effects on the two involved kingdoms.

Research history

This topic – circulation of Polish coins in the Hungarian Kingdom – was studied by several scholars. We would like to start the list with Adorján Divéky.¹ He published Prince Sigismund's account books from the period when he lived in his oldest brother's (Hungarian King Wladislaw II between 1490 and 1516 AD) royal court. Lajos

¹ Divéky 1914.

Huszár collected and studied the relevant written sources to reconstruct the qualities of the Polish coin inflow during the Hungarian Early Modern Age (16–17th centuries).² István Gedai published his paper about the statistical analysis of Polish coin hoards from the Hungarian National Museum, Numismatic Cabinet's collection.³ István Draskóczy wrote an article about the Polish salt's import and its prices.⁴

Methodology

The appearance and the circulation of the Polish coins during the Hungarian Early Modern Ages is a fact. Both written sources and coin hoards prove them. The list of questions and problems starts when we would like to ask for more details. First, we must explain the known methodological problems.

In the 16th century Hungary, many laws, orders or other governmental or legal written memories mention the case of "Polish coins". It became an urgent issue around the middle of the century and reached its peak in the 1570's. The biggest problem with them is that we have no specific information on their accurate effectiveness. Later, we will explain it a little bit more.

Coin hoards are the other group with other problems. We can observe and separate a definite horizon of coin hoards from the time of the fifteen years war (1591-1606 AD). It was a huge and meaningful cornerstone in the life of the departed Hungary. This war closed the 16th century Hungarian economic golden age. Many hoards – including really big ones (more than a 1000 pieces) had been buried during this period. The problem is their dating. The year sign from the closing issue offers only a terminus post quem dating. It is clearly a big thing, but the average structure of hoards shows that the youngest group is usually the smallest one at the same time. Another case is that the terminus post quem dating can or cannot be more detailed. We can combine that with the written sources to expand the set of information, but it is simply not enough in many cases. There is a solution which can date the hoard itself better without the limititing effect of the closing issue and its dating. Our inner chronology theory is based on the method when we separate coins in a hoard by their issuing decade. Of course, it is more effective if we can analyze bigger hoards. It takes more time and work, but we can observe different groups, separation in time or space. If we get closer to the understanding of the structure of a hoard, we can compare it to other hoards to carry out a statistical analysis. The inner chronology can provide us information about the coin circulation and the process of collecting pieces together. Obviously, we must handle the variety of transactions, wealth status and many other circumstances that lead somebody

² Huszár 1969.

³ Gedai 1985.

⁴ Draskóczy 2009.

or a group to bury these coins in their exact location. If we think that a chaotic period lead to bury treasured wealth to the ground, we face a really big problem. What can a randomly chosen human bury? Obviously, everything they have at that exact moment. According to the study of coin hoards, we can state that they can vary in denominations, emission years, issuing rulers and/or mints etc. There are older – even decades older than others – coins, which are in use at the burying moment. Of course, there is a cause and effect connection between the coinage and the structure of a hoard, but we must emphasize that a collection of numismatic artifacts is more likely the result of a process and its point-like aspect should be only secondary. These thoughts seem to be useless, but we think that these factors are important when we would like to study the coin circulation (cause) using coin hoards (effect).

Coin circulation

In this paper, we would like to examine the circulation of Polish coins in the Hungarian Kingdom during the 16th century. It starts with issues from the second half of the 15th century. This group is not the biggest one, but its presence is obvious. The hoard from Mezőkövesd and Kunmadaras-Repülőtér contains half grains from Wladislaw Jagiellon, Casimir IV and John Albert. If we take King Alexander's issues into consideration, we can say, that an independent group is observable. This is the class of the "pre-Sigismund I" period. It starts around the middle of the 15th century – depends on the opening issue of the hoard – and lasts until Sigismund's coronation in 1507 AD. These coins do not have specific year signs, and they are mostly half grains. Their arrival can be connected to the trading between Poland and Hungary and Sigismund's stay in the royal court in Buda.

The Hungarian Jagiellonian reign (1490–1526) is a two-faced period. King Mathias I's death created a confused inland political situation. The succeeding process was not easy, but Wladislaw made it and became the second with this name in the Hungarian throne (1490–1516). His reign was not as bad as the later, mainly narrative sources describe it, but he had to solve many problems. The big picture of the Hungarian economy looked right after King Mathias' reforms (1467), but a Europe-wide mining crisis (many mining sites had been covered under ground water) affected very badly his coinage and his related income.⁵ King Wladislaw II could not solve this problem fully, therefore the empty treasury has been inherited by his son, Louis II (1516–1526). One of his advisors, Imre Fortunatus, worked out a monetary reform. His idea was that the royal mint halves the silver content of denarii, but also sets an artificial and mandatory exchange rate. King Louis II started to perform this monetary reform in 1521, but it became a totally disaster quickly. The reform is called as "moneta nova reform", because the population started to separate the "older (good) one aka

⁵ Gyöngyössy 2008: 31-35.

antiqua moneta" from the newer ones "moneta nova".⁶ Despite its cancellation in 1525, the monetary catastrophe had already happened. The chaos was topped by the Battle of Mohács in 1526 which ended with King Louis's death. The Hungarian royal army was defeated by the Ottomans. Many noblemen died and the Ottomans started to expand the sphere of their influence.

Next year, two men became the King of Hungary at the same time: Ferdinand (1527-1564) and John Zápolya (1527-1540) (as Ferdinand I or rather John I). The period between 1527 and 1540 is called the age of two kings. Their political and military fight with each other was a civil war as well. The local elite strengthened its political and military power which was closely connected with economic power. The government needed more and more taxes as the fight continued, but the economic prosperity decreased gradually. There were many wrong coins in the circulation and counterfeiting appeared as well. We can agree with Zoltán Gálocsy's statement that the population lost their trust in Hungarian currency.⁷ These factors resulted in the next huge inflow of Polish coins in the 1530's and 1540's. It is clear when we take a look at the hoards from Mezőkövesd and Kunmadaras-Repülőtér.8 The two decades mentioned earlier were important in the life of the Polish Kingdom too. After the Polish-Teutonic war (1519–1521 AD) and the treaty of Cracow (1525) had to integrate the coinage of his vassal nephew, Albert of Brandenburg, the first prince of Prussia. The process ended in 1530. A remarkable amount of Polish (and Prussian) coins – grains and half grains - arrived in the area of the Hungarian Kingdom and started their career in the Hungarian domestic coin circulation. According to our latest information, this inflow period dominates the Kunmadaras-Repülőtér hoard which is one of the biggest relevant hoards from this period.9

King Sigismund's death (1548) is a milestone in the Polish-Hungarian connections. His oldest son, Sigismund August succeeded him on the throne. The new king's foreign policy, especially in connection with Hungary was a little bit different. Meanwhile, The Hungarian Kingdom became a battlefield and had been divided among the Ottomans, The Habsburgs and John Zápolya II.¹⁰ The Carpathian-basin had been the end of the Ottoman expansion, so Sigismund August could perform his non-intervention policy¹¹ and focus on his country.¹²

⁶ Gyöngyössy 2017.

⁷ Gálocsy 1905: 91.

⁸ We have only preliminary results.

⁹ Nagy 2019; Nagy et al. 2019: 11–22.

¹⁰ His territory finally transformed into the Principality of Transylvania.

¹¹ Brzezinski 2016: 213–217.

¹² This paper is not a platform to study foreign affairs from this period, so i just mentioned some cornerstones or mandatory information.

I must highlight the 1570's decade as the peak of the governmental step up against Polish coins. There are many factors that indicated this strengthened express of power. However, the problem of Polish coin inflow existed for a longer period, the Hungarian economy needed time to recover after the inland military campaigns, and the Habsburgs attempted to get the Polish throne after Sigismund August's death in 1572. It ended up as something between a total failure and a controversial result. I must emphasis to present some Polish opinions and thoughts on Hungary and the Habsburgs. Generally, we can say that there was a strong empathy toward the Hungarian inhabitants (!), but there was a significant antipathy against the royal court and its dynasty. Hungary also became an example, a tool in the controversy between the reformed churches and the Catholicism. The latter one pointed on their southern neighbor as the result of turning away from God.¹³

The Habsburgs' dynastic interest and Hungarian economic need (ending this monetary problem once and for all) became connected, which became obvious during the 1570's, if we check the memories from diets. It became clear, that the Polish coin inflow is harmful from the Hungarian aspect, but the government could not find a sustainable solution. They attempted to revise the exchange rate,¹⁴ and being with the permissive monetary situation.¹⁵ The Hungarian orders represented another opinion. They urged the King to intervene in the coin circulation and exclude the Polish coins from the Hungarian Kingdom.¹⁶ In the end, the sanctuarized laws (XX/1574 and XIX/1578) declared the exclusion of Polish currencies and ignored the exchange rate revision.¹⁷ This declaration represents the power and nescience of the Hungarian orders. They focused on their current situation instead of pursuing the monetary consolidation and forcing the Habsburg establishment to perform a structural monetary reform. Their ignorance resulted in a constantly bad and disadvantageous monetary system which preferred bigger denominations opposite to the smaller ones. It drove the everyday life into a situation that required foreign currency to keep itself sustainable.

Case study: Kunmadaras-Repülőtér Polish hoard¹⁸

This hoard is really special. On the one hand, it is really useful in studying the Polish coin inflow in Hungary during the 16th century. On the other hand, it can rewrite

¹⁷ https://net.jogtar.hu/ezer-ev-torveny?docid=57400020.TV&searchUrl=/ezer-ev-torvenyei%3Fkey-word%3D1574 (accessed at 18:59 18.05.2020); net.jogtar.hu/ezer-ev-torveny?docid=57800019.TV&searchUrl=/ezer-ev-torvenyei%3Fkeyword%3Dlengyel%2520p%25C3%25A9nz (accessed at 19:00 18.05.2020)

¹⁸ This case study focuses on only cornerstones and only the relevant qualities.

¹³ Tazbir 1988.

¹⁴ MOE VI. 1883: 6; 14.

¹⁵ MOE VI. 1883: 14.

¹⁶ MOE VI. 1883: 9; 18.

or confirm many older suggestions. These coins were unearthed during the construction of a fire extinguisher reservoir for a grain silo in May 2018. This silo is located near the abandoned soviet military airport. The Damjanich János Museum got a sudden phone call from one of the investors of the grain silo. Unfortunately, the earthwork was limited to a relatively small area, so the hoards exact archaeological context is not widely known. Zoltán Polgár, the chief archaeologist of this validating excavation observed clues of medieval-early modern age objects, but there was no opportunity to start a professional excavation.

The hoard contains approx. 7500 pieces (current closing emission is a triple grain by Sigismund II from 1591), mostly grains and half grains. We have only preliminary results, because the conservation, registration, and the studying process takes so much time. In the following sections, we will focus on the registered 350 coins. Our conclusions and suggestions refer only to the actual sample size; therefore, they should be used carefully and within their context.

First of all, our registered coins show that the structure of the hoard differs from the average Hungarian coin hoard structure. It has no domestic issues in it which is not so common for this period. This kind of homogeneity is unique compared to the size of the hoard. I was faced with the first general question: it is a collected treasure (long-term procedure) or we have found a 16th century "coffer" (point-like event). Unfortunately, it cannot be decided yet. The structure of the hoard shows a kind of longevity if we are taking emission dates into consideration and do not count with the spent time in the coin circulation. The latter one is a variable and really difficult to determine exactly. On the other hand, the hiding procedure is a point-like event and the similarity of denominations supports the counter-theory of the longer treasuring theory. We support a moderate standpoint that says that these coins were treasured somewhere,¹⁹ but they were in use when the hiding procedure became mandatory, hence we found these artifacts in a secondary position.

This hoard is dominated by Sigismund the Old's and Albert of Brandenburg's issues. Although, we registered many grains from these two rulers, we had to deal with some problems. This coin hoard is a good depiction of the Polish-Prussian monetary rivalry and the changes in the Polish domestic monetary system.²⁰ It could be a really good thing, but our observations tell us something special: the issues of this hoard "could not react" as fast as the written changes had been performed. Despite the possible alternative opinions, the hoard "reacted" faster than we can observe in a usual situation. We can say that according to the known part of the Kunmadaras hoard, these coins had

¹⁹ The average condition of the coins in good-very good. Only half grains show obvious signs of the use. They are more worn than grains, but they are older in general.

²⁰ For more information: Nagy et al. 2019: 25-27.

been gathered together systematically, but we can also deny the theory, that we are dealing with an intentional coin collecting activity.

Last but not least, we would like to make an excursion about the future of the study of this hoard. Despite the discursive discussion of the case study, these coins have an essential importance to the studying of the Polish-Hungarian coin circulation during the Early Modern Ages. We are facing a really difficult, but noble challenge to order the information we know about a very complex system. However, the topic is kind of well-studied, only parts of the mentioned system had been detailed. We have to put the pieces into their right place and expand the mosaic into a bigger picture. Our previous studies and the Kunmadaras-Repülőtér hoard revealed that this topic is way more difficult and detailed than we have known before. This paper is only a small part of the whole.

Abbreviations

MOE VI - Magyar Országgyűlési Emlékek vol. VI.

Sources

1000ev.hu (collection of laws, relevant sections)

MOE VI. 1883 - Monumenta Hungariae Historica 3. Monumenta Comitialia regni Hungariae 6. Vilmos Fraknói (ed.). Budapest.

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We would like to present ten articles by young researchers from Italy, Greece, Austria, Spain, Turkey, Hungary, and Poland concerning particular aspects of numismatics and economy.

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The articles direct the reader's attention to various issues involving aspects of numismatics such as propaganda, coin finds, circulation in certain territories, and denominations. Due to the broadening of the subject of the conference, the publication includes articles dealing with issues related to economics. The subject matter of this publication focuses mostly on aspects of antiquity, the mediaeval and modern ages periods.

