

Economic Changes in the Early Hellenistic
Kingdoms of Macedonia and Thrace

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Abstract

The end of the fourth century B.C. saw large-scale political overhauls with powerful monarchies replacing the former *polis*-centred Greek world. With these political changes came economic changes. Evidence around the Greek world at this time shows expanding number and shifting roles of market officials, the foundation of urban centres, and changes in land distribution. The kings, starting with Philip II, played significant roles in many of these developments. Macedon and Thrace, however, offer less evidence for such changes than other regions. New archaeological evidence, however, of amphoras produced near ancient Mende shows a clear difference between earlier practices of organizing amphora production and those practices from the late fourth century. The changes in amphora stamping show an increase in personal accountability and complexity of organization thereby providing substantial detail to the more general evidence for economic change Macedonia and the Chalkidike.

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Abstract	i
Acknowledgements	ii
List of Tables	iv
Chapter 1: Introduction	1
1) History of Research	2
2) The Thesis	6
Chapter 2: Early Hellenistic Economies: Kings and Cities	10
1) Sources and Evidence	11
a. Epigraphy	12
b. Literature	13
c. Archaeology	14
2) Administrative Institutions and Officials	15
a. <i>Agoranomoi</i> : Classical Period	15
b. <i>Agoranomoi</i> : Hellenistic Period	17
c. <i>Astynomoi</i>	23
d. Taxes and Tribute	25
e. Trade	28
3) Results of Royal Intervention	34
a. City Foundation and <i>Synoikismos</i>	34
b. Land Control, Grants, and Intervention	40
4) Conclusions	47
Chapter 3: Amphora Stamps and Ceramic Evidence	50
1) Amphora Stamping	51
2) Research History of Amphora Stamps from the Kassandra Peninsula	54
3) Mendeian Stamping Practices	59
a. Classical Mendeian Stamps	59
b. Monograms	63
c. Name-Stamps	65
d. Stamped Jar Stands/Supports	69
4) Stamp Dies	72
5) Conclusions	75
Chapter 4: Conclusions	79
Catalogue	86
Tables	140
Bibliography	141

List of Tables

Table 1: List of Stamps with Multiple Occurrences and their Die-Counts	140
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Chapter One

Introduction

“Something is known of their administrative system and of their relations with the Greek cities that lay within their boundaries and outside them, but there is no trustworthy evidence, either literary or epigraphical, to throw light upon the changes in the economic and social system of the country.”¹

Thus Mikhail Rostovtzeff describes the socio-economic situation of Early Hellenistic Macedonia in *The Social and Economic History of the Hellenistic World*. Rostovtzeff assumes that there was economic change based on his examination of the Ptolemaic and Seleukid kingdoms during this period, but it is clear that this change could not be seen in the Macedonia. Less than fifty years before the period discussed by Rostovtzeff, Philip II (r. 359-336 B.C.) oversaw significant changes to Macedonia, which have even been considered ‘revolutionary’.² These included social and economic changes both as direct intervention and as a consequence of broader political changes. The expansion by Alexander III (r. 336-323 B.C.) across the Achaemenid Empire saw the interaction of multiple cultures, with the spread of Greeks and Greek culture eastwards led by the Macedonian dynasties created after Alexander’s death in 323 B.C. This thesis seeks the “trustworthy evidence” that Rostovtzeff is concerned with when examining the other Successor kingdoms: literature, inscriptions, and archaeology. Scholarship of Macedonia and Thrace in all of these fields was lacking at the time Rostovtzeff was writing, but this thesis will use the abundance of new evidence from these fields to prove that there were economic changes in Macedonia and Thrace during the Early Hellenistic period.

¹ Rostovtzeff 1941, p. 250.

² Hammond 1989, p. 153. For Philip II’s reign: Hammond and Griffith, 1979; Gabriel 2010; Anson 2014.

1) History of Research

Rostovtzeff covers the economies of the Ptolemies and Seleukids in almost 300 pages.³ The economic situation of the Macedonian and neighbouring Thracian kingdoms of Kassander, Lysimachos, and even the later Antigonids, however, is covered in a mere five pages.⁴ He admits that there is little evidence at the time from which to draw, although he also concludes that there were no changes in this region. It was “a country of tribal, almost feudal, structure, under a king who owned large domains in Macedonia proper”.⁵ His work, one of the earliest to incorporate archaeological evidence, recognized the existence of the estate-owning aristocracy. Ultimately he concluded that Antigonos I and his future dynasty worked to develop the revenues of his state.⁶ He believed that economic developments and a certain level of economic rational motivation were normal in Antiquity. However, Rostovtzeff’s conclusions about the Antigonids did little to demonstrate the economic changes of the Macedonian-Thracian region. Although he provides examples of economic development in the Ptolemaic and Seleukid kingdoms, the brief section concerning the Northern Aegean reveals a gap in the knowledge of economic development.⁷

Moses Finley took the opposite view of Rostovtzeff’s belief in economic changes, developments, and growth. This lack of development coincided with his views that the ancient Greeks and Romans did not have an economy, in our broad sense of the term. Thus [Aristotle] “wrote no *Economics*”.⁸ They did not conceive economic concepts like supply and demand,

³ For further reading on the life of Rostovtzeff and the Marxist theory that pervades his work see Bongard-Levin 1999, Momigliano 1954, Reinhold 2002, and Wes 1988.

⁴ Rostovtzeff 1941, pp. 250-255; see pp. 255-551 for his sections on the Ptolemies and Seleukids.

⁵ Rostovtzeff 1941, p. 250.

⁶ Rostovtzeff 1941, pp. 252-253.

⁷ See also: Rostovtzeff 1922 and Rostovtzeff 1936.

⁸ Finley 1973, p. 21; see also: Finley 1965, 1970, and 1977, and Andreau 1977 and 2002 for more on Finley’s works.

investment, or capital nor did they take much care in keeping track of numerical data.⁹ Growing and selling cash-crops for the marketplace was not something that wealthy landowners would consider, as capital or investment (like purchasing land for the sake of growing cash-crops) was non-existent. For Finley, the modern concept required a “conglomeration of interdependent markets”, a phrase often repeated in his introductory chapter.¹⁰ While inter-state trade might have existed, it was not incorporated into society in a systematic fashion. Most importantly for this thesis, Finley claimed that production was essentially at the same level throughout Antiquity.¹¹ Since there was no economy, according to Finley, there could be no economic history of Antiquity, hence there were no notable changes.

In opposition to Finley’s rejection of economic history, Zosia Archibald’s *Ancient Economies of the Northern Aegean: Fifth to First Centuries B.C.* is an economic history of the Northern Aegean over several centuries.¹² Her work expands greatly on the economy of the areas in which Rostovtzeff could not say much. Archibald’s work combines the various literary sources, but takes them in context with a vast body of archaeological material from the North Aegean. Finally, Archibald synthesizes a wide sample of evidence including literary, epigraphic, and archaeological sources. While not a revolutionary methodology at the time, Archibald’s ability to combine various types of evidence shows the shifting trends towards this methodology in broad economic studies of Antiquity. A major theme throughout the work is that the Northern Aegean should be viewed as “a network of socially and politically interdependent and interlinked

⁹ Although evidence for keeping track of such figures exists, they were related to keeping track of land and its production for the “absentee landlord”, see Saller 2002, p. 255.

¹⁰ Finley 1973, pp. 22-23.

¹¹ Finley 1973, pp. 19 and 83.

¹² Archibald 2013.

units”, rather than a single political unit between the fifth and second centuries B.C.¹³ The topic of “royal economies” is considered but the actual changes brought about by the rise of the Macedonian successor states are not explicitly stated, and are instead viewed in relation to the Roman conquests and incorporation of Macedon into the Roman state. Nevertheless, the discussion of a royal economy is important. This is because, in contrast to the Finleyean tradition, the existence of a royal economy suggests that there was some economic development because the kings wanted a profitable royal economy. While modern research of Northern Aegean economies such as Archibald’s has gone against the views of Moses Finley by accepting the existence of a rather sophisticated economy, there is still a gap concerning the developments that occurred under the Hellenistic kings and as a result of kings.

Studies of Hellenistic economies have shifted towards a view more contrary to Finley. A common criticism of the Finleyean tradition was seen in the attempt to create an economic model for 1500 years of history.¹⁴ Regionalism and synthesizing different types of evidence have become increasingly important in modern studies, although epigraphic and literary evidence still remains the most popular sources because of their relative quantity and somewhat clear presentation of the situation.¹⁵ An interest in determining economic performance has led to the search for quantitative data and has driven modern studies, with the view that quantitative data can illustrate changes and trends in various economic systems.¹⁶ Ancient economic historians do not shy away from trying to measure per capita consumption rates.¹⁷ While many problems are associated with trying to determine such a complicated matter in antiquity, the increased interest

¹³ Archibald 2013, p. 20

¹⁴ Hopkins 1983, pp. xi-xii; Andreau 2002, p. 34; see also Horden and Purcell 2000.

¹⁵ Davies 2001, p. 16.

¹⁶ Andreau 2002, pp. 37-38; for example, see Duncan-Jones 1982. Morris, Saller, and Scheidel 2007, p. 7.

¹⁷ Morris, Saller, and Scheidel 2007, p. 6.

in this data shows a shift in contemporary research. The possibility for economic growth in Antiquity is now seen as very likely in modern scholarship. Increased archaeological work in various regions, and with more carefully recorded excavations, has probably played an important role in this modern paradigm shift. Further, the idea that economies were driven by individual motivations is also important in post-Finley scholarship. Whether it is kings being examined or private individuals, the actions of economic activity and developments should be viewed as the results of various individual motivations driving these changes.¹⁸

The use of various economic models has become increasingly common in the study of ancient economies, including New Institutional Economics (NIE).¹⁹ NIE provides the “opportunity to reconsider institutional aspects of the ancient economy that may initially strike us as bizarre or even counterproductive”.²⁰ Institutions in this framework are defined by Douglass North as “regularities in repetitive interactions among individuals”.²¹ These provide the individual some reassurance that certain repetitive interactions and exchanges will have a predictable outcome. NIE often focuses on the impact of institutions concerning costs associated with production, search, and transactions. Transaction and search costs within markets, for example, include activities such as finding a buyer/seller, reaching some agreement on price and quantity, and other such tasks which require time, effort, and sometimes even money.²² In a similar vein, production costs may include the introduction of new technology, which changes the organization of a production process. Generally, the rules of these repetitive actions (i.e. institutions) are viewed as lessening transaction, search, and production costs in order to make

¹⁸ Archibald 2001, p. 4.

¹⁹ For N.I.E. see North 1986; Coase 1998; Scheidel, Morris, and Saller 2007.

²⁰ Frier and Kehoe 2006, p. 142.

²¹ North 1986, p. 231.

²² Frier and Kehoe 2006, pp. 117-118.

economic activities more available to more individuals.²³ The idea of transaction, search, and production costs is just one of several more modern economic ideas that scholars of Greco-Roman economies have applied to their studies. Caution should be used when applying modern economic theories to ancient societies, but models like NIE are useful because they provide a society-based foundation for explaining economic processes and organization.

2) The Thesis

The following chapters of the thesis will present a synthesis of evidence in order to understand economic changes. Chapter Two will provide an examination of the epigraphic, literary, and non-ceramic archaeological evidence. This will provide the context of economic and related social changes in the Northern Aegean during the fourth and third centuries. This evidence supports Rostovtzeff's view that a considerable number of changes occurred in various parts of the Mediterranean during the Early Hellenistic period. The continued appearance of economic officials and the changes to these magistrates suggests an increase in the organisation of market transactions. The Hellenistic period also experienced an increase in urbanization, and evidence for changes in land ownership and distribution.²⁴

Chapter Two will also examine how much influence the new Hellenistic kings had on economic processes. It is unlikely that kings had a direct influence on every aspect of the economy. The evidence will demonstrate that they had both a direct influence in some aspects including food supply, infrastructure, and city foundations and an indirect influence in certain aspects like the imposition of taxes and the redistribution of land. Kings were constantly waging wars and the need for money increased during this period. This need for tax-money may have

²³ Frier and Kehoe 2006, pp. 118.

²⁴ Cohen 1995, p. 15; Aperghis 2005, p. 27; Bintliff 2012, p. 318.

been a reason for economic changes in various activities, as private individuals and cities needed to raise taxes and tributes for kings. The kings also united previously independent territories into unified kingdoms and this likely changed the administrative and economic foundations in these regions.

The evidence presented in Chapter Two will draw from various types of evidence that are available in other regions of the Hellenistic world. The Northern Aegean, however, does not have a wealth of epigraphic and literary evidence like other regions. It does have considerable amphora evidence which provides evidence for changing practices in aspects of amphora production. One such region, around Mende and the greater Chalkidike, is an example of the abundance of ceramic evidence and will be a main topic for this thesis. Amphoras could carry a variety of goods and their hardiness ensured their survival to the present day in considerable numbers. Scholarship on amphoras (examined in Chapter Three) has managed to identify and organize typologies and chronologies for various regional and *polis*-based amphoras.²⁵ A number of amphoras were stamped or marked in some fashion, typically on the handles, with various images, letters, and names.²⁶ Much like the amphoras themselves, the stamps have received a great deal of scholarship, perhaps even more. They have been assigned chronologies, places of origin, and even some theories of who stamped them and why they were stamped. Amphora markings have their origins as early as the ninth century, and continue into the Hellenistic period. Sometime in the last half of the fourth century, however, stamping practices began to change in the Chalkidike. A nearly unbroken sequence of stamping practices can be traced through the Classical period to the Hellenistic period, with the emergence of the “Parmeniskos Group” sometime in the late fourth or early third century B.C. These stamps are found at Mende, but

²⁵ E.g. Grace 1949, 1956, 1971, and 1979; Grace and Lenger 1958; Garland 2000.

²⁶ Lawall 2005, pp. 197-198.

there are also large numbers of published and unpublished stamps of this group from the Athenian Agora and other sites. The material from the Athenian Agora and from a Mendeian kiln-site will provide the bulk of the amphora stamping evidence for this thesis. A number of stamped amphoras and amphora stands have been excavated at a Classical and Hellenistic kiln site at Poseidi near Mende: thus one can trace changes in stamping practices and their relationship to increasing complexity of economic processes. These stamps provide potential evidence for changes in the production of basic goods (namely, amphoras and their contents) in the new Hellenistic kingdoms of the northern Aegean.

The thesis concludes by bringing the amphora evidence together with the evidence from textual sources and settlement archaeology and surveys, in order to determine the extent to which one can show economic change in Early Hellenistic Macedonia and Thrace. There is evidence for changing economic practices throughout the Greek world during the Early Hellenistic world, and even the sparse evidence in Macedonia and Thrace seems to point in the same direction. The increasing organisation of amphora production can be examined in terms of broader economic developments related to changes in agricultural practices and the evidence for royal and civic economic institutional changes presented in Chapter Two. The amphoras were used to move agricultural goods from one place to another, and the efforts to improve production efficiency suggest an increased focus on managing surplus, transporting goods to markets, and interacting at markets. This would raise the needed cash to pay the new tributes to the kings. Such civic efforts to organize markets allowed for the conversion of more agricultural surplus to cash which could either be directly taxed in order to raise tribute or so nearby farmers could raise the cash to pay their civic taxes.²⁷

²⁷ Hopkins 1980; Aperghis 2004 and 2005.

Mikhail Rostovtzeff identified economic developments in the Hellenistic world, but not specifically Macedonia and Thrace. This thesis, operating within the post-Finleyan tradition, seeks rather to explore economic organization, processes, and even performance rather than trying to understand the motives and economic rationality/irrationality of ancient societies. Therefore, this thesis provides the evidence for economic change or development in these regions and proposes that there was a need for people to raise cash by selling off crops in the markets in order to pay the taxes levied by the new kings in the Greek world.

Chapter Two

Early Hellenistic Economies: Kings and Cities

Rostovtzeff believed there was some level of economic change and growth during the Hellenistic period, but the extent of regional growth compared to growth in “the Mediterranean world” remains in question. Furthermore, there is the question of whether this change and growth is attributed to the Hellenistic (and immediately preceding) period, or whether the changes were a continuation of earlier changes in various locations.²⁸

The chapter begins by examining several magistracies that existed during the Classical period and continued to operate through the Hellenistic period albeit with changed roles in the city. This assessment will show possible changes to the roles of these magistrates from the Classical period to the Early Hellenistic. This will illustrate how these magistrates were becoming increasingly important in the economic efficiency and operation of these cities so that various transactions could be completed smoothly.

The institutions of taxation and trade will be examined following the examination of magistracies. These sections will begin the transition towards the evidence for more direct proof of royal intervention in the economy. The changes and continuation of taxes on both *poleis* and individual citizens will begin the investigation into how the kings were increasingly concerned with raising cash from their subjects. In a similar vein, the idea of royal trade and how kings may have sought to improve this sector of the economy will also be examined.

The Hellenistic period also saw the increasing number of cities along with the combination of several cities into larger ones (*synoikismos*). The creation of massive urban centres not only had political and military effects, but certainly economic ones. New cities meant

²⁸ Manning 2007, p. 459; Van der Spek 2007, p. 433.

the creation of industry and jobs, the centralization of the agricultural workforce, and becoming centres of taxation and tax-collection.²⁹

Finally, the changes to land distribution and farm-structures will be examined. The reign of Philip II (r. 359-336 B.C.) saw the beginning of the increased urbanization and the centralization of agricultural activity, which continued even more into the Hellenistic period. The appearance of larger estate-like farmhouse-towers in commanding locations suggests a change in social order as well as economic activity. Many share similarities with evidence for large storage capacity and the production of cash crops like wine and oil. The towers suggest the development of a market-based agricultural economy, again centred on the need to raise money for various taxes owed to the king.

The evidence examined in this chapter will show changes in various elements of economic activity during the Hellenistic period. Much of the evidence is from regions beyond Macedonia and the Chalkidike, which highlights the scarcity of literary, epigraphic, and archaeological evidence in Macedonia. Once the various general changes are examined in this chapter, the amphora evidence in Chapter Three provides the evidence for changes specifically in the Chalkidike during the same period.

1) Sources and Evidence

A brief discussion of the sources will highlight the problem of their scarcity in the Early Hellenistic period. Nevertheless, there are still other valuable sources of evidence for the Hellenistic period. Epigraphy is increasingly important through the Late Classical period and into the Early Hellenistic period. This period has also benefitted from a large amount of recent

²⁹ Cohen 1995, p. 15; Aperghis 2005, p. 27; Alcock 1994.

archaeological work. Literary sources directly addressing economic matters are rare for all of Antiquity, and the Early Hellenistic period also lacks a contemporary historical narrative.

a) Epigraphy

The amount of epigraphic evidence in the Hellenistic period well outnumbers the evidence from earlier periods, especially in Asia Minor.³⁰ There is no wealth of papyri in Macedonia, Thrace, and Asia Minor unlike the large quantities from Ptolemaic Egypt.³¹ This makes the inscriptions even more important for providing evidence for transactions, land sales, and other economic information in those regions. Indeed, epigraphy has allowed historians to construct a more faithful model of royal administration, *polis*-institutions, and socio-economic relations between kings and their new cities than would be possible by considering later literary sources alone.³² Many inscriptions examined in this chapter are reproductions of letters sent by kings to manage, directly or indirectly, the economic functions of the cities, including: land distribution, land development, land disputes between cities, issues with royal land, donations to cities, tax relief/imposition, control of resources, and loans. These letters show a considerable interest by the kings for the economic functions of their subjects.

The increase in epigraphic evidence might be attributed to the simple increase in the number of cities (and thus a higher proportion survives) and the desire of these cities to preserve “public records”.³³ Royal letters and decrees were especially important in resolving disputes concerning land distribution and grants. The importance of physically publishing these royal letters is that they may have been a source of pride for a *polis* in the event of a favourable

³⁰ Shipley 2000, p. 20.

³¹ See Bagnall 2009; Shipley 2000, pp. 196-201.

³² Hammond 1988; Hatzopoulos 1996; Billows 1990; Burstein 1980, 1984, and 1986.

³³ Shipley 2000, p. 21.

judgment by the king.³⁴ Publication made the inscriptions more visible and thus the king's ruling would not be in doubt as long as the inscription remained.³⁵ For example, after a dispute between Priene and Samos (*RC* 6 and 7 = *OGIS* 12 and 13), Samos published the favourable ruling by Lysimachos. The letter to Priene might not have even been published on stone, but rather was stored in the archives on papyrus because it was not a favourable ruling.³⁶ A letter from Antiochos III (r. 223-187 B.C.) to his viceroy concerning a major priesthood appointment includes a publication order (*SEG* 37.1010).³⁷ Such orders for publication appear to be, on the one hand, self-aggrandizing propaganda, but also ensured that important information about land disputes, or political appointments of magistrates and priesthoods, was never in doubt.

b) Literature

Written sources that specifically discuss economic matters are rare for any period of Antiquity. The *Oikonomikos* by Xenophon largely deals with the “private individual” and his economic activity, although it does touch upon agricultural diversity for market-production and the synthesis of the individuals with the *polis*-economy.³⁸ There is also a treatise on economic activity found in the pseudo-Aristotelian *Oikonomika*, written probably around the death of Alexander III.³⁹ The second book is of most interest here, since it deals with the four levels of economic activity. The author of this work clearly thinks that a royal economy existed, but excluded the incomes from agriculture, mining, and other such monopolies owned by the kings.

³⁴ Bencivenni 2014, p. 147.

³⁵ Welles 1934, p. xl.

³⁶ Bencivenni 2014, p. 147. It is also very likely the inscription simply did not survive, but Bencivenni notes that it is not engraved on the walls of the temple of Athena Polias, which preserved many other similar documents.

³⁷ Bencivenni 2014, pp. 150-151.

³⁸ *The Encyclopedia of Ancient History*, 2012, pp. 1-2, s.v. *Oikonomikos* (treatise) (T. Howe).

³⁹ *The Encyclopedia of Ancient History*, 2012, pp. 1-2, s.v. *Oikonomika* (treatise) (D.M. Schaps).

The literary evidence for the Early Hellenistic period as a whole is sparse and often relies on later references. Diodoros Siculus' work, *Bibliotheca Historica*, is one of the few complete historical narratives through the reign of Philip II to the end of the fourth century. Although Diodoros was not a contemporary writer, he relies heavily on contemporary sources of the age (now lost to modern scholars) such as Hieronymous of Kardia and Douris of Samos.⁴⁰ These narrative sources rarely address economic issues directly, however.

c) Archaeology

The discovery and excavation of the many cities and sites across the Hellenistic world has helped to understand their sizes, potential populations, and inferences on wealth and production. The city of Doura-Europos, excavated by Mikhail Rostovtzeff, helped shape his view of the Hellenistic world.⁴¹ One criticism that Moses Finley had of economic history was the lack of quantitative data and the claims made by using quantitative data where it is neither appropriate nor properly applied.⁴² Modern archaeology has worked in many different areas to provide this sort of data so that scholars might reach conclusions which provide more quantitative data. Excavations on smaller sites, like single farmhouses and the towers, and surveys that identify settlement patterns over broad regions across the Hellenistic world are just as valuable in determining the socio-economic composition of the countryside.⁴³ This

⁴⁰ Shipley 2000, pp. 7-9.

⁴¹ Cohen 1995; Aperghis 2004 and 2005; Rostovtzeff 1941.

⁴² Finley 1973, pp. 24-25

⁴³ Adam-Veleni 2009; Tsigarida and Vassiliou 2011; Tsigarida, Vassiliou, and Naum 2009; Morris and Papadopoulos 2005.

demographic information can be used to measure economic performance, and suggest the effect of kings on the economies through the programs of city-building and shifting of populations.⁴⁴

The field of economic archaeology can include various sub-fields and types of evidence. This includes numismatics, pottery, domestic archaeology, the study of human, animal, and plant remains, and many more. The amphora evidence is the important sub-field used in this thesis. The amphoras provide a focused case-study against which the “larger” sorts of evidence examined in this chapter, and the possibilities they present, might be tested.

2) Administrative Institutions and Officials

Some of the most useful evidence provided by textual sources and epigraphy are their details about various magistracies, economic laws, and taxation. However, in order to track potential changes in these areas, their existence and uses during the preceding periods must be examined first. The magistracy of *agoranomos* is the main official examined here, although it will be done with discussion of related officials. The growing importance and existence of the market officials is connected to the imposition and collection of various taxes. Magistrates in cities allowed smoother transactions. This would increase the flow of goods that could be taxed entering or leaving the *polis*. The ideas of taxes and trade are examined as institutions here with consideration to how economic changes could be related to the rise of the Hellenistic kingdoms.

a) Agoranomoi: Classical Period

The *agoranomoi* predate the Hellenistic period, and the most reliable knowledge about them comes from Athens, particularly in the *Athenian Constitution*. These magistrates, elected

⁴⁴ Morris, Saller, and Scheidel 2007, p. 7.

by lot, were “responsible for everything that is sold, to ensure that what is on sale is pure and without blemish” (*Ath. Pol.* 51.1).⁴⁵ Classical Athens had ten *agoranomoi*, who were split as five in Athens and five in the Piraeus, to go along with ten of each *metronomoi*, *sitophylakes*, and *epimeletai*; a fair number of men to oversee various functions in two markets.⁴⁶ Closely related to the *agoranomos* is the *metronomos*, responsible for the “care of all the measures and weights, so that the sellers use just ones” (*Ath. Pol.* 51.2).⁴⁷

The function of the *agoranomoi* is also discussed in Plato’s *Laws*. Their responsibility includes the protection of the market space from vandalism with the power of imposing fines (*Pl. Leg.* 6.764b). Their duties in the protection of trade also extended to foreigners, to ensure that local merchants were not cheating them during transactions (*Pl. Leg.* 8.849a-b).

One inscription from Erythrai (*I.Erythrai* 15) shows an example of the responsibilities that the *agoranomoi* had in the regulation of marketplaces. It is worth noting that the inscription is dated 360-300 B.C., and thus possibly from the Hellenistic period. The inscription details the sale of wool and how wool must only be sold in the “wool market”, as well as the measures taken against selling poor-quality wool.⁴⁸ It also shows the *agoranomoi* were charged with carrying out the collection of fines given to those merchants who failed to comply with the regulations: “let the *agoranomoi* carry out the execution of the fine” (*I.Erythrai* 15).⁴⁹ The use of the plural noun for this position suggests that the city employed more than one during the fourth

⁴⁵ This translation comes from J. Salmon 1999, p. 156: “τούτοις δὲ ὑπὸ τῶν νόμων προστέτακται τῶν ὀνίων ἐπιμελεῖσθαι πάντων, ὅπως καθαρὰ καὶ ἀκίβδηλα πωλήσεται.”

⁴⁶ *Ath. Pol.* 51.3; Salmon 1999, p. 157; Bekker-Nielsen 2007, p. 125.

⁴⁷ Salmon 1999, p. 156; “Κληροῦνται δὲ καὶ μετρονόμοι, πέντε μὲν εἰς ἄστυ, δὲ εἰς Πειραιέα. καὶ οὗτοι τῶν μέτρων καὶ τῶν σταθμῶν ἐπιμελοῦνται πάντων, ὅπως οἱ πωλοῦντες χρήσονται δικαίους.”

⁴⁸ Bresson 2016, p. 239.

⁴⁹ The fine in this case was twenty drachmas, possibly per talent of wool.

century.⁵⁰ Related to the inscription at Erythrai, in fifth century Athens there was a similar need to regulate wool, suggested by two lines in Aristophanes (Ar. *Ran.* 1386-1387). Wool was sold by weight, and evidently there was an issue with merchants wetting their wool, thus being able to sell it for a higher price.⁵¹

The office of the *agoranomoi* clearly was not a Hellenistic invention. Athens is probably over-represented in this case, but the epigraphic evidence also suggests that there was a desire to regulate markets around the Mediterranean. Indeed, Athens might not be unique with this magistracy; the presence of an *agoranomos* might be considered the norm, and Léopold Migeotte proposed that every major *polis* had at least one *agoranomos* in service each year based on various surviving inscriptions.⁵² The job of the *agoranomoi* was primarily to oversee the smooth operation of designated commercial spaces. This may have been, in part, to increase the quantity of taxable traffic. Furthermore, the scarcity of evidence for Classical period *agoranomoi*, in comparison with the Hellenistic period, may indicate expansion of administrative and economic institutions.

b) Agoranomoi: Hellenistic Period

The evidence for the existence of the *agoranomoi* throughout the Greek world is much clearer and more numerous during the Hellenistic period. Multiple inscriptions on Delos attest to their existence. One of many inscriptions (*IG* XI, 4 1143) honouring Hermes and Aphrodite, is dated during the mid-third century.⁵³ Likewise, inscriptions from Thasos honour various patron deities for the different magisterial bodies: *agoranomoi*, *epistatai*, *apologoi*, *mnemones*,

⁵⁰ Bresson 2016, p. 239.

⁵¹ Bresson 2016, p. 241; Dover 1993, p. 367, note for 1386.

⁵² Migeotte 2009, pp. 144-145.

⁵³ Sokolowski 1964, p. 2.

gynaikonomoi, and *gymnasiarchoi*.⁵⁴ Dedications are made to Aphrodite by *agoranomoi* at Sardis (*I. Sardis* 99) and Selymbria.⁵⁵ Even smaller islands like Ios appear to have employed these magistrates, where *agoranomoi* are mentioned in an inscription concerning a *sitonia* (a public grain-fund; *IG* XII 5.1010).⁵⁶

Similar magistrates may also have existed in different regions under different names, and there is potential confusion in the evidence. At Akraiphia in Boiotia an inscription lists different fish and their current prices, dated c. 210-203 B.C.⁵⁷ The list includes three *ἀγωνάρχῃ*, an office that Ephraim Lytle equates with an *agoranomos*.⁵⁸ A stamped *oinochoe* from Histria (*SEG* 802b), dated to the third century B.C., bears the name of the *agoranomos*.⁵⁹ An inscription regarding the Mysteries of Andania, in the Peloponnese, shows the role of the *agoranomoi* in quality assurance:

Let the city's *agoranomos* take care that the sellers sell products that have not been adulterated and are of authentic quality, and that they use weights and measures in conformity with public measures; let him set neither sale price nor times, and let no one require sellers to pay a fee for a place. (*Syll.*³ 736)⁶⁰

It is seen here that the *agoranomos* could also take on the duties of the *metronomos*, by insuring that publically chosen standards were used. Interesting here are the limitations placed on the *agoranomos*, who were prohibited from price-fixing.⁶¹ An Athenian inscription (*IG* II² 903),

⁵⁴ Sokolowski 1964, p. 2.

⁵⁵ Sokolowski 1964, pp. 2-3.

⁵⁶ Reger 1993, p. 327.

⁵⁷ Lytle 2010, pp. 253-303.

⁵⁸ Lytle 2010, p. 260, n. 19; for the evidence linking the two magistrates together, see Roesch 1965, pp. 141-145.

⁵⁹ Coja and Dupont 1979, p. 46, no. 28.

⁶⁰ Gawlinski 2012, pp. 86-87.

⁶¹ Again a fine is mentioned for non-compliance of market-rules, and again the amount is 20 drachmas.

dating to 176/175 B.C., honours a merchant who sold his large supply of oil (almost 59,000 litres) during an oil shortage. Like Agathokles above, the merchant agrees to sell his entire load to the city for a price lower than what he might have achieved selling to individuals elsewhere.⁶² If this restoration is correct, it seems that the *agoranomoi* brought about this deal and it shows how they were taking steps to deal with shortages in Athens as well as stimulating economic transactions.

The terms *agoranomoi* and *metronomoi* may have become more interchangeable through the Hellenistic period. An inscription on the back of a bronze weight from Abdera bears the name of an *agoranomos*, Διαγόρας, and has been dated to the beginning of the third century (*SEG* 30-662).⁶³ This does not necessarily mean the *agoranomos* was now in charge of weights and measurements, but a weight bearing the magistrate's name does point in this direction. It suggests there was state involvement in the production of reliable standards for market-use in order to reduce transaction costs. It's presence on a tool used for improving transaction costs and reducing the amount of potential arguments and fraud in the markets suggests the desire of the *polis* to improve market-flow as well as reduce altercations. Further, the *metronomoi* are still mentioned, albeit infrequently, during this period as seen in a fragmentary inscription from Athens (*SEG* 24-157).

The Hellenistic *agoranomoi* may have also taken over the role of the Classical *sitophylakes*, in dealing with the security and fair-dealing of grains within the city (*Ath. Pol.* 51.3).⁶⁴ *Agoranomoi* and *sitophylakes* could be seen as interchangeable terms with the evidence

⁶² Hannestad 2005, p. 182.

⁶³ Salmon 1999, p. 156. For the date of the bronze weight in question, see *SEG* XXX, 662, s.v. Abdera (area of Illanli). Bronze weight, beginning of the 3rd cent. B.C. (H.W. Pleket and R.S. Stroud).

⁶⁴ Salmon 1999, p. 157; on Classical *sitophylakes* see Figueira 1986; Seager 1966.

supporting the use of *agoranomoi* more regularly through the Hellenistic period. An honorary inscription from Parion in Mysia, dated to just after 200 B.C. explains that the *agoranomos* is honoured for having “taken [every] care of the other merchandise” (*Syll.*³ 596).⁶⁵ Clearly he fulfilled the duties laid down in *Ath. Pol.* 51.1 by ensuring the quality of goods in the market. However, in the preceding line of that passage, one learns that he also “managed the supply [of grain, so that] the residents could buy it [as cheaply as possible]” (*Ath. Pol.* 51.1). The *agoranomos* at Parion was also performing the traditional duties of the *sitophylakes*: “to see that unground [grain] in the market is on sale at a fair price” (*Ath. Pol.* 51.3).⁶⁶ The regulation of prices was a necessary duty for these magistrates, as they attempted to keep costs of grain, flour, and bread all in line with each other.⁶⁷ One important thing to note with this inscription is the statement: “...[who was appointed] by the people [of Parion] to be *agoranomos*” (*Syll.*³ 596, lines 5-7). The officials were still elected by the city, suggesting its importance to the *polis* rather than the monarch.

An inscription from Ephesos (*Syll.*³ 354; *I.Eph.* 1455), dated c. 300 B.C. and thus under the control of Demetrios I (r. 294-288 B.C.), honours a Rhodian named Agathokles with citizenship.⁶⁸ Agathokles, presumably a trader, had brought 14,000 *hekteis* of wheat to the city. The *agoranomos* of Ephesos persuaded Agathokles to sell his wheat for less than its current market value: six *drachmas* per *medimnos*. The inscription states that he did this as a favour to the people, but the possibility of citizenship (which he was granted) along with some relief from future duties and tolls (which he was not granted) suggest the immediate loss was worth future gain. The situation presented him with a guaranteed market to unload all of his grain at once,

⁶⁵ Dittenberger’s translations are used for all *Syll.*³ entries, including brackets.

⁶⁶ *Ath. Pol.* 51.3, trans. H. Rackham, London, 1952.

⁶⁷ Salmon 1999, p. 156.

⁶⁸ Rogers 2012, p. 55.

rather than risk seeking other markets. It is not mentioned if the reason for the high grain price was a shortage or other factors. Perhaps the *agoranomoi* had failed to reign in earlier merchant price-gouging. The *agoranomoi* were again fulfilling the duty of *sitophylakes* by ensuring the supply of grain for the city at a fair price.

The protection against price-gouging is one possible interpretation of the price lists for fish found at Akraiphia and Delphi. Lytle suggests that the lists were published because the two sites were associated with many foreigners visiting the nearby sanctuaries who could have been lucrative targets for fishmongers.⁶⁹ Fish prices varied over the course of the day, and so market officials were trying to prevent the customers arriving early from paying a comparatively high amount.⁷⁰ Price-fixing should not be seen as something the *agoranomoi* could do at a whim however, and the relatively few examples of price-fixing should attest to this fact.⁷¹

Athens might present an exception to the possibility of overlap between the *agoranomoi* and the *sitophylakes*. However, an Athenian inscription dated 239/238 B.C., honours the *sitophylax* of that year (*SEG* 33-117).⁷² Another inscription dated to the mid-third century from Athens also names a *sitophylax* (*SEG* 21-738). These inscriptions suggest that these magistrates were regularly elected in Athens even into the mid-third century. The import of grain into Athens was important, and it seems the *sitophylakes* were mostly in charge of ensuring that grain was not being sold at too high a price.⁷³ There was an evident increase in the number of *sitophylakes* sometime in the late fourth century which possibly coincides with a shortage of grain around

⁶⁹ Lytle 2010, pp. 280-281.

⁷⁰ Lytle 2010, p. 286.

⁷¹ Migeotte 2009, pp. 148-149.

⁷² See *Agora* XIV, pp. 72-74.

⁷³ Salmon 1999, p. 157.

Greece: "... there used to be ten [*sitophylakes*] elected by lot, five for Piraeus and five for the city, but now there are twenty for the city and fifteen for Piraeus" (*Ath. Pol.* 51.3).⁷⁴

The creation of local funds to purchase food (*sitonia*) for the *polis* was another way by which an *agoranomos* managed the city's food supply. These evidently could be set-up at the suggestion of kings, as seen in the planned *synoikism* of Teos and Lebedos (*RC* 3, *SIG*³ 344).⁷⁵ Antigonos I details the creation of a fund, by which a person could import grain and sell it locally. Rather than the would-be exporter bringing his goods first to the market (presumably for inspection) and then to the harbour for transport, he could instead proceed directly to the harbour, having declared to the *agoranomos* his intention to pay the duties on it.⁷⁶ An inscription from Ios (*IG* XII 5.1010), dated to the late third century, again demonstrates the involvement of the *agoranomoi* in the *sitonia*. The *agoranomos* Megakles was the recipient of the loan repayment by Areteas, the buyer of the public grain.⁷⁷

The role of the *agoranomos* remained very similar to its role in the Classical period, but with some noticeable differences. They continued their regulation of market-spaces and goods entering them. But in many places the magistracy took on roles of other offices, including the role of Classical *sitophylakes* in securing grain. Securing grain often involved convincing merchants to sell their goods to the cities exclusively as the *agoranomos* sought to relieve shortages. Men continued to be chosen for the office by the *polis* at Athens (*Pl. Leg.* 6.763d-6.764a) and there is no evidence that the king appointed anyone to this position. Nevertheless, it

⁷⁴ *Ath. Pol.* 51.3, trans. H. Rackham, London, 1952. The suggested date and reason for the increase in *sitophylakes* is by Rhodes 2002, note for 51.3-4.

⁷⁵ Welles 1934, p. 22.

⁷⁶ Welles 1934, p. 30.

⁷⁷ Reger 1993, p. 327.

seems possible that kings could get involved with the food supply of their cities and thus become involved with the affairs of these magistrates.

c) *Astynomoi*

Astynomoi often worked alongside the *agoranomoi* but were perhaps not as directly involved with the economy. Unfortunately, there is just as little evidence for the *astynomoi* in the Classical period as there is for the *agoranomoi*. Much like the *agoranomoi*, the *astynomoi* in Athens were split between the city itself and the Piraeus: five in each (*Ath. Pol.* 50.1-2). They have been likened to a type of urban law enforcement for laws concerned with buildings and balconies overhanging roads (*Ath. Pol.* 50.2). They also ensured corpses were removed from the streets and that water collection and drainage worked properly (*Ath. Pol.* 50.2). Their presence as a police-force and a corpse-handler might be seen in Isaios' *On the Estate of Kleonymos*, where the magistrate was summoned after a death in order to annul a will (Isae. 1.15).⁷⁸

Their economic role seems to have been largely concerned with imposing fines in coordination with the *agoranomoi* (Pl. *Leg.* 6.764c). The office of the *astynomoi* is mentioned often alongside the *agoranomoi*, although no *astynomoi* appear in inscriptions until the Hellenistic period. The distinction between *agoranomoi* and *astynomoi* is made but they could cooperate in their work as well:

Similarly, the [*astynomoi*] shall have power of fining and punishing in their own sphere, fining up to a mina of their own motions, and up to twice that sum in conjunction with the [*agoranomoi*].⁷⁹ (Pl. *Leg.* 6.764c)

⁷⁸ Cox 2007, p. 769.

⁷⁹ Pl. *Leg.* 6 trans. R.G. Bury, Cambridge, 1967. The terms in brackets are personal changes: “τὰ αὐτὰ δὲ καὶ ἀστυνόμοις ἔστω ζημιώματά τε καὶ κολάσεις ἐν τῇ ἑαυτῶν ἀρχῇ, μέχρι μὲν μνᾶς αὐτοὺς ζημιοῦντας, τὴν διπλασίαν δὲ μετὰ ἀγορανόμων.”

The *astynomoi* also worked with the *nomophylakes* and *agoranomoi* to set up specific stalls for merchants wishing to do business in the market (Pl. *Leg.* 8.849d-e). This is similar to an inscription from Erythrai (*I.Erythrai* 15), where merchants were assigned to designated spaces.⁸⁰

At Vrasna in Macedonia, *astynomoi* appear on roof tiles bearing the inscription “ἀστυνόμων Θουρίππου, Δημητρίου” or “ἀστυνόμων Πατροκλέους, Προξένου” (*SEG* 45.743).⁸¹ These tiles may represent the *astynomos*’ role in production, or simply that they were convenient as an easily datable name.

There are several examples of *astynomoi* appearing on stamped amphora handles in the Thracian interior and West Pontic coast. Sinopean stamps bearing *astynomoi* appear in the Thracian interior, found at the Odrysian capital of Seuthopolis.⁸² Seuthopolis was founded in the late fourth century, probably between 325-315 B.C., and was destroyed by the Celtic invasions in the early third century.⁸³ The evidence at Seuthopolis suggests that stamps from Sinope were including the names of *astynomoi* as early as the fourth century.

The appearance of these names on amphoras could imply the connection of the magistracy with the economies of their cities, especially in terms of foreign trade and production. The *astynomoi* were more likely only involved in the economy as far as enforcing regulations and fines in concert with the *agoranomoi*. At the very least they provided a datable name to the amphora, and might have been involved with the duties imposed on exports from the home *polis*.⁸⁴

⁸⁰ See Bresson 2016, p. 239 for Erythrai.

⁸¹ Adam-Veleni 1992, p. 415.

⁸² Balkanska 1984; *SEG* 58.714.

⁸³ Cohen 1995, pp. 87-88; Cunliffe 2000, p. 172.

⁸⁴ Grace 1934, p. 199.

d) Taxes and Tribute

Although there is some literary evidence for various market officials, there is no literary evidence for any sort of taxation official. It may be that the market officials, however, were at least indirectly involved in the issue of taxation. First, a basic difference between taxes and tribute should be outlined. There is little evidence for any distinction in ancient sources, and the terms may have become interchangeable. However, a passage from Thucydides describes that a tax replaced the tribute on the Delian allies: "... they imposed on their subjects, instead of tribute, a 5% tax on imports and exports by sea..." (Thuc. 7.28). This suggests that the basic difference was that a tax was a regular payment on daily transactions that could be between equals or unequal actors, while a tribute was a larger but less frequent payment, probably to a superior state.⁸⁵

Although evidence from the Early Hellenistic period is sparse, there is evidence from the Classical period that market transactions, imports, and exports were all taxable. An inscription, dated to the 420s B.C. (*IG I³ 62*), states: "[those who wish] to bring corn... [and engage in trade] paying whatever taxes the [Athenian People] decree".⁸⁶ Assuming these taxes continued into later periods, the management of markets and transactions would have allowed for more taxable transactions to occur. Although it is not clear how these taxes were collected, it seems evident that many forms of taxation and tribute from the Classical period appear to have continued into the Early Hellenistic period in combination with a continuation of Achaemenid formats and some new methods.⁸⁷

⁸⁵ Fawcett 2016, p. 160.

⁸⁶ Fawcett 2016, p. 159.

⁸⁷ Kaye 2015, p. 19.

Many taxes seem to have been in kind, usually as a percentage or fraction of whatever yield was being taxed.⁸⁸ There is scarce evidence for an actual poll-tax in any Hellenistic kingdom, and Noah Kaye notes that the logistics behind the collection of this sort of tax may have prevented it.⁸⁹ It is possible, however, that something like a poll-tax was placed upon inhabitants of certain cities, judging by the remission of taxes by Alexander for the people of Naulochon in Asia Minor.⁹⁰ There is also evidence that the wealthy inhabitants of the kingdoms provided large sums of money, particularly in times of war. An aristocrat for Antiochos III, Hermeias, evidently paid mutinying troops out of his own funds for the king (Polyb. 5.50.4-5). It is unknown if Antiochos paid his nobleman back.⁹¹

At least by the reign of Alexander III there were various obligations with “land, personal services, and all levies on property” (Xen. *Anab.* 1.16.5). These taxes likely predate the reign of Alexander since he provided relief from them to the families of those killed at the Granicus River in 334 B.C.⁹² The land tax was applied to land-owners and the tenants on royal lands, probably on the farms production, so it was similar to the *phoros* in connection to taxes from the *polis*’ land.⁹³ The existence of a “personal-service tax” suggests that Macedonian kings by at least the mid-fourth century were attempting to utilize the population to improve infrastructure such as roads, walls, and other public works.⁹⁴ It may be that men chose to pay their tax in labour rather than cash or in kind, although it is important to note that there is no actual proof for this in practice. Hammond suggests that the “personal levies” were only imposed during times of need

⁸⁸ Rostovtzeff 1941, pp. 404 and 465.

⁸⁹ Kaye 2015, p. 12.

⁹⁰ Kaye 2015, p. 12.

⁹¹ Kaye 2015, pp. 12-13.

⁹² Hammond 1989, p. 179.

⁹³ Hammond 1989, p. 179; Rostovtzeff 1941, p. 466.

⁹⁴ Hammond 1989, p. 179.

but this could mean during any time of war, which was frequent during the late fourth and early third centuries.⁹⁵

An inscription dated to the reign of Antiochos I (r. 281-261 B.C.; *SEG* 33.1034) suggests that a *phoros* (which might also be equated with the *dekate*, or the “1/10th tax”) on grain harvests was enforced in Aeolis.⁹⁶ The inscription covers a wide range of goods being taxed besides grain: hunted animals, flocks, orchards, and bees.⁹⁷ The *phoros/dekate* may also be a fixed tax based on average yields, which would mean that annual revenues would not suffer during poor harvests.⁹⁸ An inscription from Miletos (*I.Milet.* 139) states that Ptolemy I freed the city from a heavy *phoros* by “some of the kings”.⁹⁹ The *phoros* seems to have been applied to a variety of different goods and rights as a means of raising money from many sources.

Tributes on the other hand might not have been as effective as some kings hoped, however, since cities may have been unwilling or unable to pay. Two inscriptions from Miletos (*I.Milet.* 138 and 139) imply that Lysimachos (and presumably other kings) could request “tributes” in lieu of tax payments, and this shows the seemingly interchangeable nature of the two terms.¹⁰⁰ These might have simply been back-tax payments, or perhaps the repayment of loans taken by the city to pay Lysimachos. *I.Miletos* 138 tells how the Milesians took a loan of 12 talents and 10 *minae* to pay Lysimachos. We are not given a reason for the loan, but Stanley Burstein suggests it was to repay an earlier loan from the king, or as an imposed penalty for defecting to Demetrios in 287 B.C.¹⁰¹

⁹⁵ Hammond 1989, p. 179.

⁹⁶ Kaye 2015, p. 7.

⁹⁷ Kaye 2015, p. 7.

⁹⁸ Billows 1990, p. 290.

⁹⁹ Burstein 1980, p. 73, believes this refers to Lysimachos.

¹⁰⁰ Burstein 1984, p. 61.

¹⁰¹ Burstein 1984, p. 62.

The question becomes how to determine the source of these taxes. Were they imposed directly by the king or were they employed by the *poleis* as a way to raise the money necessary to pay the king? Something like the various *phoros* taxes and trade-duties were probably *polis*-collected taxes. Alexander personally remitting taxes on land and personal services suggests that these, on the other hand, were paid directly to the king. The payments made by cities to kings are more commonly seen as forms of tribute and perhaps should not be seen as a city-to-king tax system. Rather, individual *poleis* established their own methods of taxing the inhabitants so that they could collect the more aptly-named tributes for the kings.

e) Trade

Taxes were imposed on transactions at ports and markets as well as goods and produce, and so there was an interest for both cities and kings to facilitate trade. The kings may have also tried to manage trade on a larger scale by creating monopolies on certain goods, particularly strategic resources. Hammond credits Philip II with deliberately creating a connection between the coast and the interior as well as the urbanization of Macedonia by moving large populations from the highlands to the coast while maintaining a connection with the resources of the interior. The capture of the coastal towns of Methone, Amphipolis, and the Chalkidike along with interior locations like Krenides/Philippi may indicate this connection between coast and interior. Likewise the deposition of the Thracian king Kersebleptes in 346 B.C. led to campaigning on the Hellespont in order to remove Athens' coastal bases.¹⁰² The process included the systematic capture of coastal cities and towns with the goal, according to Hammond, of controlling import

¹⁰² Psoma 2014, pp. 142-143.

and export duties (see pp. 25-26).¹⁰³ Kassander was presumably doing something like this at Kassandreia on the Chalkidike.¹⁰⁴ Athenaeus claims that Kassander commissioned an amphora specifically for Kassandreia due to the “extraordinary quantity of Mendeian wine which was exported from the city” (Ath. 11.784c). This passage suggests that kings may have actively sought to improve or promote trade in their cities.¹⁰⁵ Demetrios and Lysimachos likely engaged in similar activities, especially the latter with the foundation of Lysimacheia in 309 B.C. Once the city was established, and the Asian side of the straits was captured, Lysimachos had the ability to collect tariffs from all traffic in the straits, although this is not attested anywhere.

The Hellenistic kings became closely involved in controlling the trade of certain goods. Antigonos I was reluctant to allow Teos and Lebedos to import foreign grain during their *synoikismos*. While Antigonos claims a desire to keep the cities from falling into debt, Billows believes he wanted to create a grain monopoly.¹⁰⁶ Welles even goes as far as to call the king “a grain merchant on a large scale”.¹⁰⁷ Owning such vast tracts of land surely meant a large amount of grain under royal control, but Antigonos claims the cost of the grain would not profit him in any way and he assures the city that they can buy his grain for cheaper than from anywhere else. Since much of the royal land was worked by tenants or natives (*laoi*, usually tied to the land; Plut. *Phoc.* 29.1), Antigonos would not suffer a personal loss on selling cheap grain.¹⁰⁸ It seems likely that Antigonos owned some land near the site of the *synoikism* from which he could supply grain to the inhabitants.

¹⁰³ Hammond 1989, p. 178.

¹⁰⁴ Hammond 1989, p. 289.

¹⁰⁵ See Papadopoulos and Paspalas 1999, and Lawall 2004 for the issues concerning the passage in Athenaeus.

¹⁰⁶ Billows 1990, p. 287.

¹⁰⁷ Welles 1934, p. 29.

¹⁰⁸ Hammond 1989, p. 179; Burstein 1984, p. 60.

Antigonos also tried to increase his own involvement in the papyrus market even though Ptolemaic Egypt was the centre of this market. Antigonos invested in improving production of the papyrus plant around a lake in Syria (Theoph. *Hist. Plant.* 4.8.4). This ensured that the king would have valuable papyrus ropes for building ships, without needing to import Egyptian rope, which could be cut off in times of conflict.¹⁰⁹ Likewise, he aimed to import frankincense through increased contact with the Arabian peninsula (Theophr. *Hist. Pl.* 9.4.8). He might have had plans to cultivate the plant himself, cutting out the middleman, by requesting the actual plant be sold to him.¹¹⁰ Finally, his attempted conquest of the Nabataeans might have been motivated by a desire to control the trade routes from the Arabian Peninsula, as well as control of the bitumen production around the Dead Sea in spite of Egyptian control of such a valuable ship-building resource.¹¹¹ There may be a parallel with the Roman Imperial-period conquest of the Nabataeans by Emperor Trajan (r. A.D. 98-117). There is evidence to suggest that Trajan renewed construction on a canal that would ultimately connect the Mediterranean Sea with the Red Sea.¹¹² In both cases, the initial conquests were likely driven by political and military gain rather than the economic benefits. Nevertheless, it is evident that the economic benefits were not ignored once the territory was conquered.

The efforts of Antigonos I fit within the well-established Macedonian timber-trade, which can best be considered a royal-controlled monopoly. The region was well known for its timber:

¹⁰⁹ Billows 1990, p. 288.

¹¹⁰ Billows 1990, p. 288.

¹¹¹ Billows 1990, p. 288.

¹¹² Aubert 2011, p. 35.

It is a narrow [region], which produces shipbuilding timber. In Europe, it is found in Macedon and in parts of Thrace and Italy, while in Asia, in Kilikia and in Sinope and Amisos. (Theopr. *Hist. Pl.* 4.5.5)¹¹³

During the Classical period the Macedonian kings owned the forests and presumably the rights to all resources within them, whether the timber or potential mineral and animal resources. Logging rights may have been managed on a case-to-case basis. One Athenian, Andokides, received the right to “cut and export as many [trees] as [he] wished” (Andoc. 2.11).¹¹⁴ Exclusive trade rights with a *polis* are seen in the case where King Perdikkas (r. 448-413 B.C.) reached an agreement with Athens (*IG* I³ 89).¹¹⁵ A similar deal was struck between Amyntas III (r. 392-370 B.C.) and the Chalkidean League, after the latter helped the former take back his throne.¹¹⁶ Except for the case of Andokides, the Macedonians seemed to maintained control of actually logging the forests; the buyers could only receive timber and thus the king remained in control of processing.¹¹⁷ The treaty with the Chalkideans (*Syll.*³ 135) allowed them to use timber for building ships but only if Amyntas III allowed it.¹¹⁸ The Athenian dependence on Macedonian timber is seen in Xenophon:

With Macedonia in our possession, the place from which the Athenians get their timber, we shall of course be able to construct far more ships than they. (Xen. *Hell.* 6.1.11)¹¹⁹

For a sense of the scale of naval building programs earlier in the fifth century, the Athenians might have required at least 300,000 oars in total, including spares.¹²⁰ The skill and

¹¹³ Bissa 2009, p. 112, who also provides the translation for Theophrastos. For the importance of Macedonian timber see also Archibald 2013, pp. 194, 198, 208, 240; Borza 1990 and 1995, p. 32; Psoma 2014, p. 134.

¹¹⁴ Bissa 2009, pp. 112-113.

¹¹⁵ Bissa 2009, p. 114.

¹¹⁶ Bissa 2009, pp. 114-115

¹¹⁷ Bissa 2009, pp. 114-115; see also Psoma 2014 for more on the Athenian-Macedonian relationship in timber trade.

¹¹⁸ Borza 1995, p. 182; Denkers 2012, p. 30.

¹¹⁹ Borza 1995, p. 187.

¹²⁰ Borza 1995, p. 34.

craftsmanship required for this suggests that the industry was organized and required a considerable amount of manpower. These large numbers continued into the fourth century, when there were 50,000 spare oars kept by the Athenian navy.¹²¹ The timber needed for the actual hulls, prows, and other parts of the ship must have been quite high. Borza estimates between 2700-3600 square feet of 1 1/2-2" planks.¹²² Assuming that these numbers were maintained consistently, the royal monopoly would be particularly lucrative for Macedon.¹²³

There is less evidence for actual timber-export deals into the Hellenistic period, but there is little reason to believe the kings would allow such a profitable system to disappear. Philip II's campaigns into Epiros and Molossia may have had some economic motivation, as the lands contained more timber.¹²⁴ Perhaps more reasonable is the possibility that after taking control of those timber-rich areas, he began successfully denying the resource from Athens. His campaigns to close off timber access to his enemies would be a waste if they could turn to other markets. The capture of Amphipolis in 357 B.C., Methone in 356 B.C., and the Chalkidike allowed Philip greater control of the coastlines and access to the interior regions rich with timber.¹²⁵

In 336/335 B.C., before setting off on his campaign, Alexander III settled land issues with Philippi (*Syll.*³ 277). Although only a brief passage, Alexander makes sure that the Philippians stopped selling timber from their lands. This may reflect faltering royal control over the timber trade. More likely, however, it was a reflection of the regime change and an example of a *polis* pushing the limits of their economic freedom. The control of access to timber

¹²¹ Borza 1995, p. 34; see also Meiggs 1982, p. 131.

¹²² Borza 1995, p. 35, who uses the work of Casson 1971.

¹²³ This discussion does not take into account the timber needed for construction, which must have been considerable as well. See Borza 1995, pp. 35-36 for some estimates.

¹²⁴ Hammond 1989, pp. 185-186.

¹²⁵ Borza 1995, p. 97.

continued to be an important Macedonian strategy against its enemies as well as ensuring a supply of wood if kings wished to build a navy.¹²⁶

The fall of Persia, and the expansion of Greco-Macedonians kingdoms opened up access to many Asian timber resources, and perhaps it started a decline in the Macedonian timber monopoly.¹²⁷ Nevertheless, the timber trade continued into the period of the Roman wars with the Macedonians. After the defeat at Pydna in 168 B.C., the Romans demanded the immediate cessation of logging and exporting timber (Livy 45.29.14).¹²⁸ While the prime motive for this was to prevent Macedon or any Greek state from rebuilding a navy, it also served to prevent any Macedonian troublemakers from raising money from the exports.

The gold mines were another example of a valuable resource being deliberately exploited by the Macedonian king, beginning with Philip II. The refoundation of Krenides as Philippi, is the best known example. Diodoros reports on Philip's efforts:

“At the gold mines near the city, which were small and unimportant, he [increased] the infrastructure to the extent that they brought him revenue of over 1000 talents.” (Diod. Sic. 16.8.6-7)¹²⁹

Diodoros goes on to explain this gold was used to create an army and bribe Greeks. Nevertheless, the investment in mines increased the outputs, whether this was Philip's intention or not. Whether Philip contributed actual money, equipment, and manpower or whether he left the work to private individuals is impossible to determine, but Philip clearly instigated the improvements.¹³⁰ Unfortunately there is no firm evidence for the further development of a mining monopoly in Macedonia.

¹²⁶ Hammond 1988, p. 384; Missitzis 1985, pp. 13-14.

¹²⁷ Borza 1995, p. 99.

¹²⁸ Errington 1990, pp. 222-223.

¹²⁹ Bissa 2009, p. 37.

¹³⁰ Hammond 1989, p. 162; Bissa 2009, p. 37.

The king's role in trade affairs seems more evident than their involvement with civic magistrates. This is likely due to the fact that the trading of natural resources like timber or papyrus was connected with the idea of royal land. Theoretically, the king owned the land he conquered (see pp. 40-41) and so would directly benefit from improving infrastructure and controlling exports of resources from that land.

3) Results of Royal Intervention

The kings appear to have affected the economy in various ways through imposition of taxes and intervening in trade. Furthermore, the creation of kingdoms and the new demand for tributary payments may have urged cities to improve market efficiency. More broadly, the kings also caused changes in the organization of cities and land through city foundation, *synoikismos* (the combination of two or more *poleis*), and the control of land. The creation of large urban centres, whether new or from combining smaller towns started a period of increased urbanization. The collection of land by a single king, which could be gifted at will, created a loyal aristocracy for political support. This may have also had a significant effect on the economic system of northern Greece due to the increasing amount of estate-centred farming in the region.

a) City Foundation and Synoikismos

Traditionally, cities are considered by scholars as nodes of concentrated manpower and political power. However, they may have also been part of an attempt to centralize and strengthen the economy.¹³¹ New cities become population centres which required a steady source

¹³¹ Cohen 1995, p. 15; Aperghis 2005, p. 27.

of food. The creation and growth of cities provided a reliable market for surrounding farmers who could purchase goods they could not produce easily on their own: tools, ceramics, and specialized foods.¹³² The integration of new urban centres with the countryside is seen in the Bosporan Kingdom during the third century B.C. Survey work shows new networks of roads connecting the growing urban and rural populations, likely in an effort to improve both the political and economic relationship between urban and rural populations.¹³³ It is impossible to discern whether these agriculturalists were forcibly moved closer to cities or whether they took the opportunity for increased commerce. It might be that distant farmers were moved, alongside retired soldiers settled with them, closer to new cities.¹³⁴

City foundations would have had significant effects on the economy whether by opening up new land or resources (mines or farms) or by creating centres of commerce and industry. Isocrates he urged Philip II to found cities in Asia Minor, not only to protect against the Persians, but as a solution to relieve the unemployment issues plaguing Greece (Isoc. *Paneg.* 5.120).¹³⁵ Philip II may have been more concerned with military and political strategy than economic concerns during his urban reorganization. For example, the refoundation of Krenides in 356 B.C. seems to be a part of Philip's policy of "founding strong cities at important places" (Diod. Sic. 16.71.1-2).¹³⁶ As noted above (see p. 33), Philip invested money into improving the mines around the city, suggesting more than just a military-oriented plan for the region.

¹³² Aperghis 2005, p. 35.

¹³³ Alcock, Gates, and Rempel 2003, pp. 360-361.

¹³⁴ Alcock 1994, p. 182.

¹³⁵ Cohen 1995, p. 15. Issues of unemployment in Late Classical Greece are still unclear and often rely on this very passage from Isocrates. The idea that people and possibly kings were concerned with such issues is still interesting and thus it is mentioned here.

¹³⁶ For the refounding of Krenides, see Diod. 16.3.7 and 16.8.6, and also *IG II*² 127.45, as per Cohen 1995, p. 16, n. 4; see Psoma 2014, p. 141 for the opportunity of Philip II in settling people at Philippi.

Among the Diadochoi, Kassander began city-building first with the creation of Kassandreia in 316 B.C. This was done by *synoikismos* on the site of Potidaia with other cities on the Pallene peninsula, including Mende (Livy 31.45.14), as well as survivors of Olynthos, which was sacked in 348 B.C. (Diod. Sic. 19.52.2-3).¹³⁷ The existence of a *boule*, *strategoi*, and *nomophylakes*, as well as the autonomous passing of decrees suggests that the city was quite independent in its day-to-day operations.¹³⁸ Kassander probably also founded Thessaloniki around the same time (Diod. Sic. 19.52.2), and the foundation likely included a *synoikismos* with Therme and surrounding villages (26 according to Strabo: Apollod. *Epit.* 7, frag. 21).¹³⁹ Antigoneia-in-the-Troad, later renamed Alexandraia Troas when it was captured by Lysimachos in 301 B.C.,¹⁴⁰ was the result of a *synoikismos* of Kebren, Skepsis, Larisa, Kolonai, Hamaxitos, and Neandreia on the former Sigia (Strab. 13.1.33, 47, 52).¹⁴¹

Demetrios Poliorketes (387-283 B.C.) founded Demetrias in Thessaly after 294 B.C.¹⁴² with a *synoikismos* of several surrounding towns: Nelia, Pagasai, Ormenion, Rhizous, Sepias, Olizon, Boibe, and Iolkos. Some later additions also included the people of Aiolo, Halos, Spalauthra, Korope, Kasthanaia, and Amphanai.¹⁴³ Demetrios also founded another Demetrias near Sikyon after capturing the site in 303 B.C. (Diod. Sic. 20.102.2-4). He then moved the population to a two-leveled plateau nearby, at modern Vasiliko. His own garrison occupied the “higher” of the two plateaus and Athenaeus indicates his involvement in establishing the new

¹³⁷ Cohen 1995, 95.

¹³⁸ Cohen 1995, pp.95-96; see also *SEG* 12.373.

¹³⁹ Cohen 1995, p. 101.

¹⁴⁰ See Pliny *NH* 5.124 for the renaming.

¹⁴¹ Cohen 1995, p. 145.

¹⁴² Cohen 1995, p. 112, n. 1 believes the foundation should date between 294-288 B.C. when he was in control of Macedonia; see also Plutarch *Demetr.* 53.3.

¹⁴³ Cohen 1995, p. 111.

city (Ath. 13.577c).¹⁴⁴ It is interesting here that Demetrios/Sikyon signed a treaty with both Athens and Stymphalos upon the latter's refoundation, which included commercial agreements (IG V,2 351-357).¹⁴⁵ Originally dated to the last quarter of the third century B.C., a re-reading of the fragmentary inscription claimed that the word "Demetrios" fits in newly-restored areas.¹⁴⁶ The use of the lunate-sigma, the dialect of the inscription, and a fragment of the treaty found in Athens that is securely dated to 303/302 B.C. has suggested a date for that time for the inscription, and thus the treaty.¹⁴⁷

Lysimachos founded Lysimacheia around 309 B.C., evidently as a way to protect himself from the Thracians (Appian *Syr.* 1). The city would also protect the crossing from Asia and provide a launching point for Asian excursions.¹⁴⁸ The foundation included a *synoikismos* of Paktye and Kardia, where Kardia seems to have been abandoned or destroyed in the process (Pausanias 1.9.8).

The attempted *synoikismos* between Teos and Lebedos (see p. 29) is an excellent example of a king becoming closely involved in the economic affairs of new cities. Antigonos ordered the cities to set-up a fund for purchasing grain. The king expresses his unwillingness to allow the city to import food or to set up a subsidized grain supply, believing that both were too expensive:

Previously we were un[willing] that [any] city should undertake the importation of grain or maintain a (subsidized) grain-supply, [for we were not willing to have the] cities spend for this purpose large sums of money unnecessarily... We did not [wish] even now to give this permission, for the crown [land] is near [and if a need] of grain arose, we think there could easily be brought from [there whatever] one wished. (RC 3, *Syll.*³ 344)¹⁴⁹

¹⁴⁴ Cohen 1995, p. 126.

¹⁴⁵ Lolos 2011, p. 72.

¹⁴⁶ Gauthier 1972, pp. 295-306; Lolos 2011, pp. 72-73.

¹⁴⁷ Taeuber 1981, pp. 179-192; Lolos 2011, p. 73.

¹⁴⁸ Cohen 1995, p. 83; Lund 1992, p. 42, who also suggests it served as a launching point for future invasions of Asia (p. 64).

¹⁴⁹ This translation comes from Welles 1934, p. 22. The Greek original text comes from Welles 1934, p. 19: "ἡμεῖς δὲ πρότερον μὲν οὐ[κ ἐβουλόμεθα μηδεμιᾷ πό]λει δίδοσθαι τὰ σιτηγῆσια μηδὲ

A desire to protect his subjects from falling into debt is reasonable enough, especially if cities were now viewed as centralized tax-farms.¹⁵⁰ Antigonos likely did not want his cities paying money for imported grain from his rivals, especially the Ptolemies.¹⁵¹ As the passage above shows, Antigonos suggests to the Teans and Lebedians that the crown-lands could support the *synoikismos* (RC 3, lines 80-85). Billows suggests that this allowed his tenant-farmers to convert their surplus into cash. This would suggest that Antigonos, and perhaps other kings like Seleukos I according to Makis Aperghis, were creating a cyclical system of produce, trade, and taxes with their city-foundations in order to provide reliable sources of silver incomes.¹⁵²

New cities required land and archaeological work suggests that the cities being founded in the Seleukid Empire covered considerable amounts of land. On the smaller end of the spectrum, a city like Doura-Europos was founded on a space of about 45 hectares. Larger cities like Chalkis, Kyrrhos, and Seleukia-Zeugma took between 65 and 100 hectares upon foundation.¹⁵³ The largest foundations were of Antioch (225 hectares), Apameia (205-255 hectares), and Seleukia-Pieria (250-300 hectares).¹⁵⁴

Extensive survey work from the fourth century B.C. across Greece indicates two to five hectares was an average farm-size for a nuclear family.¹⁵⁵ Therefore, a city the size of Antioch would roughly equal the land lived on by 45-110 families, which would amount to between 270-

σίτου γίνεσθαι παράθε[σιν, οὐ θέλοντες τὰς] [π]όλεις εἰς ταῦτα ἀναλίσκειν χρήματα συχνὰ οὐκ ἀναγκαῖα [ὄντα, ἐβουλόμεθα δὲ] [ο]ὐδὲ νῦν ποεῖν τοῦτο, πλησίον οὔσης τῆς φορολογουμέ[νης] χώρας ὥστε ἐὰν χρεῖα] [γ]ίνηται σίτου εὐχερῶς, οἰόμεθα εἶναι μεταπέμπεσθαι ἐκ [ταύτης ὁπόσ] [ο]ν ἂν τις βούληται.”

¹⁵⁰ Aperghis 2005, pp. 36-37; Billows 1990, p. 287.

¹⁵¹ Billows 1990, p. 287.

¹⁵² Billows 1990, p. 287; Aperghis 2005, p. 35.

¹⁵³ Aperghis 2005, p. 31.

¹⁵⁴ Aperghis 2005, p. 31.

¹⁵⁵ Migeotte 2009, p. 86; Osborne 1990, p. 24. Taking the lower estimate of two hectares, the Classical-period size, may be more appropriate for the majority of farmers.

660 people.¹⁵⁶ The city foundations listed above then would have taken potential farm-plots away from roughly 2000-6000 people. Considering that cities like Doura-Europos had between 5000-10000 people upon foundation, and a city like Antioch or Seleukia-Pieria could have had more than 25000 according to ancient sources, the process of founding a city would cause population disruption both by moving people into the cities and by taking up nearby land (Arist. *Pol.* 5.61.1; Malalas *Chron.* 201.12-16).¹⁵⁷

On the other hand, the foundation of cities may have opened up previously unworkable land. The Diyala flood-plain may be an example of this with the foundation of Seleukia-on-the-Tigris (c. 305 B.C.), where the foundation prompted people to open up previously non-arable land through improvement of irrigation to compensate for land taken up by the city.¹⁵⁸ Likewise Antioch and Apameia were both within fertile valleys, and such large cities being created nearby likely intensified agriculture in the area.¹⁵⁹ Likewise the founding of Philippi involved some effort in opening up new land for habitation and farming. The marshland around Philippi was drained, probably by Philip II (Theophr. *Hist. pl.* 5.14.5-6), allowing the city to work it for sustenance.¹⁶⁰

The massive population displacement in the *synoikismoi* would have required competent administration, either from the kings (seen in the case of Antigonos and Teos-Lebedos), the inhabitants, or both. Survey work has shown that the new (and old) cities were successful in drawing populations from the countryside to nucleate around urban centres. The new cities must have created new employment opportunities as well. The *synoikismos* of Teos and Lebedos

¹⁵⁶ Alcock, Cherry, and Davis 1994, p. 160. This estimate assumes an average nuclear family size of six people.

¹⁵⁷ Aperghis 2005, p. 31.

¹⁵⁸ Aperghis 2004, p. 37.

¹⁵⁹ Aperghis 2005, p. 32.

¹⁶⁰ Missitzis 1985, pp. 7-8.

includes temporary housing construction for the Lebedians coming to Teos (*RC* 4, line 16-18). This would have required a building program and it would have required labourers. Furthermore all of the infrastructure improvements necessary to accommodate the larger population (for example, roads, water supply, places of entertainment) would require further labour. It is difficult to determine what the intentions of the city-foundations were. It is clear, however, that the process of founding cities and the increasing importance of cities would have had an economic effect at the heart of which were the kings.

b) Land Control, Grants, and Intervention

It is clear that kings had direct influence over land concerning creating cities and the indirect economic changes that occurred due to city foundations. The fact that kings could create cities seemingly at will is tied to royal control of land which had a direct effect on the economic systems of northern Greece. Hellenistic ideas of royal land ownership are based upon “spear-won land”. The king effectively owned the land that he conquered, and he could gift the land to cities, allies, and friends.¹⁶¹ Essentially, the king was the law concerning land ownership, and while the lack of evidence for vast revocation of land suggests that it was not politically expedient to do so, it is likely that kings could take land away as easily as they granted it.

Land surveys for Hellenistic Macedon have suggested a shift towards more estate-centred agricultural organization.¹⁶² The number of small sites slowly decreases over time, while the number of medium and large sites increases. The increase in number and size of cities in the Northern Aegean might have drawn small farmers closer to centres of commerce. A market-centred agricultural system would have helped people and cities to raise cash for taxes. Literary

¹⁶¹ Hammond 1988, pp. 389-390; Eckstein 2009, p. 249.

¹⁶² Bintliff 2012, p. 318.

evidence suggests that a farmer did not need a large storeroom, because surplus should be immediately sold at the market (Arist. [*Oec.*] 1344b31-33 and 1345a-17-19).¹⁶³

The increase of estate-centred farming in an almost feudal-like social-structure in Macedon and Thrace is very likely.¹⁶⁴ The aristocrats acting as the “feudal lords” are split between the *philoï* and the more personal *hetairoi*. Hammond does not see the latter group as a sort of hereditary feudal aristocracy, but rather as entirely “made-men” whose new status was entirely dependent on the king.¹⁶⁵ On the other hand, Rostovtzeff and Borza see Macedonia and Thrace as “feudal proto-states of medieval Europe”.¹⁶⁶ They need not be part of hereditary nobility however, but merely the upper class of Macedonia, whether they were hereditary or those who improved their status at the lower spectrum of the upper classes. Such men would be bound to the king who granted them their land and wealth. Thus there is the possible distinction between the *philoï* and *hetairoi*: the latter were Macedonians chosen to serve closely with the king, while the former were almost exclusively Greeks from the cities.¹⁶⁷ Regardless of this distinction, it was ultimately dependent on those whom had the king’s favour.

Several examples for the royal control of land show how Hellenistic kings aided the creation of a new feudal-like social structure. An inscription from Priene, c. 286 B.C., (*I. Priene*

¹⁶³ Migeotte 2009, p. 87.

¹⁶⁴ The term “feudalism” is highly problematic since its use often brings the subject into comparison with the feudal structures in Europe during the Middle Ages. Rostovtzeff uses the term with some hesitation (Rostovtzeff 1941, p. 250); however he does describe it in terms similar to the structure of the early French kingdom. Its use here however should bear no comparison with social situations millennia in the future. The term simply refers to a basic structure of social power, resting on obligations between classes: the grants of land and protection to the serfs for the obligation to fight, farm, and pay dues for the lord. For medieval feudalism see Stephenson 1942; Bloch 1989; Reynolds 1994.

¹⁶⁵ Hammond 1989, pp. 54-55.

¹⁶⁶ Borza 1995, p. 239; Rostovtzeff 1941, p. 250.

¹⁶⁷ Errington 2008, p. 66; Borza 1995, p. 241 notes that any distinction in the ancient sources should not be seen as an actual distinction with the current evidence.

16; RC 8), from an unknown king (probably Lysimachos), involves the grant of *parioikoi* status to the *pedeis* (similar to the *laoi*) around Priene.¹⁶⁸ This grant was either in response to a recent uprising or simply as a way to solve a labour shortage in the city. It meant more equitable rights for the new farmers than they had as *pedeis*. Lysimachos might have given royal land and its serfs (the *pedeis*) to Priene as a gift then, and converted the labourer's status in order to placate them. Regardless, the city now had a new workforce.¹⁶⁹ The Macedonian rulers clearly saw the use of the local peasantry however, as their existence continued through the final days of the Seleukid Kingdom, having been adopted from the earlier Persian system.¹⁷⁰

The "Limnaios Donation" (Syll.³ 476) is one example of the lucrative *philo*i gifts, wherein King Lysimachos grants Limnaios 1200 *plethra* (c. 120 hectares) of land near Semylia, 900 *plethra* near Strepsa, and 360 *plethra* near Olynthos.¹⁷¹ The gift to Limnaios is quite generous when compared to the land given a military *kleruchy* by an Attalid dynast in the second century comprising 125 *plethra* of arable land and a further 12 1/2 *plethra* of vineyards, (RC 51, *I. Pergamon* 1.158).¹⁷² Antiochos I made two sizable donations of land to friends. The first was to one Aristodikides for a total of 3500-5000 *plethra* of land in the Troad (RC 10-13; *I.Ilion* 33).¹⁷³ In the same group of letters, Antiochos grants around 1500 *plethra* of land, also in the Troad, to one Athenaios (RC 12). The interesting topic in these letters is the definition of royal and civic land, and that all land can only be one or the other. Once land is given away or sold by a king,

¹⁶⁸ Welles 1934, p. 53; Lund 1992, p. 151.

¹⁶⁹ Burstein 1984, p. 60; Lund 1992, p. 150.

¹⁷⁰ Lund 1992, p. 147.

¹⁷¹ Bresson 2016, p. 150.

¹⁷² Hatzopoulos 1996, p. 335; Welles 1934, pp. 205-209.

¹⁷³ Bresson 2016, p. 150; Welles 1934, pp. 60-71

the individual owner and the associated city should take steps to incorporate the land into the *polis* boundaries and administration.¹⁷⁴

Kings may have donated or sold royal land directly to cities, perhaps in the process of new populations being moved.¹⁷⁵ At Pitane, an inscription (*OGIS* 335) includes the sale of some royal land by Antiochos I for the sum of 350 talents.¹⁷⁶ These gifts show how wealthy the kings were in land. Land could also be revoked by kings, based on the existence of land-grant renewals. There may have been slight distinctions that differed between land owned or cultivated by a city. The situation between Alexander and Philippi (*Syll.*³ 277) suggests that certain areas of granted land were only for cultivation. Hammond notes this distinction by various words: *ἐργάζεσθαι* (“to be worked”; *Syll.*³ 277, l. 4), *καρπίζεσθαι* (“to enjoy the fruits of”; *Syll.*³ 277, l. 19), and *νέμεσθαι* (“dealt out” but with the sense of managed or enjoyed; *Syll.*³ 277, l. 24). However the division of civic and royal land (with temple land probably existing as a rarer, but prominent third category) could mean that once the land was incorporated into the *polis* boundaries, the king could not reclaim it without presumably causing resentment.

Clearly, the kings were able to grant very vast and wealthy plots of land to loyal followers or cities. The existence of tower sites and fortified farmhouses provides further evidence into the possibility of the changing landscape. It is important to note that the earliest towers are dated as early as the fifth century B.C. in Attica.¹⁷⁷ Average sizes for these domestic buildings have been placed between 0.02-0.04 hectares.¹⁷⁸ Unfortunately, there is no study concerning associated land-sizes. Many of these complexes are situated on hills that afford a

¹⁷⁴ Bagnall and Derow 2004, sec. C-18.

¹⁷⁵ Welles 1934, p. 53.

¹⁷⁶ Burstein 1984, pp. 60-61.

¹⁷⁷ Morris and Papadopoulos 2005, p. 106.

¹⁷⁸ Adam-Veleni 2009, p. 14.

commanding view of the property.¹⁷⁹ New archaeological evidence has identified over 20 similar sites across Macedonia (Western, Central, and Eastern) and has been dated broadly between 350 and 280 B.C.¹⁸⁰ Similar stone towers were common in the Near East during the third and second centuries B.C., as well as on the Crimean Peninsula.¹⁸¹ Crimean towers are typically associated with carefully measured-out farm plots, and have been associated with the expansion of the Bosporan kingdom advancing their influence further into the countryside.¹⁸² The issue with the towers in Macedonia and Thrace is whether they predate the Hellenistic kingdoms. Construction before the reign of Philip II would suggest an unrelated phenomenon for their initial appearance.

If the towers in Macedonia predated Hellenistic kings, then a military use may be the best explanation for the towers. There is evidence to support a military use in other pre-Hellenistic regions. Towers in the Korinthia area may have served to protect access to the valuable hinterland.¹⁸³ Pottery assemblages suggest “low-intensity” and short-term habitation. On the islands, a defensive purpose seems reasonable due to the vulnerability to pirates.¹⁸⁴ Defensive purposes are reasonable in Thrace, especially during the late fourth century when relations between Lysimachos and the Odrysian Kingdom were often hostile. Sites in the Northern Aegean are also found in strategically defensive spots. The site at Kounouklia overlooks the sea, while towers at Lekane and Arapis are placed on hill-tops.¹⁸⁵

Pottery assemblages typically include domestic items alongside industrial olive and wine presses, which suggest heavy agricultural activity. The domestic items include household

¹⁷⁹ Adam-Veleni 2009, p. 14.

¹⁸⁰ Adam-Veleni 2009, pp. 14-15.

¹⁸¹ Alcock 1994, p. 182; Saprykin 2006, p. 279.

¹⁸² Saprykin 2006, p. 279; Nikolaenko 2006, p. 160; Morris and Papadopoulos 2005, p. 159.

¹⁸³ Caraher, Pettegrew, and James 2010, pp. 398-400.

¹⁸⁴ Morris and Papadopoulos 2005, p. 158.

¹⁸⁵ Tsigarida, Vassiliou, and Naum 2009, p. 398; Adam-Veleni 2009, p. 14.

ceramics, high capacity storage areas, and the presence of weaving and cooking equipment. Several sites on the Kassandra Peninsula of the Chalkidike have small grain mills along with evidence of workshops for producing baskets, floor-mats, cloth/textiles, and even some evidence for on-site metalworking.¹⁸⁶ The towers at Siphnos had olive presses, while the examples on the Kassandra Peninsula had workshops for honey (also seen from clay beehives found at a tower near Apollonia)¹⁸⁷, tiles, and pottery.¹⁸⁸ The sites in the Chalkidike, a region noted for its many vineyards and wine production, raise the possibility that the towers were the centres of wine production (Theophr. *Caus. pl.* 3.15; Pliny *HN* 4.37).¹⁸⁹ Towers are found in relation with vineyards on Thasos and Pieria in the late-fourth century B.C.¹⁹⁰ Interestingly enough one tower-farm at Tria Platania in Thessaly seems to have switched from the production of wine to olive oil after the vineyards were destroyed in the early third century.¹⁹¹

The cost of the industrial equipment like olive and wine presses, along with the cost of building such towers suggests the presence and ownership of moderately wealthy men, at the very least.¹⁹² Thus, the *philoï* and *hetairoi* seems to provide a reasonable identity of the owners in the Northern Aegean. This was a period of nearly constant warfare, and the Northern Aegean was likely faced with the threat of raiders from the revitalized kingdom of Odrysia. Since these

¹⁸⁶ Tsigarida and Vassiliou 2008, p. 434; Tsigarida, Vassiliou, and Naum 2009, p. 398; Adam-Veleni 2009, p. 15; Caraher, Pettegrew, and James 2010, pp. 398-400.

¹⁸⁷ Adam-Veleni 2009, p. 15.

¹⁸⁸ See Osborne 1990, p. 22 for the Siphnian evidence; Alcock 1994, p. 182 suggests that wine-presses on-site are not far-fetched; Tsigarida and Vassiliou 2009, p. 434; Tsigarida, Vassiliou, and Naum 2009, p. 398.

¹⁸⁹ Morris and Papadopoulos 2005, p. 177; for Chalkidean wine production see also Papadopoulos and Paspalas 1999, and Lawall 2004.

¹⁹⁰ Morris and Papadopoulos 2005, p. 177.

¹⁹¹ Morris and Papadopoulos 2005, p. 177.

¹⁹² Morris and Papadopoulos 2005, pp. 164 and 197.

estates were wealthy, the owners may have taken the initiative to defend their property during the unstable fourth and third centuries.

While the identity of the tower-owners may be reasonably argued, the identity of the small-farmers working these lands is difficult to discern. The existence of dependent natives (sometimes referred to as *laoi*) may represent the lowest “step” of the feudal pyramid. These inhabitants were too poor to move when the land was conquered but they provided a sizable workforce, as well as another taxable population.¹⁹³ The *laoi* were somewhere between slaves and “serfs” in status, who owned their own property and may not have been tied to their *mandrai*.¹⁹⁴ They paid rents and provided labour (*leitourgia*) to their respective aristocracy. In return, the *laoi* were given protection by the local aristocracy, or even the nearby *polis* as suggested by an inscription concerning a land-grant where the *basilikoi laoi* could live in nearby Petra for protection (*RC* 11, *SIG¹* 158).¹⁹⁵ There has been some suggestion that the *laoi* were incorporated into the economic system of kings-cities-individuals as procurers of raw materials for manufacturing goods in the *poleis*.¹⁹⁶

A dispute between the Greco-Macedonians of Philippi and nearby Thracians may offer some insight. Philip II had granted the people of Philippi some neighbouring land, which was renewed or confirmed by Alexander (*Syll.*³ 277). The Philippians sent embassies to Alexander (*Syll.*³ 277, l. 3-4 and l. 26) due to some dispute with the Thracians, who did not seem to send embassies to Alexander in this case.¹⁹⁷ Hammond suggests that their lack of representation and

¹⁹³ Eckstein 2009, p. 255; Lund 1992, pp. 146-147.

¹⁹⁴ Lund 1992, p. 149; Rostovtzeff 1941, p. 508; Bikermann 1938, pp. 177-179.

¹⁹⁵ Lund 1992, p. 150; Welles 1934, pp. 62-63.

¹⁹⁶ Lund 1992, p. 147 and n. 131, who cites Rostovtzeff 1922, p. 376; see Briant 1982, p. 243, and Bikermann 1938, p. 169 for further readings on industrial activity of Asia Minor.

¹⁹⁷ Hammond 1988, pp. 384-385.

the continued favour to the Philippians meant that the Thracians did not hold the same status. Instead the Thracians were tenants or serfs on the land that they had once owned.¹⁹⁸

In theory the king owned all of the land that he conquered, which is demonstrated by the letters concerning Aristodikides and Athenaios in the Troad (see p. 42). Parceling out royal land created a new and loyal aristocratic landowning class, from which the king could then demand manpower, taxes, and political support. Direct management was shifted from the King to a larger number of what can be considered “feudal lords”. The “feudalism” of the system is seen by the organized construction of fortified farm-sites with the characteristic stone towers: too expensive for small-farmers to build but ideal for the more wealthy classes to assert local dominance.

4) Conclusions

From this overview of royal economies of the Late Classical and Early Hellenistic period it can be seen that kings did have an effect on the economies of their kingdoms. It appears that economic magistrates existed before the appearance of the various Macedonian kingdoms, but the *poleis* continued to appoint their own councils and magistrates during the period of the Diadochi, with seemingly no evidence for royal interference. It allowed the cities to maintain the idea that they were free in their own affairs and the king was assured that the markets were running smoothly and generating taxes.

However, direct interference by a king was also possible when examining their role in trade monopolies. The creation and protection of the timber or the gold and silver monopolies in Macedonia would have increased export incomes. State investment in these monopolies can be seen in the gold and silver mines around Philippi becoming very lucrative when Philip improved

¹⁹⁸ Hammond 1988, p. 385.

their infrastructure. At Krenides, the presence of cities could greatly increase the output of important resources, such as gold and silver mines both by improving infrastructure and conveniently settling a nearby work force. The efforts of Antigonos to control grain-importation by Teos and Lebedos shows that kings were increasing the profits from royal land and grain sales. It is possible that Antigonos could have sold his grain for a higher price elsewhere, but he had an assured market in the new city. The new city was also spared from spending importing grain from one of Antigonos' rivals at a presumably higher price. This would ensure the city would eventually have money to make tributary payments to Antigonos, rather than defaulting like Miletos with Lysimachos. The creation of cities and movement of populations to these cities may have created jobs for the unemployed, and they were seen to have opened up new land for working. The process of *synoikismos* transformed the cities into major centres of production and tax collection in an effort to centralize the process for greater efficiency. The changes in land distribution and possible new social conditions are still very debatable. The Achaemenid mode of farming with native *laoi* being exploited appears to have caught on with the Macedonian dynasties, perhaps as early as the reign of Philip II. The evidence suggests that farms were becoming more estate-like and were being run with the goal of producing crops for the market. The increased production of cash-crops meant more market transactions. This meant that farmers could raise cash for various taxes, while the city could tax these transactions as well with which they could pay the large tributary payments required by the kings.

Much of the evidence presented in this chapter has been spread out widely across the Mediterranean, with an effort to maintain an Aegean focus. The evidence also covers many different kings across a broad period of time so that the argument has not totally focused on a relatively narrow geographical and chronological space. Further archaeological evidence may fill

in this gap in terms of geographic and chronological evidence at least for the Chalkidike. Amphora stamps from the region can be assigned a more refined geological and chronological context. They also show observable changes in style over time. The changes in amphora stamping can then be linked more broadly to the evidence examined in this chapter in order to determine when economic changes were occurring in the Northern Aegean and in relation to which king.

Chapter Three

Amphora Stamps and Ceramic Evidence

The previous chapter surveyed various forms of evidence used to illustrate changes in Hellenistic economies in the broader Mediterranean. Some evidence has even shown potential change in the areas of interest, Macedonia and Thrace, including Mende and the Chalkidean peninsula. The evidence examined in Chapter Two is very broad, particularly chronologically, since it cannot be dated firmly within the Early Hellenistic period in many cases. In order to provide geographically and chronologically confined evidence, this chapter examines stamped amphora handles from Mende, the Chalkidike, and other Northern Aegean sites and the changes in stamping practices.

Amphora stamps are most often studied for what they can provide in terms of date and place of manufacture. Individual *poleis* and broader regions (e.g. Chalkidike) had unique forms of stamps, and many of these regional types have relatively tight chronologies based upon datable archaeological contexts. The use of amphora stamps in dating sites and assemblages is another useful function of amphora stamps. The stamps are important for this thesis because of what they can mean concerning economic organization and changes in organization. Changes in amphora stamping can lead to conclusions concerning broader changes in economic activity.

This chapter will first examine the broader issue of stamping practices and their purpose across Antiquity. The purpose of the amphora stamping can indicate by whom this section of economic production was being run: kings, *poleis*, or private individuals. It is important to determine the reasons for stamping because the knowledge provides a connection between the artifact and the broader economic processes of the society in which it is used.

Two issues are important throughout the chapter and for the thesis as a whole because they may determine at what level the state was involved with production and trade during this period. The first issue concerns stamping practices in the late fifth and early fourth centuries at sites in Northern Greece. This is important because it is necessary to track the changes in stamping that occur in the late fourth and early third centuries in order to demonstrate changes to economic organization. The second issue is the variation in names and formats within the body of Mendeian amphora stamping through an examination in stamp dies and the implications of similarities and differences in them.

1) Amphora Stamping

The practice of marking amphoras dates back to as early as the Bronze Age, where amphoras had *dipinti* (painted markings, as opposed to those that are engraved) as markings.¹⁹⁹ At Mende, *dipinti* appear to gradually give way to stamping or incising the actual clay for a more permanent form of marking amphoras. This is based on the earliest types of stamps being discovered in contexts from this period in Athenian fills.²⁰⁰

The study of amphora stamping can be broadly divided into three categories: place or region of manufacture, the chronology of stamping practices, and the reasons for stamping. The first two categories set up the context for the practice of amphora stamping as a whole in order to address the third category. Studying the geographic and chronological framework of stamping practices allows a comparison of them to the broader historical context and therefore what social and economic reasons for stamping there may have been.

¹⁹⁹ Papadopoulos 1994, p. 438.

²⁰⁰ *Agora* XXI; *Agora* XXX; Badoud 2013, pp. 93-94.

One suggested reason for stamping was that they were used to date the vintage within.²⁰¹ Virginia Grace points out that this is fine for places like Thasos where the vintage was actually aged, but places where the wine was of lower quality would not have bothered. What about amphoras not carrying wine? Not every city that produced and stamped amphoras was necessarily exporting wine. It is possible that oil can expire although it can last up to two years if stored and sealed properly. If so, it may not have needed a date.

Two theories concerning the reason for stamping include marking the amphora based on its contents or to designate goods for special occasions. For the former, stamps may represent the volume of the amphoras contents, as seen on the stamps from Akanthos which provide the amphoras capacity.²⁰² For the latter, Grace believed that certain Samian stamps were used to mark olive oil used in festivals for Hera in the region.²⁰³ Another theory for the purpose of stamping was raised by Schuchhardt, claiming that perhaps the stamps referred to the necessary drying period for amphoras.²⁰⁴ Grace, however, dismisses this idea, since the drying period was likely only being a few days in the Mediterranean climate, whereas the stamps record a wider time period.²⁰⁵ Finally, it is possible that amphora stamps, as with brick stamps, were used as a form of inventory management. The date on the bricks, and by extension the amphoras, could help a manufacturer inventory his production levels.²⁰⁶

Grace initially believed that stamps represented a license from the state that allowed the manufacturer to sell the goods within the amphora; the license presumably expired based on the

²⁰¹ Grace 1934, p. 198.

²⁰² Garlan 2006, pp. 276-279; Bresson 2016, p. 243.

²⁰³ Grace 1971, pp. 65-66.

²⁰⁴ Schuchhardt and Fabricus 1895, p. 429

²⁰⁵ Grace 1934, p. 198.

²⁰⁶ Grace 1934, pp. 198-199; Nilsson 1909, pp. 58-59.

date of the stamp.²⁰⁷ While a Greek from the given city would presumably know which magistrate was in office and who had served in recent years, the stamps with these magistrates would have no meaning to a Greek in a different city. Furthermore, many stamps carry only a name, without any clear indication of an official capacity for that person. The appearance of image-only stamps, like those at Classical Mende examined below, would have no precise date for a Greek; rather they may have been a simple civic mark.

There are many theories for the reasons of amphora stamping, the origins of which could be broadly considered as either an initiative of the state for economic control or an initiative of the people and workshops manufacturing the amphoras. It is important to note that many types of amphoras, often unique to a single *poleis* or broader region, were not stamped at all. Likewise the information on stamps across regions and time varied greatly from simple letters, to names of the city and magistrates, or images similar to coins, and more.²⁰⁸ Eventually various *poleis* and regions began stamping the names of fabricants, including Sinope, Thasos, and Rhodes.²⁰⁹ This has led to the argument that amphora stamping came from a desire to improve organization in shared kilns, for which there is considerable evidence.²¹⁰ The use of shapes like crosses and circles, with no evident name or city-ethnic, suggests the idea of private production and marking.²¹¹

Ultimately the reasons for stamping probably vary between regions and conclusions should be based on whatever information the stamps present. The wide variety of names, letters, images, and shapes used in amphora stamping, all of which may mean nothing to modern

²⁰⁷ Grace 1934, p. 199.

²⁰⁸ Lawall 2005, pp. 194-195.

²⁰⁹ Garlan 1998, p. 582.

²¹⁰ Lawall 2005, p. 196; Garlan and Tatlican 1999, p. 23; Garlan 1998, p. 585.

²¹¹ Tsatskheladze and Vnukov 1992, pp. 373-374.

scholars, could indicate a wide number of uses for the stamps. On one hand, there is the possibility that stamps were used to verify the capacity of the amphora, thus reducing transaction costs. On the other hand stamps could represent the desire, either by the state or by individuals, to improve organization and control of the manufacturing process. The kinds of information presented on stamps varied across both time and space in the Greek world. Different stamping practices recorded different variables, each of which allowed for a different set of values (e.g. the presence or absence of a civic image; only a small set of different letters; or more broadly, those who were in a particular job or office), and only in certain cases is it possible to discern precisely what the stamp represented. Finally, the different variations and values they present leads to the issue of “personal responsibility”. In cases like the Parmeniskos Group (see below) where a stamp only preserves a single name instead of a civic image or capacity information, it is assumed that the individual on the stamp bore some responsibility and so was compelled to stamp the amphora.

It is clear that stamping practices as single sites and regions did change over time. While the reasons for the transformations may not be clear, the changes in stamping practices reflect changes in the organization of amphora production. For this reason, the study of early Mendeian and later Parmeniskos Group stamps is a useful case-study for broader economic changes during the Late Classical and Early Hellenistic period. The Kassandra Peninsula is a region that saw some royal intervention with the *synoikism* of Kassandreia (see above p. 29).

2) Research History on Amphora Stamps of the Kassandra Peninsula

The following section examines the history of scholarship behind the Mendeian and Parmeniskos Group stamps. It traces the types of stamps used in Classical Mendeian stamping to

the eventual use of Parmeniskos Group stamps also used in Mende. It is important that these are viewed as the continuation of stamping practices from a single site, rather than two distinct practices because the different kinds of information on the stamps seem to imply changes in economic organization.

Mendeian amphoras and their stamps were identified by Grace who noted the connection between the Dionysian imagery on the stamp compared to coins from the “Kaliandra hoard”.²¹² Her study of Mendeian amphoras led to a general typology of their shape with a “flaring rim”, “broad band handles” and a “shallow depression” on the underside of the foot. Mendeian amphoras were marked with *dipinti* beginning some time after 450 B.C., and these continued into the late fifth century, often beside stamped images.²¹³ Beginning in the last quarter of the fifth century, the “coin type” stamps began to be used commonly.²¹⁴ Stamps bearing a letter were found in a well deposit on Thasos, which was closed c. 330 B.C. thus suggesting a movement away from civic-imagery in the fourth century.²¹⁵ Both Grace and Ian Whitbread concluded that few Mendeian amphoras were actually stamped.²¹⁶

The *synoikism* of Kassandreia seemed, until recently, to explain the apparent break in production of Mendeian amphoras in the late fourth century or at any rate the inability of scholars to recognize a Mendeian type for the Hellenistic period. Excavation at the site of Poseidi near ancient Mende, however, revealed production of a later amphora type already labeled as the “Parmeniskos Group” at the same site as the earlier Classical Mendeian amphoras. The first work that published (as yet unnamed) Parmeniskos Group stamps was the 1871 catalogue by Albert

²¹² Grace 1949, pp. 182 and 186, no. 1. Noe 1926 for the Kaliandra hoard.

²¹³ Lawall 1995, pp. 125-126.

²¹⁴ Grace 1953, p. 107.

²¹⁵ Lawall 1995, p. 127.

²¹⁶ Grace 1953, p. 107; Whitbread 1995, p. 198.

Dumont entitled *Inscriptions céramiques de Grèce*, which provided two examples with the name Παρμένισκος.²¹⁷ The second work was the *Die Inschriften von Pergamon II*,²¹⁸ which published stamps from a Hellenistic fill in Pergamon: thus they provided early datable evidence for the stamps found within.²¹⁹ The third is a work largely on Knidian stamps by E.M. Pridik, which contained a further Παρμένισκος stamp.²²⁰ A catalogue of stamps from Southern Russia in the Hermitage Collection, again by E.M. Pridik, is especially important because it showed that the (still unnamed) Parmeniskos Group existed in significant numbers in the Black Sea region.²²¹ Finally, Virginia Grace published three Parmeniskos Group stamps in an article concerning stamps excavated in 1931 and 1932.²²² Listed under the broad heading “Unknown Provenance” were the names Νικόστρατος, Παρμένισκος, and Φορμίων.²²³ Along with listing these names, she describes the clay as a “micaceous buff clay” and notes the small projecting rim.²²⁴

These four works plus Grace’s 1934 publication provided the basis for Grace’s further work into amphora stamps and the Parmeniskos Group. In Grace’s 1956 publication on the Pynx excavations, she first introduces them as “Parmeniskos Group” and identified the typically rectangular stamp-form with a name in the genitive broken over two lines.²²⁵ She tentatively dated them to the early third to early second century B.C.²²⁶ Grace also noted that some bore

²¹⁷ Dumont 1871, p. 322. These were among the many thousands of stamps found in the earliest excavations in Athens; Grace notes this, as well as the poor archaeological practices with which these stamps were discovered in Grace 1934, p. 206; It should be noted that Dumont did not list this stamp as specifically “Parmeniskos Group” type.

²¹⁸ Schuchhardt and Fabricus 1895, no. 1285, p. 495.

²¹⁹ Grace 1934, p. 207; more on datable contexts below.

²²⁰ Pridik 1897, pp. 127-187.

²²¹ Pridik 1917; Grace 1934, pp. 206-207 and 283.

²²² Grace 1934, pp. 197-310.

²²³ Grace 1934, p. 283, nos. 244-246.

²²⁴ Grace 1934, p. 283.

²²⁵ Grace 1956, pp. 120 & 168.

²²⁶ Grace 1956, p. 168.

monograms rather than names but grouped them with the Parmeniskos Group based on similar characteristics such as rim shape, body shape, and clay type. The description of the clay changes little from her original in 1934: “micaceous russet clay, sometimes with an irregular brownish gray core”.²²⁷ The characteristic rim, perhaps the most important attribute for identifying stamps (besides the stamp-form itself), is noted as having a “sharp outer edge”.²²⁸

In total, Grace recorded 25 unique names over the 85 handles that had been discovered by 1956, as well as listing where these handles had been found: Athens, Delos, Corinth, Philippi, Thasos, Pergamon, Troy, and around the Black Sea.²²⁹ Provenance was still undetermined at this point, and the short section in the article did little to stimulate further published works concerning the group. In 1957, Anne-Marie and Antoine Bon published a catalogue of Thasian stamps in collaboration with Virginia Grace. Several monograms that would later be linked to the Parmeniskos Group were published here, such as the so-called “A-type” monograms.²³⁰

Stamps from Pella in Macedonia are frequently included in Grace’s notes along with Athenian counterparts, and it seems likely that she was also drawing from the more than 140, largely unpublished, stamps excavated at Pella by Petsas and Makaronas in the 1950s and 1960s. This likely started the shift away from believing Meliboia as the production centre and towards Northern Greece and specifically the Chalkidike.²³¹ One of the most notable discoveries - in terms of quantity and relevant location - was the 90 stamps and three well preserved amphoras

²²⁷ Grace 1956, p. 168; “micaceous russet clay” is repeated frequently in her notes and Group index cards.

²²⁸ Grace 1956, p. 168. It should be noted that not every rim that is preserved shares these traits across Parmeniskos Group amphoras, but the stamp is otherwise distinctly of the group.

²²⁹ Grace 1956, p. 168.

²³⁰ Bon and Bon 1957, p. 499.

²³¹ Akamatis 2000, p. 215.

from the Pella excavations between 1980 and 1987.²³² The excavations discovered ten new proper names, ten monograms and single-letters, and two double-letter stamps (IM and MI).²³³

Not long after the finds from Pella were published, excavations just north of ancient Mende, at Poseidi and Fourkas, revealed kiln sites accompanied by stamped handles and jar supports stamped in the Parmeniskos fashion.²³⁴ Importantly, the kiln-site included both Classical and Hellenistic period production, showing that the Parmeniskos Group stamps were part of the broader sequence of Mendean stamping.²³⁵ Surface finds included 18 stamped handles belonging to the Parmeniskos Group. The amphoras are clearly Parmeniskos in style with the knob-shaped toe and the telling triangular rim.²³⁶

The entire Chalkidean peninsula has become the new favoured area as the origin of the Parmeniskos Group. Published materials from Siviri on the Kassandra promontory included five Parmeniskos group handles along with stamps from Kos, Rhodes, Thasos, and Knidos.²³⁷ The five stamps carried four different names, none of which were new, and no monograms or letter-stamps were discovered. Finds from a Late Hellenistic building at Pefkochori suggest pottery production (among other goods), and it is likely that the site's use predates the beginning of the Hellenistic period. Four different names are among the stamps found in these excavations, along with two monograms, and several incuse-O stamps. Further, two unstamped supports (like those from Poseidi) were found.²³⁸

²³² Akamatis 2000, pp. 215-216.

²³³ Akamatis 2000, p. 218.

²³⁴ Anagnostopoulou-Chatzipolychroni 2006.

²³⁵ Anagnostopoulou-Chatzipolychroni 2006, pp. 133-140; Garlan 2006, pp. 141-147.

²³⁶ Garlan 2006, p. 146.

²³⁷ Tsigarida and Vassiliou 2011, p. 430.

²³⁸ Tsigarida, Vassiliou, and Naum 2009, pp. 283-285.

It is quite clear that the Chalkidike and Macedon were centres of production at the very least. The kilns at Mende with Parmeniskos amphora production and handle-stamping are evidence for a major production site. The kilns at Pella have not been confirmed as a production site for amphoras, but the amount of Parmeniskos material there has led to the suggestion of Pella as another production site.²³⁹ The kiln-sites and workshops in the excavations of the Kassandra peninsula may suggest more widespread production of the amphoras.

3) Mendean Stamping Practices

It seems likely that Mende and the wider Chalkidean Peninsula was probably an important production centre of Parmeniskos Group amphoras, if only one site among several. Therefore, the stamping practices of the region just before the appearance of the Parmeniskos Group should be considered, since it provides a better understanding of stamping practices leading up to the noticeable shift in stamping forms.

a) Classical Mendean Stamps

Classical period stamps attributed to Mende/Chalkidike before the use of the Parmeniskos-type can be broadly divided into four different categories: coin-types, male figure-types, cup-types, and letter-types. The first type contains a bearded figure seated backwards on a donkey (**nos. 1-3**). These stamps are reliably attributed to Mende based on the numismatic evidence. Civic bronze coins are easily identified by the ethnic *Μενδαίων* on the coins' reverse.²⁴⁰ The identity of the figure is still debated. Some prefer the figure to represent

²³⁹ Akamatis 2000, p. 220.

²⁴⁰ Grace 1949, p. 178; Badoud 2013, p. 93.

Dionysos, which would fit with a desire for wine and grape imagery from the city.²⁴¹ Others believe the figure is Hephaistos and that the image depicts his drunken return to Olympos, a scene that has solid traditions in other art media.²⁴² This Dionysian imagery may be seen on stamps (**nos. 4** and **144**) which depict Hermes (based on the winged shoes) running. The figure holds something in an outstretched hand that is most likely a child Dionysos, looking up at his courier, which recalls Dionysian mythology and depictions in art. While this stamp is difficult to date, its form and general imagery recalls these coin-type stamps from late-fifth century Mende and so a Dionysos-reading seems appropriate.

The second type consists of a beardless male head usually wreathed although preservation often makes this difficult to discern, and overall very coin-like (**nos. 5-10, 141-142**).²⁴³ Again this type is seen in the coinage of Mende in the period 430-358 B.C. (although the evidence for amphora stamps suggests that these did not go beyond the late fifth century) and has been identified as Dionysos. The figure on the coinage can apparently vary between wreathed and not wreathed, but facial features, including the same slope of the nose and the shape of the head, appear reasonably consistent across both stamps and coins.²⁴⁴ These head-types have an interesting addition to the group, as two from the Agora (**no. 11** and **SS 11748**)²⁴⁵ depict a man in profile with the name *Αγριείας* below the head, an early example of named-stamps.

Although not a Dionysos head, one further head-type stamp related to the coinage are Silenos heads/masks (**no. 12**). A stamp from Mende (**no. 143**) depicts the face frontally, rather

²⁴¹ Grace 1949, p. 178; Carpenter 2011, p. 254.

²⁴² See Carpenter 1997 for Dionysian imagery in the Greek world at the time; Badoud 2013, p. 93.

²⁴³ Grace 1949, p. 178; Badoud 2013, p. 93.

²⁴⁴ Head 1887, p. 211; Gatzolis 2011, pp. 142-143.

²⁴⁵ SS11748 is in Badoud 2013, p. 94; both are published in Bon and Bon 1957, p. 458, where they are categorized as Thasian.

than in profile. Similar coinage related to Silenos depicts the satyr behind a donkey.²⁴⁶ These coins have been dated very broadly throughout the fifth century, but as late as 420 B.C. and often generally contemporary with Dionysos-on-the-donkey types among other mid-to-late fifth century coins.

The third category includes those stamps that depict various forms of cups and jugs. Several tentative dates can be gathered from associated deposits. One stamp (**no. 14**) labeled as Mendean was found in the first layer of well deposit (U 13:1). The well has been dated to the early decades of the fourth century based on the various types of amphoras.²⁴⁷ Mendean sherds actually appear most frequently in this deposit, with more stamps featuring youthful heads (**no. 10**), and forms similar to those found in the Porticello shipwreck. The shipwreck has had several conflicting dates given to it; some prefer a date between 415 and 385 B.C. while others have pushed the date back to c.430 B.C.²⁴⁸ The Mendean amphoras of the wreck however more resemble late-fifth and early-fourth century angular forms rather than earlier “globular” ones c. 425 B.C.²⁴⁹ Therefore if the amphoras of the deposit are similar to the shipwreck, a date for Deposit U 13:1 in the early part of the fourth century seems possible although it is important to note the circular arguments concerning the dates for this deposit as U 13:1 is used to date the shipwreck. Furthermore, Chian toes from the deposit are mixed between a pre-400 B.C. form and a post-400 B.C. form. Likewise two stamps, **no. 15** and **no. 16**, were found in broadly datable deposits. Stamp **no. 15**, bearing a ribbed kantharos, was discovered in a waste pit in the Agora (Deposit E 6:3.3) which has been broadly dated to 375-310 B.C.²⁵⁰ The latter stamp (**no. 16**),

²⁴⁶ Gatzolis 2011, p. 143.

²⁴⁷ Lawall 2000, p. 71.

²⁴⁸ Eiseman 1973 and Gill 1987 respectively.

²⁴⁹ Lawall 1998, p. 19.

²⁵⁰ *Agora* XII, p. 388; *Agora* X, p. 67; *Agora* XXX, p. 361.

depicting perhaps a handled-mug or a ribbed aryballos, was found in a fill from the conversion of a house to an “industrial establishment” (C 19:5) dated between the late fifth century and first half of the fourth century.²⁵¹ While it seems earlier material is present in the deposit, the stamp (**no. 17**) fits with the large amount of Mendean wares within and an early-fourth century date is appropriate with the present evidence. Finally, a stamp bearing a krater (**no. 18**) is found in Deposit S 16:1, which has been dated 425-400 B.C.²⁵²

Finally, there are the letter-type stamps that consist of either a single letter or a pair of letters. These forms are often rather small in size, and in are stamped with a circular die. Several of these stamps are incuse, or impressed into the clay, rather than standing in relief. The incuse forms are typically the letter *omicrons* or a circle (**nos. 19-22**), the letter *chi* (**nos. 23-24**), or a few other letters with no evident care for orientation on the neck or the handle. This form appears on Mendean amphoras of the early fourth century. A recurring stamp of this category is a retrograde-nu often set within a circle (**nos. 32-35**) which is within the circular stamp itself. The same is true for several other types found at both sites, including an incuse *chi* and a recurring stamp featuring a *phi* set within a diamond or ovoid stamp.

Two incuse *alphas* (**nos. 25 and 26**) and an incuse *delta* are found in the same layer of Deposit U 13:1. Also in this deposit is a *chi* stamp (**no. 23**) and four *omicron*/circle stamps (**nos. 19-22**). As mentioned above, the simple incuse omicrons appear on Mendean amphoras and so a date of the early fourth century seems reasonable for their inception, perhaps even earlier. A *phi* stamp (**no. 33**) appears in Deposit R 13:11, thus suggesting a tentative date of the mid-fourth century.

²⁵¹ *Agora* XII, p. 386; *Agora* XXI, p. 97; *Agora* XXIII, p. 330; *Agora* XXIX, p. 440; *Agora* XXX, p. 360.

²⁵² *Agora* XII, p. 398; *Agora* XXI, p. 100; *Agora* XXIII, p. 336; *Agora* XXX, p. 366; *Agora* XXXIII, p. 375.

There are clear links between the city's coinage and the new coin-type stamps appearing at the end of the fifth century. There is the strong possibility that there was a link between the city's economic and symbolic functions based on the use of coin-images on their amphoras. Most importantly is that these Mendeian stamps are clearly datable to the fifth century and before the appearance of the Parmeniskos Group stamps. The images and letters, datable to the early fourth century to perhaps as late as the mid-fourth century, show a clear development in stamping practice. There is also the fact that the shift towards full names represents a strong link to a specific person, rather than any number of possibilities that a single letter might represent. Nevertheless, it is clear that there were a few common methods of stamping Mendeian amphoras by the mid-fourth century. By the second half of the fourth century, there is a break in stamping style, beginning with the appearance of monograms.

b) Monograms

Sometime after the mid-fourth century B.C., the simple letter-style stamps seen above (see pp. 61-62) were replaced with more complex monograms. These monogram stamps are categorized with the Parmeniskos Group because they share rim forms and clay compositions and colors. Unfortunately most monogram stamps of the Parmeniskos Group are impossible to date with any real certainty. Few are located within closed contexts or among other materials that might provide clues to their dates.

The beginning of the change can be seen in the NI/MI/IN-style stamps, set within a rectangle. One amphora neck (**no. 50**) represents the shift towards multi-letter stamps. The

amphora is found in Deposit D 16:1, which is dated 325-275 B.C.²⁵³ Another one these stamps (**no. 52**) was found just above the classical layer of a Byzantine building foundation fill, tentatively supporting a fourth century hypothesis.

A tentatively datable stamp from Athens bears an *AP* (**no. 36**) (it could be an *AT* but it is indexed as the former and that seems to be the better reading), and was found in a deposit (E-F 2-3:2) from the road northwest of the Agora. The deposit as a whole has a wide temporal range, but Layer VII where the stamp is located has been dated to the third to early second centuries B.C.²⁵⁴ However finds from this period are found as intrusions in the layer below it (Layer VIII, dated mid-fourth century to the third century B.C.), and so dates are not as clear as they could be.²⁵⁵

The excavations at Pella discovered three similar monograms that appear to use the same die.²⁵⁶ A stamp with a *ATPK* (?)²⁵⁷ was found in the same well (dated to the middle of the third century) as ΠΑΡ44, and with coins belonging to Antigonos Gonatas and Demetrios II.²⁵⁸

The monograms may have been the stage between Classical stamping practices and then name-based *Parmeniskos* practice. The kiln-site at Poseidi, which continues over both Classical and Hellenistic periods, contains few handles stamped with names: only 9 stamped handles survive from the kiln itself. In contrast, there are over 20 monograms from the site. This suggests that, in a site dated more in the late Classical period, the *Parmeniskos* materials here favour the monogram style stamps and thus that these were an intermediary step between the images from Classical Mendeian stamps and the eventual complete names of the Hellenistic period stamping.

²⁵³ *Agora* XII, p. 387; Rotroff 1984, pp. 343, 347, 349, pls. 16:7, 7-9; *Agora* XXX, p. 361; Lawall 2004, pp. 447-448; *Agora* XXXIII, p. 349.

²⁵⁴ *Agora* XII, p. 389; *Agora* XXIX, p. 448; *Agora* XXX, p. 362.

²⁵⁵ *Agora* XXIX, p. 448.

²⁵⁶ Akamatis 2000, pp. 47-48.

²⁵⁷ The question-mark is used by Akamatis when identifying this particular type of monogram. One example may appear at Athens as well, although the dies are not the same.

²⁵⁸ Akamatis 2000, p. 219.

c) Name-Stamps

The actual name-stamps of the Parmeniskos Group then follows the monogram stamps chronologically. These stamps bear a name in the genitive case and they are divided over two lines. Although this description fits the majority of these stamps, there are several examples of names which do not follow this pattern precisely. Nevertheless, they are still Parmeniskos-style due to their rim form or clay composition. The monogram stamps are rather limited in variation with most of them being based around an *alpha* in some manner. The name stamps present a much higher degree of variation, as more than twenty names have been discovered with considerable variation compared to the similar monograms.

The name *Παρενίσκος* (and various others) were found also in the Thessalian city of Demetrias.²⁵⁹ The city itself only came into existence c.296 B.C. when Demetrios Poliorketes founded it in a *synoikismos* of all the surrounding towns (Strab. 9.436). However the site most likely encompassed some of the urban area formerly occupied by Pagasai and Neleia, which were occupied as early as the sixth and seventh centuries B.C.²⁶⁰ Therefore, the foundation date of Demetrias is important for providing a possible *terminus post quem*, although the chronology of the city's foundation is still somewhat unclear.

A stamp from Pella with *Παρενίσκος* (ΠΑΡ 57) was found in a well with bronze coins of Alexander III,²⁶¹ Kassander (305-297 B.C.), and Antigonos Gonatas (r. 277-239 B.C.), and the layer immediately above it containing coins of Perseus (r. 179-167 B.C.).²⁶² Furthermore, this

²⁵⁹ Stamp publications from the site are spread through various volumes of the Demetrias excavations in the 1970s, by Bakhuizen et. al 1976.

²⁶⁰ Cohen 1995, p. 111.

²⁶¹ It is unclear if this is a posthumous coin of Alexander III, since these were minted by Lysimachos during the third century B.C.

²⁶² Akamatis 2000, pp. 219-220.

stamp was found with a Rhodian stamp from Period II (c. 234-199 B.C.)²⁶³ and a Thasian stamp dating c.250 B.C. Akamatis concludes that the Parmeniskos Group stamps found in this deposit, including ΠΑΡ 57, can be dated roughly to the third quarter of the third century.²⁶⁴ The Rhodian stamp, however, brings the date lower towards 239 B.C. than assigning one closer to the first and second quarters of the third century. The coinage and the other amphora material in the well suggest that *Παρενίσκος* may have been in use earlier than Akamatis' conclusion.

Several stamps with the name *Αμεινόνικος* are found in more useful contexts. As with most of the Parmeniskos stamps at Athens, several of those bearing *Αμεινόνικος* are only datable to the Hellenistic or third century B.C., typically based on related pottery found with them. One stamp (**no. 58**) is found with a Knidian stamp dated tentatively to the late third century.

Another stamp (**no. 55**) is found in the datable Layer 9 of the West End Trench (section ΒΔ 562). Layer 9 contained a single coin attributed most likely Antigonos Gonatas (r. 277-239 B.C.),²⁶⁵ but also contains coins from the fifth and sixth centuries A.D. The layer immediately above it, Layer 8, can be dated roughly to the second half of the second century B.C., largely based on a Knidian stamp dated to the last decade of the second century. The layers immediately below it (sub-divided as 9a and 9b) are dated to the second half of the fourth century. This is suggested by a fourth century Chian amphora as well as datable coins. One coin is a bronze from Euboia dated between 348-338 B.C.²⁶⁶ The second coin is an Athenian bronze dated between 350 to the mid- or early-330s B.C.²⁶⁷ This may all be for nothing however, as the next layer below these (Layer 10) is dated to the second half of the third century, and a sub-layer (10a) is

²⁶³ See Finkielsztein 2001 for chronology of Rhodian amphora stamps.

²⁶⁴ Akamatis 2000, p. 220.

²⁶⁵ This coin could also be second century B.C. Athenian as well. Both styles feature the combination of a helmeted Athena (obverse) and Pan or Zeus (reverse)

²⁶⁶ Picard 1979, p. 168.

²⁶⁷ *Agora* XXVI, no. 38 s.

fourth century in date. Nevertheless, it seems reasonable to conclude that a third century date is applicable to this find-spot.

Three stamps with the name *Τιμαίνετος* are found in contexts which may establish a third century date for the stamps. The first (**no. 129**) is from a cistern deposit (L 17:7)²⁶⁸ on Aischines Street. This deposit has been dated rather broadly between 310 and 220 B.C. mostly based on the pottery finds, including Thasian stamps.²⁶⁹ Also related was a single Athenian silver coin dated to the early third century.²⁷⁰

The second stamp (**no. 130**) is found in a fill beneath the Stoa of Attalos (Deposit Q 8-9:1), which contains 122 Rhodian, Chian, and Thasian stamps. The stamps are dated based on their names to between 200 B.C. and 180 B.C. The coins found within this deposit date to the same period and thus the fill can be dated to the first quarter of the second century.²⁷¹

The final example (**no. 131**) comes from a Great Drain fill that has broad dates between the fourth century B.C. and first century A.D.²⁷² However, the Hellenistic layer (Layer 1, lot ΕΕ 12)²⁷³ contains coins from Megara which date to the late fourth or early third century. Therefore, these coins are probably of the mid-to-late third century but they may provide a useful *terminus post quem* for the fill and the stamps within.

The name *Μικίων* appears in several sites, including a stamp from Pella. This stamp (IIAP 44) was found in a well east of the stoa and subsequently dated based primarily upon the coinage around it. One bronze minted by Antigonos Gonatas is in the associated layer.

²⁶⁸ *Agora* XII, p. 394; *Agora* XXIX, p. 460.

²⁶⁹ Bon and Bon 1957, nos. 259 and 2010.

²⁷⁰ Although a date in the third quarter of the fourth century has been suggested, Shear 1933, pp. 246-247.

²⁷¹ *Agora* XXXIII, p. 373.

²⁷² *Agora* XXIX, p. 434.

²⁷³ The layers above are more Roman in their materials.

Immediately below this layer, coins from Philip II are mixed with more Antigonos Gonatas bronzes. The top of the fill consists of several more layers containing Gonatas coins and finally some bronzes of Demetrios II (r. 239-229 B.C.).²⁷⁴ Akamatis, therefore, places this particular stamp somewhere in the broad period of 277-229 B.C. This could be narrowed down to 277-240 B.C. because the coins of Demetrios II are within the layer above the stamp. There was also a *Μικίων* stamp from Kounouklia, on the Kassandra peninsula, which was found with an Antigonos Gonatas bronze.²⁷⁵

In Athens a well deposit (A 14:1)²⁷⁶ with a stamp (**no. 99**) was dated based on the Hellenistic pottery within. This was found with coins dating as early as those of Antigonos Gonatas, as well as several Athenian New Style (beginning around 196 B.C.)²⁷⁷ coins, which does not help in narrowing down a date. Although the deposit continues until the fourth century A.D., the subdivision with the stamp is found alongside Type-2 lamps dated roughly to late third century to early second century B.C.²⁷⁸

The recurring association of stamps of *Μικίων* with coins from Antigonos Gonatas is conspicuous. This name is well-represented in Macedonia, including finds at Aiani and Philippi.²⁷⁹ Gonatas took control of Macedon in 277 B.C., and after losing Upper Macedonia briefly in 274, he consolidated the kingdom in 272 B.C. His reign was relatively long as well, lasting until 239 B.C., and so *Μικίων* can be placed anywhere within the period from the 270's to the 240's B.C.

²⁷⁴ Akamatis 2000, p. 219.

²⁷⁵ Tsigarida, Vassiliou, and Naum 2009, pp. 382-383.

²⁷⁶ *Agora* XXIX, p. 433.

²⁷⁷ Thompson 1952, p. 32.

²⁷⁸ H.S. Robinson (Field Notebook).

²⁷⁹ Tod 1942, p. 54; Tod does not give the stamp's name here, but Grace notes it is a *Μικίων* stamp.

A stamp bearing the name *Νικόκλης* (**no. 112**) was found in a cistern fill deposit (A 18:1, Layer 1). This deposit, covered by a thin layer of dug bedrock and then the Roman layers above, contained coinage largely from third century Athens. It also contained amphora and lamp material from the third century B.C., although there are second century intrusions in the fill. Nevertheless the deposit has been dated 275-200 B.C.²⁸⁰

Excavations around the Chalkidike, especially the Kassandra peninsula have yielded more Parmeniskos material, as noted above. At Siviri, originally dated to the reign of Philip V (r. 221-179 B.C.) but now dated starting in the reign of Philip II (r. 359-338 B.C.), a workshop was found with a number of stamps from Rhodes, Kos, Thasos, and Knidos. Among these amphora stamps were five Parmeniskos stamps, including one naming *Ἀμεινόνικος*.²⁸¹

d) Stamped Jar Stands/Supports

The Parmeniskos Group stamps are interesting because they are found on amphora stands (**nos. 191-225**) at the production/kiln site of Poseidi. Amphora stands are known from various assemblages around the Mediterranean. These are ceramics that are typically cylindrical in shape, hollow on the inside, and with an opening on both ends. These characteristics can often differ however, as will be seen below. It is difficult to date the supports when they stand on their own and there are no obvious changes in form that would demonstrate changes over time.²⁸² Stands or supports are often found at production centres, such as those mentioned above at the Poseidi. The use of the stands is typically ascribed to holding amphoras with pointed toes

²⁸⁰ *Agora* XXIX, p. 434; *Agora* XXV, p. 163;

²⁸¹ Tsigarida and Vassiliou 2011, pp. 430-434.

²⁸² Rieger and Möller 2011, p. 164.

upright.²⁸³ Stands have been found within kilns, suggesting that they held amphoras being fired. However stands can also be found outside of kilns in other areas around workshops, and so could have been used for holding amphoras anywhere.²⁸⁴ At Marmarica in Egypt, stands are associated with all sizes of workshop, from small to large.²⁸⁵ It is difficult to know how wide-spread the use of these stands were in production centres of different sizes

Although their general shape is fairly typical, some variations may allow for different interpretations of their use. At Akademia in Egypt fourteen stands were found and were bi-conic in shape. This shape, in combination with their narrowness, might have allowed the supports to be used as stoppers around the rims of amphoras.²⁸⁶ Pichot and Şenol provide an image of this where the “support”, which had an opening in the middle, was slotted into the opening of the amphora in one case.²⁸⁷ Perhaps this provided greater control when pouring or inserting goods into the amphora. Another possibility is that they may have been inserted before firing the amphora in order to ensure the neck kept its shape. Another “support” was similarly slotted into the opening of the amphora, but was completely solid to act as a stopper of sorts, which could be removed.²⁸⁸ The examples at Akademia just serve to illustrate that the “supports” may not have necessarily been used in a uniform fashion in every region.

The supports from Mende/Poseidi were separated into two distinct categories: Type A and Type B. Type A stands are noticeably wider at the base with the bottom lip being rather thick and often sloppily done. Type B stands tend to be narrower and often have a neater more

²⁸³ Tsatsaki and Nodarou 2015, p. 294.

²⁸⁴ Tsatsaki and Nodarou 2015, pp. 294-295; cf. Empereur, Marangou, and Kritzas 1991, pp. 481-493 for (evidence from the first century A.D.) stands outside kilns.

²⁸⁵ Rieger and Möller 2011, p. 150.

²⁸⁶ Pichot and Şenol 2014, p. 228.

²⁸⁷ Pichot and Şenol 2014, p. 238, fig. 9.

²⁸⁸ Pichot and Şenol 2014, p. 238, fig. 9.

prominent lip on the inside of the base. Three names make up the entire batch: *Θεόδοτος* (the most numerous), *Εὐβουλος*, and *Κριτόλαος*. The former two names both appear with a jar to the right of the name: a krater or kantharos for *Θεόδοτος* and an amphora for *Εὐβουλος*. These images can cover either both rows of the stamp, as is often the case with *Εὐβουλος* stands, or just the bottom corner as is often the case with *Θεόδοτος*.

The use of these stands may be involved in the organization of shared kiln-sites and thus related to the possible causes for why Parmeniskos Group amphoras were stamped. There is evidence from various sites beyond the Chalkidike where manufacturers were sharing the same kiln site, and thus the stamps helped with organization.²⁸⁹ If kilns were shared and the individuals represented on the stamps were active at the exact same time then this permanent and visible marking on the stand might help delineate where each manufacturer was set up within the workshop/kiln. This would prevent others from entering their space and ensure that larger manufacturers had sufficient space reserved for their production.

If kilns were not shared or if the names were not contemporary with each other, however, then the purpose of stamping becomes difficult to discern. Parmeniskos Group stamps have a theoretically vast number of purposes by their nature. A name with no official title or other meaning could represent any number of scenarios. Further research into production sites of Parmeniskos amphoras is necessary to better understand the issue of shared workshops/kilns and, by extension, the reason for stamping amphoras in the Parmeniskos style.

²⁸⁹ Garlan and Tatlican 1999, p. 23; Garlan 1998, p. 585.

4) Stamp-Dies

Although the reason for stamping amphoras in the Parmeniskos style is not entirely clear, the stamps and their dies can still provide some insight into amphora production. The study of stamp-dies is important because it can potentially reveal information about production levels and information about stamp production. In particular is the idea that each die had a certain number of uses before it became too worn, much like dies in minting coins. Studying dies is not new, however, since Grace identified differences in stamps in her 1956 article and in her notes as well.²⁹⁰ Not every name found at Athens or Mende is presented here; rather names which appear multiple times take precedence and particularly those names with different dies.

The most numerous single name found at Athens is *Μικίων*, which is found on eight different handles. Examination of the stamps reveals that there was probably two different dies used for this name group. The difference between the two dies quite noticeable. The more numerous (**nos. 99-100, 102-105**) die uses rather blocky letters, while the second die (**nos. 101 and 106**) uses thinner letters.

The name *Νικίας* is found on five stamps at Athens and these appear to use the same die based on letter-forms and spacing, as well as the stamp-dimensions. This consistency follows into the handles themselves, as four of the five are similar in thickness and shape, while the fifth (**no. 107**) appears bulkier. One oddity from this name-group is on the stamped-handle **no. 108**: the stamp is oriented parallel with the rim-side rather than perpendicular to it (running “down” the handle). This is most likely just an error in the stamping process, but raises interesting questions of the stamping process. The single stamp from Poseidi bearing the name *Νικίας* (**no. 188**), however, uses a different die from those in Athens. The letters are spaced over two-line

²⁹⁰ Grace 1956, p. 169.

differently and the example from Poseidi may contain an image of a jar in the bottom-right corner. The name also appears at Pella and the stamp also uses a different die. The name is set over one line rather than two. However the letters of each die shares stylistic traits, particularly in the shape of the *kappa*. One could cautiously suggest that the name still belonged to one individual who used different stamp-forms for unknown reasons. This raises the question of who chose the layout of the die or perhaps it suggests an industry of artists who created dies. *Νικιάς* may have employed a new die-maker at some time who chose to lay it out in a different manner. On the other hand, *Νικιάς* himself may have decided to change the layout himself.

‘Ηγήσινος appears with five stamps at Athens with three or four unique dies. At Pella, where five stamps were found, there are at least three different dies beyond those from Athens. The first group of this name is quite conspicuous, written over just a single line and using untidy script and a lunate-sigma. Two stamps at Athens (**nos. 78 and 79**) use this die. One amphora at Pella appears to use the same die. The remaining three stamps at Athens (**nos. 80-82**) spread the name over two lines and the script is neater than the above examples. Nevertheless, a close examination of the letter spacing and placement still reveals at least two different dies. At Pella it seems this die is used for three handles, and is quite similar to **no. 82** at Athens. Pella also introduces one new die to this name-group on stamp ΠΑΡ 25 where the sigma is placed on the first line of text rather than the second. The letter forms, especially the larger omicron, are somewhat different from all the other examples of this name. The stamp is also squarer in dimensions, rather than the typical rectangular form.

Next the name *Παρμενίσκος* appears six times, including one stamped handle from Poseidi. Each stamp uses a different die.

In contrast to *Παρμενίσκος*, the name *Αμεινόνικος* appears a similar amount of times (including once at Poseidi) but every stamp appears to use the same die.

The name *Θεόδοτος* (**nos. 197-222**) is clearly the most numerous in this study. The name appears a total of twenty-nine times, including twenty-six stamped amphora stands from Poseidi. Despite the high recurrence of this name, the impressions maintain a striking regularity with a neat script using large, blocky letters. There appears to be two dies used for the stamped handles and a single die for the stamped amphora stands. Interestingly, one stamp from Athens, **no. 91**, may be a similar die to the form seen at Poseidi, with the possibility for the image of a sideways amphora in the bottom-right corner. Two stamps also appear at Pella, using two different dies. Indeed one stamp, ΠΑΡ 29²⁹¹, appears similar to the stamped support dies, with the possibility (poor preservation makes it difficult) of a krater or kantharos depicted in the lower-right corner.

Finally, the name *Εὐβουλος* (**nos. 191-296**) appears only at Poseidi but it is the only name to appear on both stamped handles and stamped amphora stands from this site. The amphora on the supports' stamp is consistently located in the bottom right corner, and the dies are very similar. *Εὐβουλος* stamps on handles (**nos. 181-187**), where preservation allows, do not depict this amphora. The name also appears on two stamped-handles from Pella (ΠΑΡ 17 and ΠΑΡ 18)²⁹², both using different dies. Although several of the stamped handles are poorly preserved, there are at least four or five different dies used for this name. The dies for the stamped stand all appear uniform, but the stamped handles vary greatly in form and organization of the letters. This raises questions concerning the actual use of the stamps, especially between the use of stamps on handles and on amphora stands. It is possible that the amphora stands excavated at

²⁹¹ Akamatis 2000, p. 36.

²⁹² Akamatis 2000, p. 34.

Poseidi simply represent a single period in time, while the handles represent a broader time period in which new dies were created for *Εὐβουλος*.

To make sense of this range of dies per name, it seems reasonable to assume that new dies were created when old ones were worn out or otherwise unusable. Logically, a die becomes unusable based on how often it is used. If so, it is reasonable to conclude that those names with more unique dies were associated with higher production levels, while those with fewer unique dies were associated with lower production levels, either at one time or over a longer period of time. This might be the case for the difference in die-numbers noted with *Παρμενίσκος* and *Αμεινόνικος*. The former, with more unique dies, was producing amphoras at a higher level or for a longer period of time while the latter was not producing as many or for a shorter period of time. There should be some caution with this conclusion because it assumes that every dies changed in style fairly often. Finally, it is important to consider that much of this is based upon what happens to be excavated. Differences between total stamps and total dies might become less significant if there was a greater number of stamped handles excavated.

5) Conclusions

The evidence presented has provided an unbroken sequence of amphora stamping at Mende and the Chalkidike. This clear sequence, generally covering the fifth through third centuries, show a clear change in the way amphoras were stamped at Mende and the Chalkidike. The stamps from Classical Mende are well-documented and have an established chronology leading into the mid fourth century. The Dionysian imagery and various wine vessels from the Classical period provide a distinctive style for this time. Then, some time probably in the late fifth century, the Classical image-type stamps gave way to the various letter-stamps. Following a

gap that may be associated with the *synoikism* of Kassandreia the use of monograms emerges in the late fourth century. These do not seem to be in use for long, as by the third century full names were the mainstream practice in the region. Unfortunately, the precise beginning date for the Parmeniskos Group remains difficult to discern.

Various datable contexts which contain Parmeniskos stamps suggest that the named stamps were in use by the early third century B.C. This can be seen at both Chalkidean and Black Sea sites. In 2000 Ludmili Getov sought to date a particular *Αντίφιλος* from the Kabyle excavations. The stamp itself was found in a tomb Getov dates the burial to 281-277 B.C. based on the coinage within.²⁹³ An *Αντίφιλος* stamp was also found at Olbia, and Stoyanov notes that its related amphora is a near match to the one from Kabyle.²⁹⁴ This, along with associated grave goods, has led to a suggested date in the end of the fourth to the early third centuries.

The appearance of Parmeniskos style stamps in the West Pontic area has led scholars to suggest the idea of “regional production centres” for Parmeniskos amphoras. A group of stamps bearing the name *Ματρόβιος* have been found at Thracian sites of Olbia, Kabyle, and Odessos.²⁹⁵ This particular group is interesting because the name is found on non-Parmeniskos Group stamps as well; where the name appears over one line with a Korinthian helmet above it (the helmet being the connection to Mesembria through the city’s coinage).²⁹⁶ The name *Μελσέων* is attested at Mesembria during the second quarter of the third century the latter which and is connected to the legendary founder of the city, Melses.²⁹⁷ Neutron activation and clay-sample analysis of these stamps, and differences in amphora and stamp morphology, suggests that *Αντίφιλος*,

²⁹³ Getov 2000, pp. 152-153.

²⁹⁴ Stoyanov 2003, pp. 37-38.

²⁹⁵ Stoyanov 2011, p. 191.

²⁹⁶ Stoyanov 2011, p. 193.

²⁹⁷ Stoyanov 2011, p. 193.

Ματρόβιος, and *Μελσέων* should be considered a sub-group regionally produced in Mesembria.²⁹⁸ The appearance of these amphora stamps around the same time that Mendeian amphoras were being stamped in the Parmeniskos style suggests that the Parmeniskos Group may have been a wide Thracio-Macedonian phenomenon.

The differences in dies may also suggest actual levels of production by each name. It could be assumed that names with many dies were frequently having new dies made as old ones became too worn to be used. As noted, the issue with this conclusion is that each name would change every time a new die was made. It is also possible that different dies could represent different individuals separated by a period of time. It is possible that major differences in dies signify different individuals operating at the same time, who needed to differentiate themselves if they were sharing workshop space. This is another area where further discovery and excavation of Parmeniskos Group material would be helpful in order to create a more full count of stamp numbers and different dies.

The purpose of stamping is still debatable, as with many different classifications of amphora stamps, but it seems likely that the Parmeniskos Group was part of improving economic organization. The shift from city-related images, various images like cups, and simple incuse letters to more complex monograms and full names shows this. If kiln-sites were increasingly shared, particularly during a time of increased amphora production, then better organization of production seems likely to occur. This would help to reduce production costs as zones of production could be delineated between fabricants thus preventing confusion and altercations.

But were kiln-sites shared? A survey of Classical and Hellenistic period kiln-sites in the Aegean was undertaken by Eleni Hasaki that suggest the Hellenistic period saw a concentration

²⁹⁸ Stoyanov 2003, pp. 40-41.

of kilns in centres of production, including Athens, Pella, and Pherai-Velestino in Central Greece.²⁹⁹ Intensity of production is suggested by the presence of multiple kilns at each site during the Hellenistic period, where often there were two or three kilns in, possibly, full-time use.³⁰⁰ This included six kilns at Pella in the Tsagarli Plot, which existed along with four other kilns at various areas in Pella.³⁰¹ In general the numbers of kilns per site does not seem to have increased from the Classical period, although the simultaneous use of kilns is now a possibility during this period. However sites like Pella and Athens seem to have increased their production capabilities during the Hellenistic period based on increased number of workshop areas although determining changes in production at continuous sites is difficult due to overlapping work spaces. Hasaki believes that rather than the idea of massive ceramic “factories”, the Classical and Hellenistic period saw an increase in separate “medium-sized” workshops.³⁰² It seems that kiln-sites may not have been shared if there was an increase in smaller workshops during the Hellenistic period

Did changes in stamping reflect an increase in complexity? The shift from civic imagery seen on coins to single letters and limited monograms to full names suggests an increase in accountability on the individual during the process of amphora production. What was this accountability then? This may not be possible to discern with the current research in the field of Parmeniskos Group amphora stamps. Despite these issues of chronology and stamping reasons, there is clear evidence for changes to stamping practices and, presumably, organization of amphora production.

²⁹⁹ Hasaki 2002, p. 236.

³⁰⁰ Hasaki 2002, pp. 236-237.

³⁰¹ Hasaki 2002, pp. 236 and 238.

³⁰² Hasaki 2002, pp. 313-314.

Chapter 4

Conclusions

This thesis sought evidence of economic change and development in the Northern Aegean during the late Classical and Hellenistic periods. The difficulty that has plagued scholars of this field during this time period in the Northern Aegean has been the sparse and scattered evidence that definitively shows economic changes in this region. There are anecdotal hints of economic practices during the Early Hellenistic but nothing that suggests broad economic changes in Macedonia and the Chalkidike. The examination of economic systems is hindered by the lack of literary sources in the ancient world that discuss matters of the economy and economic development. The consideration of the new amphora-based evidence, however, has contributed to the debate concerning economic changes in the Northern Aegean from the Classical period to the Hellenistic.

The epigraphic material presented in Chapter Two provides rather clear evidence of various economic activities in a number of datable cases. The various economic magistracies of Greek *poleis* are often mentioned in these inscriptions; the increasing frequency of references to these magistrates during the Late Classical period and into the Early Hellenistic period suggests that there was some increase in their activity. This indicates an increased interest in the smooth operation of economic activities and perhaps demonstrates more economic activity in the spheres of these magistrates.

Inscriptions also show that kings were becoming more directly interested in economic matters often on an increasing scale: the organization of the broad *phoros* taxes, royal trade monopolies, improvements to infrastructure, urbanization, and land distribution all seem to have increased during this period.

Survey archaeology and the investigation of the rural tower-sites show the potential for changes related to land distribution and ownership with agricultural production. In certain regions agriculture was being centred upon localized, rural aristocrats. The gathering of small-farmers around estate-towers or cities would create a nodular network of wealthy estates surrounded by more small-farmers. Taxes could be gathered from this nodular system society in a more reliable manner, if one assumes these aristocrats were loyal and regular in tax-payments to their land-granting kings. Taxes and revenues could flow from single, large-estate landowners, who collected from the small-farmers (freeborn or otherwise) to the cities and the kings.

Following this centralization of land into the hands of the wealthy there is the possibility for increased agricultural intensification. Many of the towers have an associated olive press or mill, while others sites around the Chalkidike are often associated with wine production. These agricultural installations would have required a certain level of wealth (as did the towers themselves), and the various other goods evidently produced at these sites suggests industry conducted beyond the household needs. The towers were not unique to the Hellenistic period, but many of them appear in areas where royal land was gifted and the individuals were now presumably loyal to the king. The conglomeration of land into the hands of the wealthy elite may have been a result of kings ensuring they had a loyal base of followers. Therefore, there is evidence for increased intensification and greater degree of aristocratic presence in agriculture.

Chapter Three's case study of amphora production at Mende and elsewhere in the Chalkidike provides chronologically- and geographically-specific evidence for economic changes occurring against the general backdrop established in Chapter Two.

Amphoras made in and around Mende during the late fifth century often bore images related to the city and its coins, particularly images of Dionysos. Classical period stamps were

likely associated with the *polis*, imitating civic coinage with images of Dionysos' face, Dionysian mythology, cup-types, and letter stamps.

A break in the record follows latest letter-stamps, perhaps related to the *synoikism* of Kassandreia, and the Parmeniskos Group stamps, beginning with the monograms and then the names, became the main stamping practice. The precise date of this change is still unclear, as stated in Chapter Three, but the early third century remains the most likely, in concert with the political changes of the period. This clear break in stamping practices shows that there were changes in the production of amphoras. The change from letters to monograms and full names presents a much wider range of values for the name. The fact that the name of an individual, whoever he may have been, was stamped on an amphora suggests a greater degree of accountability on that individual for the production of amphoras.

It is uncertain precisely where the Parmeniskos style originated but it should be clear that there was no single centre of production, based on kiln sites Poseidi (Mende) and possibly at Pella. Workshops outside of major centres associated with amphora stamping on the Kassandra peninsula (at Siviri and Pefkochori) also make it difficult to determine an origin, but do raise further possibilities concerning the meaning of the stamp. Production centres in the Thracian interior and Black Sea coast indicate the wide spread of this general stamping practice. Since the precise date of Parmeniskos-style stamping is still unclear it is impossible to say whether the practice originated in the Chalkidike or in the western Pontic area. Wherever the Parmeniskos Group originated, the important fact is that by the third century, much of Macedonia and Thrace was making this the main style of amphora stamping.

The identity of the names on the Parmeniskos Group stamps is the important issue because it will suggest the possible reasons behind the change in stamping practices. Were the

Parmeniskos stamps meant to indicate some sort of magistrate? Monograms are quite common in Hellenistic minting practices to indicate the official in charge of the mint from where they originated, whether a civic or royal-appointed administrator. Although there is evidence for them elsewhere, such as at Rhodes, no record exists for a ceramics official in Parmeniskos Group production centres.³⁰³ The earlier Mendeian stamps often had a connection to civic imagery that might suggest some economic purpose in the market: perhaps as a guarantee of the amphoras contents and quantity.³⁰⁴ The lack of any single centre of origin but rather as a broader regional style may suggest some sort of state-level control over amphora production. It may not be a simple coincidence that the Parmeniskos Group appears roughly at the same time in Macedonia, Thrace, and the West Pontic when these areas were controlled by Kassander and then Lysimachos. It may indicate that state units, whether royally controlled areas or cities, were taking more direct control over economic processes. Therefore, it may be that these royal or civic regions, operating within the same administrative boundaries of the territories controlled first by Kassander and then Lysimachos.

Contrary to a more state-involved process is that individual kiln-site organization was developing. This may be the case if kiln-sites like the one at Poseidi were shared, but this is inconclusive with the evidence currently. The issue with these interpretations lies mainly in the wide variation of stamp types across both space and time. The Parmeniskos Group places emphasis on the individual, whether that individual was acting on behalf of the public or as a private being. There was no more civic imagery on stamps, nor did the amphoras bear the names of current civic officials. The new idea of individualism over the communal stamping practices earlier/elsewhere may indicate that private manufacturers were interested in improving output

³⁰³ Grace 1934, p. 215 and Grace 1947, p. 446.

³⁰⁴ Grace 1934, p. 139 and Grace 1956, p. 118.

but nothing about the Parmeniskos style suggests how exactly a private individual would benefit in this way.

The change in stamping practices and the evidence for production sites around the Chalkidike suggests that there was a growing need for amphoras. The growing demand for amphoras suggests that there was an increase in agricultural surplus, or at least an increase in surplus that was meant solely for markets and exchange such as wine. If there was a strong desire for taxes and tribute by kings then cash-crops would become increasingly important. Taxes during the Hellenistic period could be in silver or in kind, and it is still unclear who had to pay in silver or in kind. Did the poorest farmer need to raise silver cash in order to pay taxes? If so, then there is the issue to whom he would have paid this cash: to a local aristocrat, the nearest city (possibly many miles away), or directly to royal collectors? The alternative is that the small-farmers paid in kind to their local aristocrats or cities in the case of city-owned farmlands. This higher level (aristocrat or city), particularly aristocrats who lived relatively far from cities, had easier access to markets where large amounts of goods could be sold for cash for tax payments. The idea that Aperghis puts forth for the Seleukid economic system between city and countryside can be applied.³⁰⁵ Small farmers, now centralized and attached either formally or informally to large estates, did not necessarily need to travel far in order to find markets for their crops if temporary local markets were established. Following Aperghis' model, the farmers could sell food for silver at local markets with which they could pay their taxes as well as buy other necessities which they could not produce. Hopkins describes a similar system in the Roman world in which the small-farmer would now sell his surplus while the town raised money

³⁰⁵ Aperghis 2005, p. 35.

through each transaction.³⁰⁶ Hopkins's model incorporates changes in agricultural production, the increasing prominence of towns, and the development of local and distant markets: all ideas which have been discussed in this thesis within a Hellenistic setting.³⁰⁷

While it would be foolish to attribute every economic development at this time to the new kings, it would be just as foolish to claim that the new regimes had no effects. As discussed, they had clear indirect effects by the imposition of taxes and tributes or the growth of the estate-centred farms. The kings also had direct involvement in economic changes during this time. It seems likely that the creation of cities was, at least in part, an effort to create centralized centres of exchange from which reliable sources of money could be drawn. It is difficult to argue that the kings knew what effects the foundation of cities would have in every case. It is likely that many cities were founded by kings as a new capital for their kingdoms, like Lysimacheia and Kassandreia. There were many more foundations beyond the needs for a capital city, however, and so political reasons cannot be the only reason.

Further research into the relative chronology between Chalkidean and Pontic sites is necessary in order to determine where the Parmeniskos style of stamping originated. This is important because the region in which the group originated can determine how much of an impact the kings had on economic changes. In the Northern Aegean, the monarchs were more prominent; Macedonia and the Chalkidike were known to be affected by royal intervention by the *synoikism* of Kassandreia. The western Pontic sites, however, were on the peripheries of those political changes until later.

More research into Hellenistic kiln-sites that were clearly providing Parmeniskos amphoras is necessary. If there were production sites beyond those at Mende, Pella, and Black

³⁰⁶ Hopkins 1980, pp. 101-102.

³⁰⁷ Hopkins 1980, p. 102.

Sea sites, then their identification can provide insight as to who was stamping the amphoras. More kiln-sites would also mean further proof that amphora production was deliberately increased during this period. More knowledge concerning actual amphora production levels would also assist in determining whether state interests or individual fabricants were behind the changes in amphora stamping. If amphora production was being increased during this period, it might indicate that farmers were increasing the production of cash crops, like oil and wine, which could be sold in order to raise cash for the increasing demand for taxes by the kings. If this was a state-driven change then this would be apparent evidence for royal intervention in the economy.

Catalogue

Mendeian and Parmeniskos Group Stamps at Athens

1 (SS 6917)

Grace 1949, p. 186, pl. 20 no. 1.

Agora Section I: 2/ΣT; Deposit R 13:1; elev. -6m to -12.5m;
well lower fill

Handle WxTh: 0.044 x 0.019

No rim is preserved.

Reclining bearded figure on donkey holding a cup (in circle)

Lawall 1995, pp. 117, 336, 344. For Deposit R 13:1, see:

Agora V, p. 157; *Agora* XII, p. 398; *Agora* XXX, p. 366;

Agora XXXIII, pp. 374-375.

Date of context: c. 430-400 B.C.



2 (SS 10761)

Lawall 1995, p. 126.

Agora Section ΣΣ, #410; east Pier 17, disturbed south Stoa
fill

Handle WxTh: 0.043 x 0.016

Rather thin handle. Part of rim preserves as a somewhat flat-topped and protruding lip before angling sharply back to the neck. Some red paint survives around rim and handles.

Reclining bearded figure (Dionysos) on donkey holding a cup (in dotted circle)



3 (SS 14030)

Agora Section ΣA, #2493; mixed fill

Handle WxTh: 0.042 x 0.018

Somewhat thin handle. Small section of poorly preserved rim, suggests small rounded rim with slight edge.

Reclining bearded figure (Dionysos) on donkey holding a cup (in dotted circle)



4 (SS 11283)

Agora Section T:80-82/ΛΣΤ-ΛΘ; late Roman fill

Handle WxTh: 0.048 x 0.019

Rather broad handle. Rim preserves as a rather flat-topped section with a rounded edge and angling almost straight back to the neck.

Circular stamp depicting figure holding caduceus, carrying a child in other hand, and wearing winged-shoes

Cf. Pridik 1917, p. 118, no. 433, pl. XV, 18.



5 (SS 385)

Agora Section H: 24/IB

Handle WxTh: 0.043 x 0.019

Handle only. Broad, thin handle.

Male Head w/ Ivy Wreath (in circle)

Pridik 1917, pl. XV.



6 (SS 8008)

Grace 1956, p. 172, nos. 221-223, pls. 77 and 80.

Agora Section Ω: 55/KE; Well upper fill P 21:4

Handle WxTh: 0.045 x 0.025

Rather thick handle. Rim is flat-topped to a prominent wedge shape, and styled with grooves. Traces of red paint or resin remain below the rim.

Male head in profile w/ ivy-wreath circle

Lawall 1995, pp. 333, 343.



7 (SS 13657)

Lawall 1995, p. 129.

Agora Section T, #2901, ΠA, S/16,17-16/13,14; Deposit S 16:1, well north of Nymphaeum

Handle WxTh: 0.051 x 0.021

No rim preserved. Small amount of resin on inside of neck.

Male head wreathed in ivy (in circle)

For Deposit S 16:1 see: *Agora* XII, p. 398; *Agora* XXI, p. 100; *Agora* XXIII, p. 336; *Agora* XXX, p. 366; *Agora* XXXIII, p. 375.

Date of context: c. 425-400 B.C



8 (SS 13659)

Lawall 1995, p. 125.

Agora Section T, #2949, IIA, S/16,17-16/13,14; Deposit S 16:1, well north of Nymphaeum

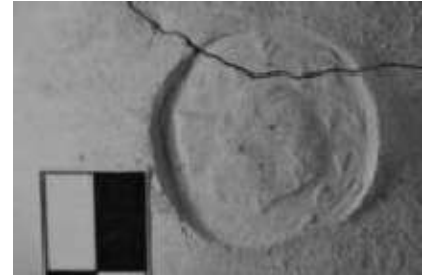
Handle WxTh: 0.045 x 0.022

One complete handle survives with section of rim and the shoulder join. Very broad rim, flat-topped, and coming to a rounded edge before angling sharply back to neck. Resin survives inside neck. Faint red paint survives on handle and under rim

Male head wreathed in ivy (in circle)

For Deposit S 16:1 see **no. 7**.

Date of context: c. 425-400 B.C



9 (SS 14796)

Agora Section PP, T/14,15-13/12,13; elev. ca. 65.85m;

Room F southeast quadrant, layer XIII

Handle WxTh: n/a x 0.020

Handle is damaged. Rim is preserved, showing a broad flat-topped rim with a gentle edge and somewhat protruding.

Male head wreathed in ivy (in circle)



10 (SS 14810)

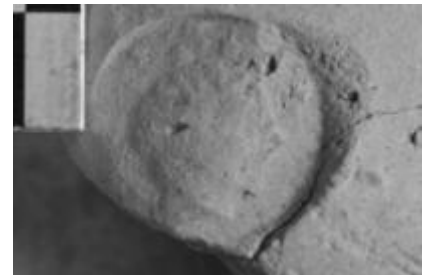
Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Handle WxTh: 0.043 x 0.022

Part of stamp is broken. No rim is preserved.

Male head wreathed in ivy (in circle)

For Deposit U 13:1 see: Rotroff and Ntinou 2013, p. 180, no. 68, figs. 119 and 121; MacKinnon 2014, pp. 190, 198, 201, 226-231, 238, n. 2, 66, 82, figs. 7, 8, 9, tbl. 2.



11 (SS 14262)

Bon and Bon 1957, no. 2125.

Agora Section Ω:59/ΞΕ; southwest corner House D, mixed fill in pit

Handle WxTh: 0.042 x 0.028

Very thick, rounded handle. No rim preserved.

Male head (in circle; surrounded by letters); Ἀγρία



12 (SS 7614)

Agora Section ΠΘ: 113/ΛΔ; Deposit B 15:1; elev. -17.80m to -0.05m; Well

Handle WxTh: 0.043 x 0.019

Complete handle, with rim and part of shoulder preserved. Rim is flat-topped going out to a wedge-shape and angling back with a concave surface. Thumb-print visible at the handle-shoulder join.

Bearded head, Silenos, profile (in circle)

For the stamp see: Corbett 1949, pp 336-337, no. 106, pl. 98, fig. 7; Lawall 1995, pp. 123, 316, 343. For Deposit B 15:1 see: Corbett 1949, pp. 298-351; Howland 1958, p. 234; *Agora* VIII, p. 125; *Agora* X, p. 136; *Agora* XII, p. 384; *Agora* XXI, p. 96; *Agora* XXIII, p. 329; *Agora* XXIX, p. 436; *Agora* XXX, p. 359.

Date of context: c. 425-400 B.C.



13 (SS 10017)

Grace 1956, p. 173, no. 230, pl. 78.

Agora Section Θ, #1869; late fill

Handle WxTh: 0.050 x 0.025

Very broad and thick handle. No rim preserves. Light brown micaceous surface with remnants of pale tan slip.

Ivy leaf (in circle)

Bon and Bon 1957, p. 511, no. 2246.



14 (SS 14805)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

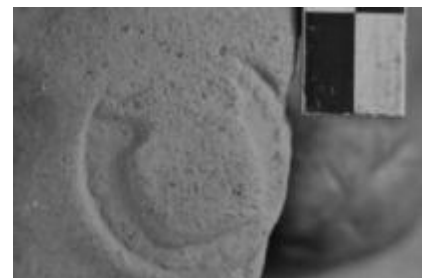
Handle WxTh: 0.048 x 0.025

Rather broad and thick handle.

Ribbed aryballos (in dotted circle)

Ribbed appearance is worn.

For Deposit U 13:1 see **no. 10**.



15 (SS 6311)

Agora Section KK: 60/ΔH; Deposit E 6:3; elev. -2.90m;
Cistern Layer III just below fill change

Handle WxTh: 0.046 x 0.020

Very broad rim with rounded top, comes to a slight edge.
Slight groove at join between handle and neck, possible
rejoin or sloppy work. Faint red paint preserved around neck
just below rim.

Ribbed aryballos in beaded circle

For Deposit E 6:3 see: *Agora X*, pp. 33 and 67; *Agora XXX*,
p. 361.

Date of context: 375-310 B.C.



16 (SS 10061)

Agora Section NN:65-66/K-KA; Deposit C 19:5

Handle WxTh: 0.050 x 0.023

Very broad handle. Part of rim survives showing a broad-
topped lip, rounded and angling sharply back to neck.

Ribbed aryballos in beaded circle

For Deposit C 19:5 see: *Agora X*, p. 136; *Agora XII*, p. 386;
Agora XXIII, p. 330; *Agora XXX*, p. 360.

Date of context: 4th century



17 (SS 14053)

Agora Section ΣA, #2906; Stoa fill, Stoa Shop IV

Handle WxTh: 0.052 x 0.022

Stamp circle is somewhat irregular. Very broad handle. Very
broad-topped rim, coming to a very protruding, rounded
edge and angling back to neck sharply.

Ribbed aryballos (in dotted circle)



18 (SS 13555)

Lawall 1995, p. 127.

Agora Section T:115/ΙΣΤ, ΠΑ, S/16,17-16/13,14; Deposit S
16:1, upper fill of well, north of Nymphaeum

Handle WxTh: 0.043 x 0.022

No rim preserved.

Krater (in circle)

For Deposit S 16:1 see **no. 7**.

Date of context: c. 425-400 B.C



19 (SS 14809)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Handle WxTh: 0.051 x 0.021

Very broad handle. Very small portion of rim preserves, showing a rounded interior; damage prevents a full profile.

O (or ring; incuse)

For Deposit U 13:1 see **no. 10**.



20 (SS 14813)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

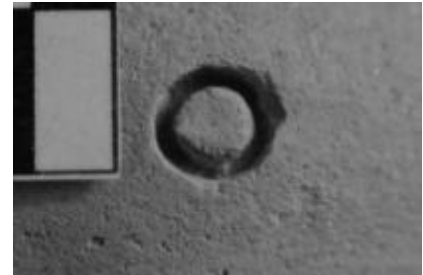
Handle WxTh: 0.045 x 0.027

Very thick handle. No rim is preserved.

O (or ring; incuse)

Stamp is somewhat neater than other with the same stamp (**no. 19**).

For Deposit U 13:1 see **no. 10**.



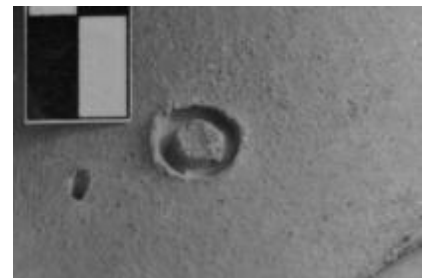
21 (SS 14817)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Fragment is actually large section of the neck and a portion of the rim. No actual handle is preserved. Stamp in question found on neck down near the shoulder. Rim is broad and rather protruding to the rounded edge. Contains traces of resin on inside.

O (or ring; incuse)

For Deposit U 13:1 see **no. 10**.



22 (SS 14816)

Grace 1956, p. 172, no. 216.

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

No handle survives, just portion of rim and neck Stamp is positioned on the neck near the rim.

B (?), or two O's/rings

For Deposit U 13:1 see **no. 10**.



23 (SS 14811)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Handle WxTh: 0.047 x 0.025

Rather broad and thick handle. Rim is broad-topped with a rounded interior and a small slightly rounded edge.

Cross (incuse; in circle)

For Deposit U 13:1 see **no. 10**.



24 (SS 3197)

Grace 1956, no. 220

Agora Section AR, Deposit M 23:1; elev. -3.10m; Cistern in Northwest Corner of Byzantine Building

Handle WxTh: 0.052 x 0.024

Quite a broad, thick handle. Faint red paint line around below rim-line. Rim is preserved; rather protruding and flat-topped wedge.

X (incuse, in circle)

Bon and Bon 1957, no. 2202. For Deposit M 23:1, see *Agora XXXIII*, p. 366.

Date of context: 100-75 B.C.



25 (SS 5881)

Bon and Bon 1957, no. 2206.

Agora Section I: 2/ΣT; 1.1; elev. c. -5.00m; Well, top of the 5th meter

Handle WxTh: 0.053 x 0.027

Very broad and thick handle. Small section of the rim preserved; very thick and prominently protruding wedge-shaped rim, flat on top.

AΔ (incuse)

Incuse letters, but combines letters like a monogram.

For Deposit R 13:1, see: **no. 1**.

Date of context: c. 430-400 B.C.



26 (SS 14808)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Handle WxTh: 0.049 x 0.022

Very broad handle. No rim is preserved.

A (incuse)

For Deposit U 13:1 see: **no. 10**.



27 (SS 14807)

Agora Section PP'; Deposit U 13:1; Room 6 well, upper dump fill, layer I

Handle WxTh: 0.048 x 0.024

Relatively broad and thick handle. Rim has a rounded, flat top and a gently angled edge. Traces of resin survive within neck.

Δ (incuse)

For Deposit U 13:1 see **no. 10**.



28 (SS 311)

Grace 1934, p. 288, no. 268.

Agora Section Δ: 12/KΣT; elev. 59.50m; found in Hellenistic level

Handle WxTh: 0.053 x 0.027

Monogram set within a diamond stamp, no evident orientation with handle. No rim preserves. The handle is quite broad and heavy.

Φ (in oval)



29 (SS 4704)

Agora Section HH, #23; old dump

Handle WxTh: 0.045 x 0.021

Rather broad handle. Stamp placed off-centre. No rim preserved. Brown-grey micaceous clay, rather coarse.

Φ (monogram, in oval)

Cf. Grace 1934, p. 288, no. 268.



30 (SS14826)

Lawall 2000, p. 13.

Agora Section R/18,19-13/20; Deposit R 13:11 elev. -6-6.40m; well

Fully preserved amphora. Rim is somewhat round-topped, protruding somewhat and angles back sharply to neck.

For Deposit R 13:11, see: *Agora XXIX*, p. 471; *Agora XXXVII*, p. 227.

Date of context: mid-4th cen. B.C.



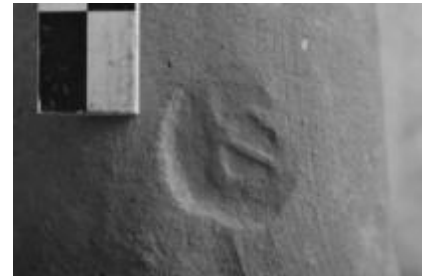
31 (SS 14329)

Agora Section Φ :66/ Λ Z; well

Handle WxTh: 0.041 x 0.020

Triangular rim, coming to a somewhat sharp edge.

Φ (monogram in circle)



32 (SS 2571)

Bon and Bon 1957, no. 2196.

Agora Section K: 6/H; elev. 61.20m; disturbed level

Handle WxTh: 0.051 x 0.020

Rather broad and heavy handle, with a protruding somewhat bulky rim rounded out of the mouth.

N (retr., monogram in circle)



33 (SS 3701)

Bon and Bon 1957, p. 501, no. 2196.

Agora Section N: 34/M; late Roman building destruction fill

Handle WxTh: 0.046 x 0.021

No rim is preserved.

N (retr., in circle)

Cf. Grace 1934, p. 288, no. 266.



34 (SS 6192)

Bon and Bon 1957, no. 2196.

Agora Section KK: 58-78; ΛΘ-MΓ; Layer III, modern fill

Handle WxTh: 0.045 x 0.025

Very thick handle. No rim is preserved.

N (retr., in circle)



35 (SS 14862)

Agora Section BE, J/9,10-3/8; elev. 51.35-51.11m; under road

Handle WxTh: 0.049 x 0.023

Rather broad handle. Rather bulky handle, protrudes considerably to a rounded, thin edge.

N (retr.; in circle)



36 (SS 8366)

Bon and Bon 1957, p. 499, no. 2187.

Agora Section MM, #408, E-F 2-4; Deposit E-F 2-3:2; layer VII, road area, north-south cut

Handle WxTh: 0.046 x 0.020

Letters are oriented parallel to the rim. No rim is preserved.

AΨ (monogram in circle)

Ψ built into the arch of the A.

For Deposit E-F 2-3:2, see: *Agora* XII, p. 389; *Agora* XXIX, p. 448; *Agora* XXX, p. 362.

Date of context: 4th cen. B.C.



37 (SS 18)

Grace 1934: p. 288, no. 267.

Agora Section E: 11-15/Δ-ΣΤ; elev: -1.5m to -3.5m

Handle WxTh: 0.053 x 0.027m

Preserves handle only.

AT (monogram in circle)

Bon and Bon 1957 no. 2185.



38 (SS 13907)

Bon and Bon 1957, p. 499, no. 2185.

Agora Section MΣ, #898; west end of Stoa filling

Handle WxTh: 0.044 x 0.020

No rim is preserved.

AT (monogram in circle)



39 (SS 5357)

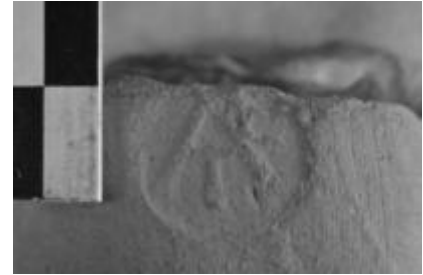
Bon and Bon 1957, no. 2188.

Agora Section Σ: 6-10/ΛΔ-ΛΖ; c. -2.20m

Handle WxTh: 0.041 x 0.017

Rather thin handle. No rim is preserved.

ATP (monogram in circle)



40 (SS 7355)

Bon and Bon 1957, no. 2188.

Agora Section Σ: 24-27/ΠΣΤ-OA; elev. 62.80m-62.60m

Handle WxTh: 0.039 x 0.021

No rim is preserved.

ATP (monogram in circle)

The P is squished/smudged in the corner, suggesting a slight mis-stamp.



41 (SS 10989)

Bon and Bon 1957, no. 2188.

Handle WxTh: 0.039 x 0.022

Relatively narrow handle. Some rim survives with a rounded top angling to a somewhat protruding, rounded edge.

ATP (monogram in circle)



42 (SS 11718)

Agora Section MΣ, #87; South Stoa area 3-4, south foundation layer 2, Middle Stoa Building fill

Handle WxTh: 0.041 x 0.019

Rim is preserved, with an angular top coming to a rather sharp rounded edge.

ATP (monogram in circle)



43 (SS 2601)

Bon and Bon 1957, p. 499, no. 2188.

Agora Section M: 72/NA; elev. 59.60m; found in fill over Wall A

Handle WxTh: 0.042 x 0.021

No rim preserved.

ATKP (?) (monogram in circle).

Reading of a K is questionable, as it is difficult to discern a complete letter beneath the P.



44 (SS 14301)

Agora Section IIA, #4; mixed fill

Handle WxTh: 0.043 x 0.016

Very thin handle. Only very small piece of rim survives, but not enough for clear analysis of form.

ATN (monogram in circle)



45 (SS 14361)

Agora Section IIA, S 17; Panathenaic Way; late Roman context

Handle WxTh: 0.040 x 0.017

Somewhat thin handle. Stamp itself is somewhat small compared to other circular monograms. No rim is preserved.

ATM (monogram in circle)



46 (SS 496)

Agora Section Θ: 31/H; elev. c. 60.40m; in Middle Stoa Building Fill

Handle WxTh: 0.045 x 0.020

No rim is preserved. Rectangular/trapezoidal stamp shape.

AM (?) (monogram)

Possible readings include AΔ, AΛ, or AM, with the alpha being built into the first hump of the mu.



47 (SS 1039)

Agora Section Θ, #74; elev. 59.60m; found in Trench ΣT
Handle WxTh: n/a x n/a

No rim preserved. Damage to the entire handle prevents full measurements.

APM (monogram in circle)



48 (SS 1658)

Agora Section Θ: 34/ΛB; elev. 58.40m; in black earth under House B

Handle WxTh: n/a x 0.021

Handle is poorly preserved, chipped off on both sides, although it appears rather narrow. No rim is preserved.

Stamp not oriented in any particular way.

APN (monogram in circle)



49 (SS 1221)

Agora Section Θ, #968; elev. 60.50m; found in Trench K'

Handle WxTh: 0.039 x 0.017

Relatively thin handle. Small amount of rim preserved but very damaged.

ΑΓΙ (?) (monogram in rectangle)

Possible reading of APK, but preservation may mean some letters have been damaged.



50 (SS 10344)

Rotroff 1997, pp. 342 and 548.

Agora Section OO, #553; Deposit D 16:1; Cistern A

Handle WxTh: n/a x n/a

Large portions of the neck and rim survive, along with both complete handles and the shoulder-joints. Rim is small and rounds on both sides to a small edge.

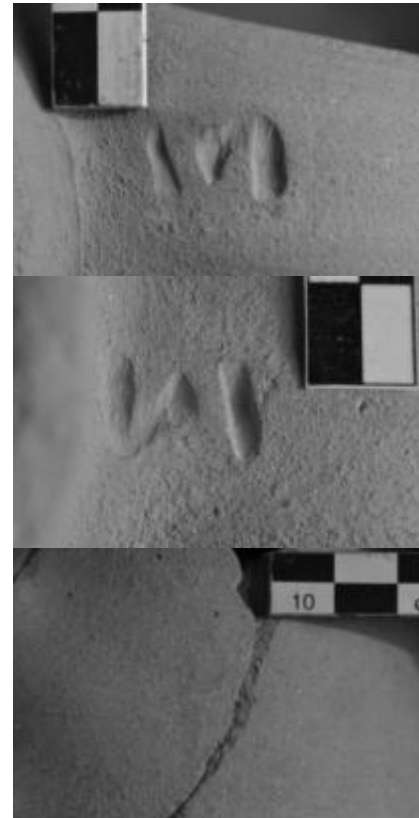
Side A: NI (retr., incuse) Side B: NI (retr., incuse)

Neck: Painted P

Both handles stamped with an inscribed retrograde NI. Also a faint painted P on one side of the neck.

For Deposit D 16:1 see: *Agora* XII, p. 387; Rotroff 1984, pp. 343, 347, 349, pls. 16:7, 7-9; *Agora* XXX, p. 361; Lawall 2004, pp. 447-448; *Agora* XXXIII, p. 349.

Date of context: 325-275 B.C.



51 (SS 321)

Grace 1934, p. 293.

Agora Section E: 06/MH; elev. 0.0m

Handle WxTh: 0.04 x 0.022

No preserved rim. Incuse stamp with no visible stamp-borders. No evident orientation of the stamp to rest of handle.

NI (retr., incuse)



52 (SS 3123)

Bon and Bon 1957, p. 506, no. 2226.

Agora Section H', #723; Byzantine Building, room XVIII, lowest layer above Classical

Handle WxTh: 0.043 x 0.023

One corner of the rectangular stamp shows, suggesting other stamps of the same letters are the same. No rim preserved.

NI (retr., incuse)



53 (SS 14778)

Agora Section BΓ', H/2,5-4/4,5; Shop III layer 6

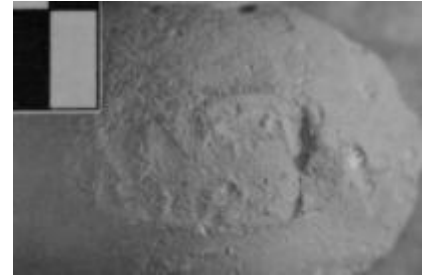
Handle WxTh: 0.033 x 0.021

Very narrow and somewhat rounded handle. Poorly preserved stamp, and no rim survives.

Ἀλκά

γορος

This name belongs to the production of Parmeniskos Group stamps outside of the Chalkididke, likely from near ancient Troy, see Lawall 1999, pp. 191-192.



54 (SS 512)

Agora Section Θ: 46/IE; elev. c. 60.30m

Handle WxTh: 0.045 x 0.017

Broad but thin handle with a small amount below the curve preserved, narrowing towards the (eventual) shoulder-join. No rim preserved.

Ἀμεινο

νίκου



55 (SS 14779)

Agora Section ΒΔ, M/13-5/19; west end trench, layer 9

Handle WxTh: 0.046 x 0.021

Somewhat broad handle. Complete handle is preserved, including the shoulder joint. Has a slight thumb/finger print at bottom of handle. Rim is triangular coming to a sharp edge and gradually angling back to neck.

Ἀμεινο

νίκου



56 (SS 2319)

Agora Section K: 39/ΑΣΤ; elev. 60.00m; found in a Hellenistic fill

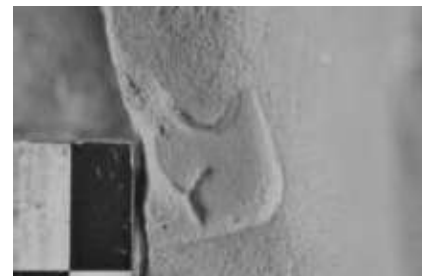
Handle WxTh: 0.045 x 0.020

Rim is preserved, showing a somewhat sharp edge on the mouth, and coming down to a sharp-edged side.

[Ἀμειν]ο

[νίκο]υ

Very poorly preserved stamp and handle, but O and Y position compared to other stamps of the same name suggests the reading (see **nos. 54-55** and **57-59**).



57 (SS 2371)

Agora Section Γ: 91-93/Γ-Z; elev. 59.50m-59.70m; in Hellenistic fill north of Roman building

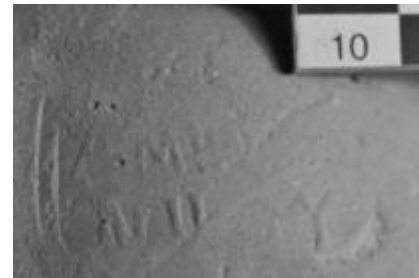
Handle WxTh: 0.036 x 0.018

Quite narrow handle. Stamp is not impressed deeply, making a difficult reading. No rim is preserved.

Αμεινός

νίκου

Cf. Akamatis 2000, p. 31.



58 (SS 14722)

Agora Section ΒΓ, I 14; late Roman fill

Handle WxTh: 0.038 x 0.021

Rather narrow handle. No rim preserved.

Αμεινο

νίκου



59 (SS 14973)

Grace 1956, p. 168.

Agora Section BH, #105; Layer XXV-H; BH 116

Handle WxTh: 0.046 x 0.020

No rim is preserved. Somewhat wide handle.

Αμεινο

νίκου



60 (SS 7425)

Agora Section Σ: 18-23/NZ-O; elev. c. 61.40m-61.30m; late Roman fill

Handle WxTh: 0.039 x 0.019

Somewhat thin, narrow handle. No rim is preserved.

Αριστο

φάνου



61 (SS 10714)

Agora Section IIII, #736; Deposit C 17:5; under Building A, room 2

Handle WxTh: 0.039 x 0.019

Stamp is unusually oriented parallel to the rim (also see **no. 108**). Small rim, rounding on both faces to a slight edge.

Γλαύ

κου

For Deposit C 17:5 see: *Agora XXII*, p. 97.

Date on context: Early Roman



62 (SS 844)

Agora Section Θ, #540; elev. 58.80m; Middle Stoa Building Fill, Southwest Trench extension (before 183 B.C.)

Handle WxTh: 0.042 x 0.021

Rather broad handle; no rim preserved.

Δήμο

A single-line stamp (see also **no. 63**), may be related (in name) to Δημοσίμος (cf. **nos. 65** and **66**).



63 (SS 15016)

Agora Section EA, T/15-22/3; Deposit T 21:1; elev. 85.906-86.208m; west trench rubble layer

Handle WxTh: 0.040 x 0.023

One-line named stamp. No rim is preserved.

Δήμο

For Deposit T 21:1 see: *Agora XXXI*, p. 151.

Date of context: Hellenistic



64 (SS 2607)

Agora Section M: 68/ME; Strosis 3

Handle WxTh: 0.044 x 0.018

Rim is preserved, with a sharp top and angling on a concave slope down to the sharp edge.

Δήμ[ο]

[τίμου]

Second line is present but worn away (see **nos. 65** and **66**).



65 (SS 10120)

Agora Section NN, #3353; Deposit A-B 19-20:1; Hellenistic sand-fill, southern Great Drain

Handle WxTh: 0.040 x 0.019

Small portion of rim survives showing a small rim with an angled top.

Δη[μο]

τίμ[ου]

For Deposit A-B 19-20:1 see: Young 1951, pp. 262-263; Kleiner 1976, pp.15-19, pls. 1-4; *Agora* X, pp. 67, 135-136; *Agora* XII, p. 384; *Agora* XXXIII, p. 344; *Agora* XXXVII, p. 218.

Date of context: c. 4th century - 46 B.C.



66 (SS 14316)

Agora Section Y, #539; Deposit J 17:1; floor pit in cellar of House 634/19, room 6

Handle WxTh: 0.043 x 0.015

Thin handle (possibly due to damage). Handle is broken, erasing half of the stamp. No rim is preserved.

[Δη]μο

[τί]μου

Date of context: Mixed to late Roman



67 (SS 11673)

Agora Section MΣ, #14; South Stoa area 5-6, south foundation layer 1, Middle Stoa Building fill

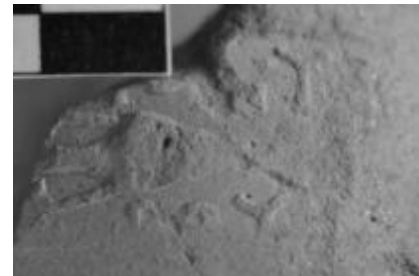
Handle WxTh: 0.043 x 0.017

Rather thin handle. Reading is difficult due to damage to the stamp. No rim is preserved.

[Δ]ιού

[σ]ρον

Lines are separated by an amphora.



68 (SS 685)

Agora SectionΘ: 2; elev. 59.60m; in Southwest Trench, in disturbed black-earth layer.

Handle WxTh: 0.044 x 0.023

Top row not preserved but the stamps size suggests two lines, divided by the amphora;

[Ἐκα]

[τ]άτου (w/ amphora)

Bon and Bon 1957, no. 2140.



69 (SS 13763)

Bon and Bon 1957, p. 492, no. 2140.

Agora Section K:25-26/AA-AE; layer under foundation blocks

Handle WxTh: 0.046 x 0.022

No rim preserved.

Ἑκα

ταίου (divided by amphora)



70 (SS 5580)

Agora Section T: 76/AA; Hellenistic fill

Handle WxTh: n/a x n/a

Form of the stamp is Parmeniskos-style. Rim survives but suggests no relation with the Parmeniskos Group; a rounded rim with no edge.

Ευβι

ότω



71 (SS 6279)

Agora Section T, #678; surface find

Handle WxTh: 0.038 x 0.020

Part of rounded-edge rim is preserved.

Ευβι

ότω



72 (SS 9977)

Agora Section NN:77-79/K-KΓ; late Roman fill

Handle WxTh: 0.031 x 0.016

Very narrow, thin handle. Handle and stamp are damaged.

No rim is preserved.

Ευ[βι]

ότω



73 (SS 13500)

Agora Section K:21-22/Α; Hellenistic fill between later walls

Handle WxTh: 0.042 x 0.023

Small chunk of rim preserves; rounded on top and coming to a slight edge.

Ευβι

ότω



74 (SS 273)

Grace 1934: p. 293, no. 267.

Agora Section A: 34/KE; elev. -2.6m

Handle WxTh : 0.042 x 0.021

One-line stamp, with large letters. No real rim is preserved and handle is broken well before the curve.

Εύγει [(των)]



75 (SS 9944)

Agora Section NN, #2752; Drain A, Byzantine fill

Handle WxTh: 0.037 x 0.022

Rather thin handle. No rim is preserved. One-line stamp.

Εύγει [(των)]

Stamp only has one row of letters.



76 (SS 10125)

Agora Section NN:70/Λ-ΛΛ, #3366; Deposit A-B 19-20:1;

Hellenistic sand-fill, southern Great Drain

Handle WxTh: 0.040 x 0.021

Almost complete top of jar, including most of the rim, both handles and shoulder-joins, and the neck. Small rim angling on both sides to a fine edge. One-line stamp.

Side a: Εύγει [(των)] Side b: Εύγει [(των)]

For Deposit A-B 19-20:1 see: **no. 65.**

Date of context: c. 4th cen.-46 B.C.



77 (SS 13428)

Agora Section K, #2894; south of Middle Stoa and Drain C, Hellenistic fill

Handle WxTh: 0.041 x 0.023

No rim is preserved. One-line stamp.

Εύγει [(των)]

Rotroff 1988, p. 89.



78 (SS 4081)

Agora Section Γ: 95/KΘ; Deposit E 14:3.3; Cistern fill
Handle WxTh: 0.041 x 0.018

Some rim is preserved with a triangular top and angles to a sharp edge.

‘Ηγησίνου

One-line stamp, using a lunate-sigma (see also **no. 79**).

For Deposit E 14:3, see Rotroff 2006, p. 352.

Date of context: 4th-3rd cen. B.C.



79 (SS 4258)

Agora Section Π: 42-44/ΛΣΤ-M; modern fill

Handle WxTh: 0.044 x 0.020

No rim is preserved.

‘Ηγησίνου

One-line stamp, using a lunate-sigma (see also **no. 78**).



80 (SS 1273)

Agora Section Θ, #986; elev. 59.80m; found in Trench K'

Handle WxTh: 0.039 x 0.017

Relatively thin handle. No rim preserved.

‘Ηγή

σίνου

Agora database suggests an H rather than the I but it is similar to two other stamps with the same name (see **nos. 81** and **82**).



81 (SS 5925)

Agora Section Σ: 24-34/ΛΑ-ΛΖ; elev. -2.4 to -2.6m

Handle WxTh: 0.042 x 0.019

Stamp surface is poorly preserved. No rim is preserved.

[‘H]γη

[σί]νου



82 (SS 10844)

Agora Section ΣΑ, #520; Deposit Q 8-9:1; east Piers 17-18, fill over Square Building floor, 9th course level

Handle WxTh: 0.042 x 0.017

Thin handle. No rim preserved. Red-brown micaceous clay with light slip poorly preserved.

‘Ηγη
σίν[ου]

For Deposit Q 8-9:1 see: *Agora* XXII, p. 106; Grace 1985, p. 23, n. 9; *Agora* XXIX, p. 469; *Agora* XXXIII, p. 372; *Agora* XXXVII, pp. 63-64, 66, 83, 86, 227.

Date of context: c. 200 B.C.



83 (SS 14491)

Agora Section S, # 2975; surface near Circular Building

Handle WxTh: 0.038 x 0.030

Narrow but very thick, rounded handle. Narrow handle but unusually round in shape. No rim is preserved.

‘Ηρα
γόρο

Reading may or may not be complete based on break of handle.



84 (SS 540)

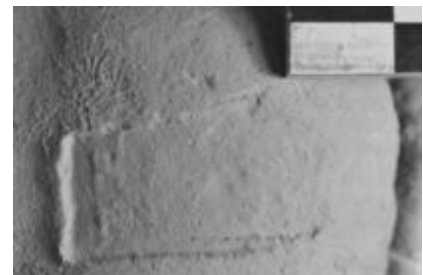
Agora Section Θ: 50/KB; elev. 60.30m

Handle WxTh: 0.038 x 0.021

Small amount of the rim is preserved, suggesting a sharply edged shape.

‘Ηρ[ακλ]
είδου

Possible reading of “Ηρακλείτου”, but Ηρακλείδου is more appropriate based on other stamps with the same name.



85 (SS 8349)

Agora Section ΓΤ, #30; Terrace west of church, southeast area, east trench in red mixed fill

Handle WxTh: 0.042 x 0.021

No rim is preserved. Stamp is very worn down.

‘Ηρακλ
είδου



86 (SS 9671)

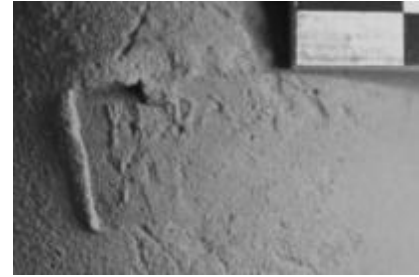
Agora Section Θ, #1820; late fill near house 636/21

Handle WxTh: 0.041 x 0.021

No rim is preserved. Part of the neck survives.

‘Ηρακ[λ]

εἰ[δου]



87 (SS 10134)

Agora Section NN:70/Λ-ΛΛ, #3381; Deposit A-B 19-20:1;

Hellenistic sand-fill, southern Great Drain

Handle WxTh: 0.036 x 0.020

Relatively narrow handle. Small portion of rim survives showing a somewhat protruding angled rim.

‘Ηρακλ

[ε]ἶδου

For Deposit A-B 19-20:1 see: **no. 65**.

Date of context: c. 4th cen.-46 B.C.



88 (SS 14323)

Agora Section Φ, #1018; west of Phaidon street, channel beneath Roman wall

Handle WxTh: 0.040 x 0.020

Considerable portion of rim is preserved. Rim is a triangular lip with concave upper face leading to sharp edge.

‘Ηρ[ακ]λ

εἶδου



89 (T 1936)

Agora Section T

Handle WxTh: 0.034 x 0.017

Very narrow and thin handle. No rim is preserved. Stamp is either significantly worn, or was not impressed deeply at stamping.

‘Ηρα[κλ]

[εἶδο]υ



90 (Y 1937)

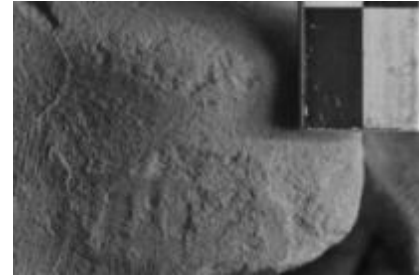
Agora Section Y

Handle WxTh: n/a x 0.020

Stamp is very poorly preserved. Handle is also damaged. No rim is preserved.

Ἡρα[κλ]

[εἶδου]



91 (SS 4648)

Agora Section Π, #626; found in clean-up

Handle WxTh: 0.039 x 0.021

Relatively narrow handle. No rim is preserved.

Θεόδο

το[υ]

The stamp has not been well-preserved, with the bottom half mostly unreadable. Bottom-right corner may have space for image of a jar.



92 (SS 8563)

Agora Section NN, #340; northeast corner, modern fill

Handle WxTh: 0.035 x 0.022

Relatively narrow handle. No rim is preserved.

Θεοδ

ότου

Letters quite large and blocky, but clear.



93 (SS 11209)

Agora Section Σ:44/K; Hellenistic ash-fill, southwest of monument

Handle WxTh: 0.041 x 0.024

Somewhat thick handle relative to its width. Rim is preserved as a rather protruding rather sharply and angles sharply back to the neck.

Θεοδ

ότου



94 (SS 7131)

Agora Section $\Lambda\Lambda$: 99/KB; modern fill

Handle WxTh: 0.033 x 0.016

Rather small. Very narrow and thin handle. No rim is preserved.

Θεο[δ]

ώρου



95 (SS 3885)

Agora Section K, #1071; below late strosis under Holy Apostle Street

Handle WxTh: 0.037 x 0.020

Relatively narrow handle. No rim is preserved.

Καλλι

μάχου



96 (ΠΠ 1947)

Agora Section ΠΠ

Handle WxTh: 0.041 x 0.021

No rim is preserved. Very compact stamp.

[Καλλι]

μάχου



97 (AH 149)

Pynx

Handle WxTh: 0.041 x 0.018

Relatively thin handle. No rim is preserved. Bottom half of stamp is missing; likely due to poor technique/similar factors at time of stamping.

Καλλι

μάχου



98 (SS 1862)

Agora Section I: 40-43/ΙΘ-K; in gravel layer above stereo, within late Roman context

Handle WxTh: 0.041 x 0.017

Rather thin handle. Ovoid stamp-shape rather than the typical rectangular shape. Section of the rim is preserved, showing a rounded top coming to a sharp edge.

Λεόν

τος



99 (SS 7353)

Agora Section ΠΘ: 105/NH; Deposit A 14:1; elev. -6.00m;
Well

Handle WxTh: 0.037 x 0.017

Rather narrow handle. No rim preserved.

Μικί

ωνος

For Deposit A 14:1, see: *Agora V*, p. 124; *Agora XXIX*, p. 433.

Date of context: second cen. B.C.-second half 4th cen. A.D.



100 (SS 502)

Agora Section Θ: 30-40/IB-IΘ; found in surface filling

Handle WxTh: n/a x 0.018

Handle is broken just below stamp. No rim preserved. The stamp uses thick blocky letters typical of the name-type.

Μικί

ωνος

Cf. Dumont 1872, p. 321, no. 156.



101 (SS 5958)

Agora Section KK: 50-78/ΜΣΤ-N; Layer III, modern fill

Handle WxTh: 0.044 x 0.019

Rim protrudes quite prominently, wedge-shaped to a rounded tip, then gently slopes back to the neck.

Μικί

ωνος



102 (SS 6827)

Agora Selection ΑΛ: 86/ΝΓ

Handle WxTh: 0.040 x 0.017

Rather thin handle. Bottom row of stamp is not preserved.

Rim is preserved, coming to a sharp edge with a concave slope.

Μικί

[ωνος]

The suggested reading is likely as the letter forms are similar to others of the same name (see **nos. 103** and **104**).



103 (SS 7719)

Agora Section $\Lambda\Lambda$: 105/ Σ T; late Roman, black earth
Handle WxTh: 0.040 (where preservation allows) x 0.018
No rim is preserved, nor any neck.

Μικί

ωνος

The K somewhat blobbed, possibly from poor die or poor technique.



104 (SS 9527)

Agora Section $\Xi\Xi$:94-101/ Λ E- Ξ B; Fill II House L south wall

Handle WxTh: 0.041 x 0.019

No rim is preserved.

Μικί

ωνος



105 (SS 14313)

Y, #534; Southeast House room F, destruction fill over north wall

Handle WxTh: 0.038 x 0.017

No rim is preserved.

Μικ[ί]

[ωνος]

Stamp is difficult to read due to bottom half missing; likely due to poor technique at actual time of stamping.



106 (AH 244)

Pynx

Handle WxTh: 0.043 x 0.021

Rim is somewhat flat-topped rim coming to rounded edge.

Μικί

ωνος



107 (SS 5345)

Agora Section P:9/ME; elev. -2.70m

Handle WxTh: 0.041 x 0.021

Stamp is set well off from the centre of the handle. No rim is preserved.

ΝΙΚ

ίου



108 (SS 4689)

Agora Section Σ: 5-30/MA-ME; elev. -0.30m; below modern road level

Handle WxTh: 0.045 x 0.018

Relatively broad handle. Stamp orientation parallel to rim, rather than perpendicular like others with this name.

ΝΙΚ

ίου

Cf. Pridik 1917, p. 136, no. 107.



109 (SS 9250)

Agora Section NN, #1113; north of Roman bath, in

Byzantine brown fill

Handle WxTh: 0.043 x 0.021

Typical rounded rim with sharp outer edge, and concave upper angle.

ΝΙΚ

ίου



110 (SS 9842)

Agora Section NN:68-71/ME-MZ; Hellenistic-early Roman fill

Handle WxTh: 0.041 x 0.019

No rim is preserved.

ΝΙΚ

ίου



111 (SS 12902)

Agora Section K:28/ΛΓ; Hellenistic fill west of water basin;
Middle Stoa Building fill

Handle WxTh: 0.041 x 0.019

Rim preserves as a small triangular rim with a sharp edge
and angles back to neck sharply.

Νικ

ίου



112 (SS 9919)

Agora Section NN:77/ΝΔ, Deposit A 18:1.3; elev. -3.8--
3.3m; Cistern fill 3

Handle WxTh: 0.049 x 0.019

Rather broad handle. A small sharply-angled rim is
preserved.

Νικοκλ

έους

Stamp contains a physical line separating the rows of letters.

For name comparison see Grace and Lenger 1958, p. 419,
no. 156. For Deposit A 18:1.3 see: *Agora XXXIII*, p. 343.

Date of context: second cen. B.C.



113 (SS 15050)

Agora Section EA, U/1,3-22/3,4; Deposit T-U 21:1; middle
trench

Handle WxTh: 0.036 x 0.019

Very narrow handle. No rim is preserved.

Νικοκ

λέους (retr.)

Stamp uses lunate-sigma.

For Deposit T-U 21:1 see: *Agora XXXI*, pp. 150-151.

Date of context: 220-150 B.C.



114 (SS 150)

Grace 1934: p. 283, no. 168.

Agora Section ΣΤ: 5-8/ΣΤ-H; elev. 62.53m

Handle WxTh : 0.035 x n/a

Handle is broken off around stamp. Nearly complete handle
from neck join. Rim is preserved as more rounded edge, not
as sharp as typical of the Parmeniskos Group.

Νικος

τράτου

Grace 1956, p. 168.



115 (SS 5459)

Agora Section P: 2/ΛΗ; elev. c. -2.90m; Roman sand-fill
Handle WxTh: 0.034 x 0.017

Relatively narrow and thin handle. Small amount of rim survives; small rim angling gently to the edge before returning to the neck.

Νίκος
τράτου



116 (SS 14638)

Agora Section ΜΣ, H 14; around Southwest Fountain House drain

Handle WxTh: 0.036 x 0.018

Relatively narrow handle. No rim is preserved.

Νίκος
τράτου



117 (SS 6704)

Agora Section Y: 2/ΜΓ; Byzantine fill

Handle WxTh: n/a x 0.022

Handle is broken off through the stamp. Preserved rim comes to a sharp edge, with the top angle concave.

Πα[ρ]με
γίσκου



118 (SS 9811)

Agora Section NN: 66-70/ΛΗ-MZ; late brown Byzantine (?) fill

Handle WxTh: 0.041 x 0.023

Handle and stamp has several gouges.

Π[α]ρμε
[γίσκο]ν

Entire bottom line does not preserve except for Y; similar form to other of the same name allows reading.



119 (SS 7825)

Agora Section KTA, #124; from Hadrian Street
Handle WxTh: 0.039 x 0.022

Appears to be double-stamped, in both directions overlapping each other. Relatively large amount of rim is preserved; rounded, almost triangular top coming to a sharp edge, with concave surface. Slight trace of red paint below the rim.

Παρμε
νίσκου



120 (SS 275)

Grace 1934, p. 283, no. 245.

Agora Section Δ: 22/K; found near the surface of West Trench in loose earth.

Handle WxTh: 0.045 x 0.024

A horizontal line present below each row of letters.

[Παρμε]
νίσκου

First line largely worn away. Second line is similar to other stamps of the same name.

Grace 1956, p. 168.



121 (SS 14649)

Agora Section K, G 16; Trench D back fill

Handle WxTh: 0.041 x 0.021

No rim is preserved.

Παρμε
νίσκου



122 (SS 11002)

Agora Section ΣΑ, #907; mixed fill

Handle WxTh: 0.038 x 0.018

Rather narrow, thin handle. No rim is preserved.

Πλα
τόριου



123 (SS 6846)

Agora Section ΑΛ: 81/M; Deposit E 5:2; elev. -7.92m;
Cistern

Handle WxTh: 0.036 x 0.019

Rather narrow handle. Large section of rim preserved. Rim does not have as sharp an edge, and not as protruding; rather more rounded and small.

Ποσει

δίππ[ου] ←

For Deposit E 5:2 see: *Agora XXXIII*, p. 105.

Date of context: c. 250-190 B.C.



124 (SS 10323)

Agora Section NN, #4197; House L, room 2; Hellenistic fill

Handle WxTh: 0.039 x 0.017

Rather thin handle. Name on the stamp is written boustrophedon. Small rim, with concave upper face coming to a somewhat protruding edge.

Ποσει

δίππο[υ] ←



125 (SS 13251)

Agora Section ΓΤ, #1062; unknown provenience

Handle WxTh: n/a x 0.020

Handle and stamp are damaged, preventing a measurement of the width. No rim is preserved.

[Ποσ]εῖδ

[ίπ]που

Reading possible due to similarities to other stamps of the same name. However, unlike other stamps of this name, it is not boustrophedon.



126 (SS 15023)

Agora Section ΕΑ, T/14,19-21/20,22/4; Deposit T 21:1;
west trench rubble layer

Handle WxTh: 0.042 x 0.020

Small triangular rim with a sharp outer edge.

δίπ[που] ←

Ποσε[ι] ←

Name on stamp actually starts on bottom line.

For Deposit T 21:1 see: **no. 64**.

Date of context: Hellenistic



127 (SS 15028)

Agora Section EΛ, T/14,15-21/20,22/1; Deposit T 21:1;
west trench east post-Herulian wall, layer II

Handle WxTh: 0.039 x 0.019

Small triangular rim with a sharp outer edge. Somewhat narrow handle.

Δίππου ←

Ποσει ←

Name on stamp actually starts on bottom line.

For Deposit T 21:1 see: **no. 64**.

Date of context: Hellenistic



128 (SS 3791)

Grace 1956, p. 168, pl. 74.

Agora Section Ξ: 63/ΝΔ; Northwest corner of Rectangular chamber

Handle WxTh: n/a x n/a

Almost full neck, one handle to the shoulder-join, and a section of rim preserved. Small rim coming to a sharp, triangular edge.

Σωκρά

του



129 (SS 14278)

Agora Section Φ, #911; Deposit L 17:7; Aeschines street, south cistern

Handle WxTh: 0.038 x 0.020

Rather narrow handle. Small section of rim preserves, with a concave upper-face angling to a rounded edge. Stamp uses a dot-omicron.

Τιμαι

γέτου

For Deposit L 17:7 see: *Agora* XII, p. 394; Pollitt 1979, p. 221; Rotroff 1982, p. 103; *Agora* XXXIII, p. 364; *Agora* XXXVII, pp. 68 and 224.

Date of context: 310-220 B.C.



130 (SS 10823)

Agora Section ΣΑ, #487; Deposit Q 8-9:1; west Pier 17, fill over Square Building floor, at bottom of 8th foundation course

Handle WxTh: 0.038 x 0.018

Relatively narrow, thin handle. No rim preserves.

Τῖμαι

γέτου

For Deposit Q 8-9:1 see: **no. 82.**

Date of context: c. 200 B.C.



131 (SS 10138)

Agora Section ΝΝ:70/Λ-ΛΛ, #3385; Deposit A-B 19-20:1; Hellenistic sand-fill, southern Great Drain

Handle WxTh: 0.040 x 0.016

Rather thin handle. Small portion of rim preserved showing a somewhat large rim with a concave upper edge.

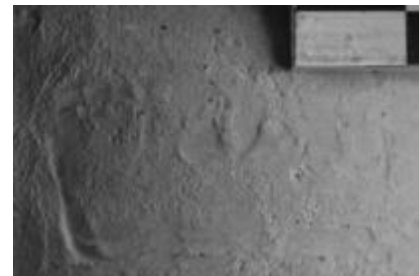
Τῖμαι

γέτου

Stamp is poorly preserved and reading is largely based off stamps with the same name.

For Deposit A-B 19-20:1 see: **no. 65.**

Date of context: c. 4th cen.-46 B.C.



132 (SS 779)

Agora Section Θ, #508; elev. 58.50m; Middle Stoa Building Fill, Southwest Trench on south side

Handle WxTh: 0.042 x 0.017

Rather thin handle. Small section of sharp-edged rim with a rounded top preserved.

[Τ]ῖμαι

γέτου

Uses the “dot-omicron” like other stamps with the same name.



133 (SS 6158)

T: 75/KB; late Roman fill

Handle WxTh: 0.038 x 0.017

Somewhat narrow and quite thin handle. No rim is preserved.

Τιμαι ←

νέτου ←

Only stamp of the name-type with the whole name retrograde.



134 (SS 10009)

Agora Section OO, #132; Roman fill above Great Drain

Handle WxTh: 0.039 x 0.019

No rim is preserved.

[Τι]μαι

νέτου



135 (SS 11236)

Agora Section KTA, #301; southwest section of mount Theseion

Handle WxTh: 0.042 x 0.018

Rim is preserved; has flatter top protruding somewhat far before angling sharply back to the neck.

Τιμαι

νέτου



136 (SS 14782)

Agora Section PP, T/5,6-13/13,14; elev. ca. 65.00m; north of Rooms A and B

Handle WxTh: 0.035 x 0.016

Very narrow and thin handle. Part of rim preserves, with a rounded lip and flattish top, coming to a rounded edge. Stamp itself is not impressed into clay very well in some spots.

Τιμα[ι]

νέτου



137 (Ω 1957)

Agora Section Ω

Handle WxTh: 0.041 x 0.020

Some rim preserves as rounded with slight edge.

Τιμαί

νέτου



138 (T 1936a)

Agora Section T

Handle WxTh: n/a x 0.015

Rather thin handle (possible due to damage). Handle is broken in middle. No rim is preserved.

[Τι]μαί

[ν]έτου



139 (SS 8891)

Agora Section NN: 75-105/MA-ME; late Roman/early Byzantine red fill

Handle WxTh: 0.043 x 0.021

No rim is preserved.

Φανο

λάου



140 (SS 298)

Grace 1934, p. 283, no. 246.

Agora Section Δ: 5/KΓ; elev. 59.30m

Handle WxTh: 0.041 x 0.021

Stamp has been impressed twice, overlapping each other on different orientations. No rim is preserved.

Φορμί

ωνος

Grace 1956, p. 168.



Mendeian and Parmeniskos Group Stamps at Mende

141 (AK E80)

Mende surface find

Handle WxTh: 0.020 x 0.020

Very thin handle. Flat-topped rim protruding prominently and angles sharply back to neck.

Male head (in circle)



142 (AK E81)

Mende surface find

Handle WxTh: 0.042 x n/a

Rim is rather protruding and thin, coming to sharp edge. Bottom of stamp is missing.

Male head w/ ivy (in circle)



143 (AK E94)

Mende surface find

Handle WxTh: 0.045 x n/a

No rim is preserved. Somewhat broad handle.

Silenos mask (in rectangle)



144 (AK E85)

Basia plot, south of wall 8; 83m

Handle WxTh: 0.045 x 0.020

No rim is preserved.

Running Hermes carrying caduceus and infant Dionysos



145 (AK E38)

Basia plot, sec. 2; 0.095-0.27m

Handle WxTh: 0.038 x 0.018-0.021

No rim is preserved. Stamp is heavily worn.

Ivy leaf (?) (in, possibly dotted, circle)



146 (AK E68)

Mende surface find

Handle WxTh: 0.046 x 0.018-0.021

No rim is preserved.

A (incuse)



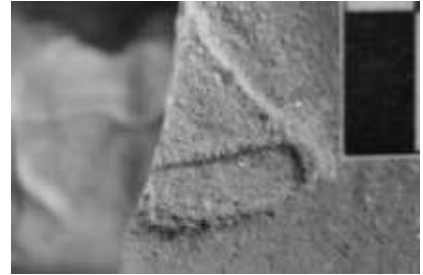
147 (AK E92)

Mende surface find

Handle WxTh: n/a x n/a

Handle is rather damaged. No rim is preserved.

A or Δ (incuse, in circle)



148 (AK E79)

Mende surface find

Handle WxTh: 0.045 x n/a

No rim is preserved. Handle is quite wide.

B (in circle)



149 (AK E9)

Basia plot, sec. 16A-18A; under destruction layer between walls 4-5, 0.41-.51m (A81)

Handle WxTh: 0.046 x 0.023

No rim is preserved.

B (incuse)



150 (AK E48)

Mende surface find

Handle WxTh: 0.050 x n/a

Small section of rim is preserved with pointed edge and somewhat rounded on top. Very wide and heavy handle.

IT (incuse)



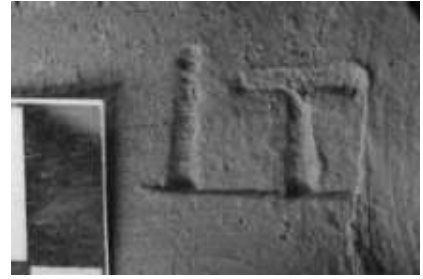
151 (AK E95)

Mende surface find

Handle WxTh: 0.047

No rim is preserved. Somewhat broad handle.

IT (incuse, in rectangle)



152 (AK E49)

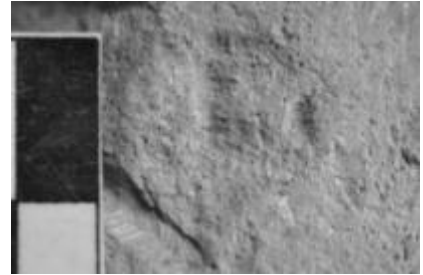
Mende surface find

Handle WxTh: 0.055 x n/a

No rim is preserved. Handle and stamp are poorly preserved.

Rather wide handle.

X (incuse, in circle)



153 (AK E93)

Mende surface find

Handle WxTh: 0.046 x n/a

Somewhat small, flat-topped rim with slightly rounded edge.

X (incuse, in circle)



154 (AK E69)

Mende surface find

Handle WxTh: 0.044 x 0.018-0.022

No rim is preserved. Stamp is not impressed deeply.

Reading is difficult to discern; possibly a stylistic Π or lunate-sigma



155 (AK E106)

Basia plot, sec. 1a; 2.41m

Handle WxTh: 0.039 x 0.020

No rim is preserved.

Reading is difficult. An incuse rectangular shape not set within a stamp.



156 (AK E5)

Basia plot, sec. C', south of wall 4; destruction layer, 1.40m (M25)

Handle WxTh: 0.043 x 0.022

No rim is preserved.

N (retr.; in circle)



157 (AK E2)

Basia plot, sec. 16A-18A; destruction between 4-5 wall (M5)

Handle WxTh: 0.045 x n/a

Rather thick, triangular rim preserves with rounded top.

A, surrounded by ivy



158 (AK E3)

Basia plot, sec. 14B; 0.85-1m (M18)

Handle WxTh: 0.040 x n/a

No rim is preserved.

AT (monogram in circle; possibly in a M on the right shoulder of the A)



159 (AK E91)

Mende surface find

Handle WxTh: 0.065 x n/a

Rim is thick and sharply edged on the top and side. Extremely wide handle. Surface of handle is very worn.

AT (monogram in circle)



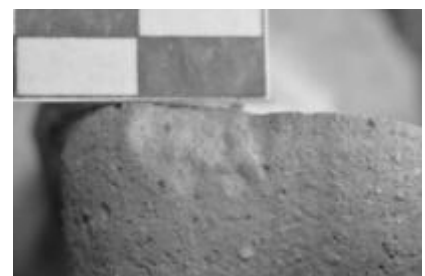
160 (AK E102)

Basia plot, secs. 8-9; 3.22-3.38m

Handle WxTh: 0.039 x 0.020-0.022

No rim is preserved. Handle is broken across stamp. Stamp is rather small.

AT (monogram, in circle)



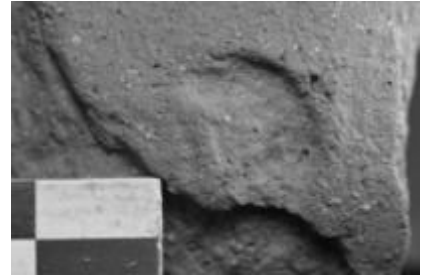
161 (AK E86)

Basia plot, secs. 8-9-13; 3.17-3.22m

Handle WxTh: 0.050 x 0.027

No rim is preserved. Handle is very broad and thick. Surface of handle has significant damage.

ATP (monogram in circle)



162 (AK E33)

Basia plot, sec. 6; 0.52-0.69m

Handle WxTh: 0.039 x 0.017

No rim is preserved. Circle of stamp is irregular.

Λ or A P (?) (monogram in circle)



163 (AK E36)

Basia plot, sec. 11; 0.44m (M2)

Handle WxTh: 0.070 x n/a

Some rim preserved, rather sharp edge but top does not survive.

Φ (?) (monogram in circle)

Stamp is too damaged for decisive reading.



164 (AK E108α)

Basia plot; south of wall 2

Handle WxTh: 0.051 x 0.017

No rim is preserved. Very broad handle.

Φ (in diamond)



165 (AK E84)

Mende surface find

Handle WxTh: 0.040 x n/a

No rim is preserved.

Φ (in oval)



166 (AK E90)

Mende surface find

Handle WxTh: 0.043 x 0.018

No rim is preserved. Second circle next to stamp, seems to be thumb-print or similar error in production/stamping process.

Φ (?) (monogram in circle)



167 (AK E1)

Basia plot, sec. 12b; 0.85-1m (M14)

Handle WxTh: 0.050 x n/a

Rim preserves slightly rounded with no real edge and a flattish top. A groove where rim curves back to neck.

ΦI



168 (AK E7)

Basia plot, sec. 11; destruction layer, 0.31-0.58m (A43)

Handle WxTh: 0.035 x 0.011-0.014

No rim is preserved.

ΦI (monogram in circle)



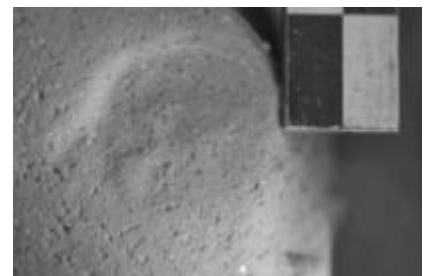
169 (AK E32)

Basia plot, cut 1; 0.65-0.78m

Handle WxTh: 0.046 x 0.015-0.021

No rim is preserved.

ΦI (monogram in circle)



170 (AK E34)

Basia plot, sec. 20; 0.11-0.24m

Handle WxTh: 0.041 x 0.014-0.019

No rim is preserved.

ΦI (monogram in circle)



171 (AK E35)

Basia plot, cross-sec. 12B; 0.67-0.85m (Γ57)

Handle WxTh: 0.041 x 0.014-0.019

No rim is preserved.

ΦI (monogram in circle)



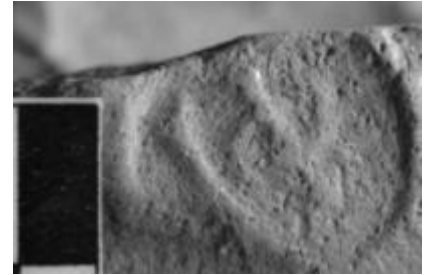
172 (AK E39)

Basia plot, western part of cross-sec. 4; 0.46-0.52m (A26)

Handle WxTh: 0.042 x 0.017-0.020

No rim is preserved.

ΦI (monogram in circle)



173 (AK E44)

Basia plot, sec. 17-18; 0.06-0.50m

Handle WxTh: 0.038 x 0.014-0.017

No rim is preserved. Rather small stamp.

ΦI (monogram in circle)



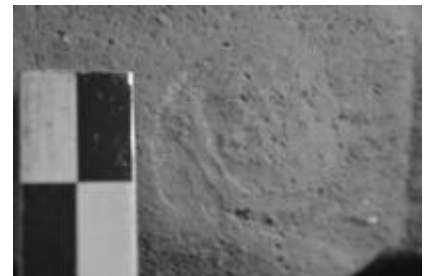
174 (AK E45)

Basia plot, sec. 10; 0.31-0.50m

Handle WxTh: 0.046 x 0.018-0.020

No rim is preserved.

ΦI (monogram in circle)



175 (AK E6)

Basia plot, sec. 5; -0.54-0.41m (M6)

Handle WxTh: 0.035 x 0.011-0.014

No rim is preserved.

HΔP (?) (monogram in rectangle)

Unusual monogram within a rectangle.



176 (AK E51)

Mende surface find

Handle WxTh: 0.045 x n/a

No rim is preserved. Stamp is quite small.

M (?)

Reading difficult due to poor preservation.



177 (AK E108στ)

Fourka; ceramic workshop

Handle WxTh: 0.034 x 0.022

No rim is preserved. Handle is quite narrow.

ΣΙ or ΜΙ (monogram, in rectangle)



178 (AK E108ε)

Mende, entrance of Vigla

Handle WxTh: 0.055 x 0.018

No rim is preserved. Very broad handle.

Φοι (incuse)



179 (AK E40)

Basia plot, northern wall 8; 0.42-0.87m (M3)

Handle WxTh: 0.050 x 0.010

Small rounded rim with slight edge on top and groove along join with neck. Stamp is small, rectangular and resembles a hybrid of monogram and full name stamps.

οιΔ



180 (AK E71)

Mende surface find

Handle WxTh: 0.036 x 0.018

No rim is preserved. Die is comparable to examples at Athens.

Αμείνο

[v]ίκου



181 (AK E4)

Basia plot; destruction between 4-5 wall, 1.39m (M14)

Handle WxTh: 0.035 x n/a

No rim is preserved.

Ευβού

λου

Stamp is not two distinct lines.



182 (AK E8)

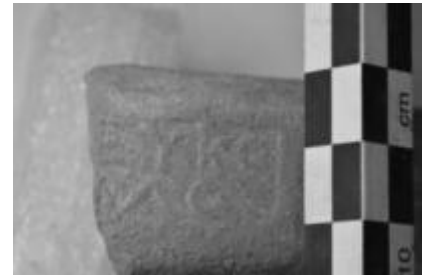
Basia plot, sec. 18; 0.05-0.13m

Handle WxTh: 0.023-0.030 x n/a

No rim is preserved.

Ευβο

ύλου



183 (AK E30)

Basia plot, intersection Γ; 0.60-0.80m (Γ30)

Handle WxTh: 0.041 x 0.018-0.020

Poorly preserved handle with no rim and very worn stamp.

[Ε]υβο

[ύλ]ου

Upright jar of this name-group does not survive, but likely present.



184 (AK E37)

Basia plot, sec. 4; 0.78-1m (M6)

Handle WxTh: 0.036 x 0.018-0.021

No rim is preserved. Heavily damaged but probably room for two-lined stamp.

Ε[υβο]

[ύλου]



185 (AK E43)

Basia plot; destruction plot between walls 4 and 5; 1.22m (M3)

Handle WxTh: 0.032 x 0.019-0.020

No rim is preserved.

[Ευ]βού

[λο]υ



186 (AK E76)

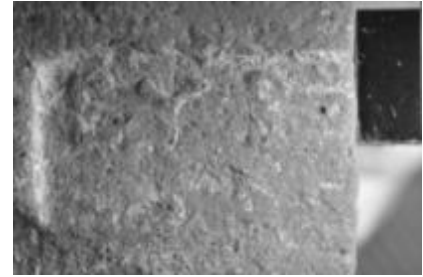
Basia plot, SE sections (259B)

Handle WxTh: 0.035 x 0.016-0.017

No rim is preserved. Rather narrow handle. Surface of stamp rather worn.

Ευβ[ό]

[λου]



187 (AK E77)

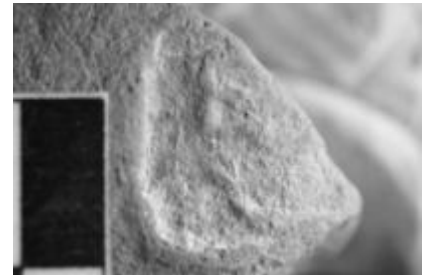
Basia plot, east extension sec. 5; 0.78-1.32m

Handle WxTh: 0.035 x 0.020

No rim is preserved. Very narrow handle. Handle is damaged on stamp.

Ευ[βό]

λ[ου]



188 (AK E41)

Basia plot, sec. 1; west wall of south circular kiln; 1.12m

Handle WxTh: 0.040 x 0.022

Nearly complete neck, rim, and one full handle survive. Sharp-edged rim with triangular top and groove along neck join. Ovoid stamp shape.

b) Νικ[ί]

ου

c) [Νικί]

ου

May also read Ευβούλου but form and stamp-shape are unique so not comparable. May contain a jar after the name.



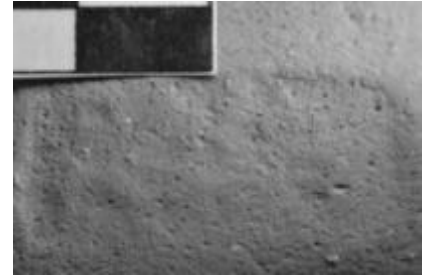
189 (AK E83)

Mende surface find

Handle WxTh: 0.040 x n/a

No rim is preserved.

Παρα
μόγου



190 (AK E42)

Basia plot, sec. 1; circular kiln, 0.62-0.82m (M1)

Handle WxTh: 0.029 x 0.017

No rim is preserved.

Παρμε
νίσκου



Stamps on Stands

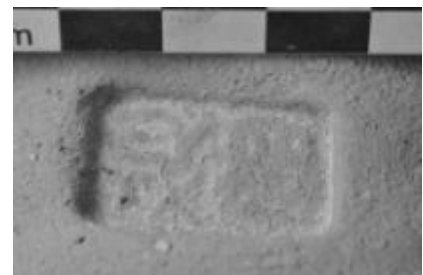
191 (AK E15)

Basia plot, sec. 15 (M21)

Stand HxW: 0.145 x 0.117

Stamped amphora stand. Type-A base, very thick and prominent inner-lip. Thin rounded rim, very gently flares. Very tall and heavy stand. Clay lump inside equal with stamp, probably from stamping process. Stamp runs horizontal.

Ευβο
ύλον



192 (AK E17)

Basia plot, sec. 18; destruction layer, 0.35m (ME7)

Stand HxW: 0.140 x 0.129

Stamped amphora stand. Type-A base. Rounded rim, slightly flares. Stamp runs vertical.

Ευβο
ύ[λ]ον (upright jar, over both lines)



193 (AK E28)

Basia plot, cross-sec. 16A; 1-1.15m

Stand HxW: 0.080 x 0.032

Stamped amphora stand. Type-A base, rather thick. No rim is preserved.

[Ευβ]ο

[ύλου] (upright jar)

Reading based on surviving jar similar to other stamps of same name.



194 (AK E29)

Basia plot, cross-sec. 16A; 1-1.15m (Γ72)

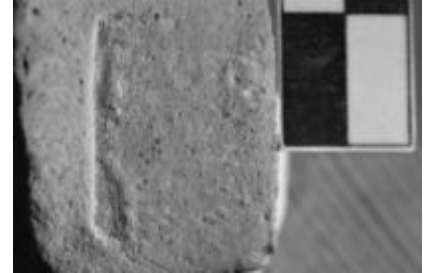
Stand HxW: 0.040 x 0.020

Stamped amphora stand. Poorly preserved stand, with no base or rim surviving. Stamp runs vertical (likely).

Ευβ[ο]

ύλ[ου]

Upright jar of this name-group does not survive, but likely present.



195 (AK E109)

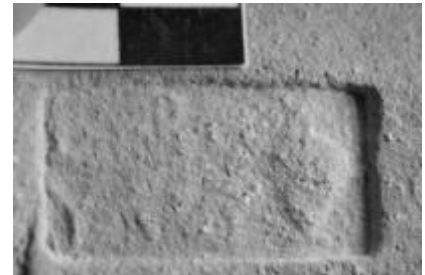
Area Γ'; stones between walls 4 and 5, 0.22-0.89m (Γ3)

Stand HxW: 0.075 x n/a

Stamped amphora stand. Type-A base, rather thick. No rim is preserved. Stamp runs vertical.

Ευβό

υλου (upright jar)



196 (AK E135)

Basia plot, secs. 13-14; 0.18-0.54m (M1)

Stand HxW: 0.143 x 0.140

Stamped amphora stand. Type-A base, very wide. Rim is small, rounded, and hardly protruding. Rather tall and wide stand. Stamp runs vertical.

Ευβο

ύλου (upright jar)



197 (AK E11)

Basia plot, sec. 11-12; 0.60-0.87m

Stand HxW: 0.080 x 0.050

Stamped amphora stand. No rim or base survives.

Θε[ο]δό

τ[ου]

Likely has sideways amphora like others with this name but has been broken off.



198 (AK E12)

Basia plot, sec. 12A (M28)

Stand HxW: 0.123 x 0.135

Stamped amphora stand. Type-B base. Rim is rounded and relatively thick, flares gently. Stamp runs vertical.

Θεο[δ]ό

.τ[ου] (sideways jar)



199 (AK E13)

Basia plot, sec. 12

Stand HxW: 0.011 x 0.117

Stamped amphora stand. Type-B base, but more narrow and rather squat. Rounded rim, flares gently. Stamp runs vertical.

Θεο[δ]ό

[το]υ (sideways jar)



200 (AK E16)

Basia plot, cut 12 (M25)

Stand HxW: 0.124 x 0.105

Stamped amphora stand. Type-B base. Rounded rim, gently flares. Tall and narrow stand. Stamp runs vertical.

Θεοδό

του (sideways jar)



201 (AK E18)

Basia plot, sec. 18; 0.33m (M15)

Stand HxW: 0.105 x 0.100

Stamped amphora stand. Type-B base. Rounded rim, gently flares. Stamp runs vertical.

Θεοδό

.του (sideways jar)



202 (AK E19)

Basia plot, sec. 14b; destruction layer of space Γ', 0.76m (M5)

Stand HxW: 0.114 x 0.113

Stamped amphora stand. Type-B base. Relatively rounded and flaring rim. Stamp runs vertical.

Θε[ο]δό

του (sideways jar)



203 (AK E20)

Basia plot, sec. 7; near wall 2, 0.46m (M3)

Stand HxW: 0.150 x 0.102

Stamped amphora stand. Type-B base, more narrow and very prominent inner-lip. Thick rounded rim, flares sharply. Stand is rather narrow. Stamp runs vertical.

Θεοδό

τοῦ (sideways jar)



204 (AK E21)

Basia plot, sec. 18; destruction layer, 0.34m (M4)

Stand HxW: 0.100 x 0.095

Stamped amphora stand. Type-B base, rather narrow. Rounded rim, flares sharply. Stamp runs vertical.

Θεοδό

το[υ] (sideways jar)



205 (AK E22)

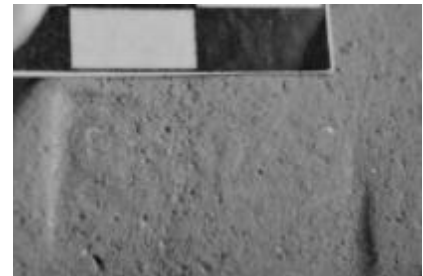
Basia plot, sec. 15 (Υπ47)

Stand HxW: 0.112 x 0.110

Stamped amphora stand. Type-B base, only small lip. Rounded rim, somewhat flat-topped, flares sharply. Stamp runs vertical.

Θεοδό

τ[ου] (sideways jar)



206 (AK E23)

Basia plot, sec. 15 (M26)

Stand HxW: 0.122 x 0.105

Stamped amphora stand. Type-B base, but with prominent inner-lip. Flat-topped rim, flares noticeably. Stamp runs vertical.

Θε[οδό]

τοῦ (sideways jar)



207 (AK E24)

Basia plot, sec. 15; 0.41m (M41)

Stand HxW: 0.099 x 0.100

Stamped amphora stand. Type-B base, with outer groove on the lip. Rounded rim with slight edge, flares sharply. Rather short and narrow. Stamp runs vertical.

Θεοδό

τοῦ (sideways jar)



208 (AK E25)

Basia plot, sec. 15 (M48)

Stand HxW: 0.115 x 0.100

Stamped amphora stand. Type-B base. Rounded rim, gently flares; has small convex line inside. Stamp runs vertical.

Θεο[δó]

τοῦ (sideways jar)



209 (AK E26)

Basia plot, sec. 10 (M10)

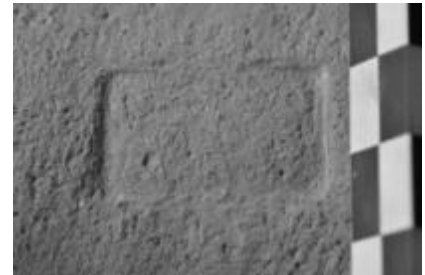
Stand HxW: 0.110 x 0.100

Stamped amphora stand. Type-B base, particularly wide.

Somewhat flat-topped rim, flares gently. Quite short and narrow stand. Stamp runs vertical.

Θε[οδ]ό

τοῦ (sideways jar)



210 (AK E27)

Basia plot, sec. 17.

Stand HxW: 0.115 x 0.100

Stamped amphora stand. Type-B base, wide bottomed. Rounded rim with faint edge, sharply angled. Very narrow top and wide bottom. Stamp runs vertical.

Θεοδό

τ[ο]ῦ (sideways jar)



211 (AK E31)

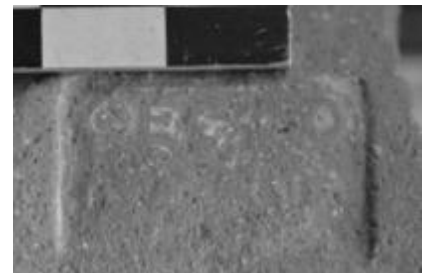
Basia plot, sec. 18; 0.34-0.48m

Stand HxW: 0.074 x 0.038-0.057

Stamped amphora stand. No base or rim survive.

Θε[ο]δό

το[υ] (sideways jar)



212 (AK E66)

Basia plot, sec. 12

Stand HxW: 0.112 x 0.116

Stamped amphora stand. Type-B base, but somewhat narrow for type. Rounded rim, flares significantly. Stamp runs vertical.

Θεοδ[ό]

τοῦ (sideways jar)

Sideways jar does not survive but stamp is similar to others with jar.



213 (AK E103)

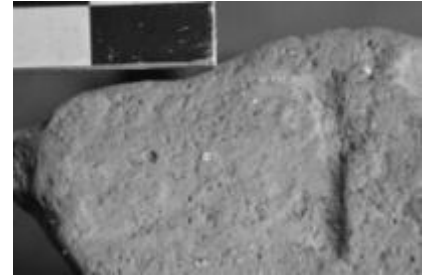
Basia plot, sec. 13; inside south furnace, 3.28m

Stand HxW: 0.075 x 0.040-0.054

Stamped amphora stand. Type-B base. No rim is preserved. Stamp runs vertical.

[Θεο]δó

[του] (sideways jar)



214 (AK E127)

Basia plot, sec. 12A; 0.55-0.85m (M2)

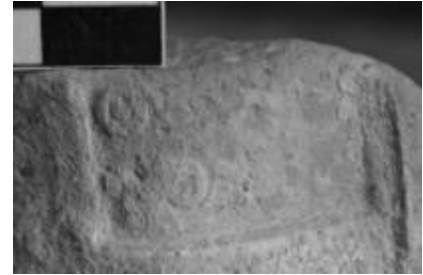
Stand HxW: n/a x n/a

Stamped amphora stand. Type-B base, rather wide. No rim is preserved. Stamp runs vertical.

Θεο[δó]

του (sideways jar)

Sideways jar does not survive but space suggests it is present, and die is alike to others of the name-group.



215 (AK E128)

Basia plot, sec. 15 (Υπ 31)

Stand HxW: 0.114 x 0.111

Stamped amphora stand. Type-B base, somewhat narrow and only a slight inner-lip. Rim is flat-topped, slightly rounded and protruding. Stamp runs vertical.

Θεο[δ]ó

του (sideways jar)



216 (AK E131)

Basia plot, sec. 15 (Υπ 42)

Stand HxW: 0.132 x 0.120

Stamped amphora stand. Type-B base but more prominent inner-lip and more rounded outer-edge. Rim is sharply rounded on top and flares gently. Stamp runs vertical. Quite a tall and wide stand.

Θεοδ[ó]

του (sideways jar)

Stamp is damaged but spacing suggests the reading provided with room for the sideways jar of the name-group.



217 (AK E132)

Basia plot, sec. 12 (Υπ 11)

Stand HxW: 0.116 x 0.112

Stamped amphora stand. Type-B base. Rim is rounded with a slight rounded edge, and flares out gently. Stamp runs vertical.

Θε[οδó]

του (sideways jar)



218 (AK E133)

Basia plot, sec. 15 (Υπ 32)

Stand HxW: 0.096 x 0.097

Stamped amphora stand. Probably Type-B base, although little survives. Rim is rounded with a noticeable edge rather than typical flaring. Stamp runs vertical.

Θεοδό

[του] (sideways jar)

Sideways jar does not survive but space suggests it is present, and die is alike to others of the name-group.



219 (AK E134)

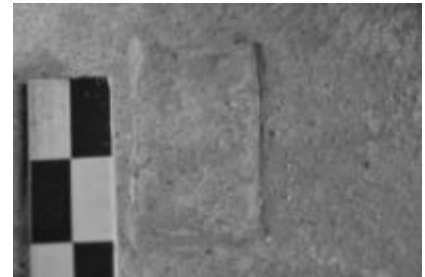
Basia plot, sec. 12 (Υπ 4)

Stand HxW: 0.098 x n/a

Stamped amphora stand. Type-B base. Only small pieces of rim survive, suggest gently flaring shape. Stamp runs vertical.

Θεοδό

του (sideways jar)



220 (AK E136)

Basia plot, sec. 18; 0.2m (M16)

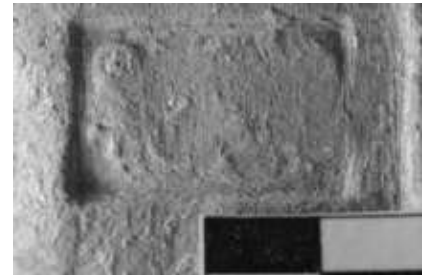
Stand HxW: 0.095 x n/a

Stamped amphora stand. Type-B base with protruding inner-lip. Rim is gently rounded but with an angled top and gently flares. Stamp runs vertical.

Θε[οδ]ό

του (sideways jar)

Sideways jar does not survive but space suggests it is present, and die is alike to others of the name-group.



221 (AK E137)

Basia plot, sec. 15 (Υπ 23)

Stand HxW: 0.112 x 0.102

Stamped amphora stand. Type-B base. Rim rounded with somewhat flat top and protruding. Stamp runs vertical.

Θεοδό

του (sideways jar)

Sideways jar does not survive but space suggests it is present, and die is alike to others of the name-group.



222 (AK E138)

Basia plot, cut 7; next to wall 2, 0.46m (Υπ 4)

Stand HxW: 0.119 x 0.131

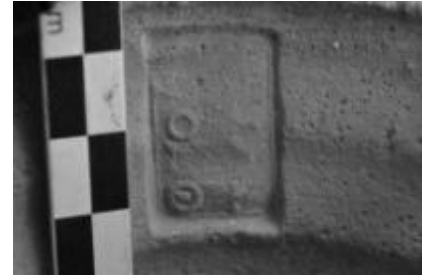
Stamped amphora stand. Type-B base. Rim has a rounded top.

Stamp is on inside of cylinder and runs vertical.

Θεο[δό]

του (sideways jar)

Sideways jar does not survive but space suggests it is present, and die is alike to others of the name-group.



223 (AK E10)

Basia plot, sec. 11-12; 0.60-0.87m (M18)

Stand HxW: 0.075 x 0.109

Stamped amphora stand. No base survives. Rounded rim with slight edge before flaring out noticeably. Stamp runs horizontal.

Κριτο

λάου



224 (AK E46)

Basia plot, sec. 18; destruction layer, 0.020-0.34m

Stand HxW: 0.085 x 0.030-0.043

Stamped amphora stand. No base or rim are preserved. Stamp likely runs horizontal.

Κριτο

[λά]ου



225 (AK E67)

Basia plot, sec. 18

Stand HxW: 0.120 x 0.120

Stamped amphora stand. Type-B base, but no discernible inner-lip. Rim has rounded top, flares gently. Stamp runs horizontal.

Κριτο

[λάου]



Tables

Table 1: List of Stamps with Multiple Occurrences and their Die-Counts³¹¹

Name on Stamp	Number of Stamped Handles	Different Discernible Dies
Αμεινονίκου	7	1
Δήμο	2	2
Δημοτίμου	2	2 ?
Ἑκαταίου	2	1
Ευβίωτω	4	2
Εὐβουλος ³⁰⁸	7 (6)	5 (1)
Εύγει	4	1
Ἑγησίνου	5	4
Ἑρακλείδου	7	1 ?
Θεόδοτου ³⁰⁹	3 (26)	2 (1)
Καλλιμάχου	3	2 ?
Κριτολάου	3	1
Μικιώνος	8	2
Νικίου ³¹⁰	6	2
Νικοκλέους	2	2
Νικοστράτου	3	1
Παρμενίσκου	6	6 ?
Ποσειδίππου	5	2
Τιμαινέτου	10	3 ?

³⁰⁸ Εὐβουλος appears only at Poseidi, but it appears on both stamped handles and stamped stands. The numbers in brackets represent the stamped stands.

³⁰⁹ Θεόδοτος is the only one that appears on stamped amphora stands at Poseidi as well as handles from Athens and Mende. The numbers in brackets represent the stamped stands.

³¹⁰ Νικίας has one stamped handle from Poseidi, which is a noticeably different die from the Athens-based examples.

³¹¹ The stamps of some name-groups are not well preserved enough to conclusively determine how many dies are present. At best, some groups can only be assumed based on fragmentary stamps.

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