

THE CIRCULATION OF GREEK FEDERAL COINAGE

THE CIRCULATION OF GREEK FEDERAL COINAGE:
A STUDY OF THE MOVEMENT AND USAGE
OF COINS FROM ANCIENT GREEK FEDERAL STATES
THROUGH AN EXAMINATION OF COIN HOARDS

By CASSIUS DI MARIA, B.B.A., B.A.

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AUTHOR: Cassius Di Maria, B.B.A. (George Brown College), B.A. (McMaster University)

SUPERVISOR: Dr. Spencer Pope

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Abstract

The aim of this discussion is to examine the coins from a selection of both Classical and Hellenistic Greek federal states in order to identify potential patterns in how the coins were used. This is done through an in-depth analysis of coin hoard data, focusing on hoards which contain the coins from a league alongside coins from *poleis* within that league, taking into account hoard contents, approximate deposit date, and the hoard findspot. This data is then compared to the data from hoards containing coins from the *poleis* of a league, regardless of whether the hoards contained coins from the league or not.

The study finds that, while each league examined is unique, certain patterns can be identified. The leagues typically mint coins not just to the same standard as their *poleis*, but in the same denominations, such as the triobols of the Achaean League and her member-*poleis*. The hoards containing coins issued from a league show a strong preference for regional circulation, which is highlighted when juxtaposed with the hoards containing the civic coinage, which have findspots across the ancient Mediterranean world. This shows that the coins minted by the leagues served a separate and more regional purpose than the coins the *poleis* were minting.

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Introduction

Across the Classical period and into Hellenistic Greece, the federation, or league, was a nigh ubiquitous institution, a state comprised of several *poleis* joining together to form a single overarching governing body. Though these states were each unique, there were certain constants across them. Chief among these was the production of unified coinage, where the state would produce coins at the federal level which would then be used across the territory of the state. Though an often-discussed phenomenon of the ancient world, this study will aim to highlight key differences in the circulation of federal coinage when compared to coinage produced on the civic level through the analysis of coin hoards.

This will begin by providing insight into the monetary policies of federal states within the ancient world by examining both the economic and political landscapes of several federal states from both Classical and Hellenistic Greece. In order to examine the economic policies and monetary practices of these leagues, the meaning of the term ‘league’ in an Ancient Greek context must first be established, along with what these political entities looked like. Following that will be a discussion of what benefits *poleis* saw from joining together into these leagues, with a focus specifically on the economic aspects. This will include a brief comparison to modern federations and modern unified currency. Nine leagues from Classical and Hellenistic Greece will be highlighted, with discussions of their individual history and policies. The first chapter will be focused on setting the groundwork, establishing the specifics of the political institution, and providing a brief overview of the leagues selected for the case studies.

Following this discussion will be an in-depth analysis of a selection of coin hoards from five of the leagues discussed in chapter one: The Acarnanian League, the Achaean League, the Chalcidian League, the Euboean League, and the Thessalian League. The hoards chosen for

analysis will be those in which coinage from these leagues is found alongside the autonomous coinage from *poleis* within these leagues, so that these hoards can later be contrasted with the hoards containing autonomous coinage discussed in chapter three. Analysis of findspot and hoard contents shows specific patterns, both in collection and circulation of the coins. The hoards containing coins issued by the federations have a tendency to cluster within league territory, rarely venturing far outside the state's borders, and, with one exception, never venturing outside of Greece. There is also a level of uniformity within the hoards when it comes to the denominations present. Though the extent of this uniformity varies between leagues, there is a tendency to favour one or two denominations, and these are prioritized in league issues, civic issues, and often in coins brought in from outside the league as well.

The final chapter consists of an in-depth discussion of the data collected and patterns identified in chapter two, organized league by league. This discussion is supplemented by further hoard analysis, this time focusing on the hoards containing coins issued by the *poleis* which make up the various leagues. The purpose here is to track how the circulation of these autonomous issues compares to the circulation of the federal issues. Across the five leagues, the pattern is consistent – while the coinage of a league tends to be found within or just outside of league territory, these autonomous coins made their way into hoards found throughout the Mediterranean basin. This stark difference in circulation implies a clear difference in production and purpose for the two levels of coinage, and that this is consistent across the five leagues examined here supports that this is not merely down to chance.

Chapter 1 – The Economic Landscape of the Leagues

1.1 – Federations in the Ancient World

The term ‘league’ is often used in political discussions to refer to a federal state. Though within the scholarship there tends to be a great focus on the figure of the *polis* as a fully autonomous city-state, one cannot overlook the fact that these states were often interconnected through trade, military alliances, and in many cases through the forming of confederations. Indeed, as the classical period was coming to an end, nearly half of the city-states within the Greek mainland were integrated into some form of larger federal state¹. This happened when multiple city-states would join together and move beyond the formation of an alliance. The multiple states would organize an overarching government, whose policies would apply to all of the member states, while the individual *poleis* would continue to run their own state, operating under the federal government². This concept, with its multiple levels of government working together, is common to this day, especially in countries with a large geographic area, such as Canada, as it allows for the differing needs of the widespread population to be met³.

While these states are referred to in modern scholarship as ‘leagues’, federal states are not the only unions this term is applied to. This term has been applied to other alliances as well, such as the Delian League, which was not a federal state, leaving it somewhat vague⁴. Another type of alliance which has the potential for being confused with a federal state is the *symmachia*. This term refers to a military alliance between states, coming from the Greek for ‘to fight

¹ Funke and Beck 2015, 3.

² Funke and Beck 2015, 1-3.

³ Mackil 2013, 1.

⁴ Larsen 1968, xiv.

together⁵. Typically, a *symmachia* is a bilateral arrangement, an alliance between just two states, though this is not true for every instance of the alliance⁶. In addition, the arrangement may be between states of any level – meaning that it is possible for a federal state to also be a member of a *symmachia*⁷. Since a *symmachia* was generally concerned exclusively with military matters, it was far less involved than a federation, which would involve a level of economic cooperation not seen in a standard military alliance.

In addition to the *symmachia*, this is also the *syntaleia*, another type of alliance not uncommon in the Ancient Greek world. This form of alliance is far less understood than the military alliance, as ancient sources are not explicit about what the alliance entails. As with the *symmachia*, this is typically a bilateral arrangement, however it appears to be an asymmetrical one, comprised of one smaller and weaker *polis* and one stronger one, such as Chaironeia and Orochmenos. It has been suggested that one of the functions of this arrangement was to act as a tax unit, to make easier the act of levying taxes⁸. Once again, this is an arrangement which appears to be far less involved than federalism. In addition, just as a *symmachia* could involve a federal state, it seems that a federal state could involve *syntaleia*. Though separate from federalism, it is important to note the variety of alliances which existed in the Classical and Hellenistic periods, many of which remain obscure in their details.

There are multiple terms beyond league commonly used for the political institution of the federal state, including federation, confederacy, *koinon*, and *ethnos*⁹. Adding to the confusion is the fact that the ancient sources are inconsistent, and neither of the ancient Greek terms listed can

⁵ Couvenhes 2016, 13-14.

⁶ Couvenhes 2016, 16.

⁷ Couvenhes 2016, 17.

⁸ Mackil 2013, 296.

⁹ Mackil 2013, 5.

be assumed with absolute certainty to refer to a true federal state¹⁰. For the purposes of this discussion, however, both the term league and the term *koinon* should be assumed to refer to a federal state, unless otherwise stated.

The word *koinon* is, like many words in Ancient Greek, somewhat complicated in its definition. It is the singular neuter version of the word *koinos*, a term which can be defined as ‘common’ or ‘shared’. Taken in the plural neuter, *ta koinas* is a word which refers to public money or the public treasury, translating literally to “the common things”¹¹. In this sense, it is very similar to the Latin *res publica*. The fact that this is a word which exists outside of its political meaning somewhat complicates things, as does the fact that multiple different terms appear to have been used to refer to the same thing¹².

One of the most common ways federal states are referred to in the sources is by simply the plural of the *ethnos*, for example, the Arcadians or the Achaeans, with no additional qualifiers. This adds an unfortunate layer of ambiguity to their discussions, as they could potentially be referring to the residents of a geographic area, or an *ethnos*, without the implication of political federation. This can be seen in the following passage of Xenophon’s *Hellenica*, where the names of several federations are mentioned, all without any qualifiers to identify them as federal states;

οἱ γὰρ Ἀκαρνᾶνες ἐπεστράτευσον, καὶ τῶν Ἀθηναίων δὲ καὶ Βοιωτῶν συμπαρήσαν τινες αὐτοῖς διὰ τὸ συμμαχοῦς εἶναι. πιεζόμενοι οὖν ὑπ’ αὐτῶν οἱ Ἀχαιοὶ πρέσβεις πέμπουσιν εἰς τὴν Λακεδαίμονα. οἱ δ’ ἐλθόντες ἔλεγον ὅτι οὐ δίκαια πάσχοιεν ὑπὸ τῶν Λακεδαιμονίων. (Xen. *Hell.* 4.6.1)

¹⁰ Funke 2015, 98.

¹¹ Mackil 2013, 5.

¹² Mackil 2013, 5-8.

“For the Acarnanians marched against them, and the Athenians and the Boeotians were also present, on account of being allies to them. Therefore the Achaeans, suffering greatly under them, sent ambassadors into Lacedaemon. And those arriving said that they were not treated justly by the Lacedaemonians.”¹³

Note that this wording makes no distinction between the federations it mentions (the Acarnanians, the Boeotians, and the Achaeans) and the other, non-Federal entities, such as the Athenians. Xenophon is not alone in speaking of federations this way, but thankfully there are instances where the ancient sources use some form of qualifier, which allows us to confirm (or at least assume with substantial evidence to support) that they are speaking of a federation. Indeed, Xenophon himself uses a more specific term two passages later, referring not simply to the Acarnanians, but instead to “*to koinon tōn Akarnanōn*”¹⁴. The decision to either include or omit these qualifiers, then, appears to be stylistic, or perhaps based on context. The context of the sentence where this phrase is used is: “πέμψας εἰς Στράτον πρὸς τὸ κοινὸν τῶν Ἀκαρνάνων”, “sending to Stratus before the federation of the Acarnanians”¹⁵. However, this usage of *to koinon* has in the past been translated not simply as ‘the federation of the Acarnanians’, but more specifically as “the general assembly of the Acarnanians”¹⁶. The decision to translate the term to be more specifically political emphasizes the fact that, when reading the ancient sources, the name of the *ethnos* on its own is taken to mean the federation, and so, to some translators, the inclusion of the word *koinon* must have significance beyond simply being a stylistic choice.

Since the period Herodotus is writing about pre-dates many of the leagues under discussion, his usefulness as a source in this area is minimal. What he instead provides is a look

¹³ Author’s translation.

¹⁴ Xen. *Hell.* 4.6.4

¹⁵ Author’s translation.

¹⁶ Xenophon. Xenophon in Seven Volumes, 1 and 2. Carleton L. Brownson. Harvard University Press, Cambridge, MA; William Heinemann, Ltd., London. vol. 1:1918; vol. 2: 1921.

at the *poleis* in these areas and their relationships to each other, and how that may have led to the eventual development of federalism. When he does refer to these groups, however, he uses the same terminology as the above Xenophon passage uses, using the plural of the *ethnos* to refer to the group as a whole, even in instances that predate the formation of a federal state, such as with the Arcadian League¹⁷.

The ambiguity surrounding the language used to refer to states within the ancient authors can lead to uncertainty, which has led some scholars to theorize that certain leagues were not true federal states at all, due to the lack of concrete evidence supporting their existence. The Euboean League is a federation which has had its existence contested within the scholarship due to this fact, which shall be discussed in further detail below.

1.2 – Federations in the Modern World

Unfortunately, the intense focus of writers, both ancient and modern, on the *polis* has led to the federal State being often overlooked as a key part of Greek history¹⁸. Another potential contributor to the undermining of the importance of federations throughout this period of Greek history is the difficulty in applying the modern concept of federalism to ancient forms of government, as there will rarely be a perfect match, and unlike with institutions such as democracy and oligarchy, there are no extant discussions of their policies or concrete reasons for formation from ancient sources¹⁹. This silence on the topic is especially surprising from two sources in particular: Aristotle and Polybius. The topic of federalism is barely touched on in Aristotle's *Politics*, where it would have fit in well. Polybius, having a prominent Achaean

¹⁷ Herodotus 1.66.1-3 is an example of the Arcadian League being referred to in this way.

¹⁸ Funke and Beck 2015, 3.

¹⁹ Mackil 2013, 4.

statesman for a father, is useful as a source for the history of the league, as well as the events during his lifetime. Unfortunately, he provides little information when it comes to the specifics of how the various levels of government operated and interacted with each other²⁰. Given this fact, it is no surprise that it is often modern definitions of a federal state that are presented in works dedicated to ancient federalism.

Federalism is a familiar concept in the modern world. Some of the most prominent examples of modern federal states include The United States of America, Canada, and Australia²¹. In a recent publication, Inman and Rubinfeld defined a federal state as “a federation of subnational self-governing units under a central national government”, which creates the multiple levels of government typically associated with federations²². However, though it may seem fitting, it is not always best to apply modern definitions, such as the one above, to ancient forms of government. The modern examples of federal states all operate differently, and the definition is found where their operations overlap. The ancient federations would have also been quite different from each other in form and policy. Indeed, Emily Mackil posits that the modern historian’s insistence on approaching federalism from a modern standpoint is itself limiting our ability to understand the phenomenon as it occurred in the ancient world²³. Nevertheless, the broad strokes of what federalism is have remained much the same, and an understanding of what makes this form of government appealing even to this day is important.

²⁰ Larsen 1968, xii.

²¹ Mackil 2013, 1.

²² Inman and Rubinfeld 2020, 1.

²³ Mackil 2013, 4.

1.3 – The Federations of Classical and Hellenistic Greece

In 1968, Larsen published the first comprehensive look at Greek federalism since Freeman’s 1863 work, *History of Federal Government from the Foundation of the Achaian League to the Disruption of the United States*. In this work, he provided a simple definition for a federal state in the ancient world, stating that it is “a state in which there is a local citizenship in the smaller communities as well as a joint or federal citizenship and in which the citizens are under the jurisdiction both of federal and local authorities”²⁴. More recently, Beck and Funke described the federal state as “represent[ing] a design to unite a multitude of state-entities whose powers and prerogatives are safeguarded in the course of integration”²⁵. Both of these definitions are broad, as is necessary. The federal states of the ancient world were varied, with laws, systems, and political policies designed to suit their specific needs. To attempt a more specific definition of a federal state would be to define several states out of existence.

Leagues formed for a variety of reasons. The predominant theory throughout the 20th century for the formation of leagues in the ancient world was that they primarily served a military and defensive purpose. However, this explanation fails to take into account the existence of the *symmachia*, the military alliance previously discussed that would have served to meet the *poleis* defensive needs without the additional complications brought on by the formation of a federal state²⁶. This means that there must have been additional benefits to the member *poleis* who joined these federations, and these benefits were most likely economic. Federations include

²⁴ Larsen 1968, xv.

²⁵ Funke and Beck 2015, 1.

²⁶ Mackil 2013, 2.

a level of economic cooperation that no other alliance has, and this economic cooperation should, in theory, provide economic benefits to all member states²⁷.

That the leagues were created for the purpose of economic benefits is supported by the fact that most of them set up institutions to promote economic integration across their territories, something that the *symmachia* could not provide²⁸. A more in-depth discussion of the economic institutions of these federal states will occur below, but it is important to keep in mind that the economic mobility and freedom provided to member *poleis* could allow for the member states to achieve together what would have been impossible on their own.

Emily Mackil isolated five conditions which led to the development of federal states in the Ancient Greek world. The first two, economic and militaristic cooperation, have already been discussed briefly. The remaining three are the pre-existence of an organized state, such as a *polis*, a shared ethnic and religious background, and a large geographic territory that the pre-existing states wished to exert control over²⁹.

Though every federal state was different, the importance of shared ethnicity and religion to the forming of a new federation cannot be overstated. As discussed, within the writings of ancient authors, the federal states will often be referred to with the collective plural of their *ethnikon*, such as the Achaeans or the Euboeans³⁰. This can even be seen in the epigraphic and numismatic evidence, where inscriptions will use ethnonyms such as *Boeotoi* or *Achaeoi* on their own, rather than qualifying them with *koinon* or *sympoliteia*³¹. The Federal state and the *ethnos*

²⁷ Mackil 2015, 487.

²⁸ Mackil 2015, 489.

²⁹ Mackil 2013, 331-332.

³⁰ Funke and Beck 2015, 14.

³¹ Hall 2015, 31.

were one and the same. The majority of the Greek federal states shared a common ethnic background, at least among the groups that formed the initial union, and the *ethnos*-based terminology continued to be used even as the federal states expand to include *poleis* with which they did not share a common ancestry³².

The importance of this shared background can be seen clearly in the inscription on a dedication from Olympia, which Pausanias tells us reads "τῷ Διὶ τἈχαιοὶ τὰγάλματα ταῦτ' ἀνέθηκαν, ἔγγονοι ἀντιθέου Τανταλίδᾳ Πέλοπος", "The Achaeans, descendants of Pelops the godlike son of Tantalus, dedicate these statues to Zeus"³³ (Pausanias 5.25.10). This dedication to Zeus dates to the early 5th century BCE and highlights their common heroic ancestor, Tantalid Pelops. In this way, the members of the Achaean federal state do not just see themselves as a political group, but also as direct descendants of the Achaeans of Homer³⁴. The Achaeans are not alone in this. Many of the federal states found throughout the Classical and Hellenistic periods share a name with one of the groups mentioned in the Homeric *Catalogue of Ships*, from Book 2 of the *Iliad*³⁵. In addition, it is worth noting that the few examples of so-called leagues which did not strive for ethnic cohesion, instead embracing the plurality of ethnic groups within their territory, such as the Pylaian-Delphic Amphiktyony, appeared to have no aspirations regarding political union³⁶.

Another federal state which placed a great amount of value on their shared mythic history was the Aetolian League. Over the course of the 5th c BCE, it seems that the myth of Aetolos was altered in order to both promote cohesion within the state, as well as justify Aetolian control over

³² Funke and Beck 2015, 19.

³³ Author's translation.

³⁴ Rizakis 2015, 120.

³⁵ Hall 2015, 36.

³⁶ Hall 2015, 30.

areas such as Lokris³⁷. This is seen again in Boeotia, where their eponymous hero, Boeotos, appears in the literary and epigraphic record quite late, certainly no earlier than the 6th c BCE³⁸.

Given the importance of their (occasionally perceived) shared ethnic background, one of the main ways this was expressed in a federal union was through common religious ceremonies and shared sanctuary sites³⁹. Many of the larger federal states in the ancient world had within their borders a federal sanctuary site, such as the Sanctuary of Zeus at Olympia in the Achaean League⁴⁰, the Sanctuary of Apollo at Thermos in the Aetolian League⁴¹, and both the Itoneion near Koroneia and the Poseidonion at Onchestos in the Boeotian League⁴². In addition to these shared sanctuaries, there was also the existence of common religious ceremonies held within the individual member *poleis*, such as the *Dionysia* in Euboea. Though the location of these festivals was not a federal site, the federal state organized them, ensuring they occurred simultaneously in the island's four *poleis*⁴³.

These sanctuary sites, shared festivals, and common mythic ancestors served as important expressions of a region's ethnic cohesion. This, in turn, worked to hold the region together and provided a justification for the federal cooperation beyond the economic benefits⁴⁴. And, indeed, these motivations were not necessarily wholly separate. Upgrading sanctuaries, setting up games, and building new shrines and temples are all things that require a large amount of capital in order to achieve. By joining together in a federation, the resources of several *poleis* could be pooled,

³⁷ Funke 2015, 90-92.

³⁸ Beck and Ganter 2015, 135.

³⁹ Ibid.

⁴⁰ Rizakis 2015, 119.

⁴¹ Funke 2015, 86.

⁴² Beck and Ganter 2015, 155.

⁴³ Knoepfler 2015, 161.

⁴⁴ Funke and Beck 2015, 25.

and far grander projects could become possible⁴⁵. If the *poleis* in question had pre-existing economic ties, it is also possible that the federal state was formed to further strengthen those bonds⁴⁶.

1.4 – The Economics of Federations

As mentioned above, economic cooperation played a major role in the federal state. Nobel Prize-winning economist Friedrich Hayek argued that the existence of a political federation entails economic cooperation⁴⁷. This appears to have been as true in the ancient world as it is today. And, indeed, it was a recognized fact that members of federal states saw economic benefits and advantages that the entirely independent *polis* did not. Consider the following passage from Xenophon’s *Hellenica*, which is part of a speech in which the danger the Chalcidian League poses to the various Peloponnesian *poleis* is highlighted:

τί γὰρ δὴ καὶ ἐμποδῶν, ὅπου ξύλα μὲν ναυπηγήσιμα ἐν αὐτῇ τῇ χώρᾳ ἐστὶ, χρημάτων δὲ πρόσοδοι ἐκ πολλῶν μὲν λιμένων, ἐκ πολλῶν δ’ ἐμπορίων, πολυανθρωπία γε μὴν διὰ τὴν πολυσιτίαν ὑπάρχει; (Xen. *Hell.* 5.2.16)

“For indeed what is in their way, where there is wood useable for shipbuilding in their countryside, and revenues of money from their many harbours, and from their many trading-places, and an abundant population on account of much food being available?”⁴⁸

This passage states that one of the reasons the Chalcidians pose such a threat is the large number of resources they have access to. This goes back to the fact that federations are an ideal form of government for allocating resources across a wide area with an uneven distribution of

⁴⁵ Ibid.

⁴⁶ Mackil 2015, 491.

⁴⁷ Hayek 1939, 132-134; cf. Mackil 2015, 487.

⁴⁸ Author’s translation.

natural resources⁴⁹. The amount of timber in Chalcidian territory is a concern, as it allows the state to build a greater number of ships. The state itself is prosperous due to the multiple harbours and markets it levies taxes from, and the amount of food it can grow allows them to support a large population. In short, the union of this state has led directly to allowing it to become a robust and formidable presence, a fact that is noted by other *poleis*.

Earlier in this same passage the speaker, a man by the name of Kleigenes, states the following to the Spartan assembly;

ἐννοήσατε δὲ καὶ τόδε, πῶς εἰκὸς ὑμᾶς τῆς μὲν Βοιωτίας ἐπιμεληθῆναι ὅπως μὴ καθ' ἐν εἶη, πολὺ δὲ μείζονος ἀθροισμένης δυνάμεως ἀμελῆσαι, καὶ ταύτης οὐ κατὰ γῆν μόνον, ἀλλὰ καὶ κατὰ θάλατταν ἰσχυρᾶς γιγνομένης. (Xen. *Hell.* 5.2.16).

“But also consider this, how it seems fitting for you to take care regarding the Boeotians lest they become united, but to have no care regarding the gathering of a much greater power, and they are becoming strong not only by land but also by sea.”⁵⁰

The speaker believes, or at least is presented by Xenophon as believing, that the union of the Boeotians was also inherently threatening to the Spartans. These federations were recognized by their contemporaries as providing a distinct economic advantage, and so were something to be wary of allowing to form.

Though each league had their own policies, there were certain economic consistencies across them. The majority of these leagues minted their own coinage, or, in some cases, had their name stamped on the coins of the *poleis* within their league⁵¹. An example of the latter is the Thessalian League, wherein the member-*poleis* minted their own coins, but they did so on the

⁴⁹ Mackil 2013, 1.

⁵⁰ Author's translation.

⁵¹ Mackil 2015, 489.

authority of the federal state⁵². There are several benefits to having a unified currency within a league. First, these coins promote regional exchange, opening the economies of the member-states up, while also facilitating the payment of taxes or wages for troops. Second, centralized control of coin production should, in theory, reduce the likelihood of a coin shortage, and allow regions with surplus to help meet emergency supply needs⁵³. The minting of coins was a resource-intensive practice, and the evidence suggests that it was not long after coins first appeared in the Mediterranean that states began forming monetary unions in order to produce coins together in a cooperative fashion. By working together, these states could maximize the efficiency of their resource usage when it came to coin production⁵⁴. This common coinage, or at the very least common usage of weights and measures, was one of the ways the federal state achieved economic integration, something that was vital for the state to survive⁵⁵.

Within the ancient world, the barrier created by dissident currencies between states was already understood and discussed. In his economic treatise, *Poroi e Peri Prosodon*, commonly referred to as *Ways and Means*, Xenophon makes the following statement concerning the issue;

ἀλλὰ μὴν καὶ τοῖς ἐμπόροις ἐν μὲν ταῖς πλείσταις τῶν πόλεων ἀντιφορτίζεσθαι τι ἀνάγκη: νομίσμασι γὰρ οὐ χρησίμοις ἔξω χρῶνται: ἐν δὲ ταῖς Ἀθήναις πλεῖστα μὲν ἔστιν ἀντεξάγειν ὧν ἂν δέωνται ἄνθρωποι, ἣν δὲ μὴ βούλωνται ἀντιφορτίζεσθαι, καὶ οἱ ἀργύριον ἐξάγοντες καλὴν ἐμπορίαν ἐξάγουσιν. ὅπου γὰρ ἂν πωλῶσιν αὐτό, πανταχοῦ πλεον τοῦ ἀρχαίου λαμβάνουσιν.
(Xen. *Poroi*. 3.2)

“But also the merchants in most of the cities are forced to take anything as return cargo; for the coinage is declared not useable outside [of the state]; but in Athens, it is possible for men to export what is lacking in return, and if they do not wish to take a return cargo, exported silver

⁵² Bouchon and Helly 2015, 238.

⁵³ Mackil 2015, 491.

⁵⁴ Mackil and van Alfen 2006, 201.

⁵⁵ Mackil 2015, 489.

coins also draw good commerce. For wherever they sell it, they take absolutely more than the principal investment.”⁵⁶

Though the discussion here centers on the good reputation of Athenian silver, it nevertheless shows that there was concern from merchants when it came to accepting the local currency as payment for their goods. This problem would have been especially troublesome in smaller *poleis* that did not have the reputation to back up their coins. By introducing a single currency used across a federation and ensuring that these coins were recognizable and minted to the weights and standards of the region as a whole, this barrier to trade could be removed, or at the very least mitigated. Merchants travelling the region would no longer have to worry that the silver they took as payment in one *polis* would be “declared not useable” in the next.

If the purpose of the coinage was to facilitate spending within the federal state, it appears to have succeeded, as preliminary coin hoard analysis suggests that the coins tended to circulate within the region where they were produced, rather than travel far abroad⁵⁷. Economic mobility is a key part of these federal states, as it tends to override any other incentive to break up the state. To leave the league means reducing the economic opportunities for citizens of your *polis*. The high value placed on this economic mobility can be seen in the strong reactions to the partitioning of the Macedonian state by the Romans. The limiting of their economic mobility was seen as akin to the total dissolution of their state⁵⁸.

⁵⁶ Author’s translation.

⁵⁷ Mackil 2015, 491.

⁵⁸ Mackil 2015, 494.

1.5 – The Euro: A Modern Unified Currency

Implementing a unified coinage in order to remove barriers to trade and promote economic mobility within a group of allied states is something which continues to be done in the modern era. The examples of modern federal states mentioned above, Canada, The United States of America, and Australia, all use a single unified currency across their territories. However, within these states, it is difficult to determine if this had any noticeable impact on trade, as these examples of federal coinage did not supplement nor replace a pre-existing autonomous civic coinage. In this way, the implementation of the Euro around the turn of the millennium⁵⁹ provided a unique opportunity to study the impact on trade of a unified currency on such a large scale.

A study published in 2000 by Rose *et al.* made waves in the economic world for claiming that the impact of such a unified currency on trade would be up to a 200% increase – that is to say, that trade would likely triple for member states⁶⁰. The scholarly community did not unquestioningly accept this claim, and in the years that followed several other scholars published studies of their own attempting to determine what the true impact of a unified currency on trade would be⁶¹. The estimates of the impact differed wildly, though no other scholar's calculations came close to those from the original 2000 study⁶².

Once the Euro had been implemented, the impact of the Euro on trade continued to be the subject of study, and as mentioned above, these studies provided far more modest results. Micco

⁵⁹ The Euro was introduced in stages, with the non-physical Euro coming into play January 1 1999, and the physical notes and coins being introduced January 1 2002 (see Micco *et al.* 2003 pp 318-321).

⁶⁰ Rose *et al.* 2000, 31-34.

⁶¹ For an in-depth discussion of the studies published on this topic, as well as their shortcomings, see Baldwin & Taglioni 2007. For an explanation of the gravity model used within these studies, and the issues its usage presents, see pp 782-793.

⁶² Baldwin and Taglioni 2007, 779.

et al. found in their 2003 study that the increase in trade in the Eurozone countries had been just 4% for many of the member states, and no state experienced an increase of over 10%⁶³. Once more time had passed, in 2007 Baldwin and Taglioni's study found an even lower impact – in fact, they determined the real impact of trade within the Eurozone was anywhere from 0-40%⁶⁴.

Ultimately, calculating the impact on trade has proven complicated and imprecise. One thing is clear from all of these studies, however, and that is that the scholars across the board expected to see some level of positive impact on trade from the shift. Lower numbers are met with confusion, and errors in the gravity models are assumed to be the reason for this. After all, how could unifying the currency of several states not lead to an increase in trade? And yet several scholars have gone on to argue that the implementation of the Euro led to a negligible increase in trade for the member states⁶⁵.

How, then, can the removal of barriers to trade be a reason for a currency union⁶⁶, if the alleged removal of these barriers has a negligible impact on the trade between member states? The answer lies in which sorts of states are most likely to form a currency union. As stated above, leagues in the ancient world tended to be formed by groups of communities which had a common culture and traced their roots to a common ethnicity. The same appears to be true of modern currency unions. Silva and Tenreyro state in their 2010 study that “cultural and historical links may increase the propensity to form a currency union”⁶⁷. Communities such as these would likely have pre-existing relationships and so pre-existing trade. It is possible, then, that the reason it is difficult to see an increase in trade is that the trade between the states pre-dates the

⁶³ Micco *et al.* 2003, 336.

⁶⁴ Baldwin and Taglioni 2007, 812-815.

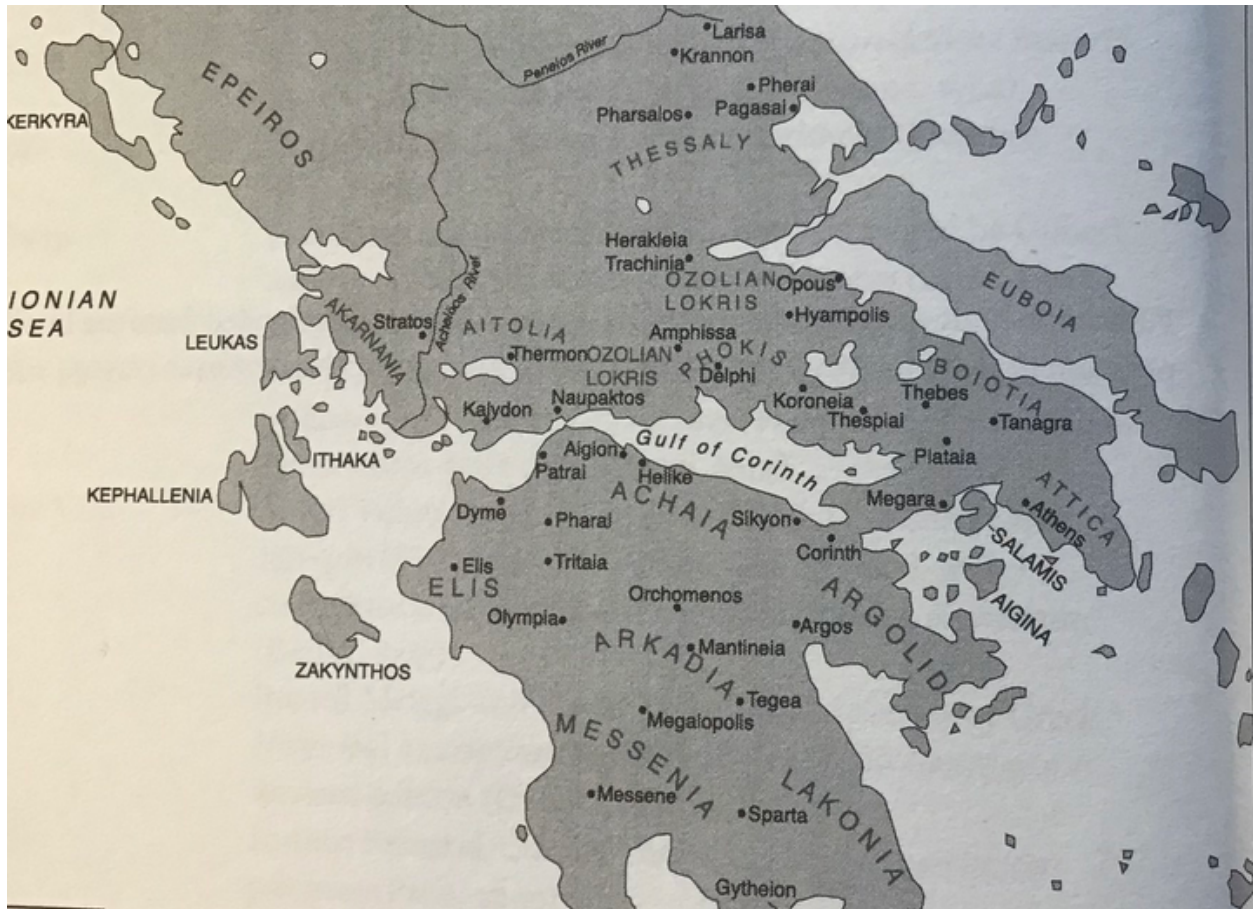
⁶⁵ Silva and Tenreyro 2010, 69.

⁶⁶ As implied by Xenophon and outright stated by Silva and Tenreyro 2010 (pg 54).

⁶⁷ Silva and Tenreyro 2010, 55.

currency union, and the implementation of a unified coinage served to increase the ease of this pre-existing trade, rather than specifically to incentivize new trade. The implications this possibility has on the currency unions of the ancient world shall be discussed in a later section of this chapter.

1.6 – The Leagues

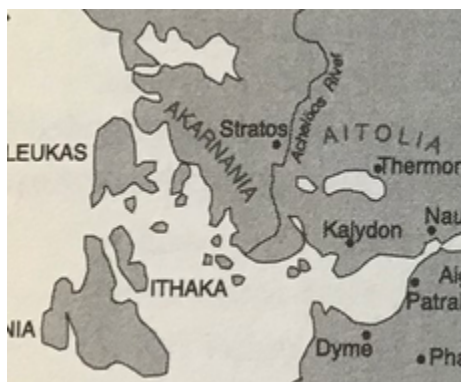


Map of Greece with general territory of prominent leagues identified, © Emily Mackil, 2013.

This discussion will begin with an examination of nine leagues, and how their economic and minting policies differed. The leagues chosen for this discussion are the Acarnanian League, the Achaean League, the Aetolian League, The Arcadian League, the Boeotian League, the Chalcidian League, the Epirot League, the Euboean League, and the Thessalian League. The

following is a brief overview of each league, including their location, approximate dates, and the details of their federal coin emissions. For images of the coins discussed in this section, see Table 1.1 in Appendix A.

1.6.1 - The Acarnanian League



Map showing the location of Acarnania, © Emily Mackil, 2013

The Acarnanian League was situated in the Western part of the Greek mainland, running along the western banks of the Achelous river, and extending south to the delta of that same river. The Echinades Islands, off the western coast, were also considered to be part of Acarnania⁶⁸. There were roughly twenty-five independent *poleis* within Acarnania, however, these *poleis* were not all consistently active members of the league, as there is evidence across the classical period of various *poleis* abstaining from the league. There are references to “*to koinon ton Akarnanon*” starting from around the middle of the 4th century⁶⁹. In general, the evidence for this league is scant, with the ancient historians having little to say about it⁷⁰. Thucydides, in his *Archaeology*, dismisses the Acarnanians, listing them among others in Greece who still follow the “*παλαιῶ τρόπῳ*”, or “the old ways” (Thucydides 1.5.3). As referenced

⁶⁸ Freitag 2015, 67.

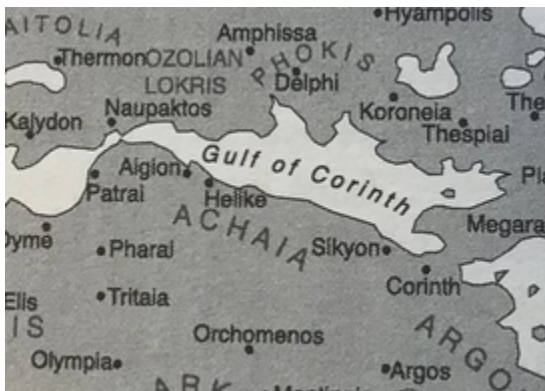
⁶⁹ Freitag 2015, 66.

⁷⁰ Freitag 2015, 69.

above, this league is specifically referred to as *to koinon tōn Akarnanōn* in Xenophon's *Hellenica* (4.6.4).

From what epigraphic and literary evidence exists, it does not appear that the Acarnanian League had any formal system of taxation in place, though that of course does not mean there was not a less formal or direct method of state funding to which the member-*poleis* contributed⁷¹. This league also struck their own coinage, with emissions from the area first appearing around 400 BCE, though some coins appear to date slightly earlier in the 5th century. Their coinage typically featured the river god Acheloos and the nymph Kallirhoë, and is considered to be federal coinage by many scholars⁷². That this dating would imply the federal coinage pre-dates the suggested appearance of the federation itself will be discussed in greater detail below.

1.6.2 - Achaean League



Map showing the location of Achaia, © Emily Mackil, 2013.

The Achaean League was situated in the Northwest of the Peloponnese and took up this entire region⁷³. This is one of the three leagues surrounding which there is the most information concerning, and as such most modern treatments of ancient federalism will focus heavily on

⁷¹ Freitag 2015, 83.

⁷² Ibid.

⁷³ Rizakis 2015, 118.

them⁷⁴. One of the best ancient sources for the history of this league is Polybius, as mentioned above, who was the son of an Achaean statesman, and was himself involved in the Achaean government. Though he wrote much about the league, the downside of this is the majority of his writing has a heavy pro-Achaean slant, and he cannot be trusted to be objective (not that objectivity is something possible in any historian, however in this instance there is an understanding of more specific potential bias)⁷⁵. There were, in fact, two Achaean Leagues. The First Achaean League was Classical in origin, and consisted of twelve *poleis* or, potentially, twelve districts, depending on how Herodotus 1.145-146 is to be understood⁷⁶. A reading of Strabo 8.7.5 supports the latter option, stating that "ἐκάστη δὲ τῶν δώδεκα μερίδων ἐκ δήμων συνειστήκει ἑπτὰ καὶ ὀκτώ", "And each of the twelve parts were combined from seven or eight of the townships"⁷⁷. This wording implies that the twelve parts of the Classical Achaean League were not necessarily fully formed *poleis*, but rather groups of smaller communities.

The Achaean League was re-founded in 280/79 BCE, and it is this Second Achaean Confederation that much of the discussion of economic policies will center around, as it is this version of the league that the vast majority of extant sources pertain to, rather than the Classical institution⁷⁸. The original twelve *poleis* or parts that made up the Classical league expanded in this iteration, and other *poleis* were added as time went on. This version of the league existed until the Roman era and continued to operate in some capacity after Greece was made a Roman province⁷⁹.

⁷⁴ Mackil 2013, 6.

⁷⁵ Larsen 1968, 82.

⁷⁶ Mackil 2013, 46-47.

⁷⁷ Author's translation.

⁷⁸ Rizakis 2015, 123.

⁷⁹ Rizakis 2015, 124.

The coinage of the Achaean League has been much discussed in scholarship, and is indeed one of the things this league is most known for. Unlike other leagues, the Achaean League coinage was identical regardless of which city minted it, save for small legends appearing to depict names and a crest indicating which *polis* it came from. The obverse of these coins depicts the bust of Zeus, and the reverse depicts the Achaean monogram, a combination of A and X. It is on the reverse, around the monogram, that the identifying features of the minting *polis* appear⁸⁰.

1.6.3 - Aetolian League



Map showing the location of Aetolia, © Emil Mackil, 2013.

The Aetolian League was situated along the northern coast of the Gulf of Corinth, moving inland in mainland Greece. The official status of this state prior to the Peloponnesian War is difficult to ascertain, and scholars disagree as to whether the shift to a federal state was an organized and systematic adjustment of the constitution, or a more gradual and long-term shifting of policy, though current popular opinion tends to lean towards the former⁸¹. From what

⁸⁰ Hoover 2011, 5.

⁸¹ Funke 2015, 94.

information there is, this *koinon* existed as a federal state by the early 360s BCE, however the region had successful and extensive military cooperation as early as the 420s BCE⁸².

Much is known about the rights of citizenship granted in Aetolia. The main concern of these rights appears to be the ability to vote and run for various offices throughout the league, a right which was extended indiscriminately to all citizens of member-*poleis*⁸³. As is often the case, these rights came with a set of responsibilities as well, in this case, the responsibility to contribute to military contingencies and pay a league tax, which was determined based on the *polis* population⁸⁴.

Within Aetolia, the political structures of the individual member-*poleis* were largely similar, and each state had its own laws regulating its internal affairs⁸⁵. This autonomy on the level of the individual member states is an important hallmark of a federal state. There appears from the ancient sources to have been little friction between the league and the member states, and instead, they cooperated, allowing the league to thrive⁸⁶.

This league minted silver coinage from around the middle of the 3rd century BCE until some point in the mid- to late-2nd century BCE. The exact dates are contested⁸⁷. They minted coinage both on the Attic standard and the Corcyrean standard⁸⁸. The coinage for this league shows up at least a century later than the formation of the league, depending on when you wish

⁸² Mackil 2013, 252.

⁸³ Funke 2015, 102.

⁸⁴ Funke 2015, 103.

⁸⁵ Funke 2015, 106.

⁸⁶ Funke 2015, 108.

⁸⁷ De Laix 1973, 48-49.

⁸⁸ De Laix 1973, 48.

to place the official league formation, a late start when compared to many of the other leagues examined.

1.6.4 - Arcadian League



Map showing the location of Arcadia, © Emily Mackil, 2013.

The Arcadian confederacy was located in Arcadia, in the central Peloponnese, and was one of the shortest lived of the federal states, spanning just eight years, from 370-363/2 BCE⁸⁹. There has been much scholarly debate surrounding the possibility of an Arcadian League predating this, this speculation fueled by the existence of coins from the 5th century BCE with the legend ARKADIKON. However, the existence of these coins on their own does not provide enough evidence to assume the existence of a political union as involved as a federal state⁹⁰. This will be discussed in detail in the next section. In addition to the coinage that predates the Arcadian League, there was also the minting of coinage which post-dated the league which, again, shall not be taken as proof-positive of the existence of the league outside of the generally

⁸⁹ Xenophon gives an account of the collapse of the *koinon* in *Hellenica* 7.4.12-34. The collapse was in part due to the seceding of Mantinea in protest of confederate magistrates using funds from the Olympics for state purposes.

⁹⁰ Prior to 370 BCE, the *poleis* of Arcadia were involved in a complicated, interconnected web of alliances, fueled by the strong ethnic bond evident in the area (see Nielsen 2015, 254-258 for an in-depth discussion of these alliances). The impetus for the formation of the league in 370 BCE was Sparta's defeat at Leuktra, detailed by Xenophon in *Hellenica* 6.5.6.

accepted time period. With that in mind, the accepted dates for the existence of the Arcadian League within this discussion will be the short period of 370-363/2 BCE.

Unlike the Aetolian League, discussed above, the members of the Arcadian League had their own distinct constitutions, and no effort seems to have been made to ensure their political institutions lined up with one another⁹¹. Whether this was due to the short-lived nature of the league can only be speculated on. Still, within the relatively short time frame this league was extant, they left their mark on the political landscape of the Peloponnese, most notably with the founding of Megalopolis in the early years of the league⁹². The founding of a new *polis* not as a colony of a pre-existing *polis*, but instead as a symbol of the power of the league (note the choice of name) shows the degree of coordination and cooperation present in the Arcadian League from the very beginning.

As with other leagues, the members of the Arcadian League were expected to contribute financially to the state, as well as to contribute a certain number of troops to the federal army. Indeed, it was this policy that ultimately led to the dissolution of the state in 363/2 BCE, as disagreements over these payments, along with concern over the sourcing of state funds, proved to be irreconcilable⁹³. This is once again evidence of the careful balancing act that must be played within a federal state, as these forms of government require an incredibly complex and ongoing series of negotiations in order to keep them together, and when those negotiations fail, the state ceases to be⁹⁴.

⁹¹ Nielsen 2015, 261.

⁹² Nielsen 2015, 264.

⁹³ Xenophon *Hell.* 7.4.31-33; See Nielsen 2015, 264-267 for further discussion of this dissolution.

⁹⁴ Funke and Beck 2015, 1.

Besides the intriguing 5th century BCE silver coinage, the Arcadian League also minted coins during the short period of time it was active in the 4th century BCE. These coins were minted at the new *polis* of Megalopolis in response to the Mantinean Crisis in 363-362 BCE⁹⁵. These coins were staters minted to the Aiginetic standard. The mint at Megalopolis also produced obols and triobols for the Arcadian League in the late 4th century BCE⁹⁶. It is perhaps tempting to take the continued federal emissions from Megalopolis as evidence for the continued existence of the federation as a whole, however this need not necessarily be the case. It is possible that Megalopolis simply continued to mint coins for a federal state that no longer existed, either because of the convenience the recognized coin types carried with them, or perhaps out of a sense of pride regarding her origins – Megalopolis was founded to be the seat of this league, after all. Supporting the theory that the coins were minted despite the Arcadian League no longer existing is another set of coins from the mint at Megalopolis. In the 2nd century BCE, at a point in history when it cannot be argued that Megalopolis was acting as a member of the Arcadian League, she once again issued Arcadian League triobols. The reason that Megalopolis cannot have been issuing these coins in the name of the Arcadian League as an active federal state is that the mint issued triobols of the Achaean League alongside the Arcadian League triobols⁹⁷. Even if it were prudent to accept that the Arcadian League survived longer than the time span accepted by scholars, Megalopolis could not have been a member of both the Arcadian League and the Achaean League at the same time. Therefore, the precedent is set that this *polis*, at least, was producing coinage bearing the name of a league outside the time period in

⁹⁵ During which Mantinea defected from the Arcadian League in protest of the league's occupation of Olympia and appropriation of sanctuary funds, see again Xenophon *Hell.* 7.4.31-33.

⁹⁶ Hoover 2011, 231.

⁹⁷ *Ibid.*

which that league was active. This apparent dual minting will be further discussed in chapter three.

1.6.5 - Boeotian League



Map showing the location Boeotia, © Emily Mackil, 2013.

The Boeotian League, located in central Greece, north of the Gulf of Corinth, was founded in the mid-5th century BCE, and quickly grew to become one of the most sophisticated examples of a federal state for its time⁹⁸. As with many of the other federations discussed in this work, the Boeotian League required the payment of taxes from its member-states, and the state had a federal army which was made up of hoplites and cavalry provided by each of the *meroi* that the league was divided up into⁹⁹. In addition, the state produced a large amount of federal coinage, featuring the Boeotian shield on the obverse, with the reverse displaying the monogram of the minting city¹⁰⁰. These coins show a sophisticated uniformity of weight and style, implying a high degree of cooperation in minting them¹⁰¹.

⁹⁸ Beck and Ganter 2015, 135.

⁹⁹ Beck and Ganter 2015, 143.

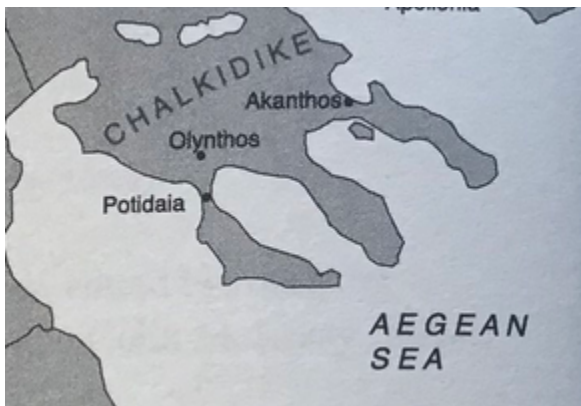
¹⁰⁰ Beck and Ganter 2015, 138.

¹⁰¹ *Ibid.*

The Boeotian League had several dedicated cult sites which served a function beyond their religious one¹⁰². By the Hellenistic period, the shrine of Poseidon Onchestios had developed to become the administrative center of the *koinon*, and the cult of Athena Itonia was the religious center¹⁰³.

This league was disbanded in 386 BCE under The King's Peace, however it quickly reformed, and by the early 370s BCE it was back, though this time with a far more Theban lean than before¹⁰⁴. Though the league continued to exist in the Hellenistic period, it is more difficult to follow its trajectory than in the Classical period, and much that can be said about it is mere speculation¹⁰⁵.

1.6.6 - Chalcidian League



Map showing the Location of Chalcidike, © Emily Mackil, 2013

The Chalcidian League was located on the North-Eastern coast of the Aegean Sea on the Chalcidike Peninsula. Several *poleis* on this peninsula united to form a league in 432 BCE,

¹⁰² Though, of course, the disentanglement of the political and the religious in Ancient Greece is not a straightforward, or even necessarily possible endeavour.

¹⁰³ Beck and Ganter 2015, 135.

¹⁰⁴ Beck and Ganter 2015, 146-148.

¹⁰⁵ Beck and Ganter 2015, 151.

though beyond that, information is scant¹⁰⁶. There are time periods for which there is no evidence of this league's continued existence, save for the federal coinage which the state continued to mint¹⁰⁷. Though Thucydides mentions a number of different individuals referred to as a 'Chalcidike', there is ambiguity as to whether he means a member of this league or a settlement of the Thracian Chalcidians¹⁰⁸. Due to the scarcity of ancient authors discussing this league in any detail¹⁰⁹, little is known about their military or taxation systems, beyond that both existed. Their troops are referred to in the sources as 'the Chalcidians', rather than as troops of the specific *polis* from which they hailed¹¹⁰.

In the same vein, the coinage from the Chalcidian League, which originally bore the name of Olynthus, the *polis* which contained the mint, was modified to instead bear the name of the Chalcidians. This was in line with an overall move near the end of the 5th century in this league to combine federal identity with *polis* identity, due to the large influx of citizens around this time¹¹¹. The continued presence of coin emissions during times in which there is no other evidence of the league's existence is helpful as a source, though not without its pitfalls, as will be discussed in the section below.

¹⁰⁶ Zahrnt 2015, 341.

¹⁰⁷ Zahrnt 2015, 349-351.

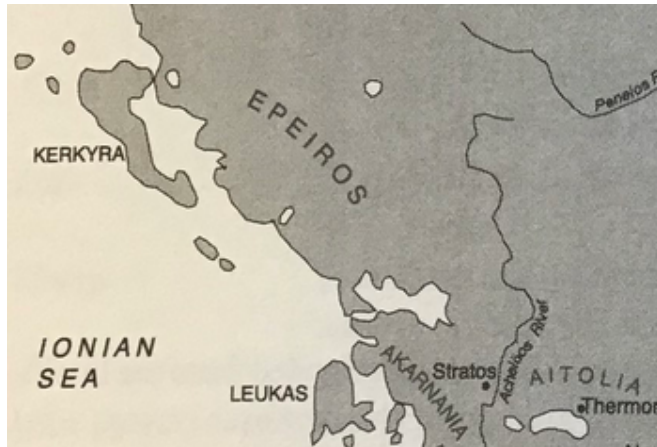
¹⁰⁸ Zahrnt 2015, 347.

¹⁰⁹ Xenophon's discussion of the league as a threat to the Peloponnese is one of the few concrete sources, and paints the league as well established and well organized.

¹¹⁰ Zahrnt 2015, 346.

¹¹¹ Zahrnt 2015, 347.

1.6.7 - Epirote League



Map showing the location of Epirus, © Emily Mackil, 2013.

The Epirote League is located on the coast in the North-West of Ancient Greece (a location now partially within modern Albania)¹¹². This league was founded at some point around the end of the 4th century BCE and the beginning of the 3rd century BCE, and while this dating is generally accepted, there is some minor contention in scholarly circles, mostly surrounding at what point the Kingdom of Molossia became a part of the league¹¹³. The Epirote League is another federal state which tied much of its identity into a specific cult site within its territory, in this case the oracular shrine of Zeus at Dodona¹¹⁴. This shrine was famous across the ancient world, and the league dedicated significant resources to building it up, especially in the third century, when they also instated a new festival, the *Naiia*¹¹⁵. The importance the league placed on this sanctuary is evident when one looks at the coin emissions, which predominantly featured iconography related to Dodona. When Pyrrhos, an Epirote king who famously battled with

¹¹² Meyer 2015, 297.

¹¹³ Meyer 2015, 298; This controversy is not directly related to the topic at hand, but for those interested, Elizabeth A. Meyer goes into great detail in her chapter in *Greek Federation in Antiquity*, “Molossia and Epeiros”, pp 297-318.

¹¹⁴ Meyer 2015, 300.

¹¹⁵ Meyer 2015, 309.

Rome, paid his troops, he did so with coinage featuring this iconography¹¹⁶. Featuring imagery related to a *koinon*'s ethnic religion on that state's coinage was common enough, and it served both to make the coinage recognizable and as a uniting feature for the various people of the league. There was a second cultic site in Epirote, though it received far less attention than the shrine at Dodona. This was another shrine to Zeus, this one to Zeus Areios, near Passaron¹¹⁷.

1.6.8 - Euboean League



Map showing the location of Euboea, © Emily Mackil, 2013.

The Euboean League, located on the island of Euboea off the Eastern coast of Attica, has been the subject of scholarly study and debate for decades. There is disagreement surrounding when the *poleis* of Euboea united, as well as what the nature of this union entailed. As with the Chalcidian League, discussed above, there are large periods of time where this league is not mentioned at all in the sources, and the lack of discussion has led to debates as to whether this state counts as a federal league at all, as there is scant evidence for the political institutions of

¹¹⁶ Meyer 2015, 311-312.

¹¹⁷ Meyer 2015, 300.

this group¹¹⁸. Unlike the Chalcidian League, there are also large gaps in the Euboean numismatic record, spanning much of the 4th and 3rd centuries BCE, which makes some scholars hesitant to accept a 4th century BCE foundation date¹¹⁹. Further adding to the confusion is the fact that the *poleis* of Euboea seem to have, at least on occasion, acted as entirely separate political entities. For example, in 302/1 BCE, when Demetrios's naval campaign ventured into Asia Minor, Eretria participated, yet there is no record of the presence of any of the other Euboean cities. This could mean that the members of the Euboean League each had their own military, with no connected federal military, or it could mean that, at the time of the campaign, Eretria was not an active member of the league. It was not uncommon throughout history for *poleis* to leave federal states, but due to the lack of literary evidence, anything concerning Eretria is merely speculation¹²⁰.

One thing known for certain about the Euboean League was that they had coin emissions over several centuries, from the start of the 4th century BCE all the way up to the period of Roman conquest in Greece, though, as mentioned above, there are large gaps between these emissions. These emissions consisted of silver and bronze coins, and the coins themselves had a variety of types on both the obverse and reverse, contrary to other leagues, such as the Boeotian or Achaean, which typically had a standard obverse type across all emissions, regardless of minting *polis*¹²¹. Euboea also appears to have had a single, consistent minting *polis*, rather than having either multiple cities mint federal coinage or the minting operating on a rotation. Initially, scholars assumed the minting city to be Eretria, due to its size and apparent importance in the league, however later evidence has proven that the federal mint was located in the *polis* of

¹¹⁸ Knoepfler 2015, 158.

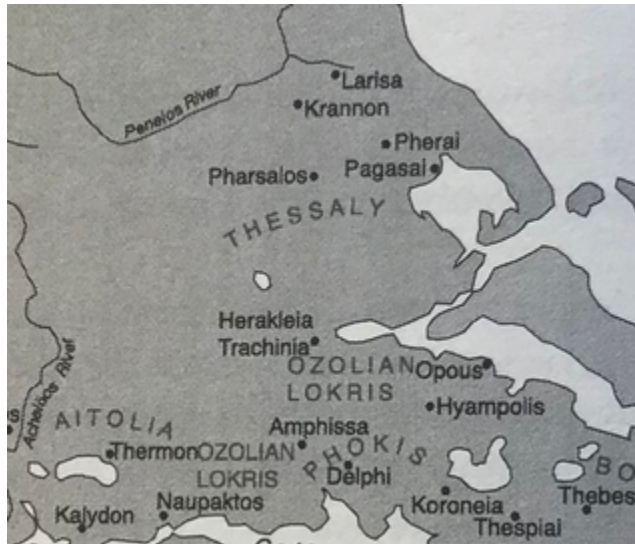
¹¹⁹ Knoepfler 2015, 162-164.

¹²⁰ Knoepfler 2015, 168.

¹²¹ Knoepfler 2015, 162.

Chalcis¹²². In addition, the sources also confirm that the Euboean League's main cultic center was the cult of Artemis Amaysia¹²³.

1.6.9 - Thessalian League



Map showing the location of Thessaly, © Emily Mackil, 2013.

The Thessalian League was a federation located in the Thessalian plain in mainland Greece, just north of Aetolia. The Thessalians existed as a recognizable group since the Archaic period, however this is once again where the blurring of the line between *ethnos* and *koinon* can cause confusion¹²⁴. Indeed, one of the sources of funding for the league comes from a tax or tribute imposed upon the *perioikoi*¹²⁵ at the end of the 6th century BCE¹²⁶. Steps were taken towards the formation of a Thessalian Confederacy, which existed in the Classical period, likely from the end of the 6th century BCE to the end of the 4th century BCE, when Philip II of Macedon took over the area. The next time this confederacy appeared was after the Roman

¹²² Knoepfler 2015, 164-165.

¹²³ Knoepfler 2015, 161.

¹²⁴ Bouchon and Helly 2015, 231.

¹²⁵ Here, this term refers to those populations living in the mountains surrounding the Thessalian plain – not considered true citizens of Thessaly, yet still subject to her taxation and rule.

¹²⁶ Bouchon and Helly 2015, 238.

defeat of Philip V in 196 BCE. Along with his proclamation of freedom of the Greeks, T. Quintus Flamininus organized a new Thessalian *koinon*, one which survived up to the end of the 3rd century CE¹²⁷.

This *koinon* had a tax on goods that came into their two harbours, Pagasai and Pyrasos, which proved quite lucrative, and allowed them to fund a federal army¹²⁸. Initially, the *koinon* did not mint any sort of federal coinage, instead having each member of the state mint their own coins using a standard set of weights and measures. These coins were not minted by the Thessalian League, but rather under the authority of the Thessalian League¹²⁹. The coins used similar, but not identical, iconography¹³⁰. This changed at some point in the Hellenistic period, when the federal state took over the minting of silver coinage entirely. The individual *poleis* were still minting their own bronze coins at this time. The minting of these silver coins was allegedly borne from a desire to express the political unity of the *koinon*¹³¹.

Following the Roman reinstatement of the Thessalian League, the numismatic landscape appears to have shifted dramatically. The minting of drachmae continued, however the federal mints began to also produce the double victoriatus, a Roman denomination of silver which predates the more well-known sestertius¹³². The presence of locally minted Roman coinage can be seen as a reminder of the presence of Rome in Thessaly during this period, while also serving

¹²⁷ Bouchon and Helly 2015, 231.

¹²⁸ Bouchon and Helly 2015, 238.

¹²⁹ Though the distinction seems minor, it is significant. The *poleis* in Thessaly were minting coins under their own name, identifiable as autonomous emissions, however the weight was standardized, and the iconography used was similar. These coins would also usually feature the legend *Thessaloi*, identifying the larger group the *poleis* were a part of. In this way, the coins from smaller *poleis* were essentially backed by the authority of the larger league, without the need for the implementation of an official unified coinage. For a full discussion of the early coinage of Thessalian *poleis*, see Bouchon and Helly 2015, 237-239.

¹³⁰ Bouchon and Helly 2015, 238.

¹³¹ Bouchon and Helly 2015, 244.

¹³² Cascio 1981, 83.

as a way to ensure that the Roman military presence in the area can be paid in a currency they are familiar with.

1.7 – The Shortcomings of Coinage as Evidence of Federalism

The fact that each of the above leagues operated differently when it comes to both their economic and political institutions makes a direct comparison between them somewhat complicated. However, there are several consistencies across them that can be used to make some general statements. First, for the most part, the leagues represent a cooperation between individual *poleis*, rather than an instance of coercion into the union. Second, a military alliance comes along with it, although even that is not as cut and dry as would initially be assumed. Some of the states had federal militaries, but in the case of others, such as Euboea, it appears that the individual *poleis* had their own military, separate from the others. Finally, and this is the most consistent, appearing in all nine of the above leagues, the federal states minted coins for the use of their members. The nature of these coin emissions varied, naturally, however there is evidence of federal coinage from each of these states. It has been suggested that, in many instances, the minting of a common coinage predates the formation of the federal state, as there are examples from the ancient world of unified coinage existing outside of federalism¹³³. This would explain how a federal state like Arcadia, with its remarkably short lifespan, managed still to have a comparatively robust minting operation. On the flip side, it would call into question those states for whom their coinage is used as evidence of their existence, such as the Chalcidians.

An example of this occurring is with the Arcadian League. Recent scholarship has reached a consensus of dating for that federation, as stated above, as existing between 370 and

¹³³ Mackil 2013, 247.

363/2 BCE¹³⁴. This dating is not without its challengers. The existence of coinage from the beginning of the 5th century BCE bearing the inscription ARKADIKON has, in the past, led scholars to theorize that the Arcadian League existed at this much earlier date¹³⁵. The double minting of both Arcadian and Achaean League coinage by Megalopolis in the 2nd century BCE, however, shows that the presence of an apparent unified coinage cannot be taken as proof of the existence of a federal state, and that for Arcadia in particular the coins can be considered regional, rather than federal.

The minting of a common regional coinage implies a high level of cooperation between the *poleis*, however, as stated above, it does not, on its own, prove that the *poleis* were members of a federal state. Rather than these coins proving that the Arcadian League existed earlier, they may be an example of what Mackil has suggested, that is, of cooperative minting efforts leading eventually to the formation of a federal state. In addition, the time period these coins are from lines up with a time when communities that were otherwise autonomous entities were working together when it came to their coinage, whether that meant minting using the same weights and measures, or minting the same coins entirely¹³⁶. There is, therefore, an inherent risk in using common coinage alone to attempt to prove (or, indeed, disprove) the existence of a federal state.

Taking the theory that unified coinage predates some of these federations, while also considering the previous statement that the trade relations between communities predate the implementation of a unified coinage, what begins to form is a picture, for at least some of these leagues, of a group of *poleis* with regular trade and cooperation joining together to mint coinage cooperatively, and then eventually forming a federal state in order to improve the economic

¹³⁴ Nielsen 2015, 250.

¹³⁵ Roy 1972, 334-336.

¹³⁶ Mackil 2013, 247-248.

mobility between the various member states. In this way, the unified coinage serves as both a symbol of the cooperation between the *poleis* and a tool with which this cooperation occurs.

1.8 – Concluding Thoughts

The existence of an economic or monetary benefit for federalism is evident for all nine of the *poleis* examined in this study. That each of these states produced some form of federal coinage shows there must have been a distinct benefit for the federal state as a whole, as well as for the individual member-*poleis*, in the minting of a common coinage. The next stage of this discussion will be to examine the coin hoards from several of the previously discussed federal states, identifying patterns in the denominations present, the find spots, and the types of coins which show up alongside the federal coins. Careful attention will be paid to which member-states have autonomous coins apparently circulating alongside the coins of their federation.

Chapter 2 – The Hoards

Of the nine leagues discussed in chapter one, five of them have hoards which contain both federally minted coins and autonomous coins of a *polis* within that federation. Those federations are the Acarnanian League, the Achaean League, the Chalcidian League, the Euboean League, and the Thessalian League. Some of these leagues have only two or three hoards that show this phenomenon, but the Achaean League, the Chalcidian League, and the Euboean League have a wide variety of hoards to consider. Within this chapter, the data from 39 hoards will be collected, and patterns regarding findspot, denominational breakdown, and ratio of league issued coinage to autonomous civic issued coinage will be identified. The goal within this chapter is to lay the groundwork for an in-depth analysis of these patterns in the third chapter of this work.

2.1 – The Acarnanian Hoards

Coins of the Acarnanian League show up infrequently in hoards. Indeed, of the coin hoards within the catalogue¹³⁷, only IGCH 145 and IGCH 312 contain coins issued by this league. Both coin hoards are small, and consist exclusively of bronze coins. Coins of this small denomination would serve a different function within the economy, and this makes these hoards quite unique, as most of the hoards examined here are composed of silver coins¹³⁸. While there is extant silver coinage of the Acarnanian League, it does not appear in any of the catalogued hoards. Due to the entirely bronze nature of these two hoards, comparisons between them and the silver hoards from other leagues may be of little use.

¹³⁷ Thompson *et al.* 1973; accessed digitally through coinhoards.org.

¹³⁸ The Chalcidian League and the Euboean League present bronze-exclusive hoards, however these are alongside the more expected silver hoards.

2.1.1 - IGCH 145

Findspot: Oeniadae, Acarnania

Deposit Date: 280 BCE

Hoard Breakdown (see Appendix B, Table 2.1 for full hoard contents)

	Bronze	Total
League	5	5
Civic	18	18
Total	23	23

This hoard is comprised entirely of bronze coins, of which 22% are league issue and 78% are civic issue. All of the civic issues can be sourced to the mint at Oeniadae.

2.1.2 - IGCH 312

Findspot: Matsouki, Greece

Deposit Date: 200-100 BCE

Hoard Breakdown (see Appendix B, Table 2.2 for full hoard contents)

	Bronze	Total
League	73	73
Civic	61	61
Total	134	134

This hoard is comprised entirely of bronze coins, of which 54% are league issue and 46% are civic issue. All of the civic issues can be sourced to the mint at Oeniadae.

2.1.3 - Trends Within the Acarnanian League Hoards

	Bronze	Total
League	78	78
Civic	79	79
Other	0	0
Total	157	157



A pie graph showing the breakdown of the Acarnanian League Hoards

On average, coins of the Acarnanian League make up 38% of the hoards that they are found in, while civic issues of Acarnanian *poleis* make up 62%. Looking at all the coins, they are split almost perfectly evenly between civic and federal. However, given the small sample size (only two very small hoards), whether this is significant is uncertain. In addition, as mentioned above, these hoards are both entirely bronze. Smaller denominations may have circulated differently than their silver counterparts, which could be impacting the distribution of these hoards.

The lack of silver coins within the hoards makes a denominational analysis relatively unhelpful. IGCH 312 is significantly larger than IGCH 145 (134 coins vs 23), and in this hoard

there is close to an even split between federal and civic issues. This is also the hoard which was found outside the borders of the Acarnanian League, at Matsouki. It is interesting to note that neither of these hoards contain coins from anywhere outside Acarnania, with the civic issues in both hoards being sourced entirely from Oeniadae. Unfortunately, two hoards, neither of which contain over 150 coins, is a small sample size and any conclusions drawn about the money circulation within the Acarnanian League from this information would be questionable at best. Still, this could be said to imply that coins from the Acarnanian League stayed within the league, and possibly were preferred over coins from outside the league. This conclusion is based not only on these two hoards, but also on the lack of Acarnanian League coins found in any other hoards. Though IGCH 312 was found outside of Acarnania, it does not appear that the coins from this league were hoarded alongside coins from outside of the league. In addition, the only other hoard within the database that contains coinage from Oeniadae is IGCH 311, another fully bronze hoard found within Acarnania. This hoard did not contain any Acarnanian League coins, so it was not analyzed in the previous section.

2.2 – The Achaean Hoards

Nine hoards containing both Achaean League and civic coins were examined for this study, totaling nearly 8,000 coins. Nearly all of these hoards were found in or just outside of Achaea, with the notable exception of IGCH 2053, discussed below. Given that the Achaean League is one of the best attested federal states in the literary and epigraphic evidence¹³⁹, it is promising to see it as one of the best attested in the numismatic evidence as well. The hoards below show multiple active civic mints, along with a strong preference for a specific

¹³⁹ Mackil 2013, 3.

denomination of coin – in this instance, triobols. Due to the expansion of the Achaean League to encompass territory outside of Achaea itself, not every mint counted as a civic mint of the Achaean League was a league member for the full duration of the league’s existence, as that would rule out the vast majority of member-states. The mints which are present in these hoards and have been counted as civic mints of the Achaean League are as follows; Sicyon, Argos, Megalopolis, Lacadaemon, Messene, Patras, Elis, Corone, Aegae, Cleonae, Corinth, Epidaurus, Cleitor, and Tegea.

2.2.1 – IGCH 242

Findspot: Arcadia

Deposit Date: 165-160 BCE

Hoard Breakdown (see Appendix C, Table 2.3 for full hoard contents)

	Triobol	Drachma	Didrachma	Bronze	Total
League	152	0	0	0	152
Civic	52	1	0	0	53
Other	19	5	1	1	26
Total	223	6	1	1	231

Of the 231 coins in IGCH 242, 65.8% are league issues, 22.9% are civic issues, and the remaining 11.3% come from mints outside of the Achaean League. The majority of this hoard is comprised of triobols, making up 95.6% of the hoard, with the bulk of these triobols being league issues (~68%), followed by civic issues (~23%) and the remainder (~8.5%) coming from mints outside of the league. The civic issues come from Sicyon, Argos, Cleonae, Megalopolis, and Elis. The other coins found in this hoard, the drachma and didrachma, are denominations that

were not minted by the league; however, they are here in such a small amount that an analysis of their presence at this time is not the priority.

2.2.2 – IGCH 257

Findspot: Cephallenia, Elis

Deposit Date: 175-145 BCE

Hoard Breakdown (see Appendix C, Table 2.4 for full hoard contents)

	Triobol	Total
League	75	75
Civic	52	52
Other	19	19
Total	146	146

IGCH 257 is a hoard comprised entirely of triobols. League issues make up around 51.5% of the hoard, civic issues around 35.5% and coins from outside of the Achaean League the remaining 13%. The civic issues come from the mints at Sicyon, Messene, Lacadaemon, and Argos.

2.2.3 – IGCH 260

Findspot: Western Greece

Deposit Date: 146 BCE

Hoard Breakdown (see Appendix C, Table 2.5 for full hoard contents)

	Triobol	Drachma	Total
League	429	0	429
Civic	172	0	172
Other	45	31	76
Total	646	31	677

Of the 677 coins in IGCH 260, 63.4% can be sourced to federal mints, 25.4% to civic mints within the league, and the remaining 11.2% to mints outside of league territory. Once again, this is a hoard made up primarily of triobols, and indeed the breakdown is almost identical to IGCH 242. This hoard is 95.4% triobols (recall IGCH 242 was 95.6% triobols). Of the 646 triobols within this hoard, around 66.5% are league issues, around 26.5% come from league *poleis*, and the remaining 7% come from mints outside of the Achaean League. The civic triobols come from Sicyon, Patras, Messene, Lacadaemon, Argos, and Megalopolis. The 80 Triobols from Megalopolis are of a type that can be dated 195-182 BCE – Megalopolis is a member of the Achaean League at this point¹⁴⁰. All the drachmae in this hoard come from mints outside of the league – in this case, all 31 drachmae came from Chalcis.

2.2.4 – IGCH 261

Findspot: Zougra (ancient Pellene), Achaea

Deposit Date: 146 BCE

Hoard Breakdown (see Appendix C, Table 2.6 for full hoard contents)

	Triobol	Drachma	Total
League	654	0	654
Civic	157	0	157
Other	149	25	174
Total	960	25	985

Of the 985 coins in IGCH 261, 66.4% are league issues, 15.9% are from civic mints within the league, and the remaining 17.7% come from mints outside of Achaean League territory. Triobols make up an even larger percentage of this hoard than the previous two,

¹⁴⁰ Dengate 1967, 61.

discounting, of course, the hoard containing only triobols. This hoard is 97.5% triobols. Of these triobols, 68% are league issues, 16.5% are from civic mints within the league, and 15.5% are from mints outside the Achaean League. As has been shown to be common, the civic issues were minted at several different cities within the league, in this case they come from Corinth, Sicyon, Messene, Argos, and Megalopolis. The 25 drachmae in this hoard came from Boeotia and Aegina.

2.2.5 – IGCH 262

Findspot: Diakofto, Achaea

Deposit Date: 146 BCE*

Hoard Breakdown (see Appendix C, Table 2.7 for full hoard contents)

	Triobol	Tetrobol	Roman Silver	Unknown Silver	Total
League	1601	0	0	0	1601
Civic	1085	0	0	0	1085
Other	207	6	1	100	314
Total	2893	6	1	100	3000

Of the 3,000 coins in IGCH 262, 53.4% are league issues, 36.2% come from civic mints within the Achaean League, and the remaining 10.4% come from mints outside of Achaean League territory. This is the third Achaean League hoard made up of around 96.5% triobols. Of the 2893 triobols in this hoard, around 55.5% of them are league issues, around 37.5% come from civic mints within the league, and the remaining 7% come from mints outside of the Achaean League. The civic triobols come from mints from Sicyon, Aegae, Messene, Corone, Argos, and Megalopolis. The triobols from outside of the league also have a variety of sources, with two of the largest being Chalcis and the Aetolian League.

In this hoard is a single Roman coin. This coin calls the dating of this hoard into question, as initial estimates set the deposit date at around 146 BCE, however the Roman coin within the hoard appears to be from sometimes in the 80s BCE. Either the dating needs to be reconsidered, or the Roman coin was somehow added to the hoard after its deposit date. The latter seems more likely, as the rest of the coins align with the dating of the hoard. This hoard also contains 100 pieces of unidentified silver – coins for which no denomination and no mint is recorded in the hoard catalogue. A correspondence between Simon Bendall and Margaret E. Thompson concerning this hoard specifies that these coins are crude, late issue silver which are too worn to contain any identifying features¹⁴¹. Since Bendall does not even hazard a guess as to the mint of origin of these coins, they have been categorized as coming from outside of league territory.

2.2.6 – IGCH 270

Findspot: Olympia, Elis

Deposit Date: 145-140 BCE

Hoard Breakdown (see Appendix C, Table 2.8 for full hoard contents)

	Triobol	Unknown Silver	Total
League	630	0	630
Civic	50	0	50
Other	0	157	157
Total	680	157	837

The data for this hoard is unfortunately incomplete. There are triobols from a variety of sources both within and outside of the Achaean League for which the number is unknown, as well as drachmae and didrachms. Only the number of triobols from the Achaean League and

¹⁴¹ Correspondence of Waggoner/Bendall and Bendall/Thompson about IGCH 0262.

from Megalopolis are given with any certainty. With that in mind, the conclusions drawn from this hoard may be shaky at best. Nevertheless, the information present is still valuable. Of the numbers given, around 81% of this hoard is made up of triobols, though this number may be higher, given that there are triobols from a variety of mints which have no certain number provided. Of the triobols accounted for, around 92.5% are league issues, and the remaining 7.5% are from the mint at Megalopolis, a member of the Achaean League. The remaining coins in the hoard that are properly accounted for are silver coins for which no mint or denomination is given.

2.2.7 – IGCH 271

Findspot: Agrinion, Aetolia

Deposit Date: 145-135 BCE

Hoard Breakdown (see Appendix C, Table 2.9 for full hoard contents)

	Triobol	Drachma	Tetradrachm	Roman Silver	Total
League	838	0	0	0	838
Civic	203	0	0	0	203
Other	134	83	41	39	297
Total	1175	83	41	39	1338

Of the 1338 coins in IGCH 271, 62.6% are league issue, 15.2% are from civic mints within the Achaean League, and the remaining 22.2% come from mints outside of the Achaean League. This hoard is comprised of around 88% triobols. The remainder of the hoard is made up of around 6% drachmae, and around 3% each of tetradrachms and Roman silver. Of the 1175 triobols, around 71.5% are league issues, around 17% come from civic mints within the Achaean League, and the remaining 11.5% come from mints outside of the Achaean League. The civic

triobols can be sourced to mints from Sicyon, Messene, and Megalopolis. The coins from outside the Achaean League also have a wide variety of mint locations, from Athens to the Roman Republic.

2.2.8 – IGCH 301

Findspot: Messenia

Deposit Date: 200-100 BCE

Hoard Breakdown (see Appendix C, Table 2.10 for full hoard contents)

	Triobol	Drachma	Bronze	Total
League	133	0	1	134
Civic	31	0	11	42
Other	1	2	1	4
Total	165	2	13	180

Of the 180 coins in IGCH 301, 74.4% are league issues, 23.3% are from civic mints within the Achaean League, and the remaining 2.3% come from mints outside of Achaean League territory. Triobols make up around 92% of this hoard, with the remainder made up of drachmae (around 1%) and bronze coins (around 7%). Of the 165 triobols in this hoard, around 80.5% are league issues, around 19% come from civic mints within the league, and the single remaining coin (accounting for around 0.5%) came from a mint outside of the league, in this case from Aetolia. The civic triobols came from mints in Sicyon, Patras, Lacadaemon, Argos, and Megalopolis. The bronze coins in this hoard are almost all from within the territory of the Achaean League, specifically the mints at Sicyon, Messene, Epidaurus, Cleitor, and Tegea.

2.2.9 – IGCH 2053

Findspot: Calabria, Italy

Deposit Date: 146 BCE

Hoard Breakdown (see Appendix C, Table 2.11 for full hoard contents)

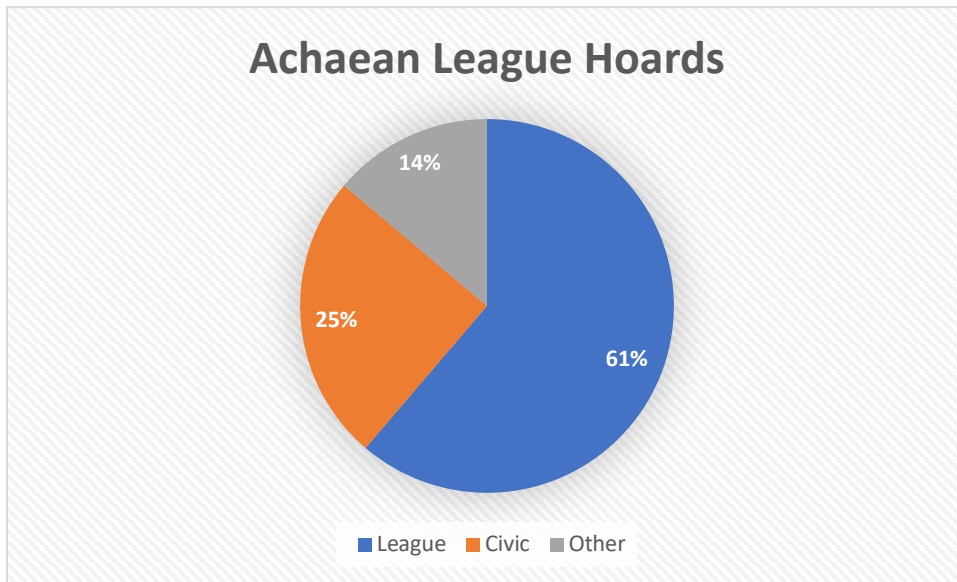
	Triobol	Drachma	Total
League	322	0	322
Civic	150	0	150
Other	24	3	27
Total	496	3	499

Triobols make up around 99.4% of this hoard, with the remaining 0.6% being made up of three drachmae from Chalcis. Of the 496 triobols in this hoard, around 65% are league issues, with around 30% coming from civic mints within the Achaean League, and the remaining 5% coming from mints outside of the Achaean League. The civic issue triobols in this hoard come from the mints at Patras, Sicyon, Messene, Lacadaemon, Argos, and Megalopolis.

The findspot of this hoard is unique among the Achaean League hoards, as it is the only hoard which was found this far outside league territory. Discovered in Calabria, it is inappropriate to view this hoard as evidence that coinage of the Achaean League travelled this far abroad, since the hoard is made up almost exclusively of coins sourced to Achaea, making it likely that the hoard was collected while still within Achaea, and then brought over to Italy as a single unit.

2.2.10 – Trends within the Achaean League Hoards

	Triobol	Tetrobol	Drachma	Didrachm	Tetradrachm	Roman Silver	Unknown Silver	Bronze	Total
League	4834	0	0	0	0	0	0	1	4835
Civic	1952	0	1	0	0	0	0	11	1964
Other	598	6	149	1	41	40	257	2	1094
Total	7384	6	150	1	41	40	257	14	7893



A pie chart showing the breakdown of the Achaean League hoards.

For the nine hoards examined containing Achaean League coinage and civic issues of Achaean *poleis*, league coinage makes up an average of around 65% of each hoard, and a total of 61% across all hoards. Civic issues, meanwhile, average around 17%, with a total of 25% across all hoards. There are no hoards in which civic issues outnumber league issues. The hoards are all centered around the territory of the Achaean League, with IGCH 2053 as the notable exception. This is a coin hoard containing nearly 500 coins, found in Calabria. Despite where this hoard was discovered, the coins within are all from roughly the same part of Greece - that is, from within the Achaean League or its close neighbors. For this reason, it seems unlikely that the hoard was collected in Italy. Rather, it seems that the hoard was compiled within Achaëa, and then brought over to Calabria. Knowing this, the existence of this hoard does not provide any concrete evidence for the circulation of coins, as the makeup of the hoard shows with near certainty that the coins within it did not arrive in Italy independent of one another.

As is immediately apparent, triobols were the denomination of choice in the Achaean League. They make up all but one of the league coins found in these hoards, all save a handful of the civic coins, and outnumber the coins from outside the league by over 100. They make up 93.5% of the total coins in these hoards. Of the triobols in these hoards, 65.5% are Achaean League issue, 26.4% come from civic mints within the Achaean League, and 8.1% come from outside the Achaean League.

This strong proclivity towards triobols, to the exclusion of nearly every other denomination, leads one to consider the possibility that these coins were minted with a very explicit purpose. The potential uses or intended uses of these coins will be explored in greater detail in the next chapter.

2.2.11 – The Autonomous Mints of the Achaean League

Mint	Triobol	Drachma	Bronze	Total	Percentage
Sicyon	641	1	1	643	32.7%
Argos	618	0	0	618	31.5%
Megalopolis	608	0	0	608	31%
Lacadaemon	30	0	0	30	1.5%
Messene	25	0	7	32	1.6%
Patras	25	0	0	25	1.3%
Corone	2	0	0	2	0.1%
Aegae	1	0	0	1	0.05%
Cleonae	1	0	0	1	0.05%
Corinth	1	0	0	1	0.05%
Epidaurus	0	0	1	1	0.05%
Cleitor	0	0	1	1	0.05%
Tegea	0	0	1	1	0.05%
Total	1952	1	11	1964	100%

It is immediately apparent that three *poleis* in particular sourced the vast majority of civic issue triobols in these hoards, with a combined total of around 95.65% of the triobols coming

from either Sicyon, Argos, or Megalopolis. As mentioned above, a brief look at some of the coinage from Megalopolis dates it as contemporary with the coinage of the Achaean League in several of these hoards. This means, assuming that the current dating of this coinage is correct, the coins were not just circulating at the same time, but were minted at the same time.

There is only a single silver civic coin across all the hoards examined which is not a triobol. IGCH 242 contains a drachma from Sicyon. Beyond this, every civic silver coin is of the same denomination, and that denomination matches with the Achaean League coins examined, showing a clear preference for triobols within the league. There are slightly more civic bronzes, at 11, although it should be noted that these all come from the same hoard, IGCH 301. This hoard is also the one which contains the only league issued bronze coin. In addition, of the five mints to which the civic bronzes can be sourced, three of them, Epidaurus, Cleitor, and Tegea, have no silver coinage present across these hoards. Examining the catalogue for each of these three cities provides some more insight. Epidaurus minted autonomous silver coinage, though none of it is present in these hoards. In the mid-3rd century BCE, they issued drachmae on the Aeginetic standard, though these appear to have been produced prior to the *polis* becoming a member of the Achaean League. At this time, triobols were also produced. There is then a gap in the numismatic record, as Epidaurus appears to cease production of silver coinage until the mid-2nd century BCE, when it begins production of Achaean League triobols¹⁴². Cleitor, too, minted federal coins, and while the *polis* did mint autonomous silver, including triobols, these issues date to the mid-3rd century BCE. Cleitor's membership of the Achaean League can only be confirmed at the start of the Social War, which took place in 220-217 BCE. For this reason, it is

¹⁴² Hoover 2011, 170-171.

uncertain if Cleitor was an active league member at the time of these coins¹⁴³. Finally, like the other three, Tegea also minted triobols for the Achaean League, and once again the autonomous triobols appear to pre-date those of the Achaean League¹⁴⁴. That all three of these *poleis* appear to have ceased minting of their own autonomous silver coinage around a century before production of Achaean federal coinage began at their mints is likely the reason for the lack of their silver within these hoards.

2.3 – The Chalcidian Hoards

The member list of the Chalcidian League fluctuates across the years. In addition, there are member states who are never named explicitly in the extant sources, and so determining whether a city was a member at the time of striking is a complicated task. For the purposes of this discussion, only coins from the Chalcidian *poleis* of Olynthus, Acanthus, Terone, Scione, Aeneia, and Potidaea will be considered civic issues, though it is known that, at their peak, there were over 30 members of this league. Compared to the Achaean League, the numbers for the Chalcidian League are somewhat less impressive, for although the same number of hoards are examined, the nine Chalcidian League hoards total under 500 coins across them, meaning on average each hoard is less than a tenth the size of their Achaean counterparts. It is necessary to keep this in mind when considering the following data.

2.3.1 – IGCH 359

Findspot: Olynthus

Deposit Date: 421 BCE

¹⁴³ Hoover 2011, 212-213.

¹⁴⁴ Hoover 2011, 264-266.

Hoard Breakdown (see Appendix D, Table 2.12 for full hoard contents)

	Tetrobol	Drachma	Total
League	3	0	3
Civic	12	0	12
Other	3	1	4
Total	18	1	19

Of the 19 coins in IGCH 359, 15.8% come from federal mints, 63.2% come from civic mints within Chalcis, and the remaining 21% come from mints outside of the Chalcidian League. All but one of the coins in IGCH 359 are tetrobols. Of the 18 tetrobols in this hoard, 66.6% are civic issues from within Chalcis, while league issues and issues from outside of Chalcis make up 16.7% each.

2.3.2 – IGCH 364

Findspot: 10km WNW of Amphipolis

Deposit Date: 400-375 BCE

Hoard Breakdown (see Appendix D, Table 2.13 for full hoard contents)

	Tetrobol	Tetradrachm	Drachma	Triobol	Trihemiobol	Unknown	Total
League	2	0	0	0	0	0	2
Civic	4	1	0	0	0	0	5
Other	3	0	42	35	8	5	93
Total	9	1	42	35	8	5	100

As can be seen here, the majority of the coins in this hoard do not seem to come from a league city. Indeed, just 2% of the coins in this hoard are league issues, and just 5% are coins from civic mints within the Chalcidian League, while the remaining 93% come from mints outside of the Chalcidian League. The 5 civic coins in this hoard can be sourced to the mint at

Acanthus. Most of the coins here, specifically the drachmae and the triobols, come from the mint at Neapolis. Considering that these are two denominations which do not come from any federal or autonomous Chalcidian mints, it may be tempting to see this as an instance of the coinage from outside the league being brought in to fill the denominational gaps. However, given how much the non-Chalcidian coinage outnumbers the coinage from Chalcis, and the fact that this hoard is the only one found outside of the borders of the Chalcidian League, it is prudent to consider this to be a non-Chalcidian hoard into which a small number of both Chalcidian League and civic coins found their way.

2.3.3 – IGCH 366

Findspot: Olynthus

Deposit Date: 379 BCE

Hoard Breakdown (see Appendix D, Table 2.14 for full hoard contents)

	Tetrobol	Total
League	7	7
Civic	1	1
Other	1	1
Total	9	9

This small hoard of just 9 coins was found at Olynthus, and is made up entirely of tetrobols. The majority of these, 77.8%, are league issues, and then one each of civic and non-league mints make up the remaining at 11.1% each. The single autonomous coin comes from Terone.

2.3.4 – IGCH 372

Findspot: UNKNOWN

Deposit Date: 348 BCE

Hoard Breakdown (see Appendix D, Table 2.15 for full hoard contents)

	Tetradrachm	Total
League	33	33
Civic	1	1
Other	0	0
Total	34	34

Though larger than IGCH 366, this is yet another relatively small hoard consisting almost entirely of league issued coinage, in this case tetradrachms. With only one non-league issued coin, the league issues here make up over 97% of the hoard. The single civic issue in this hoard comes from Acanthus. Unfortunately, this hoard is of unknown provenience, which limits its usefulness in determining where these coins were circulating.

2.3.5 – IGCH 373

Findspot: Olynthus

Deposit Date: 348 BCE

Hoard Breakdown (see Appendix D, Table 2.16 for full hoard contents)

	Tetradrachm ¹⁴⁵	Total
League	43	43
Civic	2	2
Other	1	1
Total	46	46

¹⁴⁵ There is uncertainty regarding the number of tetradrachms from Acanthus within this hoard. For the purposes of the following calculations, the number of tetradrachms from Acanthus has been assumed to be 2, and the number of coins within the hoard has been assumed to be 46.

This hoard is comprised entirely of tetradrachms, with league issued coins making up the majority, at around 93.5%. The coins from civic mints within the league, in this case from Acanthus, sit at 4.3%, and the single coin from outside the league makes up the remaining 2.2%.

2.3.6 – IGCH 374

Findspot: Olynthus

Deposit Date: 348 BCE

Hoard Breakdown (see Appendix D, Table 2.17 for full hoard contents)

	Tetradrachm	Tetrobol	Total
League	19	60	79
Civic	3	0	3
Other	2	0	2
Total	24	60	84

Of this 84 coin hoard, 71.4% is made up of league issued tetrobols. The remainder of the hoard is 22.6% league issued tetradrachms, 3.6% civic issued tetradrachms, and 2.4% tetradrachms from mints outside of the Chalcidian League. Between the tetrobols and tetradrachms, issues from the Chalcidian League make up 94% of this hoard. The three civic issued tetradrachms in this hoard can be sourced to the mint at Acanthus.

2.3.7 – IGCH 375

Findspot: Olynthus

Deposit Date: 348 BCE

Hoard Breakdown (see Appendix D, Table 2.18 for full hoard contents)

	Tetrobol	Total
League	53	53

Civic	11	11
Other	11	11
Total	75	75

This hoard is comprised entirely of tetrobols, of which 70.6% are league issues. The coins from civic mints within the league make up a further 14.7%, and the remaining 14.7% is made up of coins coming from outside the Chalcidian League. The civic coins in this hoard come from a variety of mints, in this case Acanthus, Terone, Scione, and Olynthus.

2.3.8 – IGCH 377

Findspot: Olynthus

Deposit Date: 348 BCE

Hoard Breakdown (see Appendix D, Table 2.19 for full hoard contents)

	Tetrobol	Tetradrachm	Total
League	46	4	50
Civic	3	0	3
Other	10	0	10
Total	59	4	63

Of the 63 coins in this hoard, all but 4 are tetrobols. The 4 non-tetrobol coins, accounting for 6.3% of the hoard, are all league issued tetradrachms. League issued coins make up the bulk of this hoard at 79.4%. The remainder of the hoard is comprised of tetradrachms from *poleis* within the Chalcidian League (4.8%) and tetradrachms from *poleis* outside the Chalcidian League (15.9%). The civic mints represented in this hoard are Aeneia, Olynthus, and Scione.

2.3.9 – IGCH 378

Findspot: Olynthus

Deposit Date: 348 BCE

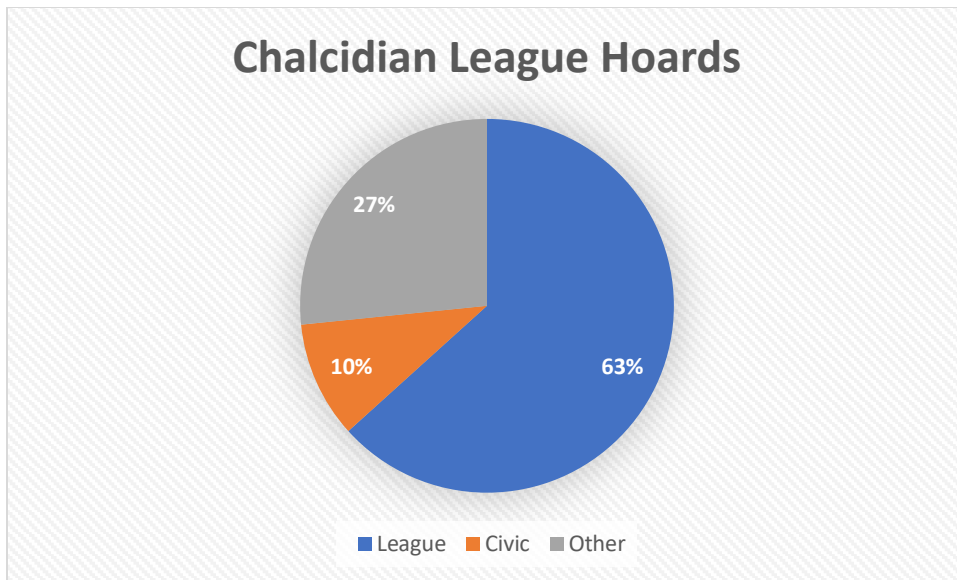
Hoard Breakdown (see Appendix D, Table 2.20 for full hoard contents)

	Bronze	Total
League	25	25
Civic	9	9
Other	0	0
Total	34	34

This is a relatively small hoard, comprised exclusively of bronze coins. Of the 34 bronze coins, 73.5% are league issues, and the remaining 26.5% are from civic mints within the Chalcidian League. This hoard contains no coins from mints outside of the Chalcidian League. The Chalcidian mints which the civic coins can be sourced to are Acanthus, Potidaea, and Scione.

2.3.10 – Trends within the Chalcidian League Hoards

	Tetradrachm	Tetrobol	Drachma	Triobol	Trihemiobol	Unknown Silver	Bronze	Total
League	99	171	0	0	0	0	25	295
Civic	7	31	0	0	0	0	9	47
Other	3	30	43	35	8	5	0	124
Total	109	232	43	35	8	5	34	466



A pie chart showing the breakdown of the Chalcidian League hoards.

Across the hoards examined from the Chalcidian League, federal issues make up an average of 67% of each hoard, with civic issues averaging around 15%. Of the 466 coins across all hoards, federal issues total 63.3% of the coins considered, while civic issues total 10.1%. All of the hoards contain exclusively silver with the exception of IGCH 378, which is a bronze hoard. The only hoard with a known findspot which was not found at Olynthus, IGCH 364, did not make it far out of the Chalcidian League, found just outside of Amphipolis. In addition, this hoard contained substantially lower than average coinage from mints within the Chalcidian League, whether federal or autonomous, so its existence outside of Chalcidian borders is less surprising. One of the hoards, IGCH 372, is of unknown provenience, severely limiting its usefulness for this research. Perhaps it is fortuitous, then, that this hoard does not contain a particularly interesting array of coins, merely a handful of league coins and a single tetradrachm from Acanthus.

The coin hoards containing issues from the Chalcidian League alongside civic issues from *poleis* within the league follow a less obvious pattern than that of the Achaean League.

However, there still appears to be a preference for certain denominations over others. The only League silver coins are tetradrachms and tetrobols, and the league coinage outnumbers the civic coinage by a significant margin. In addition, the two denominations which have the most coins from outside the Chalcidian League are drachmae and triobols, denominations which have no league or civic issues present across any of the hoards. Unlike with the Achaean League, coins from outside the league outnumber civic issues, however this is almost entirely due to IGCH 364, which is the hoard most of the drachmae and all of the triobols come from. This hoard alone contributes 93 of the 124 non-Chalcidian coins, which has a noticeable impact on the final numbers. Were this hoard not included, civic issues would outnumber this ‘other’ category, as they do in Achaea and Euboea.

2.3.11 – Autonomous Coinage of Chalcidian League *Poleis*

	Tetrobol	Tetradrachm	Bronze	Total	Percentage
Acanthus	20	7	2	29	61.7%
Terone	4	0	0	4	8.5%
Olynthus	3	0	0	3	6.4%
Scione	3	0	2	5	10.6%
Aeneia	1	0	0	1	2.2%
Potidaea	0	0	5	5	10.6%
Total	31	7	9	47	100%

Acanthus is the largest contributor of the civic coins found in these hoards, producing nearly five times as many coins as the next largest producers, Scione and Potidaea. However, as mentioned above, the small size of these numbers leads to minor discrepancies in the amounts having a large impact on the percentages – consider that the largest producer in the Chalcidian hoards produced less than 5% of the volume of emissions from Sicyon, the largest producer for the Achaean League.

On top of producing the most coinage found in these hoards, Acanthus is also the only *polis* to provide us with a silver coin other than a tetrobol. It is worth noting that the seven tetradrachms present come from several different hoards. Overall, there is a preference for tetrobols from the civic mints, however it is not as pronounced as with the Achaean triobols.

These hoards contain very few bronze coins, all of which come from IGCH 378, the exclusively bronze hoard examined. That Potidaea contributed only bronze coins is worth considering, despite the low number of silver contributed across the civic *poleis*. A brief examination of the coinage from Potidaea shows that the majority of the silver coins minted by the *polis* pre-date the Chalcidian League, with these coins produced between the late-6th and late-5th centuries. The latest coinage from the *polis* dates to just before the outbreak of the Peloponnesian war in 431 BCE, which was one year before the formation of the league¹⁴⁶.

2.4 – The Euboean Hoards

The Euboean League is a curious federation, far better represented in the numismatic evidence than it is in the literary or epigraphic sources¹⁴⁷. This study examines 16 hoards, containing a total of over 2800 coins¹⁴⁸. The majority of the hoards are silver hoards, however there are also four bronze-exclusive hoards examined. Within this examination, coins are considered to be autonomous civic issues if they are sourced from the mints at Chalcis, Carystus, Histiaea, or Eretria.

¹⁴⁶ Kagan 2013, 4-7.

¹⁴⁷ Knoepfler 2015, 158.

¹⁴⁸ Though this league has provided us with nearly double the number of hoards we saw from the Achaean League, we once again have a comparatively small number of coins from the hoards.

2.4.1 – IGCH 156

Findspot: Eretria, Euboea

Deposit Date: 275-250 BCE

Hoard Breakdown (see Appendix E, Table 2.21 for full hoard contents)

	Drachma	Unknown Silver	Total
League	18	0	18
Civic	1	0	1
Other	0	241	241
Total	19	241	260

The majority of IGCH 156 is comprised of silver coins of unknown issue and denomination, leaving this hoard somewhat questionable in its usefulness. Of the 260 coins, 19 are drachmae (7.3%), and of those, 18 were issues by the Euboean League. The single issue from a civic mint came from Histiaea. The 241 coins added are not accounted for in Wallace's original catalogue and description of the hoard contents, as the majority of the hoard was dispersed before he had a chance to view and photograph them¹⁴⁹. These unidentified coins render this hoard problematic to analyze.

2.4.2 – IGCH 165

Findspot: Central Greece

Deposit Date: 250-200 BCE

Hoard Breakdown (see Appendix E, Table 2.22 for full hoard contents)

	Drachma	Triobol	Total
League	49	0	49
Civic	30	1	31

¹⁴⁹ Wallace 1956, 53.

Other	0	0	0
Total	79	1	80

Of the 80 coins in IGCH 165, 61.3% are league issues and 38.7% are from civic mints within the Euboean League. The majority of these coins are drachmae, which make up 79 of the 80 coins in this hoard. Of these drachmae, around 62% are Euboean League issues, and the remaining 38% are from mints within Euboea, in this case from the Euboean *polis* of Chalcis.

2.4.3 – IGCH 166

Findspot: Central Greece

Deposit Date: 250-200 BCE

Hoard Breakdown (see Appendix E, Table 2.23 for full hoard contents)

	Drachma	Tetrobol	Total
League	34	0	34
Civic	0	1	1
Other	0	0	0
Total	34	1	35

IGCH 166 is unique in that it is one of only two hoards examined in this study which do not contain any denominational crossover between the league and civic issues (alongside IGCH 194, to be discussed below). Within the rest of the hoards examined, there is always at least one denomination which appears in both the league and the civic issues. Here, there are 34 league issued drachmae (97.1%) alongside a single tetrobol minted in Histiaea (2.9%).

Unfortunately, there are two factors which must be taken into consideration before this can be accepted as a serious deviation from an otherwise remarkably consistent pattern. First, the size of this hoard. While there are a reasonable number of drachmae present here, the single

tetrobol does not provide as strong a statement as if there had been a collection of civic tetrobols, making up a larger percentage of this hoard. It would be difficult to argue that the single tetrobol from Histiaea had been brought in intentionally, though that the tetrobol is one of the denominations not present as a league issue in any hoard does give one pause. Of further concern is that, in Wallace’s initial publication of these hoards, he identifies this tetrobol as an “early Histiaian tetrobol”, likely predating the drachmae in this hoard¹⁵⁰. Though still an example of contemporaneous circulation, it does greatly reduce the likelihood that this shows contemporaneous minting.

The second issue is perhaps far more concerning, and that is that, due to difficulties of provenience, there is a good chance that this hoard was not, in fact, a single hoard at all. The contents of this hoard were actually published as three separate finds, all of which have dubious provenience, with no confirmed find spot¹⁵¹.

2.4.4 – IGCH 167

Findspot: Euboea

Deposit Date: 250-200 BCE

Hoard Breakdown (see Appendix E, Table 2.24 for full hoard contents)

	Drachma	Didrachma	Tetradrachm	Unknown silver	Total
League	145	0	0	0	145
Civic	2	4	0	0	6
Other	9	0	2	3	14
Total	156	4	2	3	165

¹⁵⁰ Wallace 1956, 54.

¹⁵¹ Wallace 1956, 54-56.

Of the 165 coins in IGCH 167, 87.9% come from federal mints, 3.6% from civic mints within Euboea, and the remaining 8.5% from mints outside of Euboea. At 94.5%, drachmae make up the vast majority of this hoard. Of these drachmae, league issues make up 92.9%, 1.3% come from mints within the Euboean League (in this case from the mint at Carystus), and the remaining 5.8% come from mints outside the league. The 4 didrachms in this hoard are also from the mint at Carystus. As with the previous hoard, IGCH 166, this hoard is actually an amalgamation of several smaller deposits, though in this case the deposits are all from the same area of Euboea, so they are more useful as data¹⁵².

2.4.5 – IGCH 175

Findspot: Eretria, Euboea

Deposit Date: 235 BCE

Hoard Breakdown (see Appendix E, Table 2.25 for full hoard contents)

	Drachma	Tetrobol	Tetradrachm	Triobol	Stater	Didrachm	Total
League	275	0	0	0	0	0	275
Civic	2	1	0	0	0	0	3
Other	32	0	214	27	8	13	294
Total	309	1	214	27	8	13	572

Of the 572 coins in IGCH 175, 48.1% are Euboean League issues, and all of these coins are drachmae. This hoard contains very few issues from civic Euboean mints, just 0.5%. Interestingly, all three of these civic issues come from a different *polis*, with the drachmae coming from Carystus and Chalcis, and the tetrobol coming from Histiaea. The remaining 51.4% of the coins in this hoard come from various mints outside of Euboea. It is interesting to note

¹⁵² Wallace 1956, 59-61.

here that, though league issues make up only 48.1% of this hoard, they make up 89% of the drachmae. In addition, only 11% of the non-Euboean coins in this hoard share a denomination with the Euboean coins. The remaining 89% are denominations that neither league nor autonomous civic issues in this hoard share.

Unfortunately, the data for this hoard is partially missing. This is once again due to this hoard being comprised of multiple smaller hoards¹⁵³.

2.4.6 – IGCH 177

Findspot: Carystus, Euboea

Deposit Date: 230 BCE

Hoard Breakdown (see Appendix E, Table 2.26 for full hoard contents)

	Drachma	Tetradrachm	Didrachm	Stater	Total
League	265	1	0	0	266
Civic	16	0	52	0	68
Other	14	27	0	2	43
Total	295	28	52	2	377

Euboean League issued coins comprised of 70.6% of IGCH 177, with issues from *poleis* within the league making up 18%, and the remaining 11.4% coming from mints outside of Euboea. All but one of the 266 league issued coins are drachmae, with the final coin being a tetradrachm. The autonomous civic drachmae and the didrachms come from Carystus.

2.4.7 – IGCH 188

Findspot: Euboea

¹⁵³ Wallace 1956, 47-9.

Deposit Date: 250-200 BCE

Hoard Breakdown (see Appendix E, Table 2.27 for full hoard contents)

	Drachma	Tetradrachm	Didrachm	Tetrobol	Triobol	Unknown silver	Total
League	2	4	1	0	0	0	7
Civic	3	1	5	3	1	0	13
Other	0	0	0	0	0	1	1
Total	5	5	6	3	1	1	21

IGCH 188 is an interesting hoard comprised of a small amount of a variety of denominations. League issues comprise 33.3% of this hoard, issues from civic mints another 61.9%, and a single unidentified piece of silver the remaining 4.8%. The civic issues come from various mints within Euboea, with the drachmae coming from Chalcis and Histiaea, the single tetradrachm from Eretria, the didrachms from Carystus, the tetrobols from Histiaea, and the single triobol from Carystus. Disregarding the unidentified coin, this hoard lacks coinage from outside Euboea.

2.4.8 – IGCH 194

Findspot: Chalcis, Euboea

Deposit Date: 225-200 BCE

Hoard Breakdown (see Appendix E, Table 2.28 for full hoard contents)

	Drachma	Didrachma	Flan	Total
League	61	0	0	61
Civic	0	31	120	151
Other	0	0	0	0
Total	61	31	120	212

Another interesting hoard, IGCH 194 is one of two hoards discussed in this study which contain no denominational crossover between league and civic issues. This hoard is comprised of 28.8% Euboean League issued drachmae, 14.6% didrachms from Carystus, and the remaining 56.6% of the coins in this hoard are flans, blank silver disks intended to be struck into coins. These flans have been sourced to a mint at Chalcis and are the weight of a tetrobol. The presence of these unstruck flans sets this hoard apart from the others, as flans do not circulate in the economy the same way as struck coins, calling into question how it was that this hoard was originally collected. Perhaps this hoard was intended to go to the mint at Chalcis, as this is where it was deposited, or perhaps this is an example of someone embezzling the unstruck flans.

That the only two hoards to contain no denominational crossover are also both non-standard in other ways seems to imply that denominational crossover is the norm within hoards containing both league and civic issues of coins.

2.4.9. – IGCH 205

Findspot: Chalcis, Euboea

Deposit Date: 230-200 BCE

Hoard Breakdown (see Appendix E, Table 2.29 for full hoard contents)

	Drachma	Triobol	Total
League	27	0	27
Civic	59	5	64
Other	22	109	131
Total	108	114	222

League issues make up only a small portion of IGCH 205, at 12.2%. Autonomous civic issues make up 28.8% of this hoard, with 51 of the drachmae coming from the mint at Chalcis, 5

from Histiaea, and 3 from Carystus. The 5 triobols are all from Chalcis. The remaining 59% of this hoard has been sourced to mints from outside of Euboea. It is interesting to note that, while most of the league and civic issues are drachmae (100% and 92.2% respectively), the majority of the coins from outside Euboea are triobols (83.2%). This could indicate that a desire to have coins of this denomination led to seeking coins from outside Euboea, especially when one considers that triobols are one of the denominations not represented in the league issues found within these hoards.

2.4.10 - IGCH 210

Findspot: Carystus, Euboea

Deposit Date: 200 BCE

Hoard Breakdown (see Appendix E, Table 2.30 for full hoard contents)

	Drachma	Didrachm	Tetradrachm	Total
League	0	1	0	1
Civic	0	11	0	11
Other	4	6	5	15
Total	4	18	5	27

This hoard contains only one coin issued by the Euboean League, a single didrachm. The civic issues in this hoard are also didrachms, all of which can be sourced to the mint at Carystus, and they make up around 40.7% of this hoard. The remaining 55.5% of the hoard can be sourced to outside the league, and these are a mixture of drachmae, didrachms, and tetradrachms.

Didrachms make up the majority of this hoard, at 66.7%.

2.4.11 - IGCH 215

Findspot: Carystus, Euboea

Deposit Date: 230-170 BCE

Hoard Breakdown (see Appendix E, Table 2.31 for full hoard contents)

	Drachma	Didrachm	Tetradrachm	Total
League	0	1	1	2
Civic	1	2	0	3
Other	0	0	0	0
Total	1	3	1	5

IGCH 215 is a small collection of a variety of different Euboean coins, with 40% being from the league mints and 60% from civic mints. The hoard is 60% didrachms, 20% drachmae, and 20% tetradrachms. Of course, when working with numbers this small, percentage becomes less important. The 3 civic coins in this hoard all come from the mint at Carystus, which is also where this hoard was found.

2.4.12 – IGCH 221

Findspot: Eretria, Euboea

Deposit Date: 198-190 BCE

Hoard Breakdown (see Appendix E, Table 2.32 for full hoard contents)

	Bronze	Total
League	40	40
Civic	272	272
Other	40	40
Total	352	352

IGCH 221 is one of the all-bronze hoards examined from the Euboean League. Of these coins, 11.4% were issued by the Euboean League, 77.2% from civic mints within the league, and

11.4% from mints outside of Euboea. The civic issues in this hoard come from the mints at Eretria and Chalcis.

2.4.13 – IGCH 225

Findspot: Eretria, Euboea

Deposit Date: 192-175 BCE

Hoard Breakdown (see Appendix E, Table 2.33 for full hoard contents)

	Bronze	Total
League	84	84
Civic	100	100
Other	0	0
Total	184	184

IGCH 225 is one of the bronze hoards examined for this study. Euboean League issued bronzes make up 45.7% of this hoard, while bronzes from civic mints make up 54.3%. The civic issues mostly come from the mint at Chalcis (85%), with a small number coming also from Eretria and Carystus (9% and 6% respectively).

2.4.14 - IGCH 230

Findspot: Euboea

Deposit Date: 175 BCE

Hoard Breakdown (see Appendix E, Table 2.34 for full hoard contents)

	Bronze	Total
League	12	12
Civic	9	9
Other	1	1
Total	22	22

IGCH 230 is one of the bronze hoards examined for this study. It is a relatively small hoard. League issued bronze coins make up 54.5% of this hoard, with bronze coins from civic mints making up 40.9% and the remaining 4.6% consisting of a single bronze coin from outside of Euboea. Of the civic coins, 8 are sourced to the mint at Chalcis, and the remaining coin comes from Carystus.

2.4.15 – IGCH 240

Findspot: Euboea

Deposit Date: 170-165 BCE

Hoard Breakdown (see Appendix E, Table 2.35 for full hoard contents)

	Bronze	Triobol	Total
League	10	0	10
Civic	44	0	44
Other	5	1	6
Total	59	1	60

Were it not for the presence of a single triobol from Eastern Locris, IGCH 240 would be an entirely bronze hoard. For the purposes of this study, it will be considered alongside the other all bronze hoards, as the league and civic coins in this hoard are all bronze. League issued bronze coins make up 16.7% of this hoard, civic issues 73.3%, and coins from outside of Euboea the final 10%. The civic issues in this hoard all come from Chalcis save for 2, which come from Eretria.

2.4.16 – IGCH 241

Findspot: Euboea

Deposit Date: 170-165 BCE

Hoard Breakdown (see Appendix E, Table 2.36 for full hoard contents)

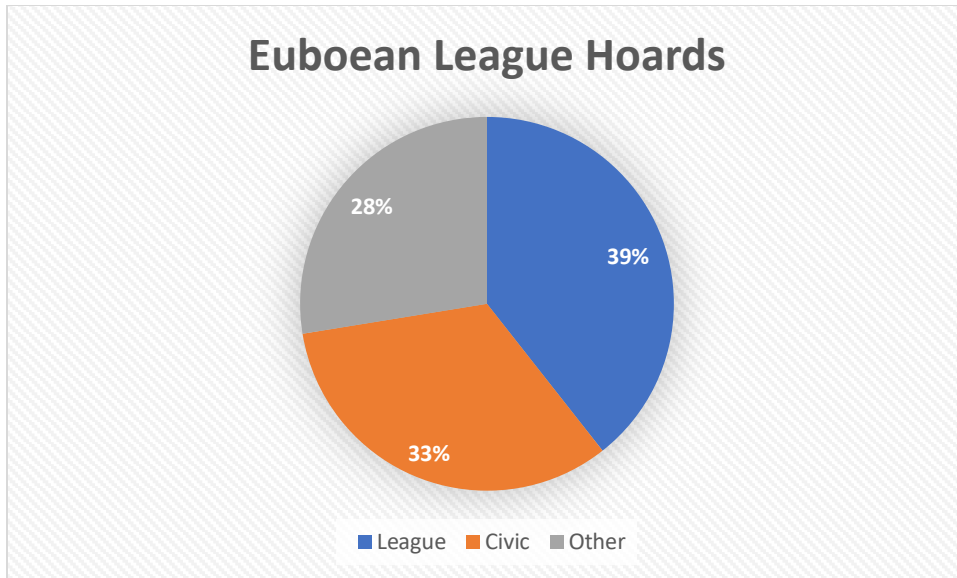
	Bronze	Total
League	75	75
Civic	162	162
Other	3	3
Total	240	240

IGCH 241 is another of the all bronze hoards from Euboea. League issued bronze coins make up 31.3% of this hoard, with issues from civic mints within the league making up a further 67.5%, and coins from outside the league making up the remaining 1.2%. Nearly all of the civic coins come from the mint at Chalcis, with only 5 coming from other mints (4 of these from Eretria and 1 from Carystus).

2.4.17 – Trends within the Euboean League Hoards

	Drachma	Triobol	Tetrobol	Didrachma	Tetradrachm	Stater	Unknown Silver	Bronze	Total
League	876	0	0	3	6	0	0	221	1106
Civic	114	7	5	94	1	0	120*	587	928
Other	77	137	0	13	243	10	245	49	774
Total	1067	144	5	109	250	10	365	857	2808

*the 120 flans from IGCH 194 have been counted among the unknown silvers for the purposes of this chart



A pie chart showing the breakdown of the Chalcidian League hoards.

The multiple bronze hoards from Euboea provide an interesting insight, for while most of silver coins in these hoards come from the federal mints, as in the previous leagues analyzed, the majority of the bronze issues come from the civic mints (587 civic bronze coins compared to just 221 league bronze coins). Also observable here is what may be coinage from outside the league being brought in to supplement a gap in the denominations. The tetradrachm, a large high value coin, is the third most abundant denomination in these hoards (discounting the unknown silvers) despite having only six league issues and one civic issue. The tetradrachms in these hoards are 97.2% sourced from outside of the Euboean League.

2.4.18 – The Autonomous Coinage of the Euboean *Poleis*

	Drachma	Triobol	Tetrobol	Didrachm a	Tetradrachm	Bronze	Total	Percent
Chalcis	84	6	0	0	0	339	429	53.1%
Eretria	0	0	0	0	1	240	241	29.8%
Carystus	23	1	0	94	0	8	126	15.6%
Histiaea	7	0	5	0	0	0	12	1.5%
Total	114	7	5	94	1	587	808*	100%

*The 120 flans have been left out of this chart due to uncertainty regarding mint of origin, though Chalcis has been listed as the most probable.

A possible example of civic coinage from within the league also serving the function of filling a denominational gap within the league are the didrachms. Of the 109 didrachms across these hoards, just 2 of them come from federal mints, while 94 (86.2%) come from civic mints (with the remainder coming from outside Euboea). Perhaps even more interesting, Carystus is the only Euboean *polis* to have didrachms represented in these hoards at all, and 74.6% of all the coins from Carystus within these hoards were of this denomination.

Unlike hoards looked at from Achaia, there are instances where the civic coinage outnumbers the federal coinage by a significant margin. On average, federal issues make up around 49% of the hoards examined, while civic issues make up an average of around 35.5%. Across all hoards, the league coinage totals 41%, while the civic coinage totals 26%. The hoards of Euboea were all found on the island of Euboea, with the exceptions of IGCH 165 and IGCH 166, which are of less certain provenience. Still, both hoards were found not far from Euboea even at the furthest they have been mapped to, and given the cluster of hoards within Euboea, it seems likely that these hoards, too, are from the island itself.

2.5 – The Thessalian Hoards

Three coin hoards containing Thessalian League coins alongside civic coinage were examined. Of the leagues examined, the Thessalian League is the one with the least co-circulation. In addition, this league has the most uneven distribution across the hoards, with IGCH 117 containing 38 coins, IGCH 162 containing 39, and IGCH 313 containing 1199. None of these hoards contain league and civic issues in equal amounts. Overall, the Thessalian League seems to serve as an exception to the somewhat standard patten of co-circulation seen in the previous four leagues, and indeed two of these instances of co-circulation may be a coincidence

rather than the active practice it appears to be with the other leagues. The mints found within these hoards counted as part of the Thessalian League are Larissa, Magnesia in Thessaly, and Perrhaebia.

2.5.1 – IGCH 117

Findspot: Tricca, Thessaly

Deposit Date: 300 BCE¹⁵⁴

Hoard Breakdown (see appendix 2.37 for full hoard contents)

	Drachma	D. Victoriatus	Stater	Tetradrachm	Total
League	1	2	0	0	3
Civic	1	0	0	0	1
Other	1	0	31	2	34
Total	3	2	31	2	38

IGCH 117 is a hoard primarily comprised of coins from outside the Thessalian League. Indeed, league issued coins make up only 7.9% of this hoard. A single drachma from Larissa accounts for 2.6% of this hoard, and the bulk of the coins (89.5%) come from outside of Thessaly. Varoucha has suggested that the Thessalian coins in this hoard are intrusive, and suggests an initial deposit date of 300 BCE, despite the presence of the Republican double victoriatus¹⁵⁵. If one accepts this, the hoard technically contains no coinage of the Thessalian League.

¹⁵⁴ *The deposit date of 300 BCE is provided by coinhoards.org, however the presence of double victoriati in this hoard makes this deposit date impossible, as these coins were minted in Thessaly between 191 and 148 BCE. The most likely explanation seems to be that these coins are intrusive in the hoard.

¹⁵⁵ Varoucha 1938, 446; 1939, 288.

2.5.2 – IGCH 162

Findspot: Karditsa, Thessaly

Deposit Date: 250 BCE

Hoard Breakdown (see appendix 2.38 for full hoard contents)

	Drachma	Tetradrachm	Stater	Bronze	Total
League	0	0	0	1	1
Civic	1	0	4	0	5
Other	0	22	3	8	33
Total	1	22	7	9	39

IGCH 162, much like IGCH 117, contains very few coins from Thessaly. There is a single issue from the Thessalian League (making up just 2.6% of this hoard), and the civic issues make up 12.8%. The remaining 84.6% of this hoard comes from mints outside of Thessaly. All of the civic issued coins in this hoard come from the mint at Larissa. There are a variety of denominations represented here, though that the single league coin is bronze is noteworthy. In addition, the majority of the non-Thessalian League coins are tetradrachms, a denomination not represented in any of the hoards here in either league or civic issue coins.

2.5.3 – IGCH 313

Findspot: Larissa, Thessaly

Deposit Date: 130-100 BCE

Hoard Breakdown (see appendix 2.39 for full hoard contents)

	Drachma	D. Victoriatus	Triobol	Total
League	472	681	39	1192
Civic	7	0	0	7
Other	0	0	0	0
Total	479	681	39	1199

IGCH 313 is not at all similar to the previous Thessalian League hoards, both of which contained under 40 coins. At well over 1000 coins, the vast majority of which come from the league, it provides an interesting counterpoint to the other two hoards examined from this league. Coins issued by the Thessalian League make up 99.4% of this hoard, with the remaining 0.6% coming from mints within the league – 6 from Magnesia in Thessaly and 1 from Perrhaebia. This hoard contains a fairly even mix of Greek coins (mostly drachmae along with a handful of triobols) and the Roman Republican double victoriati, with 56.8% of the hoard in the Roman denomination¹⁵⁶.

2.5.4 – Trends within the Thessalian League Hoards

	Drachma	D. Victoriatus	Triobol	Tetradrachm	Stater	Bronze	Total
League	473	683	39	0	0	1	1196
Civic	9	0	0	0	4	0	13
Other	1	0	0	24	34	8	67
Total	483	683	39	24	38	9	1276

¹⁵⁶ IGCH 314, containing 24 federal issue double victoriati and 12 drachmae, is theorized to have split off from this hoard. Since this is not definitive, it has not been included in the counts, but she nevertheless be kept in mind.



A pie chart showing the breakdown of the Thessalian League hoards.

A quick glance at the three hoards of the Thessalian League shows that they may not be the best suited to analysis, as they swing to one of two extremes. IGCH 117 and IGCH 162 contain far more coinage from outside Thessaly than from within, while IGCH 313 is almost exclusively league silver, with only a very small amount of civic coinage. The differences within these hoards can likely be attributed to their deposit dates, with the first two estimated around the early 3rd century BCE and the latter the late 2nd century BCE. So, while the average distribution in these hoards is around 36% league coinage and around 2% civic coinage, that actually tells us very little. In addition, the possibility that IGCH 117 initially contained no Thessalian League coins, and these are a later intrusion, renders its usefulness suspect. However, it is interesting to note that the two hoards containing comparatively little Thessalian coinage were still found within the bounds of Thessaly. Whether this is indicative of a tendency for Thessaly to bring in coinage from other regions, rather than using their own, is something that could potentially be worth further investigation.

The proclivity for Roman denominations in this league is interesting, as is the apparent coproduction of Greek and Roman coins by the same issuing body. The catalogues have no record of coins of this Roman denomination being minted on the civic level, so it appears to be an instance of the federal body stepping in to fill in what was, at this point in history, a need. Given that the Thessalian League was re-established by the Roman Republic, it makes sense for them to be the body issuing these coins¹⁵⁷.

2.5.5 – The Autonomous Coinage of Thessalian *Poleis*

	Drachma	Stater	Total
Larissa	2	4	6
Magnesia	6	0	6
Perrhaebia	1	0	1
Total	9	4	13

There are few autonomous civic coins found within these hoards, and so there is little information to analyze. It is worth noting that the two pre-Roman hoards, IGCH 117 and IGCH 162, contain autonomous coinage exclusively from Larissa, and the post-Roman hoard, IGCH 313, contains coinage from Magnesia in Thessaly and Perrhaebia, but none from Larissa.

The mint at Larissa was an important source for Roman coinage in the Greek world, especially moving into the imperial period¹⁵⁸. If these coins were being minted at Larissa, it would account for the lack of autonomous coinage from the *polis* at this time, as the mint could have been repurposed to provide coinage for the league.

¹⁵⁷ Bouchon and Helly 2015, 231.

¹⁵⁸ The Julio-Claudians, Flavians, and Severans all had coinage minted at Larissa. This will be further discussed in chapter three.

2.6 – Concluding Thoughts

A key point to note here is that these hoards are almost all clustered around the league which their coins come from. This supports that, typically, these coins did not circulate outside of the regions where they were minted to a significant degree, an observation made by previous scholars¹⁵⁹. The Chalcidian hoards were all located on or near the Chalcidike Peninsula, and the Thessalian and Euboean hoards were entirely clustered within the boundaries of those states. There are two exceptions to this rule. The Achaean league hoard, IGCH 2053, was discovered in Calabria and as discussed above, this in no way proves that the coins were circulating that far outside of the region. Then there is the Acarnanian League hoard, IGCH 312, which was found nearly 200km North of Oeniadae, in Matsouki. That of the 39 hoards examined only two strayed any significant distance from the state's borders is significant.

Another trend apparent in these hoards is a tendency for league issues to outnumber civic issues in their hoards. This raises the question of whether this happens because there were more league coins circulating than civic coins, or because it was not common for civic coinage to circulate alongside league coinage. It would make sense for there to be more league coinage for larger leagues, such as Achaea, because the combined resources of the league would allow for a greater amount of coinage to be struck than an individual *polis* could manage on its own. However, the league coinage is not being compared to the coinage of a single *polis*, but that of all of the *poleis* in the league which minted their own coins. With league coinage still coming out ahead, it is possible that this means either that those collecting these hoards were actively seeking league coinage, or else that the civic coin production was much lower. Discussions of

¹⁵⁹ Mackil 2015, 491.

civic coins in chapter three show the latter to be unlikely. It is possible that the coins of the league were sought because they allowed greater ease of use in the various *poleis* within the league. As discussed in chapter one, the economic mobility and freedom within a federation was one of the main benefits it provided for its citizens. Using the league coinage could have been an example of this benefit in action.

The leagues examined also tend to have a preference for a specific denomination. In no league is this more apparent than the Achaean League, with all league silver having been struck in the same denomination, and the civic coins nearly all following suit. This can also be seen with the Euboean drachmae and the Chalcidian tetrobol. With both of these leagues, the denomination which was the clear preference for the league issues was also the preference for the civic issues. In the case of Chalcis, this may be a coincidence, as it is also the preference for the coins from outside the league as well. This means that tetrobols may dominate not because they were the most commonly minted, but instead because the ones depositing the hoards had a preference for them, regardless of source. The same cannot be said for Euboea, where the most common denominations from outside the league are the least common from within, showing a possible attempt to fill in the denominational gaps. Regardless, examining Achaea, Chalcis, and Euboea, it seems likely that the co-circulation of league and civic coins is not due to the different issuing bodies filling different denominational needs, as in all three cases the main denomination of silver present is the same from both sources. These patterns will be examined and discussed in depth in the next chapter.

Chapter 3 – The Implications of the Data

A large amount of numerical data has now been collected, and the trends and patterns within the data identified. In this chapter, this data will be analyzed, and coupled with research into both primary and secondary sources, tentative conclusions will be drawn concerning the nature of these hoards and what they can tell us about the economic landscape at the time of their deposition.

The main patterns which will be analyzed in this section are the denominational preference in the hoards, if any, the find spots of the hoards, and the mints the autonomous coinage of the member-states can be sourced to. Where applicable, other factors may be analyzed as well. The goal of this analysis is to see if there is anything that can be gleaned regarding the economic realities of each league at the time of deposition, as well as to see if there are patterns that remain true across the five leagues.

3.1 – The Acarnanian League

Two hoards containing coinage of the Acarnanian League are examined in this study. Both of these hoards are small and contain exclusively bronze coinage. While this preference limits the cross-comparison possible between Acarnania and the other leagues, it also provides insight into other aspects of the Acarnanian economy.

3.1.1 – Preference for Bronze

The Acarnanian League coinage appeared infrequently within the catalogued hoards. Indeed, within the catalogue only IGCH 145 and IGCH 312 contain coinage from this league. That both of these hoards are bronze exclusive hoards is curious, as coin hoards typically contain

higher value denominations¹⁶⁰. Though none are recorded in the hoard catalogue, the Acarnanian League also produced silver coinage. These coins were produced in wide a variety of denominations, with staters (figure 3.1), hemistaters (figure 3.2), drachmae (figure 3.3), trihemiobols (figure 3.4), hemidrachms (figure 3.5), and $\frac{1}{4}$ staters (figure 3.6).

In addition, there were mints within Acarnania producing silver coinage on a civic level, these being Alyzia (c. 350-250 BCE), Anactorium (c. 350-250 BCE), Argos Amphiloichicum (c. 350-250 BCE, possible additional productions c. 205 BCE), Astacus (c. 350 BCE), Coronta (c. 300-250 BCE), Echinus (c. 300-250 BCE), Leucas (c. 500-250 BCE, federal emissions c 300-250 BCE, possible additional federal emissions c. 250-167 BCE), Metropolis (c. 300-250 BCE), Palaerus (c. 350-250 BCE), Phytia (c. 350-250 BCE), Stratus (c. 450-300 BCE, federal emissions c. 400-300), Thyrrheium (c. 350-167 or later, possible federal emissions c. 250-229)¹⁶¹. Tantalizingly, there is significant crossover in the production dates at the mints which produced both autonomous and federal silver. Leucas, Stratus, and Thyrrheium, the three mints which are believed to have produced the federal coinage for the Acarnanian League, all appear to have contemporary autonomous emissions. The coinage from these three mints will be briefly discussed below.

Taking this into account, it seems that the hoards are not an accurate representation of the coinage of the Acarnanian League. Though it is tempting to think of coin hoards as a snapshot of the numismatic landscape at the time of deposition, the reality is that they will never be perfectly representative of the coinage that was circulating at the time. Not only do coin hoards represent the coinage which individuals wished to collect and store away, they also represent those

¹⁶⁰ Howgego 1995, 88.

¹⁶¹ Gardner 1887, 329-331.

collections which, for whatever reason, the one who stored was not able to retrieve. Individuals do not bury or hide away money with the intention of leaving it there – something has to occur to stop them from being able to retrieve the hoard at a later date¹⁶². Instances such as this show us just how much the hoards can differ from the coinage that was being produced.

3.1.2 – The Autonomous Coinage from Acarnanian *Poleis*

As mentioned above, many of the *poleis* of Acarnania minted their own silver. Though none of these coins made their way into the hoards, they are still worthy of discussion. What is interesting about these emissions is that nearly all *poleis* appear to cease their autonomous emissions by the mid-3rd century BCE. The records show possible additional production from Argos Amphiloichicum at the end of the 3rd century BCE, however there is uncertainty regarding these coins. The only Acarnanian *polis* which appears to have produced autonomous coinage longer is Thyrrheium, which has autonomous emissions dated to 167 BCE, and there are potential additional coins from even later.

The years with dating crossover for the autonomous and federal emissions from the three *poleis* which either minted or are presumed to have minted federal coins are as follows: between the years 300-250 BCE for Leucas, between the years 400-300 BCE for Stratus, and between the years 250-229 BCE for Thyrrheium. Of these three *poleis*, the federal emissions from Thyrrheium are the least certain. However, even discounting this *polis*, there is still an apparent 50 years of co-productions at Leucas and another with an apparent 100 years of co-production at Stratus.

¹⁶² Howgego 1995, 88-89.

Unfortunately, since there are no examples of federal silver from Acarnania within the hoards, it is uncertain if federal and autonomous emissions were circulating together. However, examining the catalogue just for these autonomous emissions, there are examples of autonomous emissions from all three of these *poleis* showing up in hoards. A brief breakdown of what the hoard presence was for each of these *poleis* will follow.

As mentioned, Oeniadae appears to have only produced bronze coinage. These coins did not appear to travel far, as they are not common within the hoards. In addition to the two bronze Acarnanian hoards discussed, coinage of Oeniadae shows up in one additional hoard, which was discovered within Acarnania¹⁶³. This tells us that, at least based on hoard data, the coinage of Oeniadae did not travel far – certainly no further than the bronze coinage of the Acarnanian League.

Though the silver coinage of the Acarnanian League is not represented in the hoards, a brief survey of the hoard catalogue shows that the silver coinage of her member-states is. As mentioned above, the three *poleis* of the Acarnanian League believed to have minted the federal silver are Leucas, Stratus, and Thyrrheium. Two of these *poleis* are well represented in the hoard data. A brief discussion of these hoards will follow. See Appendix H for the full list of hoards discussed, along with deposit dates, findspots, and number of coins of the pertinent *polis*.

Leucas, believed to have minted silver coinage for the Acarnanian League from between 300-250 BCE has autonomous silver coinage present in 42 different hoards¹⁶⁴. Of these hoards,

¹⁶³ IGCH 145, IGCH 311, and IGCH 312.

¹⁶⁴ IGCH 72, IGCH 85, IGCH 88, IGCH 106, IGCH 119, IGCH 140, IGCH 147, IGCH 171, IGCH 200, IGCH 201, IGCH 1694, IGCH 1790, IGCH 1910, IGCH 1925, IGCH 1977, IGCH 2119, IGCH 2127, IGCH 2130, IGCH 2131, IGCH 2132, IGCH 2133, IGCH 2135, IGCH 2144, IGCH 2145, IGCH 2146, IGCH 2147, IGCH 2148, IGCH 2149, IGCH 2150, IGCH 2151, IGCH 2152, IGCH 2153, IGCH 2169, IGCH 2179, IGCH 2180, IGCH 2181, IGCH 2183, IGCH 2185, IGCH 2187, IGCH 2188, IGCH 2189, and IGCH 2198.

only one, IGCH 119, was found within Acarnania. A further nine were found in other findspots across Greece. Further afield, IGCH 1664 was found in Egypt, while IGCH 1790 was found in Iran. Three of the hoards were found in mainland Italy, all in the south. The remaining 27 hoards containing autonomous coinage of Leucas were found in Sicily. That makes up a total of 64.3% of the hoards. In addition, many of these hoards have a deposit date in line with the years in which Leucas was apparently minting silver for the Acarnanian League¹⁶⁵. While this of course does not prove that co-production was occurring, it does seem to imply that the autonomous silver of Leucas was either more desirable than the federal silver, or that it was produced in far greater volumes.

It should also be noted that these hoards are not all merely a case of one or two coins travelling out to Sicily. While some do contain small numbers, others contained coinage of Leucas in large numbers. Of the 27 hoards found in Sicily, 13 contained at least 10 coins from Leucas, and of those 13, two contained 75 or more¹⁶⁶.

The next *polis* which seems to have minted federal coinage for the Acarnanian League is Stratus, which has federal emissions dated to 400-300 BCE. Unlike Leucas, which shows up across many hoards, Stratus has autonomous silver coinage in only one recorded hoard. A hoard from Western Greece, IGCH 88, contains a single silver coin from the mint at Stratus. This hoard does not have a specific findspot on record, so whether this hoard came from within Acarnania or not remains unclear. This hoard's deposit window of 325-300 BCE falls within the federal production window given for Stratus. Unfortunately, a single coin in a single hoard can tell us very little. Nevertheless, it highlights how widespread the coinage of Leucas is in comparison.

¹⁶⁵ 21 of the hoards have a date range that falls within the federal production period of 300-250 BCE.

¹⁶⁶ IGCH 2133 contained 78 and IGCH 2151 contained 75.

The final *polis* on record as minting federal coinage for the Acarnanian League is Thyrrheium. This *polis* is believed to have minted federal coinage for the league in the years 250-229 BCE, however, as mentioned above, these emissions are less assured than those of Leucas or Stratus. Autonomous silver coinage from Thyrrheium shows up in many hoards, though not as many as Leucas. A total of 24 hoards contain coinage from the mint at this *polis*¹⁶⁷. Two of these hoards, IGCH 107 and IGCH 140, were found in Greece, though it is interesting to note that neither of these hoards were found within Acarnania¹⁶⁸. There are also two hoards from this group, IGCH 151 and IGCH 152, which were found in a location none of the hoards of Leucas made it to. Both of these hoards were found in Crete¹⁶⁹. There were then five discovered in Southern mainland Italy, and the remaining 15 hoards were found on Sicily. Just like with Leucas, more than half of the hoards containing these coins were found within Sicily. There is also a great deal of crossover, with 14 of the 15 Sicilian hoards for Thyrrheium also containing coinage of Leucas¹⁷⁰. The only Sicilian hoard to contain coinage of Thyrrheium and not Leucas is IGCH 2098, and it is also worth noting that this is the oldest of the hoards found in Sicily for this *polis*, with an estimated deposit date of 400 BCE. The rest of the hoards found here are dated to 320 BCE or later.

Of the 24 hoards, only IGCH 2030, found in Calabria and containing 11 silver coins of Thyrrheium, has a deposit date with falls within the period in which the *polis* was supposedly

¹⁶⁷ IGCH 107, IGCH 140, IGCH 151, IGCH 152, IGCH 1952, IGCH 1968, IGCH 1969, IGCH 1977, IGCH 2030, IGCH 2098, IGCH 2145, IGCH 2146, IGCH 2147, IGCH 2149, IGCH 2151, IGCH 2152, IGCH 2179, IGCH 2180, IGCH 2181, IGCH 2183, IGCH 2185, IGCH 2187, IGCH 2188, and IGCH 2198.

¹⁶⁸ IGCH 107 was found in the Peloponnese and IGCH 140 was found on the island of Cephalonia.

¹⁶⁹ Though a part of Greece, for the purposes of this discussion, Crete will be treated as a separate location.

¹⁷⁰ IGCH 2145, IGCH 2146, IGCH 2147, IGCH 2149, IGCH 2151, IGCH 2152, IGCH 2179, IGCH 2180, IGCH 2181, IGCH 2183, IGCH 2185, IGCH 2187, IGCH 2188, and IGCH 2198 all contain coins from both Leucas and Thyrrheium.

minting for the Acarnanian League, dated to 230-200 BCE¹⁷¹. The rest of the hoards pre-date the federal emissions.

Overall, the Acarnanian League was apparently minting silver coinage from 400-229 BCE. During this same time period, autonomous coinage from Leucas and Thyrrheium traveled to Italy and Sicily, as well as a handful of pieces finding their way to Egypt and Iran. Despite this, the coinage of the Acarnanian League itself never found its way into these hoards – or, indeed, into any hoards, save for the two bronze exclusive hoards discussed above. This pattern of federal coinage being largely absent from geographically distant hoards, while autonomous coinage travels far abroad, is one which continues as the discussion shifts to the other leagues.

3.1.3 – Dating of the Hoards

The two hoards containing coinage of the Acarnanian League have a large gap between their apparent deposit dates. IGCH 145 has been dated to 280 BCE, while IGCH 312 dates to between 200-100 BCE. Even at the earlier in the deposit window for IGCH 312, this is a difference of nearly a century. Despite this fact, the makeup of the hoards is virtually identical – both containing exclusively bronze coins from Oeniadae and the federal mint of Acarnania.

The presence of bronze coinage of Oeniadae in IGCH 145 could raise doubts regarding the dating of 280 BCE. Discussions of the bronze coinage from Oeniadae date it to 230 BCE at the earliest¹⁷². Even allowing for some inaccuracies in both the dating of the mint operations and the dating of this deposit, a discrepancy of 50 years is substantial. As for the league itself, there is evidence of its existence up to the Roman conquest of Greece in 146 BCE, though it appears

¹⁷¹ Though the crossover here is only one year, given that the hoard is in Calabria, which is quite a distance from Acarnania, one can assume that there would be a slight delay between coin emissions and the collection and deposit.

¹⁷² Gardner and Poole 1888, 189.

to never have been officially dissolved¹⁷³. Bronze coinage from the league has differing dates depending on the source, with earlier sources stating that it started production around 229 BCE¹⁷⁴, while some later sources have pushed this date back to around 300 BCE¹⁷⁵. The later dating of 229 BCE would also render the dating of this hoard impossible.

Though there is no way to be sure, the similar makeup of these hoards, as well as the presence of the bronze coinage from Oeniadae, implies that they are closer in date than recorded. As it stands, there seems to be little information available to support the dating, as the explanation for the date of 280 BCE is currently unpublished.

3.1.4 – Conclusions

Overall, the hoards from the Acarnanian League provide us less information than some of the other leagues examined, due to the small number of examples, and the fact that both of the hoards are bronze only. Indeed, through looking at the coinage from *poleis* which were not present in the hoards, key information was gathered regarding the patterns of circulation. The Acarnanian League did have silver coinage, and so did the *poleis* within the league. However, none of the silver of the Acarnanian League has been recorded in hoards. The same cannot be said of the *poleis*. Leucas in particular had a large amount of silver coinage across the hoards, and these hoards were found across the Mediterranean, with a large number in Sicily.

It seems, then, that compared to the coinage of the member-*poleis*, coinage of the Acarnanian League was not only less common outside of league territory, but it was also less commonly hoarded in general. Based on extant hoard data, there are no examples of silver coins

¹⁷³ Frietag 2015, 77.

¹⁷⁴ Gardner and Poole 1888, 169-170.

¹⁷⁵ Frietag 2015, 83-85.

being hoarded, and only two of bronze. This coupled with the fact that bronze hoards are usually less common than silver, not more¹⁷⁶, seems to indicate that the absence of league silver was purposeful.

3.2 – The Achaean League

The Achaean League hoards present us with the largest number of coins looked at for this study¹⁷⁷, with 7893 coins across nine hoards. The patterns within these hoards can be tracked, both when it comes to the contents of the hoards and their respective findspots.

3.2.1 – Prominence of Triobols

The preference for triobols within the Achaean League hoards is clear, making up over 93% of the nearly 8000 coins examined in this study. Sometimes referred to as a hemidrachm, this coin is worth three obols or half a drachma – not a particularly high value denomination. This section will explore potential reasons for the obvious preference for hoarding coins of this denomination over higher value coins.

The first explanation for the predominance of the triobol in these hoards is that this was virtually the only denomination minted by the Achaean League, and coins minted federally make up 61% of the coins examined. In studies of Achaean League coinage, silver is synonymous with triobol. Consider that in his 1895 *Catalogue of the Coins of the Achaean League*, Major-General M. G. Clerk refers to the coins he examines exclusively by their material, referencing no denominations for the silver coins. However, he does provide a weight range for these coins,

¹⁷⁶ Consider that there are nine hoards containing Achaean League coinage with zero bronze exclusive, nine containing Chalcidian League coinage with one bronze exclusive, and sixteen containing coinage of Euboea with five bronze exclusive.

¹⁷⁷ Though not the most hoards – the Euboean League has them beat with sixteen.

with them falling between 2.1 and 2.85 grams¹⁷⁸. While 2.85g is slightly too large for a triobol minted to the attic standard (this size is closer to a tetrobol of that standard¹⁷⁹), it does align with the slightly debased Aeginetan standard which the *poleis* in the region based their currencies on¹⁸⁰. Based on this, then, the silver coins within the catalogue presented by Clerk are certainly all triobols, though he never says this explicitly.

Within the hoards examined, every coin minted by the Achaean League is a triobol, save for a single bronze coin in IGCH 301. Did the Achaean League exclusively mint triobols for their silver currency? This is a tempting conclusion based on the hoard evidence and the catalogues. However, a single coin in the collection of the American Numismatic Society casts a shadow of doubt on this conclusion – an Achaean hemistater depicting the head of a nymph in profile on the obverse and Athena wielding a spear and shield on the reverse¹⁸¹. The coin differs in type from the triobols of the Achaean League in both obverse and reverse (figure 3.7). Hemistaters of the Achaean League are relatively rare and can be dated to between 370-360 BCE. This means that these are coins of the first Achaean League, formed in the 5th century BCE. During this time, it seems the league did not produce any triobols. The second Achaean League, reformed in the mid-3rd century BCE, on the other hand, produced exclusively triobols for their silver coinage, and it is from this second Achaean League that the coins in the hoards examined for this study came¹⁸². For this reason, silver coins of alternate denomination are not relevant to the discussion.

¹⁷⁸ Clerk 1895, iii-iv.

¹⁷⁹ Kraay 1966, 7.

¹⁸⁰ Dengate 1967, 99.

¹⁸¹ See <http://numismatics.org/collection/1950.53.6> (add image)

¹⁸² Hoover 2011, 5.

There is also a high percentage of triobols within the autonomous coinage of the member-states of Achaea, with 99.4% of the coinage from these states in this denomination. The coinage from these *poleis* will be discussed at length below. It is worth noting here, however, that there is only a single silver coin across the nine hoards from an Achaean *polis* which is not a triobol – a drachma from Sicyon. The remaining non-triobol autonomous coins in these hoards are bronze.

The percentage of triobols from mints outside of Achaea is lower, with 54.7% of these coins in this denomination. However, if the 257 pieces of unknown silver¹⁸³ are removed from the calculations, this percentage jumps to 71.4%. Even without the omission of the unidentified coinage, triobols make up the majority of the coins brought in from outside of Achaea, and there are significantly more triobols than any other single denomination at 598 pieces. Once again omitting the unidentified silver, as it is not possible to determine what denomination these were, or even if they were all the same denomination, the next most numerous denomination from outside of Achaea is the drachma at 149 pieces. This means that there are four times as many triobols as drachmae. At such a significant difference, it is reasonable to state that the collection of triobols across these hoards was the goal, and their overwhelming presence in these hoards cannot be attributed solely to the output of the Achaean mints.

3.2.2 – The Autonomous Coinage from Achaean *Poleis*

When examining the autonomous coinage within these hoards, the majority of these coins can be sourced to three mints from within the Achaean League – Sicyon, Argos, and Megalopolis. Only one silver coin from these three mints is not a triobol – a single drachma from Sicyon. This drachma is the only silver coin from an autonomous mint that is not a triobol across

¹⁸³ 100 of which come from IGCH 262, and 157 of which come from IGCH 301.

these hoards. The other nearly 2000 silver coins are all triobols. While it cannot be the case for Sicyon, given the presence of the Drachma in this hoard, it is possible that other *poleis* in the Achaean League were also exclusively minting their silver into triobols.

This seems to be the case for Megalopolis. This *polis* is unique in that it was explicitly founded in the 360s BCE in order to serve as the capital of an Arcadian federation¹⁸⁴. The *polis* had sporadic minting and a comparatively small output, especially during the 4th- and 3rd-century BCE. During this time, Megalopolis provided a large number of mercenaries to fight for other cities, leading to a relatively steady income stream. With a consistent supply of foreign silver coming into the city, there would be substantially less incentive for them to mint their own¹⁸⁵. That this is a case of small output, rather than an issue of only a small number of coins surviving to the present day, can be supported by examining the dies of the extant coins. There are no transfers of reverse dies between the coins, which seems to indicate a mint with a single anvil as the source¹⁸⁶.

Megalopolis is unique in another way as well. At the beginning of the 2nd century BCE, two different groups of triobols were produced by the mint of this *polis*. The first were Achaean League triobols, bearing Zeus laureate on the obverse and the monogram of the Achaean League on the reverse, struck to the reduced Aiginetic standard that was used for league coinage. The second group of triobols were also minted to this standard, and featured Zeus laureate. The reverse of these coins, however, featured a seated youthful Pan. These coins have been identified as a type from the Arcadian League – a league which supposedly ceased existing more than 100

¹⁸⁴ Dengate 1967, 57.

¹⁸⁵ Dengate 1967, 58-59.

¹⁸⁶ Dengate 1967, 102.

years prior¹⁸⁷. This provides a clear example of a *polis* minting federal coinage alongside what could be called, for lack of a better term, autonomous coinage. At the very least, this coinage was not minted on the authority of the Arcadian League. As discussed in chapter one, there is no evidence of the Achaean and Arcadian Leagues coexisting, nor of any *poleis* operating as a member of more than one federation at the same time. It has been suggested that this dual minting was done to satisfy the monetary preferences of the local citizens in Arcadia, allowing them to continue using a coin type they were accustomed to, despite the issuing body of said type no longer existing¹⁸⁸. As the Achaean League grew, it came to encompass territories with no historical or ethnic ties to Achaea. The lack of Arcadian monogram on these triobols means that it is not overtly tied to a previously existing state, however it is still of a type familiar and perhaps comfortable to the citizens of Arcadia. This is strong evidence to support that the Achaean League did permit autonomous minting from member-states.

While nearly all of the silver coinage of Megalopolis is minted as triobols, there are examples of one other denomination catalogued. In the mid third-century, Megalopolis minted a small number of tetradrachms (figure 3.8)¹⁸⁹. The jump from triobol (hemidrachm) to tetradrachm is dramatic, with a tetradrachm worth eight times as much as a triobol. These coins feature Herakles on the obverse, where the triobols of Megalopolis feature Zeus. On the tetradrachms, Zeus takes his place on the reverse, seated.

Though these Tetradrachms existed, they never made their way into any of the 2nd c BCE hoards containing coinage of Megalopolis. Eleven hoards dated to this century were examined, every hoard containing coinage from Megalopolis, regardless of whether Achaean League

¹⁸⁷ Hoover 2011, 231-236.

¹⁸⁸ Hoover 2011, 231.

coinage was also present¹⁹⁰. Across these hoards, there are 631 coins from Megalopolis, all of which are identified as triobols. None of these hoards ventured far outside of Achaean League territory, save for IGCH 2053, the hoard found in Calabria, discussed above. The hoards discussed for Megalopolis, along with the following for Sicyon and Argos, can be found listed in detail in Appendix I.

Unlike Megalopolis, Sicyon produced a wide variety of denominations when it came to its silver coinage. Limiting the dating of these coins to just the 2nd c BCE, the ANS catalogue dates both autonomous triobols (figure 3.9) and autonomous drachmae (figure 3.10) to this time period. Recall that Sicyon was the only Achaean *polis* to have a non-triobol silver coin in the hoards¹⁹¹. Sicyon contributed a total of 642 silver coins to the Achaean League hoards examined, of which only one was not a triobol. The question arises, then, was this a pattern of preference for coins of Sicyon in general, or a preference unique to the hoards with league coinage present.

The inventory of Greek coin hoards catalogues 28 hoards containing coinage of Sicyon dated to the 2nd c BCE¹⁹². Within these hoards there were 798-799 silver coins, of which 791 are triobols, 5 are drachmae, and 2-3 are obols¹⁹³. These numbers reveal two things. First, though there were significantly more hoards which did not contain both league and autonomous coinage for Sicyon, it was in the hoards which contained league coinage that the majority of the

¹⁹⁰ The hoards examined for Megalopolis were IGCH 233, IGCH 242, IGCH 251, IGCH 260, IGCH 261, IGCH 262, IGCH 267, IGCH 270, IGCH 271, IGCH 301, and IGCH 2053. Of these, IGCH 233, IGCH 251, and IGCH 267 did not contain Achaean League coinage.

¹⁹¹ There is a single drachma from Sicyon in IGCH 242.

¹⁹² The coin hoards examined were IGCH 182, IGCH 195, IGCH 199, IGCH 200, IGCH 207, IGCH 214, IGCH 217, IGCH 233, IGCH 242, IGCH 243, IGCH 246, IGCH 252, IGCH 253, IGCH 257, IGCH 258, IGCH 260, IGCH 261, IGCH 262, IGCH 263, IGCH 266, IGCH 267, IGCH 269, IGCH 271, IGCH 301, IGCH 303, IGCH 471, and IGCH 2053. Of these hoards, IGCH 242, IGCH 257, IGCH 260, IGCH 261, IGCH 262, IGCH 271, IGCH 301, and IGCH 2053 also contained coinage of the Achaean League.

¹⁹³ IGCH 253 is recorded as containing either one or two obols.

autonomous coinage of Sicyon is found (28.6% of the 28 Sicyon hoards contain league coinage, yet these 8 hoards contain 80.5% of the silver coins across the hoards). Second, while the percentage of non-triobol silver is slightly higher when you include the hoards which do not contain Achaean League coinage¹⁹⁴, there is still a strong preference for triobols over other denominations across these hoards.

The findspots of the hoards from Sicyon line up closely with those of the Achaean League discussed in the previous chapter. Of these hoards, only four did not have a findspot in mainland Greece. One is, of course, IGCH 2053, located in Calabria. Another is IGCH 471, which was discovered further north in Macedonia. Finally, there were two hoards discovered in Crete, IGCH 252 and IGCH 253. While this shows that the coinage of Sicyon occasionally ventured further than the federal coinage of the Achaean League, it is not enough evidence to concretely claim there is a pattern within the deposits.

There is a repeat of the trends from Sicyon in the hoards containing coinage of Argos. Once again hoards with deposit dates within the 2nd c BCE were examined, of which there were 16¹⁹⁵. These hoards contain 670 silver coins, of which 669 are triobols. The lone non-triobol silver coin is a drachma in IGCH 195. Argos had a gap in their mint production from the mid-3rd century BCE until they began coin production for the Achaean League, and they only resumed the production of their own autonomous silver after the dissolution of the league in 146 BCE¹⁹⁶. Despite this fact, the majority of the hoards examined are dated to the middle of the 2nd c BCE, a

¹⁹⁴ 0.88% rather than 0.16%.

¹⁹⁵ The hoards examined were IGCH 182, IGCH 195, IGCH 217, IGCH 242, IGCH 243, IGCH 252, IGCH 254, IGCH 257, IGCH 258, IGCH 260, IGCH 261, IGCH 262, IGCH 271, IGCH 301, IGCH 2030, IGCH 2053. Of these hoards, IGCH 242, IGCH 257, IGCH 260, IGCH 261, IGCH 262, IGCH 271, IGCH 301, and IGCH 2053 also contained coinage of the Achaean League.

¹⁹⁶ Hoover 2011, 157.

full 100 years after silver production allegedly ceased at Argos. In addition, the majority of the hoards are dated to 146 BCE or earlier¹⁹⁷, and so cannot contain autonomous coinage from the post-Achaean League emissions of Argos. If it is indeed the case that Argos was not minting any new silver coins during her time in the Second Achaean League, then the alternative is that the triobols of Argos were a desirable coin – enough so that hundreds of them were collected across these hoards. Indeed, IGCH 262, dated to 146 BCE, contains 391 triobols of Argos. There is, of course, the possibility that these coins were minted and deposited immediately following the dissolution of the league – the findspot of Diakopto is only around 100km away from Argos.

The findspots of the hoards containing Argive coinage line up with what was also seen from Sicyon. Of the 16 hoards, 75% were found in mainland Greece. Moving to Calabria there is not only IGCH 2053, as expected, but an additional hoard in this region, IGCH 2030. Argos is the only of these three *poleis* to have her coinage show up in two different hoards within *Magna Graecia*. The other two hoards from outside of mainland Greece were both found in Crete. One of these is IGCH 252, which also contains coinage from Sicyon, however the other is IGCH 254, which does not. This means that, though both Sicyon and Argos have their coinage appear in two different hoards discovered in Crete, only one of these hoards is the same for the two *poleis*.

As mentioned above, across the 16 hoards examined, there were 670 silver coins. In addition to these, there were also 214 bronze coins. Though autonomous bronze coins from Achaean *poleis* were present in the hoards examined in chapter two, Argos was not one of the

¹⁹⁷ Coin hoards dated to 146 BCE or prior are: IGCH 182, IGCH 195, IGCH 217, IGCH 242, IGCH 243, IGCH 254, IGCH260, IGCH 261, IGCH 262, IGCH 2030, and IGCH 2053. Of the remaining hoards, IGCH 252, IGCH 257, IGCH258, and IGCH 301 all have a deposit date range that ends post-Achaean League dissolution, however they each begin while the league was still active, and so the deposits could be either pre- or post-dissolution. Only IGCH 271, with a deposit range of 145-135 BCE, is believed with certainty to post-date the dissolution of the Achaean League.

mints they were sourced to. There will be a brief discussion of the bronze coinage from those hoards below.

Examining the findspots of the hoards for these three *poleis*, there is minimal deviation from the pattern set by the league hoards. The hoards for Megalopolis do not deviate at all, all staying within the bounds of where the league hoards were found – however, given that only three hoards from this time period containing coinage of Megalopolis did not also contain coinage of the Achaean League, this makes sense. Both Sicyon and Argos went slightly further, and in similar directions. Both had coinage end up on Crete, though not much, and while Argos had an extra hoard in Calabria, Sicyon was the only *polis* to make it to Macedonia. However, the number of hoards to travel outside of mainland Greece is small for both, and so it is doubtful if this indicates a true difference in the circulation of the coinage from the federal emissions.

Something curious here is that none of these Achaean *poleis* had coinage present in hoards in Sicily. Recall that Sicily was the most prominent location for hoards from the *poleis* examined for the Acarnanian League. Indeed, only IGCH 2030 and IGCH 2035 were found in *Magna Graecia*. The hoards looked at for Achaean typically date to around a century later than those examined for Acarnania, so this could indicate a change in preference for importing coins from the Greek mainland at this time, or it could be indicative of a general preference for coinage from certain regions over others.

3.2.3 – Military Pay

The prevalence of the triobols in the coinage produced by the Achaean League and her member states certainly partially accounts for their prevalence in these hoards, yet the question of why triobols still remains largely unanswered. A coin of such a small denomination would be

relatively impractical for making large payments. Where the triobol would be useful, though, is in the paying of daily wages. There is a large number of hoards dated to the 2nd century BCE in this data set, a time of military upheaval in Greece. The deposit dates for IGCH 260, IGCH 261, IGCH 262, and IGCH 2063 being set to 146 BCE should not be ignored. This year is significant for Greece as a whole, but also for the Achaean League in particular, as it is the year of the Achaean War, when the league made a final stand against the Roman Republic. Utterly outmanned, common consensus is that there was little hope of Achaea winning this conflict. Prior to the Achaean War, the league was also in consistent conflict with Macedon, at times even allying herself with Rome to this end¹⁹⁸. All of this is to say that the first half of the 2nd century BCE was a time of near constant military activity for the Achaean League.

A possible explanation for the selection of triobols, then, can be put forward. Military activity requires soldiers, and soldiers require pay. From the end of the third century into the first half of the second, soldiers of a particular sort were especially common in the Achaean League. Mercenaries were a common presence within Achaean armies, their popularity possibly making up for the fact that Achaea had difficulties maintaining a long-term standing army of any significant size. Indeed, by the end of the 3rd century, these mercenaries were not merely hired on a case-by-case basis, but in fact were furnished with long-term contracts. They became such a staple of the Achaean forces that their ongoing military success relied quite heavily upon their presence¹⁹⁹. The ratio of mercenary to citizen soldiers within the army fluctuated, and can be difficult to determine. Polybius' account of the battle of Mantinea, includes a description of two wings of the phalanx made up of citizen soldiers, while the third wing was made up of foreigners

¹⁹⁸ Gruen 1976, 46.

¹⁹⁹ Griffith 1977, 102.

and mercenaries²⁰⁰. It is a relatively safe assumption that the foreign soldiers are mercenaries, meaning that up to one third of the so-called Achaeans fighting in this battle were not Achaean at all, but instead soldiers for hire²⁰¹.

By 146 BCE, the Achaean League was suffering financially, to the point where it has been argued that it would not have been possible for them to continue to employ the large force of mercenaries they had grown dependent on in the past²⁰². However, even accepting that the final battles of the Achaean League in 146 BCE did not include mercenary troops (something which is not certain), non-mercenary soldiers also needed pay. That a mercenary soldier is typically defined as a soldier who fights for pay conceals the fact that the citizen-soldiers of the ancient cities were also paid for their service²⁰³.

Moreover, soldiers were paid at least a portion of their wages in advance, so that they would have the money on hand for the campaign. The reason for this is that, whether mercenary or citizen-soldier, those fighting in an Ancient Greek army were often required to procure their own rations on a day-by-day basis²⁰⁴. The realities of the ancient world made travelling with enough food for an entire army impractical at best, and often wholly impossible. For this reason, it was common on the march for to pay each soldier a small amount of coinage to cover the cost of his rations, rather than to provide meals. This makes logistical sense, as the money necessary to purchase a month's worth of food takes up much less room than a month's worth of food. It was common for merchants to follow the army, selling food to the soldiers while on the march. As armies approached cities, they would send messengers ahead to request that the cities set up

²⁰⁰ Polybius 11.2.4; See Griffith pg. 104 for a full discussion of the possible interpretations of this passage.

²⁰¹ Griffith 1977, 105.

²⁰² Griffith 1977, 106.

²⁰³ English 2012, ix.

²⁰⁴ O'conner 2021, 515.

an *agora* for the soldiers. Often these markets would be set up outside the city walls, as ancient *poleis* had strict regulations concerning the selling of goods to non-citizens²⁰⁵.

There is little specific discussion of the acquisition of provisions for soldiers from the ancient sources, likely because it was considered mundane. The times when the purchasing of food is discussed are generally when some unique difficulty has arisen. One such example of this is provided by Thucydides, when he tells us that the Athenians were tricked into going far from their ships while at Eretria, since the Eretrians had set up their *agora* at a great distance from the harbour²⁰⁶. Noteworthy in this passage is that it is stated that the Athenians had left so that they could purchase their *ariston*, which typically means breakfast, though is occasionally used for other meals as well. This word choice has been used to support the argument that the purchasing of food was done on a daily basis by the soldiers, rather than an individual purchasing his rations in bulk²⁰⁷.

If the soldiers were buying food frequently in small portions, as is suggested in this passage, then minting triobols is a logical choice. This smaller coin would be more suitable for making these daily purchases. Another thing to note concerning that triobol is that there is precedent within the sources for this being the specific daily wage of a soldier. Though both of these references come from the Classical Period, and so predate the time period of this discussion by several centuries, they are nevertheless valuable to examine. The first comes from Thucydides, who tells us of the Athens-Argos treaty. Among other stipulations of this treaty, it is stated that hoplites and other infantry are to receive three Aeginetan obols per day for *sitos* – the

²⁰⁵ O’conner 2021, 527.

²⁰⁶ Thucydides 8.95.4

²⁰⁷ See O’Conner 2021 pp 515-520 for a full discussion of this argument.

name of this payment clearly implying it is meant to be used to purchase food²⁰⁸. The triobols of the Achaean League were minted to the Aeginetan standard, and this triobol was worth around four Attic triobols.

Xenophon makes another reference to the Aeginetan triobol being the standard daily value of a soldier. He presents that Sparta allowed those members of the Peloponnesian League who either were unable or unwilling to contribute soldiers to instead contribute one Aeginetan triobol per day per man they could not send – and this money was presumably to be used to hire mercenaries²⁰⁹. A fragment on Menander, too, references the amount paid in daily wages for a soldier, and this fragment specifically says four obols, rather than three²¹⁰. Given that Menander was an Athenian, he is no doubt speaking in Attic obols, where four would be worth the same as three Aeginetan obols.

From what evidence we have, though the payment of soldiers and mercenaries both for their wages and their rations are listed *tes hemeras*, the payments themselves would have almost certainly been made on a monthly basis, rather than daily²¹¹. This is similar to the modern practice of presenting wages as hourly, despite the fact that no worker is paid every hour. To pay soldiers their wages each day would have been logistically complicated. Nevertheless, the sheer volume of triobols present here implies that the soldiers were still paid with these smaller denominations, rather than aggregating the pay in larger coins. This would make calculating the amount owed each month far simpler.

²⁰⁸ Thucydides 5.47.6

²⁰⁹ Xenophon *Hell.* 5.2.21

²¹⁰ Menander frag. *Olynthia* 357 K. “μετ’ Ἀριστοτέλους γὰρ τέτταρας τῆς ἡμέρας / ὀβολοὺς φέρων.” trans. “With Aristotles bringing four obols a day” (author’s translation).

²¹¹ Trundle 2004, 90.

Though the dates of the hoards align with the Achaean War, an examination of the findspots of these particular hoards shows no confirmed crossover between these findspots and the locations of known battles of the Achaean War. The four main battle locations discussed by the historians are the Alpheus River in Elis, Scarphea in Locris, Chaeronea in Boeotia, and the final and largest battle at the Corinthian isthmus²¹². None of these hoards were found anywhere within Locris nor Boeotia. There are also no hoards with confirmed findspots near the Corinthian isthmus. While there is a hoard which was found near the Alpheus River²¹³, the official listed findspot of this hoard is Olympia, implying that, rather than a hoard from this battle, this may have been a deposit from the sanctuary located there.

Though it would have been interesting to line up hoard findspots with the known battles, that they do not line up does not indicate that these hoards were not from the military. The purposeful production and collection of triobols, a denomination heavily associated with the payment of both citizen soldiers and mercenaries, supports this theory, as does the dating, which will be discussed below.

3.2.4 – Achaean Bronze Coins

Bronze coins are found infrequently within these hoards, and unlike some of the other leagues examined, there are no bronze exclusive Achaean League hoards²¹⁴. Of the 7893 coins across these nine hoards, a total of 14 are bronze coins. One of these is league issued, two are from *polis* mints outside of the league, and the remaining eleven are autonomous issues from

²¹² Montagu 2000, 137-138.

²¹³ IGCH 270.

²¹⁴ The Acarnanian League, The Chalcidian League, and the Euboean League all had at least one bronze exclusive hoard.

mints within the league²¹⁵. It should be noted that these coins are not spread evenly across the nine hoards, but rather concentrated in just two of them – one in IGCH 242 and the other thirteen in IGCH 301. The bronze issues make up 7.2% of IGCH 301²¹⁶, and while not an insignificant percentage, based on the hoard data as a whole, it can be confidently stated that collecting the bronze coins of the league and her member-states was not a priority. This aligns with what is known to be true of general hoard trends, as discussed briefly above²¹⁷. In addition, taking the theory of military pay as the primary purpose of at least some these deposits, bronze coinage would not be suitable for this, as the previously discussed evidence supports payment in Aegintean triobols.

The Achaean League does not find its coinage in any bronze exclusive hoards, despite the fact that league clearly minted bronze coinage. This lends weight to the theory that the hoards containing coinage of the Achaean League were purposefully collected, and intended to be as uniform as possible. The hoards were collected with a purpose, and whatever that purpose was, it did not require bronze coinage.

3.2.5 – Dating of the Hoards

The deposit dates of Achaean League hoards are clustered around the middle of the 2nd century BCE, with four of the nine hoards dated to 146 BCE²¹⁸. Given that this was the year Rome defeated the Achaean League in their final stand, it is unsurprising that so many of the hoards would come from this year. In general, there are a larger number of hoards from periods of unrest. Though hoards were presumably consistently buried across both peace and war times,

²¹⁵ Seven from Messene and one each from Sicyon, Epidaurus, Cleitor, and Tegea.

²¹⁶ Of the 180 coins in this hoard, 13 are bronze and 167 are silver. Of the 167 silver coins, 165 are triobols.

²¹⁷ Howgego 1995, 88.

²¹⁸ IGCH 260, IGCH 261, IGCH 262, and IGCH 2053.

“... in war or invasion the number of owners unable to retrieve their property would be much higher”²¹⁹. The other hoards from this league are dated to not far from this event. Two have a dating within the decade immediately following²²⁰, and another two to the thirty-year period immediately prior²²¹. The final hoard from this set, IGCH 301, has a less specific deposit date provided, dated to somewhere in the period of 200-100 BCE.

3.2.6 – Conclusions

The nearly uniform nature of the hoards examined from the Achaean League provides a tantalizing glimpse into the purposes of the minting practices within Achaean, and implies purposefully collected hoards. That the predominant denomination is the triobol lends itself to the theory that these hoards, and by extension the majority of minting operations within Achaean, were intended to be used for military pay. This is further supported by the fact that the majority of coinage brought in from outside the league were also triobols, rather than coinage of other denominations brought in to fill the gaps in production created by a league which produced almost exclusively a single denomination.

The Achaean League was a league built on the triobol, a small silver coin perfect for paying the wages of not just soldiers but any labourer. The production and collection of these coins was purposeful, and the league’s strong reliance on mercenaries can certainly be taken as being at least a partial reason.

²¹⁹ Kraay 1966, 19.

²²⁰ IGCH 270, dated to 145-140 BCE, and IGCH 271, dated to 145-135 BCE.

²²¹ ICGH 242, dated to 165-160 BCE, and IGCH 257, dated to 175-145 BCE.

3.3 – The Chalcidian League

For this discussion, nine hoards were examined, with a total of 466 coins across these hoards. Though there are the same number of hoards as for the Achaean League, these hoards are significantly smaller. While the Achaean League averaged 877 coins per hoard, the Chalcidian League averages just under 52 coins per hoard. This means that the average Achaean League hoard is larger than the sum total of the coins examined from Chalcis. It is important to keep this in mind when examining patterns, as smaller discrepancies within these hoards may cause a comparatively larger impact on the data.

3.3.1 – Dating and Findspots of the Hoards

The hoards of the Chalcidian League are the most clustered of all the leagues examined in this study. Of the hoards, only a single one travelled outside of the Chalcidike Peninsula, and this one just barely, having been found outside the *polis* of Amphipolis²²². Of the nine hoards, seven were found specifically at Olynthus, the capital of the Chalcidian League. The only two hoards not found there were the aforementioned hoard discovered at Amphipolis, and IGCH 372, a hoard of uncertain provenience for which no definitive findspot can be given. That these hoards were discovered not just within league territory, but all within the same *polis* is noteworthy. Indeed, there were no hoards for this league discovered within the Chalcidike peninsula that were not discovered at Olynthus.

In addition to having the most uniformity in the findspots, the Chalcidian League also has the most hoards with the same suspected deposit date. Six of the nine hoards examined have a

²²² IGCH 364; Also recall that this hoard contained mostly non-Chalcidian coins, compared to the hoards found within league territory.

deposit date of 348 BCE. This is a date of great significance to the Chalcidian League, as it is the date Olynthus fell to the armies of Philip II of Macedon²²³. The discussion earlier concerning the prominence of hoards from times of unrest and upheaval applies here as well. It is no coincidence that, of the hoards dated to 348 BCE, five of the six were found in Olynthus – and the fifth is IGCH 372, of the uncertain provenience. Based on the findspots and dating, these hoards can be attributed to the invasion and subsequent capture of the capital city.

3.3.2 – Smaller Hoards

The hoards from the Chalcidian League are all significantly smaller than those of Achaea or Euboea. The largest hoard is IGCH 364, with 100 coins. This hoard is non-standard for the hoards of this league, however, in that this was the hoard located at Amphipolis. The hoards found at Olynthus are all smaller than this, with the smallest being IGCH 366, which contained just 9 coins.

Examining the sizes of the hoards from 348 BCE, the six hoards range in size from 34 coins to 84 coins, with an average size of 56. These hoards contain exclusively tetradrachms and tetrobols, with the exception of IGCH 378, which is a hoard of 34 bronze coins. In each hoard, the majority of the coins are federal emissions²²⁴. Tetradrachms and tetrobols are the most common silver overall for the hoards of this league, but the total absence of any other denomination is noteworthy. In several of the hoards from earlier periods, additional denominations made their way in from mints outside of the league. There are still coins from mints outside of the league in some of these six hoards, however they match the denominations

²²³ Zahrnt 2015, 357.

²²⁴ The highest percentage of federal coinage is in IGCH 372, at 97.1%. The lowest percentage is in IGCH 375, at 70.1%. The average percentage of federal coinage within these hoards is 80.6%.

of the coins from within the league²²⁵, showing a potential preference for these denominations over others.

It is possible that these relatively small hoards clustered around the time of the fall of Olynthus represent the personal wealth of citizens of the *polis* who were unable to retrieve it when Philip II took the city. If tetradrachms and tetrobols were the denomination of choice within the city, it would make sense not to have hoarded anything else, as uncommon denominations can be more difficult to spend²²⁶.

3.3.3 – Autonomous Emissions

Within the hoards examined for the Chalcidian League, there are examples of autonomous emissions from six different *poleis* within the Chalcidike Peninsula: Acanthus, Terone, Olynthus, Scione, Aeneia, and Potidaea. In addition, with the exception of a single hoard which was found near Amphipolis, the hoards from this league were all clustered in the peninsula. Examining the full catalogue of hoards containing coinage from these *poleis*, this does not remain the case once one allows for hoards not containing coinage of the Chalcidian League. For a complete list of hoards discussed in this section, including deposit date, findspot, and number of relevant coins, see Appendix J.

The first Chalcidian *polis* to examine is Acanthus, with 30 coin hoards on record containing their coinage²²⁷. Of these hoards, ten are located in mainland Greece. More

²²⁵ IGCH 373 contains 1 tetradrachm of Amphipolis, IGCH 374 contains 2 tetradrachms of Amphipolis, IGCH 375 contains 11 tetrobols of Perdiccas II, and IGCH 377 contains 10 tetrobols of Perdiccas II.

²²⁶ Recall Xenophon *Poroi* 3.2 regarding certain types of silver being 'declared not useable' in other states.

²²⁷ IGCH 357, IGCH 359, IGCH 360, IGCH 364, IGCH 372, IGCH 373, IGCH 374, IGCH 375, IGCH 378, IGCH 385, IGCH 1177, IGCH 1182, IGCH 1479, IGCH 1480, IGCH 1482, IGCH 1483, IGCH 1639, IGCH 1640, IGCH 1644, IGCH 1645, IGCH 1646, IGCH 1652, IGCH 1790, IGCH 1820, IGCH 1822, IGCH 1830, IGCH 1874, IGCH 2065, IGCH 2066, and IGCH 2071.

specifically, these ten²²⁸ are all located in the Chalcidike Peninsula save for one – IGCH 364, the league hoard discussed above, located just outside Amphipolis. Six of these ten hoards are clustered around the Chalcidian *polis* of Olynthus. A further 12 of these hoards are located in Egypt, Anatolia, or near the Ionian coast. Four were found even further east, with two found in what is modern day Afghanistan, one in modern Iran, and one in modern Tajikistan. Finally, there are four in *Magna Graecia* – one in Calabria and three in Sicily.

With Acanthus, then, there is a dramatic difference in the way the hoards are distributed than with those containing the league coinage. Hoards containing the coinage of Acanthus are by no means tied to the Chalcidike peninsula, and indeed those found in this location appear to be the minority. Moving on to the other *poleis* from this league this pattern continues, though none are as well represented within the hoards as Acanthus. The five remaining leagues have far fewer hoards on record than Acanthus, so first the find spots for each *polis* will be discussed, followed by analysis of the Chalcidian *poleis* as a group.

The next *polis* for us to consider is Terone. There are eight hoards to consider from this *polis*, less than half the number from Acanthus²²⁹. Of these, three come from Olynthus, four from Egypt, and one from Iran. Once again, these coins are more likely to be found in hoards further away from the territory of the league.

Moving on to Olynthus, the capital of the league. Despite this status, this *polis* has the fewest examples of coinage within the hoards²³⁰, with just four hoards identified containing

²²⁸ Of these ten, only two do not contain Chalcidian League coinage – IGCH 357 and IGCH 360.

²²⁹ IGCH 356, IGCH 366, IGCH 375, IGCH 1634, IGCH 1640, IGCH 1644, IGCH 1645, and IGCH 1790.

²³⁰ Or perhaps because of it, for Olynthus was likely producing federal coins.

coinage minted by this *polis*²³¹. Of the four hoards containing coinage from Olynthus, three were found on site at Olynthus, and the remaining hoard comes from Egypt.

The next Chalcidian *polis* to discuss is Scione, which has recorded coinage discovered in six hoards²³². Four of these hoards were discovered within the territory of the Chalcidian League, of which only one was not located at Olynthus²³³, and the remaining two hoards come from Egypt.

The Chalcidian *polis* of Aeneia has coinage present in five different hoards²³⁴. Of these five, two are from Chalcidian territory and three come from Egypt. It should be noted that, of the five *poleis* in discussed in this section, Scione is the only one which has just one coin present in each of the hoards. The rest of the *poleis* discuss all have at least one hoard which contains multiple coins from their mint.

Potidaea is the final mint from Chalcis. There are seven hoards within the catalogue which contain coinage from this mint²³⁵. Of these hoards, two were found in the Chalcidike Peninsula, three were found in Egypt, one was found in Italy, and one in Sicily.

It is immediately apparent that the findspots of these hoards containing autonomous coinage of the Chalcidian *poleis* differ substantially from those of the hoards with the league coinage. The furthest any of the league hoards travelled was Amphipolis which, while not on the Chalcidike peninsula, is quite close. The hoards examined here were often significantly further than this. One interesting thing to note is that none of these hoards were found in mainland

²³¹ IGCH 375, IGCH 377, IGCH 379, and IGCH 1644.

²³² IGCH 360, IGCH 375, IGCH 377, IGCH 378, IGCH 1637, and IGCH 1644.

²³³ IGCH 360 was discovered at Kassandreia.

²³⁴ IGCH 360, IGCH 377, IGCH 1634, IGCH 1635, and IGCH 1644.

²³⁵ IGCH 360, IGCH 378, IGCH 1636, IGCH 1644, IGCH 1645, IGCH 1874, and IGCH 2130.

Greece outside of the Chalcidike peninsula (save the hoard from Amphipolis). The coins were found far afield in Egypt, Asia, and Italy, and yet not in any hoards closer to home such as in the Peloponnese or Attica.

Across all five *poleis*, only three denominations of coins were present in the hoards – tetradrachms, tetrobols, and bronze coins²³⁶. These denominations line up with the denominations of civic coins which show up in league hoards, as well as the denominations present from the federal mints.

There is a substantial amount of crossover among these hoards. From the hoards discussed, four contained coins from two Chalcidian mints²³⁷, three contained coins from three²³⁸, two contained coins from four²³⁹, and one contained coinage from all five of the mints examined²⁴⁰. The hoard which contained coinage from all five mints, IGCH 1644, had a findspot in Assiut, Egypt.

What this crossover tells us is that the coinage from this *polis* had a tendency to circulate together. This makes sense, yet it makes the fact that it circulated without the coinage of the Chalcidian League more noticeable. It should be noted that the majority of the autonomous hoards discussed in this section have deposit dates of around the same time period as the deposit dates for hoards of the Chalcidian League, running from around the late- 5th century BCE to the mid- to late-4th century BCE.

²³⁶ For the purposes of this discussion, all bronze coins will be considered to be the same denomination.

²³⁷ IGCH 1634, IGCH 1640, IGCH 1790, and IGCH 1874.

²³⁸ IGCH 377, IGCH 378, and IGCH 1645.

²³⁹ IGCH 360 and IGCH 375.

²⁴⁰ IGCH 1644.

3.3.4 – Conclusions

The majority of the hoards examined for this league appear to be the result of Philip II's conquest of Chalcis and defeat of Olynthus in 348 BCE. These hoards are small, composed exclusively of the denominations used within the league itself, and were all found at Olynthus. Colin M. Kraay wrote "a concentration of hoards in one period or place is good evidence for unsettled and insecure times", and this is shown quite clearly here²⁴¹.

The near total lack of any coinage of the Chalcidian League outside of Chalcis seems to be an indication that these coins were minted for use within the league. Supporting this theory is the fact that the league coinage so greatly outnumbers even the civic coinage within the hoards from the fall of Olynthus. On the other hand, the coinage from the Chalcidian *poleis* travelled far, showing up in hoards as far as Sicily and modern Afghanistan. Based on this, it is very likely that the federal emissions and the autonomous emissions served different purposes – one intended to be used locally by federal citizens and one intended to be used further afield.

3.4 – The Euboean League

The Euboean League is the league from which the most hoards were examined. Sixteen hoards containing both autonomous and federal coinage are included in this discussion. Across these sixteen hoards there is a total of 2807 coins, for an average of just over 175 coins per hoard. These hoards are larger on average than those from Chalcis, however they are still significantly smaller than those from the Achaean League.

²⁴¹ Kraay 1966, 19.

3.4.1 – Prominence of Drachmae

When it comes to the federal emissions present in the Euboean League hoards, the preference for drachmae is obvious, though the silver is not exclusively in this denomination, as with the Achaean triobols. Drachmae make up 99% of the federal silver found across these hoards. The exceptions are three didrachm and six tetradrachms²⁴².

While there is a strong preference for the drachma in the federal coinage, the same cannot be said about the autonomous civic coinage present in the hoards. Though the drachma is the most common silver denomination present, it is not by nearly as much as in the federal examples. Across the sixteen hoards there are 114 drachmae, while there are 94 of next most common silver denomination, didrachms²⁴³. Several other silver denominations are present as well, in much smaller quantities²⁴⁴.

While drachmae are the most common denomination to show up in these hoards, and make up a significant portion of the federal coinage, there is a second type of coin which comes in close second. Indeed, at 38%, drachmae do not even make up the majority of coins across the sixteen hoards. This is due to the large number of bronze coins present, owing to five of the sixteen hoards being bronze coin hoards. These bronze coins make up a total of 30.5% of the coins examined. The bronze coins and the hoards they are sourced to will be discussed in detail below.

²⁴² IGCH 177 contains 1 tetradrachm, IGCH 188 contains 1 didrachm and 4 tetradrachm, IGCH 210 contains 1 didrachm, and IGCH 215 contains 1 didrachm and 1 tetradrachm.

²⁴³ For the purposes of this discussion, the 120 flans from IGCH 194 shall be discounted, though it is worth remembering that they were sourced to the mint at Chalcis and are the weight of a tetrobol. Were we to count them as such, tetrobols would be the most common denomination amount from the autonomous mints of Euboea. However, we cannot know the purpose of these flans, and so they are not included in this analysis.

²⁴⁴ The hoards contain 7 triobols, 5 tetrobols, and 1 tetradrachm.

3.4.2 – Autonomous Emissions

As perhaps makes sense for the league with the most hoards in the federal hoard portion of this study, Euboean *poleis* also have the most representation within the hoards when it comes to their autonomous emissions, with two of the *poleis* from the study with the highest number of hoards coming from this region²⁴⁵. Going over these hoards, it is important to keep in mind that, of the sixteen hoards examined for the federal emissions, only IGCH 165 and IGCH 166 do not have a findspot which can be definitively located on the island of Euboea. These hoards are of unknown provenience, and both shall be discussed in the section on problematic hoards below. For a detailed list of the hoards discussed, along with deposit dates, findspots, and number of relevant coins, see Appendix K.

Chalcis is the *polis* from this study with coinage present in the most hoards, with a total of 45 hoards containing coins from this *polis*²⁴⁶. Of these hoards, 14 came from Euboea itself, with a further 24 coming from somewhere in the rest of Greece. The remaining seven hoards are split across a variety of locations, with two coming from Macedonia, two from Egypt, two from Italy, and one from Crete.

The next *polis* examined from Euboea is Eretria, which has coinage found in 19 hoards²⁴⁷. Nine of these hoards were found within Euboea, and a further five came from

²⁴⁵ There are three *poleis* from this discussion with autonomous emissions present in over forty hoards. These are Chalcis with 45, Histiaea with 43, and Leucas with 42.

²⁴⁶ IGCH 3, IGCH 73, IGCH 112, IGCH 129, IGCH 133, IGCH 140, IGCH 157, IGCH 165, IGCH 173, IGCH 175, IGCH 176, IGCH 178, IGCH 182, IGCH 188, IGCH 195, IGCH 199, IGCH 205, IGCH 209, IGCH 219, IGCH 221, IGCH 223, IGCH 225, IGCH 226, IGCH 230, IGCH 232, IGCH 239, IGCH 240, IGCH 241, IGCH 242, IGCH 243, IGCH 245, IGCH 254, IGCH 260, IGCH 262, IGCH 266, IGCH 267, IGCH 270, IGCH 271, IGCH 301, IGCH 457, IGCH 471, IGCH 1640, IGCH 1644, IGCH 1875, and IGCH 2053.

²⁴⁷ IGCH 2, IGCH 5, IGCH 9, IGCH 10, IGCH 11, IGCH 136, IGCH 188, IGCH 219, IGCH 221, IGCH 223, IGCH 225, IGCH 226, IGCH 240, IGCH 241, IGCH 1483, IGCH 1639, IGCH 1640, IGCH 1644, and IGCH 1774.

elsewhere in mainland Greece. Of the remainder, three were found in Egypt, one in Syria, and one in Babylon.

From the mint in the Euboean *polis* of Carystus coins found their way into 20 hoards²⁴⁸, with a large majority of these hoards located within Euboea. Sixteen of the hoards were found within the territory of the league. Three were found within mainland Greece, and just one ventured from Greek shores, and was found in Egypt. Carystus is the only *polis* from which the majority of the hoards are located within league territory. The few hoards that fall outside Euboea also contain very few coins, with the three Greek hoards containing only one coin each²⁴⁹, and the Egyptian hoard not faring much better at three tetradrachms. On the other hand, six of the sixteen hoards found within Euboea contained at least ten coins.

The Euboean *polis* of Histiaea has her coinage present in the second most hoards within this study, with coinage showing up in 43 hoards²⁵⁰. Of these hoards only seven were found on the island of Euboea. The largest number were found in mainland Greece, with 21 hoards coming from somewhere in Greece outside of Euboea. There were also three found in Macedonia and three found in Crete. The remaining nine hoards have findspots unique within this study. Eight of these hoards were found within modern Bulgaria, and the final hoard was found in France.

²⁴⁸ IGCH 53, IGCH 167, IGCH 175, IGCH 177, IGCH 182, IGCH 188, IGCH 191, IGCH 192, IGCH 194, IGCH 205, IGCH 210, IGCH 215, IGCH 225, IGCH 226, IGCH229, IGCH 230, IGCH 241, IGCH 243, IGCH 344, and IGCH 1644.

²⁴⁹ IGCH 182, found in Achaea, contains one drachma.

IGCH 229, found in Boeotia, contains one bronze coin.

IGCH 243, found in the Peloponnese contains one drachma.

²⁵⁰ IGCH 69, IGCH76, IGCH93, IGCH120, IGCH129, IGCH 156, IGCH 159, IGCH 166, IGCH 175, IGCH 182, IGCH 188, IGCH 205, IGCH 218, IGCH 226, IGCH 228, IGCH 232, IGCH 233, IGCH 239, IGCH 243, IGCH 248, IGCH 253, IGCH 254, IGCH 262, IGCH 267, IGCH 270, IGCH 271, IGCH 304, IGCH 305, IGCH 309, IGCH 330, IGCH 471, IGCH 474, IGCH 475, IGCH IGCH 476, IGCH 860, IGCH 942, IGCH 943, IGCH 944, IGCH 945, IGCH 946, IGCH 947, IGCH 948, and IGCH 2374.

Just as with the Chalcidian League, there is a stark difference between the findspots of hoards with federal coinage and those without. The federal coinage was confined to the island of Euboea, not venturing outside of league territory, while the autonomous emissions of these *poleis* made their way quite far. For Chalcis and Histiaea, the two biggest hoards, it was more likely for a hoard to be somewhere in Greece that was not Euboea than to be on the island. The coinage also travelled quite far, with hoards found in Crete, Italy, Egypt, Asia, and even Bulgaria.

As is perhaps to be expected with as many hoards as exist for these *poleis*, there is substantial crossover between them. Of these hoards, fifteen contained coins from two of the four *poleis*²⁵¹, seven contained coinage from three of the four²⁵², and two contained coinage from all four²⁵³. As with the Chalcidian League, this seems to imply a tendency of these coins to co-circulate – once again highlighting the obvious absence of federal coinage from the hoards which were found further away.

A familiar hoard is examined here. Containing coinage from Chalcis, Eretria, and Carystus is IGCH 1644. This hoard, discovered in Assiut, Egypt, was also one of the hoards examined in the previous discussions of the autonomous hoards of both the Acarnanian League and the Euboean League. Indeed, this hoard was the only hoard discussed to contain coinage from all four Euboean *poleis*. This hoard of 681 coins contains a fascinating amalgamation of coinage from across the Mediterranean – the coinage comes from as far west as Himera to as far

²⁵¹ IGCH 129, ICGH 219, IGCH 221, IGCH 223, IGCH 230, IGCH 232, IGCH 239, IGCH 240, IGCH 254, IGCH 262, IGCH 267, IGCH 270, IGCH 271, IGCH 471, and IGCH 1640.

²⁵² ICGH 175, IGCH 182, IGCH 205, IGCH 225, IGCH 241, IGCH 243, and IGCH 1644.

²⁵³ IGCH 188 and IGCH 226.

east as Salamis. In total, 58 distinct mints are represented within this hoard alone²⁵⁴. With a deposit date estimated at around 475 BCE, the sheer scope of this hoard in regards to mints provides a unique view of the coinage of the Mediterranean, however this potentially harms its usefulness for the current discussion, as it cannot be said to be a typical deposit.

Looking at the 24 total hoards which contain coinage from at least two of the Euboean mints, it is noteworthy that all of them contain coinage from Chalcis. Recall that archaeological evidence supports Chalcis as the site of the federal mint of the Euboean League – they did not appear to have multiple mints producing their league coinage²⁵⁵.

It is tempting to assume that this is simply because Chalcis has coinage present in the most hoards, however coinage of Histiaea is present in only two fewer hoards, and the pattern of co-circulation is less distinct²⁵⁶. Fifteen of these hoards contain coinage from Histiaea, and while that comes to 62.5%, which seems noteworthy, it is nowhere near the 100% rate for Chalcis. In addition, both Eretria and Carystus show up in ten of these hoards, which is around 41.7%. These *poleis* both have less than half the hoard presence Histiaea has, yet have two-thirds of the presence in the hoards which display co-circulation. One of the reasons Histiaea seems underrepresented in these hoards comparatively could be the fact that nearly a quarter of the hoards containing coinage from this *polis* made their way to areas of Europe the coinage from the other *poleis* did not – namely, Bulgaria and France.

²⁵⁴ These mints are Metaponto, Caulonia, Croton, Rhegium, Himera, Zankle, Acanthus, Aegae, Aeneia, Mende, Olynthus, Potidaea, Scione, Sermylia, Stageira, Terone, Derrones, Ichnae, Orrescii, Abdera, Dicaea, Thasos, Peparethus, Corcyra, Leucas, Delphi, Tanagra, Carystus, Chalcis, Eretria, Athens, Aegina, Corinth, Melos, Naxos, Paros, Tenos, Abydos, Lampsacus, Parium, Clazomenae, Miletus, Teos, Chios, Samos, Cnidus, Cos, Camirus, Ialysus, Lindus, Phaselis, Idalium, Lapethus, Paphos, Salamis, Cyrene, Barce, and the Achaemenid Empire.

²⁵⁵ Knoepfler 2015, 164-165.

²⁵⁶ Histiaea appears to have been a very productive mint, with over 1400 extant examples of coinage catalogued by the American Numismatic Society.

These Bulgarian hoards are curious. Six of these hoards contain exclusively coinage from Histiaea²⁵⁷. In addition, the hoards seem to come from all across Bulgaria, with no two hoards having the same findspot. Compare this with the many hoards from Chalcis discovered on site at Olynthus. However, of the eight Bulgarian hoards, only one, IGCH 860, has a deposit date which falls conclusively within the time the Euboean League was issuing coinage. This hoard is not one of the ones containing exclusively coinage of Histiaea, but is instead a small hoard which had a single tetrobol from Histiaea within it. The other seven deposits can only tentatively be said to be from the same time period as the federal emissions, as these hoards are each dated 200-100 BCE. The Euboean League is believed to have minted coinage up until the Roman conquest of Greece, and concerning the dating for the hoards examined which contained federal emissions, none has a later potential dating than 165 BCE²⁵⁸. Whether these eight Bulgarian hoards can be considered contemporary with the federal emissions, then, largely depends on when in that period of 200-100 BCE the deposit was made²⁵⁹.

3.4.3 – The Dating and Location of the Hoards

Euboea is another federation whose federal coinage remained within its border²⁶⁰. The only hoards which cannot be conclusively situated within the island are IGCH 165 and IGCH 166. There are a number of somewhat problematic hoards within the Euboean section of this discussion, and a brief overview of these will take place below.

²⁵⁷ IGCH 942, IGCH 943, IGCH 945, IGCH 946, IGCH 947, and IGCH 948.

²⁵⁸ Both IGCH 240 and IGCH 241 are dated to 170-165 BCE.

²⁵⁹ That being said, it should be noted that the deposit date for a hoard will often not line up with the production date of the coinage. Coins are designed to be used for many decades, and so can end up in hoards dated to significantly later than the coinage was produced.

²⁶⁰ This study only considered hoards within which federal and autonomous coinage both appeared, however it is worth noting that there is only one additional hoard containing Euboean League coinage, IGCH 164. This is a hoard containing exclusively Euboean League drachmae, and was found in Euboea as well.

As seen in the previous section, coins from the Euboean *poleis* found their way into hoards across the ancient world, travelling both East and West. That it was multiple hoards in each location, often containing multiple coins, with some even containing coins from multiple Euboean *poleis* shows as that this was no coincidence. There must have been a pattern of circulation for the coinage of these *poleis* that led them to travel this far, and this pattern did not extend to the coinage of the league itself.

The key to this intense difference in distribution may lie in the dating of the hoards. The hoards containing silver coinage of the Euboean League²⁶¹ all have dates falling between 275-200 BCE, with the only exception being IGCH 215, with a date range of 230-170 BCE. Whether this hoard follows the dating standards of the others or not would depend on when within the 60-year period this hoard was deposited. When comparing the dating of the hoards containing autonomous civic coinage found outside of Euboea, only two of these 30 hoards were deposited in the 3rd century. The two exceptions to this otherwise remarkably consistent rule are IGCH 457, a hoard containing five drachmae from Chalcis which was deposited in Kozani, Macedonia in 240-230 BCE, and IGCH 860, a hoard containing a single tetrobol of Histiaea which was deposited in Bulgaria in 275-265 BCE. Outside of these two hoards, every hoard containing autonomous Chalcidian coinage found outside of Greece is dated to either before or after the 3rd century BCE.

There are gaps in the numismatic record for the Euboean League, gaps significant enough to cast doubt on the continued existence of this league during those time periods. However, these gaps do not quite lineup with what is represented here, as these gaps are earlier, from the 4th into

²⁶¹ The bronze hoards shall be discussed in their own section.

the 3rd centuries BCE²⁶². While there are hoards from before the 3rd century BCE, none of them are dated to the 4th century BCE. Instead, many of the hoards located in Egypt and Asia are dated to the 5th century BCE. The rest of the non-Greek hoards are dated to the 2nd century BCE. As mentioned, the hoards containing silver coinage from the Euboean League all date to the 3rd century BCE, assuming the acceptance of an earlier date in the deposit window for IGCH 215. In addition, it is generally accepted that the Euboean League stopped minting silver coinage by around the mid-3rd century BCE²⁶³. However, this does not mean that there was no Euboean League coinage with the hoards in the 2nd century BCE.

3.4.4 – The Bronze Exclusive Hoards

The Euboean League is unique amongst the leagues examined here for the large number of hoards containing exclusively bronze coins²⁶⁴. As mentioned, of the sixteen hoards examined, five of them are bronze exclusive²⁶⁵. Just as each of the hoards containing Euboean League silver can be (roughly) dated to the 3rd century BCE, the bronze hoards can all be dated to the early 2nd century BCE, with dates ranging from 198-165 BCE. The fact that the hoards are split between these two centuries, with silver emissions on one side and bronze emissions on the other, is certainly an interesting phenomenon.

The hoard with the earliest deposit date is IGCH 221, with a deposit date of 198-190 BCE. No other hoard has a deposit date range starting earlier than 196 BCE. This year is of significance in this period of Greek history as the year of Flaminius' proclamation concerning

²⁶² Knoepfler 2015, 162-164.

²⁶³ Wallace 1956, 118.

²⁶⁴ While the Acarnanian League technically has a larger proportion of bronze exclusive hoards, the fact that there are only two hoards in total somewhat lessens the impact of this.

²⁶⁵ Technically, IGCH 240 is not a bronze exclusive hoard, as it contains a single triobol from Opuntian Locris. However, given that the silver coin is but one of 60 coins in the hoard, as well as being sourced to outside of Euboea, this hoard will still be considered in the discussion of the bronze exclusive hoards.

the freedom of the Greeks. Though comparatively less attention is typically paid to the study of bronze coinage than silver, a general timeline of bronze emissions from the Euboean League has been proposed, with this proclamation in 196 BCE as the impetus for the first issues, and 168 BCE as the last²⁶⁶. These dates line up almost exactly with the deposit dates of the hoards. In the case of the Euboean federal coinage, it seems that the hoard deposit dates are also revealing the chronology of the coins themselves – at least, in a general sense.

3.4.5 – The Problematic Hoards

As was briefly discussed previously, some of the hoards of the Euboean League have a problematic provenience, or other causes for concern, which potentially calls their value as data for this discussion into question. This section will touch on the various questionable hoards examined, and go over how this could impact the discussion.

The first hoard to discuss is IGCH 156. This was a hoard containing 260 pieces of silver found near Eretria in 1935. A hoard of this size should be able to provide interesting data regarding cocirculation, or perhaps denominational preferences. Unfortunately, the hoard was dispersed before it could be properly recorded, and only 19 coins were able to be properly catalogued²⁶⁷. With 92.7% of this hoard unidentified, it is uncertain which *poleis* had coinage present, as well as what denominations made up the majority of the hoard. The dispersing of hoards such as this to private collections before they can be properly catalogued causes unfortunate gaps in the numismatic record where they need not exist.

²⁶⁶ Wallace 1956, 134-135. For a complete discussion of the methodology used to come to these dates for the coins, see in addition pages 119-132.

²⁶⁷ Wallace 1956, 53.

The next problematic hoard is IGCH 165. This hoard has an uncertain findspot, noted simply as somewhere in central Greece. While this could include Euboea, there is no way to confirm for certain. This hoard was shown to numismatist W. P. Wallace in 1950 by an Athenian coin dealer, who could provide neither where the hoard was found nor when it was discovered. In addition, he stated that he would not allow Wallace to publish the hoard unless he purchased it from him in its entirety, which he did not do²⁶⁸. Not knowing the findspot of this hoard causes it to be one of only two hoards in this discussion which cannot be definitively placed within Euboea. The other will be discussed below. Though it seems likely that this hoard did originate in Euboea, based on the pattern observed in the fourteen hoards with confirmed findspots, this cannot be said for certain, leaving unfortunate vagueness in this aspect of the discussion.

Next is IGCH 166, which has the same problem as IGCH 165 with an uncertain findspot listed simply as central Greece. Since between these hoards there are now two hoards which cannot be located within Euboea for certain, statements concerning the circulation patterns of the Euboean League coins are less concrete than they otherwise could be. The reason for IGCH 166's uncertain provenience is slightly different than for IGCH 165. This hoard is actually an amalgamation of three smaller hoards, all of which have an unknown findspot and discovery date²⁶⁹.

IGCH 175 is another hoard which is comprised of several smaller collections counted as one hoard, though in this instance the findspots are known. Unfortunately, knowledge of the contents of these smaller hoards is incomplete, though thankfully there is more information than with IGCH 156. For many of the coin types in this hoard, we have a minimum amount, but it is

²⁶⁸ Correspondence of Wallace/Noe about IGCH 0165, 1950.

²⁶⁹ Wallace 1956, 54-56.

highly likely that there were more, and they are unaccounted for. Of the 28 different coin types found within this hoard, 12 are potentially incorrectly catalogued²⁷⁰. Given that much of the discussion of co-circulation is done examining the amounts of coinage which show up in the hoards, the information obtained from this hoard is unfortunately not providing the full picture. Two different Euboean mints, Chalcis and Histiaea, are impacted, which increases the impact on the data.

Unique amongst the hoards discussed across all leagues, IGCH 194 contains within it 120 flans. The American Numismatic Society has six of these flans within their catalogue, and they are recorded as weighing between 2.64-2.79g, supporting an identification of these as unstruck tetrobols. They have been tentatively identified with the mint at Chalcis, where the hoard was discovered, however this is not a certain identification (figure 3.11)²⁷¹. Though an intriguing find within a hoard, these flans cause problems for this discussion. As was mentioned in the above section, identifying these flans as tetrobols adds a large number of this denomination to the analysis, and casts doubt on some of the conclusions regarding denomination within the Euboean League hoards. There is also the additional problem of the implication of flans within a hoard such as this. Clearly this is not a standard hoard, and cannot be expected to be representative of currency which was circulating at the time of the deposit. By their very definition as unstruck

²⁷⁰ The coins this applies to in this hoard are the drachmae of Alexander III of Macedon, both the staters and triobols of Opuntian Locris, the triobol from Phocis, the triobols from Boeotia, the drachma from Chalcis, the tetrobol from Histiaea, the tetradrachms of Athens, the didrachms and drachmae from Rhodes, the tetradrachms of the Seleucid Empire, and the Ptolemaic tetradrachms.

²⁷¹ The flans can be found within the catalogue at the following stable URLs:

<http://numismatics.org/collection/1944.100.20295>
<http://numismatics.org/collection/1944.100.20296>
<http://numismatics.org/collection/1944.100.20297>
<http://numismatics.org/collection/1944.100.20298>
<http://numismatics.org/collection/1944.100.20299>
<http://numismatics.org/collection/1944.100.20300>

coins, flans are not yet circulating within the economy. The presence of these 120 flans, then, could be an indication of unusual deposit circumstances surrounding IGCH 194.

IGCH 205 is relatively standard among the hoards examined, having a confirmed findspot and a seemingly complete catalogue of contents. However, it is worth noting here that this hoard is another hoard acquired as two separate lots. In addition, the two lots were acquired from two separate individuals, several years apart. The coins themselves are in very poor condition²⁷². While not a terribly unusual condition for a hoard to be catalogued from, it does increase the possibility that additional sections of the hoard have been lost, and so is worth noting here.

There is nothing concerning about the condition IGCH 215 was found in, however it is the smallest hoard from Euboea, containing just five coins. This means that any observations made concerning the denominational preferences ultimately mean very little. It was included in this discussion because it is a coin hoard containing federal and autonomous civic coinage, and the findspot being Euboea is still significant, however when any single coin makes up 20% of the hoard, there is very little meaningful numerical analysis that can be performed.

The final somewhat problematic hoard to discuss is IGCH 240. This is the only bronze hoard to be included in this section, as the bronze hoards from Euboea seem on the whole to be more consistent in the provenience and cataloguing. The concern for this hoard comes from the single non-bronze coin. The triobol, from the mint at Opuntian Locris, is believed to be an intrusion into this hoard²⁷³. Intrusions are not uncommon in hoards, and indeed this not the first

²⁷² Correspondence of Wallace/Thompson about IGCH 0205, 1958.

²⁷³ Wallace 1956, 121-123.

intrusion seen in a hoard in this study²⁷⁴. Even so, one would be remiss to leave this out in a survey of potential issues in the Euboean hoards, minor though this issue is.

In total, eight of the sixteen hoards examined for Euboea have at least minor concerns, and some have quite significant issues. While it is to be expected that the federation with the largest number of hoards would have the most problematic hoards, this is half of those discussed. While the data discussed here is still valuable, one should nevertheless keep in mind that there are potential issues with it which cannot be rectified, due to the nature of the hoards themselves.

3.4.6 – Conclusions

With the Euboean League, there is a continuation of the same patterns seen in Achaea and Chalcis. The hoards containing federal coinage circulate close to home, while the hoards containing the autonomous civic coinage travel outside of federal territory, and quite often outside of Greece entirely. There is also yet again a denominational preference, with drachmae dominating the silver coinage within the hoards from both the federal and autonomous civic mints. However, there is something here that is not present in the other hoards, with the silver coinage from outside the league being largely of denominations not present from either the federal or autonomous civic mints. It seems that the coins, in this case triobols and tetradrachms, were brought in to fill gaps.

Of further note is, in the dating of the hoards, the difference in federal emissions between the 3rd and 2nd centuries BCE, with the former presenting us with silver coins and the latter bronze. Combining this with the gap in the hoards containing autonomous civic coinage found

²⁷⁴ IGCH 262 contains an almost certainly intrusive Roman Republican Quinarius, which dates to 66 years after the deposit date of the hoard.

outside of Greece, with almost none of these having a deposit date during the time when the Euboean League was producing federal silver²⁷⁵. This shows a lull in the circulation of coinage of the Euboean *poleis* during this time, and likely indicates a cessation, or at least a reduction, of silver production from these mints.

All that being said, one should still keep the inherently problematic nature of a large number of these hoards in mind. Eight of the sixteen hoards in this discussion can be considered potentially troublesome in some way, as has been outlined above. Nevertheless, within this league there are clear patterns, which even the potentially corrupted data from the problematic hoards would only slightly weaken, rather than altogether dismiss.

3.5 – The Thessalian League

The Thessalian League hoards, of which three are examined in this discussion, contain a total of 1276 coins. This comes out to an average of just over 425 coins per hoard, however the extremely unequal distribution of these coins²⁷⁶ leads this average to be a largely unhelpful number to consider. Like the Acarnanian League, these hoards do not follow the same patterns as with the other leagues examined. This makes them problematic when it comes to attempting a league-to-league comparison, however it allows us to examine what was likely a unique situation within the Thessalian League at the time.

²⁷⁵ The two exceptions, IGCH 457 and IGCH 860, have been noted above.

²⁷⁶ IGCH 117 contains 38 coins and IGCH 162 contains 39 coins, while IGCH 313 contains 1199. This means that nearly 94% of the coins examined from Thessaly came from IGCH 313.

3.5.1 – Dating of the Hoards

The hoards of the Thessalian League are split along a date in a manner similar to those of the Euboean League²⁷⁷. From the 3rd century BCE there are two hoards containing minimal coinage of the Thessalian League²⁷⁸. The coinage of this league was clearly not circulating widely at this time, or if it was, it did not end up in the extant hoards. There is little more to be commented on concerning these two hoards.

The other hoard dates to 130-100 BCE. This hoard contains almost 1200 coins, 99.4% of which are Thessalian League federal coins, which stands in stark comparison to the earlier hoards. This shows a dramatic shift in the minting habits of the league. The cause of this shift is the reformation of the Thessalian *koinon* by the Romans in 196 BCE as the seat of Roman power in Greece²⁷⁹. With this, the minting practices of the league changed, and they began producing more silver, as well as producing their currency in new denominations.

3.5.2 – Greek and Roman Denominations

Under Rome, the Thessalian League minted drachmae and triobols, which can be seen in this hoard. The most common coin in this hoard, however, is the double victoriatus. As mentioned, this coin is a precursor to the more widely recognized sestertius, and was minted by the Roman Republic in the 2nd century BCE²⁸⁰. These coins appearing together shows us an example of dual minting in order to serve two different groups' needs. The drachmae and triobols were likely minted to be used by the local Greek population, who would have little

²⁷⁷ If we recall, all of the 3rd century BCE hoards contained federal silver, while all of the 2nd century BCE hoards were exclusively bronze.

²⁷⁸ Indeed, there is a good chance that IGCH 117 originally contained no coinage of the Thessalian League at all, as the coins present in this hoard date to significantly later than the hoard itself.

²⁷⁹ Bouchon and Helly 2015, 231.

²⁸⁰ Cascio 1981, 83.

interest in unrecognizable Roman silver, while the double victoriati could be used to, for example, pay the Roman troops stationed in the province. Though this hoard is dated to after the defeat of the Achaean League and the Roman conquest of Greece, the coins themselves were minted from the early 2nd century BCE²⁸¹. Military pay as a chief purpose of minting has been discussed previously, and it may well apply here as well.

This is an early example of what would become a trend for the mint at Larissa. The Thessalian League formed at the beginning of the 2nd century by the Romans lasted until around the 3rd century CE, and the mint continued to be a source of coinage, providing coins for many of the emperors²⁸². Entering the 2nd century BCE, Roman coinage has a presence in the hoards of several leagues discussed, but it is in the Thessalian League alone where there is a Greek federation minting these coins on behalf of Rome.

3.5.3 – Autonomous Emissions

Only three *poleis* of the Thessalian League produced autonomous coinage that found its way into hoards alongside the coinage of the league itself. These were Larissa, Magnesia in Thessaly, and Perrhaebia. As noted previously, the coinage of Larissa shows up in the two pre-Roman hoards, while that of Magnesia in Thessaly and Perrhaebia is present only in the hoard of Roman Thessaly. For a complete list of the hoards discussed, including deposit date, findspot, and number of relevant coins, see Appendix L.

²⁸¹ Cascio 1981, 83-85.

²⁸² For some (non-exhaustive) examples of Imperial coinage sourced to Larissa, see figures 3.11 through 3.16.

Autonomous coinage of Larissa shows up in 28 of the recorded coin hoards²⁸³. Of these, half were found within Thessaly, with another ten coming from elsewhere in mainland Greece. The remaining four hoards were found further north, with three in Macedonia and one in Yugoslavia. Nearly all of these hoards are dated to between the early-4th century and mid-3rd century BCE. There are only three hoards within this collection with dates falling later than this, in the early- to mid-2nd century BCE²⁸⁴. There are several commonalities in these later hoards. They all contain very few coins, with two containing one silver²⁸⁵ and one containing two bronze²⁸⁶. In addition, all three of these hoards were discovered in mainland Greece, outside of Thessaly itself. Given that in 197 BCE, with the so-called liberation of the Greeks under T. Quinctius Flaminius, the mint at Larissa switched to producing the federal emissions for the league²⁸⁷, it seems like these coins were almost certainly produced at an earlier date than the deposit estimation.

The first area to examine from the post-Rome hoards is Magnesia in Thessaly. Technically a region rather than a *polis*, the mint for this region appears to have been located in the city of Demetrias²⁸⁸. This mint has autonomous coinage present in just three hoards from the catalogue²⁸⁹. All three hoards were located within Thessaly and all three have deposit dates within the 2nd century BCE.

²⁸³ IGCH 52, IGCH 55, IGCH 56, IGCH 57, IGCH 58, IGCH 61, IGCH 70, IGCH 71, IGCH 74, IGCH 76, IGCH 96, IGCH 103, IGCH 111, IGCH 116, IGCH 117, IGCH 146, IGCH 157, IGCH 162, IGCH 168, IGCH 219, IGCH 232, IGCH 245, IGCH 371, IGCH 383, IGCH 384, IGCH 385, IGCH 386, and IGCH 447.

²⁸⁴ IGCH 219 is dated to 200-170 BCE, IGCH 232 is dated to 171-169 BCE, and IGCH 245 is dated to 175-150 BCE.

²⁸⁵ IGCH 232 and IGCH 245.

²⁸⁶ IGCH 219.

²⁸⁷ Gardner and Poole 1888, 1-6.

²⁸⁸ Gardner and Poole 1888, xxxi.

²⁸⁹ IGCH 239, IGCH 306, and IGCH 313.

Perrhaebia is similar to Magnesia, in that it was a region within Thessaly, rather than a *polis*. The mint for this region was in the city Olosson. Coinage from this region shows up only in a single hoard within the catalogue – IGCH 313, the hoard which was examined in the federal hoard analysis in the previous chapter. Within this hoard of 1199 coins, Perrhaebia has a single drachma.

The hoards which contain the coinage of Magnesia in Thessaly and Perrhaebia are dated exclusively to the 2nd century BCE. There is no crossover between the hoards containing coinage of Larissa and the those containing Magnesia in Thessaly and Perrhaebia. This is certainly due to the different time periods the coins were circulating – coinage of Larissa circulated a century or more earlier than coinage from the other two mints.

Looking at these hoards, it is clear that coinage from Thessaly tended to stay within Thessaly, at least as far as hoards are concerned, and rarely ventured outside of Greece. It is noteworthy that, though four hoards containing coinage from Larissa were found outside of Greece, they were not found overseas. Rather, they were found further inland, north of Greece in Macedonia and Yugoslavia.

3.5.4 – Conclusions

Though the Thessalian League is a fascinating example of minting practices within a Greek federation, it is because it is so interesting that it is largely unrelated to the discussion here. It is unique in its production of Roman coinage, so there is nothing to compare to the other leagues discussed. This puts it in much the same category as the Acarnanian League. This is evidence of a mint ceasing production of autonomous coinage in order to begin production of federal issues, as the coinage from Larissa appears to stop once the mint begins to produce the

coinage for the Thessalian League in the 2nd century BCE. Unlike with some of the other federations, there is no strong preference for any specific denomination. Of the Greek coinage, the drachma far outnumbers the triobol, however this could simply be because hoards tend to contain higher denominations, rather than that this league preferred the drachma to the triobol.

As seen before, this league also follows the standard pattern of autonomous civic coinage travelling further than the federal emissions do, though half of the hoards containing coinage of Larissa can be sourced to Thessaly, so the difference is less pronounced. In addition, the small number of true Thessalian League hoards makes this a difficult pattern to confirm. If there were a larger sample size, it would be perhaps more worthy of discussion. Overall, the Thessalian League provides much to discuss, while confirming little.

3.6 – Concluding Thoughts

The patterns in the circulation of the autonomous emissions across these five leagues provide an interesting counterpoint to the patterns in the circulation of the federal emissions. For each league, the autonomous coins had a much wider range of circulation. As consistent as this pattern is, it cannot be coincidence. It is clear that the coins from Greek *poleis* circulated throughout the Mediterranean basin, though where within this area they are found seems to differ from *polis* to *polis*. The question then becomes why the coins of the federal states did not follow this pattern, as seen in chapter 2. The final section of this study will discuss all the information accumulated here, and combining the patterns noticed with the additional research presented here, explanations will be put forth for the drastic differences in circulation evident.

Conclusions

The production of a unified coinage has many benefits for a group of states, whether or not they are members of a federation. It helps remove the economic barrier imposed by dissident currency, something which the Ancient Greeks were aware was a concern. Removing this economic barrier could, in theory, have a beneficial effect on inter-state trade, although in practice the true impact on trade is somewhat more complicated to determine. An additional benefit in the ancient world was the pooling together of resources, as the minting process was expensive, occasionally prohibitively so. For these reasons, the practice of minting a unified or cooperative coinage was common from the early days of minted currency,

Within the federal states of Classical and Hellenistic Greece, this seems to have been a standard practice. Of the nine leagues examined in chapter one, all produced some form of unified currency at some point. The economic benefits provided by such a currency would have been very attractive to these states, as they help to foster a kind of economic unity. For this reason, even though the economic practices of these states differed, this tendency to produce a unified coinage remained across all of them.

In an effort to identify potential purpose for the minting of these coins, beyond the somewhat intangible economic benefits, a selection of coin hoards containing the coins of five different leagues were examined. The hoards selected were those containing both federal issues and issues from *poleis* within the federations. For each of these leagues, clear patterns were identified in the hoards.

The first pattern to note is that of findspot. For each of the five leagues, the hoards had a tendency to cluster within league territory, and the few that were found outside of the territory of

the league were generally within a couple hundred kilometers. The only exception to this is an Achaean League hoard discovered in Calabria, the contents of which support the understanding that this hoard was collected in Achaia and transported to Italy as a single unit, and therefore does not work against the argument for regional circulation presented by these hoards.

The hoards also show a tendency to favour one denomination above the rest. This is seen most clearly in the Achaean League hoards, the vast majority of which are made up of triobols, a relatively small silver coin. In the same vein as the denomination preference, there is also a pattern of denominational crossover. In almost every hoard examined, federal and autonomous coins show up in the same denominations. There are only two examples of hoards where the federal and autonomous civic coins are in entirely different denominations, and both of these are non-standard hoards from Euboea. This denominational crossover indicates two things. First, it supports the idea of a denominational preference within a league. Second, it shows that federal and autonomous civic coins are not circulating together for the purposes of filling some sort of denominational gap.

Examining the clustering of these hoards around the territory of their league, the next question was whether this was simply a function of coins in the ancient world. If it was standard for all coins from these regions to remain within the area they were minted, then the tendency of federal coins to do just that is hardly remarkable. To ensure that this was not the case, hoards containing coins from the *poleis* within these federations were examined, and their find spots tallied up. The data shows that, for almost every *polis*, it is more likely that the coins were hoarded outside of league territory, rather than within it. From the hoards containing league coins, there is only one with a findspot outside of Greece, IGCH 2053, found in Calabria. However, with the autonomous civic coins, there are hoards found in Southern Italy, Sicily,

Crete, Egypt, Bulgaria, and deep into Asia. Nor are these hoards anomalies. Each of the locations listed have multiple hoards discovered there.

So now one might question why the league coins did not make their way around the Mediterranean basin the way the coins of their member-states did. The reason for this could be that the federal coins were minted for a specific purpose, and that purpose was wholly regional. Returning to the economic benefits of a unified coinage, the coins could have been minted mainly for trade between member-states. Recall that one of the benefits of gained by citizens of select federations was the ability to purchase property in any of the other *poleis* in that state. A unified federal currency would simplify this process. It could be used for smaller purchases as well.

Looking to the Achaean League, there is a different purpose identified for the federal coinage. The uniformity of the hoards, made up almost entirely of triobols, supports a reading of these hoards as having been collected for the purpose of paying the wages of soldiers, mercenary or otherwise. The triobols used by the Achaean League were minted to the Aeginetic standard, meaning they were worth around four Attic obols. There is a plethora of evidence across the ancient sources supporting this as the daily wage of a low-ranking soldier. Along with the clustered findspots of the hoards and the general dating of these hoards to 146 BCE indicates that these hoards are related to the Achaean War, and the league's final stand against Rome.

Moving beyond the hoards specifically, it seems likely that the coins minted by the Achaean League as a whole were intended to facilitate the hiring of mercenary troops, a common practice within the league armies, as supported by the ancient sources. That the league minted exclusively triobols for the entirety of its Hellenistic existence supports this. The triobol is also the most common denomination minted by the member-states of the Achaean League. It is

known that the members of the Achaean League contributed to a military fund of some variety, and potentially the *poleis* were minting these triobols for that purpose.

The minting of coins in the ancient world was a labour and resource intensive practice, and so not one that any state would undergo without reasonable cause. When the member-*poleis* of a federal state already mint their own coins, there must be a specific reason for them to begin minting of coinage on the federal level. Whether this reason was the optimization of resources, increasing economic mobility, or something more specific such as the payment of mercenary troops, it is important to not view the minting of these common currencies as a default action on the part of the state. Given the amount of coordination involved, it is not a decision that would be made lightly. Through further examination of the differences between the autonomous civic coins and the federal issues, the specific purposes these coins were minted for can be identified.

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Appendix A – The Federal Issues

Table 1.1 – Federal Issues Discussed in Chapter 1

League	Denomination	Obverse	Reverse	Source
Acarnanian League	Silver Hemistater			http://numismatics.org/collection/1944.100.19465
Achaean League	Silver Triobol			http://numismatics.org/collection/1944.100.37606
Aetolian League	Silver Tetradrachm			Frederick Sheu, "Coinage Systems of Aetolia," Numismatic Chronicles (1960), second group, monogram 8; BMC Thessaly pg. 194, 4ff.
Arcadian League	Silver Triobol (5 th Century BCE)			http://numismatics.org/collection/1944.100.40024

<p>Arcadian League</p>	<p>Silver Obol (4th Century BCE)</p>			<p>http://numismatics.org/collection/1944.100.40028</p>
<p>Boeotian League</p>	<p>Silver Stater</p>			<p>http://numismatics.org/collection/1923.999.94</p>
<p>Chalcidian League</p>	<p>Silver Triobol</p>			<p>http://numismatics.org/collection/1991.93.8</p>
<p>Epirus</p>	<p>Bronze Coin of Pyrrhos</p>			<p>http://numismatics.org/collection/1944.100.18811</p>

<p>Euboean League</p>	<p>Silver Didrachm</p>			<p>http://numismatics.org/collection/1967.46.90</p>
<p>Thessalian League</p>	<p>Silver Double Victoriatus</p>			<p>http://numismatics.org/collection/1935.117.163</p>

Appendix B – Acarnanian League Hoards

Table 2.1 – IGCH 145

Number	Coin
5	Acarnanian League, Bronze
18	Oeniadae, Bronze

(source: [CoinHoards: IGCH 145](#))

Table 2.2 – IGCH 312

Number	Coin
73	Acarnanian League, Bronze
61	Oeniadae, Bronze

(source: [CoinHoards: IGCH 312](#))

Appendix C – Achaean League Hoards

Table 2.3 – IGCH 242

Number	Coin
7	Aetolian League, Silver, Triobol
5	Silver, Triobol (Opuntian Locris)
1	Silver, Triobol (Phocis)
2	Silver, Drachma (Boeotia)
6	Silver, Triobol (Boeotia)
2	Chalcis, Silver, Drachma
1	Silver, Drachma (Aegina)
152	Achaean League, Silver, Triobol
1	Sicyon, Silver, Drachma
10	Sicyon, Silver, Triobol
1	Bronze (Elis)
4	Argos, Silver, Triobol
1	Cleonae, Silver, Triobol
37	Megalopolis, Silver, Triobol
1	Rhodes, Silver, Didrachm

(source: [CoinHoards: IGCH 242](#))

Table 2.4 – IGCH 257

Number	Coin
1	Aetolian League, Silver, Triobol
1	Silver, Triobol (Opuntian Locris)
1	Silver, Triobol (Boeotia)
7	Sicyon, Silver, Triobol
75	Achaean League, Silver, Triobol
1	Messene, Silver, Triobol
3	Lacedaemon, Silver, Triobol
41	Argos, Silver, Triobol
16	Arcadian League, Silver, Triobol

(source: [CoinHoards: IGCH 257](#))

Table 2.5 – IGCH 260

Number	Coin
21	Aetolian League, Silver, Triobol
13	Silver, Triobol (Opuntian Locris)

5	Silver, Triobol (Phocris)
6	Silver, Triobol (Boeotia)
31	Chalcis, Silver, Drachma
429	Achaean League, Silver, Triobol
53	Sicyon, Silver, Triobol
1	Patrae, Silver, Triobol
1	Messene, Silver, Triobol
2	Lacedaemon, Silver, Triobol
35	Argos, Silver, Triobol
80	Megalopolis, Silver, Triobol

(source: [CoinHoards: IGCH 260](#))

Table 2.6 – IGCH 261

Number	Coin
1	Aenianes, Silver, Triobol
1	Lamia, Silver, Triobol
104	Silver, Triobol (Aetolia)
11	Silver, Triobol (Opuntian Locris)
32	Silver, Triobol (Boeotia)
22	Silver, Drachma (Boeotia)
3	Silver, Drachma (Aegina)
1	Corinth, Silver, Triobol
11	Sicyon, Silver, Triobol
654	Achaean League, Silver, Triobol
2	Messene, Silver, Triobol
96	Argos, Silver, Triobol
47	Megalopolis, Silver, Triobol

(source: [CoinHoards: IGCH 261](#))

Table 2.7 - IGCH 262

Number	Coin
1	Lamia, Silver, Triobol
63	Aetolian League, Silver, Triobol
12	Silver, Triobol (Opuntian Locris)
4	Silver, Triobol (Phocis)
28	Silver, Triobol (Boeotia)
7	Thebes, Silver, Triobol
92	Chalcis, Silver, Drachma

6	Histiaea, Silver, Tetrobol
29	Sicyon, Silver, Triobol
430	Sicyon, Silver, Triobol
1	Aegae, Silver, Triobol
1601	Achaean League, Silver, Triobol
6	Messene, Silver, Triobol
2	Corone, Silver, Triobol
22	Argos, Silver, Triobol
369	Argos, Silver, Triobol
226	Megalopolis, Silver, Triobol
1	Roman Republic, Silver, Quinarius (83-82 BCE)
100	Silver (Unknown)

(source: [CoinHoards: IGCH 262](#))

Table 2.8 – IGCH 270

Number	Coin
[?]	Aenianes, Silver, Triobol
[?]	Lamia, Silver, Triobol
[?]	Thebae, Silver, Triobol
[?]	Silver, Triobol (Phocis)
[?]	Silver, Triobol (Opuntian Locris)
[?]	Silver, Drachma (Boeotia)
[?]	Silver, Triobol (Boeotia)
[?]	Chalcis, Silver, Drachma
[?]	Histaea, Silver, Drachma
[?]	Silver, Drachma (Aegina)
[?]	Sicyon, Silver, Triobol
630	Achaean League, Silver, Triobol
50	Megalopolis, Silver, Triobol
[?]	Silver, Triobol (Peloponnesus)
[?]	Rhodes, Silver, Didrachm
157	Silver (Unknown)

(source: [CoinHoards: IGCH 270](#))

Table 2.9 – IGCH 271

Number	Coin
2	Aenianes, Silver, Triobol
4	Lamia, Silver, Triobol

1	Oeta, Silver, Triobol
1	Thessalian League, Silver, Triobol
97	Silver, Triobol (Aetolia)
17	Silver, Triobol (Opuntian Locris)
1	Silver, Triobol (Phocis)
11	Silver, Triobol (Boeotia)
4	Silver, Drachma (Boeotia)
72	Chalcis, Silver, Drachma
6	Histaea, Silver, Drachma
39	Athens, Silver, Tetradrachm
1	Silver, Drachma (Aegina)
838	Achaean League, Silver, Triobol
50	Sicyon, Silver, Triobol
2	Messene, Silver, Triobol
151	Megalopolis, Silver, Triobol
2	Cyme, Silver, Tetradrachm
39	Roman Republic, Silver, Denarius

(source: [CoinHoards: IGCH 271](#))

Table 2.10 – IGCH 301

Number	Coin
1	Silver, Triobol (Aetolia)
2	Chalcis, Silver, Drachma
13	Sicyon, Silver, Triobol
1	Sicyon, Bronze
6	Patrae, Silver, Triobol
133	Achaean League, Silver, Triobol
1	Achaean League, Bronze
7	Bronze (Messenia)
2	Lacedaemon, Silver, Triobol
2	Argos, Silver, Triobol
1	Methana, Bronze
1	Epidaurus, Bronze
8	Megalopolis, Silver, Triobol
1	Cleitro, Bronze
1	Tegea, Bronze

(source: [CoinHoards: IGCH 301](#))

Table 2.11 – IGCH 2053

Number	Coin
2	Aenianes, Silver, Triobol
1	Oeta, Silver, Triobol
4	Silver, Triobol (Aetolia Region)
1	Silver, Triobol (Locris Region)
2	Silver, Triobol (Boeotia Region)
2	Thebes, Silver, Triobol
3	Chalchis, Silver, Drachma
322	Achaean League, Silver, Triobol
18	Patrae, Silver, Triobol
38	Sicyon, Silver, Triobol
13	Silver, Triobol, (Messenia Region)
23	Lacedaemon, Silver, Triobol
49	Argos, Silver, Triobol
12	Silver, Triobol (Arcadia Region)
9	Megalopolis, Silver, Triobol

(source: [CoinHoards: IGCH 2053](#))

Appendix D – Chalcidian League Hoards

Table 2.12 – IGCH 359

Number	Coin
12	Acanthus, Silver, Tetrobol
3	Chalcidian League, Silver, Tetrobol
3	Perdiccas II of Macedon, Silver, Tetrobol
1	Athens, Silver, Drachma

(source: [CoinHoards: IGCH 359](#))

Table 2.13 – IGCH 364

Number	Coin
1	Acanthus, Silver, Tetradrachm
4	Acanthus, Silver, Tetrobol
2	Amphipolis, Silver, Drachma
1	Amphipolis, Silver, Tetrobol
2	Chalcidian League, Silver, Tetrobol
8	Eion, Silver, Trihemiobol
40	Neapolis, Silver, Drachma
35	Neapolis, Silver, Triobol
2	Perdiccas II of Macedon, Silver, Tetrobol
5	Silver (Unknown)

(source: [CoinHoards: IGCH 364](#))

Table 2.14 – IGCH 366

Number	Coin
7	Chalcidian League, Silver, Tetrobol
1	Terone, Silver, Tetrobol
1	Perdiccas II of Macedon, Silver, Tetrobol

(source: [CoinHoards: IGCH 366](#))

Table 2.15 – IGCH 372

Number	Coin
1	Acanthus, Silver, Tetradrachm
33	Chalcidian League, Silver, Tetradrachm

(source: [CoinHoards: IGCH 372](#))

Table 2.16 – IGCH 373

Number	Coin
2-3	Acanthus, Silver, Tetradrachm
1	Amphipolis, Silver, Tetradrachm
43	Chalcidian League, Silver, Tetradrachm

(source: [CoinHoards: IGCH 373](#))

Table 2.17 – IGCH 374

Number	Coin
3	Acanthus, Silver, Tetradrachm
2	Amphipolis, Silver, Tetradrachm
19	Chalcidian League, Silver, Tetradrachm
60	Chalcidian League, Silver, Tetrobol

(source: [CoinHoards: IGCH 374](#))

Table 2.18 – IGCH 375

Number	Coin
4	Acanthus, Silver, Tetrobol
53	Chalcidian League, Silver, Tetrobol
2	Olynthus, Silver, Tetrobol
2	Scione, Silver, Tetrobol
3	Terone, Silver, Tetrobol
11	Perdiccas II of Macedon, Silver, Tetrobol

(source: [CoinHoards: IGCH 375](#))

Table 2.19- IGCH 377

Number	Coin
1	Aeneia, Silver, Tetrobol
1	Olynthus, Silver, Tetrobol
1	Scione, Silver, Tetrobol
4	Chalcidian League, Silver, Tetradrachm
46	Chalcidian League, Silver, Tetrobol
10	Perdiccas II of Macedon, Silver, Tetrobol

(source: [CoinHoards: IGCH 377](#))

Table 2.20 – IGCH 378

Number	Coin
2	Acanthus, Bronze
25	Chalcidian League, Bronze
5	Potidaea, Bronze
2	Scione, Bronze

(source: [CoinHoards: IGCH 378](#))

Appendix E – Euboean League Hoards

Table 2.21 – IGCH 156

Number	Coin
18	Euboean Leage, Silver, Drachma
1	Histaea, Silver, Drachma
241	Silver (Unknown)

(source: [CoinHoards: IGCH 156](#))

Table 2.22 – IGCH 165

Number	Coin
30	Chalcis, Silver, Drachma
1	Chalcis, Silver, Triobol
49	Euboean League, Silver, Drachma

(source: [CoinHoards: IGCH 165](#))

Table 2.23 – IGCH 166

Number	Coin
10	Euboean League, Silver, Drachma
1	Histiaea, Silver, Tetrobol
9	Euboean League, Silver, Drachma
15	Euboean League, Silver, Drachma

(source: [CoinHoards: IGCH 166](#))

Table 2.24 – IGCH 167

Number	Coin
2	Alexander III of Macedon, Silver, Drachma (336-323 BCE)
1	Carystus, Silver, Didrachm
2	Carystus, Silver, Drachma
31	Euboean League, Silver, Drachma
2	Athens, Silver, Tetradrachm
4	Alexander III of Macedon, Silver, Drachma (336-323 BCE)
3	Carystus, Silver, Didrachm
30	Euboean League, Silver, Drachma
3	Alexander III of Macedon, Silver, Drachma, 336-323 BCE
84	Euboean League, Silver, Drachma
3	Silver (Unknown)

(source: [CoinHoards: IGCH 167](#))

Table 2.25 – IGCH 175

Number	Coin
1	Philip II, Silver, Tetradrachm (359-336 BCE)
24+	Alexander III of Macedon, Silver, Drachma (336-323 BCE)
1	Demetrius I Poliorcetes, Silver, Tetradrachm (294-288 BCE)
1	Demetrius I Poliorcetes, Silver, Drachma (294-288 BCE)
3	Demetrius I Poliorcetes, Silver, Triobol (294-288 BCE)
15	Antigonus II Gonatas, Silver, Tetradrachm (277-239 BCE)
18	Lysimachus, Silver, Tetradrachm (306-281 BCE)
2	Lysimachus, Silver, Drachma (306-281 BCE)
2+	Silver, Stater (Opuntian Locris)
18+	Silver, Triobol (Opuntian Locris)
1+	Silver, Triobol (Phocis)
1	Tanagra, Silver, Stater
5	Silver, Stater (Boeotia)
5	Silver, Drachma (Boeotia)
5+	Silver, Triobol (Boeotia)
1	Carystus, Silver, Drachma
1+	Chalcis, Silver, Drachma
6	Euboean League, Silver, Didrachm
7	Euboean League, Silver, Tetradrachm
275	Euboean League, Silver, Drachma
1+	Histaea, Silver, Tetrobol
31+	Athens, Silver, Tetradrachm
1	Paros, Silver, Tetradrachm
2	Kingdom of Pergamum, Silver, Tetradrachm
7+	Rhodes, Silver, Didrachm
[?]	Rhodes, Silver, Drachma
2+	Seleucid Empire, Silver, Tetradrachm
136+	Ptolemy I/II/III, Silver, Tetradrachm

(source: [CoinHoards: IGCH 175](#))

Table 2.26 – IGCH 177

Number	Coin
1	Alexander III of Macedon, Babylon, Silver, Tetradrachm (323-310 BCE)
1	Alexander III of Macedon, Uncertain value, Silver, Tetradrachm (323-310 BCE)
3	Alexander III of Macedon, Silver, Drachma (336-323 BCE)
37	Carystus, Silver, Didrachm

8	Carystus, Silver, Drachma
1	Euboean League, Silver, Tetradrachm
1	Euboean League, Silver, Drachma
28	Euboean League, Silver, Drachma
6	Athens, Silver, Tetradrachm
2	Silver, Stater (Elis)
1	Seleucus I Nicator, Seleuceia ad Tigrim, Silver, Tetradrachm, 305 BCE-281 BCE
1	Seleucus I Nicator, Ecbatana, Silver, Tetradrachm, 305 BCE-281 BCE
1	Antiochus Hierax, Abydus, Silver, Tetradrachm, 242 BCE-227 BCE
1	Alexander III of Macedon, Miletus, Silver, Tetradrachm, 323 BCE-310 BCE
1	Alexander III of Macedon, Marathus, Silver, Tetradrachm, 323 BCE-310 BCE
1	Alexander III of Macedon, Tyre, Silver, Tetradrachm, 323 BCE-310 BCE
9	Alexander III of Macedon, Silver, Drachma, 336 BCE-323 BCE
1	Lysimachus, Lampsacus, Silver, Tetradrachm, 306 BCE-281 BCE
1	Lysimachus, Ephesus, Silver, Drachma, 306 BCE-281 BCE
15	Carystus, Silver, Didrachm
8	Carystus, Silver, Drachma
236	Euboean League, Silver, Drachma
11	Athens, Silver, Tetradrachm
1	Seleucus I Nicator, Uncertain value, Silver, Drachma, 305 BCE-281 BCE
1	Antiochus I Soter, Seleuceia ad Tigrim, Silver, Tetradrachm, 281 BCE-261 BCE

(source: [CoinHoards: IGCH 177](#))

Table 2.27 – IGCH 188

Number	Coin
1	Euboean League, Silver, Didrachm
4	Euboean League, Silver, Tetradrachm
2	Euboean League, Silver, Drachma
4	Carystus, Silver, Didrachm
1	Carystus, Silver, Didrachm
1	Carystus, Silver, Triobol
2	Chalcis, Silver, Drachma
1	Eretria, Silver, Tetradrachm
1	Histiaea, Silver, Drachma
3	Histiaea, Silver, Tetrobol
1	Silver (Unknown)

(source: [CoinHoards: IGCH 188](#))

Table 2.28 – IGCH 194

Number	Coin
21	Carystus, Silver, Didrachm
10	Carystus, Silver, Didrachm
61	Euboean League, Silver, Drachma/Fraction
120	Silver (Unknown)

(Source: [CoinHoards: IGCH 194](#))

Table 2.29 – IGCH 205

Number	Coin
2	Alexander III of Macedon, Silver, Drachma (336-323 BCE)
1	Philip III Arrhidaeus, Colophon, Silver, Drachma, 323 BCE-317 BCE
6	Silver, Triobol (Opuntian Locris)
37	Silver, Triobol (Boeotia)
36	Chalcis, Silver, Drachma
5	Chalcis, Silver, Triobol
12	Alexander III of Macedon, Silver, Drachma, 336-323 BCE
5	Demetrius I Poliorcetes, Silver, Triobol (294-288 BCE)
1	Lysumachis, Silver, Drachma (306-281)
15	Silver, Triobol (Phocis)
16	Silver, Triobol (Opuntian Locris)
29	Silver, Triobol (Boeotia)
3	Carystus, Silver, Drachma
15	Chalcis, Silver, Drachma
27	Euboean League, Silver, Drachma
5	Histiaea, Silver, Drachma
6	Rhodes, Silver, Drachma
[?]	Rhodes, Silver, Triobol
1	Silver, Triobol (Unknown)

(source: [CoinHoards: IGCH 205](#))

Table 2.30 – IGCH 210

Number	Coin
1	Silver, Drachma (Boeotia)
5	Carystus, Silver, Didrachm
6	Carystus, Silver, Didrachm
1	Euboean League, Silver, Didrachm

1	Andros, Silver, Didrachm
3	Naxos, Silver, Didrachm
4	Paros, Silver, Tetrachm
1	Paros, Silver, Didrachm
1	Paros, Silver, Drachma
2	Paros, Silver, Drachma
1	Tenos, Silver, Tetrachm
1	Tenos, Silver, Didrachm

(source: [CoinHoards: IGCH 210](#))

Table 2.31 – IGCH 215

Number	Coin
1	Euboean League, Silver, Tetrachm
1	Euboean League, Silver, Didrachm
1	Carystus, Silver, Didrachm
1	Carystus, Silver, Didrachm
1	Carystus, Silver, Drachma

(Source: [CoinHoards: IGCH 215](#))

Table 2.32 – IGCH 221

Number	Coin
1	Bronze (Boeotia)
47	Chalcis, Bronze
40	Euboean League, Bronze
225	Eretria, Bronze
39	Bronze (Unknown)

(source: [CoinHoards: IGCH 221](#))

Table 2.33 – IGCH 225

Number	Coin
6	Carystus, Bronze
85	Chalcis, Bronze
84	Euboean League, Bronze
9	Eretria, Bronze

(source: [CoinHoards: IGCH 225](#))

Table 2.34 – IGCH 230

Number	Coin
1	Hieron II, Bronze (270-215 BCE)
1	Carystus, Bronze
8	Chalcis, Bronze
12	Euboean League, Bronze

(source: [CoinHoards: IGCH 230](#))

Table 2.35 – IGCH 240

Number	Coin
1	Amphipolis, Bronze
1	Silver, Triobol (Opuntian Locris)
42	Chalcis, Bronze
10	Euboean League, Bronze
2	Eretria, Bronze
1	Athens, Bronze
1	Athens, Bronze
1	Amaseia, Bronze
1	Clazomenae, Bronze

(source: [CoinHoards: IGCH 240](#))

Table 2.36 – IGCH 241

Number	Coin
1	Thessalian League, Bronze
1	Carystus, Bronze
157	Chalcis, Bronze
75	Euboean League, Bronze
4	Eretria, Bronze
2	Bronze (Unknown)

(source: [CoinHoards: IGCH 241](#))

Appendix F – Thessalian League Hoards

Table 2.37 – IGCH 117

Number	Coin
1	Alexander III of Macedon, Sicyon, Silver, Tetradrachm, 336 BCE.-323 BCE
1	Alexander III of Macedon, Silver, Drachma, 336 B.C.-323 BCE
2	Thessalian League, Silver, Double Victoriatus
1	Thessalian League, Silver, Drachma
1	Larissa, Silver, Drachma
28	Silver, Stater (Boeotia)
1	Athens, Silver, Tetradrachm
1	Aegina, Silver, Stater
2	Sicyon, Silver, Stater

(source: [CoinHoards: IGCH 117](#))

Table 2.38 – IGCH 162

Number	Coin
1	Philip II, Silver, Tetradrachm (359-336 BCE)
1	Philip II, Bronze (359-336 BCE)
3	Alexander III of Macedon, Silver, Tetradrachm (336-323 BCE)
5	Antigonus II Gonatas, Silver, Tetradrachm (277-239 BCE)
1	Antigonus II Gonatas, Bronze (229-220 BCE)
1	Lysimachus, Alexandria Troas, Silver, Tetradrachm, 306 B.C.-281 B.C.
1	Lysimachus, Lysimachia, Silver, Tetradrachm, 306 B.C.-281 B.C.
1	Lysimachus, Cius, Silver, Tetradrachm, 306 B.C.-281 B.C.
4	Larissa, Silver, Stater
1	Larissa, Silver, Drachma
1	Thebes, Bronze
1	Thessalian League, Bronze
2	Thebes, Silver, Stater
7	Athens, Silver, Tetradrachm
1	Sicyon, Silver, Stater
1	Ephesus, Silver, Tetradrachm
1	Antiochus II Theos, Alexandria Troas, Silver, Tetradrachm
1	Antiochus II Theos, Alexandria Troas, Silver, Tetradrachm, 261 B.C.-246 B.C.
5	Bronze (Unknown)

(source: [CoinHoards: IGCH 162](#))

Table 2.39 – IGCH 313

6	Magnesia in Thessaly, Silver, Drachma
1	Perrhaebia, Silver, Drachma
681	Thessalian League, Silver, Double Victoriatus
472	Thessalian League, Silver, Drachma
39	Thessalian League, Silver, Triobol

(source: [CoinHoards: IGCH 313](#))

Appendix G – Images from Chapter 3



Figure 3.1. Silver Stater, Acarnanian League.
Source: <http://numismatics.org/collection/1997.127.29>



Figure 3.2. Silver Hemistater, Acarnanian League.
Source: <http://numismatics.org/collection/1944.100.19465>



Figure 3.3. Silver Drachm, Acarnanian League.
Source: <http://numismatics.org/collection/1944.100.19334>



Figure 3.4. Silver Trihemiobol, Acarnanian League.
Source: <http://numismatics.org/collection/1944.100.19349>



Figure 3.5. Silver Triobol, Acarnanian League.
Source: <http://numismatics.org/collection/1955.54.161>



Figure 3.6. Silver Hemistater, First Achaean League
Source: <http://numismatics.org/collection/1950.53.6>



Figure 3.7. Silver Tetradrachm, Megalopolis.

Source: <http://numismatics.org/collection/1952.44.5>



Figure 3.8. Silver Triobol, Sicyon.

Source: <http://numismatics.org/collection/1944.100.38665>



Figure 3.9. Silver Drachma, Sicyon.

Source: <http://numismatics.org/collection/1934.74.8>



Figure 3.10. Silver, Unstruck Flan (2.79g)

Source: <http://numismatics.org/collection/1944.100.20295>



Figure 3.11. Bronze Coin of Augustus, Larissa.

Source: <http://numismatics.org/collection/1944.100.17727>



Figure 3.12. Bronze Coin of Tiberius, Larissa.

Source: <http://numismatics.org/collection/1944.100.17734>



Figure 3.13. Bronze Coin of Claudius, Larissa.
Source: <http://numismatics.org/collection/1944.100.17720>



Figure 3.14. Bronze Coin of Nero, Larissa.
Source: <http://numismatics.org/collection/1944.100.17738>



Figure 3.15. Bronze Coin of Domitian, Larissa.
Source: <http://numismatics.org/collection/0000.999.7552>



Figure 3.16. Bronze Coin of Caracalla, Larissa.

Source: <http://numismatics.org/collection/1944.100.17775>

Appendix H – The Autonomous Hoards of Acarnanian *Poleis*

Table 3.1 – Hoards Containing Autonomous Coins from Leucas

IGCH	Deposit Date	Findspot	Coins from Leucas	Total Coins in Hoard
0072	350-325 BCE	Aetolia	6	12
0085	306 BCE	Near Corinth	9	196
0088	325-300 BCE	Western Greece	2	28
0106	400-300 BCE	Corcyra	150	150
0119	300 BCE	Acarnania	5	49
0140	300-275 BCE	Cephalenia	UNKNOWN	350-400
0147	280 BCE	Epirus	2	60
0171	250-240 BCE	Argolis	1	3786
0200	300-200 BCE	Near Corinth	1	200
0201	300-200 BCE	Epirus	UNKNOWN	150+
1644	475 BCE	Egypt	1	681
1790	375 BCE	Iran	1	394
1910	387 BCE	Southern Italy	1	134
1925	340-330 BCE	Southern Italy	1	210
1977	270 BCE	Southern Italy	2	1849
2119	390-380 BCE	Sicily	2	113
2127	350 BCE	Sicily	1	29
2130	350-340 BCE	Sicily	13	91
2131	340 BCE	Sicily	18	88
2132	340-330 BCE	Sicily	2	26
2133	340-330	Sicily	78	327
2135	350-325 BCE	Sicily	3	47
2144	333-310 BCE	Sicily	43	245
2145	320-310 BCE	Sicily	33	300
2146	320-310	Sicily	1	32
2147	310 BCE	Sicily	34	277+
2148	310 BCE	Sicily	10	58+
2149	310 BCE	Sicily	18+	65+
2150	300 BCE	Sicily	2	19
2151	300 BCE	Sicily	75	642
2152	300-220 BCE	Sicily	3	17
2153	300 BCE	Sicily	7	78
2169	330-270 BCE	Sicily	2	150
2179	300-270 BCE	Sicily	2	21
2180	300-270 BCE	Sicily	44	530
2181	300-270 BCE	Sicily	UNKNOWN	460+
2183	300-270 BCE	Sicily	10	89
2185	289 BCE	Sicily	23	347
2187	300-270 BCE	Sicily	40	169

2188	300-270 BCE	Sicily	UNKNOWN	243+
2189	300-270 BCE	Sicily	1	23
2198	282 BCE	Sicily	1	27

Table 3.2 - Hoards Containing Autonomous Coins from Stratus

IGCH	Deposit Date	Findspot	Coins from Stratus	Total Coins in Hoard
0088	325-300 BCE	Western Greece	1	28

Table 3.3 - Hoards Containing Autonomous Coins from Thyrrheium

IGCH	Deposit Date	Findspot	Coins from Thyrrheium	Total Coins in Hoard
0107	330-300 BCE	Peloponnesus	1	40
0140	300-275 BCE	Cephalonia	UNKNOWN	352-400
0151	280-270 BCE	Crete	4	49
0152	280-270 BCE	Crete	3	410
1952	300 BCE	Southern Italy	20	57
1968	300-270 BCE	Southern Italy	1	11
1977	270 BCE	Southern Italy	2	1849
2030	230-200 BCE	Southern Italy	11	68
2098	400 BCE	Sicily	1	34
2145	320-310 BCE	Sicily	1	300
2146	320-310 BCE	Sicily	2	32+
2147	310 BCE	Sicily	8	277+
2149	310 BCE	Sicily	1	65+
2151	300 BCE	Sicily	4	642
2152	300-220 BCE	Sicily	2	17
2179	300-270 BCE	Sicily	1	21
2180	300-270 BCE	Sicily	34	530
2181	300-270 BCE	Sicily	UNKNOWN	460+
2183	300-270 BCE	Sicily	12	89
2185	289 BCE	Sicily	62	347
2187	300-270 BCE	Sicily	12	169
2188	300-270 BCE	Sicily	UNKNOWN	243+
2198	282 BCE	Sicily	9	27

Appendix I – The Autonomous Hoards of Achaean *Poleis*

Table 3.4 - Hoards Containing Autonomous Coins from Megalopolis

IGCH	Deposit Date	Findspot	Coins from Megalopolis	Total Coins in Hoard
0233	168 BCE	Boeotia	1	58
0242	165-160 BCE	Arcadia	37	231
0251	175-150 BCE	Acarmania	3	12
0260	146 BCE	Western Greece	80	677
0261	146 BCE	Achaea	47	985
0262	146 BCE	Achaea	226	3000
0267	150-140 BCE	Achaea	1	48
0270	145-140 BCE	Elis	50	850+
0271	145-135 BCE	Aetolia	151	1348
0301	200-100 BCE	Messenia	8	180
2053	146 BCE	Southern Italy	9	499

Table 3.5 - Hoards Containing Autonomous Coins from Sicyon

IGCH	Deposit Date	Findspot	Coins from Sicyon	Total Coins in Hoard
0182	265-200 BCE	Achaea	31	55
0195	225-200 BCE	Phocis	26	65
0199	300-200 BCE	Elis	7	11
0200	300-200 BCE	Near Corinth	3	200
0207	230-200 BCE	Albania	1	15
0214	230-170 BCE	Thessaly	1	13
0217	200-170 BCE	Argolis	1	217
0233	168 BCE	Boeotia	1	58
0242	165-160 BCE	Arcadia	11	230
0243	175-150 BCE	Peloponnesus	8	105
0246	175-150	Peloponnesus	22	35
0252	170-130 BCE	Crete	10	35
0253	170-130 BCE	Crete	1-2	17+
0257	175-145 BCE	Cephalenia	7	146
0258	175-145 BCE	Argolis	1	33
0260	146 BCE	Western Greece	53	677
0261	146 BCE	Achaea	11	985
0262	146 BCE	Achaea	459	3000
0263	146 BCE	Corinth	12	16

0266	150-140 BCE	Aetolia	4	16
0267	150-140 BCE	Achaea	31	48
0269	150-100 BCE	Attica	1	130
0271	145-135 BCE	Aetolia	50	1348
0301	200-100 BCE	Messenia	14	180
0303	200-100 BCE	Phocis	1	42
0471	200-150 BCE	Macedoania	1	38
2053	146 BCE	Southern Italy	38	499

Table 3.6 - Hoards Containing Autonomous Coins from Argos

IGCH	Deposit Date	Findspot	Coins from Argos	Total Coins in Hoard
0182	265-200 BCE	Achaea	3	55
0195	225-200 BCE	Phocis	1	65
0217	200-170 BCE	Argolis	214	217
0242	165-160 BCE	Arcadia	4	230
0243	175-150 BCE	Peloponnesus	6	105
0252	170-130 BCE	Crete	10	35
0254	150 BCE	Crete	8	1154
0257	175-145 BCE	Cephalenia	41	146
0258	175-145 BCE	Argolis	1	33
0260	146 BCE	Western Greece	35	677
0261	146 BCE	Achaea	96	985
0262	146 BCE	Achaea	391	3000
0271	145-135 BCE	Aetolia	10	1348
0301	200-100 BCE	Messenia	2	180
2030	230-200 BCE	Southern Italy	13	68
2053	146 BCE	Southern Italy	49	499

Appendix J – The Autonomous Hoards of Chalcidian *Poleis*

Table 3.7 - Hoards Containing Autonomous Coins from Acanthus

IGCH	Deposit Date	Findspot	Coins from Acanthus	Total Coins in Hoard
0357	480-450 BCE	Chalcidike Pen.	150+	150+
0359	421 BCE	Chalcidike Pen.	12	19
0360	400 BCE	Chalcidike Pen.	4	55+
0364	400-375 BCE	Amphipolis	5	100
0372	348 BCE	Chalcidike Pen.	1	34
0373	348 BCE	Chalcidike Pen.	2-3	46-47
0374	348 BCE	Chalcidike Pen.	3	84
0375	348 BCE	Chalcidike Pen.	4	75
0378	348 BCE	Chalcidike Pen.	2	34
0385	340-335 BCE	Chalcidike Pen.	3	240
1177	480 BCE	Anatolia	1	38
1182	460 BCE	Anatolia	UNKNOWN	50+
1479	500-490 BCE	Syria	4	16
1480	500-480 BCE	Seleukis	UNKNOWN	4+
1482	445 BCE	Jordan	3	113
1483	425-420 BCE	Syria	1	100
1639	500-470 BCE	Egypt	1	72
1640	485 BCE	Egypt	2	92
1644	475 BCE	Egypt	38	681
1645	470 BCE	Egypt	5	84
1646	460 BCE	Egypt	1	15
1652	360 BCE	Egypt	2	83
1790	375 BCE	Iran	8	394
1820	390-380 BCE	Afghanistan	1	170
1822	180-170 BCE	Tajikstan	3	1500
1830	380 BCE	Afghanistan	2	115+
1874	508 BCE	Southern Italy	5	600
2065	489-479 BCE	Sicily	4	36+
2066	485 BCE	Sicily	6+	1076+
2071	475-470 BCE	Sicily	1	338

Table 3.8 - Hoards Containing Autonomous Coins from Terone

IGCH	Deposit Date	Findspot	Coins from Terone	Total Coins in Hoard
0356	479 BCE	Chalcidike Pen.	6	11
0366	379 BCE	Chalcidike Pen.	1	9

0375	348 BCE	Chalcidike Pen.	3	75
1634	500 BCE	Egypt	1	4
1640	485 BCE	Egypt	1	92+
1644	475 BCE	Egypt	11	681
1645	470 BCE	Egypt	3	84
1790	375 BCE	Iran	1	394

Table 3.9 - Hoards Containing Autonomous Coins from Olynthus

IGCH	Deposit Date	Findspot	Coins from Olynthus	Total Coins in Hoard
0357	348 BCE	Chalcidke Pen.	2	75
0377	348 BCE	Chalcidke Pen.	1	63
0379	348 BCE	Chalcidke Pen.	34	35
1644	475 BCE	Egypt	1	681

Table 3.10 - Hoards Containing Autonomous Coins from Scione

IGCH	Deposit Date	Findspot	Coins from Scione	Total Coins in Hoard
0360	400 BCE	Chalcidike Pen.	1	55+
0375	348 BCE	Chalcidike Pen.	2	75
0377	348 BCE	Chalcidke Pen.	1	63
0378	348 BCE	Chalcidike Pen.	2	34
1637	500 BCE	Egypt	1	165
1644	475 BCE	Egypt	1	681

Table 3.11 - Hoards Containing Autonomous Coins from Aeneia

IGCH	Deposit Date	Findspot	Coins from Aeneia	Total Coins in Hoard
0360	400 BCE	Chalcidike Pen.	1	55+
0377	348 BCE	Chalcidke Pen.	1	63
1634	500 BCE	Egypt	1	4
1635	500 BCE	Egypt	1	2
1644	475 BCE	Egypt	1	681

Table 3.12 - Hoards Containing Autonomous Coins from Potidaea

IGCH	Deposit Date	Findspot	Coins from Potidaea	Total Coins in Hoard
0360	400 BCE	Chalcidike Pen.	2	55+

0378	348 BCE	Chalcidike Pen.	5	34
1636	500 BCE	Egypt	1	23
1644	475 BCE	Egypt	6	681
1645	470 BCE	Egypt	4	84
1874	508 BCE	Southern Italy	4	600
2130	350-340 BCE	Sicily	1	91

Appendix K – The Autonomous Hoards of Euboean *Poleis*

Table 3.13 - Hoards Containing Autonomous Coins from Chalcis

IGCH	Deposit Date	Findspot	Coins from Chalcis	Total Coins in Hoard
0003	530-510 BCE	Euboea	4	6
0073	350-325 BCE	Epirus	1	62
0112	330-300 BCE	Acarmania	140	140
0129	310-290 BCE	Peloponnesus	34	478
0133	300-270 BCE	Thessaly	5	11
0140	300-275 BCE	Cephalenia	1	352-400
0157	275-250 BCE	Athens	1	94
0165	250-200 BCE	Central Greece	31	80
0173	250-225 BCE	Acarmania	9	50
0175	235 BCE	Euboea	1+	572+
0176	235-225 BCE	Elis	8	82
0178	230-220 BCE	Euboea	7	19
0182	265-200 BCE	Achaea	13	55
0188	250-200 BCE	Euboea	2	21
0195	225-200 BCE	Phocis	8	65
0199	300-200 BCE	Elis	2	11
0205	230-200 BCE	Euboea	56	222
0209	200 BCE	Messenia	38	52
0219	200-170 BCE	Euboea	55	74
0221	198-190 BCE	Euboea	47	352
0223	161-150 BCE	Boeotia	5+	25+
0225	192-175 BCE	Euboea	85	184
0226	200-180 BCE	Euboea	3	130
0230	175 BCE	Euboea	8	22
0232	171-169 BCE	Euboea	2	1300
0239	175-165 BCE	Thessaly	8	52
0240	170-165 BCE	Euboea	42	60
0241	170-165 BCE	Euboea	157	240
0242	165-160 BCE	Arcadia	2	231
0243	175-150 BCE	Peloponnesus	14	105
0245	174-150 BCE	Zacynthus	1	172
0254	150 BCE	Crete	1	1154
0260	146 BCE	Western Greece	31	677
0262	146 BCE	Achaea	92	3000
0266	150-140 BCE	Aetolia	2	16
0267	150-140 BCE	Achaea	10	48
0270	145-140 BCE	Elis	UNKNOWN	850+

0271	145-135 BCE	Aetolia	72	1348
0301	200-100 BCE	Messenia	2	180
0457	240-230 BCE	Macedonia	5	27
0471	200-150 BCE	Macedonia	2	38
1640	485 BCE	Egypt	1	92+
1644	475 BCE	Egypt	1	681
1874	508 BCE	Southern Italy	1	600
2053	146 BCE	Southern Italy	3	499

Table 3.14 - Hoards Containing Autonomous Coins from Eretria

IGCH	Deposit Date	Findspot	Coins from Eretria	Total Coins in Hoard
0002	525-515 BCE	Athens	3	26
0005	520-500 BCE	Attica	2	8
0009	500-480 BCE	Euboea	UNKNOWN	3+
0010	500-480 BCE	Euboea	8+	100+
0011	480 BCE	Corinth	1	135
0136	300-270 BCE	Attica	1	8
0188	250-200 BCE	Euboea	1	21
0219	200-170 BCE	Euboea	17	74
0221	198-190 BCE	Euboea	225	352
0223	161-150 BCE	Boeotia	10+	25+
0225	192-175 BCE	Euboea	9	184
0226	200-180 BCE	Euboea	14	130
0240	170-165 BCE	Euboea	2	60
0241	170-165 BCE	Euboea	4	240
1483	425-420 BCE	Syria	1	100
1639	500-470 BCE	Egypt	1	72
1640	485 BCE	Egypt	1	92+
1644	475 BCE	Egypt	5	681
1774	155-150 BCE	Babylon	3	100

Table 3.15 - Hoards Containing Autonomous Coins from Carystus

IGCH	Deposit Date	Findspot	Coins from Carystus	Total Coins in Hoard
0053	370-330 BCE	Euboea	3	15
0167	250-200 BCE	Euboea	6	165
0175	235 BCE	Euboea	1	572+
0177	230 BCE	Euboea	68	378
0182	265-200 BCE	Achaia	1	55

0188	250-200 BCE	Euboea	6	21
0191	235-200 BCE	Euboea	5	5
0192	235-200 BCE	Euboea	17	18
0194	225-200 BCE	Euboea	31	200
0205	230-200 BCE	Euboea	3	222
0210	200 BCE	Euboea	11	28
0215	230-170 BCE	Euboea	3	5
0225	192-175 BCE	Euboea	6	184
0226	200-180 BCE	Euboea	38	130
0229	176-125 BCE	Boeotia	1	1549
0230	175 BCE	Euboea	1	22
0241	170-165 BCE	Euboea	1	240
0243	175-150 BCE	Peloponnesus	1	105
0344	86 BCE	Euboea	20-30	100+
1644	475 BCE	Egypt	3	681

Table 3.16 - Hoards Containing Autonomous Coins from Histiaea

IGCH	Deposit Date	Findspot	Coins from Histiaea	Total Coins in Hoard
0069	350-325 BCE	Peloponnesus	2	25
0076	327 BCE	Messenia	1	35
0093	310-300 BCE	Thessaly	5	112
0120	300 BCE	Albania	9	72
0129	310-290 BCE	Peloponnesus	4	478
0156	275-250 BCE	Euboea	1	260
0159	264-240 BCE	Thessaly	2	65
0166	250-200 BCE	Central Greece	1	35
0175	235 BCE	Euboea	1	572+
0182	265-200 BCE	Achaea	2	55
0188	250-200 BCE	Euboea	4	21
0205	230-200 BCE	Euboea	5	222
0218	200-170 BCE	Athens	8	8
0226	200-180 BCE	Euboea	1	130
0228	180-170 BCE	Thessaly	53	130
0232	171-169 BCE	Euboea	6	1300
0233	168 BCE	Boeotia	2	58
0239	175-165 BCE	Thessaly	28	52
0243	175-150 BCE	Peloponnesus	5	105
0248	175-150 BCE	Epirus	75	600
0253	170-130 BCE	Crete	11	17+
0254	150 BCE	Crete	160	1154

0262	146 BCE	Achaea	6	3000
0267	150-140 BCE	Achaea	2	48
0270	145-140 BCE	Elis	UNKNOWN	850+
0271	145-135 BCE	Aetolia	6	1348
0304	200-100 BCE	Thessaly	377	387
0305	200-100 BCE	Thessaly	600	600
0309	200-100 BCE	Epirus	18	18
0330	100-70 BCE	Crete	1	98+
0471	200-150 BCE	Macedonia	31	38
0474	175-165 BCE	Macedonia	3	13
0475	175-165 BCE	Macedonia	100	200
0476	175-165 BCE	Northern Greece	2250	3000
0860	275-265 BCE	Bulgaria	1	22
0942	200-100 BCE	Bulgaria	116	116
0943	200-100 BCE	Bulgaria	UNKNOWN	UNKNOWN
0944	200-100 BCE	Bulgaria	43	51
0945	200-100 BCE	Bulgaria	10	10
0947	200-100 BCE	Bulgaria	163	163
0948	200-100 BCE	Bulgaria	160	160
2374	170-130 BCE	France	1	245

Appendix L – The Autonomous Hoards of Thessalian *Poleis*

Table 3.17 - Hoards Containing Autonomous Coins from Larissa

IGCH	Deposit Date	Findspot	Coins from Larissa	Total Coins in Hoard
0052	400-350 BCE	Thessaly	UNKNOWN	2000+
0055	350 BCE	Thessaly	2	4
0056	350 BCE	Thessaly	6-7	16-18
0057	350 BCE	Thessaly	2	6
0058	350 BCE	Thessaly	266	324
0061	350-300 BCE	Thessaly	13+	20+
0070	350-325 BCE	Phocis	4	42
0071	350-325 BCE	Thessaly	UNKNOWN	6+
0074	330-325 BCE	Elis	1	48
0076	327 BCE	Messenia	1	35
0096	400-300 BCE	Thessaly	2	13
0103	400-300 BCE	Argolis	1	5
0111	330-300 BCE	Thessaly	10	69
0116	300 BCE	Thessaly	2	27
0117	300 BCE	Thessaly	1	38
0146	280 BCE	Thessaly	1	30
0157	275-250 BCE	Athens	1	94
0162	250 BCE	Thessaly	5	39
0168	250-225 BCE	Thessaly	156	591
0219	200-170 BCE	Euboea	2	74
0232	171-169 BCE	Euboea	1	1300
0245	175-150 BCE	Zacynthus	1	172
0371	348 BCE	Chalcidike Pen.	1	5
0383	359-336 BCE	Chalcidike Pen.	2	10
0384	370-330 BCE	Macedonia	UNKNOWN	10+
0385	340-335 BCE	Chalcidike Pen.	62	240
0386	340-330 BCE	Macedonia	4	29
0447	280 BCE	Yugoslavia	1	29

Table 3.18 - Hoards Containing Autonomous Coins from Magnesia in Thessaly

IGCH	Deposit Date	Findspot	Coins from Magnesia in Thessaly	Total Coins in Hoard
0239	175-165 BCE	Thessaly	1	52
0306	200-100 BCE	Thessaly	2	13
0313	130-100 BCE	Thessaly	6	1199

Table 3.19 - Hoards Containing Autonomous Coins from Perrhaebia

IGCH	Deposit Date	Findspot	Coins from Perrhaebia	Total Coins in Hoard
0313	130-100 BCE	Thessaly	1	1199