

Late Antique Stamped Amphorae as Evidence for Imperial Policy:
The Halasarna Workshop, Cos Island



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TO ALEX AND ATHINA

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Preface

This book presents the administrative stamps found on amphorae of Late Antiquity (5th–7th centuries AD) across the Mediterranean Sea and suggests the interpretation of their function. The research is exclusively devoted to the subject of the administrative stamping (1) at city level found on amphorae commonly referred to as Late Roman Amphora (LRA) 1, and (2) at state level on amphorae of type LRA 13. Amphorae of this period were containers used for the transportation of agricultural products, especially wine and oil, usually by sea.

Special emphasis is placed on the state stamps of LRA 13 of the third quarter of the 6th–first half of the 7th century AD, with our reference point being the only production workshop known to date – at Halasarna on the island of Cos. In fact, this book marks the completion of a research process that began more than 15 years ago.

I cannot recall exactly when I first held a stamped amphora neck fragment in my hands, it was sometime in the early 2000s, but I can confidently say where I was: In the archaeological warehouse of the excavations being undertaken by the National and Kapodistrian University of Athens (NKUA) at Halasarna, Cos. I was working on cataloguing the Late Roman amphorae, imported and local, of the settlement as part of my thesis, which was defended in 2007 and published in 2010 (Diamanti 2010a). I also recall my immediate reactions: At first, it was doubt as to whether what I had in front of me was indeed a stamp. No one was accustomed to Late Roman amphora stamps in the late 1990s and early 2000s. Straight away I ran from the underground warehouse out into the natural light to examine the stamped sherd under different lighting conditions from various angles: ‘Is this a stamp? Could this be an inscription?’. The only certainty was that the amphora was a local LRA 13. After that, I developed an instinctive, as it were, reaction to check every neck fragment. Other stamped amphorae followed, and the joy was always great. And there came other examples – with stamps of figures resembling the emperors as represented on the coins of the time, as well as others bearing inscriptions of officials. Among the thousands of amphora fragments I have recorded, there were only a few dozen of the precious state stamps on Coan amphorae that had been ‘discarded’ as waste at the workshop deposits and were not exported.

The workshop of Late Roman state-stamped amphorae at Halasarna is to this day a unique example of its kind, as it is the only one published. Its study after the publication of my thesis, which continued and was published in a series of related papers, gave me the space and time to delve deeper into the subject and to propose some answers to questions such as: What do these stamps mean? Why should a workshop be dedicated to the production of these amphorae on Cos? Which officials visited the facility just before the firing of the amphorae to place their stamp, or that of their superior, the eparch, the *quaestor exercitus*, the eparch of the islands, according to my proposal, and mentioned in the stamped inscriptions that surrounded the bust of the emperor, which served as the national ‘crest’ of the time? How did the early Byzantine Halasarnians feel seeing these officials in their village, or representations of the emperor on their pottery vessels? But also, how did they feel sending their agricultural produce to meet the needs of the state? We can only guess at the answers to some of these questions. However, for most of them, Halasarna of Cos offers the appropriate historical and archaeological framework, so one cannot easily be misled either chronologically or historically. This phenomenon of the state LR 13 stamped amphorae began at Halasarna in the second half of the 6th century AD and continued for a maximum of 70–100 years. Cos also belonged to the *quaestura exercitus* administered by the ‘eparch of the islands’, which operated under the direct control of the emperor, an administrative unit created by Justinian in AD 536 to meet state needs by taxation in kind on accessible agricultural production

centres of the Aegean, such as Cos. The emperors who succeeded Justinian resorted to using this means to maintain their armies in the Danube regions and in Constantinople.

This present work also offers new findings and evidence related to the Halasarna material, in a unified catalogue and study, with the increasing number of published or unpublished similar examples brought to my attention by colleagues from across the Mediterranean. Based on the available data (drawings and photographs), our research proposes, on a macroscopic basis, which examples published elsewhere may belong to the Halasarna workshop and which may not, leading to a map of the distribution of its amphorae. Additionally, through this comparative study various new iconographical and epigraphical motifs, as well as technological patterns, are identified, i.e. the ligature of the ounce, or the iconographic and technological similarity of stamps of different origins.

Acknowledgements

This project, although difficult at times, of course benefitted from important help during its implementation. It is very touching to be given the opportunity to thank all those who have helped me in different ways over the years to complete this task. Even though I had the idea of writing this book in my head for several years, I had to wait for the right moment and conditions that would allow me to be able to fully commit to it. However, the time that has passed since then worked in my favour, as more examples were spotted in the meantime at the Halasarna excavation and elsewhere, and I had the chance to have constructive discussions with my colleagues.

I would like to thank the directors of the excavation at Halasarna, Professors Emeritae Georgia Kokkorou-Alevra, Sophia Kalopisi-Verti, and Maria Panagiotidis-Kesisoglou, who trusted me and have honoured me with their collaboration for decades now. My sincere thanks also go to Assistant Professor Nikolaos Dimakis for his support in matters related to the seamless work at Halasarna, as well as to the Ephorate of Antiquities of Dodecanese – Ministry of Culture for their assistance.

I owe my warmest thanks to Dr Dimitrios Athanasoulis, Director of my Service, the Ephorate of Antiquities of Cyclades – Ministry of Culture, for accepting my request for research leave, his interest in my research, and above all for his perspective in general on promoting the scientific aspect of the Archaeological Service. I also sincerely thank my Department Manager Dr Maria Z. Sigala, and my colleagues for their support, as well as the Ministry of Culture and the relative Service Council that approved my request for research leave.

As archaeologists, we know that a picture is worth a thousand words. The reading of the book can therefore be done in the normal way, but also in that well-known and good archaeological way, from back to front! Because there you will find the photographs and drawings of all the examples from the Halasarna workshop, as well as most of their parallel examples. It is worth mentioning also that the restrictions posed in a synthetic work, as far as the reproduction of the published photographs and drawings of other excavations are concerned, have been strictly observed, even if this meant that there would be photographs for most, but not all, of the examples in the catalogue.

For this reason, I want to thank once again the universities, archaeological schools, institutes and, of course, colleagues who provided me with photographs of their important finds with generosity, joy, and interest, so that I could make the visual material of this book as complete as possible. In particular, I wish to single out: The Ephorate of Antiquities of Athens City and the Deputy Director of the Ephorate of Antiquities of the City of Athens, Argyro Karamperidi; The American School of Classical Studies at Athens; and Mrs Sylvie Dumont, Secretary and Registrar of the Agora Excavations in Athens (for the

examples from the Agora and Pnyka); Dr Andrei Opait (for our previous study material from the Agora); as well as my colleague Nikolaos Tsouris for the drawings of the Agora examples.

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Chapter 1.

Introduction

1.1 Studying Late Roman stamped amphorae – An overview

The Late Roman/Early Byzantine period (4th-7th centuries AD) has some main characteristics that are important to consider when attempting to study any aspect of its economic history and related archaeological evidence – in our case the stamped amphorae.

The first component is the maritime character of the Late Roman world in and around the Mediterranean Sea, the ‘Mare nostrum’. Maritime commerce was significantly cheaper and faster than that conducted overland, and merchants and navigators operated over short and long distances, either privately (under state legislation governing their professions and their relationships) or on behalf of the state for the supply of its citizens and the army (*annona*).¹

A second important fact is that the main concern for the Byzantine emperor was to meet the great expenses of his state, which were the maintenance and supply of the capital and the army, as well as the Byzantine fortresses and stations. The main income of the state, on which he could rely, was from its agricultural produce (wine, oil, *garum*, cereals), grown in the centres and provinces of the East Mediterranean and the Aegean Sea,² which were then transported in Late Roman amphorae. Thus, the amphorae, spherical, oblong or cylindrical,³ originated from the production centres of the Eastern Mediterranean (Asia Minor, Cyprus, Aegean islands, Palestine, Egypt, etc.) and were from there distributed to civil and military settlements, or religious centres, around the Mediterranean and beyond.⁴ Consequently, we can understand that the mass imports of wine and oil using amphorae as an *annona*-related tax were absolutely necessary for the state and it was for its interest to organise and control them, as it did to a large extent with the operating free market.⁵

Finally, the Late Antiquity period and its economy were marked by a series of historical events, which we will discuss in more detail later.⁶ In AD 536, a few years after Justinian came to power, he systematised the supply of his army for the defence of the Black Sea and the Danube from the Aegean islands, Cyprus, and Caria, including all those geographically distant regions (Scythia Minor and Lower Mysia, with the Aegean islands, Caria, and Cyprus) under joint administration, the well-known *quaestura Iustiniana exercitus*.⁷ Justinian’s successors had to ensure even more the continuity of supplying these areas, which represented the epicentre of the Avaro-Slav conflicts and invasions, the main threat to Byzantium’s northern borders for 60 years or so (c. AD 562–626).⁸ Moreover, a few years later, (AD 541/2) the Great Plague broke out. This pandemic is rightly considered a landmark in the economic history of Byzantium, causing the death of thousands of taxpayers and with resulting tragic economic consequences, such as delays to the payment of troops and the need to provide at least some of their payment in kind.⁹

¹ Ahrweiler 1966: 7–8; Henty 1989, I: 7–9; Avramea 2002: 74, 83, 85; Laiou and Morrisson 2007: 13; Diamanti 2010a: 32.

² Haldon 1995, VI: 139; Oikonomides 2002: 979.

³ For their easier transport and loading aboard ships: Bakirtzis 1989: 73; Hayes 1997: 27.

⁴ Diamanti 2010a: 32–33.

⁵ Laiou and Morrisson 2007: 33

⁶ See below (Chapter 3) for a more detailed presentation and references to these historical events, which also constitute the historical context of the state-stamped LR 13 Coan amphorae of the Halasarna workshop.

⁷ Henty 1989, VIII: 132–133; Gkoutzioukostas and Moniaros 2009: 1–2, 87–99.

⁸ Kardaras 2008: 238.

⁹ Stathakopoulos 2004: 20, 110–154, 163–165; Laiou and Morrisson 2007: 24, 38–39.

Within this historical context, we have proposed that the amphora material should be considered as a primary historical source for any research into the commercial history of Byzantium, representing, as they did, the main containers of agricultural produce of the time that have survived to tell us their stories.¹⁰ Indeed, in Late Antiquity, apart from the free commercial trade, amphorae, within the framework of the *annona* and the *quaestura exercitus* unit, served systematically to supply both the capital and the state army.

And, vice versa, one cannot archaeologically interpret the content and usage of the amphora stamps, especially the administrative ones, separately from the historical period and archaeological context to which they belonged. The stamps, since they were executed before the amphorae were fired and before they were traded, are linked to the production and distribution of the vessels as well as to their contents.¹¹ Based on their shape, the stamps are usually round or oval, executed on the handles and on the neck of the amphorae, and a few are cross shaped. Based on their content, the amphorae stamps can be classified into two main categories:

1) Those with religious content, symbols, and inscriptions. These indicate the participation of the church in the Byzantine trade network and can be found on a few LRA 1¹² examples (nos 12–13), on some LRA 2 finds,¹³ on some LRA 5/6,¹⁴ as well as on MR5/Zeast 80¹⁵ and Keay LII¹⁶ amphorae types.¹⁷ The stamps of these amphorae, not examined in this book,¹⁸ as well as some other imported stamped amphorae from the Halasarna excavations belonging to the Samian cistern-type, as well as a Cretan amphora,¹⁹ will be examined and discussed in a corpus of all the Byzantine amphorae stamps.²⁰

2) Those with administrative content and meaning. These are the stamps found exclusively on the well-known types of amphorae of the Late Roman period: LR 1 and LR 13. LR 1 amphorae stamps have simple or cross-shaped monograms of Cilician cities, whereas the LR 13 examples bear depictions of emperors

¹⁰ Diamanti 2023: 273.

¹¹ And not their secondary use, as is often the case with the incised (graffiti) and, of course, painted (dipinti) inscriptions. The incised and painted inscriptions (Diamanti 2010a: 61–64, 89–92, wherein the previous bibliography) are the most common, since inscriptions were the most convenient and easiest means in any time of need, whether first or secondary use, to declare something on the amphorae. Written in Greek, abbreviated, incomprehensible, ‘encoded’ information of a commercial nature, addressed to those who knew how to decode it. They refer to the type, quality, or quantity of the product, the capacity of the amphora, the names of the merchants and owners of the amphorae and their contents, as well as religious inscriptions and symbols.

¹² The typology of Late Roman amphorae of J.A. Riley (Riley 1979) is used.

¹³ For a group of stamped LRA 2 amphorae, which bear a monogram read by John Hayes as a personal name, *Themistou* (ΘΕΜΙΣΤΟΥ), found in Constantinople and in Bathonea (Hayes 1992: 69–71, 77, 167, fig. 47.197, pl.13.1; Kara 2015: 245, fig. 2a-b; 2017: 278, 281), we suggested the possibility that this monogram is of religious nature: Diamanti, ‘The religious and administrative stamped amphorae – The ounce (‘ογγύια’) ligature’, forthcoming. According to Katerina Chamilaki, another similar example was found at Kastri, a Late Roman settlement in Boeotia (pers. comm.: Chamilaki forthcoming).

¹⁴ Aharoni 1964: fig. 9.4–5; Arthur 1989: 85, 86, fig. 6: LR 5/6 amphorae with handles stamped with a cross.

¹⁵ Minchev 2011: 150–159: Two stamped necks with cross-shaped stamps and religious inscriptions; Kara 2015: 249: Six stamped examples of the type, one of which with a round stamp on the handle depicting, according to U. Kara, St George, and an inscription of the name ‘Theodorou’, meaning of ‘Theodoros’. We support the suggestion that the saint is Saint Theodoros, who ‘was the first of the warrior saints depicted as an equestrian dragon slayer’, based on sphragistic evidence: Cotsonis 2020: 111.

¹⁶ Panella *et al.* 2010: 63, 73, fig. 3: Stamped amphora of the type Keay LII with the Christogram; Pacetti 1998: 197, 200, fig. 8.3.4; Bernal-Casasola 2019: 576–577: Two stamped handles of amphorae of the type Keay LII with the Menorah (see also Arthur 1989: 85–86).

¹⁷ Also, probably in a Botger 2.5: Biernacki and Klenina 2015: 101: Amphora of the type Böttger II 5 stamped on the neck with a cross (?) according to the drawing.

¹⁸ With the exception of nos 12–13, LR 1 examples in the catalogue of this book, for the sake of a comprehensive presentation of the amphora type stamps.

¹⁹ Diamanti ‘The amphorae’, forthcoming.

²⁰ Diamanti and Todorova, forthcoming.

and inscriptions with titles and names of officials, symbols, and indications of weight units.²¹ The present study examines these two administrative types of amphorae stamps,²² which testify, in an indirect or direct way, state control over the growing and distribution of agricultural produce from production centres by means of privileges granted to cities, or through direct state control by authorised officers.

Indeed, as we will examine in more detail in the following chapters, from the first to the second half of the 6th century AD there were two very important changes regarding amphorae. At the beginning of LRA 1 production, amphorae were mass-produced, mainly in a relatively few production centres, such as the cities of Cilicia, something which is attested by archaeological research, epigraphic sources, and the stamps of the amphorae themselves which refer to Cilician cities. In the second half of the 6th century AD the standardised mass production of LRA 1 at several smaller production centres,²³ such as Halasarna itself, as we shall see, indicates changes to the trade system they served, and at the same time there are no further stamped examples of the type (Chapter 2). The opposite is the case with a new type of amphora that appears in the same period, LRA 13, which bears the state's own stamps and is strong proof of the fact that state control over the maritime economic network culminated, and was no longer organised at the 'city' level, but on a higher administrative level of an 'ecumenical' and interfering Early Byzantine state. Thus, during the second half of the 6th century AD, the mass production of the same types of amphorae at many different agricultural centres of the Eastern Mediterranean, and especially the Aegean Sea, some islands of which, like Cos, were members of the *quaestura exercitus*, cannot but be explained other than within the prism of state control and service (Chapter 3).

We will focus particularly on the imperial state stamps of LRA 13, reviewing all the known material, while also presenting all the new information we have on the unique stamped amphora workshop found at Halasarna (Cos) during the excavations undertaken by the University of Athens.²⁴

But before we proceed to our present research, we will step back for a moment to take things from the very beginning as far as studies of administrative Late Roman amphora stamps are concerned, because the past research problems underline the *desiderata* of the present research. We refer to all published examples, to the best of our knowledge, of administrative stamps, and list their numbers in the Catalogue of this book so that one can simultaneously view their contextual information and place it into the corpus of administrative stamps, as presented in the next chapters (Figure 5; Plates 1–16).

Stamped Late Roman amphorae, in general, have never been the focus of relevant 20th-century publications. They are only sporadically referred to as unusual cases, while interest focused on the stamps themselves and their inscriptions rather than the type of amphora they were found on.

The first reference, to our knowledge, was made by Virginia Grace in 1949, relating to an example found at Pnyca, for which, she argues, based on iconographic similarities to contemporary coins, that the depicted bust belongs to an emperor (no. 62). In 1956, she referred to this example again and noted that another four similar unpublished examples were found at the Agora of Athens.²⁵ These examples were first presented in 2012 by the present author and Andrei Opaïț during the 28th Congress of the *Rei Cretariae Romanae Fautores* in Catania, and were published in the *Acta* of the Congress²⁶ in 2014 (nos 43, 44, 63, 64).

²¹ The only known exceptions are the LRA 1 examples represented by nos 12–13.

²² See Chapters 2 and 3.

²³ Diamanti 2023: 282.

²⁴ Diamanti 2010a: 92–107; Diamanti 2010; 2012.

²⁵ Grace 1949: 188, pl. 20.14; 1956: 171, pl. 75.214, pl. 80.214.

²⁶ Opaïț and Diamanti 2014.

In the 1960s and 1970s, we have publications by Dumitru Tudor and Emilian Popescu on the inscriptions present on a comparatively significant number of stamped LR 1 amphorae found in Scythia Minor (Sucidava and Histria).²⁷ This type of stamped LRA 1, usually referring to Cilician cities,²⁸ is always very rare (nos 4, 5, 8, 9).

At the beginning of the 1980s, a stamped LR 13 amphora found in Kameriye Ada was published in the *International Journal of Nautical Archaeology*, without much other information (no. 70).

In the middle of the same decade, an article was devoted to another example of a stamped LR 13 amphora, from Alexandria²⁹ (no. 57), in which it was assumed for the first time that the depicted bust was the eparch of Constantinople. This interpretation cannot be easily accepted today following the progress of research since then. As our discussion on this will unfold later in Chapter 3, we will mention only two points about this suggestion here. The first is that it does not take into account iconography of the coins of the same period, in which the emperor appears as depicted on the amphora stamps and with the same insignia (something that Virginia Grace had taken into account even earlier). The second point is that the period was that of the ‘eparch of the islands’, or *quaestor excercitus*, the individual, we suggest, who is the eparch referred to on the inscriptions of the amphora stamps produced in the places of his jurisdiction, one of which was Cos.³⁰ However, as the Coan stamped amphora workshop at Halasarna began to be excavated during the 1980s, it was not possible for researchers to make this correlation and historical connection at that time, since all the relevant information was first published only in 2010.³¹

Another stamped amphora of LR 1 type, found once more in Sucidava (no. 3), was published in 1987 by Octavian Toropu and Corneliu Tatulea.

John Hayes mentions in 1992 a small number of Byzantine stamped amphorae in his publication on the pottery from Saraçhane. Only one of them belongs to the state stamps of the late 6th century AD (no. 68), which he compares with the busts of emperors on Byzantine coins.³²

Fuaad Bentaher published in 1994 an amphora handle stamped with the bust of an emperor found in Tocra (no. 60). Among the finds were many coins, most of which belong to the years of Heraclius.³³

A few years later, in 1999, and in the context of the publication of the pottery found during the works of the Suisse mission in Kellia³⁴ (no. 58–59), the first example of a double-stamped LR 13 amphora was presented, bearing the bust of an emperor, and what in this book we will interpret as the ligature of the ounce.³⁵

In the 21st century, the number of publications on the subject increased. In 2002, a stamped LR 13 amphora was found in a cistern on the islet of Geronisos,³⁶ located off the west coast of Cyprus. It was the first time that attention was given to the eparch *Ptolemy* who was mentioned in the inscription around the imperial bust (no. 71).

²⁷ Tudor 1962: 118, fig. 3.7; Popescu 1976: no. 307, 313.

²⁸ See Chapter 2.

²⁹ Sztetyłło and Borkowski 1986.

³⁰ Diamanti 2019.

³¹ Diamanti 2010a.

³² Hayes 1992: 7.

³³ Bentaher 1994: 231, fig. 13a.

³⁴ Bonnet and Cattin 1999: 538–539, no. 158, fig. 489, 158.

³⁵ See Chapter 3.

³⁶ Connelly and Wilson 2002: 275, fig. 8.

A very interesting stamp on a LR 13 amphora from Comacchio in Italy (no. 61) was first published in 2007, with a more recent publication in 2021³⁷ that was accompanied by extensive analysis of the research. This example belongs to the type of stamps bearing, as we suggest, the ligature of the ounce and the value 20 ‘8 K’.³⁸ What is very interesting is that this was the first published example of its kind, as well as an *unicum* in an extensive and systematic excavation, which demonstrates the rarity of these finds, but also the importance of systematic excavations where these unique finds are more likely to be located and dated in their context. In this case, it seems that it is dated to the 7th century AD and before the main period of development of the Comacchio port area.³⁹

The present author’s PhD, defended in 2007 and published in 2010, presented the imported and local production of amphorae at Halasarna on the island of Cos.⁴⁰ The workshop of Halasarna remains, after 12 years, the only known example of a workshop making mass-produced LR1 and LR 13 amphora in the Aegean region, and, even more importantly, the only known Late Antiquity workshop producing stamped amphora. The finds (nos 14–19, 25–35, 37–41) drew more attention to this kind of stamps, and as a result, often in collaboration with many colleagues, discussions and sometimes publications of new examples appeared. This monograph on the Halasarna workshop also supported for the first time, based on historical data and archaeological parallels, the theory, previously advocated by Virginia Grace and John Hayes, that the busts of state stamps on the LR 13 amphorae belonged to Byzantine emperors. The same theory was later supported in a paper devoted, also for the first time, exclusively to Late Roman stamped amphorae of the LR 13 type.⁴¹

A recent example, published in 2010, came from the Israel-Nahalat Yehuda quarter of Rishon Le-Ziyyon, with stamps on both sides of the neck between the handles with an emperor bust and the ‘8 K’ inscription (nos 55–56), the ounce ligature that we analyse in Chapter 3 of this book. Peter Gendelman had seen the letters ‘beta and kappa which may have a numeric value and may have marked the volume capacity of the amphora’.⁴²

A very interesting case of a stamped LR 13 amphora found on Chios (no. 69) was published in 2010, and was examined within its context of a coin hoard of the first half of the 7th century AD.⁴³

In 2011 there was the publication of another LR 1 amphora stamp, referring to the Cilician city of Corycos, which was found once again in Scythia Minor, Sucidava (no. 2).⁴⁴

The present author published in 2012 the first Halasarnian examples of LR 13 amphorae with imperial busts (nos 22, 24), and this category of imperial series of Late Roman stamps was examined more systematically, as were the officers involved in controlling their production and distribution, the ‘eparchs’ of the inscriptions and the *kommerkiarioi*.⁴⁵ It was also the first article devoted exclusively to the imperial series of Late Roman amphorae.

Andrei Opaït and the present author published in 2014 four stamped examples from the Athens Agora (nos 43, 44, 63, 64), as previously mentioned, which were first reported by Virginia Grace.⁴⁶ In this book

³⁷ Negrelli 2007: fig. 21.1; Gelichi and Negrelli 2008: fig. 1.1; Negrelli 2021: 266–270.

³⁸ See Chapter 3.

³⁹ Negrelli 2021: 269.

⁴⁰ Diamanti 2010a.

⁴¹ Diamanti 2010b.

⁴² Gendelman 2010: 6, 11 fig. 4.16.

⁴³ Vassi 2010.

⁴⁴ Gherghe and Amon 2011: 24, fig.1.B, 2.

⁴⁵ Diamanti 2012.

⁴⁶ Opaït and Diamanti 2014.

the author presents recent work on them, including drawings and detailed images, which are published for the first time. They also provide an opportunity to confirm the strong probability of a Coan origin for two of them.

One example of a LR 13 amphora with a stamped neck, which was misidentified as a LR 1 amphora, was a survey find from Rhodes; it was published in 2014 (no. 45). That publication supported the already known theory⁴⁷ that the bust of the stamp belongs to an eparch.⁴⁸

In 2015, a very interesting article was published that examined material from the excavations at the Port of Theodosius (Yenikapı), carried out as part of the Marmaray Metro Transportation project in Istanbul. The article presented three LRA 1 stamps, two with the city names Corycos (no. 6) and Sevaste (Elaiussa Sevaste) of Cilicia (no. 10), and a third with a simple cross (no. 13). In addition, it presented two of the LR 13 stamped amphorae found that belonged to the imperial series of stamps (nos 46, 66–67), one of which may be of Coan origin (no. 46).⁴⁹ One of the stamps of the other examples (no. 67) belongs to the category of inscriptions with the ounce ligature and the value K, 20 ('8 K').⁵⁰

Two remarkably interesting stamped examples from Myndos of LR 13 amphorae with imperial busts were published in 2016, both bearing indications of the ounce inscription ('8 K'), and for which we propose a Coan origin (nos 47–49).⁵¹

Another example of a stamped LRA 13, found in Knidos in a chapel setting with associated auxiliary outbuildings (no. 54), was very well published in its context, with its associated finds, in 2018 and 2019.⁵² It is worth mentioning that among the finds was a *decanummion* of Phocas, wearing consular robes and holding a *mappa*, just like the emperor (Phocas or Heraclius) of the stamped amphora also found. According to the researchers, the amphora is of Coan origin and we can agree with this view.

In 2019, Horacio González Cesteros presented an example of a LR 13 stamped amphora found in Brijuni *castrum* (no. 42), arguing that it is of Coan origin, which, combined with the theory that the *castrum* was used as a military base during the Early Byzantine period, makes this example particularly important for our research.⁵³

Another article by the present author followed in 2019, presenting new historical evidence for the officer, the 'eparch', to whom the inscriptions of the imperial stamps referred, and it was suggested that this eparch was the *quaestor exercitus*, also known from the sources as the 'eparch of the islands'.⁵⁴

The number of publications has increased over time, with two further stamped examples of amphorae related to our subject being published in 2021. One was a LR 1 stamped amphora found in Olba, Cilicia that is claimed to be related to the city stamps series of this amphora type, although the stamp is worn (no. 11).⁵⁵ The other is a stamped LR 13 amphora found during underwater research at Kruglaya Bay, in Sevastopol (no. 65); the bust of the emperor was identified by the researcher as Phocas.⁵⁶

⁴⁷ Sztetyllo-Borkowski 1989.

⁴⁸ Papanikolaou 2014.

⁴⁹ Kara 2015: 245–247.

⁵⁰ See Chapter 3.

⁵¹ Gülsefa 2016: 67, 113–114, nos 39–40.

⁵² Doksanaltı *et al.* 2018, 47–48; Doksanaltı *et al.* 2019: 139–142.

⁵³ González Cesteros 2019: 67–68.

⁵⁴ Diamanti 2019.

⁵⁵ Aydın *et al.* 2021, 146.

⁵⁶ Bukatov 2021.

Thanks to Jakob Munk Højte, some very interesting examples of stamped amphorae (nos 52, 53) from Halicarnassus, which may be of Coan origin, are able to be included in this present book. They are currently awaiting publication.⁵⁷

Finally, in addition to unpublished finds from Halasarna (i.e. nos 1, 20–21, 23, 36), other examples that provide new information on the research have been included, i.e. the recently published LR 1 stamped amphora from Limyra, which is a rare and remarkably interesting example (no. 7).⁵⁸ The stamps on LR 13 amphorae (nos 50–51) from the iconic Yassiada shipwreck (7th century AD) have also recently been published, adding an intriguing example of double-stamping, probably of Coan origin.⁵⁹

In this present work we will have the opportunity to co-study all the administrative stamps on Late Roman amphorae mentioned above as a corpus, under the prism of the archaeological contextual information offered by the Halasarna workshop.

1.2. The Late Roman stamped amphorae workshop from the excavations at Halasarna (modern Kardamaina) on Cos Island (Figures 1–4)

Halasarna (modern Kardamaina) is located on the south coast of Cos, and during antiquity it was the centre of the ancient deme of Halasarna (Figure 1). The excavation of Halasarna at the western end of today's Kardamaina has been systematically conducted by the University of Athens for more than 30 years. It includes a large part of the sanctuary of Apollo Pythaios-Pythaeus and is the site where the remains of five monumental buildings have been revealed, dating to the Hellenistic period. Later, the area developed into the extensive and thriving coastal settlement of the Late Roman/Early Byzantine period,⁶⁰ which was also a mass importer and producer of amphorae (Figures 2–3).

Indeed, the strategic location of Cos during the Early Byzantine period on the hyperactive sea routes to and from the capital Constantinople,⁶¹ as well as its proximity to the southwestern shores of Asia Minor, an important commercial hub and cultural centre since ancient times, had a significant impact on settlement at Halasarna.

At the beginning of the 6th century AD, Cos belonged to the 'Eparchy of the Islands', while in the Justinian years it fell within the *quaestura Iustiniana exercitus*⁶² (Figure 4). The spread of Christianity was another factor that would shape Late Roman/Early Byzantine Cos, elevating it to an episcopal seat.⁶³ Two earthquakes in the 5th and 6th centuries AD are considered key factors in the Early Byzantine period of the island: the first occurred in AD 469 during the reign of Leo I, and less than a century later, in AD 554, during the reign of Justinian, there was an even more devastating one, as described by Agathias. From his short visit to the island, it seems clear that Cos was a way station on, arguably, the most important sea route from Alexandria to Constantinople. As his ship put in for a while at Cos, the young traveller had the opportunity to witness and later vividly describe the massive consequences of the island's recent devastating earthquake and the tsunami that followed, around AD 554. The few notes kept by the future historian are of great significance and his testimony is reflected in the stratigraphy of the Halasarna

⁵⁷ Højte and Pedersen, forthcoming.

⁵⁸ Bes, Diamanti and Dolea 2023.

⁵⁹ Diamanti 2023.

⁶⁰ Kokkorou-Alevras, Kalopissi-Verti and Panayotidi-Kesisoglou 2006: 47–68; Kokkorou-Alevras *et al.* 2016: 185–187; Kokkorou-Alevras 2020; Kalopissi-Verti and Panayotidi-Kesisoglou 2020, with further references to previous bibliography.

⁶¹ Avramea 2002: 83–84; Laiou and Morrisson 2007: 13.

⁶² Hieriocles, *Συνέκδημος*: 686.2; 4. Ahrweiler 1966: 11–12; Sodini 2003: 526. Diamanti 2010a: 23.

⁶³ Kalopissi-Verti and Panayotidi-Kesisoglou 2020: 189.

excavations⁶⁴ conducted by the University of Athens in the large destruction layer found, which defines the two phases of the settlement's life.

In the first phase, beginning in the 4th century AD, its apogee is reached in the first half of the 6th century AD, before being finally destroyed by the devastating earthquake of AD 554 referred to above. The second phase begins from the middle of the 6th century AD until the Arab raids – and the final abandonment of the settlement in the middle of the 7th century.⁶⁵

For both these phases, the area of the settlement excavated by the University of Athens has proven to be particularly representative of almost all the activities of the Halasarnians, i.e. there are discoveries of houses, storehouses, workshops, and a burial complex.⁶⁶ Moreover, the settlement stretched over c. 6 km, in a relatively narrow strip along the coast, as is revealed by the survey research of the excavators.⁶⁷

The Halasarna basilicas are also strong indicators of the prosperity and security its inhabitants enjoyed. These include the basilica in the area of Haghia Barbara, near the sea, and another in the centre of the present village of Kardamaina – a three-aisled basilica of c. AD 500, with mosaic floors that preserve the names of the sponsors: Dorotheos, Eutybios, and the presbyter Photeinos. A third basilica has been found in the area of Aragi, near the western end of Kardamaina, at the foot of the so-called 'Evraikastro'. Mention should also be made of the basilica of Haghia Theotes (Holy Divinity), the remains of which (among them its apse) are located a few metres east of the excavations that began in 1985.⁶⁸

Halasarna was deeply involved in the economic life and organisation of the Late Roman Mediterranean, as evidenced by the ceramic finds recovered from the excavation of the Late Roman settlement, including imports of amphora, fine ware, and lamps from Asia Minor, Cyprus, Aegean Sea centres, North Africa, and Palestine.⁶⁹

However, most of the ceramic material recovered consists of fragments of commercial amphorae.⁷⁰ In this respect, Halasarna is a typical case of a thriving Late Roman coastal settlement and an agricultural village, with amphora imports from other centres of the Eastern Mediterranean. Yet one of the most important factors is that Halasarna emerges as a producer for the empire, as indicated by the state-controlled, mass production of amphora types LR 1 and 13, and especially the state stamping of LRA 13. It is the only known workshop of its kind found to date, and, therefore, a secure (geographically and chronologically) basis for a comprehensive study and presentation of administrative stamped Late Roman amphorae.

The present author's doctoral dissertation includes a chapter devoted to the presentation of these Coan stamped amphorae, as well as a systematic examination of Late Roman stamped amphorae in general. After publication, the author's research was presented in subsequent related articles where, in short, these stamps were seen as a type of 'ceramic currency', distributed within the framework of the *quaestura exercitus* and a surplus redistribution economy.⁷¹

⁶⁴ Agathias, *Histories*, B 16.

⁶⁵ Kalopissi-Verti and Panayotidi-Kesisoglou 2020: 190–191. Abu 'l 'Awar invaded the island in AD 654/5. The surviving population abandoned their coastal homes and moved to the island's interior: Theophanis, *Chronographia*, ed. J. Classen, 1839, v. I, 528; *Chronique de Michal le Syrien*, ed. J.B. Chabot, 1901, t. II, 442.

⁶⁶ Kalopissi-Verti and Panayotidi-Kesisoglou 2020: 192–195.

⁶⁷ Kokkorou-Alevras, Kalopissi-Verti and Panayotidi-Kesisoglou 2006: 46–67; Kopanias 2009: 83; Kokkorou-Alevras 2009: 146–153; Diamanti 2010a: 180–185; Kalopissi-Verti and Panayotidi-Kesisoglou 2020: 190.

⁶⁸ Kokkorou-Alevras, Kalopissi-Verti and Panayotidi-Kesisoglou 2006: 46–47; Diamanti 2010a: 27–29; Brouskari 2020; Kalopissi-Verti and Panayotidi-Kesisoglou 2020: 190.

⁶⁹ Diamanti 2021.

⁷⁰ Diamanti 2010a: 27–29, 49, 80–81.

⁷¹ Diamanti 2019: 205.

1.3. What should follow? The goals and outline of this book

After these 15 years of research on the subject, described above, and the publication of several additional examples from across the Mediterranean, we believe that the time is right to revisit all the work on this fascinating subject by dedicating a monograph to it.

The main objective of the present book is to offer a comprehensive presentation of these administrative stamps of LRA types 1 and 13, and particularly the state-controlled Late Roman stamped amphorae of type 13 from the workshop of Halasarna, in their archaeological context, comparing them to similar examples published and within their historical period (Figure 5).

We would like to present these stamped amphorae as important archaeological evidence for the imperial financial policies during the 6th-7th centuries AD. For this we have the evidence of the Coan mass-produced LRA 1⁷² and 13⁷³ of the Halasarna workshop, dating from the late 6th century to the 7th centuries AD, and especially the Coan stamped LRA 13 that carry the effigy of the emperor himself, propagandising the imperial economic policy everywhere. Indeed, the soldiers were paid in kind with amphorae, the stamps of which were pictorially the same as the coins given to them as wages.⁷⁴

Accordingly, what follows is a brief outline of this work's contents and structure, also providing information on the conventions used.

Chapter 2 (LR 1 city amphora stamps; Catalogue nos 1–13; Figure 5; Plate 1) presents a chronological co-study of Late Roman administrative amphora stamps, i.e. the city stamps of LRA 1 and the reasons for their succession from the LRA 13 state stamps. The research of the administrative stamps begins with the small group of the LRA 1 city examples, which refer to cities of Cilicia, its earliest and largest known centre of production. These stamps probably acknowledged the annona-related services, the privileges of these Cilician cities, and the *navicularii* (known from the *Abydos* inscription⁷⁵).

There is at least one example known thus far from the Halasarna excavation of an imported LRA 1 stamped amphora, which is also well examined in its context, something which is not always the case. Furthermore, we must consider the fact that during the later mass co-production of LRA 1 and 13 at Halasarna, none of the LRA 1 were stamped. This is very important evidence of absence, which, combined with the earlier production date of the stamped Cilician LRA 1, can provide interesting information about the early date of this type of administrative stamp.

Finally, it is intriguing to try and trace the historical reasons for this transition from the city stamps of the LRA 1 to the state stamps of the LRA 13. The pre-existence of this type of city stamp led to the need for a new type of amphora, a completely different container, which would signify, also visually, the new economic measures expressed by the imperial state stamps and the new needs of the state, which we examine further in the next chapter.

Chapter 3 (LR 13 state amphorae stamps – From production to distribution; Catalogue nos 14–71; Figures 5–12; Plates 2–16) focuses on the state administrative stamps that appear together with a new type of amphora, the LR 13, in the second half of the 6th century AD. These stamps often bear the imperial bust, the state emblem of the period, in the same manner as on contemporary coins, and/or monograms and

⁷² For Coan LRA 1, see Diamanti 2010a: 58–72, 203–206, 279–328 (s/n 139–347).

⁷³ For Coan LRA 13, see Diamanti 2010a: 80–115, 207–216, 331–399 (s/n 359–617).

⁷⁴ Haldon 1990: 12; 1995, III, 80; Treadgold 1995: 158–159; Haldon 1999: 235; Gkoutzioukostas and Moniaros 2009: 127–129, 134–137, 141–143, 147–153.

⁷⁵ See Chapter 2.

ounce indications, as well as Greek inscriptions, around their perimeter. The latter refer often to an authorised, high-ranking official, the *Eparch*, who, according to our theory is the ‘eparch of the islands’, the *quaestor exercitus*, whose main duty was to channel the agricultural goods of the wealthy individuals of his administrative southern unit to the army camps in need on the empire’s northern borders. These stamps appear around the third to the last quarter of the 6th century AD, and until the first quarter of the 7th century, securing the necessary circulation license and possibly the exchange value of a certain number of unstamped amphorae as well.

In this chapter, the cataloguing of the Coan state stamps of the Halasarna workshop, compared to all the similar state-stamped LRA 13 published elsewhere, provides an opportunity to make suggestions as to their Coan origin (or not) and thus the distribution of the Coan production and their dates – the Halasarna workshop is currently the only point of reference for this category of stamps and could serve as a useful tool for studying them all as a corpus in context. Additionally, the co-study of all the examples offers an opportunity to recognise more easily common patterns of enigmatic inscriptions and contributes to their explanation (e.g. the ounce inscriptions), to follow the morphological progress of LRA 2 and LRA 13, and to make pictorial comparisons.⁷⁶

An attempt has been made to use one common way of handling all the catalogue material in both Chapters 2 and 3, as we support that there is a chronological sequence between the appearance of LRA 1 and 13. The catalogued examples in the present book are numbered accordingly, and in cases where there are two stamps on the same amphora, each is given its individual catalogue number in Chapter 3 so that it is possible to discuss the different characteristics and/or their contents between them, and to facilitate comparison with similar stamps of other amphorae. In other words, each entry corresponds to an amphora, but the catalogue numbers refer to their stamps (e.g. no. 1 or nos 13–14).

The first entries are devoted to Coan examples, followed by all similar LRA 13 examples of possible Coan origin (based, usually, on the macroscopic examination of an available colour image) in, more or less, geographical order, so as to show the possible distribution of the workshop exports. Then, there are examples that cannot be attributed with certainty to the Coan workshop based on the published information available, or those that definitely belong to other, so far unknown, workshops, again in geographical order. For each example not found in the Halasarnian workshop, we suggest their origin (Coan or not) and a date, based, inter alia, on the chronological comparative information of the Halasarna excavation and contexts.

The chapter includes also unpublished stamps from Halasarnian LR 13 amphorae, or new data for the published ones, resulting from new drawings and images of the material, as well as conservation work, under the Research Excellence Program ‘THALES – UOA – The Apollo Sanctuary and the Late Roman Settlement in Halasarna (Kos). The history of an ancient sanctuary, its decline and its final transformation into a Late Roman/Early Christian settlement’.⁷⁷

At the end of the book, after the Figures, the Plates reproduce photographs and/or drawings of the catalogued Halasarnian stamped amphorae, as well as the published examples of amphorae found elsewhere, for which permission has been granted.

Chapter 4 (Halasarna stamped amphorae in space and time (with Anastasios Lamprakis; Figures 2–3, 13–28) presents the Halasarnian stamped amphorae contexts in more detail, based mainly on their spatio-temporal pottery co-finds. The presentation of this data is important, of course, for documenting

⁷⁶ See Chapter 3.

⁷⁷ Page of the National and Kapodistrian University of Athens, School of Philosophy Department of History and Archaeology, <http://en.arch.uoa.gr/research-congresses/programmes/halasarna-kos.html> (viewed 7 March 2023).

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the dating of the pottery in question in this excavation. In addition, it provides enough information for the reconstruction and familiarisation with the spatial planning and the site's daily activities, which included the state-controlled workshop of Halasarna, even if the study of the architecture of the settlement has not yet been completed.

By way of conclusion, Chapter 5 (From city to state amphora stamps, and from present results to future research) attempts to provide a comprehensive and synthetic analysis of the results of this research, while suggesting the problems and desiderata to be addressed through future research.