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Assemblages of Transport Amphoras: From Chronology to Economics and Society

Panel 6.6

Mark L. Lawall (Ed.)

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Cover illustration: Trays of sherds from the Istanbul, Yenikapı harbor excavations, installed as ceiling tiles in the Istanbul Archaeological Museum, 2010 (photo: M. L. Lawall)

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PREFACE

On behalf of the 'Associazione Internazionale di Archeologia Classica (AIAC)' the 19th International Congress for Classical Archaeology took place in Cologne and Bonn from 22 to 26 May 2018. It was jointly organized by the two Archaeological Institutes of the Universities of Cologne and Bonn, and the primary theme of the congress was 'Archaeology and Economy in the Ancient World'. In fact, economic aspects permeate all areas of public and private life in ancient societies, whether in urban development, religion, art, housing, or in death.

Research on ancient economies has long played a significant role in ancient history. Increasingly in the last decades, awareness has grown in archaeology that the material culture of ancient societies offers excellent opportunities for studying the structure, performance, and dynamics of ancient economic systems and economic processes. Therefore, the main objective of this congress was to understand economy as a central element of classical societies and to analyze its interaction with ecological, political, social, religious, and cultural factors. The theme of the congress was addressed to all disciplines that deal with the Greco-Roman civilization and their neighbouring cultures from the Aegean Bronze Age to the end of Late Antiquity.

The participation of more than 1.200 scholars from more than 40 countries demonstrates the great response to the topic of the congress. Altogether, more than 900 papers in 128 panels were presented, as were more than 110 posters. The publication of the congress is in two stages: larger panels are initially presented as independent volumes, such as this publication. Finally, at the end of the editing process, all contributions will be published in a joint conference volume.

We would like to take this opportunity to thank all participants and helpers of the congress who made it such a great success. Its realization would not have been possible without the generous support of many institutions, whom we would like to thank once again: the Universities of Bonn and Cologne, the Archaeological Society of Cologne, the Archaeology Foundation of Cologne, the Gerda Henkel Foundation, the Fritz Thyssen Foundation, the Sal. Oppenheim Foundation, the German Research Foundation (DFG), the German Academic Exchange Service (DAAD), the Romano-Germanic Museum Cologne and the LVR-LandesMuseum Bonn. Finally, our thanks go to all colleagues and panel organizers who were involved in the editing and printing process.

Bonn/Cologne, in August 2019

Martin Bentz & Michael Heinzelmann

Assemblages of Transport Amphoras: From Chronology to Economics and Society: Introduction

Mark L. Lawall

There is a long and important history of research centering on ceramic chronologies that gives a starring role to closed deposits. Carl Schuchhardt's 1895 publication of a mid 2nd century B.C. deposit on the citadel of Pergamon provided a fixed point for Rhodian amphora stamps.[1] His interests were not limited to chronology; he also considered the intensity of Rhodian-Pergamene commerce and the reasons for stamping amphoras in the first place. The papers in this volume follow a current trend in Classical Archaeology towards ever greater interest in contexts, both for chronology and for socio-economic interpretations. Chronological studies depending on close studies of archaeological context remain indispensable. And yet, no less important are the insights that can be gained when detailed contextual studies of transport amphoras examine issues of trade and exchange, the economics of cult, household economies, economic development and collapse, and other such issues.

While there is undeniable value in publishing collections of amphoras or, even more traditionally, collections of those sections of amphora handles that happen to carry stamped impressions; the AIAC panel that gave rise to the present collection sought further conclusions from connections between amphora finds and their broader contexts. The contexts in question varied considerably, from an individual house, to a specific sector of one site, to multiple regions across wide landscapes. Context also depends on the other artifacts associated in one sense or another with the amphoras. Context can also be thought of in terms of the narrow or broad span of events that impacted each artifact – in this case especially the amphoras – as they entered 'the archaeological record'. And perhaps most importantly for both the theme of the AIAC conference and archaeology's contribution to big questions of ancient social history, context includes the broader economic systems in play at the time and place of each amphora's use(s). In defining context in these many different ways – and this list is incomplete – we move from readily observable features (find spot, associated artifacts) to invisible behavior (economic systems).

Our first two papers in Bonn addressed two specific, very different kinds of assemblages: the cult-related assemblage from the Taxiarchis Hill at Didyma presented by Alexandra von Miller (von Miller, paper) and the commercial assemblage recovered from the so-called Punic Amphora Building at Corinth currently under study by Antonio Saez Romero (Saez Romero, paper). Yiftah Shalev and his colleagues presented the imported amphoras from a wide range of different kinds of contexts in the Persian period Levant allowing us to see contemporary variation within a specific region (Shalev et al., abstract). Stella Demesticha's presentation on her excavations at the

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Mazotos shipwreck demonstrated the wide range of economic-behavioral conclusions that can be drawn from a carefully studied cargo (Demesticha, abstract). Kostas Filis' presentation of assemblages from two port sites on the south coast of the Corinthian gulf provided us with new, long-term data on commercial assemblages along one the busiest and contentious waterways of Greek antiquity (Filis, paper).

The second half of the session in Bonn spanned the Hellenistic and Roman imperial periods. Gerald Finkielsztejn offered a companion piece to Shalev's survey, again addressing amphora assemblages at a wide range of different kinds of sites. Stella Skaltsa's paper offered our first look at an amphora assemblage at a civic or public building in the city of Rhodes and the potential for a rich assemblage of local amphoras there to inform the interpretation of that building (Skaltsa, paper). Hannah Liedl and Horacio González Cesteros presented a discrete deposit within Terrace House 2 at Ephesus as a window into the socio-economic activity in the area and the city more generally in the Julio-Claudian period, before the construction of that well-known housing complex (Liedl and González Cesteros, paper). Finally, Anna Nagy and György Szakmány presented the amphora finds from a Roman-period, civilian settlement near the military base at Brigetio; their work adds an important data point to the ongoing study of the influence of the Roman state and its military supplies on Mediterranean trade.

Such a wide range of case studies, showing great diversity in terms of both chronology and geography, makes drawing general conclusions very difficult. This fact should hardly surprise given the emerging recognition of complexity and change in ancient economic history. The papers in this panel demonstrate the exciting potential of archaeology to contribute to this complex picture.

The amphora supply at the Didyma sanctuary as attested by the finds on Taxiarchis Hill seems to draw heavily on the immediate region in contrast to the more cosmopolitan fine wares. Other sanctuary-related assemblages, such as those published from the sanctuary of Aphaia on Aegina or Athena at Troy, draw from much wider catchment areas.[2] The broader economic system in play with the Didyma assemblage may even include amphora production aimed at sacred use much as seems to be the case at nearby Miletos. Such features of cultic use of amphora-borne goods help define both the commonalities and the differences within cultic economies.

The 5th century Punic Amphora Building assemblage and the 4th century Mazotos shipwreck each highlight the links between chronologically and spatially discrete, seemingly commercial assemblages and much broader problems of economic history.

Thanks to the finds from the Punic Amphora Building, we can move beyond the common, broad, aggregate view of imports to a specific site and delve instead into one commercial establishment in considerable detail. The archaeological record preserved at the Building can be reasonably associated with the decisions of one person or at most one family; we can see the material impact of their decisions, their connections, and ultimately their decision (whether voluntary or coerced) to end their business in that particular location.

While such a view of personal agency is rare from land excavations, shipwrecks are often considered along similar lines of individual or small-group agency. Preliminary work on the Mazotos wreck is starting to highlight both the overall structure of the cargo, its origins, its organization on the ship, and the details of the goods. The diversity of olive types recognized so far, packaged in various different amphora types, highlights the problematic links between amphora and contents, and hence potential asymmetries of knowledge for merchants and consumers.

The many stamped amphora handles found in the large portico complex in the city of Rhodes, as discussed by Skaltsa, contribute to our understanding of the function of this enigmatic complex. The mix of honorific inscriptions with hundreds of amphora handles (but not stored amphoras) suggests that amphora-borne goods, likely wine, were consumed in the building on a frequent basis, but the jars were not stored or discarded onsite. Rather than seeing evidence for fluctuation of imports or exports, as we so often consider with assemblages of amphoras, here we are seeing fluctuations in consumption for (we assume) one particular purpose or group of consumers.

The sealed deposit from under Terrace House 2 at Ephesus raises significant challenges in terms of context and interpretation. On the one hand the pit is associated spatially with the later residential quarter of the Terrace Houses; and yet, it clearly predates that activity. Connection to ritual is suggested on the basis of the good state of preservation of many vessels and the unusually high frequency of lids. Liedl and González Cesteros highlight the potential influences of local demand for different kinds of products, whether types of pottery or the contents of amphoras.

Although all of the papers just discussed also address the broader regional setting of their assemblages in terms of the points of origin of the amphoras, the two last papers in this collection focus their attention on patterns of amphora production and trade over very broad regions. In such settings the definition of context broadens considerably, both in terms of chronology and geography. The amphora record across the northern coast of the Peloponnese has expanded greatly in breadth and detail in recent decades. Filis takes into account not only the long standing, westward orientation of commerce along the Corinthian Gulf, but also the very important environmental constraints that could have limited or discouraged amphora production until economic conditions proved most conducive.

An even broader geographical and chronological perspective is used by Shalev and his colleagues. While it was not possible to drill down to the level of specific deposits, their work does draw attention to the changing presence of different amphora classes and, equally important, the absences of certain classes in certain periods. Careful comparisons with contemporary patterns elsewhere in the Mediterranean highlight the very dynamic and diverse nature of ancient economies.

The papers in this panel, both those published in whole or in part here and those to be published elsewhere, illustrate the wide range of issues illuminating aspects of ancient economies that can be addressed by close attention to amphora assemblages.

Challenges remain. A frequent topic both during this panel and others at the Congress was the matter of quantification. Until excavations across the Mediterranean adopt the same recovery, documentation, and storage policies, archaeologists will remain hamstrung by numbers. This panel and others, however, demonstrate the progress that can be achieved both by close observation of qualitative aspects of the archaeological record and by necessarily judicious reference to the admittedly limited quantitative data.

Notes

[1] Schuchhardt 1895

[2] Aegina: Johnston 1990; Troy: Lawall 2002[2003].

References

Johnston 1990

A. W. Johnston, Aegina, Aphaia-Tempel XIII. The Storage Amphoras, AA 1990, 37–64.

Lawall 2002

M. L. Lawall, Ilion Before Alexander: Amphoras and Economic Archaeology, StTroica 12, 2002, 197–244.

Schuchhardt 1895

C. Schuchhardt, Amphorenstempel, in: M. Fränkel (ed.), Die Inschriften von Pergamon. Römischer Zeit – Inschriften auf Thon, AvP 8, 2 (Berlin 1895) 423–498.

Amphorae at Taxiarchis Hill, Didyma: Economy and Cult of an Archaic Sanctuary in Light of its Assemblage of Transport Jars

Alexandra von Miller

Taxiarchis Hill is situated about 200 m northwest of the temple of Apollon Didymeus next to the Sacred Way that connects the extra-urban sanctuary at Didyma to the *polis* of Miletos. The site proved to be of great importance for the assessment of Didyma in the Archaic period.

The paper builds upon a now completed study of finds from the excavations on Taxiarchis Hill, which were carried out under the direction of H. Bumke (MLU Halle-Wittenberg) between 2000 and 2009 with the support of the German Archaeological Institute and the Nordrhein-Westfälische Akademie der Wissenschaften und der Künste.[1] The excavations revealed a stratigraphic sequence that yields four phases of Archaic activity on the upper terrace of the hill. This sequence was sealed by a final feature in the Hellenistic period, thus largely protecting the Archaic contexts from disturbance by later building activities on the site. The closed character of the deposits on Taxiarchis Hill permits us to contextualise the rich findings with regard to cult activities, especially of the late Archaic period, in a very reliable way.

Despite the wide range of different finds, the plain and banded local common ware pottery makes up the lion's share in the deposits on Taxiarchis Hill. While the majority of vessels can be related to ritual feasting and dining,[2] the high amount of amphorae is noteworthy. The local amphorae of Milesian type – both the plain transport amphorae and the slightly smaller banded amphorae – comprise about 12% in the common ware assemblage. Amphorae are hence the second-largest group of vessels, only outnumbered by the Milesian band bowls that are the most prominent shape amongst the local table service. The frequency of shapes that belong to the set of ritual table service at Taxiarchis Hill is similar to that attested from other sanctuaries (e.g. Samos, Ephesos), whereas the sheer quantity of amphorae comes as a surprise.

More than 50% of the amphorae were found in the latest Archaic layers of ca. 500 BC. This confirms a high demand for supply that can be narrowed down to a very short time span, and thus indicates a large number of people taking part in the ritual celebrations at the sanctuary. The material record on Taxiarchis Hill seems to coincide with evidence from other find spots at Didyma and on Zeytintepe at Miletos, where a remarkable number of amphorae has been mentioned for the 6th century BC[3]. Apparently, a large quantity of amphorae did not become a typical feature in the assemblages of Milesian sanctuaries before then, given the contrary situation in the archaeological assemblage of the 7th century BC at Assesos.[4] The amphora record might therefore be of further consequence for the diachronic assessment of ritual behaviours in the Archaic period.

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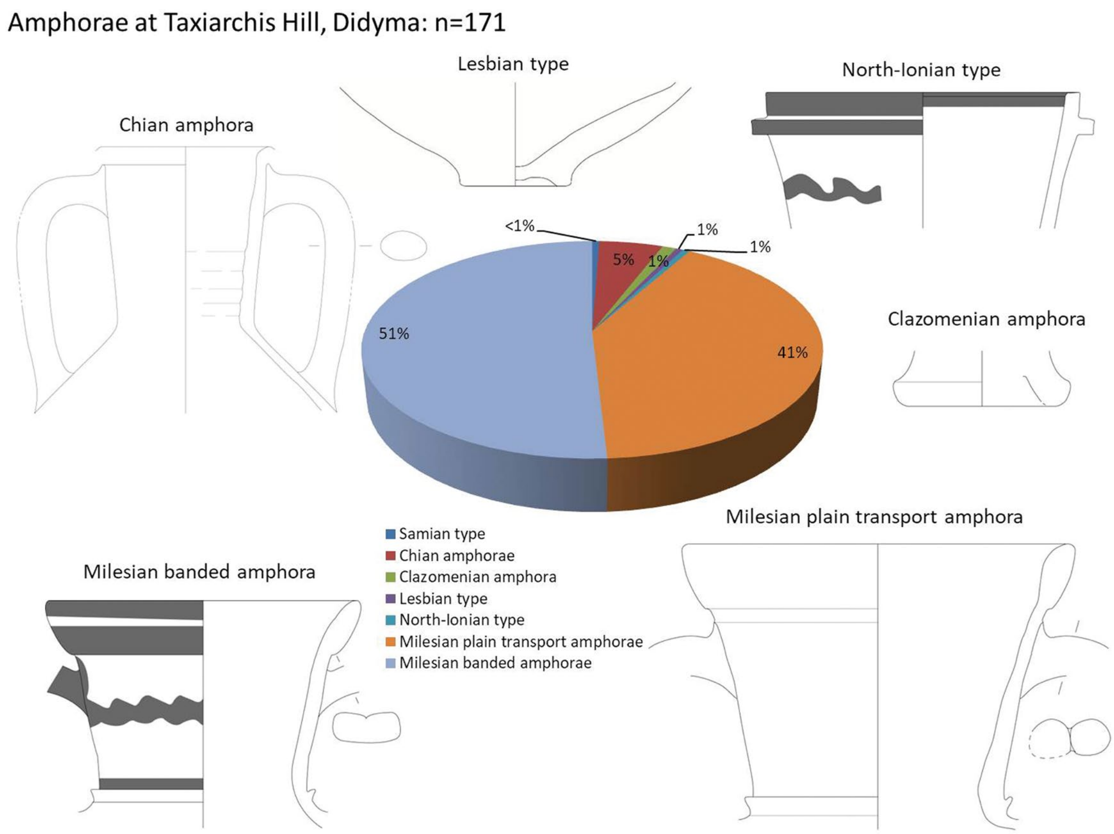

Fig. 1: Overview of the amphorae from the Archaic deposits on Taxiarchis Hill, Didyma.

According to the amphorae from Taxiarchis Hill, the supply of the sanctuary was provided almost exclusively by the surrounding Milesian region (fig. 1). The small number of imported amphorae with an emphasis on Chian vessels is a feature that again matches the evidence published so far from other places in the Milesian region.[5] The considerable amount of imports other than amphorae from both inside and outside Ionia in the deposits on Taxiarchis Hill however confirms the scarcity of amphora imports as being the result of a very deliberate choice. The microregional nature of supply is further underlined by the high portion of the banded amphorae, which are thought to have served mainly for local and regional trade and transport.[6]

Two shoulder fragments show *dipinti*, and although they are not well enough preserved to be sure, comparable finds from contemporary sanctuaries[7] give reason to believe that these jars were intended for the sanctuary already during the production process. Two other amphorae with *graffiti* were probably dedications to the sanctuary.

Both the high demands for goods as well as the presumed specific amphora production imply some kind of supervised organisation of supply at Late Archaic Didyma. Given the sanctuary's strong connection to the *polis* of Miletos at that time[8], the maintenance of Didyma by the central *polis* is very likely.

There is little evidence of a ritual use of amphorae: Three vessels show an intentional perforation through the centre of their bases. That they might have been broken in order to reuse them for ceremonial activity, e.g. by integrating them into libation rituals, is one of the possible explanations, yet other models of reuse for these amphorae-bottoms, e.g. as a tool, are equally possible.

Notes

[1] Bumke – Röver 2002; Bumke 2009; Bumke 2013; Bumke 2015; Bumke forthcoming.

[2] Bentz – Bumke 2013; Bumke 2013.

[3] Schattner 2007; Bîrzescu 2009.

[4] Kalaitzoglou 2008.

[5] Kalabaktepe: Naso 2005; Assesos: Kalaitzoglou 2008; Didyma: Schattner 2007.

[6] Bîrzescu 2009; Bîrzescu 2012.

[7] Zeytintepe: Bîrzescu 2009; Samos: Furtwängler 1980, 186; Kron 1984; Kron 1988; Furtwängler – Kienast 1989, 92–94.

[8] Herda 2006; Herda 2008; Herda 2011; Herda 2016.

Image Credits

Fig. 1: chart by author; pottery drawings by Ch. Kolb, author, Struber-İlhan.

References

Bentz – Bumke 2013

M. Bentz – H. Bumke, Mahlzeiten im rituellen Kontext, in: I. Gerlach – D. Raue (eds.), Sanktuar und Ritual. Heilige Plätze im archäologischen Befund (Leiden 2013) 275–290.

Bîrzescu 2009

I. Bîrzescu, Drei Typen archaischer Reifenamphoren aus Milet, Funde aus Milet 21, AA 1, 2009, 121–134.

Bîrzescu 2012

I. Bîrzescu, Die archaischen und frühklassischen Transportamphoren, Histria 15 (Bucharest 2012).

Bumke 2009

H. Bumke, Kulte im Kult. Bedeutung und Funktion des sakralen Mikrokosmos in extraurbanen griechischen Heiligtümern unter besonderer Berücksichtigung von Didyma, MDAVerb 40/2, 2009, 63–73.

Bumke 2013

H. Bumke, Der archaische Heiligtumsbefund vom Taxiarchis-Hügel in Didyma und sein Zeugniswert für die Rekonstruktion ritueller Mahlzeiten, in: I. Gerlach – D. Raue (eds.), Sanktuar und Ritual. Heilige Plätze im archäologischen Befund (Leiden 2013) 335–342.

Bumke 2015

H. Bumke, Aktuelle Forschungen in Didyma. Mit einem Beitrag von E. von Gaisberg, in: Ü. Yalçin – H.-D. Bienert (eds.), Anatolien – Brücke der Kulturen. Aktuelle Forschungen und Perspektiven in den deutsch-türkischen Altertumswissenschaften, Tagungsband des internationalen Symposions „Anatolien – Brücke der Kulturen" in Bonn, 7.–9. Juli 2014, Anschnitt Suppl. 27 (Bochum 2015) 325–343.

Bumke forthcoming

H. Bumke (ed.), Der archaische Heiligtumsbefund vom Taxiarchis-Hügel in Didyma, Didyma 3, 6 (forthcoming).

Bumke – Röver 2002

H. Bumke – E. Röver, Ein wiederentdecktes Heiligtum auf dem „Taxiarchis" in Didyma. Didyma – Bericht über die Arbeit 2000, AA 1, 2002, 84–104.

Furtwängler 1980

A. E. Furtwängler, Heraion von Samos. Grabungen im Südtemenos 1977, AM 95, 1980, 149–224.

Furtwängler – Kienast 1989

A. E. Furtwängler – H. J. Kienast, Der Nordbau im Heraion von Samos, Samos 3 (Bonn 1989).

Herda 2006

A. Herda, Der Apollon-Delphinios-Kult in Milet und die Neujahrsprozession nach Didyma. Ein neuer Kommentar der sog. Molpoi-Satzung, MilForsch 4 (Mainz 2006).

Herda 2008

A. Herda, Apollon Delphinios – Apollon Didymeus. Zwei Gesichter eines milesischen Gottes und ihr Bezug zur Kolonisation Milets in archaischer Zeit, in: R. Bol – U. Höckmann – P. Schollmeyer (eds.), Kult(ur)kontakte. Apollon in Milet/Didyma, Histria, Myus, Naukratis und auf Zypern, Akten der Table Ronde in Mainz vom 11.–12. März 2004, Internationale Archäologie. Arbeitsgemeinschaft, Tagung, Symposium, Kongress 11 (Rahden 2008) 13–75.

Herda 2011

A. Herda, How to Run a State Cult. The Organization of the State Cult of Apollon Delphinios in Miletos, in: M. Haysom – J. Wallensten (eds.), Current Approaches to Religion in Ancient Greece, Papers presented at a Symposium at the Swedish Institute at Athens, 17–19 April 2008 (Stockholm 2011) 57–93.

Herda 2016

A. Herda, Megara and Miletos: Colonising with Apollo. A Structural Comparison of Religious and Political Institutions in Two Archaic Greek Polis States, in: A. Robu – I. Bîrzescu (eds.), MÉGARIKA. Nouvelles recherches sur Mégare et les cités de la Propontide et du Pont-Euxin. Archéologie, épigraphie, histoire, DE L'ARCHÉOLOGIE À L'HISTOIRE 66 (Paris 2016) 15–128.

Kalaitzoglou 2008

G. Kalaitzoglou, Assesos. Ein geschlossener Befund südionischer Keramik aus dem Heiligtum der Athena Assesia, MilForsch 6 (Mainz 2008).

Kron 1984

U. Kron, Archaisches Kultgeschirr aus dem Heraion von Samos. Zu einer speziellen Gattung von archaischem Trink- und Tafelgeschirr mit Dipinti, in: H. A. G. Brijder (ed.), Ancient Greek and Related Pottery. Proceedings of the International Vase Symposium in Amsterdam, 12–15 April 1984 (Amsterdam 1984) 292–297.

Kron 1988

U. Kron, Kultmahle im Heraion von Samos archaischer Zeit, in: R. Hägg – N. Marinatos – G. C. Nordquist (eds.), Early Greek Cult Practice. Proceedings of the 5th International Symposium at the Swedish Institute at Athens, 26–29 June 1986 (Stockholm 1988) 135–147.

Naso 2005

A. Naso, Anfore commerciali arcaiche a Mileto. Rapporto preliminare, Funde aus Milet 19, AA 2, 2005, 73–84.

Schattner 2007

Th. Schattner, Die Fundkeramik vom 8. bis zum 4. Jahrhundert v. Chr. Ergebnisse der Ausgrabungen und Untersuchungen seit dem Jahre 1962, Didyma 3/4 (Mainz 2007).

Wine and Fish? A Preliminary Report on the Punic Amphorae from a Specialized Tavern of the Classical Period at Corinth

Antonio Sáez Romero

Introductory Note

The main goal of this preliminary article is to provide an overview of the Punic amphora assemblage found in excavation of the Punic Amphora Building (PAB) at Corinth. In doing so, the paper also considers the rest of items, the stratigraphy, the building itself and the historical facts that may be connected with the creation and abandonment of this famous Corinthian site. The rest of the amphorae, mostly Greek, will be studied in forthcoming papers. After a few essential data about the old excavations of the late 1970s and the latest research carried out since 2014, the western Punic and Carthaginian amphorae found in the two phases of the building will be examined. Finally, I will raise some preliminary conclusions and ideas concerning the function of the site, its historical context, and Corinth's connection with the Punic West and Carthage in the Classical and late Classical periods.

Previous Research and the Ongoing Project (2014–2018)

The PAB is one of the most cited places concerning the study of the ancient fish processing and fish consumption in the Classical Mediterranean.[1] Charles Williams and the American School of Classical Studies at Athens first excavated the building from 1977 to 1979, and soon published preliminary reports in Hesperia.[2] Subsequently, other researchers such as Carolyn Koehler[3] and Mary Lou Zimmerman-Munn[4] included material from the site in their research on Corinthian amphorae and the commercial links established among Corinth and the central and western Mediterranean.

The first reports and the more recent synthesis published by Zimmerman-Munn[5] describe the structure as a mid-5th century BC commercial building located in the intersection of two major roads (fig. 1). Although excavation of the building was incomplete, its basic design is apparent: multiple rooms, including one with a hearth (kitchen), distributed around a central courtyard, and an upper floor. According to the available stratigraphic data, preliminary reports defined two successive phases: Phase A, when it was a house or establishment with some commercial dealings, dated shortly after 470s BC; and a second stage, Phase B, that included two strata and was the period in which the building was renovated and turned into a prosperous business devoted to the merchandising of commodities. This second phase was dated in the central decades of the 5th century and the place was in operation at least until the 430s BC.[6]

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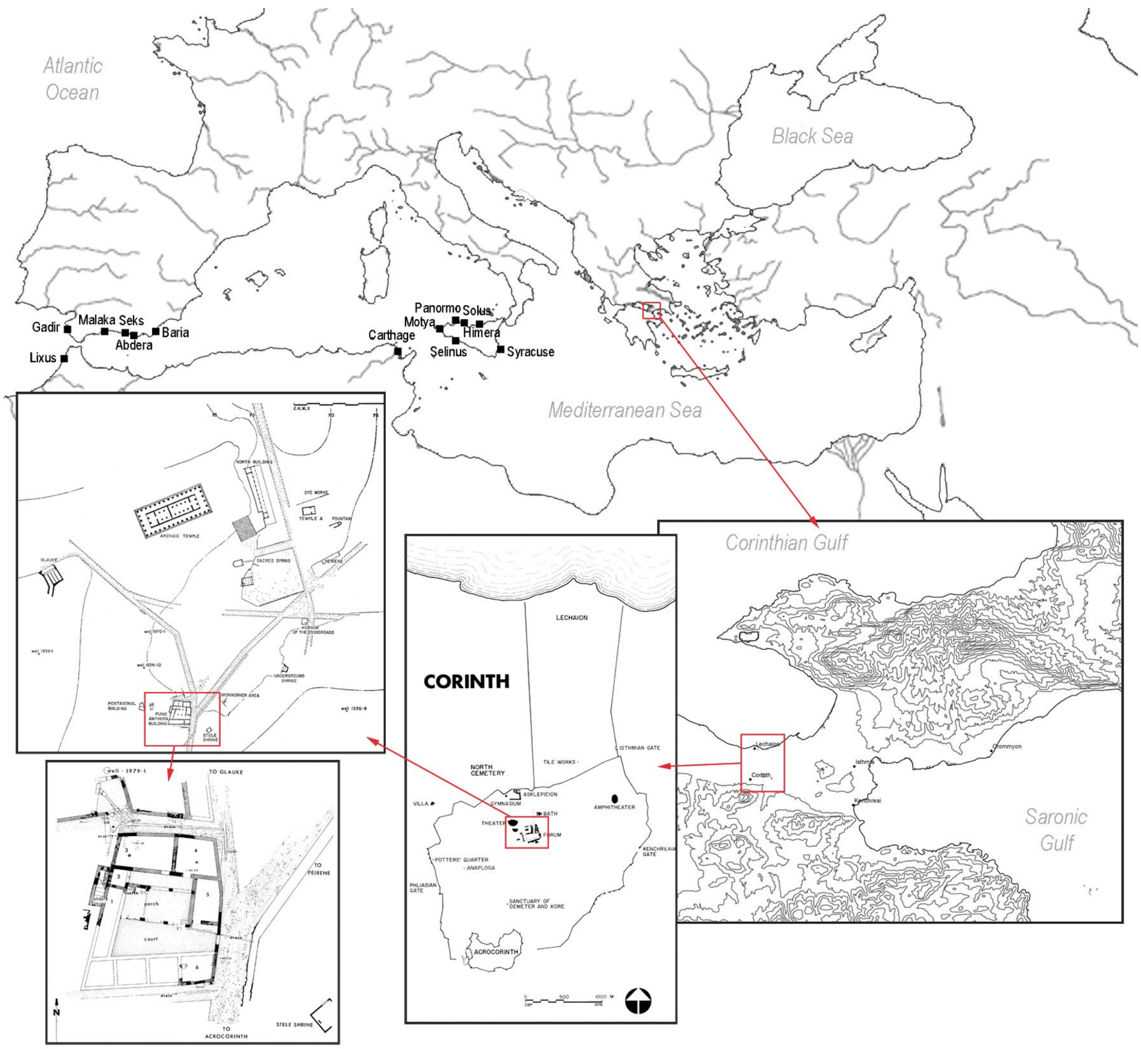

Fig. 1: Location of Corinth and the Punic Amphora Building and of the main Punic sites mentioned in the text.

The initial publication of the excavations of the PAB underlined the commercial role of the building and emphasized the great quantity of transport amphorae found, particularly in the courtyard. Hundreds of western Punic and Carthaginian amphorae for fish products and Greek wine amphorae were found in the open backyard and in the surroundings, in some cases connected to well-preserved fish remains such as fillets still preserving the scales, vertebrae and spines.[7] A first archaeometric analysis on the western Punic amphorae was published briefly after the material was unearthed, providing a first reference for the Punic amphorae from the west.[8] Conditioned by the scarce evidence available about Punic pottery workshops in the

Fig. 2: View of the main façade of the Punic Amphora Building according the plan published by Williams (1980) and the data collected in seasons 2014–2018.

early 1980s, the authors suggested that the Atlantic coast of present Morocco and undefined cities of southern Iberia would have been the main production centers for the finds recorded at Corinth. Unfortunately, no thorough study of the fish remains was published; the preliminary reports only briefly noted that there were fishbones of tuna and sea bream.

Since 2014 a new project intends to complete the publication of the site and the systematic research of the items, introducing new technological tools (such as 3D digital models developed for the building and the pottery) (fig. 2), reviewing thoroughly the stratigraphy and the field notebooks, and finishing the study of the faunal remains. Support from the American School of Classical Studies at Athens and the University of Seville has facilitated this combination of fieldwork (with summer seasons at Corinth during which thousands of sherds have been examined, sampled and digitally processed) and laboratory studies. The Fitch Laboratory of the British School at Athens is currently developing a specific project, under the direction of E. Kiriatzi and L. Fantuzzi, focusing on the Punic and Carthaginian amphorae.[9] This project compares petrographic and chemical analyses of hundreds of samples from both Corinth and the western Punic pottery workshops excavated in the last decades. The first results confirm our hypotheses based on macroscopic examination that the Bay of Cadiz was the main production area but also that many other western sites were involved in the overseas maritime trade routes of the Classical period.

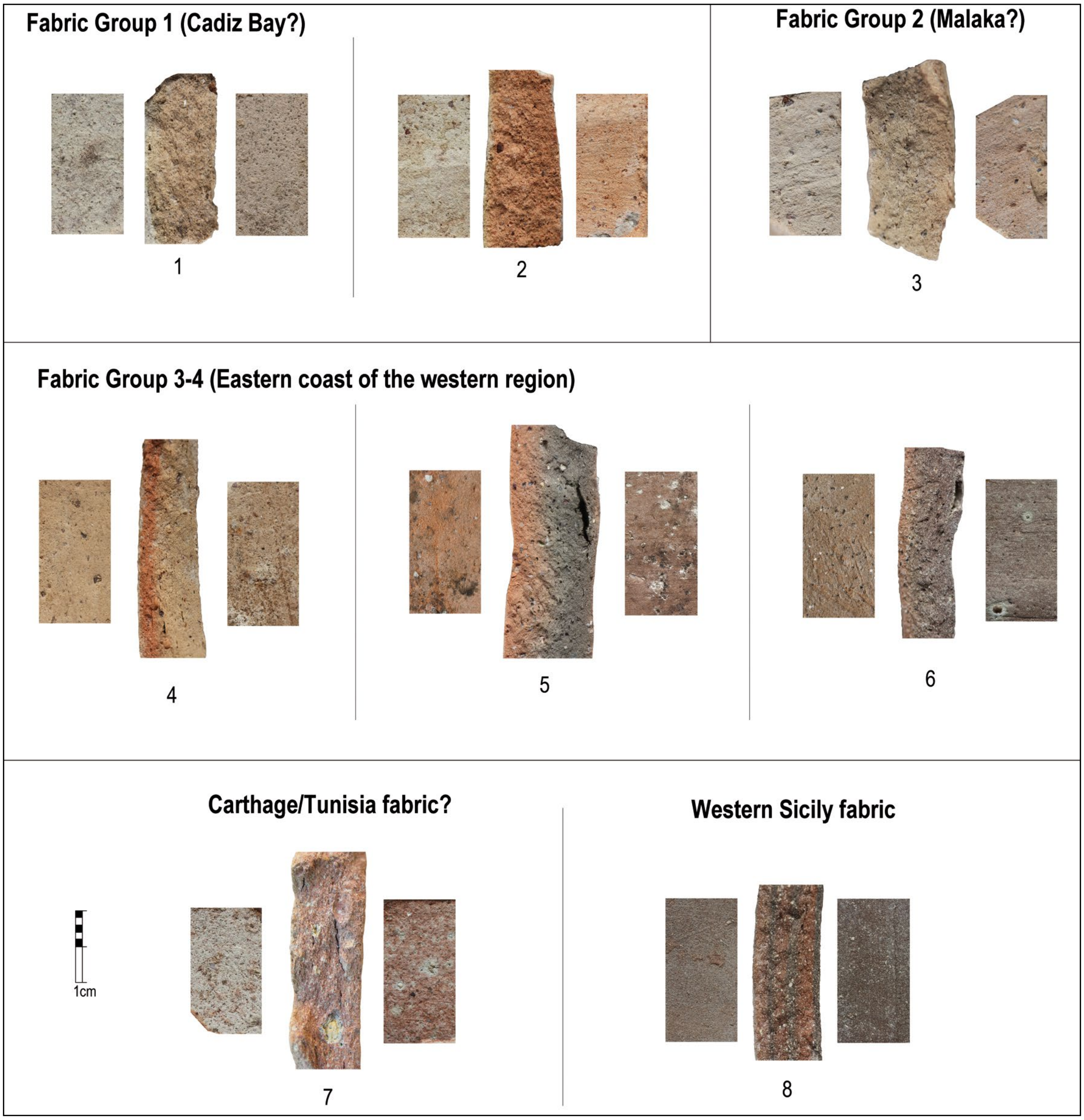

Fig. 3: Macrophotographs of the main fabric groups identified for the western Punic and the Carthaginian amphorae of the 5th Century BC contexts of the PAB (macroscopic classifying after season 2016).

The Amphorae Assemblage of the PAB: The Punic Amphorae

The western Punic vessels were mostly found in the overlapping floors of the courtyard, crushed and mixed with other pottery groups and faunal remains. The latest research completed to-date indicates that more than 67% of the total (fragments representing at least 249 of a total estimated 369 amphoras studied so far) belong to the macroscopic "fabric group 1", probably coming from the Bay of Cadiz or in general terms of the Atlantic port cities of the Strait of Gibraltar area. Just 16 (4,3%) can be linked to "fabric group 2" (possible Malaga or Cerro del Villar area) and 88 (23,85%) to "fabric group 3–4" (the later, with light brownish [group 3] and/or grey [group 4] sections, both with abundant schist inclusions, which were produced in diverse port cities of the Mediterranean coast of the region (perhaps both in the Iberian but also the Mauritanian shore) (fig. 3).

The Carthaginian imports are a minority group (parts of at least 16 jars, 4,3%). These show more homogeneity in terms of clay fabrics, as all of them seem to match with the patterns described for the amphorae produced in Motya or the Solunto/Palermo area in western Sicily. All fragments found in the contexts connected with the decades of activity of the PAB can be classified as T-1415 (Sol/Pan 4.3), generally dated 450–400 BC. A few fragments found in later contexts attributed to 4th century disturbances or new building activity belong to types T-4226 and T-4227, and these fragments illustrate the continuity of the consumption of Punic fish products at Corinth through the 4th and possibly the early 3rd century BC even after the PAB went "out of business".[10]

This sample must be considered just as a part of the total number of vessels that were consumed by the owners and clients of the PAB, as it seems reasonable to imagine that the ones not used to renovate the courtyard would have been discarded elsewhere in or around the city.

The differences observed between fabric groups, as defined by color, inclusions, firing temperatures or petrographic composition, correspond with variation in the typological features of the amphorae. The different morphological variants of the T-11210 group can be linked to the fabric clusters: T-11213 are mostly connected with Group 1 (from the Atlantic port of Gadir), T-11216 variant matches with fabrics from Malaga (Group 2), and T-11214/5 amphoras are almost exclusively included in Groups 3–4. This fact will be very helpful for the typological research in the west as the PAB provides a snapshot of a specific moment in the central stretch of the 5th century BC illustrating the regional variation of the T-11210 group.[11] The evidence from Corinth alongside research in the western Mediterranean indicates that the initial homogeneity in the late 6th century BC was gradually turning into a diversified scenario full of local artisanal traditions with their own personality.

The Punic Amphorae (Group 1)

Most of the T-11213 vessels were linked to the Cadiz (Gadir) area workshops and their characteristic fabrics, with medium-high firing temperatures and many inclusions of quartz grains (sand).[12] There are many fragmentary individuals assignable to group 1 (fig. 4, 1–4), but unfortunately no one has been completely mended and there are not complete profiles available (except for the two amphorae found in a pit nearby in the

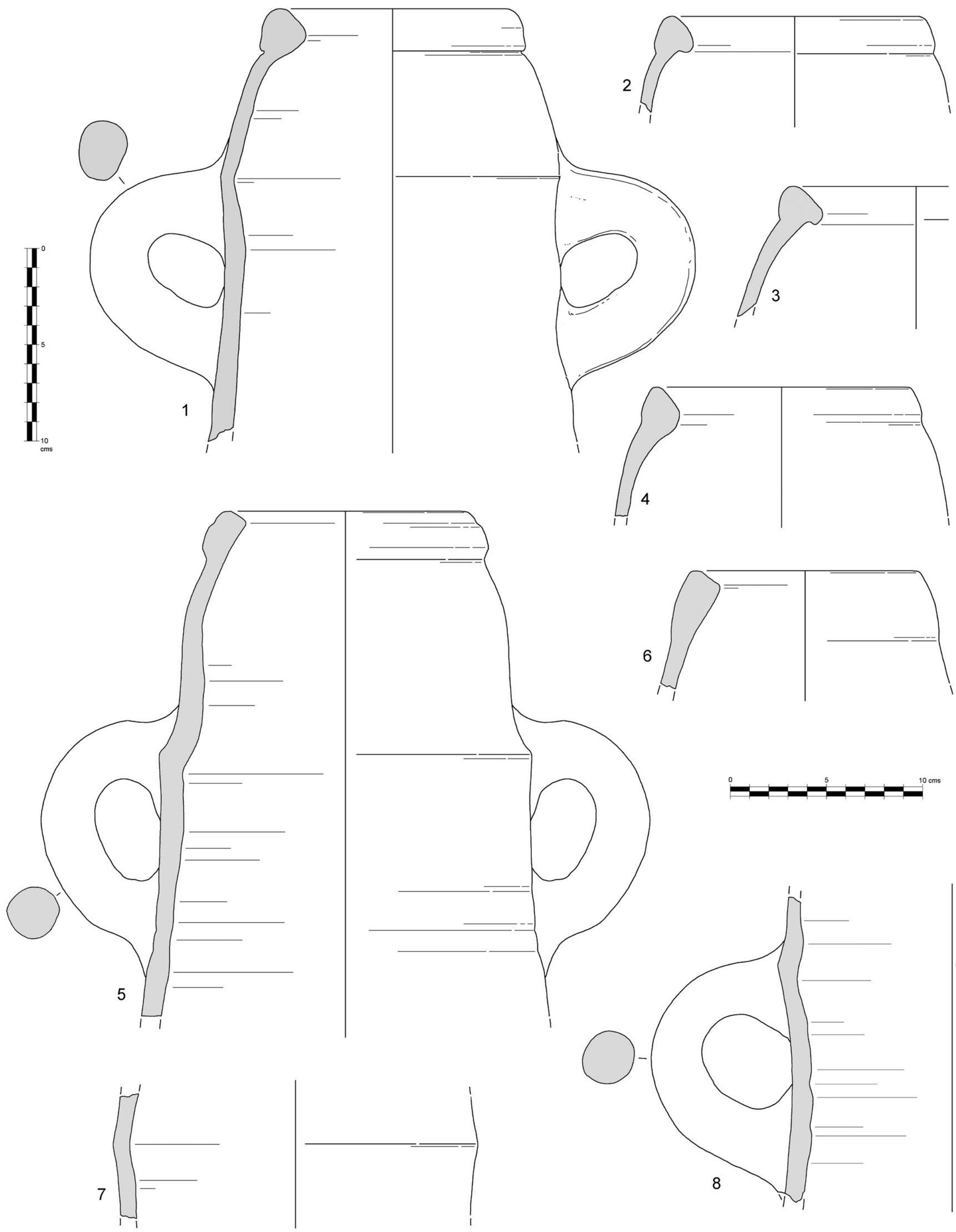

Fig. 4: Amphora fragments from the Punic Amphora Building contexts: T-11213 upper parts and rims of Fabric Group 1 (1–4) and T-11216 rims of Fabric Group 2 (5–8).

1975 season). Gadir probably was the most popular of the western Punic cities among the Classical Greeks, and the production of fish products was one of the main pillars of its economy at least since the late 6th century BC.[13]

The Punic amphorae (Group 2)

Almost all sherds, mostly rims and handles, attributed to the T-11216 and the fabric Group 2 were probably produced in workshops located in the coast of Malaga or Malaka itself (fig. 4, 5–8).[14] The clay sections and surfaces show a quite characteristic fabric, with big inclusions and medium-low firing temperatures (fig. 3, 3). Significantly, most of the fragments of rims and upper parts of the body in this group still preserve lines painted in red. Sadly none of these *dipinti* or *tituli picti* are preserved in good condition, and it has not been possible to determine whether the signs were written in Greek or Punic. These are, so far, the oldest painted inscriptions identified on T-11210 amphorae in the Mediterranean. It seems that Punic Malaka was called by the Greeks Mainake, and that (as Gadir) the city was one of the most prosperous ports in the West during the 5th century BC.

The Punic Amphorae (Groups 3–4)

The transport vessels included in fabric Groups 3–4 show more diversity in shape and fabric (fig. 5), so it seems reasonable to think that many secondary workshops were also producing amphorae and salted-fish to supply the Greek markets. There is, up-to-now, no evidence of fish processing facilities or amphorae workshops dating to the 5th century BC in key sites such as Seks (present-day Almuñécar), Abdera (Adra) or Baria (Villaricos),[15] but we can assume that these and other coastal settlements in the southern coast of Iberia were producing these variants of the T-11210 group.[16] Most of the samples present dark-brown or grey fabrics with plenty of metamorphic particles, a profile that matches with the geology of the Mediterranean river valleys of southern Spain. In contrast to Groups 1 and 2, some individuals of T-11214/5 have been mended and a few complete or almost complete profiles are available. They all show a substantial homogeneity in their design, but not in the clay recipes and firing atmospheres or temperatures.

The Carthaginian Amphorae

Just a few Carthaginian amphorae have been found in the contexts linked to the PAB, dating to the 5th century BC, but they provide important evidence for the maritime

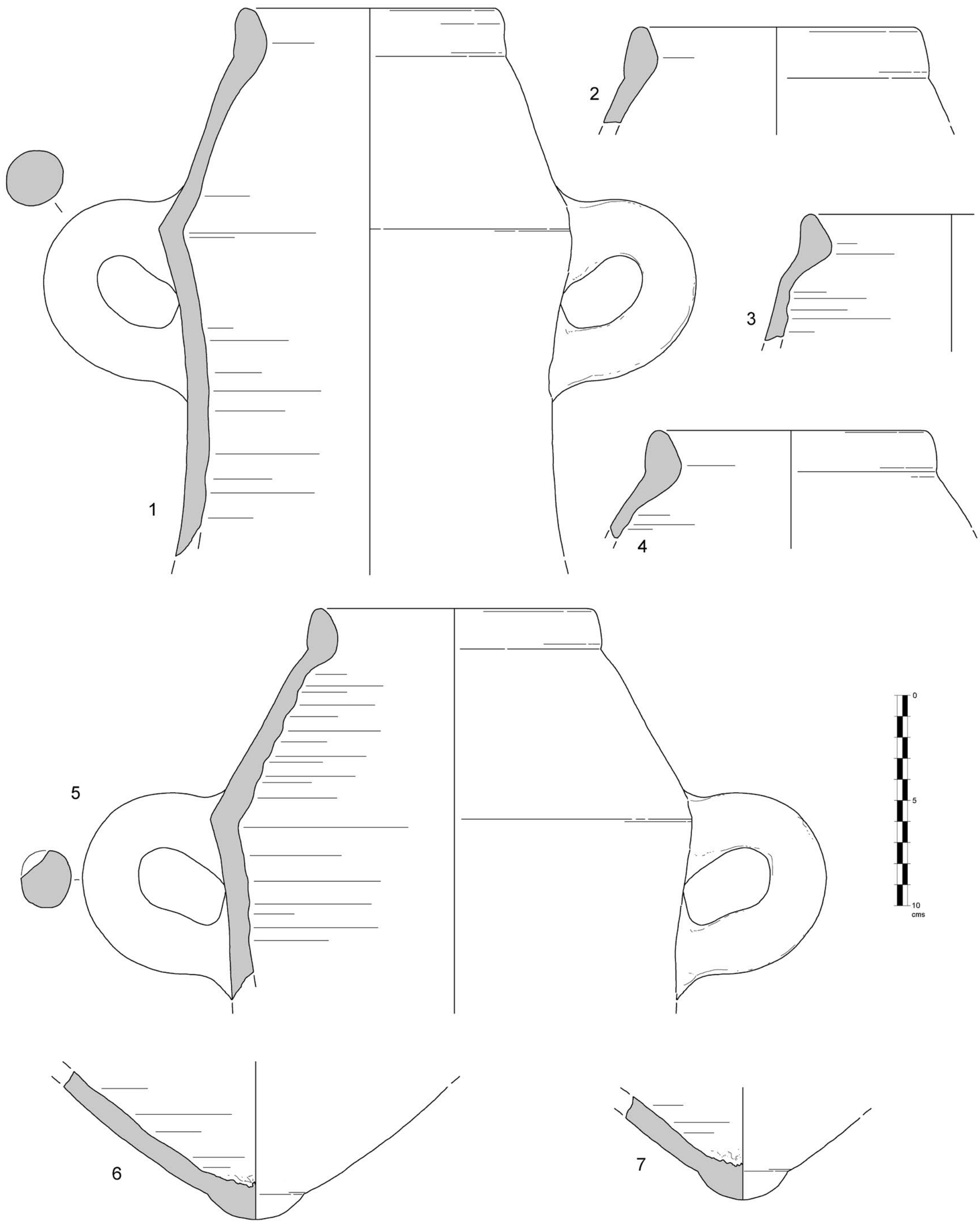

Fig. 5: Amphora fragments from the Punic Amphora Building contexts: T-11214/5 upper and bottom parts of Fabric Group 3–4 (western Punic).

routes that the western amphorae followed on their way to mainland Greece. They can be classified as variants of the T-1451 type, and although there are at least three

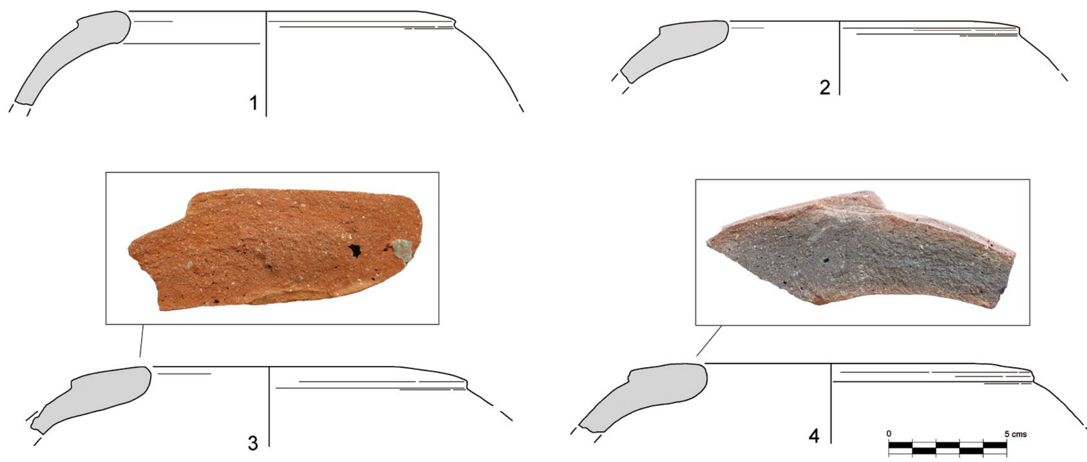

Fig. 6: Amphora fragments from the Punic Amphora Building contexts: Carthaginian T-1451 amphorae rims and photographs of two of the most characteristic types of fabrics.

different fabrics (fig. 6), they all can be connected with the rise in western Sicily of a powerful fish processing and pottery production infrastructure during the 5th century BC. In particular, it seems that at least some of the jars found at the PAB were produced in Motya, Panormo and/or Solus,[17] and probably were also carrying fish by-products to Corinth.[18]

Conclusions and Future Research

To conclude this brief overview of the Punic imports, we offer a few remarks about the ongoing studies to contextualize the consumption of the western salted tuna fillets (*tárichos*) of the PAB and its historical context. First, the project focuses on the study of the items connected with the PAB and its surroundings in the southwestern area of the Roman Forum, and after four seasons more than 3,600 items have been inventoried, classified, drawn and photographed. A significant part of the material corresponds to pottery finds, and particularly to Greek amphorae (among them, numerous Chian, Mendean and "Samian" vessels, and also some "Ionian" pear-shaped amphorae produced in southern Italy or eastern Sicily). Secondly, we are working on the 3D model of the building and its surroundings, which will be very helpful to analyze both the changes in the urban plan of the area from the Archaic to the Hellenistic period, and the functions of the rooms and open areas of the structure. Our publication plan includes a 3D digital analysis of the distribution of artefacts, and educational pictures of the feasts held at the PAB during the Classical period (fig. 7).

Fig. 7: Digital recreation of Room 4 of the Punic Amphora Building, showing the possible distribution of the furniture used for wine and fish consumption.

What was the PAB?

Although the study of the finds is still in progress, we are pretty sure that the PAB was built, used and abandoned during the central quarters of the 5th century BC as a commercial facility, probably a specialized tavern, where local elites would have eaten exclusive fish products and popular wines from overseas. If the establishment included in the menu other kinds of entertainment is not possible to tell, based on the archaeological record, but the great quantity of local and Attic finewares suggest that feasting was a regular activity within the walls of the PAB.

The PAB and the Far Punic West

The increased consumption of western *tárichos* in the Greek society of the late Archaic and Classical periods, both in the central and eastern Mediterranean, opened a very profitable market to the Punic communities of the Strait of Gibraltar region and can be considered as a key factor for the development of a "salt fish-based economy" in the western area of the Mediterranean.[19] The prosperous western cities of Gadir, Malaka and many others in the Punic West found, in the exportation of salted fish packaged in amphorae, a pillar for their non-monetized economies, as these products were relatively cheap to be produced but fetched exorbitant prices in the overseas markets (and above all in the Greek sphere). Corinthian, Athenian and other Greek elites paid a lot to consume exotic fishes that were at the same time affordable to the lower social strata of the western Punic communities.[20]

The result of decades of this connection, whether it was direct or indirect (via Sicily or Carthage), was that the western elites became very rich and were promptly hellenized, purchasing luxurious commodities such as anthropoid sarcophagi probably made in Levantine workshops and similar to those found in the royal tombs of Sidon. The 5th century necropoleis excavated at Cadiz, Malaga, Seks and Baria, and even Lixus on the Atlantic coast of Morocco, show clear signs of a rising upper class that was intimately related with the "fishy business", maritime trade, and a Classical Greek lifestyle. Tombs recently excavated at Cadiz have provided new evidence of the connection established between local elites and the Greek world and of their increasing purchasing capacity in the 5th century BC, as can be perceived in some of the jewelry used as grave goods.[21]

The Chronological Timeframe

The reasons that led the owner of the PAB to end this lucrative international business and abandon the site still remain unclear. The Athenian naval blockade of the Gulf during the Peloponnesian War, along the last three decades of the 5th century BC, was first proposed as a possible cause for the end of the arrival of the western *tárichos* to Corinth.[22] Nevertheless, other internal and external, political and military factors could have had a key role in the end of the business. In the late 5th century the area where the PAB was located underwent a major renovation that included the construction of a new internal road network, the so-called Centaur Bath and the South Stoa; the shop may have been forced to move elsewhere in the city. Carthage was rising as dominant power in the central Mediterranean and was fighting against the Greek cities in Sicily, particularly Syracuse, almost continuously until the early 4th century BC. Important cities involved in the routes that helped connect east and west were destroyed during these wars or suffered harmful effects, such as Motya, Selinus and Himera.[23] These wars would have created an unstable setting for maritime trade and a decrease, at least for a few decades, of the purchasing power of the elites in the central and western Mediterranean. The western imports at Corinth suddenly disappeared and were replaced by Sicilian fish products. At the same time, cities on either side of the Strait of Gibraltar were forced to refocus towards the Atlantic and the regional markets, resulting in a general decline in living standards in the area.[24]

Punic Imports after the PAB Stage

During the 4th and 3rd centuries BC the consumption of Punic fish products did not cease at Corinth and the Aegean.[25] Several contexts at Corinth show that Carthaginian amphorae from western Sicilian workshops are the most common items (T-4226, T-2212/4), and particularly the so-called T-4227 amphorae produced in Solus or Panormos.[26] As the Athenian archaeological record confirms, after the end of the 5th century BC only the central Mediterranean Punic imports were shipped towards the east, and the western fish amphorae disappeared from this profitable markets until the 1st century BC. It seems that Carthage and the Levantine cities replaced the western products by their own commodities, and cut the connection with Gadir and the Punic west. In this case, it is possible that Carthage itself and her allies in Sicily were not only selling fish to the western Greek retailers, but also progressively extending their trade routes to the eastern Mediterranean and the Aegean (as it is suggested by some still scattered finds[27]). Nevertheless, these questions and forthcoming projects are far beyond the scopes of this paper and the study of historical problems linked to the Punic transport vessels of the Punic Amphora Building in Classical Corinth.

Acknowledgments

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Notes

[1] Lawall 2006; Mylona 2008; Botte 2009; Docter – Bechtold 2013.

[2] Williams 1978, 1979 and 1980; see also Williams – Fisher 1976.

[3] Koehler 1978 and 1981.

[4] Zimmerman-Munn 1982 and 1983.

[5] Zimmerman-Munn 2003.

[6] Williams 1980; Zimmerman-Munn 2003.

[7] Sáez – Theodoropoulou 2021.

[8] Maniatis et al. 1984.

[9] Fantuzzi et al. 2020.

[10] Bechtold 2015, 8.

[11] Ramon Torres 1995.

[12] Some key references for the workshops in Cadiz area can be found in Ramon Torres et al. 2007; Sáez Romero 2008a.
[13] Literary references and recent archaeological research can be found in Sáez Romero 2014.
[14] Sáez Romero 2018a.
[15] Moya Cobos 2016.
[16] Martín et al. 2006; Sáez Romero 2008b; Mateo Corredor 2016.
[17] Bechtold 2015, types Sol/Pan 4.1–3.
[18] See Botte 2009; Docter – Bechtold 2013.
[19] Sáez Romero 2014.
[20] Mylona 2008; García – Ferrer 2012.
[21] Belizón – Sáez 2016.
[22] Williams 1980; Zimmerman-Munn 2003.
[23] Vasallo – Bechtold 2018.
[24] An updated overview of the process in the West in Sáez Romero 2018b.
[25] Wolff 2004; Lawall 2006.
[26] Bechtold 2015.
[27] See Göransson 2007; Johnston et al. 2012.

Image Credits

Fig. 1: Williams 1980. – Fig. 2: R. Belizón Aragón, ARQ-TECH for the PAB Project. – Fig. 3–6: by author. – Fig. 7: R. Belizón Aragón, ARQ-TECH for the PAB Project.

References

Bechtold 2015

B. Bechtold, Le produzioni di anfore puniche della Sicilia occidentale (VII–III/II sec. a.C.), Carthage Studies 9 (Ghent 2015).

Belizón Aragón – Sáez Romero 2016

R. Belizón Aragón – A. M. Sáez Romero, Peces Dorados. Un avance sobre recientes descubrimientos en la necrópolis fenicia y púnica de Gadir, Arqueología Iberoamericana 32, 2016, 3–10.

Botte 2009

E. Botte, Salaisons et sauces de poissons en Italia du Sud et en Sicilie durant l’Antiquité, Collection du Centre Jean Bérard 31 (Naples 2009).

Docter – Bechtold 2013

R. F. Docter – B. Bechtold, Two Forgotten Amphorae from the Hamburg Excavations at Carthage (Cyprus and the Iberian Peninsula) and their Contexts, Carthage Studies 5 (Ghent 2013) 91–128.

Fantuzzi et al. 2020
L. Fantuzzi – A. M. Sáez – E. Kiriatzi – C. K. Williams, Punic Amphorae Found at Corinth: Provenance Analysis and Implications for the Study of Long-distance Salt-fish Trade in the Classical Period, Archaeological and Anthropological Sciences 12, 2020, 179.

García Vargas – Ferrer Albelda 2012
E. García Vargas – E. Ferrer Albelda, Más allá del banquete. El consumo de las salazones ibéricas en Grecia (siglos V y IV a.C.), in: B. Costa – J. H. Fernández (eds.), Sal, pesca y salazones fenicios en Occidente. XXVI Jornadas de Arqueología Fenicio-Púnica (Ibiza 2012) 85–121.

Göransson 2007
K. Göransson, The Transport Amphorae from Euesperides. The Maritime Trade of a Cyrenaican City 400–250 B.C., Acta Archaeologica Lundensia 25 (Lund 2007).

Johnston et al. 2012
A. Johnston – A. Quercia – A. Tsaravopoulos – A. Bevan, Pots, Piracy and Aegila. Hellenistic Ceramics from an Intensive Survey of Antikythera, Greece, BSA 107, 2012, 247–272.

Koehler 1978
C. G. Koehler, Corinthian A and B Transport Amphoras (Ph.D. diss. Princeton University, Princeton 1978).

Koehler 1981
C. G. Koehler, Corinthian Developments in the Study of Trade in the Fifth Century, Hesperia 50, 1981, 449–458.

Lawall 2006
M. Lawall, Consuming the West in the East. Amphoras of the Western Mediterranean in the Aegean before 86 BC, in: D. Malfitana – J. Poblome – J. Lund (eds.), Old Pottery in a New Century. Innovating Perspectives on Roman Pottery Studies, Atti del convegno internazionale di studi, Catania, 22–24 aprile 2004 (Rome 2006) 265–286.

Maniatis et al. 1984
Y. Maniatis – R. E. Jones – I. K. Whitbread – A. Kostikas – A. Simopoulos – C. Karakalos – C. K. Williams II, Punic Amphoras Found at Corinth. An Investigation of Their Origin and Technology, JFieldA 11/2, 1984, 205–222.

Martín et al. 2006
E. Martín Córdoba – J. Ramírez Sánchez – A. Recio Ruiz, Producción alfarera fenicio-púnica en la costa Vélez-Málaga (siglos VIII–V a.C.), Mainake 27, 2006, 257–287.

Mateo Corredor 2016
D. Mateo Corredor, Comercio anfórico y relaciones mercantiles en Hispania Ulterior (siglos II a.C. –II d.C.) (Barcelona 2016).

Moya Cobos 2016
L. Moya Cobos, Tyria Maria. Los fenicios occidentales y la explotación de los recursos marinos (Seville 2016).

Mylona 2008
D. Mylona, Fish-Eating in Greece from the Fifth Century BC to the Seventh Century AD. A Story of Impoverished Fishermen or Lavish Fish Banquets?, BARIntSer 1754 (Oxford 2008).

Ramon Torres 1995
J. Ramon Torres, Las ánforas fenicio-púnicas del Mediterráneo Central y Occidental, Colección Instrumenta 2 (Barcelona 1995).

Ramon Torres et al. 2007
J. Ramon Torres – A. Sáez – A. M. Sáez Romero – A. Muñoz, El taller alfarero tardoarcaico de Camposoto, Monografías de Arqueología 26 (Sevilla 2007).

Sáez Romero 2008a
A. M. Sáez Romero, La producción cerámica en Gadir en época tardopúnica (siglos –III/–I), BARIntSer 1812/2 (Oxford 2008).

Sáez Romero 2008b
A. M. Sáez Romero, La producción de ánforas en el área del Estrecho en época tardopúnica (siglos III–I a.C.), in: D. Bernal – A. Ribera (eds.), Cerámicas hispanorromanas. Un estado de la cuestión (Cádiz 2008) 635–660.

Sáez Romero 2014
A. M. Sáez Romero, Fish Processing and Salted-fish Trade in the Punic West. New Archaeological Data and Historical Evolution, in: E. Botte – V. Leitch (eds.), Fish & Ships. Production et commerce des salsamenta durant l'Antiquité, Actes de l'atelier doctoral, Rome, 18–22 juin 2012, Bibliothèque d'Archéologie Méditerranéenne et Africaine 17 (Aix-en-Provence 2014) 159–174.

Sáez Romero 2018a
A. M. Sáez Romero, Notas sobre el tipo anfórico T-11216 a partir de dos ejemplares inéditos de procedencia subacuática, Boletín de la SECAH 9, 2018, 7–9.

Sáez Romero 2018b
A. M. Sáez Romero, Apuntes sobre las dinámicas comerciales de Gadir entre los siglos VI y III a.C., Gerion 36/1, 2018, 11–40.

Sáez Romero – Theodoropoulou 2021
A. M., Sáez Romero – T. Theodoropoulou, Salting and Consuming Fish in the Classical Mediterranean. A Review of the Archaeological Evidence from the Punic Amphora Building (Corinth, Greece), in: D. Bernal-Casaola – M. Bonifay – A. Pecci – V. Leitch (eds.), Roman Amphora Contents. Reflecting on the Maritime Trade of Foodstuffs in Antiquity. Proceedings of the Roman Amphora Contents International Interactive Conference (RACIIC) (Cadiz, 5–7 October 2015), Roman and Late Antique Mediterranean Pottery 17 (Oxford 2021) 485–498.

Vasallo – Bechtold 2018
S. Vasallo – B. Bechtold, Le anfore puniche dalle necropoli di Himera (seconda metà del VII - fine del V sec. a.C.). BABesch Suppl. 34 (Leuven 2018).

Williams 1978
C. K. Williams II, Corinth 1977. Forum Southwest, Hesperia 47, 1978, 1–39.

Williams 1979
C. K. Williams II, Corinth 1978. Forum Southwest, Hesperia 48, 1979, 105–144.

Williams 1980
C. K. Williams II, Corinth Excavations, Hesperia 49, 1980, 107–134.

Williams – Fisher 1976
C. K. Williams II – J. E. Fisher, Corinth 1975. Forum Southwest, Hesperia 45, 1976, 99–162.

Wolff 2004
S. R. Wolff, Punic Amphoras in the Eastern Mediterranean, in: J. Eiring – J. Lund (eds.), Transport Amphorae and Trade in the Eastern Mediterranean. Acts of the International Colloquium at the Danish Institute at Athens, September 26–29, 2002, Monographs of the Danish Institute at Athens 5 (Athens 2004) 451–458.

Zimmerman-Munn 1982
M. L. Zimmerman-Munn, Corinthian Trade with the Atlantic Coasts of Spain and Morocco in the Fifth Century B.C., AJA 86, 1982, 278–279.

Zimmerman-Munn 1983
M. L. Zimmerman-Munn, Corinthian Trade with the West in Classical Times (Ph.D. diss. Bryn Mawr College, Bryn Mawr, Pennsylvania 1983).

Zimmerman-Munn 2003
M. L. Zimmerman-Munn, Corinthian Trade with the Punic West in the Classical Period, in: C. K. Williams II – N. Bookidis (eds.), Corinth. The Centenary 1896–1996. Corinth 20 (Princeton 2003) 195–217.

Aegean Amphorae in the Southern Levant during the Persian Period: A Synthesis of Distribution Patterns

Yiftah Shalev – Ayelet Gilboa – Gunnar Lehmann

The Persian period in the Levant witnessed one of the most significant cultural, economic and political transformations the region underwent in early antiquity. Amid these changes, the region's involvement in the Mediterranean maritime trade flourished dramatically, reaching previously unattested intensity.

This paper is the first fruit of an extensive study that reexamined the distribution of transport amphorae prevalent in the Levant in the 5th–4th centuries BC and reassessed their significance for charting cross-Mediterranean contacts during this period. For many years, the study of Greek amphorae in the Levant had focus on those dated to the 7th–6th centuries, as indications for the first Greek-Levant connections, or on later Hellenistic types as indications for the so-called 'Hellenization' phenomenon. The study of Persian-period jars was usually limited to chronology and typology. The common notion was that during this period there was a massive transport of amphorae from all Aegean manufacturing centers to the Levant, and that imports gradually increased in volume from the late 6th century onward.

Our research includes amphorae from ca. 40 south Levantine sites. It involved a typological, distributional and chronological reexamination of these amphorae, preliminary sorting of fabrics using a stereomicroscope, and provenience analysis using petrography, instrumental neutron activation and x-ray fluorescence.

Greek amphorae turned up in every Persian-period southern Levantine coastal site, and a few even farther inland, in areas ruled by the Phoenicians in the Shephela, the Jezreel valley and the Galilee. They are known from large towns to small villages, in domestic, military and commercial contexts, and are usually found together with local containers such as the basket-handle and Phoenician jars.

Variety however is narrower than thought before, limited to southeastern Aegean and Ionian production centers (Chios, Samos and Miletus) as well as to some northern Aegean ones (mainly Mendes and Thasos). Other types, e.g., Lesbian and Corinthian, which are mostly common in the Aegean and the western Mediterranean, are totally absent. This is a clear indication of two different intra-regional trade networks: one operating in the eastern Mediterranean and one in its western basin.

During the early 6th century BC, following the Babylonian destructions, transport of Greek Amphora to the Levant ceased and did not revive prior to the early 5th century, with the import of Chian C1 type, dated ca. 510–480 BC. Earlier types (e.g. the white-slipped Chian amphorae), though well known in Cyprus, Egypt and northern Sinai, are totally absent in the Levant. The lack of late Archaic Clazomenian amphorae also seems to indicate that trade did not restart before ca. 500 BC.

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During the early 5th century, the most common types were from Chios, Samos and Miletus. In the mid-5th century, when the import of transport amphorae reached its zenith, the Samian and Milesian imports were still dominant but imports from Chios diminished. Imports start to dwindle during the 1st half of the 4th century, when north Aegean amphorae begin to dominate. In the 2nd half of the 4th century, the transport of amphorae to the Levant is on the rise again, especially mushroom-rim types from the southern Aegean. Quantities, however, are a still far cry from those in the 5th century BC.[1]

The reasons for the decrease in the early 4th century are uncertain. Several scholars relate it to the unstable relations and struggles between Persian and Greeks.[2] This, though, seems unlikely, especially since between ca. 450–400 BC, when clashes between these two forces were at their peak, trade only increased. More likely we should relate these changes to several local events during the 4th century that clearly disturbed daily life: the Egyptian revolt at the very the end of the 5th, the Phoenicians' involvement in the two failed attempts to re-conquer Egypt in 383 and 373, and the Egyptian conquest of parts of the Levantine coastal plain by pharaoh Tachos in 360 BC.

Most amphorae probably reached the Levant on ships sailing from the eastern Aegean via the southern coast of Cyprus, where similar variation of amphorae was noted, including all Ionian, south and north Aegean types. The very same route was used also to distribute Attic pottery,[3] and it seems that this network had a wide commercial infrastructure.[4] In Egypt on the other hand, the distribution of east Greek amphorae is different than in the Levant / Cyprus, including many northern Aegean types and very few eastern Aegean.[5] Egypt was connected to the east Aegean via a different network.

This systematic study revealed that amphorae distribution in the Levant was much more complex than previously thought, involving several regional and intra-regional networks. Furthermore, it proves that maritime trade between the Aegean and the eastern Mediterranean might not have been so intense, contrary to common assumptions, and that during the 4th century BC trade with the Aegean declined rather than increased.

Notes

[1] Shalev 2014, 370–374.

[2] Mook – Coulson 1995, 99; Demesticha 2011, 49.

[3] Stewart – Martin 2005, 87–89.

[4] Lawall 2013, 57.

[5] Shalev 2014, 389–390.

References

Demesticha 2011

S. Demesticha, The 4th-Century-BC Mazotos Shipwreck, Cyprus. A Preliminary Report, IntJNautA 40/1, 2011, 39–59.

Lawall 2013

M. L. Lawall, Two Amphorae from the Swedish Cyprus Expedition in the National Museum of Denmark. Late Archaic Through Late Classical Cypriot Trade, in: M. L. Lawall – J. Lund (eds.), The Transport Amphorae and Trade of Cyprus (Aarhus 2013) 51–60.

Mook – Coulson 1995

M. S. Mook – D. E. Coulson, East Greek and Other Imported Pottery, in: E. Stern (ed.), Excavation at Dor, Final Report. Volume I B – Areas A and C: The Finds, Qedem English Series 2 (Jerusalem 1995) 93–126.

Stewart – Martin 2005

A. Stewart – S. R. Martin, Attic Imported Pottery at Tel Dor, Israel. An Overview, BASOR 337, 2005, 79–94.

Shalev 2014

Y. Shalev, 'The Mighty Grain-Lands' – Demographic and Economic Aspects of 'Southern Phoenicia' under the Achaemenid Regime (Ph.D. diss. University of Haifa, Haifa 2014).

The Mazotos Shipwreck Cargo, 4th Century BC

Stella Demesticha

The Mazotos shipwreck, located 1.5 miles off the south coast of Cyprus, lies on a flat sandy seabed and consisted of an oblong concentration of transport amphorae (approximately 17.5m long by 8m at its widest section) partly or totally visible before any excavation took place.[1] Between 2010 and 2018, six excavation seasons were conducted by the University of Cyprus, in collaboration with the Department of Antiquities of Cyprus.

The Cargo

The excavation has focused on the two extremities of the site, which, as suspected, were the fore and rear parts of the ancient ship. The vast majority of the cargo containers belong to a widely traded type, from the island of Chios (fig. 1). None of them was found stamped and they all present a high typological uniformity: a long cylindrical neck with a rounded rim and a sharp-edged shoulder that continues to a conical body, ending in a truncated cone – shaped, hollowed toe**.** These are typical features of the series' variants that are dated to the first half or the middle of 4th century BC.[2] Although no fabric analysis has been conducted thus far, three groups have been distinguished macroscopically, with very uneven percentages among the finds: the vast majority of the amphorae were made of the standard Chian fabric, reddish brown in colour with abundant pale grey to white inclusions, but sporadic cases have also been recorded, made of a grey flaking fabric or an orange-light brown one.

Two sizes have been distinguished, based on their linear dimensions and capacities, the large ones constituting 90% of the total. Their height ranges between 91–98 cm, but values cluster around 94 cm. Their capacities, all measured up to the bottom of the neck with polystyrene beads, seem consistent: they ranged from 19.6–22.5 litres clustering around 20–21 litres. The smaller amphorae held between 9 and 10 liters, i.e. slightly less than half of the mean value of the large ones. This high degree of standardisation is also known from the Zenon archive where the term 'ημι-χία' denotes such half-sized Chian amphorae.[3]

The second commonest amphora type in the cargo is the 'Solokha I' or 'Mushroom-Rim', of diverse provenance, mainly from the southeastern Aegean.[4] No more than nine containers that could be classified under this broad family were found, most in the fore part of the ship. They belonged to different variants and their small numbers as well as their find spots, on the surface layers of the hold or at the ship extremities, do not provide secure evidence for their role as cargo or crew provisions. The third amphora group is comprised of six northern Aegean examples, similar to the Mendean type.[5] Five of them were found stowed in the bottom layer of the rear part of the hold, under and among the amphorae from Chios (fig. 1).

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Fig. 1: Chian amphorae in north part of the Mazotos shipwreck. In the middle of the lower tier, one North Aegean type can be distinguished.

The Mazotos ship was also carrying tableware: at least 55 jugs were excavated, all in the aft part of the hold, stowed on top of the amphorae. Their fabric is similar to that of the standard Chian amphorae and they were found pitched on the interior**.** It seems very unlikely that they were used as some sort of measuring unit because, despite the fact they all belong to the same type, their volumes ranged considerably, from 1.7 to 3.2 litres (measured up to the bottom of the neck).

Content

Chian wine was praised by the ancient authors,[6] so since almost all Chian amphorae had traces of resinous residue on their interior walls, it seems plausible to assume that the Mazotos ship carried a cargo of wine. Some of the amphorae, however, might have carried other commodities, as well. Olives were found inside four Chian and one Mushroom-rim amphora. Carbon stable isotope analysis indicated diverse provenance for all tested olives, i.e. those found in the Chians and the Mushroom-rim one. Before the final percentage of the olive amphorae is known, with the completion of the excavation, it is not possible to determine weather the olives were cargo or crew provisions. Still, these finds add meaningfully to the discussion about the relationship between specific commodities and amphora types.

Conclusions

The last journey of the Mazotos ship was definitely a long-distance venture. The homogeneity of the cargo containers implies that this was a large shipment of the same product — most probably wine — that was loaded at Chios, i.e. its production place or the closest maritime centre to it, and was not sold or exchanged before the ship wrecked, off the coasts of Cyprus. This cargo assemblage has also provided a unique opportunity to study the typological attributes of a large number of Chian amphorae. Preliminary results of their metrology indicate a high degree of standardisation, both in style and size, indicative of elaborate trade mechanisms of Greek cities, active in seaborne trade, like Chios.

Notes

[1] Demesticha 2011; Demesticha 2017; Demesticha et al. 2014.

[2] Anderson 1954, 170; Grace – Savvatianou-Pétropoulakou 1970, 259–260; Lawall 1998, 80–81.

[3] Kruit – Worp 2000, 94–97.

[4] Avram 1989; Vaag et al. 2002, 60–62; Lawall 2004, 451.

[5] Papadopoulos – Paspalas 1999; Lawall 2004; Filis 2012.

[6] Salviat 1986, 187–192.

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References

Anderson 1954

J. K. Anderson, Excavations on the Kofina Ridge, Chios, BSA 49, 1954, 123–172.

Avram 1989

A. Avram, Wo sind die Amphoren vom Typ 'Solocha I' hergestellt worden?, Dacia 33, 1989, 247–252.

Demesticha 2011

S. Demesticha, The 4th-Century-BC Mazotos Shipwreck, Cyprus. A Preliminary Report, IntJNautA 40/1, 2011, 39–59.

Demesticha 2017

S. Demesticha, «...καταδύσης της ολκάδος, απολέσθαι άπαντα...». Η υποβρύχια αρχαιολογική έρευνα στο ναυάγιο Μαζωτού, in: N. Papadimitriou – M. Toli (eds.), Αρχαία Κύπρος. Πρόσφατες εξελίξεις στην αρχαιολογία της ανατολικής Μεσογείου (Athens 2017) 285–300.

Demesticha et al. 2014

S. Demesticha – D. Skarlatos – A. Neophytou, The 4th-century B.C. Shipwreck at Mazotos, Cyprus. New Techniques and Methodologies in the 3D Mapping of Shipwreck Excavations, JFieldA 39/2, 2014, 134–150.

Filis 2012

K. Filis, Transport Amphorae Workshops in Macedonia and Thrace during the Late Classical and Hellenistic Times, in: S. Drougou – I. Touratsoglou (eds.), Topics on Hellenistic Pottery in Ancient Macedonia (Athens 2012) 60–85.

Grace – Savvatianou-Pétropoulakou 1970

V. Grace – M. Savvatianou-Pétropoulakou, Les timbres amphoriques grecs, in: P. Bruneau – C. Vatin – U. Bezerra de Meneses – G. Donnay – E. Lévy – A. Bovon – G. Seibert – V. Grace – M. Savvatianou-Pétropoulakou – E. L. Will – T. Hackens, Exploration archéologique de Délos XXVII. L'îlot de la maison des comédiens (Paris 1970) 277–382.

Kruit – Worp 2000

N. Kruit – K. Worp, Geographical Jar Names. Towards a Multi-Disciplinary Approach, ArchPF 46/1, 2000, 65–146.

Lawall 1998

M. L. Lawall, Ceramics and Positivism Revisited. Greek Transport Amphoras and History, in: H. Parkins – C. Smith (eds.), Trade, Traders and the Ancient City (London 1998) 75–101.

Lawall 2004

M. L. Lawall, Amphoras without Stamps. Chronologies and Typologies from the Athenian Agora, in: D. Zafiropoulou – M. Kazakou (eds.), ΣΤ' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική. Βόλος, 17–23 Απριλίου 2000 (Athens 2004) 445–454.

Papadopoulos – Paspalas 1999

J. K. Papadopoulos – S. A. Paspalas, Mendaian as Chalkidian Wine, Hesperia 68/2, 1999, 161–188.

Salviat 1986

F. Salviat, Le vin de Thasos. Amphores, vin et sources écrites, in: J.-Y. Empereur – Y. Garlan (eds.), Recherches sur les amphores grecques, BCH Suppl. 13 (Paris 1986) 145–200.

Vaag et al. 2002.

L.E. Vaag – V. Norskov – J. Lund, The Pottery. Ceramic Material and Other Finds from Selected Contexts, The Maussolleion at Halikarnassos 7 (Aarhus 2002).

Transport Amphoras from Domestic and Workshops Facilities as Indicators for Economic Changes in the Societies of NW Peloponnese from Late 6th to 2nd Century BC

Konstantinos Filis

Introduction

Ancient Achaea is a narrow land zone along the southern coast of the Corinthian Gulf in the northwestern Peloponnese. It extended from the Sythas river in the east[1] to the Larissos in the west,[2] between Corinth and Elis,[3] bordering Arcadia or Azania to the south (fig. 1). The Eastern Achaean cities tended to develop a certain distance from the coastline in safe hinterland locations. The city of Aigion, however, occupies the low plateau right next to the sea, offering supervision of the wider region.[4] Helike, also in contact with the coast, was completely destroyed by an earthquake in 373 BC,[5] along with the neighboring Voura. The Achaean cities seem to have gradually become more market-oriented, since they had access to relatively limited arable land, leading both to imports of products and exchanges with other areas and to their colonial activity in southern Italy, which had extensive fertile land. We will examine how the presence of transport amphoras changed from the Archaic to the late Hellenistic period, presenting the material from two sites: Voura and Aigion. Voura, although located in the hinterland, had access to the sea through its port at Trapeza Diakopto; Aigion was the largest port in antiquity.

Ancient Voura

During the construction of the new railway line at the site "Giannias" Trapeza Diakopto, building remains and roads of an ancient settlement were discovered.[6] The uncovered remains of the ancient roadway provide evidence for linking Trapeza Diakopto with the inland ancient city of Voura.[7] At Trapeza Diakopto four main phases can be distinguished, dated from the late Archaic to the Hellenistic period.[8] The six building complexes that have been excavated belong mainly to the last two phases of settlement habitation in the 4th and 3rd centuries BC. The chronology is based on the numerous bronze coins and fine pottery from the extensive abandonment levels, which have remained undisturbed since the site was not rebuilt after the second half of the 3rd century BC.

The commercial importance of the Voura settlement is obvious from the abundance of coins from at least 30 mints from many regions of Greece, the eastern

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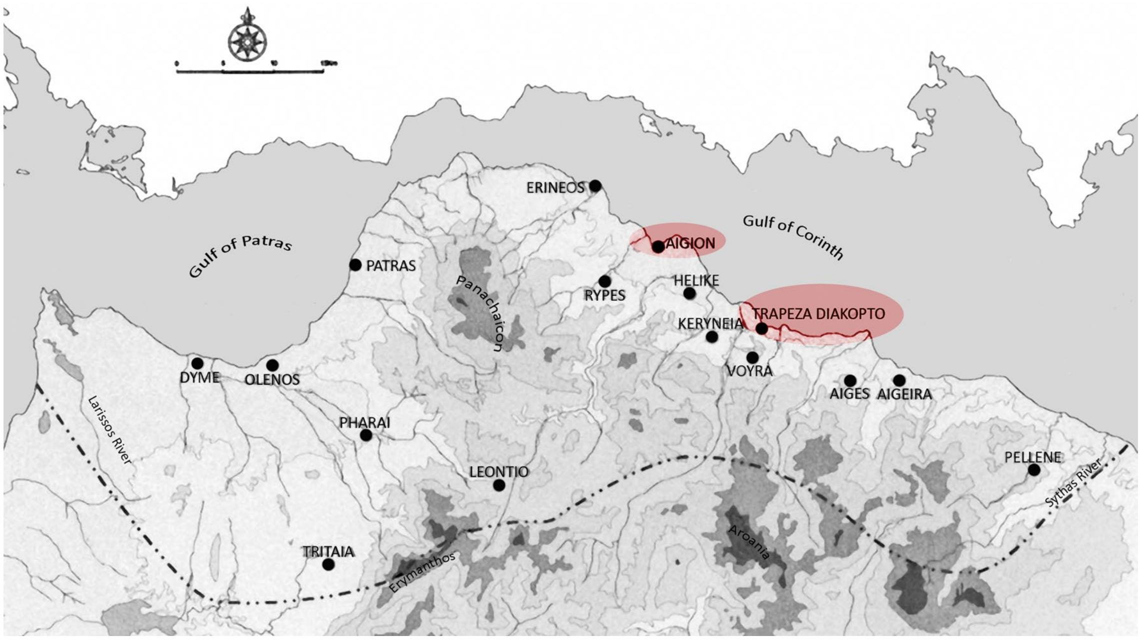

Fig. 1. Plan of Achaea in antiquity.

Mediterranean and Sicily.[9] In addition, evidence for commercial contacts also comes from the abundance of amphoras found in all the layers of the settlement.[10] Accompanying well-dated fine pottery and datable coins provide secure, needed, chronological control for the many unstamped amphoras. Therefore, the chronological identification of this material contributes to making safer conclusions about the changing intensity of product exchanges throughout the settlement's lifespan and a better understanding of the economic history of the wider region of the northwestern Peloponnese. Also, the jars' presence in domestic installations sheds light on individual consumer behavior.

The use of some buildings as private or public ones (e.g. commercial shops, taverns, inns) is worth investigating, bearing in mind that each use does not exclude the other.[11] The mix of amphora debris datable from the end of the 6th/early 5th to the middle of the 3rd centuries in the abandonment levels raises many questions as the problem of 'residual' sherds and the potential for long use-life of one amphora.[12] Also, another important question is how the continuous presence of transport amphoras can help us to distinguish the difference between domestic and commercial space.[13] I would also point out that almost none of the amphoras bore graffiti with volumetric notations, price marks, possible identifications of the contents, names of merchants or buyers. Even so, the fact is that the presence of many restorable jars from the late Archaic, Classical and, especially, the early Hellenistic period is indicative of the site's operation with amphora related commerce.

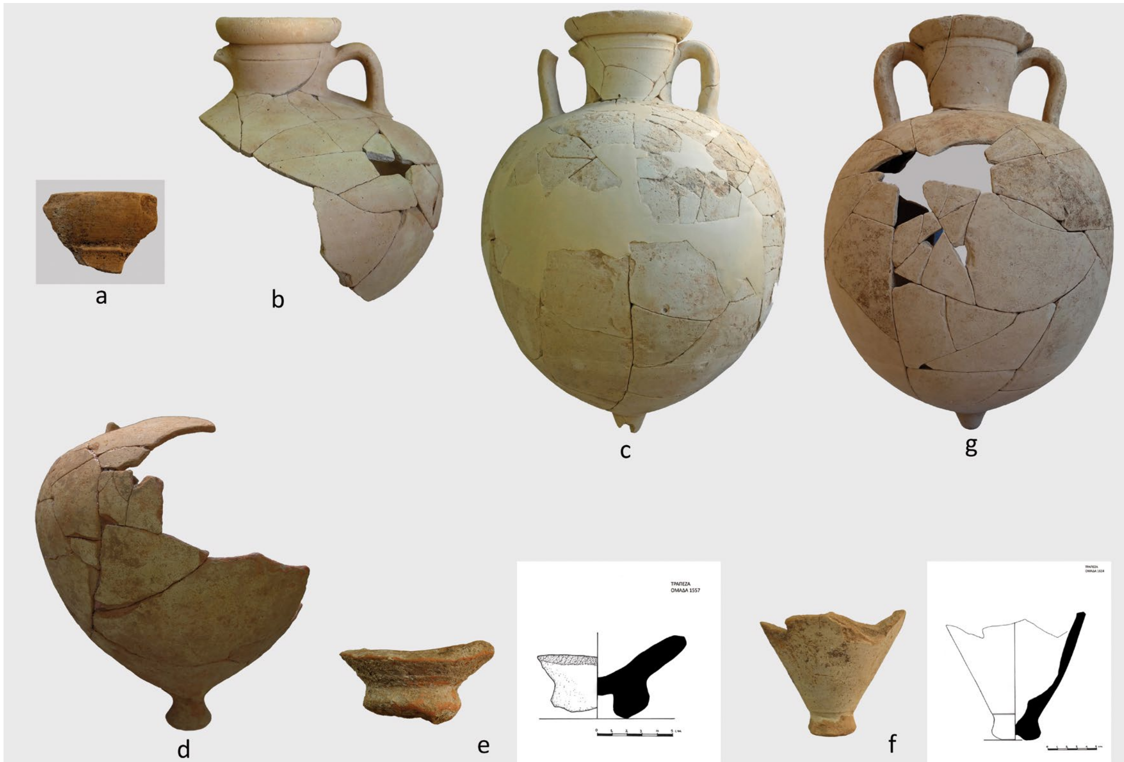

Fig. 2. Trapeza Diakopto. Late 7th – early 6th century Attic SOS (a), „Corinthian" type B (b–c, g) and North Aegean amphoras (d–f) of late 6th and 5th cent. BC.

The Amphora Material

The earliest amphora fragment is an Attic SOS rim of the late 7th – early 6th century BC (fig. 2a), which was found along with characteristic pottery of the late 6th – mid 5th centuries BC.[14] Amphoras of "Corinthian" Type B prevail in the earliest phases of the settlement (late 6th – early 5th centuries), with the characteristic thick ring-shaped rim (fig. 2b).[15] In the first half of the 5th century the type B amphoras dominate, with the echinus form rim and one or two plastic rings in the upper part of the neck (fig. 2c).[16] In the same period, some amphoras from north Aegean workshops are attested, especially from Mende or the wider region of Sithonia, Chalkidiki (fig. 2d).[17] Two amphoras with ring-toe type probably related with Thasos and Thasian peraea (fig. 2e-f).[18] In the second half of 5th century the type B amphoras continue to be present (fig. 2g),[19] along with few from north Aegean workshops.

The abandonment levels of buildings 2, 3, and 5, which date to the 4th and the first half of 3rd centuries BC, contained impressively large quantities of both almost intact and fragmentary type B Ionian – Adriatic amphoras (fig. 3). Some of them are related to the Corcyrean workshop,[20] but the differences in the morphological details and the

Fig. 3. Trapeza Diakopto. Type B Ionian – Adriatic amphoras. 4th – early 3rd cent. BC.

fabric (at least three different groups have been distinguished) make us assume that some are products of the west coast of Greece or Dalmatia.[21] Furthermore, according to petrographic study, Gassner has also suggested the Apulian coast and the Salento area, although so far no contemporary amphora production centers are known to us in these areas.[22] Rarely found are some round stamps with the letters BO, ΓΛ or with the symbols of the kerykeion and ivy leaf. Such stamps are usually attributed to Corfu and Lefkada.[23] One amphora bears a red dipinto with arrow and the letter T and traces of red dipinto on another one. The picture emerging with regard to type B amphora content, according to DNA studies, is that these containers have carried a wide range of complex, value-added, agricultural products from many regions and not just wine or oil.[24]

In the same abandonment levels of buildings 2, 3, and 5 and in road IV, the presence (18% of diagnostic sherds) of the well known type A/A' from neighboring Corinth is notable (fig. 4). They have the characteristic thick rim, triangular in cross section, with sloping upper surface, and cap or peg toe. They date from the early 4th to the mid 3rd century BC.[25] The fabric characteristics are similar to the clays of Corinth.[26] The presence of amphoras from northern Aegean and probably Central Greece/Euboean[27] is limited (fig. 5a), as is the case regarding the eastern Aegean, Ephesian type (fig. 5b) and amphoras with "mushroom-rim/knob toe" or Solokha I from the SE Aegean (fig. 5c–d).

Fig. 4. Trapeza Diakopto. Corinthian Type A/A‘. 4^{th} – early 3^{rd} cent. BC.

Of particular interest, however, is the discovery of an almost intact Punic tubular amphora and fragments of another (fig. 6). They likely belong to type Ramón T-6.1.1.3 or T-6.1.2.1.[28] Judging from the deep red in color fabric, our examples seem to have originated from western Sicily and probably belong to the production of the Phoenician colony of Palermo (anc. Panormos) or Solus.[29] They are safely dated to the first half of the 3^{rd} century BC as they have been found in a layer of the mid 3^{rd} century BC. These amphoras were used to transport salted fish, a view based on their association with the presence of several fish processing installations along the coast, between Capo Gallo and Termini Imerese, in the Panormos – Solus area operating during the 4^{th} century BC.[30]

Aigion

The port of Aigion is the largest and safest natural harbor in northwestern Peloponnese. The ancient port was in the same place as the modern harbor, but so far no facilities have been found. Like the other ports of the Achaean cities, Aigion probably had more modest harbor installations, compared to the more monumental ports of Corinth. The agora of

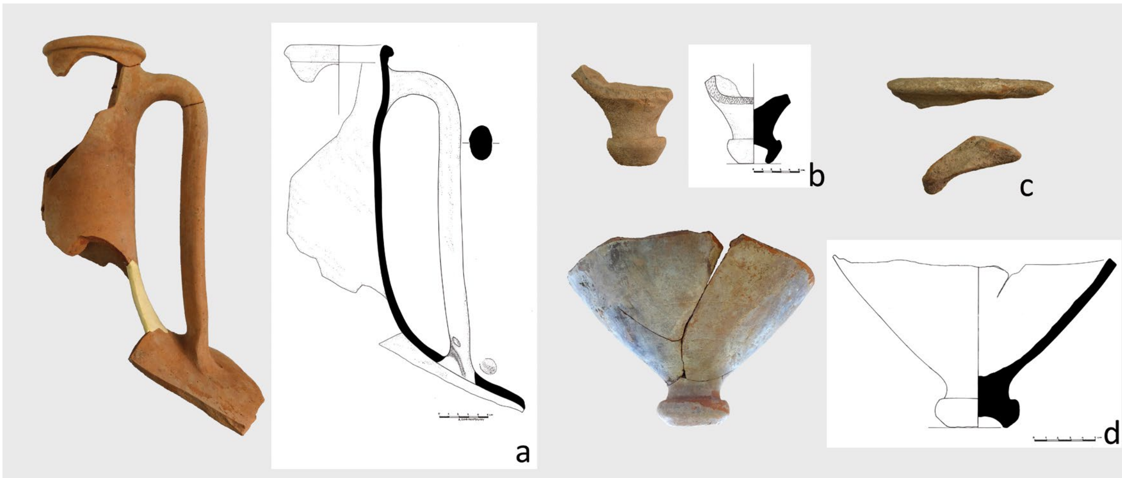

Fig. 5. Trapeza Diakopto. North and SE Aegean amphoras. 4th – early 3rd cent. BC.

Aigion was located on the upper plateau.[31] Pottery workshops with kiln structures, waste pits, and building remains with auxiliary facilities have been identified in various places within the boundaries of the ancient city.[32] Some of the workshops were located near the Hellenistic agora, which must have played a role in their production and sales. Some others were located on the northern part of the city, near the sea and others to the south. The distance from the ancient city port is relatively small, something that must have facilitated the commercialization of their products.

The Amphora Material[33]

The study of all amphora material at Aigion shows a number of gaps mainly in the presence or absence of early imports from the Archaic as well as of the Classical period. This situation is likely explained by the continuous habitation of the settlement giving archaeologists limited access to these earlier periods. However, large quantities of amphoras come from the Hellenistic workshop installations and the partly excavated marketplace.

At the pottery workshops at least three types of local transport amphoras have been identified (fig. 7), with two, similar, fine micaeous chert fabric groups. The two groups are considered as broadly local, as their inclusions are typical of the geological formations of the area of Aigion. The type I with ovoid body resembles the examples of the late Corinthian type A' and the Apani IV / Giancola 4 type of the Brindisi area. Usually it bears a rectangular stamp, more often with the name of Κέρδων and rarely Σωτήριχος. According to other finds they date to the 2nd half of the 2nd century BC. The ovoid type II amphora has a tall thick rim and short neck with two relief bands. Some of them bear stamps, usually with the name of Ζωίλος, while also still, if rarely, naming

Fig. 6. Trapeza Diakopto. Punic amphoras. Late 4th – early 3rd cent. BC.

Κέρδων.[34] Their shape belongs to Dressel 25 or proto Dressel 25 related to workshops in southern Italy[35] and the northwestern Peloponnese.[36] Similar bands also occur in late Corinthian type A',[37] the Apani IV / Giancola 4 amphoras from Brindisi[38] and even in the amphora production of the western Mediterranean (Guadalquivir).[39] The examples from Aigion date, according to other finds from waste pits, to the end of 2nd–1st century BC until early 1st century AD. The type III amphoras have a characteristic tall outward thick lip, two horizontal plastic ridges on the neck and a small hemispherical knob-type base. Similar features appear also in proto Dressel 25 and type Apani II of Brindisi.[40] According to other finds, the type is dated to the second half of 1st century BC.

Regarding the amphoras' content there is no safe data available as there are no written sources for wine or oil production in Aigion. The crops that thrive in this area today are citrus fruits, olives and vegetables, while in the surrounding hills the cultivation of vines is more common. The trade of dried raisins of Aigion was the most important economic factor in the late 19th – early 20th centuries.

In Aigion from the end of the 3rd century BC, almost at the same time when the local workshops were active, some examples appear of late Corinthian type A' (250–215 BC) and southeastern Aegean amphoras, mainly from Knidos – Rhodos. The limited material may be symptomatic of missing excavation data. However, from the 2nd century BC there is a notable presence of imports from various distant regions of the western

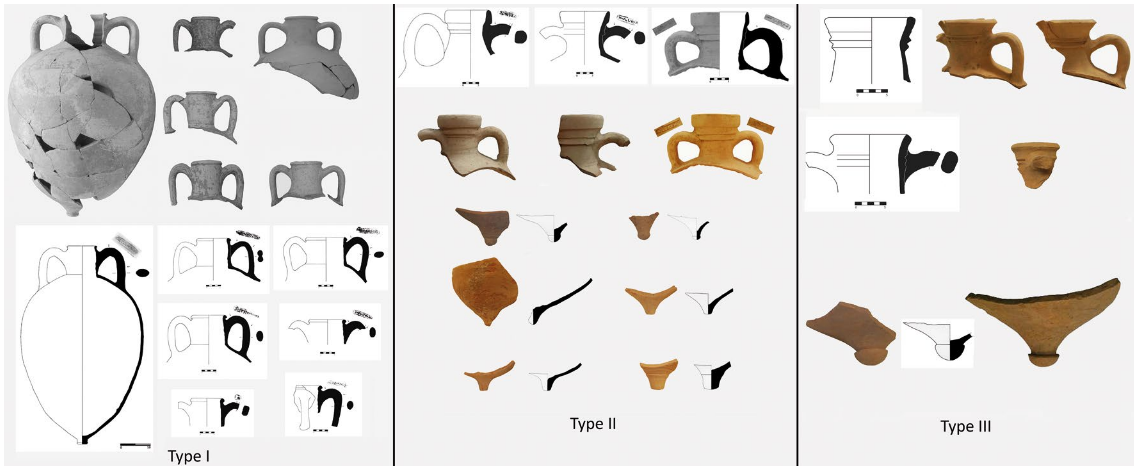

Fig. 7. Aigion. Local transport amphoras. 2nd – 1st cent. BC.

Mediterranean (fig. 8). These finds mainly come from the area of the ancient Agora and include Greco-Italic and Dressel 1 wine amphoras, Lusitanian versions of the Almagro 50 and North African Van der Werff type 1 fish amphoras.

Consumer Behavior & Economic Practices in NW Peloponnese from the Late Archaic to the Late Hellenistic Period

Eastern Achaea is a mountainous region, and it seems unlikely that agriculture would have been able to create any sufficient surplus for export to markets beyond local consumption. An exception is the case of Aigion in the late Hellenistic period, when the commercial trade activities of the city were connected with a deliberate production of a surplus, part of which was stored in transport amphoras. In the seaside settlement of Voura the demand and supply of goods carried by amphoras seems to have been of particularly important since the first years of its establishment until its abandonment probably due to seismic events.[41] The study of the material demonstrates that the city imported large quantities of amphora-borne commodities, especially during the period 400–250 BC, a time of economic prosperity and expansion of the settlement.

The presence of amphoras since the Archaic period at the harbor of ancient Voura attests to its integration into a network of near and distant production centers. Amphora circulation followed a regional and extra-regional pattern with obvious western orientation, but this does not mean that the area was outside the Aegean networks, as evidenced by the limited presence northern and southeastern Aegean amphoras. The type B amphoras dominate the assemblage by as much as 77% of the counted material. Regardless of where type B amphoras were produced they were imported consistently to Voura much as they were at Corinth.[42] The Corinthian type A/A’ amphoras were

Fig. 8. Aigion. Western Mediterranean amphoras. 2^{nd} – 1^{st} cent. BC.

probably transported with the same ships and, as Koehler observes, the two types are often found together in the west.[43]

The port of Voura was involved in long distance trade, in a direct or indirect way. Contacts with the Aegean basin could be made via the port of Piraeus, the most securely importing – transshipping center, where probably merchants from Voura operated to arrange for shipments to and from the city of Voura, or even more likely via the port of Corinth which was characterized as a point of transition of a wide range of products.[44] The imports of Punic amphoras containing probably salted fish indicate a consumer preference for a class of exotic products that could be offered as luxury goods. Such finds highlight the role that urban centers played in seeking and establishing networks of commercial contacts with distant destinations for the purpose of transporting such goods.[45] The port of Voura should be considered a local or regional center, which offered identifiable markets for these products.

The merchants who arrived at the port of Voura with amphora cargoes could exchange these with other local products, such as animal products. The economic development of Achaea was based heavily on animal husbandry[46] and the integration of such practices into a wider economic network. As Bonnier suggests,[47] the ports in the Corinthian gulf were used, on the one hand, for the export of animal husbandry products from the inland of Achaea and northern Arcadia through the river valleys that separate the whole region and, on the other hand, for the importation of cereals, olive oil from Corinth probably with the type A/A’ amphoras, probably wine or other products with type B – Ionic/Adriatic and the Aegean amphoras as well as some exotic products with the Punic amphoras from western Sicily.

The fact that the amphoras in the settlement were found broken into several small, medium and large size fragments between the abandonment levels suggests that the products they contained were sold in the city itself or repackaged into other containers made from perishable materials for transfer into the hinterland. Although it is difficult to see the exact mechanisms through which these staples were sold, there is no evidence to suggest that these products were introduced to the city by state authorities to control their redistribution to the city’s residents. A market-based trade seems more likely explanation.[48]

Aigion, on the other hand, shows little evidence, so far, either for the presence of imported Archaic and Classical amphoras or for large-scale local production of transport containers to ship abroad before the 2nd century BC. The workshops of Aigion become more active in amphora production after the destruction of Corinth in 146 BC. Local amphoras are naturally dependent on the existence of a rural surplus and their distribution depended on integration into pre-existing trade networks that continued to operate even after the collapse of Corinth. Even after 146 BC, the smaller ports in the Corinthian Gulf never stopped facilitating trade contacts and the exchange of goods at a lower scale, operating as links of communication between east and west.

Like many other regions, Aigion was primarily influenced by global commercial trends. The imports from the Italian peninsula and North Africa start almost at the same time as the activation of the local production and become gradually more intense, revealing a strong change in consumer behavior of the residents and probably a change in the population, with the coming of Italians. Moreover, in terms of local consumer conditions, the new types of Italian and Punic amphoras are the result of the Roman commercial expansion to the Aegean economies. The fact that the city of Aigion was not destroyed by the Romans, as neighbouring Corinth was, led to a remarkable economic bloom and the growth of its trade. Aigion certainly benefitted from both the existence of the harbor, which was considered the safest and most important in the region until the establishment of Patras by the Romans in 14 BC, and its overland connections to the hinterland of Peloponnese.

Notes

[1] Paus. 7, 27, 12.

[2] Paus. 7, 17, 5.

[3] Paus. 7, 1, 1.

[4] Rizakis 2008, 159–167; Petropoulos 2011, 70–73; Vordos 2008, 60–70; Vordos 2012, 332–339; Kolia 2012, 324–331.

[5] Kolia 2008, 52–59.

[6] The excavation was conducted in the period 2008–2011 under the direction of Dr. Erofili Kolia, to whom I am grateful for the permission to study the amphoras material.

[7] Kolia 2007, 215–247, esp. 240.

[8] Kolia 2018a, 389–405. Kolia 2018b, 543–560.

[9] Alexopoulos – Kolia 2015–2016, 565–586.

[10] Filis 2019a, 159–168 (for the Hellenistic material).

[11] Lawall 2016a, 59–74.

[12] Lawall 2016a, 59–74, esp. 67–71.

[13] E.g., Cahill (2002, 169) notes that the presence in some houses at Olynthos of more than ten amphoras, is indicative for non-domestic activity. In this case, however, we need to take into account the long-term storage use of such vessels for other content than the original.

[14] These are mostly early type A Attic skyphoi and type C cups.

[15] Koehler 1978, pl. 28; Koehler 1981, 449–458, esp. 452 pl. 99a. Sourisseau (2011, 204–206) has proposed amongst others Sybaris as one of the producing centers for such amphoras.

[16] Koehler 1978, pls. 29–30, 39 no. 227–229; Lawall 2011, 301 fig. I.5 no. A6.

[17] Filis 2011, 197–217; Filis 2019b, 234–261.

[18] For similar Thasian profiles, see Monachov 2003, 61, pl. 35, no. 3–4.

[19] Koehler 1978, pls. 30, 39 no. 231 (460–420 BC).

[20] Preka-Alexandri 1992, 41–52; Preka-Alexandri 2010, 76–77; Preka-Alexandri 2018, 459–482, esp. 462–467; Kourkoumelis 1988; Kourkoumelis 1990, 14–19; Kourkoumelis 1996, 641–646.
[21] For Lefkada and the Ionian coast (e.g. Amvrakia, Paleros), see Andreou 1990, 54–57, fig. 19–26; Staikou et al. 2014, 627–628. Filis – Staikou forthcoming. For Albanian coast (Epidamnos, Apollonia, Butrint), Göransson 2007, 96–97; Gassner 2003, 185; Gassner 2015, 345–356; Gassner 2011. For the possibility of production such amphoras in Pharos and other sites in Croatian coast, see Katić 2005, 75–80; Borzić 2017, 5–12; Radić Rossi 2017, 13–25; Miše et al. 2016.
[22] Gassner 2011.
[23] Kourkoumelis 2013, 473, fig. 8.2; Preka-Alexandri 2018, pl. 3α, no. 3; Staikou et al. 2014, pl. 207, no. 4229.
[24] Foley et al. 2012, 389–398.
[25] For similar profiles, see Koehler 1978, pls. 15 (nos. 44, 47–48) and 16–18.
[26] Farnsworth 1964, 224–225; Farnsworth 1970, 10–11; Farnsworth et al. 1977, 455–468; Newton et al. 1988, 59–82; Whitbread 1995, 255–346; Whitbread 2003, 1–13; Gassner – Trapicler 2011; Gassner 2003, 112–113; Whitbread 1995, 255–346.
[27] Lawall 2004, 445–454, esp. 453, fig. 33–35 (Tall-neck, conical body, ca. 300 BC).
[28] The upper part of the amphoras related mainly to the type T-7.1.2.1, but the body shaped like a cone is similar to T-6.1.1.3 or T-6.1.2.1. These types generally attributed to production centers in Tunisia as well as in Sicily, see Ramón 1995, 201.205.
[29] Greco 1997, 64; Bechtold 2008, 548; Bechtold 2015a, 9, fig. 4.7 & 12.3; Bechtold 2015b; Bechtold 2015c.
[30] Bechtold 2015a, 42–43.
[31] Papakosta 1993, 126–127; Vordos 2008, 60–70, esp. 62, fig. 28; Vordos 2012, 335, fig. 671. Papakosta (1991, 235–240) correlates incorrectly the findings from this plot with the Hellenistic fortification, which however has been identified at another site of the city, see Petropoulos 2011, 71.
[32] Filis 2016, 151–152 notes 5–9; Filis 2018, 407–408, notes 4–8.
[33] Filis 2016, 151–167; Filis 2018, 407–421; Filis 2019c, 3–34.
[34] Filis 2016, 167, fig. 5; Filis 2018, 421, pl. 5; Filis 2019c, 12–13.
[35] Van der Werff 1986, 77–137.
[36] Lolos 2009, 115–132; Lolos 2011, 331, fig. 5.42d; Trainor – Stone 2015, 107–108; Trainor 2015, 48–53; cf. Opait 2010, 155–156.
[37] Koehler 1978, pl. 11–12, 18, 87–90.
[38] Palazzo 1989, fig. 1, n. 2 and 4; Palazzo 2013; Manacorda – Pallechi 2012, 104, fig. 3.1
[39] García Vargas et al. 2011, 211–217, fig. 13–14.
[40] Manacorda – Pallechi 2012, 104, fig. 3.1; Manacorda 2001, 229–240; Palazzo 2013; Lolos 2011, 331, fig. 5.42d; Lolos 2009, 115–132; cf. Opait 2010, 155–156.
[41] Moschou 2015.
[42] Whitbread 1995, 285.
[43] Koehler 1978, 75.
[44] Pettegrew 2011, 549–574, esp. 560; Lawall 2006, 265–286.
[45] Lawall 2006, 267 no. 11. See also A. Saez Romero in the present collection.
[46] See in general Kron 2014, 109–135.

[47] Bonnier 2014; Bonnier 2016, 65–94.
[48] Lawall 2016b, 256–273.

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References

Alexopoulo – Kolia 2015–2016
G. Z. Alexopoulo – H.-I. Kolia, La circulation monétaire dans la région de l'ancienne Voura (Aigialeia). Trouvailles provenant d'habitats, BCH 139–140, 2015–2016, 565–586.

Andreou 1990
I. Andreou, Ελληνιστική κεραμική Λευκάδας, in: Β' Επιστημονική Συνάντηση για την Ελληνιστική Κεραμεική. Χρονολογικά Προβλήματα της Ελληνιστικής Κεραμεικής, Ρόδος, 22–25 Μαρτίου 1989 (Athens 1990) 54–57.

Bechtold 2008
B. Bechtold, Anfore puniche, in: R. C. Scovazzo (ed.), Segesta. Vol. 3. Il sistema difensivo di Porta di Vale (scavi 1990–1993), Documenti di Archeologia 48 (Mantua 2008) 539–569.

Bechtold 2015a
B. Bechtold, Le produzioni di anfore puniche della Sicilia occidentale (VII–II/II sec. A.C.), Carthage Studies 9 (Ghent 2015).

Bechtold 2015b
B. Bechtold, Amphora and Coarse Ware Fabrics of Panormos. Evidences for Local Production and Export, <http://facem.at/img/pdf/Fabrics_Panormos_Bechtold_Schmidt_17.6.2015.pdf> (13.09.2019).

Bechtold 2015c
B. Bechtold, Amphorae Fabrics of Solus. Evidences for Local Production and Export, <http://facem.at/img/pdf/Fabrics_Solus_Bechtold_Schmidt_17.6.2015.pdf> (13.09.2019).

Bonnier 2014
A. Bonnier, Coastal Hinterlands. Site Patterns, Microregions and Coast-inland Interconnections by the Corinthian Gulf, c. 600–300 BC (Oxford 2014).

Bonnier 2016
A. Bonnier, Harbours and Hinterland Networks by the Corinthian Gulf, from the Archaic to the Early Hellenistic Period, in: K. Hoghammar – B. Alroth – A. Lindhagen (eds.), Ancient Ports. The Geography of Connections. Proceedings of an International Conference at the Department of Archaeology and Ancient History, Uppsala University, 23–25 September 2010 (Uppsala 2016) 66–94.

Borzić 2017

I. Borzić, Corinth B and Related Types Amphorae from Eastern Adriatic Hillfort Sites, in: G. Lipovac VrkljanIrena – R. Rossi – A. Konestra (eds.), Amphorae as a Resource for the Reconstruction of Economic Development in the Adriatic Region in Antiquity. Local Production, Proceedings of the Workshop Zagreb, 21st April 2016 (Zagreb 2017) 5–12.

Cahill 2002

N. Cahill, Household and City Organization at Olynthus (New Haven 2002).

Farnsworth 1964

M. Farnsworth, Greek Pottery. A Mineralogical Study, AJA 68, 1964, 221–228.

Farnsworth 1970

M. Farnsworth, Corinthian Pottery. Technical Studies, AJA 74, 1970, 9–20.

Farnsworth et al. 1977

M. Farnsworth – I. Perlman – F. Asaro, Corinth and Corfu. A Neutron Activation Study of Their Pottery, AJA 81, 1977, 455–468.

Filis 2011

K. Filis, Εμπορικοί αμφορείς από την αρχαία Άκανθο και το τοπικό εργαστήριο (Ph.D. diss. Aristotle University, Thessaloniki 2011).

Filis 2016

K. Filis, The Local Transport Amphorae from Aigion, in: S. Japp – P. Kögler (eds.), Traditions and Innovations. Tracking the Development of Pottery from the Late Classical to the Early Imperial Periods, Proceedings of the 1st Conference of International Association for Research on Pottery of the Hellenistic Period, Berlin, 7th – 10th November 2013 (Vienna 2016) 151–167.

Filis 2018

K. Filis, Ενσφράγιστοι εμπορικοί αμφορείς από το Αίγιο, in: Θʿ Επιστημονική συνάντηση για την Ελληνιστική Κεραμική, Θεσσαλονίκη 5–9 Δεκεμβρίου 2012 (Athens 2018) 407–421.

Filis 2019a

K. Filis, Trapeza Diakoptou Aigialia, NW Pelopennese: Regional and Interregional Exchanges. The Indications from Transport Amphorae, in: A. Peignard Giros (ed.), Daily Life in a Cosmopolitan World. Pottery and Culture during the Hellenistic Period, Lyon, 5th–8th November 2015 (Vienna 2019) 159–168.

Filis 2019b

K. Filis, Τα τοπικά εργαστήρια και οι εισαγωγές εμπορικών αμφορέων στο Βόρειο Αιγαίο στους κλασικούς χρόνους. Εμπορικά δίκτυα και αγορές καταναλωτικών αγαθών, in: E. Manakidou – A. Avramidou (eds.), Η κεραμική της κλασικής εποχής στο Βόρειο Αιγαίο και την περιφέρειά του (480-323/300 π.Χ.), Θεσσαλονίκη, 17–20 Μαΐου, 2017 (Thessaloniki 2019) 243–261.

Filis 2019c

K. Filis, The Ovoid Amphorae from Aigion, NW Peloponnese. The Connection with Corinth and Brindisi, in: E. Garcia Vargas – R. Roberto de Almeida – H. Gonzalez Cesteros – A. M. Saez Romero (eds.), A Familiy Business: The Ovoid Amphorae in the Central and Western Mediterranean. Between the Last Two Centuries of the Republic and the Early Days of the Roman Empire, University of Seville / San Fernando, 10–11 December 2015 (Oxford 2019) 3–34.

Filis – Staikou forthcoming
K. Filis – V. Staikou, The Transport Amphorae from the Port Facilities of Ancient Leukas. Local / Regional and Extra-regional Exchange Networks, in: 4th IARPotHP Conference Manufacturers and Markets: The Contributions of Hellenistic Pottery to Economies Large and Small, November 2019, 11–14 Athens (forthcoming).

Foley et al. 2012
B. P. Foley – M. C. Hansson – D. P. Kourkoumelis – T. A. Theodoulou 2012, Aspects of Ancient Greek Trade Re-evaluated with Amphora DNA Evidence, JASc 39/2, 2012, 389–398.

García Vargas et al. 2011
E. García Vargas – R. R. de Almeida – H. González Cesteros, Los tipos anfóricos del Guadalquivir en el marco de los envases hispanos del siglo I a.C. Un universo heterogéneo entre la imitación y la estandarización, Spal 20, 2011, 185–283.

Gassner 2003
V. Gassner, Materielle Kultur und kulturelle Identität in Elea in spätarchaisch-frühklassischer Zeit (Vienna 2003).

Gassner 2011
V. Gassner, Amphorae Production of the Ionic-Adriatic Region, <http://facem.at/img/pdf/Amphorae_Production_of_the_Ionic_Adriatic_Region_06_06_2011.pdf > (22.09.2019).

Gassner 2015
V. Gassner, Le anfore greco-occidentali. Riconsiderando la loro evoluzione e l'identificazione dei centri di produzioni, in: R. Roure (ed.), Contacts et acculturations en Méditerranée occidentale, Hommages à Michel Bats. Actes du colloque d'Hyères-les-Palmiers, 15–18 septembre 2011 (Paris 2015) 345–356.

Gassner – Trapicler 2011
V. Gassner – M. Trapicler, Fabrics from Korinthos (Corinth), <http://facem.at/img/pdf/Fabrics_of_Korinthos_06_06_2011.pdf> (22.09.2019)

Göransson 2007
K. Göransson, The Transport Amphorae from Euesperides. The Maritime Trade of a Cyrenaican City 400–250 BC (Stockholm 2007).

Grace 1953
V. Grace, Wine Jars, in: C. Boulter, Pottery of the Mid-fifth Century from a Well in the Athenian Agora, Hesperia 22/2, 1953, 59–115.

Greco 1997
C. Greco, Materiali dalla necropoli punica di Solunto. Studi preliminari. Anfore puniche, in: C. Greco – F. Spatafora – S. Vassallo (eds.), Archeologia e territorio (Palermo 1997) 57–70

Katić 2005
M. Katić, The Production of Late Corinthian B Amphoras in Pharos, in: P. Cabanes – J.-L. Lamboley (eds.), L'Illyrie Méridionale et l'Épire dans L'antiquité IV. Actes du IVe colloque international de Grenoble, 10–12 octobre 2002 (Paris 2005) 75–80.

Koehler 1978
C. Koehler, Corinthian A and B Transport Amphoras (Ph.D. diss. Princeton University, Princeton 1978).

Koehler 1981

C. Koehler, Corinthian Developments in the Study of Trade in the Fifth Century, Hesperia 50, 1981, 449–458.

Koehler 1982

C. Koehler, Amphoras on Amphoras, Hesperia 51, 1982, 284–289.

Koehler 1992

C. Koehler, A Brief Typology and Chronology of Corinthian Transport Amphoras. English translation from the Amphoras Project Website, <http://projects.chass.utoronto.ca/amphoras/corab92.htm> (22.09.2019), original in: S. Monachov – V. Kats (eds.), Grecheskie amfory (Saratov 1992) 265–279.

Kolia 2007

E. Kolia, Τοπογραφία της Βούρας και της χώρας της: νεότερες έρευνες, ASAtene 85, 2007, 215–247.

Kolia 2008

E. Kolia, Ελίκη, in: A. Vordos – E. Kolia (eds.), Αιγιαλεία. Αρχαίες πόλεις και μνημεία (Patras 2008) 52–59.

Kolia 2012

E. Kolia, Αιγιάλεια, in: A. Vlachopoulos (ed.), Αρχαιολογία – Πελοπόννησος (Athens 2012) 324–331.

Kolia 2018a

E. Kolia, Ελληνιστική κεραμική από τη Βούρα: Κλειστά σύνολα από την ανασκαφή στην Τράπεζα Διακοπτού, in: Θʿ Επιστημονική συνάντηση για την Ελληνιστική Κεραμική, Θεσσαλονίκη 5–9 Δεκεμβρίου 2012 (Athens 2018) 389–405.

Kolia 2018b

E. Kolia, Τράπεζα Διακοπτού. Παράκτιος οικισμός στη χώρα της Βούρας, ADelt A 69–70 (Athens 2018), 543–560.

Köster 2013

M. Köster, Amphorenhenkel mit Stempel auf der Halbinsel Plaghiá, in: F. Lang – P. Funke – L. Kolonas – E.-L. Schwandner – D. Maschek (eds.), Interdisziplinäre Forschungen in Akarnanien – Διεπιστημονικές έρευνες στην Ακαρνανία (Bonn 2013) 115–126.

Kourkoumelis 1988

D. Kourkoumelis-Rodostamos, Recherches archéologiques à Corfou. Topographie, questions historiques, amphores de transport et commerce antique (Ph.D. diss. Université de Provence Aix-Marseille, Marseille 1988).

Kourkoumelis 1990

D. Kourkoumelis, Τυπολογία αμφορέων. Οι κερκυραϊκοί αμφορείς, Enalia 2/1, 1990, 14–19.

Kourkoumelis 1996

D. Kourkoumelis, Η παραγωγή οξυπύθμενων αμφορέων μεταφοράς στην αρχαία Κέρκυρα, in: Αʿ Αρχαιολογική Σύνοδος Νότιας και Δυτικής Ελλάδος, Πάτρα, 9–12 Ιουνίου 1996 (Athens 2006) 641–646.

Kourkoumelis 2013

D. Kourkoumelis, Transports maritimes et amphores en Mer Ionienne. Une première approche, in: G. Olcese, Immensa Aequora Workshop, Ricerche archeologiche, archeometriche e informatiche per la ricostruzione dell'economia e dei commerci nel bacino occidentale del Mediterraneo (meta IV sec. a.C. – I sec. d.C.) Atti del convegno Roma 24–26 gennaio 2011 (Rome 2013) 469–475.

Kron 2014

G. Kron, Animal Husbandry, in: G. Campbell (ed.), Oxford Handbook of Animals in Classical Thought and Life (Oxford 2014) 109–135.

Lawall 1995

M. L. Lawall, Transport Amphoras and Trademarks. Imports to Athens and Economic Diversity in the Fifth Century B.C. (Ph.D. diss. University of Michigan, Ann Arbor 1995).

Lawall 2004

M. L. Lawall, Amphoras without Stamps. Chronologies and Typologies from the Athenian Agora, in: ΣΤʿ Επιστημονική Συνάντηση για την Ελληνιστική Κεραμική, Βόλος 17–23 Απριλίου 2000 (Athens 2004) 445–454.

Lawall 2006

M. L. Lawall, Consuming the West in the East. Amphoras of the Western Mediterranean in the Aegean before 86 BC, in: D. Malfitana – J. Poblome – J. Lund (eds.), Old Pottery in a New Century. Innovating Perspectives on Roman Pottery Studies, Atti del convegno Internazionale di Studi Catania, 22–24 Aprile 2004 (Catania 2006) 265–286.

Lawall 2011

M. L. Lawall, Transport Amphoras from Well J 2:4, in: K. M. Lynch, The Symposium in Context. Pottery from a Late Archaic House near the Athenian Agora, Hesperia Suppl. 46 (Princeton 2011) 297–326.

Lawall 2016a

M. L. Lawall, Patterns of Amphora Discard from Houses, Shops, Taverns, and Brothels, in: A. Glazebrook – B. Tsakirgis (eds.), Houses of Ill Repute. The Archaeology of Brothels, Houses, and Taverns in the Greek World (Philadelphia 2016) 59–74.

Lawall 2016b

M. L. Lawall, Transport Amphoras, Markets, and Changing Practices in the Economies of Greece, Sixth to First Centuries BCE, in: E. M. Harris – D. M. Lewis – M. Woolmer (eds.), The Ancient Greek Economy. Markets, Households and City-States (New York 2016) 254–273.

Lolos 2009

Y. Lolos, Η οινοπαραγωγή στην Κορινθία κατά την αρχαιότητα (Κόρινθος, Σικυών, Κλεωναί), in: G. A. Pikoulas (ed.), Οἶνον ἱστορῶ IX. Πολυστάφυλος Πελοπόννησος. Επιστημονικό συμπόσιο, Ναύπλιο 9 Μαΐου 2009 (Athens 2009) 115–132.

Lolos 2011

Y. Lolos, Land of Sikyon. Archaeology and History of a Greek City-State, Hesperia Suppl. 39 (Princeton 2011).

Lund 2000

J. Lund, Transport Amphorae as Evidence of Exportation of Italian Wine and Oil to the Eastern Mediterranean in the Hellenistic Period, in: J. Lund – P. Pentz (eds.), Between Orient and Occident. Studies in Honour of P. J. Riis (Copenhagen 2000) 77–99.

Manacorda 2001

D. Manacorda, Le fornaci di Giancolo (Brindisi). Archeologia, epigrafia, archeometria, in: F. Laubenheimer (ed.), 20 ans de recherches à Sallèles d'Aude (Paris 2001) 229–240.

Manacorda – Pallechi 2012

D. Manacorda – S. Pallechi, Le fornaci romane di Giancola (Brindisi) (Bari 2012).

Miše et al. 2016

M. Miše – V. Serneels – B. Kirigin, Provenience Studies of the Type B Amphorae from Greek Colony Pharos on the Island of Hvar, Croatia, poster presented in: 41st International Symposium on Archaeometry, 15th–21st May 2016, Kalamata, <https://www.academia.edu/25540729/Provenience_studies_of_the_type_B_amphorae_from_Greek_colony_Pharos_on_the_island_of_Hvar_Croatia> (23.09.2019).

Moschou 2015

A. Moschou, Αναγνώριση παρελθόντων σεισμών σε αρχαιολογικές ανασκαφές. το παράδειγμα της Τράπεζας Διακοπτού (MA thesis, Patras University, Patras 2015).

Newton et al. 1988

G. W. A. Newton – V. J. Robinson – M. Oladipo – M. R. Chandratillake, Clay Sources and Corinthian Amphorae, in: E. A. Slater – J. O. Tate (eds.), Science and Archaeology, Glasgow 1987: Proceedings of a Conference on the Application of Scientific Techniques to Archaeology (Oxford 1988) 59–82.

Oberhummer 1897

RE III (1897) 1059 s. v. Bura (E. Oberhummer)

Opait 2010

A. Opait, Aspects of the Provisioning of the Pontic Settlements with Olive Oil in the Hellenistic and Early Roman Periods, in: D. Kassab Tezgor – N. Inaishvili (eds.), Production and Trade of Amphorae in the Black Sea, Vol. I, Actes de la table ronde internationale de Batoumi et Trabzon, 27–29 Avril 2006 (Istanbul 2010) 153–158.

Palazzo 1989

P. Palazzo, Le anfore di Apani (Brindisi), in: Amphores romaines et histoire économique. Dix ans de recherche. Actes du colloque de Sienne (22–24 mai 1986), Collection de l'école française de Rome 114 (Rome 1989) 548–553.

Palazzo 2013

P. Palazzo, Le anfore di Apani (Brindisi) (Rome 2013).

Panagou 2010

T.-M. Panagou, Η σφράγιση των αρχαίων ελληνικών εμπορικών αμφορέων. Κέντρα παραγωγής και συνθετική αξιολόγηση (Ph.D. diss. National and Kapodistrian University, Athens 2010).

Papakosta 1991

L. Papakosta, Παρατηρήσεις σχετικά με την τοπογραφία του αρχαίου Αιγίου, in: A. D. Rizakis, Αρχαία Αχαΐα και Ηλεία. Ανακοινώσεις κατά το Πρώτο Διεθνές Συμπόσιο, Αθήνα, 19–21 Μαΐου 1989, Μελετήματα 13 (Athens 1991) 235–240.

Papakosta 1993

L. Papakosta, Οδός Ν. Σολιώτη 6, ADelt 48, 1993, 126–127.

Pettegrew 2011

D. K. Pettegrew, The Diolkos of Corinth, AJA 115, 2011, 549–574.

Petropoulos 2011

M. Petropoulos, Οι αχαϊκές μητροπόλεις των αποικιών της Μεγάλης Ελλάδας, in: L. Droulia – A. D. Rizakis (eds.), Αχαΐα και νότιος Ιταλία. Επικοινωνία, ανταλλαγές και σχέσεις από την αρχαιότητα ως σήμερα, Πρακτικά συνεδρίου, Αίγιο, 6–9 Ιουλίου 2006 (Athens 2011) 58–89.

Preka-Alexandri 1992

K. Preka-Alexandri, A Ceramic Workshop in Figareto, Corfu, in: F. Blondé – J. Y. Perreault (eds.), Les ateliers de potiers dans le monde grec aux époques géométrique, archaïque et classique, BCH Suppl. 23 (Athens 1992) 41–52.

Preka-Alexandri 2010

K. Preka-Alexandri, Οι αρχαιότητες της Κέρκυρας (Athens 2010).

Preka-Alexandri 2018

K. Preka-Alexandri, Ελληνιστική κεραμική από τον Κεραμικό της αρχαίας Κέρκυρας, in: Θ' Επιστημονική συνάντηση για την Ελληνιστική Κεραμική, Θεσσαλονίκη 5–9 Δεκεμβρίου 2012 (Athens 2018) 459–482.

Radić Rossi 2017

I. Radić Rossi, Amphorae of the Corinth B Type from the Croatian Undersea, in: G. Lipovac VrkljanIrena – R. Rossi – A. Konestra (eds.), Amphorae as a Resource for the Reconstruction of Economic Development in the Adriatic Region in Antiquity: Local Production, Proceedings of the Workshop Zagreb, 21st April 2016 (Zagreb 2017) 13–25.

Ramón 1995

J. Ramón Torres, Las anforas fenicio-punicas del Mediterraneo central y occidenta (Barcelona 1995).

Rizakis 1995

A. D. Rizakis, Achaïe I. Sources textuelles et histoire régionale (Athens 1995).

Rizakis 2008

A. D. Rizakis, Achaie III. Les cités achéennes. Épigraphie et histoire, Μελετήματα 55 (Athens 2008).

Sourisseau 2011

J.-C. Sourisseau, La diffusion des vins grecs d'Occident du VIIIe au IVe s. av. J.C., sources ecrités et documents archéologiques, in: La vigna di Dionisio. Vite, vino e culti in Magna Grecia, Atti del XLIX Convegno di Studi sulla Magna Grecia, Taranto 2009 (Taranto 2011) 145–252.

Staikou et al. 2014

V. Staikou – B. Giza – K. Leontariti, Ελληνιστική κεραμική από τη Λευκάδα. Στρώμα κατάχωσης κτιρίου στον πυρήνα του νότιου νεκροταφείου, in: Η' Επιστημονική συνάντηση για την Ελληνιστική Κεραμική, Ιωάννινα 5–9 Μαΐου 2009 (Athens 2014) 623–630.

Trainor – Stone 2015

C. P. Trainor – P. J. Stone, Winners, Losers, and Survivors of Roman Imperialism. A Case Study from the Northern Peloponnese, in: W. Gauß – G. Klebinder-Gauß – C. von Rübern (eds.), The Transmission of Technical Knowledge in the Production of Ancient Mediterranean Pottery, Proceedings of the International Conference at the Austrian Archaeological Institute at Athens, 23rd–25th November 2012 (Vienna 2015) 107–108.

Trainor 2015
C. P. Trainor, The Ceramics Industry of Roman Sikyon. A Technological Study (Uppsala 2015).
Van der Werff 1986
J. H. Van der Werff, Excavations in the House of the Porch (V.ii.4–5) at Ostia, in: J. Boersma – D. Yntema – J. Van der Werff (eds.), Excavations in the House of the Porch (V.ii.4–5) at Ostia, BABesch 61, 1986, 77–137.
Vandiver – Koehler 1986
P. B. Vandiver – C. G. Koehler, Structure, Processing, Properties, and Style of Corinthian Transport Amphoras, in: W. D. Kingery (ed.), Technology and Style, Ceramics and Civilization 2 (Columbus 1986) 173–215.
Vordos 2008
A. Vordos, Αίγιο, in: A. Vordos – E. I. Kolia, Αιγιαλεία. Αρχαίες πόλεις και μνημεία (Patras 2008) 60–70.
Vordos 2012
A. Vordos, Αίγιο, in: A. Vlachopoulos (ed.), Αρχαιολογία – Πελοπόννησος (Athens 2012) 332–339.
Whitbread 1995
I. K. Whitbread, Greek Transport Amphorae. A Petrological and Archaeological Study (Athens 1995).
Whitbread 2003
I. K. Whitbread, Clays of Corinth. The Study of a Basic Resource for Ceramic Production, in: C. K. Williams II – N. Bookidis (eds.), Corinth XX, Corinth, the Centenary 1896–1996 (Princeton 2003) 1–13.
Zimmerman-Munn 2003
M. L. Zimmerman-Munn, Corinthian Trade with the Punic West in the Classical Period, in: C. K. Williams II – N. Bookidis (eds.), Corinth, the Centenary 1896–1996 (Princeton 2003) 195–217.

A First Overview of the Rhodian Stamped Handles from a Public Monumental Building in Rhodes: Context, Chronology and Function*

Stella Skaltsa

The paper presents a preliminary overview of the Rhodian stamped amphora handles recovered from a monumental public building in the city of Rhodes. Besides two nearly complete amphoras, the bulk of the amphoric material consists of stamped handles.[1] In this respect, the number of stamped amphora handles presents a relatively representative sample of amphoric material that can be associated with a specific archaeological context on the island of Rhodes itself.[2]

The site measures ca. 48 × 55 m and comprises a courtyard with a spacious peristyle (fig. 1).[3] The complex has not yet been fully published and the present contribution forms a part of the prolegomena to the future publication.[4] The plan of the complex can be restored from the outline of the foundation trenches cut into rock. More specifically, the east sides are articulated by deep porticoes. The configuration of space in the north part of the complex is not very clear due to extensive damage.[5] The most interesting find of the investigation was a temple-like structure (7.80 × 4.20 m) in the south-east part of the courtyard, with an E–W orientation.[6] A large rectangular cistern (inner dimension: 7.70 × 8.60 m) coated with hydraulic plaster and paved with pebbles broken halfway, was revealed adjacent to the trench of the east colonnade of the building.[7]

The building complex was laid out along one of the most important and wide streets (16.10 m wide) – known as *plateiai* –, conventionally designated as P 27 (fig. 2); this runs on a N–S axis, dividing the Acropolis from the lower town.[8] To the west, the building was defined by the street P 27b.[9] To the north, we suspect that the building would have extended up to P 10, a street ca. 11.60m wide.[10] The significance of this complex is underlined by the numerous inscribed once supporting bronze statues and the fragments of marble sculptures that were found scattered in the foundation trenches.[11] The great majority of the inscriptions, both public and private, are honorific and generally concern state officials, eminent citizens or high-profile individuals. They date to the Hellenistic and Roman Imperial periods. Eight statue bases were devoted to priests of Helios, the patron deity of the Rhodian State, the complex has become known in scholarship as the 'temenos of Halios'.[12] Another view proposes that it functioned as the clubhouse of the priests of Helios.[13] However, it should be noted from the outset that both identifications are highly questionable and need to be revisited. The complex was a public building whose precise function remains to be determined.[14] What can be said with some certainty is that the complex had a long building history, undergoing several building phases which spanned more than six centuries, from the late 4th/early 3rd century BC to Roman times.[15]

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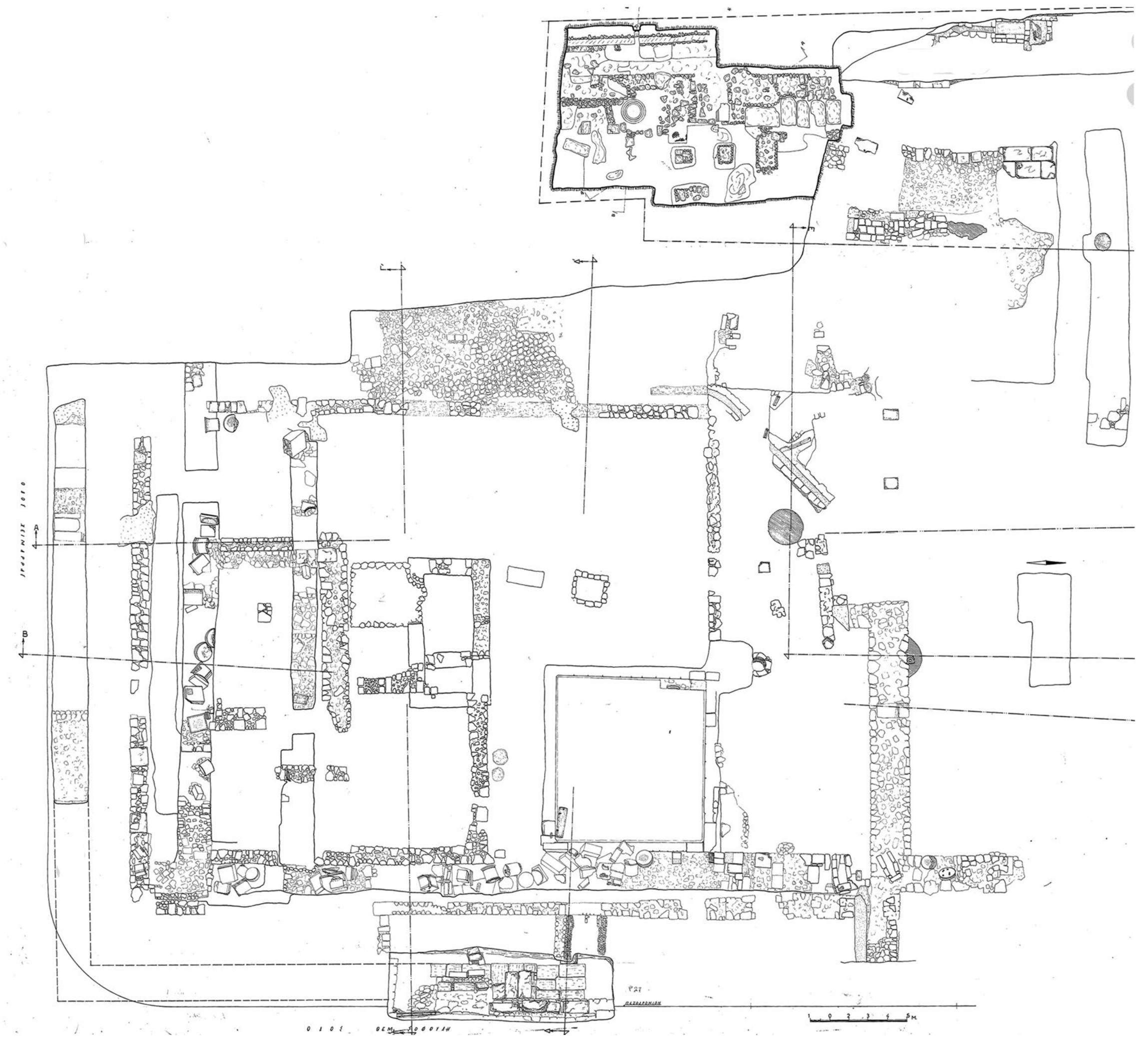

Fig. 1: Plan of the Soichan-Minetou plot.

In total 429 amphora handles have been recovered. 22 handles are unstamped, while 407 are stamped.[16] The material consists predominantly of Rhodian handles (391 in total). Only 38 handles (i.e. less than 10%) can be attributed to a non-Rhodian provenance (fig. 3).[17] The low percentage of imported amphoras from the complex neatly conforms to the general picture of non-Rhodian amphoras in Rhodes, which does not exceed 12% of the registered material.[18] If we look at the Rhodian handles (391 in total), only 5% are unstamped (21 in total) (fig. 4).[19] From the remaining 370 stamped handles, four bear a stamp containing a monogram or the like, with an additional seven bearing just a device. In other words, 358 Rhodian handles preserve stamps in varying degrees of legibility. To be more precise, nearly one quarter of the material (93 stamps in total) is currently illegible or partly legible (sometimes only the month can be read or just a few letters), whereas the remaining three quarters (266 stamps) can be attributed to stamps of eponyms and 'fabricants'.

Fig. 2: Map of the city of Rhodes with the location of the complex.

Like other ceramic finds, amphora handles were found widely dispersed in the complex.[20] Moreover, there is no deposit of amphora fragments that could potentially point to storage facilities once present in the complex. Likewise, finds (e.g. *sekomata*) that would point to commercial activities are absent. In brief, the evidence at hand does not support a commercial or storage use of amphoras. Nevertheless, the sheer number of stamped amphora handles suggests that amphoras did find their way in this building.

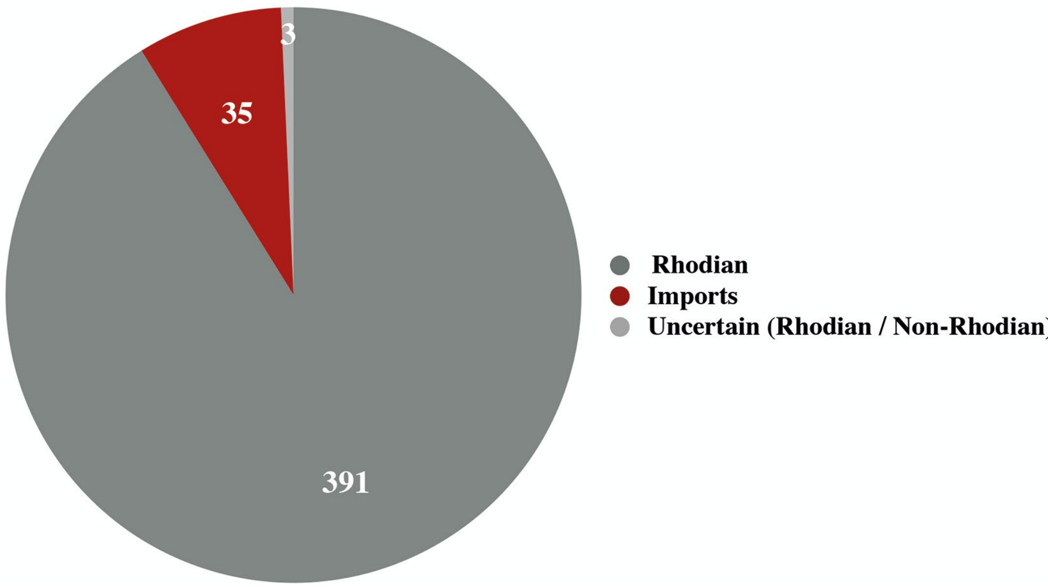

Fig. 3: Provenance of transport amphoras: the evidence from handles.

Their disposal should thus not been viewed as accidental. It was the commodity they carried, in all likelihood wine that was sought after and presumably consumed within the premises.[21] In this respect, the stamped handles from this complex, as they form a uniform assemblage, can be a useful tool in illuminating patterns of consumption and consequently throw some fresh light on the otherwise poorly understood function of this complex. In what ways, if any, can this type of evidence illuminate aspects of the use of space and ultimately of function? In other words, how can we contextualise this type of evidence?

As the Rhodian stamps are a closely datable class, the material at hand can give us snapshots of the use of space for nearly two and a half centuries, from the early 3rd century BC when the stamping practice was first introduced down to the mid-1st century BC when this practice became obsolete.[22] Several interesting patterns emerge if we organise the material by period. The lower chronology of Gerald Finkielsztejn has been followed, taking also into account some revisited dates proposed by Nathan Badoud and more recently by Thibaut Castelli.[23] The latter has partly reshuffled the eponyms for period III, which roughly corresponds to the last three decades of the 3rd century BC and the 1st third of the 2nd century BC Castelli proposes a higher chronology by a range of 5–10 years for some of the eponyms.

In particular, less than a fifth of the stamps (44 in total) can be attributed to the 3rd century BC (table 1). Although this ratio can seem fairly negligible compared to the 2nd century BC, it is still quite significant, as stamping was not universally applied to amphoras in the 3rd century BC. The 2nd century BC stands out conspicuously, as more than half of the material dates to this period. This generally agrees with a well-known observation that the 2nd century BC was ‘the heyday of amphora production on the island

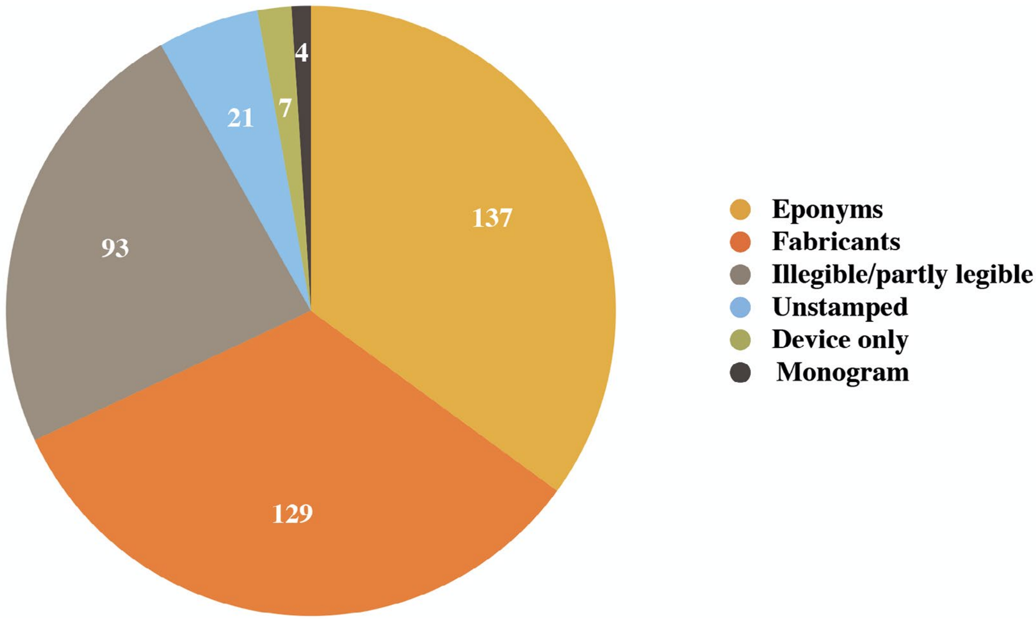

Fig. 4: Categories of stamps on Rhodian handles.

of Rhodes and her territorial possessions in Asia Minor and elsewhere, when all (or nearly all) amphorae were apparently stamped on both handles'.[24] A higher attestation of stamped handles, however, can be observed for the 2nd half of the 2nd century BC than the 1st half of this century. In other words, more handles date to period V (79 handles), which spans most of the 2nd half of the 2nd century BC, than in the preceding two periods (periods III and IV: 50 handles), which cover the 1st half of the century. While period V is the best exemplified, period VI is likewise fairly well represented with 58 handles, while an additional 14 handles can be attributed to either periods V or VI. Roughly speaking, this suggests that in the 2nd half of the 2nd century BC and the first decade of the 1st century BC, there seems to be a high concentration of amphoras in the complex: more than half of the (legible) stamped handles (151 out of 266) date to this period.[25]

How does our sample correspond to other assemblages from the island of Rhodes? In 1999 John Lund quantified the evidence of stamped amphora handles from three assemblages found on the island: those of Lindos, Kalavarda in Kamiros, and Akandia in the city of Rhodes.[26] He noticed peaks for the last and 1st decades of the 3rd and 2nd century BC respectively. As Lund's article predates the lower chronology proposed by G. Finkielsztejn, the evidence from his statistics should now be lowered by ca. 10 to 15 years. Even with the adoption of the low chronology, the peak of stamped amphora handles in these three assemblages still falls in the 1st half of the 2nd century BC. Our material, however, does not conform to this picture, as a steep increase in the number of stamped handles occurs in the 2nd half of the 2nd century BC.

If we now move to a comparison between stamps of eponyms and stamps of fabricants, the following can be observed: the names of 82 eponyms and another

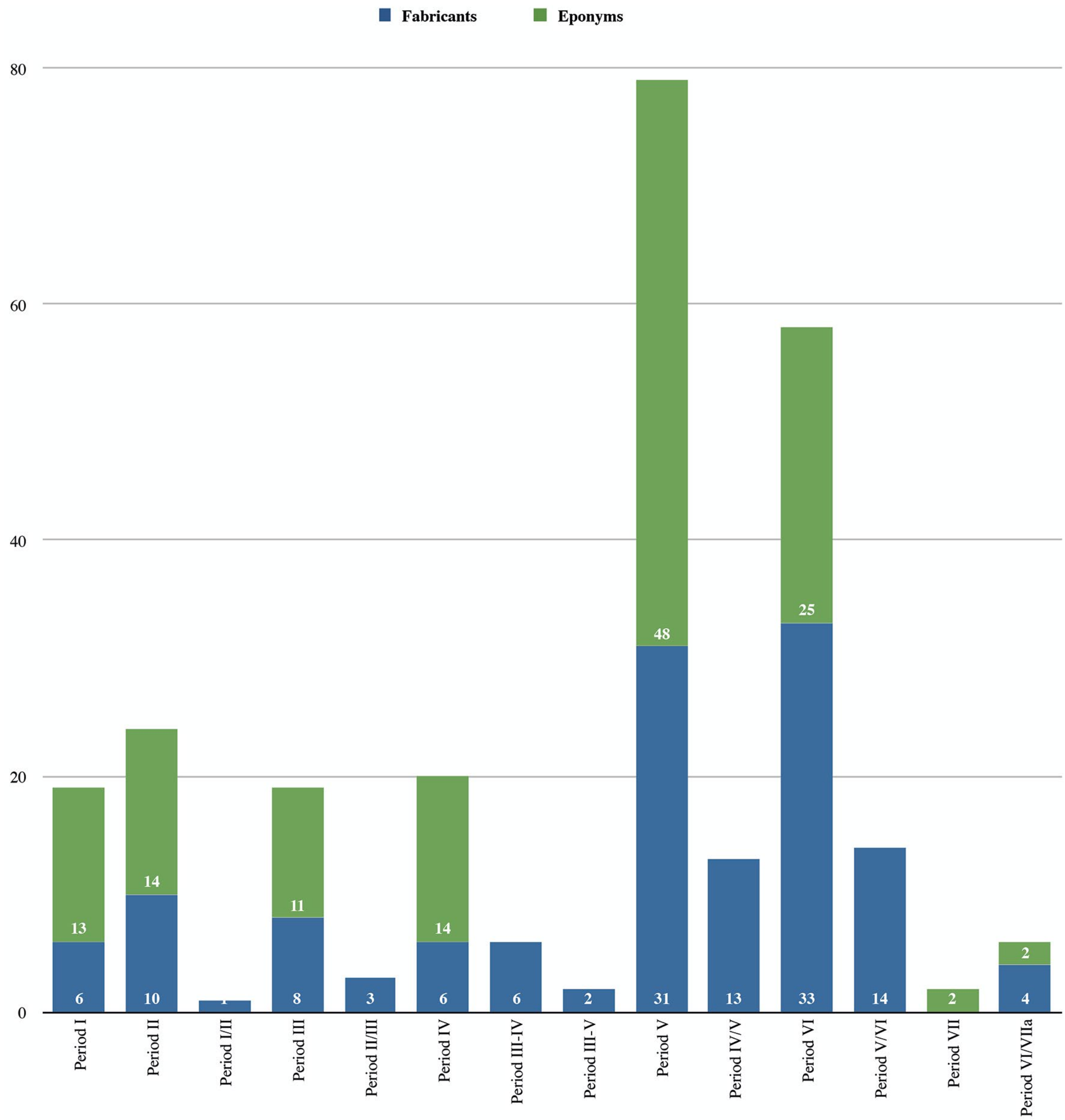

Fig. 5: Chronological distribution of the stamped amphora handles from the Soichan-Minetou plot.

75 names of fabricants have been identified, recorded in 129 and 137 stamped handles respectively (fig. 5).[27] Some names are attested on as many as eleven different stamps.[28] As can readily be noted from the graphs (figs. 6. 7), stamps of eponyms approximately match in number those of fabricants throughout the periods. There is therefore a close correspondence between the number and chronological distribution of stamps naming eponyms and those naming fabricants, suggesting that the amphora stamps from the Soichan-Minetou plot constitute a representative sample. This relatively equal

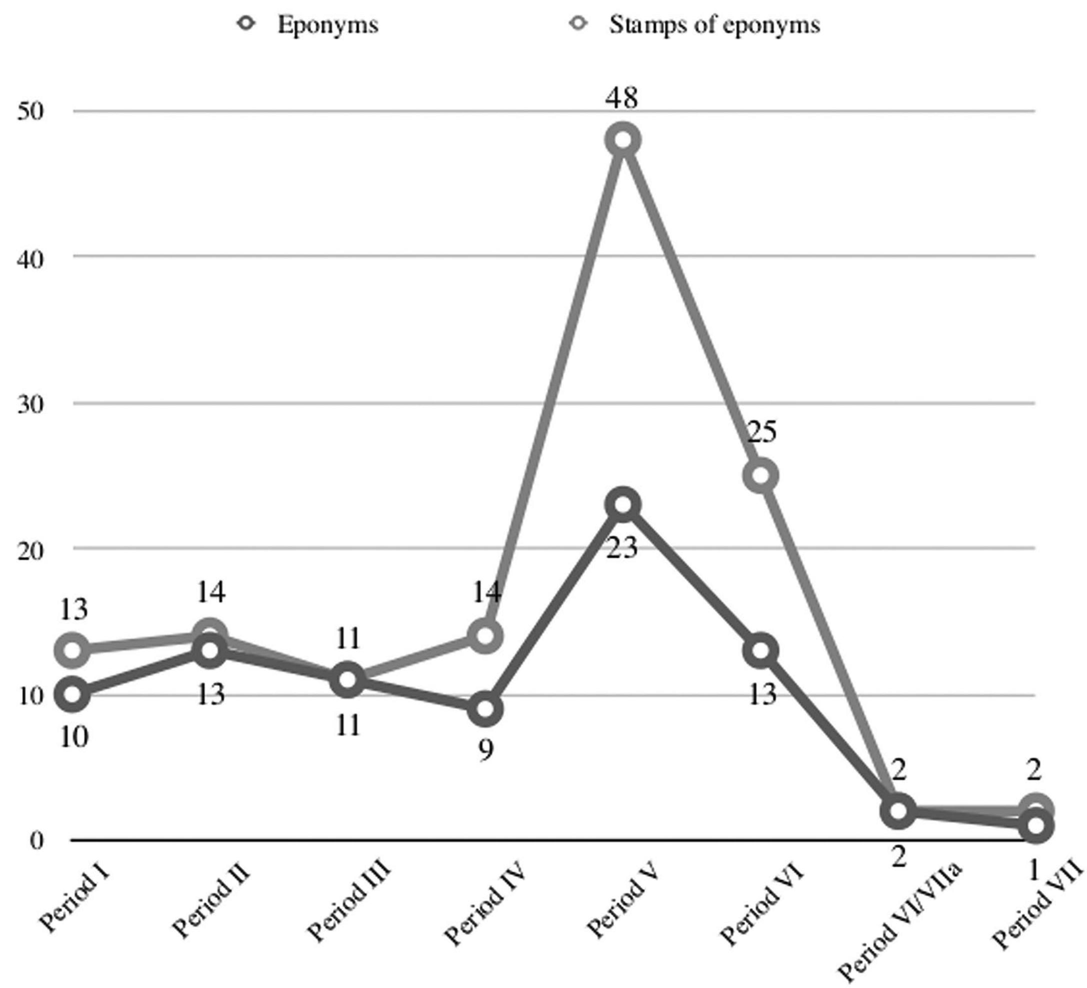

Fig. 6: Chronological distribution of eponymic stamps.

distribution of stamps organised by type (eponyms vs. fabricants) across the different periods is significant. It suggests that the deposition of amphoras in the complex was not accidental, at least not in the form of debris or fill for building. Instead, amphoras must have entered the complex on a regular and consistent basis.[29]

Further insights can be gained if the material is compartmentalised by decade. Stamps of eponyms allow us to organise the material by decade if not by year for at least one and a half centuries, that is from the mid-3rd century BC down to the late 2nd century BC (fig. 8). For periods Ia–b, VI and VII such a close chronological sequence cannot be established, partly due to the paucity of evidence and partly due to dating problems with regard to eponymic years. For period Ia five eponyms are attested whose names are recorded on six handles in total. Notwithstanding the poor documentation of handles for a period that spans over three decades (ca. 304–271 BC) – the stamping practice was not widespread in this early phase – it is equally poorly understood in

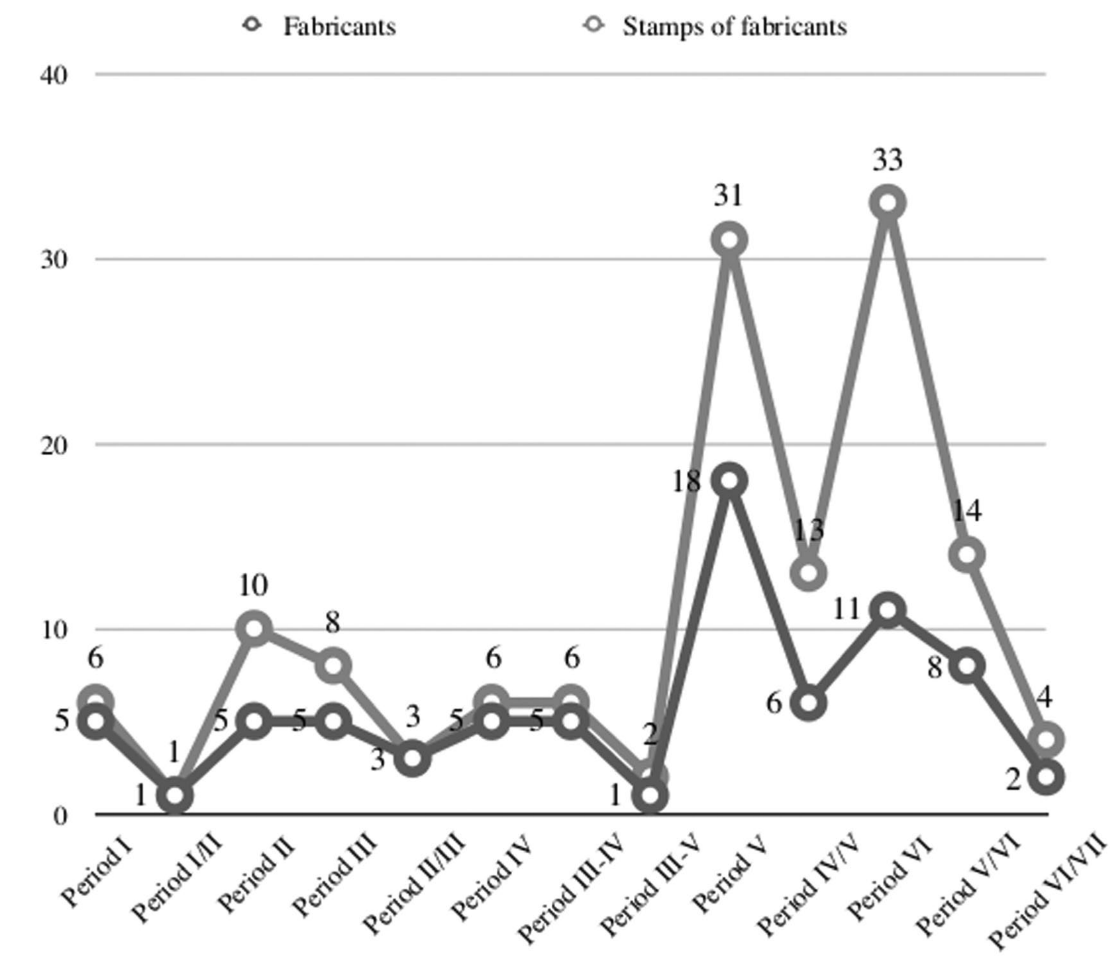

Fig. 7: Chronological distribution of fabricants stamps.

which precise year certain individuals held the priesthood of Helios. For period VI, from the 13 eponyms attested in our record, only Antilochos II's priesthood is securely dated to 100 BC,[30] while the priesthood of the remaining eponyms can be dated sometime between 107 and 90 BC. In addition, two recorded eponyms can be associated either with period VI or VII (Aristomenes and Kleudikos). Lastly, only one eponym (Simias), attested in two stamps, dates to period VII. It should also be noted that, in the record, none of the stamps is dated after the 70s BC, though the stamping practice did not cease until the Augustan period. The picture thus outlined by the material for the 1st century BC is that of a concentration of stamped handles in the 1st third of the century, with no currently legible stamped handle dated in the remainder of the century.

For all of these reasons, I focus my attention on the sequence of eponymic amphora stamps for a period that spans the mid-3rd century BC down to the late 2nd century BC (period Ic–period V) (fig. 8).[31] In particular, it can be observed that from the mid-3rd century BC to the turn of the century (period II), all decades are represented, with

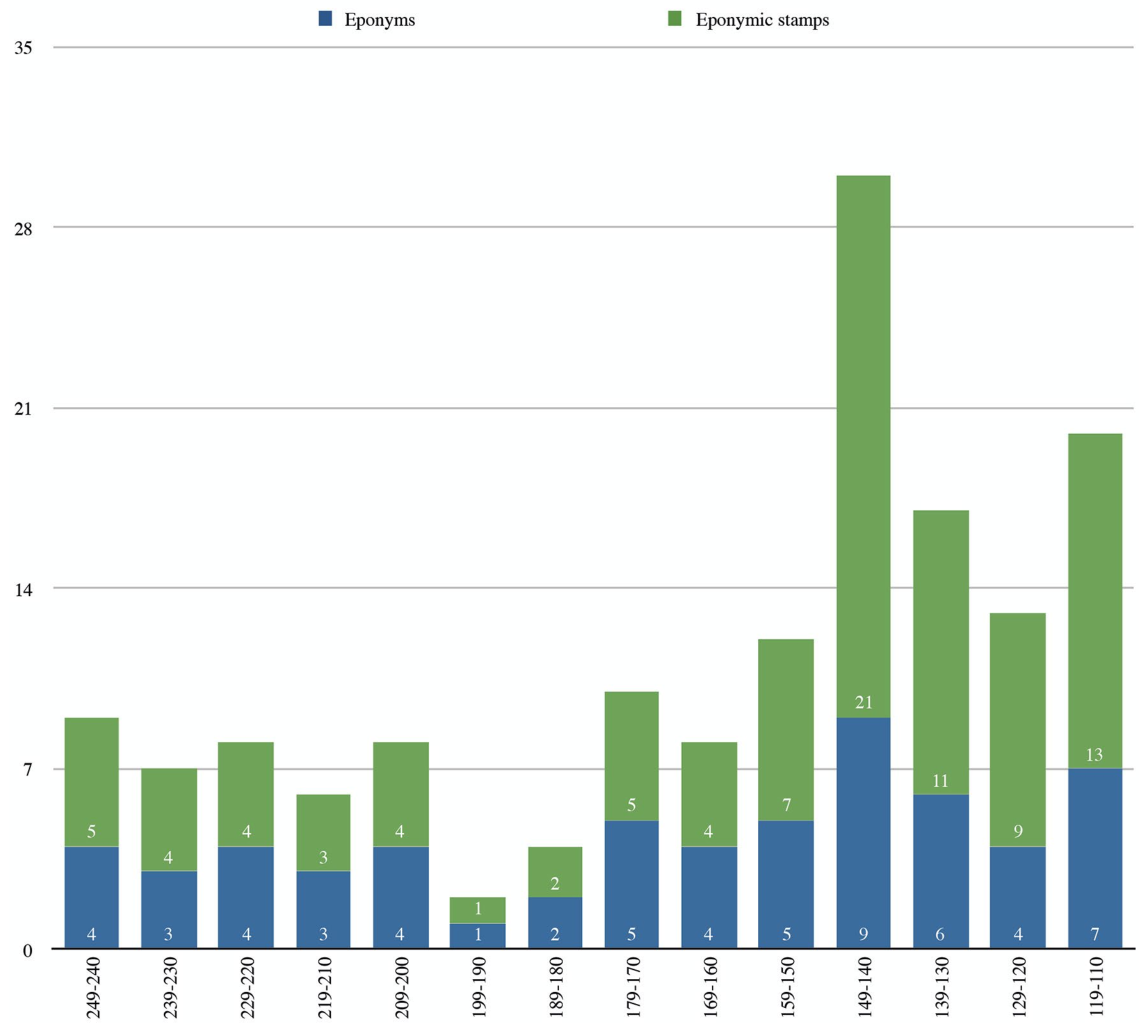

Fig. 8: Number of attested eponyms and eponymic stamps by decade.

a minimum of three recorded names of eponyms and a maximum of four. After a negligible presence of eponymic stamps in the 1st decade of the 2nd century BC (only the eponym Iasikrates is attested on one handle), the remaining decades of the 2nd century BC down to the end of period V (108 BC) are fairly well represented with a minimum of two attested names of eponyms per decade and a maximum of nine. More specifically, nearly all eponyms holding office in the 140s BC are documented in our record (nine out of ten). This is also the best documented decade in terms of the number of stamps per eponym (21 stamps in total), followed by the 110s BC when 13 stamped handles are documented for seven eponyms respectively (fig. 8).

All in all stamps of eponyms as well as stamps of fabricants attest to a steady influx of amphora vessels in the complex already from the early 3rd century BC, when the stamping practice was first introduced in Rhodian amphoras, down to the mid-2nd century BC when a conspicuous increase in the number of stamped handles is noted. Stamped amphora handles kept being accumulated in sizeable amounts throughout the 2nd half of the 2nd century BC and the 1st decade of the 1st century BC. After the 1st decade of the 1st century BC, however, the number of stamped handles drops dramatically before disappearing completely from the archaeological record a decade later (in the 70s BC).

How can we explain these 'lows'? Do they reveal a 'real' picture or a 'distorted' picture? Could the 'lows' in the 80s and 70s be related to the Mithridatic wars? Shall we take at face value the absence of stamped handles after the 70s BC, though the stamping practice did not cease for another three to four decades (Augustan period)? These are interesting avenues to explore, but at this stage, we can only advise to read the material with due caution.[32] Although the sequence of stamped handles stops in our record after the 70s BC, the complex does not otherwise show any evidence of abandonment.[33]

We have seen that amphoras found their way into the complex on a regular basis from at least the 2nd half of the 3rd century BC down to the early 1st century BC. In light of the eponymic stamps, this regular pattern can be tentatively reconstructed as an annual one. More than two thirds of eponyms' names are represented by one stamp alone (58 out of 82 names). While two stamps per eponym are occasionally attested in our record from as early as period Ia down to period VIIa (nine eponyms in total), from period IV fifteen eponyms in total are represented by three, four or five stamps each.[34] In my view, this further substantiates the idea that a steady yet small number of amphoras entered the building on a regular, probably annual, basis.[35] By implication, there was a modest but steady need of wine, if we accept that the commodity traded in the amphoras was wine. How can we begin to explain the fact that small quantities of amphoras reached this complex on a regular (e.g. annual) basis over a long period of time?

The regularity in the influx of amphoras must be connected to a recurring activity that would have taken place in the complex over at least two centuries. Moreover, in light of the relatively small number of amphoras entering the complex annually, wine was presumably consumed by a select group of people who would partake in this recurring activity. In other words, the evidence of the stamped handles seems to point to small scale consumption, perhaps within the framework of an event having a selective or exclusive character.

This preliminary overview of stamped Rhodian handles that were retrieved from a public monumental building in the city of Rhodes can shift focus from trade and production to issues of consumption. The presentation of the finds and the statistics which are possible on this basis outline rather modest and selective, yet recurrent consumption patterns for more than two centuries. These remarks pose further questions about the function of the complex as a public building. It is hoped that the ongoing study of the remainder of the finds will further illuminate the picture outlined by the stamped amphora handles.

Period	Dates	Number of stamped handles
I	ca. 304 to ca. 235 BC	19
II	ca. 234 to ca. 199 BC	24
I/II	ca. 304 to ca. 199 BC	1
III	ca. 198 to ca. 161 BC	19
II/III	ca. 234 to ca. 161 BC	3
IV	ca. 160 BC to 146 BC	20
III-IV	ca. 198 to ca. 146 BC	6
III-V	ca. 198 to ca. 108 BC	2
V	ca. 145 to ca. 108 BC	79
IV/V	ca. 160 BC to 108 BC	13
VI	ca. 107 to ca. 86 BC	58
V/VI	ca. 145 to ca. 86 BC	14
VII	ca. 85 BC to the Augustan period	2
VI/VIIa	ca. 107 to ca. 40 BC	6

Table 1: Number of stamped handles by period.

Notes

* I should like to express my sincere thanks to the archaeologist, Mrs Maria Michalaki-Kollia, for her generous permission to study the amphora handles from the Soichan-Minetou plot in the town of Rhodes. She illuminated aspects of the complex and I am most grateful for the valuable information she shared with me. I should also like to extend my thanks to the staff of the Ephorate of Antiquities of the Dodecanese for facilitating my research. The study of this material is being carried out as part of a collaboration between the Archaeological Service of the Dodecanese and the University of Copenhagen ('Rhodes Centennial Project').

[1] One of the nearly intact amphoras that have been retrieved from this complex is of Rhodian origin, while the other one is an import, whose exact provenance has not been determined yet. The two nearly intact amphoras from the complex were found lying flat on their belly unlike deposits of amphoras in Rhodes or elsewhere where amphoras are found inverted, lying on their mouths and arranged in rows. For the various views on the purpose of such an arrangement see Koehler 1986, 62, 66; Filimonos-Tsopotou 2004, 62–63 n. 228 with references. A few amphora toes from this complex have been collected, unlike handles which were systematically stored. In the 70s it was common practice to sort out ceramic finds due to the unprecedented number of artefacts accumulated from rescue excavations in the city of Rhodes.

[2] There are 35 deposits of amphoras from the city of Rhodes (Giannikouri et al. 2017, 106 n. 6 with references). Deposits of amphoras have also been found in several sites in the island of Rhodes, notably the Villanova deposit near Rhodes airport (Maiuri 1921–1922). For a recently published deposit from the city of Rhodes see Bairami 2014.

[3] The complex came partially to light during rescue excavations, which first started in 1954. A small scale investigation took place in 1962, while references to the resumption of work are found in the diaries of 1966. The excavation was completed between 1973 and 1976. A small-scale and complementary investigation took place in 1984 to the west of the building. The remains of the complex have not been preserved as the area has been backfilled and built over.

[4] For a preliminary publication see Konstantinopoulos 1975; Konstantinopoulos 1986, 243–244. See also Michalaki-Kollia 1999 for a new interpretation and identification of this complex (cf. below n. 13). A full publication of the complex is planned for 2022 by M. Michalaki-Kollia and S. Skaltsa.

[5] It should also be noted that the area to the north has never been investigated. This might have provided additional evidence for the configuration of space in this area.

[6] This temple-like structure was likewise dismantled and its contours were traced by the orientation of the foundation trenches (90cm wide) cut into the soil. A rectangular precinct, measuring ca. 25 x 30 m and built by rough stones, has been located within the peristyle courtyard. It has been attributed to a farmhouse of the late antiquity (Konstantinopoulos 1975). According to the excavator, Mrs M. Michalaki-Kollia its function should be revisited. It may have enclosed the temple-like structure, as it lies 7.50 m to the east and west, 11 m to the north and 13 m to the south. This view was presented in a lecture by M. Michalaki-Kollia on November 12 at the Danish Institute of Athens.

[7] For the cistern see Patsiada 2013, 63–64.

[8] P 27 overlaps with modern Themistokle Sophouli Street. For this street, see Kontis 1954, 340–345; 1955, 267–270.

[9] On this side, remains of blocks have been interpreted as the east border of the street and consequently the west end of the complex.

[10] P 10 started from the Great Harbour and led all the way up to the Temple of Athena and Zeus built on the highest point of the Acropolis, see Kontis 1957, 128–129.

[11] In addition to the inscriptions found in situ during the 1973–1976 excavations, 12 further inscriptions were found in the Turkish house once standing in this plot, whereas several more inscriptions and architectural fragments, also reused, came from the neighbouring Kypriotis and Topaloglou plots, which lie directly opposite, south of P13 (ADelt B, 1973–1974, 954–955; 1975, 369). For the inscriptions, see Konstantinopoulos 1963 nos. 1–12; Kontorini 1989, nos. 53–57, 58–61, 63–84.

[12] Six out of the eight bases were retrieved from the complex (SEG 39, 740–744, 747) while two (SEG 39, 745 and 746A+B) were found reused in nearby plots and attributed to the complex. For an identification with the 'temenos of Helios' see Michalaki-Kollia 1984, 311; Kontorini 1989, 129 n. 362, 178–184; Badoud 2015, 157–159.

[13] Michalaki-Kollia 1999, 73–74; Hoepfner 2003, 43–49. V. Machaira (2016, 90–91) recently endorsed Hoepfner's view. It should be noted, however, that the existence of an oikos of Haliastai is a pure speculation. First, the priests of Halios did not form an association (at least in light of the textual evidence); second, the association of Haliadai and Haliastai (IG XII 1, 155 and 156; cf. Gabrielsen 1994) was a private association whose members included foreigners residing in Rhodes as well as women; cf. Badoud 2017a, 41–42.

[14] Michalaki-Kollia, who excavated the complex between 1973 and 1975, has also put forward that this complex may be identified with the hierothyteion, prytaneion or the bouleuterion, see Michalaki-Kollia 1999, 73–74.
[15] A smelting pit that predates the construction of the peristyle building was located under the north portico, see Zimmer – Bairami 2008, 64–66.
[16] This number is based on the material that has been located and processed by December 2018. The number of amphora handles may increase in the future, especially since the finds retrieved from the west side of the complex during the 1984 campaign (see ADelt B 1984, 311) have not yet been located in the storage rooms of the Ephorate. It should also be noted that slight changes in the statistics presented here are to be expected in the future, especially if new readings of the partly illegible stamps become possible. Besides the amphora handles, there are also two stamped handles from a lagynos and a small amphora respectively, which have not been counted among the material presented in this paper.
[17] Handles of Chian, Coan, Knidian and Pamphylian origin have been identified among the record while the provenance of some handles still remains to be clarified. Among the unstamped handles there is one of non-Rhodian origin (A 23585), presumably from Kos on the basis of its double-barrel shape. This material will be fully presented in the publication of the complex.
[18] Although Rhodes was of course a major production centre of transport amphoras, non-Rhodian amphoras are occasionally found in Rhodes, Giannikouri et al. 2017, 105–106, 116 fig. 1.
[19] The number of unstamped handles might be slightly distorted as unstamped handles were not systematically collected and stored. Lund (1999, 188) underlines the problematic ratio between stamped and unstamped handles when it comes to excavation reports, whereas Empereur (1982, 226) has noted that the quantity of unstamped handles is minor in deposits that date after the 240s BC when stamping became more widespread.
[20] This is the overall picture drawn from the excavation diaries. Ceramic finds from this complex consist, among others, of tableware, utilitarian vessels and cooking ware. In general, archaeological finds including pottery and coins were found scattered all over the excavated area. The walls of the complex were dismantled probably already in Late Antiquity or in the Early Byzantine period, usually with only the first row of foundations found intact. In other words, the state of preservation of ceramic and architectural finds point to extensive destruction of the complex already in antiquity.
[21] For the commodities stored in transport amphoras, see Foley et al. 2012. For the variety of goods (e.g. wine, figs, fish, honey, mineral products, pines) stored in Rhodian amphoras in particular, see Panagou 2010, 345–347; 2016, 322 n. 20, 329. There is a general consensus among scholars that Rhodian amphoras carried wine (Koehler 1996, 326; Lund 2004).
[22] For an overview of the establishment of the chronology of Rhodian stamps see Lund 2011, 271–272, Badoud 2014, 17–23 and Castelli 2017, 3–4.
[23] For the low chronology see Finkielsztejn 2001. For some revised dates for the priests of Helios see now Badoud 2015 and Castelli 2017.
[24] Lund 2011, 271.
[25] As the study will progress, the number of handles dating to the late 2nd and early 1st century BC may still increase in the future, given that among the partly legible or illegible stamps are many that can be attributed to period VI on the basis of the shape of the handle.
[26] Lund 1999, 187–195.

[27] The names of 258 eponyms are recorded in the stamps (Habicht 2003, 542–543; Badoud 2014, 24), while 395 names of fabricants are known from the stamps (Badoud 2017b).
[28] Eleven stamps are attributed to the fabricant Mnason from Antiocheia, active in period VI.
[29] This remark can be further substantiated if we try to figure out connections between eponyms and fabricants; the material at hand is indicative of possible collaborations between fabricants and eponyms although regrettably no Rhodian amphora with both handles stamped has been retrieved from the complex. The nearly complete Rhodian amphora that has been found in the building preserves only part of one handle, which unfortunately is broken where the stamp would have been placed. At this stage of research no attempt has been made to attribute handles of eponyms and fabricants to individual vessels in the light of possible collaborations. This will entail a thorough and detailed comparison of the shape and fabric of handles before attributions can be made.
[30] Badoud 2015, 167 A 11; Habicht 2003, 554, 567.
[31] Cf. Badoud (2014, 23) who notes that 'today, the chronology of Rhodian amphora stamps allows the attribution of an approximate term to the eponyms of periods II to V (ca. 270 – ca. 108 BC).'
[32] As mentioned earlier, approximately one quarter of the stamped handles are partly legible or not at all. With the assistance of modern technology, we might be able to decipher some more names of fabricants and eponyms in the future, which could potentially change these statistics. However, it is unlikely that the overall picture presented here would be dramatically altered.
[33] The Roman Imperial period is relatively well documented in the archaeological record as indicated by the presence of ceramic finds, coins and inscriptions that date to this period.
[34] Two stamps each; Timar(, Peithiadas, Aretakles, Pythodoros, Leontidas, Aristombrotidas II, Iason, Kallixeinos, Simias; three stamps each: Gorgon, Aleximachos, Timodikos, Astymedes II, Aristogeitos, Thersandros, Aristogenes, Klenostratos, Nausippos, Aristoboulos; four stamps: Lapheides; five stamps each: Anaxandros, Aischinas and Archembrotos II.
[35] The capacity of a Rhodian amphora has been estimated between 22 and 29 litres with an average capacity in the middle of the 2nd century BC to ca. 261/2 litres (Wallace Matheson & Wallace 1982, 299–301; Wallace 2004).

Image Credits

Fig. 1–2: The Archaeological Service of the Dodecanese. – Fig. 3–8 & Table 1: by author.

References

Badoud 2014
N. Badoud, The Contribution of Inscriptions to the Chronology of Rhodian Amphora Eponyms, in: M. Lawall – P. Guldager Bilde (eds.), Pottery, Peoples and Places. The Late Hellenistic Period, c. 200–50 BC. Between the Mediterranean and the Black Sea (Aarhus 2014) 17–28.

Badoud 2015

N. Badoud, Le temps de Rhodes. Une chronologie des inscriptions de la cité fondée sur l’étude de ses institutions, Vestigia. Beiträge zur alten Geschichte 63 (Munich 2015).

Badoud 2017a

N. Badoud, Inscriptions et timbres céramiques de Rhodes. Documents recueillis par le médecin et explorateur suédois Johan Hedenborg (Stockholm 2017).

Badoud 2017b

N. Badoud, Deciphering Greek Amphora Stamps, CHS Research Bulletin 5/2, 2017, <http://www.chs-fellows.org/2017/09/11/amphora-stamps/> (11.10.2019).

Bairami 2014

K. Bairami, Πρώιμοι ροδιακοί αμφορείς. Η μαρτυρία ενός αποθέτη από την πόλη της Ρόδου, in: Η΄ Επιστημονική συνάντηση για την ελληνιστική κεραμική. Ιωάννινα, 5–9 Μαΐου 2009 (Athens 2014) 301–312.

Castelli 2017

T. Castelli, La chronologie des éponymes rhodiens de la fin du IIIe s. et du premier tiers du IIe s. Nouvelles hypothèses, REA 119, 2017, 3–24.

Empereur 1982

J.-Y. Empereur, Les anses d’amphores timbrées et les amphores. Aspects quantitatifs, BCH 106, 1982, 219–233.

Filimonos-Tsipotou 2004

M. Filimonos-Tsipotou, Η ελληνιστική οχύρωση της Ρόδου. Ρόδος I (Athens 2004).

Finkielsztejn 2001

G. Finkielsztejn, Chronologie détaillée et révisée des éponymes amphoriques rhodiens, de 270 à 180 av. J.-C. environ. Premier bilan, BAR 990 (Oxford 2001).

Foley et al. 2012

B. P. Foley – M. C. Hansson – D. P. Kourkoumelis – Th. A. Theodoulou, Aspects of Ancient Greek Trade Re-evaluated with Amphora DNA Evidence, JASc 39, 2012, 389–398.

Gabrielsen 1994

V. Gabrielsen, The Rhodian Associations Honouring Dionysodoros from Alexandria, ClMediaev 45, 1994, 137–160.

Giannikouri et al. 2017

A. Giannikouri – N. Dasakli – Ch. Palamida – F. Seroglou, Η συλλογή των εμπορικών αμφορέων και ενσφράγιστων λαβών της Εφορείας Αρχαιοτήτων Δωδεκανήσου στη Ρόδο. Ζητήματα διαχείρισης και ανάδειξης, in: Protection and Enhancement of Cultural Heritage. The Case of Transport Amphorae. Proceedings of the Scientific Conference. Rhodes, 30 September 2017 (Rhodes 2017) 105–121.

Habicht 2003

Chr. Habicht, Rhodian Amphora Stamps and Rhodian Eponyms, REA 105, 2003, 541–578.

Hoepfner 2003

W. Hoepfner, Der Koloss von Rhodos und die Bauten des Helios. Neue Forschungen zu einem der sieben Weltwunder (Mainz 2003).

Koehler 1986

C. G. Koehler, Handling of Greek Transport Amphoras, in: J.-Y. Empereur – Y. Garlan (eds.), Recherches sur les amphores grecques. Actes du colloque international organisé par le centre national de la recherche scientifique l'université de Rennes II et l'école française d'Athènes, Athènes, 10–12 Septembre 1984, BCH Suppl. 13 (Paris 1986) 49–67.

Koehler 1996

C. G. Koehler, Wine Amphoras in Ancient Greek Trade, in: P. E. Mc-Govern – S. J. Fleming – S. H. Katz (eds.), The Origins and Ancient History of Wine. Food and Nutrition in History and Antropology (Amsterdam 1996) 323–337.

Konstantinopoulos 1963

G. Konstantinopoulos, Ἐπιγραφαὶ ἐκ Ῥόδου, ADelt A 18, 1963, 1–36.

Konstantinopoulos 1975

G. Konstantinopoulos, Ἀνασκαφαὶ εἰς Ῥόδον, Prakt 1975, 238–248.

Konstantinopoulos 1986

G. Konstantinopoulos, Αρχαία Ρόδος. επισκόπηση της ιστορίας και της τέχνης (Athens 1986).

Kontis 1954

I. Kontis, Ἀνασκαφικαὶ ἔρευναι εἰς τὴν πόλιν τῆς Ῥόδου, Prakt 1954, 340–360.

Kontis 1955

I. Kontis, Ἀνασκαφικαὶ ἔρευναι εἰς τὴν πόλιν τῆς Ῥόδου, Prakt 1955, 267–283.

Kontis 1957

I. Kontis, Ἀνασκαφικαὶ ἔρευναι εἰς τὴν πόλιν τῆς Ῥόδου, Prakt 1957, 125–133.

Kontorini 1989

V. Kontorini, Ανέκδοτες επιγραφές Ρόδου. II (Athens 1989).

Lund 1999

J. Lund, Rhodian Amphorae in Rhodes and Alexandria as Evidence of Trade, in: V. Gabrielsen – P. Bilde – T. Engberg-Pedersen – L. Hannestad – J. Zahle (eds.), Hellenistic Rhodes. Politics, Culture, and Society. Studies in Hellenistic Civilization 9 (Aarhus 1999) 187–204.

Lund 2004

J. Lund, Oil in the Waters? Reflections on the Contents of Hellenistic Transport Amphorae from the Aegean, in: J. Eiring – J. Lund (eds.), Transport Amphorae and Trade in the Eastern Mediterranean. Acts of the International Colloquium at the Danish Institute at Athens, September 26–29, 2002 (Athens 2004) 211–216.

Lund 2011

J. Lund, A New Sequence of the Eponyms Named on Rhodian Amphora Stamps, ActaArch 82, 2011, 271–290.

Machaira 2016

V. Machaira, Portrait privé – portrait officiel. À la recherche des traits individualisés sur les sculptures hellénistiques de Rhodes trouvées en contexte, in: R. von den Hoff – Fr. Queyrel – É. Perrin-Saminadayar (eds.), Eikones. Portraits en contexte. Recherches nouvelles sur les portraits grecs du Ve au Ier s. av. J.-C. (Venosa 2016), 89–104.

Maiuri 1921–1922
A. Maiuri, Una fabbrica di anfore rodie, ASAtene 4–5, 1921–1922, 249–269.

Michalaki-Kollia 1984
M. Michalaki-Kollia, Οδός Θεμ. Σοφούλη και Χειμάρρας (οικόπεδο Σοϊχάν-Μηνέτου), ADelt B 39, 311.

Michalaki-Kollia 1999
M. Michalaki-Kollia, Μνημειώδες στωικό οικοδόμημα στις υπώρειες της ροδιακής ακρόπολης. Το τέμενος του Ηλίου ή δημόσιο κτίριο;, in: Ρόδος 2.400 χρόνια. Η πόλη της Ρόδου από την ίδρυση της μέχρι την κατάληψη από τους Τούρκους (1523). Διεθνές επιστημονικό συνέδριο. Ρόδος, 24–29 Οκτωβρίου 1993, Πρακτικά. Τόμος Α (Athens 1999), 73–74.

Panagou 2010
T. Panagou, Η σφράγιση των αρχαίων ελληνικών εμπορικών αμφορέων. Κέντρα παραγωγής και συνθετική αξιολόγηση (Ph.D. diss. University of Athens, Athens 2010).

Panagou 2016
T. Panagou, Transport Amphoras and their Contents, in: M. Giannopoulou – Chr. Kalline (eds.), ἠχάδιν. Τιμητικός τόμος για τη Στέλλα Δρούγου (Athens 2016) 312–334.

Patsiada 2013
V. Patsiada, Η αρχιτεκτονική του τοπίου στην πόλη της Ρόδου, in: A. Giannikouri (ed.), Ρόδος IV. Ὄλβιος ἄνερ. Μελέτες στη μνήμη του Γρηγόρη Κωνσταντινόπουλου (Athens 2013), 47–77.

Wallace Matheson – Wallace 1982
P. M. Wallace Matheson – M. B. Wallace, Some Rhodian Amphora Capacities, Hesperia 51, 1982, 293–320.

Wallace 2004
M. Wallace, Standardization in Greek Amphora Capacities, in: J. Eiring – J. Lund (eds.), Transport Amphorae and Trade in the Eastern Mediterranean. Acts of the international colloquium at the Danish Institute at Athens, September 26–29, 2000 (Aarhus 2004) 429–432.

Zimmer – Bairami 2008
G. Zimmer – K. Bairami, Ροδιακά εργαστήρια χαλκοπλαστικής. Ρόδος II (Athens 2008).

Ephesus in the Julio-Claudian Period: New Evidence of Consumption, Cult and Exchange from Terrace House 2*

Hannah Liedl – Horacio González Cesteros

The antique city of Ephesus is located on the western coast of Asia Minor. This area has been settled since prehistoric times. Good connections to the Anatolian inland and the Mediterranean trade routes make this location very advantageous. During the Hellenistic period, Lysimachos re-established the settlement between the hills of Panayirdag and Bülbüldag (302–294 BC). The continuous silting of the area around the Artemision and the main settlement at the Ayasoluk by the Kaystros river and other smaller streams seems to have been reason for the relocation. The city existed in this location until medieval times.[1] From the 2nd century BC onwards, the city developed as an important economic and cultural pole, which was converted to the capital of the new province of Asia during Augustan times. Extensive building activity dated in the early Imperial period has been documented throughout the city. This included the establishment of a political centre in the upper city, the so-called State Agora, and a trade centre, the so-called Tetragonos Agora close to the harbour in the early 1st century AD. In the course of the 1st century the city was expanding, which is for example visible in the enlargement of the great theatre or the establishment of public bath complexes. This shows the rapid growth of the city and an increase in population.[2] Not only was public building activity booming, but luxurious residential buildings, the so-called Terrace Houses, were erected during this period (fig. 1).

The Context

Terrace House 2, which consisted of seven housing units, is located in the centre of the city along the Curetes Street, which connected the upper and lower city. The first excavations were undertaken by Hermann Vetters between 1967 and 1984. Evaluation of finds such as coins or pottery allowed the identification of four main building phases.[3] The earliest structures connected to housing in this area are from the 1st century BC; however, these early structures could not be identified over the entire area.[4] After extensive destruction caused by an earthquake in the 3rd quarter of the 3rd century AD, the Terrace House 2 was abandoned as a high status residential housing unit.[5]

In 2004, excavations were conducted in several locations within the Terrace House 2. In the course of these excavations, the room 12a in Unit 5 was excavated completely[6] with the aim of investigating the relationship between the Units 3 and 5. During this excavation, an offering was found in the southeast corner of room 12. The offering consisted of a carefully deposited, local common ware pot, which was completely preserved. It likely contained some kind of food. This offering has been dated in the

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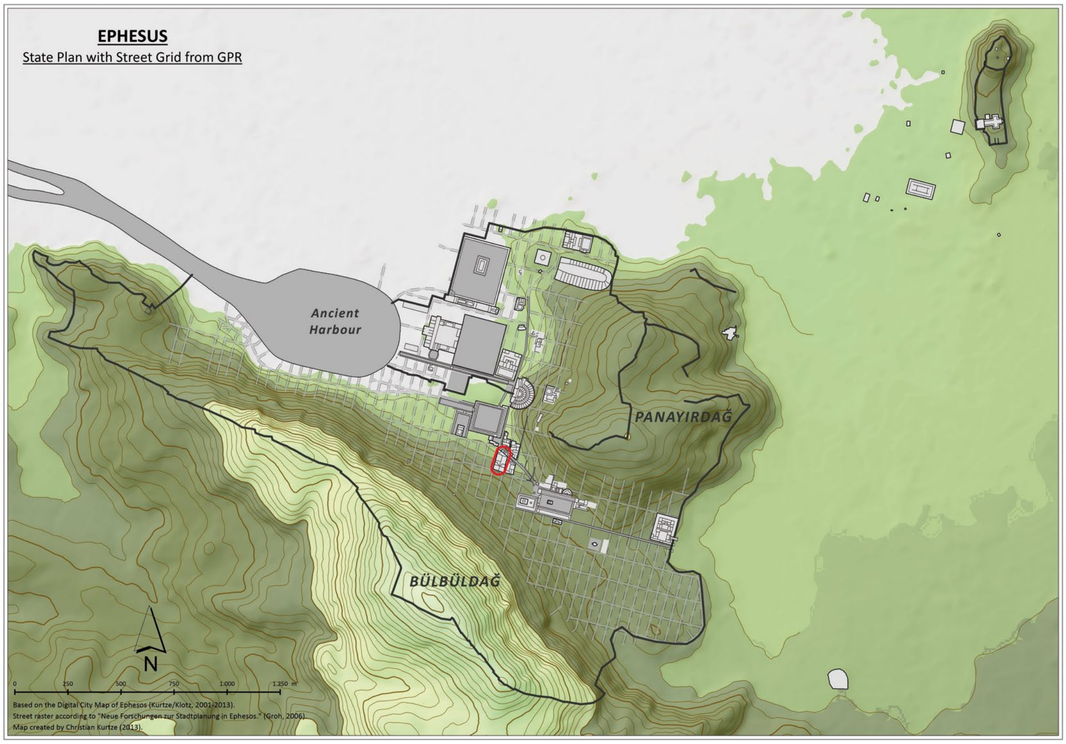

Fig. 1. Map of the Hellenistic and Roman Imperial period settlement of Ephesus.

Hadrianic period based on a coin on top of it. It is related to the second phase of Unit 5, dated around 120 AD.[7] Furthermore, an extensive pit was uncovered under a mosaic floor and several levelling layers.[8] The pit measures 1.3 × 2.2 m and is between 40 and 57 cm deep. It is partially carved into the bedrock. This closed context cannot be connected to the main building activities of Terrace House 2. The pit was filled completely with loose soil and in some areas ash and charred wood could be identified. The material in the pit filling is characterised by its quantity and diversity. A large number of well-preserved ceramics including amphorae was found as well as terracotta figurines, glass, bronze and iron nails, and one fragment of a bone needle. In addition, high quantities of animal bones and botanical remains were recovered. Based on the pottery material it was possible to date this context in the 3rd quarter of the 1st century AD.

The Pottery

The pottery found in the pit filling is diverse and partially very well-preserved.[9] Pottery finds include Terra Sigillata, thin-walled pottery, common ware, kitchen ware, lamps and several single pieces such as lead-glazed pottery (fig. 2). In total 408 vessels could be identified based on rim and base fragments. While common ware constitutes the

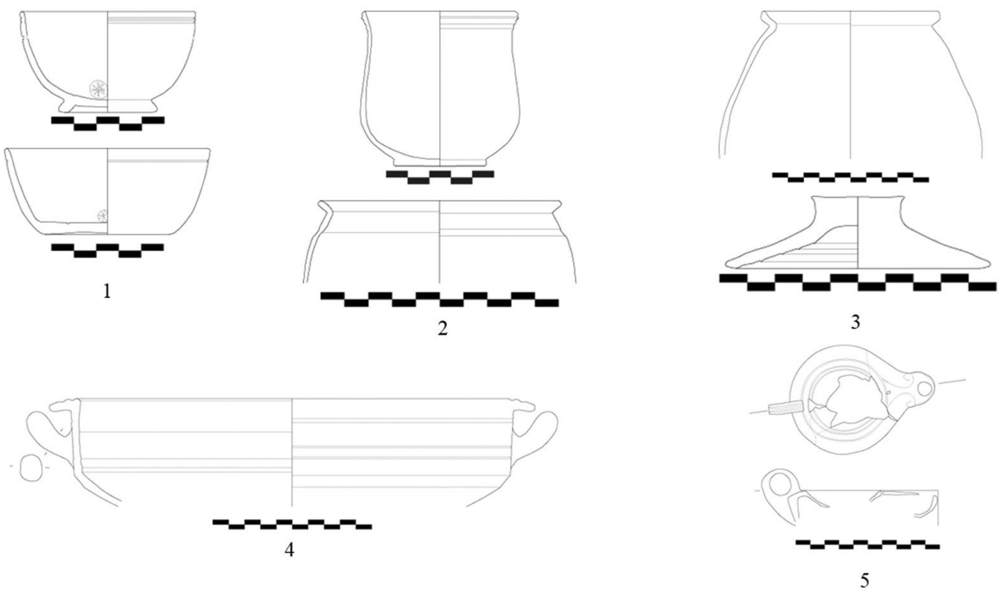

Fig. 2. Examples of the pottery findings.

highest proportion in the complex, fine ware and lamps are the most significant in terms of dating the context.

When considering Terra Sigillata, most of the fragments could be identified as Eastern Sigillata B (ESB) and a small percentage as Eastern Sigillata A (ESA); however, no other forms of sigillata were identified. ESB was the most common form of sigillata in the eastern Mediterranean during early Imperial times. A main production site is assumed in ancient Tralleis (modern Aydin) in the Meander Valley,[10] which is well-connected to Ephesus owing to one of the main Roman roads. Due to this connection, ESB was an important element of table ware in Ephesus until the mid-3rd century AD.[11] While a few forms found within the pit filling could be dated in Augustan times, most forms were in production during the mid-1st century AD. Interestingly, a few examples of black ESB, which seem to have been an Ephesian product,[12] were also identified. The forms cover a wide range from different types of bowls, plates and jars. Only few fragments of ESA, which was in production until the 2nd century AD,[13] could be identified within this context. Interestingly, no examples of Eastern Sigillata C (ESC), which can be found in Ephesus from Neronian times onwards,[14] were identified.

Thin-walled pottery is also present in the pit filling and mostly represented by cups. These forms can be found in several contexts of the 1st century AD in Ephesus.[15] Some Italian imports of thin-walled pottery can be found in Ephesus. A local production, however, for which a cup with a small lip is the most common form so far, was also identified.[16] This local cup form is the most commonly represented form in the pit filling.

Considering lamps, the examples in the complex are red-on-white, for which a production site in Ephesus or in the vicinity of the city has been proposed,[17] or with a

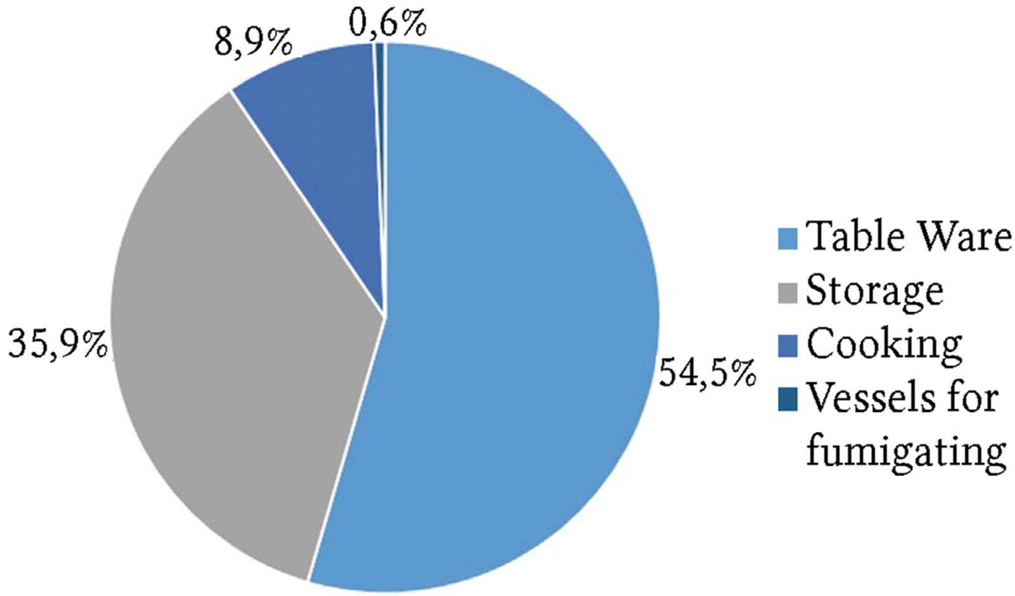

Fig. 3. Function of the pottery represented in the pit filling.

plain brownish red coat. The second technique can be found in imports from Italy as well as in copies from Asia Minor, which increased substantially from the early 1st century AD onwards.[18] The two main forms in the context – Loeschcke V and VIII – were both produced around the mid-1st century AD.[19]

Based on these significant pottery forms, a date for the context in late Julio-Claudian to early Flavian times, probably during Nero's principate, can be proposed. The pottery showed a clear tendency towards local and regional production. With few exceptions, fine ware such as Terra Sigillata and thin-walled pottery as well as the lamps were produced within Ephesus or in other parts of western Asia Minor. While during the Augustan period fine ware was largely imported, from the middle decades of the 1st century AD the Ephesian market started to be satisfied with locally or regionally produced pottery.

In regards to function, more than half of the pottery in the pit filling can be considered as table ware, mainly cups and shallow bowls as well as plates (fig. 3). In comparison, the other functions are underrepresented. The high number of common ware lids, which are highly fragmented, is striking.

The Transport Amphorae

Concerning the amphora material, a minimum number of individuals of 35 was established, and the presence of at least 15 different forms and six different big regional groups was documented. Some individual jars are well-preserved, with

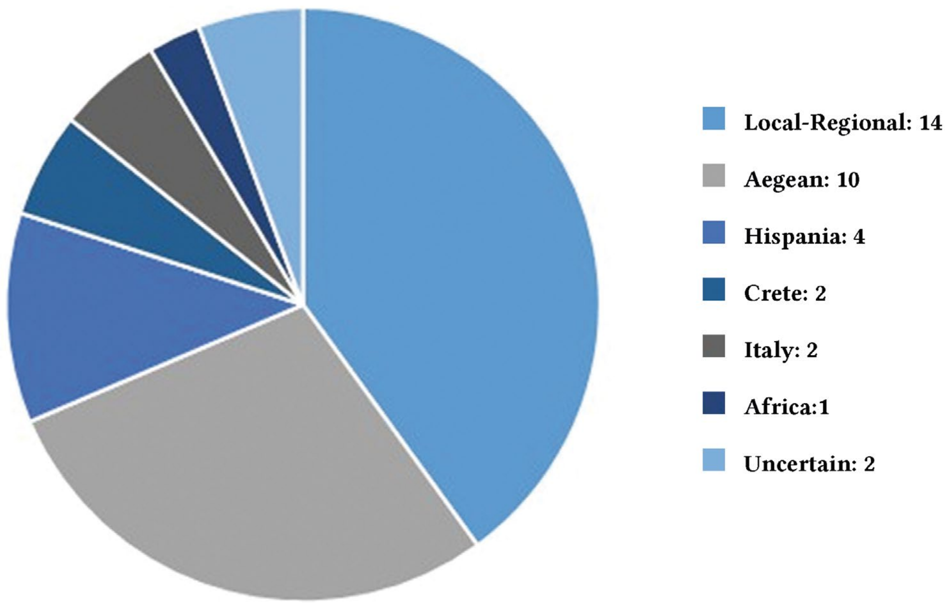

Fig. 4. Provenance of the amphorae after regional groups.

some still providing important epigraphic evidence. As commonly found in Ephesian contexts, the small, locally produced containers together with Aegean imports constitute the largest number of amphorae. Concerning the western Mediterranean amphorae, the productions of the Hispanic regions represent the most important quantitative group, followed by Italian and African products in this context (fig. 4; fig. 5).

The Ephesian containers are represented by fragments of at least 14 jars (MNI) belonging to the typical forms of the mid/late 1st century AD: the one-handle jar forms F 65/66 and the M 45 of the Athenian Agora.[20] The production of the F 65/66 is placed in the Augustan and Tiberian period, the M 45 is a vessel type used in the 2nd half of the 1st century AD.[21] Both are small containers with a capacity of six to seven litres. The content seems to have been precious wine produced in Ephesos and its hinterland.[22]

Other Aegean regions such as Kos, Rhodes and Chios seem to have exported their wine to Ephesus, as well as the olive oil from the region of Erythrai. The presence of Koan and Rhodian amphorae of the Roman Imperial period clearly indicates the continuous trade systems involving Ephesos after their initial emergence in the Hellenistic period. These forms are linked to special wines, the so-called *tethalassomenoi*, characterised by a certain quantity of salted water. These wines were appreciated for their medical properties; however, they do not seem to have been of high quality. The presence of a Chian amphora can be related to the consumption of expensive high-quality wines produced in Chios.[23] This amphora is also relevant due to the presence of a stamp on the upper part of the handle. The stamp is well pressed and can be read easily as ΓΑΙΟΥ (fig. 6). This name is surprising as it refers to somebody associated in the workshop

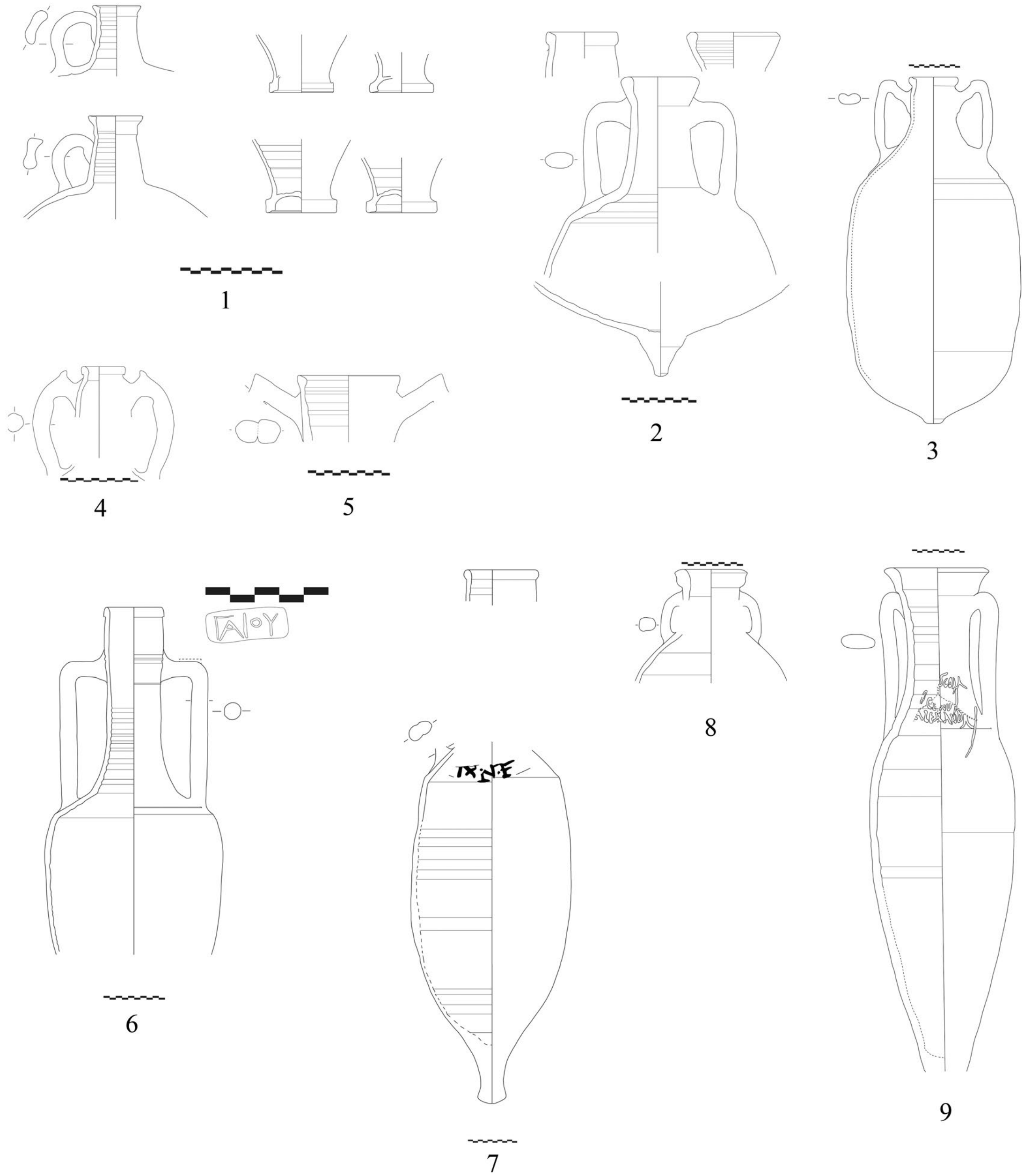

Fig. 5. Examples of the amphorae (© authors).

with a Latin name, written in Greek letters. The presence of Italians in Chios and their involvement in the wine production is known at least since the late 2nd century BC.[24] For Chian wine amphorae a group of stamps referring to a Latin name, the famous Publius Vedius Pollio, is known; however, these stamps are written in Latin letters and they refer to the owner of the vineyards. In this case, ΓΑΙΟΥ may have been a slave or freedman in charge of the control of the workshop.

Fig. 6. Stamp on the upper part of the handle of the Chian amphora reading: ΓΑΙΟΥ (© N. Gail, ÖAI).

From Crete two jars were identified. One is an almost complete AC 2 (Amphore Crétoise 2) and the other is the upper part of a small AC 4. The fabric of both specimen is quite different, indicating two diverse production areas and quite possibly two different contents. Although both types of amphorae seem to have been used for the transport of wine, they may have contained different types and/or qualities. Due to their formal characteristics, amphorae of the type AC 2 have been linked to the Koan amphorae. Equally, the AC 4 are assumed to be related to the Rhodian vessels. These connections may indicate the kind of wine they contained. The most famous wine of the island, which appears regularly in ink inscriptions on Cretan amphorae, is the *passum*, a kind of sweet wine made out of raisins.[25]

The African regions also exported some products to Ephesos during the mid and late 1st century AD. One olive oil container of the form Tripolitana I produced in a workshop in the Tripolitanian coastal area was identified. The presence of African products in Ephesos is known at least since the early Hellenistic period.[26] However, more amphorae could be found from the 3rd and 4th centuries AD, when higher quantities of African products were exported to the eastern Mediterranean.[27]

In our context, two vessels produced in the Italian Peninsula have been found. They arrived from the two main Italian areas producing amphora commodities during the Roman period: a Dressel 6A from the central Adriatic and a Dressel 2–4 from the

Fig. 7: Dressel 12 with inscription on the neck reading: [G(arum)] SCOM(bri)/ [TI(berii)] CLAVDI/ALEXANDRI (© N. Gail and authors).

Vesuvian region. Amphorae of both types and provenances have already been found in high quantities in Ephesus.[28] Nevertheless, there are some features giving a special significance to these vessels. The first is the presence of an ink inscription on the lower part of the neck of the Campanian Dressel 2–4. This inscription has been tentatively read as (-)X N · F. Unfortunately, there is no successful interpretation of these letters: based on the position and the presence of dots dividing them, they may be indicating the name of a free person, perhaps the merchant of the product.

The second and most important feature is the chronology of the deposit itself. Even though amphorae from the Italian territories were exported to Ephesos at least until the 5th or 6th centuries AD,[29] their largest imports occurred during the 2nd, and primarily the 1st century BC.[30] From the Augustan period onwards, the productive and commercial activities of ancient Hispania and other western provinces shifted the production of amphora commodities to those regions, placing the Italian Peninsula in a secondary position regarding agrarian productivity and export hierarchy.[31]

The Hispanic regions of the western Mediterranean, in this case the province Hispania Ulterior Baetica, seem to have exported more commodities into the east from this time onwards.[32] In our context two amphorae produced in the Bay of Cadiz, a Dressel 12 and a Beltrán 2A, used for the transport of fish products, have been found together with one handle fragment of a Dressel 20, the typical olive oil container of the Guadalquivir Valley produced from the Julio-Claudian period onwards. The Dressel 12 amphora has already been published due to the good preservation and significance of an ink inscription on the neck.[33] This inscription (fig. 7), which can be read as: [G(arum)] SCOM(bri)/ [TI(berii)] CLAVDI/ALEXANDRI, is one of the few inscriptions found on Hispanic amphorae in Ephesus.[34] The mention of a high standard product as the *garum* *scomber* and the interpretation of the second and third lines as the name of a freedman of the imperial family, seem to indicate that this amphora transported a precious commodity to Ephesus.[35]

Lastly, it must be mentioned that four amphorae represented among the sherds could not be identified. In most cases they seem to have belonged to Aegean types, perhaps including different versions of Imperial Koan or pseudo Koan amphorae. One base could have also belonged to a Dressel 24 or a similar amphora.

It is pertinent to refer briefly to the importance of the context on the basis of the amphora assemblage. The number of identified vessels is only 35. While this may seem little, it has to be considered that we are dealing with a context of less than 2 m^3 and in some cases with complete or almost complete amphorae. Among them are amphorae of six big production areas that have sent at least three big groups of products to Ephesus. In addition to the diversity of products and territories, some amphorae transported high quality products. The transported goods would only be consumed on important occasions and/or by the upper class, e.g. the products of the Dressel 12 with the ink inscription and the Chian amphora. These amphorae can tentatively be linked to a banquet or ritual activity. However, a problem arises when considering the large capacities of over 25 litre of some of these amphorae (e.g. Aegean or Italian wine amphorae and Hispanic fish vessels).

Interpretation of the Context

Our context represents a very good example of consumption practices in Ephesos during the 3rd quarter of the 1st century AD. The high quality and value of the imported commodities as well as the nature of the faunal remains (e.g. fish bones)[37] suggest that these products were consumed by the wealthiest Ephesians. The amphorae document an extensive trade systems for some products.

The holistic approach and synthesis of different analyses are significant for the interpretation of this closed and well-preserved context. This paper aimed to present the pottery findings and amphorae. A discrepancy between the pottery findings, for which a number of comparisons in other Ephesian contexts can be found, and the amphorae became apparent. In contrast to the fine and common ware, the amphora assemblage is unique in Ephesos so far. The pottery is mainly locally and regionally produced with only few exceptions and it seems that there was no demand for imported fine ware in the late Julio-Claudian period.

Some findings such as the high number of complete or almost complete vessels and the large proportion of table ware as well as the nature of the animal remains, support an interpretation as ritual or sacrificial pit.[38] The large number of common ware lids might also indicate ritual activity. One possible interpretation is, that these lids were used as cups in libations and destroyed afterwards. As already noted, there are other examples of ritual pits in the Terrace House, even in the same habitational unit, which are dated later; however, these examples are less extensive than the pit filling presented here. While many factors in this context point towards an interpretation as a ritual pit, the evidence is not conclusive enough to exclude other interpretations for certain. However, it presented a valuable opportunity to gain insight into the consumption behaviour of the Ephesian upper class in the 1st century AD.

Notes

* This article is part of a bigger research of the Austrian Archaeological Institute that includes the complete analysis of the material finds and excavation context of this important Unit within the Terrace House 2. For a deeper analysis of the context see Ladstätter 2020. We would like to thank Sabine Ladstätter, director of the Austrian Archaeological Institute for her help and the posibility of work on this interesting pottery material.

[1] Ladstätter 2016; 2017; 2019.

[2] Kirbihler 2009.

[3] For a more extensive chronology see Krinzinger 2002; the four building phases in Unit 5: Adenstedt 2005, 12–13.

[4] Ladstätter 2002; Adenstedt 2005, 12.

[5] Ladstätter 2002, 14–23.

[6] Excavation report: Ladstätter et al. 2005, 256–257.

[7] Ladstätter et al. 2005, 256–257. A similar offering has been identified in Unit 5 between Court 16 and room 17, which dates to the early Antonine period. In Unit 4 Court 21 another offering of the Tiberian-Claudian period was identified which is related to the construction phase after an earthquake (Ladstätter 2005, 182–183). For offerings in Ephesos in general see: Waldner 2020.

[8] Ladstätter et al. 2005, 256–257; Ladstätter 2020.

[9] Liedl 2017. This research was funded by the University of Vienna.

[10] Lund 2003, 127–128; Hayes 2008, 31–40.

[11] Ladstätter – Waldner 2013, 141.

[12] Rogl 2004, 207.

[13] Outschar 1996, 44; Hayes 1991, 32–35.

[14] Meriç 2002, 65–66.

[15] Examples see: Meriç 2002, pl. 36 K424, pl.36 K429; Struber-Ilhan 2012, fig. 40; Waldner – Ladstätter 2014, pl. 192 K821; Waldner 2016, pl. 186 K204, 206.

[16] Meriç 2002, 69–70; Ladstätter – Waldner 2013, 147.

[17] Gassner 1997, 198; Meriç 2002, 125; Perlzweig 1961, 6.

[18] Meriç 2002, 120; 123. A similar decrease of Italian imports is for example also visible in the material from Athens: Perlzweig 1961, 3.

[19] Loeschcke 1919, 40–44. 49–50.

[20] Robinson 1959.

[21] Bezeczky 2013, 26–31.

[22] None of the 14 pieces present a non-Ephesian fabric.
[23] Some remarks about the Chian wines in Antiquity: Tchernia 1986; Salviat – Tchernia 2012. For the first cent. AD, Plinius (Nh. XIV, 73 ff.) mentions the wines from Chios, Thasos and Lesbos as the most expensive from the Aegean.
[24] Finkielsztejn 2006, 134.
[25] Marangou 1995. The *passum* seems to have been also produced in minor quantities in Rhodes: Tchernia 1986, 244.
[26] Lawall 2006; Recently, new excavations carried out by the University of Regensburg in the Upper Agora of Ephesos have brought some fragments of Punic amphorae to light in an early Hellenistic context. See also Springer-Ferazin 2018. For Ephesos a first approach about the trade relations with North Africa in: González Cesteros 2021.
[27] Bonifay 2005.
[28] Bezeczky 2006; 2013.
[29] González Cesteros – Yılmaz forthcoming.
[30] Lawall 2006; Bezeczky 2006; 2013.
[31] Among others: Tchernia 1986, 125–195.
[32] The study of the Hispanic commodities in the Aegean from Hellenism until Late Antiquity is part of a project developed by one of us.
[33] González Cesteros 2012.
[34] A small number of stamps and ink inscriptions were already published by T. Bezczky (2013). For other ink inscriptions on Spanish amphorae in Ephesos see González Cesteros et al. 2020.
[35] See: González Cesteros 2012.
[36] The different finds, architecture, excavation report as well as a context interpretation are subject of a multidisciplinary work of the Austrian Archaeological Institute. Currently the authors with other colleagues (S. Ladstätter, L. Rathmayer, A. Heiss, A. Galik and A. Waldner) are working on the final publication.
[37] See Galik et al. 2020; for a general study of fish production and consume in Ephesus during the Roman and Byzantine periods: González Cesteros et al. 2020.
[38] For the interpretation of the context see Galik et al. 2020.

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References

Adenstedt 2005

I. Adenstedt, Wohnen in der antiken Großstadt. Eine bauforscherische Analyse zweier Wohneinheiten des Hanghauses 2 von Ephesos (Ph.D. diss. Technische Universität Wien, Vienna 2005).

Beyll 1993
D. Beyll, Terra Sigillata aus der Marienkirche in Ephesos. Erste Zwischenbilanz, Berichte und Materialien des Österreichischen Archäologischen Instituts 5, 1993, 5–45.

Bezeczky 2006
T. Bezeczky, Consumer Behaviour in Ephesus in the First Century BC, in: D. Malfitana – J. Poblome – J. Lund (eds.), Old Pottery in a New Century. Innovating Perspectives on Roman Pottery Studies. Atti del convegno internazionale di studi. Catania, 22–24 aprile 2004, Monografie dell'Istituto per i Beni Archeologici e Monumentali 1 (Catania 2006) 287–308.

Bezeczky 2013
T. Bezeczky, The Amphorae of Roman Ephesus, FiE 15/1 (Vienna 2013).

Bonifay 2005
M. Bonifay, Observations sur la diffusion des céramiques africaines en Méditerranée oriental durant l'Antiquité tardive, in: J-P. Sodini – F. Baratte (eds.), Mélanges Jean-Pierre Sodini, TravMem 15 (Paris 2005) 565–581.

Finkielsztejn 2006
G. Finkielsztejn, P. Vedius Pollio, producteur de vin à Chios et Cos et fournisseur d'Hérode le Grand, Grecs, Juifs et Polonais. À la recherche des racines de la civilisation européenne, Actes du Colloque international dédié à Joseph Mélèze Modrzejewski (Paris, 14 novembre 2003) (Warsaw 2006) 123–139.

Galik et al. 2020
A. Galik – H. Gonzalez Cesteros – A. Heiss – S. Ladstatter – A. Waldner, Der Rest vom Fest. Die Grubenverfüllung in Raum 12a der Wohneinheit 5 im Hanghaus 2. Archaologische Evidenz einer Cena Publica in Ephesos?, in: S. Ladstatter (ed.), Eine frühkaiserzeitliche Grubenverfüllung aus dem Hanghaus 2 in Ephesos, ErghÖJh 18 (Vienna 2020) 257–264.

Gassner 1997
V. Gassner, Tetragonos Agora. Keramik und Kleinfunde (Vienna 1997).

González Cesteros 2012
H. González Cesteros, Scomber gaditano en Éfeso. Una Dressel 12 con titulus encontrada en la "Casa Aterrazada 2" de Éfeso, DialHistAnc 38/1, 2012, 9–22.

González Cesteros 2021
H. González Cesteros, „Doing Business among Friends". Ephesian Trade with Other Ancient Capitals, in: M. Raycheva – M. Steskal (eds.), Roman Provincial Capitals under Transition. Proceedings of the International Conference Held in Plovdiv 04.–07. November 2019, Österreichisches Archäologisches Institut Sonderschriften 61 (Vienna 2021) 333–352.

González Cesteros – Yılmaz forthcoming
H. González Cesteros – Z. Yılmaz, Amphorenfunde aus der Hafennekropole, in: M. Steskal (ed.), Forschungen in der Hafennekropole von Ephesos. Die Grabungen seit 2005 im Bereich des Hafenkanals, Sonderschriften des Österreichischen Archäologischen Instituts (forthcoming).

González Cesteros et al. 2020
H. González Cesteros – V. Scheibelreiter-Gail – A. Galik, From Atlantic to the Cayster. The Consumption of Fish and Sea Products in Ephesos, Herom 9, 2020, 135–232.

Hayes 1991
J. W. Hayes, Paphos III. The Hellenistic and Roman Pottery (Nicosia 1991).
Hayes 2008
J. W. Hayes, Roman Pottery. Fine-Ware Imports, Agora 32 (Princeton 2008).
Kirbihler 2009
F. Kirbihler, Territoire civique et population d'Éphèse (Ve siècle av. J.-C.-IIIe siècle apr. J.-C.), in: H. Bru – F. Kirbihler – S. Lebreton (eds.), L'Asie Mineure dans l'Antiquité. Échanges, populations et territoires. Regards actuels sur une péninsule (Rennes 2009) 301–333.
Krinzinger 2010
F. Krinzinger, Das Hanghaus 2 in Ephesos. Die Wohneinheiten 1 und 2. Baubefund, Ausstattung und Funde, FiE 8/8 (Vienna 2010).
Ladstätter 2002
S. Ladstätter, Die Chronologie des Hanghauses 2, in: F. Krinziger (Hrsg.), Das Hanghaus 2 von Ephesos. Studien zu Baugeschichte und Chronologie, DenkschrWien 302 = AF 7 (Vienna 2002) 9–40.
Ladstätter 2005
S. Ladstätter, Keramik, in: H. Thür (ed.), Das Hanghaus 2 in Ephesos. Die Wohneinheit 4. Baubefund, Ausstattung, Funde, FiE 8/6 (Vienna 2005) 230–358.
Ladstätter 2016
S. Ladstätter, Ephesus, in: F. Daim (ed.), Historisch-kulturwissenschaftliches Handbuch, DNP Suppl. 11 (Stuttgart 2016) 678–686.
Ladstätter 2017
S. Ladstätter, Ephesus, in: P. Niewöhner (ed.), The Archeology of Byzantine Anatolia. From the End of Late Antiquity until the Coming of Turks (Oxford 2017) 238–248.
Ladstätter 2020
S. Ladstätter, Der archäologische Befund, in: S. Ladstätter (ed.), Eine frühkaiserzeitliche Grubenverfüllung aus dem Hanghaus 2 in Ephesos, ErgÖJh 18 (Vienna) 17–20.
Ladstätter et al. 2005
S. Ladstätter – A. Galik – D. Iro – M. Pfisterer – E. Rathmayr – V. Scheibelreiter – H. Schwaiger – M. Teichmann, Die Grabungen des Jahres 2004 im Hanghaus 2 in Ephesos, ÖJh 74, 2005, 247–276.
Ladstätter – Waldner 2013
S. Ladstätter – A. Waldner, Auswertung der Funde, in: St. Groh (ed.), Neue Ergebnisse zur Urbanistik in der Oberstadt von Ephesos. Intensive und extensive Surveys 2002–2006, ÖJh 82, 2013, 93–194.
Lawall 2006
M. L. Lawall, Consuming the West in the East. Amphoras of the Western Mediterranean in the Aegean before 86 BC, in: D. Malfitana – J. Poblom – J. Lund (eds.), Old Pottery in a New Century. Innovating Perspectives on Roman Pottery Studies, Atti del convegno internazionale di studi. Catania, 22–24 aprile 2004, Monografie dell'Istituto per i Beni Archeologici e Monumentali 1 (Catania 2006) 265–286.
Liedl 2017
H. Liedl, Eine frühkaiserzeitliche Grubenverfüllung aus dem Hanghaus 2 (MA thesis, Universität Wien, Vienna 2017).

Loeschcke 1919

S. Loeschcke, Lampen aus Vindonissa. Ein Beitrag zur Geschichte von Vindonissa und des antiken Beleuchtungswesens (Zürich 1919).

Lund 2003

J. Lund, Eastern Sigillata B. A Ceramic Fine Ware Industry in the Political and Commercial Landscape of the Eastern Mediterranean, in: C. Abadie-Reynal (ed.), Les céramiques en Anatolie aux époques hellénistique et romaine. Actes de la Table Ronde d'Istanbul, 22–24 mai 1996 (Paris 2003) 125–136.

Marangou-Lerat 1995

A. Marangou-Lerat, Le vin et les amphores de Crète. De l'époque classique à l'époque impériale, EtCret 30 (Paris 1995).

Meriç 2002

R. Meriç, Späthellenistisch-römische Keramik und Kleinfunde aus einem Schachtbrunnen am Staatsmarkt in Ephesos, FiE 9/3 (Vienna 2002).

Outschar 1996

U. Outschar, Aspekte zur Chronologie. Dokumentation exemplarisch ausgewählter keramischer Fundkomplexe, in: C. Lang-Auinger (ed.), Hanghaus 1 in Ephesos. Der Baubefund (Vienna 1996) 26–85.

Perlzweig 1961

J. Perlzweig, Lamps of the Roman Period. First to Seventh Century A.D., Agora 7 (Princeton 1961).

Robinson 1959

H. S. Robinson, Pottery of the Roman Period, Chronology, Agora 5. (Princeton 1959).

Rogl 2004

C. Rogl, Zu dem Produktionsbeginn schwarzer Sigillata in Ephesos. Die Evidenz der Tetragonos Agora, ÖJh 73, 2004, 207–219.

Salviat – Tchernia 2013

F. Salviat – A. Tchernia, Vins vignerons et buveurs de l´Antiquité (Rome 2013).

Springer-Ferazin, 2018

B. Springer-Ferazin, Keramik aus bauzeitlichen Horizonten der Südhalle an der oberen Agora von Ephesos (Grabungen 2015) (MA thesis, Universität Regensburg, 2018).

Struber-Ilhan 2012

J. Struber-Ilhan, Feinware (Dünnwandige Keramik) im Ostmediterranen Raum. Ein Vergleich des Formenspektrums von Ephesos mit Fundplätzen in Griechenland und Kleinasien, in: C. Reinholdt (ed.), Österreichischer Archäologentag 13, 2010, Salzburg (Vienna 2012) 175–182.

Tchernia 1986

A. Tchernia, Le vin de l'Italie romaine. Essai d'histoire économique d'après les amphores, BEFAR 261 (Rome 1986).

Waldner – Ladstätter 2014

A. Waldner – S Ladstätter, Keramik, in: H. Thür – E. Rathmayr (eds.), Das Hanghaus 2 in Ephesos. Die Wohneinheit 6. Baubefund, Ausstattung, Funde, FiE 8/9 (Vienna 2014) 435–588.

Waldner 2016

A. Waldner, Keramik, in: E. Rathmayr (ed.), Hanghaus 2 in Ephesos. Die Wohneinheit 7. Baubefund, Ausstattung, Funde, FiE 8/10 (Vienna 2016) 311–423.

Waldner 2020

A. Waldner, Bauopfer und Deponierungen von Banketten in Ephesos, in: S. Ladstätter (ed.), Eine frühkaiserzeitliche Grubenverfüllung aus dem Hanghaus 2 in Ephesos, ErgÖJh 18 (Vienna) 239–255.

Wherever they end up in the archaeological record and however they were used from initial potting to final discard, transport amphoras are artifacts of economic activity. That connection to the ancient economy, however, does not limit the range of archaeological contexts where amphoras played a significant role.
The papers in this volume examine a wide range of settings – from individual buildings to shipwrecked cargoes to broad geographic regions – where these jars are found. While find spots are often analyzed for whatever chronological evidence they might provide, contexts – broadly defined – can also contribute to more complex social and economic interpretations of the jars and the areas where they appear. Hence, in this volume, amphoras are studied in terms of supplies to sanctuaries and other public functions, artifacts of private commercial business, localized demand for different kinds of products, broad commercial trends shaped by Mediterranean geopolitics and environmental change. The authors cover finds from Archaic Didyma, Classical Corinth, the late Classical shipwreck near Mazotos (Cyprus), Hellenistic Rhodes and Ephesos, and the sites of Voura and Aigio on the north coast of the Peloponnese.
These studies highlight the many different ways that inherently economic artifacts inform our understanding of ancient society.

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