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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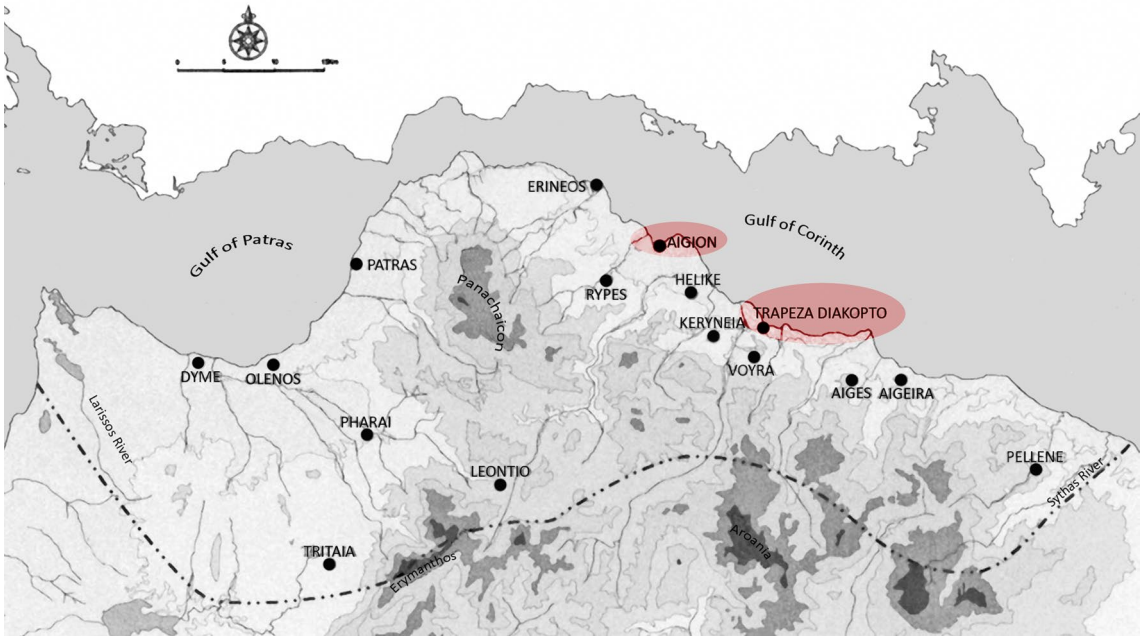

Fig. 1. Plan of Achaea in antiquity.

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.

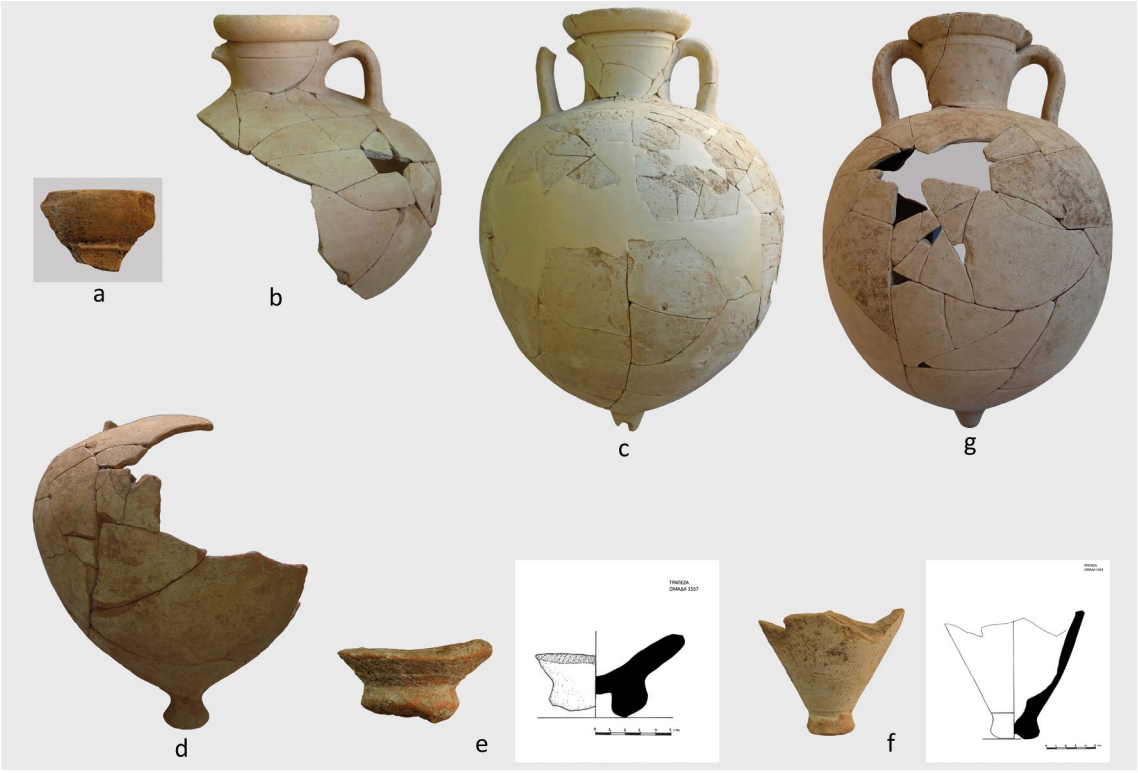

Fig. 2. Trapeza Diakopto. Late 7th – early 6th century Attic SOS (a), „Corinthian“ type B (b–c, g) and North Aegean amphoras (d–f) of late 6th and 5th cent. BC.

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‘. 4th – early 3rd 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 3rd century BC as they have been found in a layer of the mid 3rd 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 4th 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

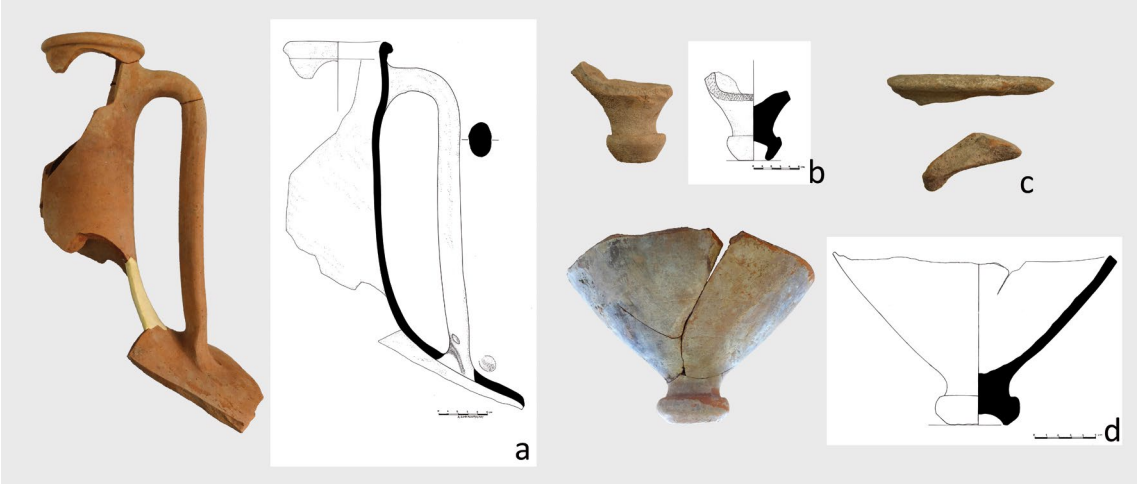

Fig. 5. Trapeza Diakopto. North and SE Aegean amphoras. 4th – early 3rd cent. BC.

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

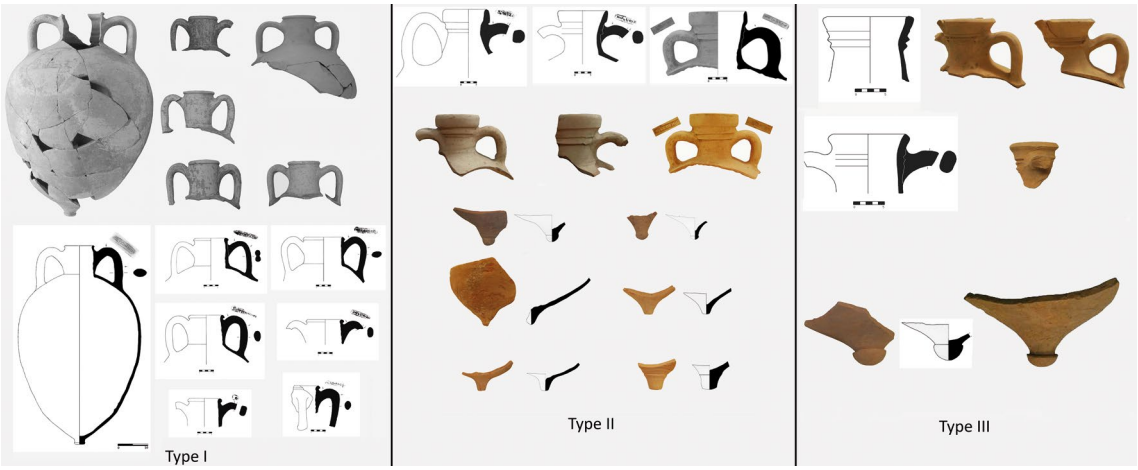

Fig. 7. Aigion. Local transport amphoras. 2nd – 1st cent. BC.

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. 2nd – 1st 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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