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INHALT

CONTENTS

THE MUSHROOM-RIMMED AMPHORA AS AN INDICATOR OF HEKATOMNID REGIONAL HEGEMONY

An Analysis of Production Patterns Based on a Back-Filled Deposit at Patara

by Erkan Dündar

The preliminary results of the excavations at the Tepecik North Bastion at Patara were published in 2017[1]. The initial results of the 2013 season revealed a destruction level (SU 25) that contains a variety of personal belongings presumably of mercenaries who manned the bastion in 334 B.C. Using the dated context of the Bastion, including a large number of ceramics, small finds and terracottas that were found in the destruction level, we argued for a revised dating of the early Hellenistic fortification walls throughout southwest Anatolia. In addition, our discussion raised the possibility that the North Bastion was constructed by the Hekatomnid rulers of Karia as part of a military garrison in the mid-4th c. B.C., and that the bastion was destroyed as a result of an attack by the forces of Alexander the Great in 334 B.C. Since that publication we have conducted several additional seasons of excavations (2014–2017), investigating the immediate vicinity of the bastion. In the process we have unearthed important new information concerning the Hekatomnid control of Patara prior to the destruction of the bastion. This information is based primarily on the ceramics recovered from a back-filled burnt soil layer in a deposit located in the southeast outer corner of the Bastion (figs. 1–3). These finds include eight amphorae and two intact unguentaria. The mushroom-rimmed amphorae in particular raise important new questions concerning the degree and the extent of Hekatomnid influence throughout southwestern Anatolia at this time.

Further research on the finds recovered in and around the North Bastion between 2013 and 2016[2] revealed that some of the amphora fragments found outside the North Bastion join with those found at the destruction level of the North Bastion (SU 25), especially some fragments unearthed from a burned soil layer of a deposit (SU 89) identified at the northeastern outer

I am grateful to Havva İşkan, the director of Patara Excavations, for permission to study the material discussed in this article. I am also indebted to Christof Schuler, Alain Bresson, and John Hyland for their valuable advice regarding historical context, as well as Mark L. Lawall and A. Kaan Şenol for worthful advice concerning my amphorae. I would also like to thank Nicholas K. Rauh for his attention to the proofreading of the paper and valuable advice regarding historical context also. The opinions expressed in this paper remain my own.

1 Dündar – Rauh 2017.

2 The similarity of the ceramics found in the deposit and in the North Bastion destruction level (SU 25) has necessitated detailed investigation.

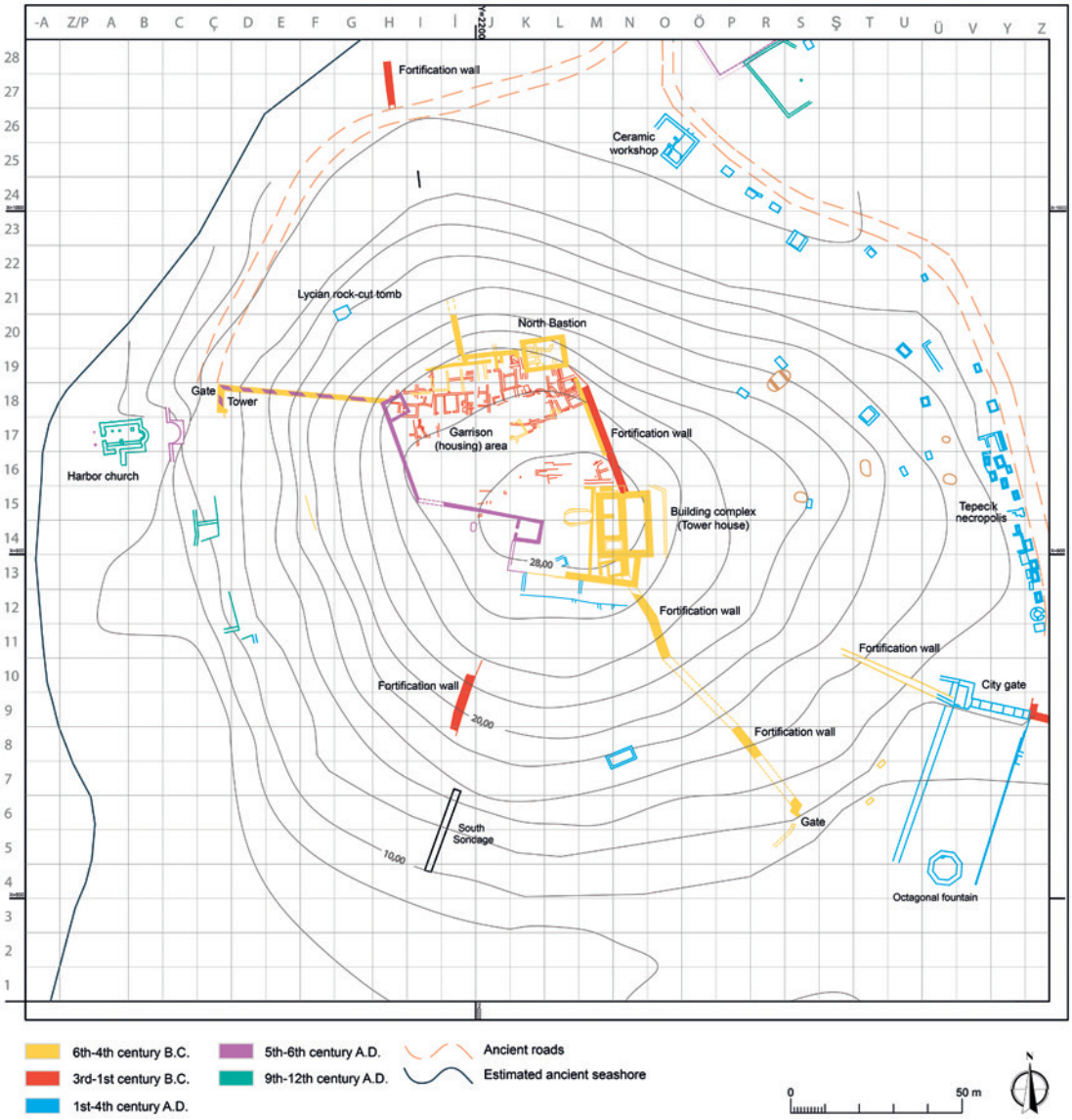

Fig. 1. The Tepecik settlement

corner of the Bastion (fig. 4). The fact that the unguentaria and amphorae in the exterior deposit had the same typological features as those recovered inside the North Bastion destruction level[3], combined with the fact that both deposits were fire damaged, indicates that these ceramic remains must originally have come from inside the North Bastion. The most likely explanation is that these remains were removed from the northern interior sector of Bastion

[3] For more information about the finds, see Dündar – Rauh 2017, 529 fig. 30.

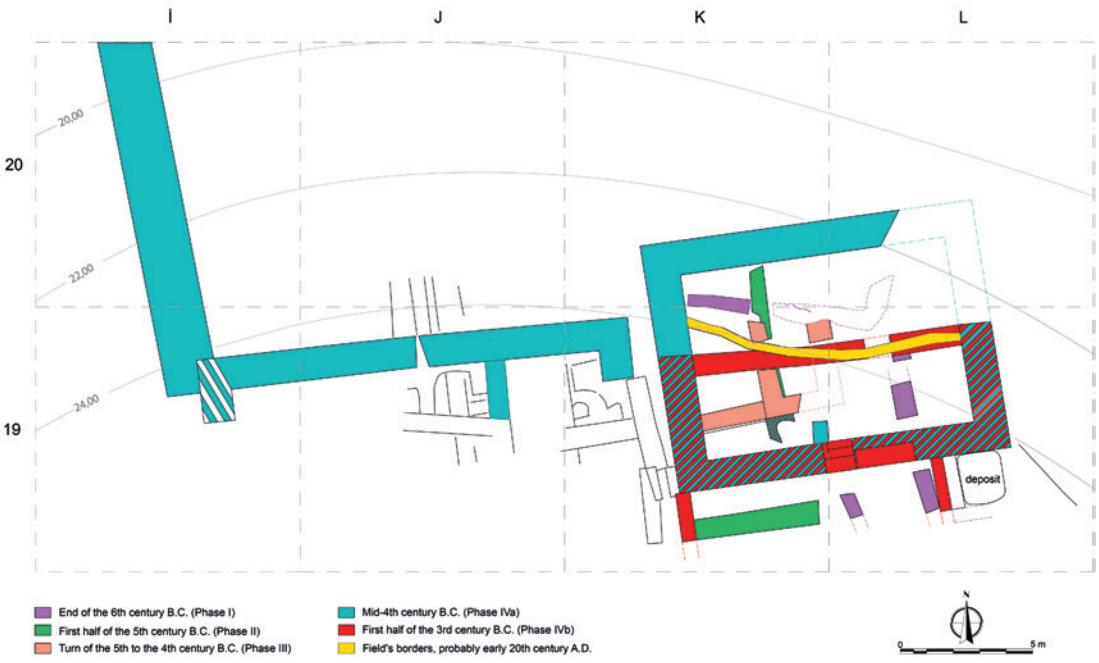

Fig. 2. Architectural phases of the Bastion complex

Fig. 3. View of the in situ remains (SU 89) in the deposit

Fig. 4. Some amphora pieces matched with from destruction level of the Bastion (SU 25) and the deposit (SU 89)

SU 25 and discarded as debris outside the building when the foundation pit was excavated for the IVb phase of the structure's northern wall[4]. These newly recovered remains must therefore be evaluated in relation to the materials published earlier.

DESCRIPTION OF THE DEPOSIT

The back-filled deposit is located to the north-east of the crest of the Tepecik settlement along the southeastern exterior corner of the North Bastion (quadrant L-19) (fig. 2). The deposit presents an oval form approximately 2.25 × 1.75 m and consists of six different layers. A detailed summary of the stratification of the back-filled deposit outside the Bastion demonstrates the existence of at least five different phases from the end of the 5th to the 1st c. B.C. (table 1). The SU 89 (23.95–23.62) layer, which contains the materials of immediate concern, is classified as a subgroup of SU 87 (fig. 5).

The earliest layer of the deposit is coded as SU 108. Early finds from SU 108 include Cypriot bichrome ware pieces dated to the first quarter of the 8th c. B.C.[5]. In addition, local coarse

[4] See our discussion in Dündar – Rauh 2017.

[5] For similar examples, see E. Gjerstad – J. Lindros – E. Sjöqvist – A. Westholm, Finds and Results of the Excavations in Cyprus 1927–1931, SCE 2 (Stockholm 1935) 549 pl. 163 no. 612; N. Arslan, Kilikya Demir Çağı Seramikleri. İthal Boyalı Seramikler ve İlişkiler (Istanbul 2010) 127 pl. 12 no. 119.

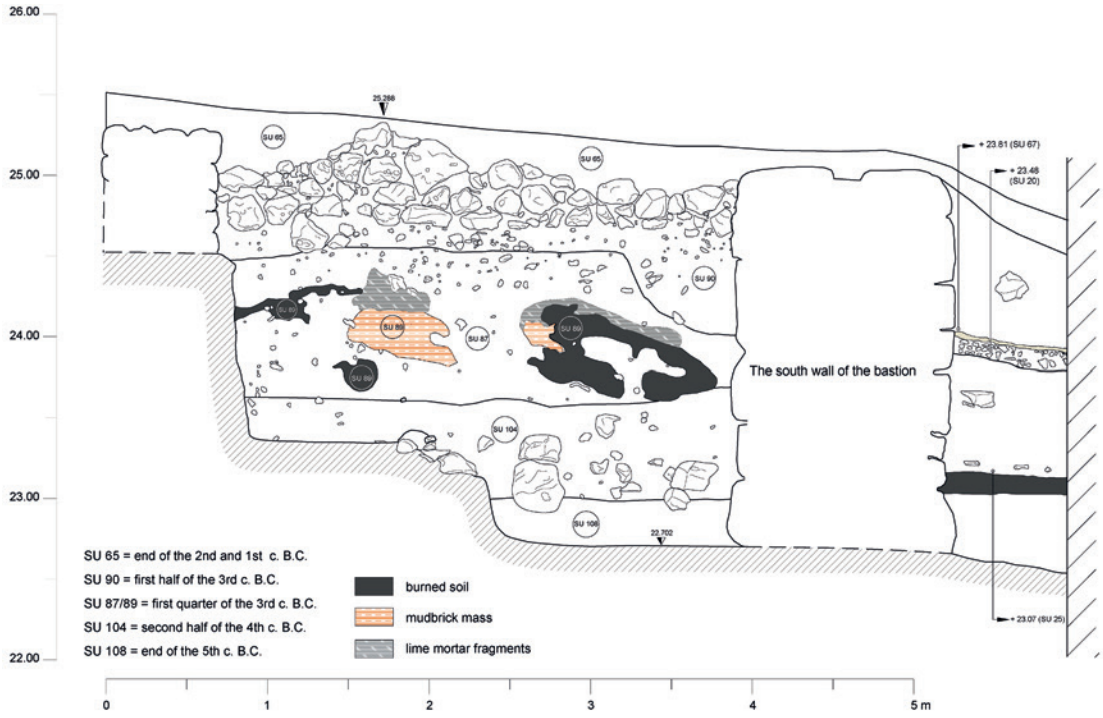

Fig. 5. Cross-section of the deposit

Stratigraphic Unit	*End Dates*
65	end of the 2nd / beginning of the 1st c. B.C.
90	first half of the 3rd c. B.C.
87 (89)	first quarter of the 3rd c. B.C.
104	second half of the 4th c. B.C.
108	end of the 5th c. B.C.

Table 1. End dates of the deposit, reflecting the dates of the latest datable artefacts

ceramic pieces with wavy and straight line decoration, a banded kylix piece dated to the first quarter of the 5th c. B.C., and a skyphos handle dated to the end of the 5th c. B.C. were recovered in this layer[6]. We date the end of layer SU 108 to the end of the 5th c. B.C.

The layer above SU 108 is recorded as SU 104. The earliest finds from this layer are a few kylix fragments dated to the end of the 6th c. B.C. and a few pieces of coarse pottery decorated with horizontal lines. In addition to these examples, a black-slipped echinus bowl, a kantharos, and some rolled-rim plates belonging to the second half of the 4th c. B.C. furnish the latest

[6] For the likely locally produced ceramics with horizontal lines, see J. Gebauer, Die Keramik der Grabungen in Limyra 2002/2003. Ein Querschnitt durch das vorrömische Material, in: M. Seyer (ed.), Studien in Lykien, ÖJh Ergh. 8 (Vienna 2007) 52–57. For the date of the kylix, see Acar 2011, 144 pl. 75 no. 320; Tuna-Nörling 1995, 24 f. pl. 6 nos. 95. 97. For the skyphos, see Sparkes – Talcott 1970, 259 pl. 16 nos. 348. 349.

elements of SU 104[7]. Accordingly, the end of layer SU 104 would appear to date to the second half of the 4th c. B.C.

SU 87 (24.64–23.95) is located above SU 104. The earliest find in this layer is a skyphos base dated to the first quarter of the 4th c. B.C.[8]. A black-slipped kantharos, rolled-rim plates, and echinus bowl pieces dating to the 4th c. B.C. are among the other ceramic finds from this layer[9]. In addition to these finds, fragments of amphora toe of North Aegean origin (probably Mende) dated to the 4th c. B.C. and fragments of mushroom-rimmed amphorae dated to the second half of the 4th c. B.C. were also found in this layer[10]. The latest finds from SU 87 are fragments of band-rimmed amphorae dated to the first quarter of the 3rd c. B.C.[11]. We, therefore, date layer SU 87 to the first quarter of the 3rd c. B.C. Based on the material recovered inside the remains of the bastion, this is also the date for the construction of phase IVb of the North Bastion. Another layer, recorded as SU 89 (23.95–23.62), was identified as a separate group within SU 87[12]. Clusters of materials were found in burned soil, brick and lime mortar. Based upon the finds from this location, the end date of layer SU 89 should be the first quarter of the 3rd c. B.C.

Another complicated layer, SU 90, is located in an upper layer of SU 87 (and 89). This layer constitutes the building foundation pit of a north-south extending wall to a dwelling that overlays the south end of the Bastion. The latest datable finds from this layer include fragments of band-rimmed amphorae dated to the first half of the 3rd c. B.C.[13].

The last stratification in the back-filled deposit is the topsoil, recently disturbed by farming. In this surface layer, recorded as SU 65, the latest dated find is a spindle-shaped unguentarium dated to the end of the 2nd / beginning of the 1st c. B.C.[14].

A comparison of the stratification recorded in the back-filled deposit outside the Bastion and the layers recorded inside the Bastion demonstrates that the finds of SU 89 belong to the Bastion IVa destruction phase. They were probably removed to prepare the back fill for the later foundation wall of phase IVb. In this respect, it is possible to give the date of destruction of the Bastion IVa phase (SU 25) as the terminus ante quem for all the finds to be discussed in this paper, in particular, the remains of the mushroom-rimmed amphorae found in SU 89 outside and SU 25 inside the Bastion.

7 For the date of the imported black-slipped kantharos, rolled-rim plates and echinus bowl, see S. I. Rotroff, Hellenistic Pottery. Athenian and Imported Wheelmade Table Ware and Related Materials, Agora 29 (Princeton, NJ 1997) 242 pl. 1 fig. 4; for the local/regional productions of these groups, see Dündar – Işın 2015, 204–208; Dündar – Rauh 2017, 533–543 nos. 2–39; Dündar 2020, 57 f. nos. 1–3.

8 For comparative examples, see Sparkes – Talcott 1970, 260 pl. 16 no. 350.

9 For the dating of similar ceramics found at Patara, see Işın 2008, 159–165 pls. 38–41; Dündar – Işın 2015, 204–208; Dündar – Rauh 2017, 532–543; Dündar 2020, 57 f. 60 f. nos. 1–3. 11.

10 For the date of the North Aegean amphorae, cf. M. Lawall, Transport Amphoras from Well S-AB and the Basins, in: P. Scherrer – E. Trinkl (eds.), Die Tetragonos Agora in Ephesos. Grabungsergebnisse von archaischer bis in byzantinische Zeit – ein Überblick. Befunde und Funde klassischer Zeit, FiE 13, 2 (Vienna 2006) 136 pl. 34 no. 221; Dündar 2017, 449 pl. 7 MnA. 4. For the mushroom-rimmed amphorae, cf. Dündar 2017, 465–469 pls. 17. 18 MrA 1–25.

11 For the date of band-rimmed amphora, cf. Grace 1963, 323 fig. 1 no. 5; Dündar 2017, 67 f. 465 pl. 17 BrA 1–4.

12 SU 89 refers to areas where burned soil, brick and lime mortar fragments were visible.

13 See above n. 11.

14 For the date of the unguentarium, cf. Dündar 2008, 19–21. 112–119 nos. U84–108 (Type 2 L).

MATERIAL ASSEMBLAGE OF SU 89

The following catalog contains documentation of the finds unearthed from SU 89. Two unguentaria and eight amphorae were recovered in this layer. One of these amphorae is Lycian, and seven others belong to the mushroom-rimmed amphora type. In addition to these finds, we recovered fragments of a Cypriot amphora that join with fragments recovered in SU 25, that is, the destruction level inside the Bastion (see fig. 4).

Catalog entries include the year of excavation and the object number, the find-spot, and the precise stratigraphic location of the find, followed by dimensions, descriptions, and an estimated date.

Unguentaria

Two unguentaria were uncovered in SU 89 (nos. **1**. **2**; figs. 6. 7). These findings are important both in terms of the dating of this form and the demonstration of the transition from the lekythos to the unguentarium typology. These unguentaria exhibit the same characteristics as the lekythos and the unguentarium that were recovered at the destruction level inside the Bastion[15]. The rims are broad and somewhat triangular, and the necks are narrow, concave, and disproportionately shorter than the bodies. The neck widens at the base to a broad nearly flat shoulder. The rounded bodies bulge just below the shoulders before tapering inward to a tall, thick ring foot. Unguentaria with pseudo-handles, as no. **2**, are also classified as pseudo-Cypriot. This type of unguentarium bears some floral decoration in the area between the pseudo-handles and various sized red, black or reddish brown bands on the neck, shoulder, and belly[16].

Unguentarium **1** with a more spherical body profile is decorated with seven horizontal painted bands of varying thickness, whereas unguentarium **2** is decorated with nine bands. In addition to these bands, there are two vertical applique handles on the shoulder of unguentarium **2**. Since these lack any functionality, they were perhaps for decorative purposes. The fabric and slip of these unguentaria indicate that they were produced locally or possibly nearby in the Xanthos River Valley[17]. Examples that slightly resemble this form have been found in Corinth[18], Pydna[19], Eridanos[20], Ktima[21], and Dor[22], all of them dated to the middle of the 4th c.

15 Dündar – Rauh 2017, 546 f. figs. 44. 45 nos. 45. 46.

16 See the discussion in S. I. Rotroff, Hellenistic Pottery. The Plain Wares, Agora 33 (Princeton, NJ 2006) 142 f. For a recent review, see L.-A. Trakatelli, The Category of the So Called Pseudo-Cypriot Amphorae and Their Distribution in Cyprus, Greece, and the Black Sea, in: N. Fenn – C. Römer-Strehl (eds.), Networks in the Hellenistic World. According to the Pottery in the Eastern Mediterranean and Beyond, BARIntSer 2539 (Oxford 2013) 81–91.

17 Dündar 2008, 11; Dündar – Rauh 2017, 534. 546; Dündar 2020, 58 no 5.

18 E. G. Pemberton, The Sanctuary of Demeter and Kore I. The Greek Pottery, Corinth 18, 1 (Princeton, NJ 1989) 177 no. 594 (C-69-103) pl. 52.

19 Z. Kotitsa, Frühhellenistische Keramik aus Pydna: Hinweise auf regionale und überregionale Kontakte, in: N. Fenn – Ch. Römer-Strehl (eds.), Networks in the Hellenistic World. According to the Pottery in the Eastern Mediterranean and Beyond, BARIntSer 2539 (Oxford 2013) 71 f. figs. 8. 9.

20 B. Schlörb-Vierneisel, Eridanos-Nekropole I. Gräber und Opferstellen hS 1–204, AM 81, 1966, 85 fig. 55, 3.

21 J. Deshayes, La nécropole de Ktima. Mission Jean Bérard 1953–55, Bibliothèque archéologique et historique 75 (Paris 1963) 208 pl. 19, 3: 1/6 (P 230); pl. 65, 1.

22 B. Guz-Zilberstein, The Typology of the Hellenistic Coarse Ware and Selected Loci of the Hellenistic and Roman Periods, in: E. Stern (ed.), Excavations at Dor: Final Report I B. Areas A and C. The Finds, Qedem Reports 2 (Jerusalem 1995) 304 fig. 6, 26: 1–6 Type UG1.

Fig. 6 a and b. Unguentarium **1** (scale 1 : 2)

Fig. 7 a and b. Unguentarium **2** (scale 1 : 2)

B.C.[23]. In a previous publication of the Pataran unguentaria, similar examples were classified as »early examples« and dated to the second half of the 4th c. B.C.[24].

The finds of the destruction level inside the North Bastion (SU 25) and those of SU 89 demonstrate that these unguentaria evolved from the locally produced lekythos at some time during the second half of the 4th c. B.C.[25]. Although the unguentaria have also been found as grave gifts, their primary purpose was as tableware in the late Classical period.

1. Unguentarium fig. 6
PTR'13/265, L-19 (SU 089-03)
Diam. rim 2.5, base 3.8; H. 13; Th. 0.3 cm
Fabric hard fired; fine texture with fine-grained components and quartz components. (Ceramic) Body 7.5 YR 7/4 pink, slip 7.5 YR 7/4 pink, bands 5 YR 5/4 reddish brown to 7.5 YR 2.5/1 black.
ca. second half of the 4th c. B.C.

2. Unguentarium fig. 7
PTR'13/255, L-19 (SU 089-02)
Diam. rim 2.8, base 4.8; H. 17.5; Th. 0.4 cm
Fabric hard fired; fine texture with fine-grained components and quartz components. (Ceramic) Body 7.5 YR 7/4 pink, slip 7.5 YR 7/4 pink, bands 5 YR 6/8 reddish yellow.
ca. second half of the 4th c. B.C.

Amphorae

A total of eight amphorae were found, one of which is intact (**7**) and another nearly intact (**5**). Two other amphorae exhibit mouths and necks (**3**. **6**), three survive as lower portions (**4**. **9**. **10**) and one as a body shard (**8**).

Amphora **3** exhibits a light red fabric and pinkish slip and has fine texture with sand and mica inclusions (fig. 8). Although it is similar to the cylindrical short-necked and ovoid-bodied mushroom-rimmed amphorae that were produced at Knidos in the 4th c. B.C.[26] its fabric and slip indicate that it was not from Knidos.

Amphora **4** has a porous, thin sand, lime and light red colored fabric with a dense mica additive (fig. 9). This example, which has a light brown slip, exhibits a profile that bulges outward then tapers to its knob toe.

Amphora **5**, which is almost complete, has lime, sand and mica added, with a light red fabric and a reddish yellow slip (fig. 10). The example has an outward elongated triangular profile rim, a long cylindrical inner side grooved length neck, thick and oval cross-sectioned handles starting from the top of the neck, and a broadly-shrunk body. The lower portion was

[23] A similar unguentarium was found in Tomb 15 of the necropolis of Rhodes-Pontamo. It is dated to between 410–380 B.C., see Jacopi 1932, 150–152 fig. 32, the upper left.

[24] Cf. Dündar 2008, 95 nos. U1–U4 pl. 1; E. Dündar, Tepecik Acropolis, in: Ş. Aktaş – E. Dündar – S. Erkoç – M. Koçak, Work at Patara 2014, News of Archaeology from Anatolia's Mediterranean Areas 13, 2015, 91 f. fig. 2.

[25] For comments on this matter, see V. R. Anderson-Stojanović, The Chronology and Function of Ceramic Unguentaria, AJA 91, 1987, 106. 109 f. 121 esp. n. 4.

[26] Monachov 1999, 162 f. Şenol (2009, 127 n. 446) suggests that although amphorae were produced in many centers along with Knidos, due to their distinctive clay, most of the amphorae in question appear to have been produced on the Knidian Peninsula. Concerning this matter, see Lawall 2013, 104.

not recovered. Similar examples classified by S. Ju. Monachov as Variant 1-D were dated to between the second half of the 60's and 30's of the 4th c. B.C.[27].

The fragment displaying mouth and neck, no. **6**, is similar to **5** with lime, sand and mica added, a light-colored fabric and slip properties (fig. 11). The most important feature of no. **6** is that it is stamped on each handle. The correct reading of the stamps is extremely difficult: one of the stamps may show the abbreviation ΠΑ, the other stamp is unreadable although it could also read ΣΙ. The origin of this mushroom-rimmed amphora can be attributed to Rhodes and its *peraia* or to Miletos and Samos due to the colors of the fabric and slip and to the fact that the handles are stamped. In his study on the Kyrenia shipwreck finds, M. L. Lawall stated that the abbreviated stamp ΠΑ, which is associated with the abbreviated stamp ΓΟ, possibly refers to a producer[28]. G. Cankardeş-Şenol attributed in her study on the Alexandrian finds a similar monogram stamp with ΠΑ to Knidos[29]. Given the fabric and form characteristics exhibited by amphorae **4**–**6**, it is possible to identify them with production in the region extending from Ephesos and Samos in the north to Kos in the south[30].

Amphora **7** is the only complete example (fig. 12). The form has an outward rim with a tapered edge, a neck that widens to the amphora's broadest point at the shoulders, a spherical body, and quite thin oval section handles that arch down from below the rim to the shoulder. The characteristic feature of the form is the omphalos-formed protrusion placed exactly in the middle of the solid handle-formed toe and a painted band encircling the toe. This amphora represents the second complete example of a Lycian amphora recovered from an archaeological excavation[31]. We have provided a typological description in previous publications[32], although its discovery here furnishes a new important context for its dating. Our research indicates that the Lycian amphorae are frequently encountered in the 4th c. B.C. strata and should be dated from the middle to the second half of the 4th c. B.C.

Amphora **8** is a body part without neck, mouth and bottom (fig. 13). The fabric, slip, and form properties indicate that no. **8** should have had a mushroom rim.

Amphora **9** has a hollow knob-toe form (fig. 14). This amphora allows us to associate it with Kos, both with respect to the form of a clean-cut toe and with respect to the fabric and slip texture. A similar example found in Koshary in the Odessa region was dated to the 4th c. B.C.[33], and examples from Halicarnassos were dated between the 5th and 4th c. B.C.[34].

27 Monachov 1999, 164.

28 Lawall 2011, 674 esp. 676.

29 Cankardeş-Şenol (2015, 174 no. 6) states that the monogram of Alexandria may refer to the name Πασικράτης.

30 For similar examples in Ephesos, see Lawall 2004. For examples from Samos, see Grace 1971, 88 pl. 15 no. 13. For those from Kos, see Georgopoulos 2001, 112 nos. 6–8. The toe form is appropriate to a region bounded by Samos and Ephesos continuing at least as far south as Kos, see Lawall 2011, 677 n. 25 with references.

31 An intact Lycian amphora was found in situ in a *gynaikonitis* at Tepecik settlement, which was destroyed in ca. 310 B.C., see Dündar 2020, 62 no. 21.

32 E. Dündar, A Group of Amphorae from Side Museum and a New Type of Amphora: The Lycian Amphora?, AA 2012/1, 47–50; E. Dündar, The First Evaluation on the Distribution of Commercial Amphoras from Lycia in the Pre-Roman Period, IstMitt 64, 2014, 33–56; Dündar 2017, 51–60.

33 N. Mateevici – E. Redina, Quelques conclusions concernant les importations amphoriques dans le site de Koshary (région d'Odessa) en Ukraine, in: D. Kassab Tezgör – N. Inaishvili (eds.), PATABS I. Production and Trade of Amphorae in the Black Sea. Actes de la Table Ronde internationale de Batoumi et Trabzon, 27–29 Avril 2006, Varia Anatolica 21 (Paris 2010) pl. 30 no. 15.

34 Nørskov – Lund 2002, 63 f. 167 pl. 32 H42; Nørskov 2004.

Amphora **10**, displaying a hollow triangular profile knob-toe, is probably the lower part of a mushroom-rimmed amphora based on its fabric structure and color (fig. 15). A careful examination of this example shows that the cavity below the bottom of the hollow has been pulled inward to narrow the hollow setting. The best examples of amphorae of similar form are known from the Kyrenia shipwreck and were dated to the beginning of the 3rd c. B.C.[35]. Similar intact amphorae exhibited in the Marmaris Museum were dated to the end of the 4th / beginning of the 3rd c. B.C.[36]. In the excavations carried out in the wider Tepecik settlement at Patara in 2017, a rich inventory of materials was found in situ in the remains of a destroyed house pantry including an amphora with the same form and fabric characteristics as no. **10**. This context is dated to the last quarter of the 4th c. B.C. based on associated coins and ceramic evidence[37]. In this case, it is possible to date amphora **10** to the second half of the 4th c. B.C.

3. Amphora (Coan/Samian) fig. 8
PTR'13, L-19 (SU 089-06)
Diam. rim 11.5; H. 27.8; Th. 0.7 cm
Fabric hard fired; fine texture with fine-grained components and quartz components. (Ceramic) Body 2.5 YR 6/6 light red, slip 5 YR 7/4 pink.
ca. second half of the 4th c. B.C.

4. Amphora (Coan/Samian/Ephesian) fig. 9
PTR'13, L-19 (SU 089-07)
Diam. base 2.8; H. 29.1; Th. 1 cm
Fabric hard fired; sandy texture with quartz and lime components. (Ceramic) Body 2.5 YR 6/6 light red, slip 10 YR 7/3 very pale brown.
ca. second half of the 4th c. B.C.

5. Amphora (Milesian/Samian) fig. 10
PTR'13, L-19 (SU 089-05)
Diam. rim 12; H. 71.3; Th. 0.9 cm
Fabric hard fired; fine texture with fine-grained components, quartz and lime components. (Ceramic) Body 2.5 YR 7/6 light red, slip 7.5 YR 7/6 reddish yellow.
ca. second half of the 4th c. B.C.

6. Amphora (Rhodian/Milesian/Samian) fig. 11
PTR'13, L-19 (SU 089-08)
Diam. rim 15.6; H. 23.3; Th. 0.8 cm
Fabric hard fired; fine texture with fine-grained components, quartz and lime components. (Ceramic) Body 2.5 YR 7/6 light red, slip 7.5 YR 8/3 pink.
Stamps a) ΠA; b) probably ΣI (sigma lunate, retrograde?)
ca. second half of the 4th c. B.C.

35 Lawall 2011, 675 pl. 281 no. 454. In earlier studies about the shipwreck, these examples were dated to the second half of the 4th c. B.C.; on this, see Bass – Katzev 1968, 172.

36 Şenol 2003, 16–18.

37 The in situ context found in 2017 is located 24 m west of the deposit that is the subject of this article. For the preliminary report on the context, see E. Dündar, Tepecik Akropolis, in: H. İşkan, Patara 2017 Kazı Çalışmaları, KST 40, 2, 2019, 367–371 fig. 10.

Fig. 8 a and b. Amphora **3** (scale 1 : 5)

Fig. 9 a and b. Amphora **4** (scale 1 : 5)

Fig. 10 a and b. Amphora **5** (scale 1 : 5)

Fig. 11 a–e. Amphora **6** and stamps (scale 1 : 5, details without scale)

Fig. 12 a and b. Lycian amphora **7** (scale 1 : 5)

Fig. 13. Amphora **8** (without scale)

Fig. 14 a and b. Amphora **9** (scale 1 : 5)

Fig. 15 a and b. Amphora **10** (scale 1 : 5)

7. Amphora (Lycian) fig. 12
PTR'13/348, L-19 (SU 089-04)
Diam. rim 12.3, base 4.7; H. 67.2; Th. 0.9 cm
Fabric hard fired; fine texture with fine-grained components, quartz and lime components. (Ceramic) Body 5 YR 6/6 reddish yellow, slip 7.5 YR 7/4 pink.
ca. second half of the 4th c. B.C.

8. Amphora (?) fig. 13
PTR'13, L-19 (SU 089-09)
Diam. –; H.–; Th. – cm
Fabric hard fired; fine texture with fine-grained components, quartz and lime components. (Ceramic) Body 2.5 YR 7/6 light red, slip 7.5 YR 8/3 pink.
ca. second half of the 4th c. B.C.

9. Amphora (Coan) fig. 14
PTR'13, L-19 (SU 089-10)
Diam. base 3.6; H. 43.5; Th. 1.3 cm
Fabric hard fired; porous, sandy texture with quartz and lime components. (Ceramic) Body 2.5 YR 6/6 light red, slip 7.5 YR 6/4 light brown.
ca. second half of the 4th c. B.C.

10. Amphora (Rhodian) fig. 15
PTR'13, L-19 (SU 089-11)
Diam. base 3.6; H. 44.7; Th. 1.4 cm
Fabric hard fired; fine texture with fine-grained components and lime components. (Ceramic) Body 2.5 YR 6/6 light red, slip 10 YR 8/3 very pale brown.
ca. second half of the 4th c. B.C.

THE CONTEXT OF THE MUSHROOM-RIMMED AMPHORA

The mushroom-rimmed amphora is so named for its wide range of flaring, heavy triangular-section rims and associated knob toes. Many different fabrics appear in this group, but most are fine-grained with at least some mica and sometimes quite a dense packing of mica visible on the surfaces. The kiln sites for this form are known from sites as far north as Klazomenai and – possibly – the Troas region and they are especially common in the east Aegean islands and along the adjacent coast (fig. 16)[38].

After many years of research on the origin of the Late Classical mushroom-rimmed amphora, also known as the South Aegean mushroom-rimmed amphora, many hypotheses have emerged pertaining to its origin. One of the most problematic groups of commercial amphorae, the form was first acknowledged by A. P. Mantsevich. Mantsevich identified one of these amphorae as »Solokha type«, based on its discovery at the Solokha kurgan near the Ukraine border[39]. The so-called Solokha I mushroom-rimmed amphorae have a short cylindrical neck

[38] Doğer 1986; Lawall 1995, 223. Lawall (2002, 203) suggests in his research with the finds from Ilion that mushroom-rimmed amphorae were imitated by potters in the Troas region from time to time (sporadic production).
[39] Mantsevich 1947, fig. 1.

Fig. 16. Map showing known and likely mushroom-rimmed amphora producers and zones

extending to the shoulders, a wide-shouldered ovoid body, a toe in the form of a hollow knob, and short handles with an oval cross-section starting from just below the rim[40].

Early studies on mushroom-rimmed amphorae offered differing views concerning the place of production for this amphora type. I. B. Zeest noticed that a stamped amphora uncovered in the Rhodes-Pontamo necropolis is similar to the Solokha I amphora[41]. However, Zeest also proposed that the Solokha I amphora was possibly produced for the evolving Attic-Bosporan trade[42]. V. R. Grace took Zeest's proposal of a Rhodian origin a step further and identified this type of amphora as a proto-Rhodian form based on the association of the mushroom rim and stamp[43]. Mantsevich suggested, however, that the form originated at Torone on the Sithonia

40 Zeest 1960, 150–152 pls. 14–16; Lawall 1995, 375 figs. 88–90.
41 Zeest 1960, 92. For the EK-abbreviation on the handle of the amphora in the Pontamo necropolis on Rhodes, see Jacopi 1932, 120 pl. 6 no. 1/12.
42 Zeest 1960, 94.
43 Grace 1963, 322 f. figs. 1–5.

peninsula in the North Aegean, based upon the depictions of a similar-looking amphora on Toronian coins of the early 5th c. B.C.[44].

Grace proposed that the earliest examples of the Solokha I form were produced in Athens at the end of the 5th c. B.C., and that the spread of this form to the eastern Aegean possibly occurred during the 4th c. B.C.[45]. Grace later added Samos as a likely origin for the mushroom-rimmed amphorae at the end of the 4th c. B.C., based on examples of the form bearing stamps showing the head of a lion, the heraldic image of Samos, despite the lack of any workshop remains for this amphora on Samos[46].

A. Doulgéri-Intzessiloglou and Y. Garlan have raised the possibility that the mushroom-rimmed amphorae were produced at the Panermos workshop in Peparethos, an island northeast of the Euboean peninsula[47]. Classified as Peparethos II, the amphora's characteristics are similar again to the Solokha I amphora, but the fabric is different. In view of the varying fabrics exhibited by this form, Doulgéri-Intzessiloglou and Garlan surmised that Peparethos was one of several locations where the Solokha I amphora was produced[48]. However, the authors readily conceded that they were unable to locate any production waste, kiln or workshop remains to support their assertion.

In fact, given the wide variation in rim form, body shape, fabric, and slip recorded for this amphora, the most likely explanation is that mushroom-rimmed amphorae were produced simultaneously at a variety of locations. Since this time a limited number of production centers has in fact been identified. One of these centers is the Meropis workshop on the island of Kos. Dated to the end of the 5th / beginning of the 4th c. B.C., this workshop is the earliest known location to produce mushroom-rimmed amphorae[49]. Another workshop has been identified on the island of Kardamaina[50]. Mushroom-rimmed amphorae on this island exhibit both *monofide* and *bifide* handles[51].

Field surveys conducted by N. Tuna and his colleagues[52] at Reşadiye on the Datça Peninsula demonstrated the existence of mushroom-rimmed amphora production centers at Knidos. The earliest workshops that they found are assigned to the 4th c. B.C.[53]. This puts the produc-

44 Mantsevich (1947, 3) reiterated in: A. P. Mantsevich, Керамічна тара з кургану Солоха, Archeologia [Kiew] 17, 1975, 79. Doulgéri-Intzessiloglou – Garlan (1990, 386. 388) do not agree with Mantsevich's theory. However, Lawall (1995, 225) does not simply insist on this being a problematic identification but makes an argument to that effect with support from Zeest (1960), who likewise rejected Mantsevich's theory.

45 V. R. Grace, Wine Jars, in: C. G. Boulter, Pottery of the Mid-Fifth Century from a Well in the Athenian Agora, Hesperia 22, 1953, 101 f no. 147. However, Lawall (1995, 226) explicitly disagrees with both Attica and northern Greece as production regions for mushroom-rimmed amphorae.

46 Grace 1971, 67 pl. 15 no. 11.

47 Doulgéri-Intzessiloglou – Garlan 1990, 369–371. 376. 386–388.

48 Doulgéri-Intzessiloglou – Garlan 1990, 386. 388.

49 Kantzia 1994; Papuci-Władyka 1997, 48.

50 Georgopoulos 2001; V. Georgopoulos, The Archaeological Evidence of Coan Amphorae from Kardamaina (Ancient Halasarna), in: K. Höghammar (ed.), The Hellenistic *Polis* of Kos. State, Economy and Culture. Proceedings of an International Semiar Organized by the Department of Archaeology and Ancient History, Uppsala University, 11–13 May, 2000, Acta Universitatis Upsaliensis = BoreasUpps 28, 2004, 129–132; A. Hein – V. Georgopoulou – E. Nodarou – V. Kilikoglou, Koan Amphorae from Halasarna – Investigations in a Hellenistic Amphora Production Centre, JASc 35, 2008, 1050.

51 Kantzia 1994, 332–342 figs. 5–10 pls. 255. 256. 260.

52 Tuna et al. 1987, 48. In recent years ten different workshops that produced amphorae and other types of pottery have been identified on the Knidian peninsula, see Sakarya 2016, 57 f.

53 Tuna 2012, 41; Sakarya 2016, 64 f.; Sakarya et al. 2019, 325.

tion of Knidian produced mushroom-rimmed amphorae in line with production elsewhere. The Knidian produced mushroom-rimmed amphorae have a cylindrical neck that narrowed at the turn from the rim to the neck. Classified as Type I, this form is thought to be the first one produced at the Reşadiye workshop in Knidos, based on the presumed development of the form[54]. In addition to this data, studies carried out in Bybassos[55] and Burgaz[56] on the Marmaris and Datça peninsula determined that mushroom-rimmed amphorae were generated throughout the Rhodian *peraia* at the beginning of the 4th c. B.C.

The presence of mushroom-rimmed amphora fragments in a ceramic kiln at Klazomenai demonstrates that the form was also produced here, at least by the third quarter of the 4th c. B.C. E. Doğer drew attention to the fact that the mushroom-rimmed amphorae produced in Klazomenai were very similar to the so-called Solokha I form[57]. Unlike production at Knidos, Miletos, Samos and Klazomenai, the Rhodians do not appear to have produced this type of amphora in the early period (6th–5th c. B.C.)[58]. Instead, Rhodian produced mushroom-rimmed amphorae came to play an important role in the wine trade from the 4th c. B.C. onwards[59]. Based on the presence of Rhodian produced mushroom-rimmed amphorae at the Kyrenia shipwreck, Grace stated that Rhodian production commenced in the second half of the 4th c. B.C. despite the lack of evidence per se for production centers on the island[60].

Recent studies indicate that mushroom-rimmed amphorae were also produced in the vicinity of Ephesos[61] and Priene[62]. Identified as the Nikandros Group[63], the earliest production of this form occurred by the first quarter of the 3rd c. B.C. and continued suppress to the middle of the 1st c. B.C.[64]. Likewise, on Paros, mushroom-rimmed amphorae were produced in Ampelas from the 4th to the 2nd c. B.C. and represent the earliest form produced on this island. The amphorae produced in the Ampelas workshop have a wide ovoid body and hollowed short knob-toe like the examples from the Kos Meropis workshop mentioned above[65]. Recent

54 Tuna et al. 1987; for stamps, see A. K. Şenol, Knidos Amphoralarında (İ.Ö. 3. yüzyıl) Monogram Mühürler (M.A. diss. Ege University, Izmir 1995) 2 pl. 1 nos. 1. 2; N. V. Jefremov, Керамические клейма поздне-классического и эллинистического Книда. Протокнидскне клейма и клейма с носом корабля, Voprosy ėpigrafiki 7, 2013, 420. 422.

55 Şenol 2015, 195 f.

56 Sakarya 2016, 66.

57 Doğer 1986, fig. 18.

58 P. Dupont, Amphores commerciales archaïques de la Grèce de l'Est, PP 204–207, 1982, 208.

59 Monachov 2005, 69.

60 Grace 1971, 67 n. 41. See also Bass – Katzev 1968, 172; Monachov 2005, 70. However, unlike the forms produced at production centers mentioned above, the mushroom-rimmed amphora attributed to Rhodes appeared to have a long, thin ovoid body narrowing down from shoulders to toe and a hollowed, outward, triangular-profiled knob toe, see Katzev 1969, esp. the figure on p. 58; Lawall 2011, 674 f. pl. 281 no. 454.

61 Gassner 1997, 105–113; Lawall 2004, 179; Bezeczky 2013, 61.

62 Fenn 2016, 166.

63 This group was first identified by Grace, who worked on the finds of Delos. It was so named due to the appearance of the name »Nikandros« on a stamped handle of a similar amphora found at the Athenian Agora. In this study Grace associated this group with Kos due to its resemblance with the Koan amphora form and the presence of the same name stamped on these. This relationship was accepted for a long time, see V. R. Grace – M. Savvatianou-Pétropoulakou, Les timbres amphoriques grecs, in: Ph. Bruneau (ed.), L'îlot de la maison des comédiens, Délos 27 (Paris 1970) 365 f. For the productions in the vicinity of Ephesos and Priene, see Gassner 1997, 105–113; Lawall 2004, 179. 182; Fenn 2016, 166 n. 1652.

64 Bezeczky 2013, 61.

65 J.-Y. Empereur – M. Picon, Des ateliers d'amphores à Paros et à Naxos, BCH 110, 1986, 504 f. fig. 9 a–c.

studies at Erythrai[66] and Miletos[67] indicate that the mushroom rim began to use sometime in the 4th c. B.C.

As the assemblage of amphorae recovered from the Kyrenia shipwreck demonstrates, however, not all mushroom-rimmed amphorae are truly similar[68]. While the bulk of the cargo was represented by the mushroom-rimmed amphorae with long cylindrical neck that are attributed to Rhodes, it also contained the short-necked jars with a spherical body that Grace identified as Samian. Hence, the same cargo exhibited more than two mushroom rim types[69].

It is safe to conclude, therefore, that amphorae with a mushroom rim were produced and are encountered at numerous locations in western Anatolia and the Aegean islands from the end of the 5th to the 2nd c. B.C.[70]. When assessing the presence of kiln sites for this form at Knidos, on the Dodecanese, and the Cyclades, J.-Y. Empereur went so far as to suggest that the mushroom-rimmed amphora represented a *koine* type throughout the southeastern Aegean in the late Classical era[71]. In addition, the fact that so many locally produced amphorae in this region are compared to the Solokha I and/or the Nikandros types, despite variations in fabric and form, indicates that the mushroom-rimmed amphora represents an extra-regional type[72].

Lawall has observed that »regional boundaries« of commercial amphora production tend to evolve over time[73]. Amphora production generally on the west Anatolian coast and the nearby islands was extremely intense in the 6th c. B.C.[74]. However, amphora production declined in this region in the first half of the 5th c. B.C., and its production boundaries narrowed[75]. Production accelerated again in the second half of that century, particularly in western Anatolia, where cities in southern Ionia and Karia resumed production by the middle of the 4th c. B.C. Nevertheless, unlike the forms produced in this region in the Archaic era, regional production at this time focused predominantly on mushroom-rimmed amphorae. The reason for the extra-regional production of this seemingly common form has never been fully understood. Since the core production region for this form appears to have been southern Ionia and Karia, further investigation of the political history and economic and commercial relations of this region in the 4th c. B.C. seems warranted.

66 D. N. Carlson – M. L. Lawall, Towards a Typology of Erythraian Amphoras, Skyllis 7, 2005/2006, 35 f.

67 G. Jöhrens, Amphorenstempel aus Didyma, in: U. Wintermeyer, Die hellenistische und frühkaiserzeitliche Gebrauchskeramik auf Grundlage der stratifizierten Fundkeramik aus dem Bereich der Heiligen Straße, Didyma 3, 2 (Mainz 2004) 153–169.

68 For the mushroom-rimmed amphorae attributed to Rhodes in the wreck, see Bass – Katzev 1968, 172; Katzev 1969, esp. the picture on p. 58; Lawall 2011, 674–679 pl. 281; Katzev – Swiney forthcoming. For the Samian amphora, see Katzev 1970, 8; Grace 1971, 67 n. 41.

69 See one other: Lawall 2011, pl. 282 no. 212.

70 Lawall 1995, 223; Lawall 2002, 203.

71 Empereur – Picon 1986, 112; J.-Y. Empereur, Producteurs d'amphores dans les ateliers de Resadiye (péninsule de Datça), AST 6, 1988, 159–163. However, as Lawall points out, *koine* was a loose use of the term, see M. Lawall, Regional Styles of Transport Amphora Production in the Archaic Aegean, in: S. Handberg – A. Gadolou (eds.), Material Koinai in the Greek Early Iron Age and Archaic Period. Acts of an International Conference at the Danish Institute at Athens, 30 January – 1 February 2015 (Aarhus 2017) 289–312.

72 Lawall 1995, 229 f.

73 Lawall 2013, 106–108 figs. 4–7.

74 Sezgin 2012.

75 Lawall 2013, 109.

HISTORICAL CONTEXT

As Empereur has suggested[76], the mushroom-rimmed amphora appears to represent a *koine* type of extra-regional production in the 4th c. B.C., with production centered particularly in the southeast corner of the Aegean Sea and the opposite Anatolian mainland (see fig. 16). When we contemplate the historical circumstances of this region at this time, its domination by the Hekatomnid dynasty of Karia, members of which served, in turn, as satraps to the Persian king, becomes inescapable. The question remains whether the onset of this dynasty has anything to do with the development of this amphora type. Certainly, the 4th c. B.C. marks the inception of significant political transitions in this region. The earliest mushroom-rimmed amphorae came into being in the late 5th c. B.C. in the southeast corner of the Aegean Sea and the opposite Anatolian mainland, precisely at the time when the Delian League dominated by Athens lost its hold on the coasts of Karia and Lycia (third quarter of the 5th c. B.C.). Not only did the number of Karian cities that paid tribute to the Delian League diminish, but in one instance, an officer dispatched by the Athenians specifically to collect these revenues in Lycia, Melesandros, was killed[77]. There is sufficient evidence, therefore, to justify the suggestion that this was a moment of significant political rupture and reorganization. The question remains whether there is a connection between this political disruption and the expanded production of the mushroom-rimmed amphora. At the very least the latter development, that is, the emergence of the mushroom-rimmed amphora, coincided with the rise of Hekatomnid influence throughout this region. Like the amphora, the Hecatomnid dynasty emerged as early as the end of the 5th c. B.C. and reached its zenith during the 4th c. B.C.

To understand the likely impact of the Hecatomnid dynasty on the regional economy, we need to situate its authority in Karia. Located in the rugged highlands of southwest Anatolia, Karia was an isolated region situated between the Maeander River to the north and the Indus River to the southeast. By 392 B.C., the region succumbed to the control of a local dynast, Hekatomnos, son of Hyssaldomos, and remained securely in his family's grasp until 334 B.C.[78]. Hekatomnos is the first known local dynast to attain status as satrap in the Persian provincial administration[79]. During the 6th and 5th c. B.C., the region was controlled by the Persian satrap of Lydia, based at Sardis[80]. Although Strabo asserts that the Hekatomnids originated from Mylasa, prosopographical research demonstrates that the family descended from an earlier dynasty based in Kindya in the 6th c. B.C. This family apparently relocated to Mylasa

[76] Empereur – Picon 1986, 112.

[77] Although Athens reportedly continued to collect taxes from Karia after 425 B.C., the number of cities that complied continued to decrease. At the outset of the Ionian War (413–404 B.C.), the Peloponnesians invaded the territory of Attica and attempted to block the ships engaged in trade to Athens from the Karian/Lycian regions. On the subject, see M. Demir – A. Doğan, Atina Vergi Listeleri'ne Göre M.Ö. V. Yüzyılda Halikarnassos ve Çevresi, in: M. A. Erdoğu – A. Özgiray (eds.), 3. Uluslararası Her Yönüyle Bodrum Sempozyumu, 30 Ekim – 1 Kasım 2013 Bodrum (Izmir 2014) 306 f. 311. About Lycia, see Thuk. 2.69.2. For discussions about the subject, see Childs 1981, 62 esp. n. 33; Keen 1998, 125 f. The assassination of the Athenian commander Melesandros in Lycia indicates that the local dynasts had thrown in their lot with the newfound Persian-Sparta alliance, see Childs 1981, 62.

[78] Hornblower 1982, 1. 36; Kuhrt 2010, 221. During the reign of Mausolos, Hekatomnid control extended to Lycia in the southeast and to a large part of Ephesos and Lydia in the North, see Polyain. 6.8; 7.23.1–2; Lukian. D.Mort. 24; Olmstead 1948, 425; Metzger et al. 1979, 32 f. (Greek text). 53 f. (Lycian text) 136 f. (Aramaic text).

[79] Henry 2017, 350. Scholars disagree about the status of the Hekatomnids at this time; for discussion, see Weiskopf 1982, 221 f. esp. n. 1.

[80] Hornblower 1982, 19. 34. 35 nn. 108. 109.

by the end of the 5th c. B.C. and established this town as their dynastic residence[81]. Their status at this time remains uncertain. Diodoros provides the first historical record of Hekatomnos as »dynast of Karia« in relation to events that occurred in 391/390 B.C. (see below)[82]. However, Hekatomnos is rarely referred to as a satrap of Karia in the ancient testimony[83]. An inscription found at Iassos and probably dated to the period of Idrieus (351/350–344/343 B.C.) refers to the Hekatomnids as βασιλείς[84]. In the 4th c. B.C., Theopompos identifies Hekatomnos as the commander of the Persian navy (ναύαρχον δὲ Ἑκατόμνων, FrGrHist 2b 115 F103), which becomes important given the dynasty's sustained prominence at sea.

The changing political and military situation in western Anatolia enabled the Hecatomnid dynasty to rise to greater prominence. At the end of the Peloponnesian War (431–404 B.C.), the Spartans attempted to exploit the dissolution of the Athenian-led Delian League to their advantage by assuming control over the Aegean and western Anatolia. Alarmed by this and determined to stymie Spartan aggression, the Persian king, Artaxerxes II (ca. 395 B.C.), threw his support behind an alliance forged by Athens, Korinthos, and Argos. However much this benefitted the Greek allies, it did little to deter the Spartan offensive in coastal Anatolia. The Spartan king, Agesilaos, conducted a devastating campaign, plundering the Phrygian and Lydian satrapies at will and exposing the inadequacy of Persian defenses[85]. Following these calamities, the Persian king appears to have reorganized his administration in western Anatolia. He appointed Autophradates as satrap of Lydia[86], Strouthas as satrap of Ionia[87], and quite possibly Hekatomnos as satrap of Karia, since he is recorded as such in ca. 392/391 B.C.[88]. Artaxerxes may have done this to appease local sentiment in Karia. The early members of the Hekatomnid dynasty were already leading figures in the region: According to the Athenian Tribute List, their city of Kindya paid one of the highest tribute payments in all of Karia[89]. The wealth that this betrays may well explain their relocation to Mylasa and their assumption of leadership over the Karian *koinon*. Later in the 5th c. B.C., a predecessor of Hekatomnos, Pixodaros of Kindya, married the daughter of the king or *syennesis* of Cilicia[90], a prominent ally

81 Strab. 14.2.23; Hdt. 5.118.2. For further discussion, see Hornblower 1982, 2. 26. 55–59. 271; Weiskopf 1982, 224; Ruzicka 1992, 15 esp. n. 5; Briant 2002, 646. 668. Henry (2017, 351) argues that Mylasa was the religious seat of the *koinon* of Karia and that ancient references to the king of the Karian *koinon* and to the king of Mylasa were the same. A likely reason for the Hekatomnid relocation to Mylasa, therefore, was to secure the political authority over Karia as a region by seizing control of the sacred center of the *koinon*. In this manner, the ancestors of Hekatomnos conceivably became the priests who presided over the sanctuary as well as the hegemons of the Karian *koinon*. Concerning this subject, see Ruzicka 1992, 6. 16; Henry 2017, 352.

82 Diod. 14.98.3. For discussion, see Ruzicka 1992, 20.

83 Henry 2017, 352. The mention of »satrap« as Hekatomnos' title was recorded on a now lost fragmentary inscription (IK Mylasa 34.4).

84 M. Nafissi, Königliche Ansprüche der Hekatomniden: Das neue Monument für die *Basileis* Kariens aus Iasos, in: E. Winter – K. Zimmermann (eds.), Zwischen Satrapen und Dynasten. Kleinasien im 4. Jahrhundert v. Chr., AMS 76 (Bonn 2015) 22. 23.

85 In fact, Artaxerxes had his leading satrap, Tissaphernes, executed for his incompetence in 395 B.C., Xen. hell. 3. For comments on the subject, see Ruzicka 1992, 17.

86 Theop. FrGrHist 2b 115 F103.4.

87 Xen. hell. 4.1.25.

88 Hornblower 1982, 37 f. 137; Debord 1999, 125. 134; Ruzicka 1992, 17; Briant 2002, 646.

89 B. D. Meritt – H. T. Wade-Gery – M. F. McGregor, The Athenian Tribute Lists I (Cambridge, MA 1939) 312 f.

90 Hdt. 5.118.2.

of Artaxerxes who commanded the Cilician Gates. Accordingly, the appointment of Hekatomnos as satrap of Karia was a logical decision[91].

Under Persian tutelage, Hekatomnos assumed increasingly important status in the region. When Evagoras of Cyprus rebelled against Persia in 391 B.C.[92], Artaxerxes commissioned Hekatomnos along with Autophradates to suppress the rebellion. Now, if not earlier, Hekatomnos demonstrated the dynasty's naval capacity, assuming command of the Persian forces assembled in Cilicia. The fact that Hekatomnos played a dubious role in this conflict, secretly negotiating with Evagoras and his ally King Agesilaos of Sparta[93], is immaterial. His ability to engage in geo-politics at this level demonstrates his new-found status[94]. Apart from this, we have little information about his life or his passing. When enumerating a list of potential allies for the Greeks in their incessant struggle with the Persians in 380 B.C., Isocrates (*Panegyricus* 4.162) refers to him as the satrap of Karia (Ἑκατόμνως δ' ὁ Καρίας ἐπίσταθμος). Diodoros indicates that he died ca. 377/376 B.C.[95].

As the ruler of Karia, Hekatomnos was succeeded by his son, Mausolos. During his reign, both the dynasty and Karia attained their political and cultural zenith. Mausolos transferred his residence from its dynastic seat at Mylasa to the coastal settlement of Halicarnassos and through his synoecism of six neighboring Lelegian communities on that peninsula, he transformed the city into a burgeoning metropolis[96]. Mausolos' development of the city and its harbor was complemented by his construction of massive fortifications, thus, permanently replacing Mylasa as the capital of Karia. The early years of his reign were a prosperous time for other cities in Karia as well[97]. From this newly founded power base, Mausolos was able to play an even greater role in world affairs. While the suppression of Evagoras in the 370's B.C. had brought a momentary respite to Persian authority in the Mediterranean[98], by the early 360's B.C., the court intrigue that prevailed at Persepolis precipitated the Great

91 Concerning the rise of the Hekatomnid dynasty and Hyssaldomos, see Weiskopf 1982, 245 f.; Briant 2002, 560.

92 Diod. 14.98.1–4; Isokr. or. 9.60. For discussion, see Costa 1974, 55 f.; Stylianou 1988, 470; Hornblower 1994, 76.

93 Diod. 14.98.3–4; 15.2.3. Ruzicka (1992, 20) states that Artaxerxes had reserved Phoenician ships in Cyprus for a possible Egyptian expedition. However, Evagoras' rebellion blocked the Persians access to these ships. Artaxerxes had no choice but to order renewed shipbuilding. According to Diodoros (15.98.3), the new fleet was commanded by Hekatomnos. Ruzicka (2012, 69) argues that Hekatomnos' lack of a Karian navy made him the commander, rather than the supplier of these ships. For the relationship between Artaxerxes and Evagoras, see also Kuhrt 2010, 386; Ruzicka 2012, 69 f. 85. 95; Henry 2017, 355 f. For discussion of Hekatomnos' behavior during the Cyprus campaign, see Olmstead 1948, 399; Costa 1974, 55; Ruzicka 1992, 27–29. 70; Briant 2002, 560.

94 Hornblower 1982, 32; Henry 2017, 355.

95 Diodoros (16.36.2) gives 354/352 B.C. as the date of the death of Mausolos following a twenty-four-year reign. Pliny the Elder (nat. 36.30) assigns the date of his death to the second year of the 107th Olympic Games (ca. 351/350 B.C.). Regarding Pliny the Elder's problematic dating, see Hornblower 1982, 39 f., esp. n. 19.

96 Pliny the Elder (nat. 5.107) states that the inhabitants of Termera, Side, Madnasa, Uranium, Pedasa, and Telmissus relocated to Halikarnassos. However, he incorrectly attributed this action to Alexander the Great. Strabo (13.1.59), citing Callisthenes, attributed the synoecism to Mausolos and reported that he excluded Syangela and Myndos from this process. For comments on this matter, see Olmstead 1948, 426; Hornblower 1982, 52 f. 78 f. 82. 188; Ruzicka 1992, 33. 35, esp. n. 9; Debord 1999, 289; Briant 2002, 668.

97 Diodoros (15.90.3) refers to the cities of Karia as »noteworthy poleis« (πόλεων ἀξιολόγων κυριεύων). On this subject, see Olmstead 1948, 426; Hornblower 1982, 52 f.; Ruzicka 1992, 57. 62; Ruzicka 2012, 69; Pedersen 2013, 40.

98 Persian authority was restored in the Eastern Mediterranean (Cilicia, Phoenicia, and Cyprus) in the early 370's B.C., Ruzicka 1992, 56.

Satraps' Revolt across Anatolia (365–360 B.C.)[99]. Athens and Sparta seized on this opportunity to intervene once again in western Anatolia. Athenian intervention in the region in the mid 360's B.C. threatened to spill over into Karia and elsewhere, raising renewed fears of Athenian aggression[100]. Although the role of Mausolos in the Great Satraps' Revolt remains uncertain, the Hekatomnid dynasty proved to be one of the greatest beneficiaries of this moment of turmoil[101]. The dynasty began to project significant force at sea. On the instructions of the Persian king, Mausolos led a navy of one hundred warships to suppress the revolt of Ariobarzanes, the satrap of Hellespontine Phrygia[102]. This same Karian navy saw action at Khios during the Social War (ca. 357–354 B.C.)[103]. Many of these warships had probably been assembled earlier by Mausolos' father, Hekatomnos, in Cilicia during the earlier war against Evagoras. If so, these and other newly constructed warships were all likely anchored in the new military harbor constructed by Mausolos at Halikarnassos. The Hekatomnids may have constructed this fleet not so much for purposes of foreign interventions, but rather to maintain the security of the shipping lanes along the Karian coast and thereby to protect the emerging harbor-cities of Karia[104]. However, during the Social War Mausolos used his fleet not only to intimidate Athens[105] but also to assist, and if possible, to assert control over neighboring Aegean maritime communities, such as Khios, Kos, Rhodes, Kaunos, and Patara, all of which accepted Hekatomnid garrisons[106]. Due to Mausolos' intervention in the Social War, Athens was

[99] Diod. 15.90.1. Apart from Diodoros, the other ancient sources do not mention a revolt of the satraps in Anatolia. Nor does Xenophon mention the revolt in the *Hellenika* nor the *Agesilaos*. For extensive comments on the subject, see Olmstead 1948, 420–422; Hornblower 1982, 170–182; Weiskopf 1989; Debord 1999, 302–366; Hornblower 1994, 84–86.

[100] Ruzicka 1992, 57.

[101] After the Satrap Revolt failed, Mausolos appears to have expanded his territory. For comments, see Olmstead 1948, 425; Moysey 1975, 128 f.; Debord 1999, 366; Hornblower 1994, 87. However, for the suggestion that Mausolos supported this rebellion, albeit indirectly, see Hornblower 1982, 172–175. 181. Concerning Mausolos' behavior in this event, see Weiskopf 1989, 48. 65–68. Mausolos and Autophradates, the satrap of Lydia, were likewise implicated in the revolt of Orontes, the satrap of Mysia in 362 B.C. Even so, nothing came of it: Diod. 15.90.3. For discussion of the matter, see Hornblower 1982, 180; Ruzicka 2012, 140. 143. 156.

[102] Xen. Ag. 2.27. For detailed comments, see Weiskopf 1989, 45 f. 48; Debord 1999, 296; Briant 2002, 662. 669.

[103] Cities such as Byzantium, Khios, Kos, and Rhodes left the Second Athenian League at the beginning of 357 B.C., with the encouragement of Mausolos: Diod. 16.7.3–4; 16.21.1–22.2; cf. Isokr. or. 8.16. Demosthenes (or. 15.3) refers to Mausolos as the instigator of the rebellion. Berthold (1984, 30, esp. n. 39) states that Mausolos supported and benefited from this development. For additional discussion, see Berthold 1978, 130. 134; Berthold 1980, 43; Cargill 1981, 178 f. 193; Hornblower 1982, 183; Cawkwell 1984, 345, esp. n. 33; Schwenk 1997, 28. Athens commissioned a fleet of sixty warships to quell the rebellion and sent them to Khios under the command of Chares and Chabrias. When Athenian generals arrived at Khios, they encountered the fleet of Byzantium, Rhodes, Kos, and Mausolos. Chabrias died during the siege, and Athenian naval power declined: Diod. 16.7.3; Plut. Phokion 6.1. For discussion of the matter, see Cawkwell 1984, 346; Ruzicka 1992, 97; Schwenk 1997, 28; Ruzicka 2012, 156 f. Following this success, the allies looted Imros and Lemnos and then attempted to take Samos (Diod. 16.21.3).

[104] Ruzicka 1992, 39. The fleets of the Hekatomnids were also vital for the protection of the western border of Persia, and they needed good and safe naval bases from which they could operate in the Eastern Aegean Sea, see Pedersen 2015, 155. For the coastal adaptation and socioeconomic connectivity of Knidos, see Greene – Leidwanger 2019.

[105] Following the confrontation at Khios, the Athenians sent an envoy to meet with Mausolos, due to the threat he posed to the Athenian naval based at Samos (Demosth. or. 24.12).

[106] The rebellious allies (Khios, Rhodes) and Kos appear to have fallen to the control of Karia in this period. Mausolos established garrisons. For the Karian garrison supported by oligarchs in Rhodes, see Demosth. or. 15.15. For his dominance over Kos and Khios, see Demosth. or. 5.25. For discussion, see Cargill 1981, 183; Hornblower 1982, 214; Ruzicka 1997, 122. The literary sources and the historical context reveal a more or less direct involvement of Mausolos in the foundation of the new city of Kos, see E. Interdonato, Karian Influences in Early

forced to recognize the independence of these and other Aegean states, including Byzantium and Perinthos[107]. In other words, by this point if not sooner, the Hekatomnids projected naval power as far removed as the north Aegean. This put their navy potentially in direct contact with Philip II, king of Macedon. Much like Mausolos, Philip of Macedon was expanding the boundaries of his empire on the Greek mainland and doing that at the expense of Athens. Although there is no evidence of any tacit cooperation between the two powers, the intervention of Mausolos in the Social War can only have benefitted the ambitions of Philip of Macedon, without necessarily posing any risk to one another[108]. The likely concern of the Persian king for Mausolos' expanding naval activity must also be borne in mind.

After the death of Mausolos in 353/352 B.C., his sister/wife Artemisia succeeded him as ruler of Karia. Although it is uncertain whether she received the official title of satrap, we know that she collected the tribute payments from Karia and Lycia on behalf of the Persian king[109]. Furthermore, based on the evidence of an attempted rebellion at Rhodes, it is clear that Artemisia continued to dominate that community[110]. Artemisia survived Mausolos by only two years, and when she died in 351/350 B.C., she was succeeded by Mausolos' brother, Idrieus[111]. Since Idrieus was ordered by Artaxerxes III to suppress a rebellion on Cyprus, one can assume that he performed the duties of a satrap[112]. According to Diodoros, following the death of Idrieus in 344/343 B.C., his sister/wife, Ada I, assumed the Karian throne for four years[113]. This initial reign of Ada continued until 341/340 B.C., when her younger brother, Pixodaros, usurped the throne[114]. An Aramaic version of the trilingual stele from the Letoon in western Lycia (dated ca. 337 B.C.) characterized Pixodaros as satrap of Karia and Lycia[115]. However, the demise of Artaxerxes III in 338 B.C. led to yet another reorganization of the Persian satrapal system. These changes complicate our understanding of political developments in coastal south Anatolia. Previously, Artaxerxes III had initiated an assault on Egypt which had persisted with rebellion for many years. His forces retook the province in ca.

Hellenistic Kos: Political, Urban and Religious Aspects, in: P. Pedersen – B. Poulsen – J. Lund (eds.), Karia and the Dodekanese. Cultural Interrelations in the Southeast Aegean I. Late Classical and Early Hellenistic (Oxford 2021) 140. For possible Hekatomnid garrisons on islands such as Kalymnos, Nisyros and Telos, see Demosth. or. 15.27; Ps.-Skyl. 99. Recent archaeological studies have shown that the Hekatomnids built garrisons in important port cities such as Kaunos and Patara. For Kaunos, see Schmaltz 1994, 188. 192–201; for Patara, see Dündar – Rauh 2017, 563. Pedersen (2015, 155) states that Kos was under the influence of Hekatomnids before 366 B.C. In addition, Hornblower (1982, 128) suggests that Rhodes lost control of its *peraia* after 386 B.C., and that too fell to the Hekatomnids. Not only for military and political, but also for cultural relations of the Hekatomnids, see Pedersen 2013, 40.

107 Diod. 16.7.3; 16.22.2. Regarding this subject, see also Olmstead 1948, 426 n. 26; Cargill 1981, 183 f.; Hornblower 1982, 183; Ruzicka 1997, 121; Ruzicka 1998, 60.

108 Hornblower 1982, 220.

109 For discussion, see Ruzicka 1992, 100; Demir 2006.

110 According to Vitruvius (2.8.14–15), at this time Rhodes undertook a military expedition against Halikarnassos, challenging the authority of the queen. For discussion, see Berthold 1978; Berthold 1984, 31 f.; Hornblower 1982, 129; Debord 1999, 400. 407; Demir 2006, 66–68.

111 Diod. 16.45.7.

112 Idrieus appointed Phocion the Athenian as the commander of the campaign against Cyprus, Diod. 16.42.7.

113 Diod. 16.69.2.

114 Ada I was exiled to Alinda by her brother Pixodaros, see Diod. 16.74.2; Arr. an. 1.23.7–8; Strab. 14.2.17. For comments, see Ruzicka 1992, 123; Debord 1999, 404.

115 Metzger et al. 1979, 32 f. (Greek text). 53 f. (Lycian text). 136 f. (Aramaic text). Regarding this subject, see also Hornblower 1982, 46 f.; Ruzicka 1992, 125; Hornblower 1994, 55.

343/342 B.C.[116]. Artaxerxes III then turned his attention to Anatolia and appointed Mentor, a Rhodian mercenary commander, to execute his objectives. At this time, Mentor is referred to as »satrap of the coast of Asia and the chief commander in the war against those who revolt«[117]. Thus, Mentor had obtained superior authority throughout the region in question. Pixodaros clearly behaved as Mentor's subordinate when he furnished and personally commanded Karian forces during Mentor's military campaign in northwestern Anatolia[118]. Thus, the reigns of Ada and Pixodaros appear to indicate that while the Hekatomnid dynasty persisted as local representatives of the Persian king, they were abruptly supplanted in the Persian hierarchy by Mentor, who appears to have assumed over-all command of the region.

While the status of the Hekatomnids declined at this juncture, that of King Philip II in Macedon continued to rise, particularly in the north Aegean. Inevitably, this drew him into conflict with the Persian Empire, and by extension, with Pixodaros. When Philip undertook his momentous siege at Perinthos in the mid-340's B.C., Artaxerxes III ordered his satraps in the region to go to the assistance of that city[119]. Among these satraps who attempted to lift the siege was Pixodaros of Karia. However, this does not mean that Philip and Pixodaros communicated or came in contact with one another, their forces inevitably confronted one another, giving each king a keen awareness of the other's military capability. Despite the Persian assistance, Philip's siege prevailed and he quickly turned his attention to the conquest of Byzantium. While there is no evidence that Pixodaros participated in the defense of this latter city, several of his garrison towns, including Khios, Kos, and Rhodes, went to its assistance[120]. These cities possibly did this due to the assistance they had received from Byzantium during the earlier Social War. As maritime communities they may also have possessed vested interest in defending Byzantium's strategic position on the Bosporus. However, in view of the fact that Pixodaros controlled these cities with garrisons, it is inconceivable that they would have gone to the assistance of Byzantium without his tacit approval[121]. Hence, Philip and Pixodaros likely sparred a second time, however indirectly. Moreover, Philip undoubtedly took note of this Persian meddling on the western side of the Hellespont, particularly following his ultimately unsuccessful attempt to besiege Byzantium[122]. After his crushing victory over the Athenians and the Thebans at the Battle of Chaeronea in 338/337 B.C., accordingly, Philip announced his intention to carry his conflict to Persian territory and quickly dispatched an advance army of ten thousand troops across the Hellespont to coastal Anatolia[123]. Like the other Persian satraps, Pixodaros now seemingly stood on a collision course with Philip. However, as noted earlier, due to the death of Artaxerxes III in 338 B.C., the political situation within the Persian hierarchy became exceedingly complicated. This allowed considerable leeway for a local satrap like Pixodaros to maneuver independently.

116 Diod. 16.51.2.

117 Diod. 16.52.2, who describes his title as αὐτοκράτορα στρατηγὸν ἀποδείξας.

118 Diod. 16.50.7 says that Pixodaros returned to Karia at the head of this army. For comments, see Ruzicka 1992, 124 f.

119 Diod. 16.74.2; 16.75.2.

120 Diod. 16.77.2. Under the command of the Karian/Persian authorities, Rhodes sent warships in 340 B.C. together with Khios and Kos, to lift Philip's siege of Byzantium, see Berthold 1980, 44 f. About Philip's siege of Byzantium, see M. Arslan, İstanbul'un Antikçağ Tarihi. Klasik ve Hellenistik Dönemler (Istanbul 2010) 171–197.

121 For discussion, see Berthold 1984, 32.

122 Diod. 16.77.3.

123 Diod. 16.89.1–2.

According to Plutarch, Pixodaros suddenly approached Philip with a proposal of marriage in the spring of 336 B.C.[124]. This negotiation likely occurred at approximately the same time or just prior to Philip's dispatch of the advance forces to Mysia. Pixodaros offered the hand of his eldest daughter, Ada II, to Philip's eldest son, the mentally challenged Philip Arrhidaeus[125]. The particulars of this marriage proposal and its unfavorable outcome need not concern us here. The real question is: what did Philip and Pixodaros individually hope to achieve by this union? Philip's intentions appear more obvious. He was about to embark on a perilous military campaign against the Persian hierarchy in western Anatolia, and any opportunity to recruit the services of a Persian satrap in the region could be viewed as a windfall. In addition, through Pixodaros Philip gained the added benefit of potential access to the strategic harbor of Halikarnassos, something that would become extremely useful as his campaign progressed along the Anatolian coast. Pixodaros' ambitions remain less obvious and can only be surmised. Perhaps, having witnessed Philip's military capabilities at Perinthos, Pixodaros feared that the Persian resistance to Philip's invasion would prove inadequate, particularly given the confused state of affairs at Persepolis at this time. Sizing up the situation, he conceivably proposed the marriage as a means to survive the approaching conflict with his Karian territories intact, regardless of outcome. Alternatively, Pixodaros' marriage proposal may have been wholly unrelated to this approaching conflict. It may merely have been intended to initiate better relations with the king of Macedon in order to improve the position of Karian commercial elements in the north Aegean and Black Sea regions. Based on the earlier Hekatomnid interventions with Byzantium and Perinthos, Karian traders undoubtedly were already active in that region (see below). Still another scenario would posit that trans-regional dynastic marriages of this sort were extremely commonplace, too much so to warrant reading anything more into the proposal than a desire to secure a beneficial marriage with a powerful neighboring dynasty. Although this too seems logical, when viewed from the perspective of the Persian king, it remains difficult to see how the latter could have condoned such an alliance between one of his own satraps and his most menacing adversary at that time. Regardless of Pixodaros' intentions with this marriage proposal, in other words, its ramifications demonstrate that the Karian ruler was capable of independent, bold behavior.

With the collapse of the marriage proposal, all this came to naught. Philip was assassinated shortly thereafter, and the new Persian king, Darius III, sent a royal army to confront the Macedonian beachhead in Mysia. He also dispatched his relative Orontobates to Karia (and Lycia)[126]. Pixodaros died in 335 B.C., at which time we learn that Orontobates was his son-in-law having married the same daughter previously offered to Philip, Ada II[127]. Presumably, this marriage occurred between 336 and 335 B.C.[128]. Pixodaros' sister, Ada I, meanwhile, con-

[124] Plut. Alexandros 10.1–3.

[125] Philip responded positively to Pixodaros' proposal. The fact that his father chose his older brother instead of himself for this marriage deal led Alexander to concoct the notorious »Pixodaros affair« in which he secretly dispatched his friend Thessalus to Pixodaros to argue on his behalf. For discussion, see J. R. Ellis, Philip II and Macedonian Imperialism (Princeton, NJ 1976) 218; Ruzicka 1992, 131 f.; Debord 1999, 406; Briant 2002, 1042; I. Worthington, By the Spear. Philip II, Alexander the Great, and the Rise and Fall of the Macedonian Empire (Oxford 2014) 100.

[126] Diod. 17.7.1.

[127] Arr. an. 1.23.8; Strab. 14.2.17.

[128] Otherwise, we have to assume that this marriage occurred prior to the proposal made by Pixodaros to Philip, complicating matters even more.

tinued to reside in exile at Alinda. When the Persian army, Mentor, and the other satraps of the region assembled in Dascylium to confront the offensive of the new Macedonian king, Alexander II, Orontobates remained at Halikarnassos, hardening its defenses and dispatching reinforcements to Dascylium[129]. Following Alexander's victory at the Battle of the Granicus River, he advanced southward along the Anatolian coast, seizing harbors like Miletos to prevent Persian forces from landing behind his lines. Alexander arrived in Halikarnassos at the beginning of autumn in 334 B.C.[130]. Ada I, the sister of the late Pixodaros, descended from Alinda to appeal to Alexander to restore her to her rightful throne[131]. Instead of appointing a Macedonian satrap as usual, Alexander recognized Ada as »queen« (*basilissa*) of Karia[132]. Due to the spirited defense of Mentor and Orontobates, Alexander's siege of Halikarnassos endured for than a year. Ultimately the Persian leaders abandoned the harbor to Macedonian control. Since the focus of this paper remains limited to the economic policies of the Hekatomnid dynasty, our summary of historical events terminates here[133].

AN OVERVIEW OF THE ECONOMIC POLICY OF THE HEKATOMNIDS

From our discussion in the previous section, it seems evident that the Hekatomnid dynasty emerged from small beginnings to assume an increasingly powerful role in the region of Karia as well as in the Persian hierarchy. Its rulers not only transformed Karia and its harbors into a potent military entity, but they also extended their control to neighboring islands, such as Rhodes, Kos, and Khios. Under Mausolos, they extended their influence eastward in the Mediterranean, garrisoning Rhodes and Lycia, assembling fleets in Cilicia, and engaging in conflict in Cyprus. Hekatomnid forces also intervened in the north Aegean, possibly to insure the commercial interests of Karian traders in that quarter. Despite the seemingly diminished status of the last three Hekatomnid dynasts, Artemisia, Ada I, and Pixodaros, the marriage agreement between Pixodaros and Philip of Macedon indicates that Pixodaros remained capable of independent, highly opportunistic behavior. Moreover, the fact that the Persians responded to this event by enticing Pixodaros into closer cooperation with the hierarchy, specifically, through the marriage alliance with Orontobates, suggests that the Persians themselves recognized the worth of this dynasty and chose the route of appeasement rather than the more delicate alternative of removal.

The historical narrative furnishes undeniable, if superficial, testimony to the development of Karia both politically and economically at this time. To supplement this picture, we must resort to archaeological data capable of providing higher resolution regarding the economic transformation of the region under the Hekatomnids. Most of these developments occurred during the reign of Mausolos, who became the ruler of Karia in 377/376 B.C. Although Mau-

[129] While Orontobates' name goes unmentioned, a thousand mercenaries were sent from Karia, see Arr. an. 1.29.1. Ruzicka (1992, 134–136) proposes that Darius III put Orontobates in charge of the Hekatomnid navy in Halikarnassos and that this is why he is not mentioned among the satraps gathered at Dascylium.

[130] Diod. 17.24.1.

[131] Diod. 17.24.2–4.

[132] Arr. an. 1.23.7; Strab. 14.2.17.

[133] After the expedition of the Macedonians, there is no definite information about the situation in Halikarnassos, and Macedonian control does not last long after Alexander's departure from the region: Diod. 18.3.1; Strab. 14.2.17. See also Fabiani 2013, 327.

solos was faithful to the Persian king, when necessary, he, like Pixodaros, engaged in independent action to expand his power in the southeastern Aegean[134]. Mausolos' intentions were equally political, territorial, and economic[135]. To understand this, we must consider his accomplishments with respect to his development of Karian harbors (synoecisms), his control of trade routes, his management of monetary policy, and his development of the resource production in the Karian hinterland.

The fact that Mausolos moved his royal residence from the Karian religious center of Mylasa to an important port settlement indicates that he wanted to expand his control of maritime trade[136]. According to Vitruvius (2.8.11), commercial concerns were an important factor for Mausolos in making this decision. Diodoros (15.90.3) also described Halikarnassos as »the heart of the metropolis in Karia«. Halikarnassos' large-capacity harbor accommodated a sizeable number of ships, much as it does today[137]. Mausolos also created a hidden naval yard in the harbor of Halikarnassos where he could construct and moor warships capable of escorting merchant convoys at sea[138]. To facilitate the movement of trade, Mausolos improved the facilities of way stations such as Myndos, Bargylia, Iasos, and Latmos along the various coasts of Karia[139]. Beyond Karia, he enhanced the Karian position in international trade partly by forging agreements and/or concessions with cities throughout the wider Aegean and eastern Mediterranean. These included communities as far away as Knossos in the south, Erythrai and Khios in Ionia, Byzantium in the north Aegean, and Phaselis in eastern Lycia. But it was particularly his relationship with Rhodes that enabled Mausolos to gain a foothold in wider Mediterranean trade.

The island of Rhodes had served as a warehouse for commercial commodities from Cyprus, Egypt, and the East for centuries[140]. However, in the years following the synoecism of Lindos, Ialysus, and Kamiros to form the northern community of Rhodes in 408 B.C., its newly constructed harbor became an attractive stopping point for merchants and sailors arriving from throughout the eastern Mediterranean[141]. Given the nature of the winds and the currents, Rhodes came to enjoy a particularly strategic role in the Aegean grain trade

134 Schwenk 1997, 27.

135 For discussion, see Ruzicka 1992, 39 f. Polyain. 7.23.1; Theop. (FrGrHist 2b, 115 F. 299) remarked that Mausolos »poked everything for the sake of money« (Suda s. Μαύσωλος ... [Sch. Demosth. 15.3] ἄρχον Καρῶν. φησὶ δὲ αὐτὸν Θεόπομπος μηδενὸς ἀπέχεσθαι πράγματος χρημάτων ἕνεκα). Vitruvius (2.8.10) defined Mausolos as »he was chock-full of revenues«.

136 See Moysey 1975, 125. 170–172. 223; Weiskopf 1982, 256; Hornblower 1982, 52 f. 78 f. 188; Debord 1999, 289; Ruzicka 1992, 33; Briant 2002, 668. Weiskopf (1982, 257) reasonably points out that, unlike the other two satrapal centers of the Persians in Anatolia (Dascylium and Sardis), Mausolos relocated his administrative center from the interior to the coast, thereby, obtaining access to the sealanes.

137 The size of the harbor is ca. 600 × 450 m.

138 For the military harbor at Halikarnassos, see Vitr. 2.8.14–15.

139 Hornblower 1982, 100 f. 112. 319–323; M.-Ch. Marcellesi, Milet des Hécatomnides à la domination romaine. Pratiques monétaires et histoire de la cité du IV^{e} au II^{e} siècle av. J.-C., MilForsch 3 (Mainz 2004); Tuna 2012, 49–78; A. Herda – H. Brückner – M. Müllenhoff – M. Knipping, From the Gulf Latmos to Lake Bafa: On the History, Geoarchaeology, and Palynology of the Lower Maeander Valley at the Foot of the Latmos Mountains, Hesperia 88, 2019, 16. 61. 72. For Iassos and Mausolos, see Fabiani 2013, 327. A further example of a Hekatomnid phenomenon within a relatively well-defined area, one considers referring to the geographical distribution of the so-called Karian-Ionian lewis, studied by Pedersen (2015, esp. table A).

140 Demosth. or. 56.10; Casson 1954, 172; L. Casson, The Ancient Mariners. Seafarers and Sea Fighters of the Mediterranean in Ancient Times (New York, NY 1959) 114; Davis 2009, 220–223. 260. 288 figs. 2.10; 7.3.

141 Lykurg. 1.14–15; Berthold 1984, 22.

with Egypt[142]. For this reason, Athens, throughout the era of the Delian League, made sure to dominate the island, particularly after Sparta deprived Athens of its Black Sea sources of food and maritime supplies toward the end of the Peloponnesian War (405/404 B.C.)[143]. That's why Mausolos worked diligently to secure the cooperation of Rhodes, even if this required main force. Hornblower assumes that he succeeded in this regard particularly following the King's Peace in 387 B.C., when it is likely that Rhodes was forced to relinquish its control of its territories on opposite mainland, such as Tenedos. These territories presumably fell to the lot of the Hekatomnid dynasty in Karia, forcing the Rhodians to work more closely with them[144]. As noted above, renewed aggression by the Athenians, particularly during the Social War, compelled the Rhodians to accept a Hekatomnid garrison, making Mausolos' dominance complete. With control of both, this harbor and Halikarnassos, both situated at the southeast corner of the Aegean, Mausolos obtained a near monopoly over the movement of the Aegean grain trade with Egypt. It was virtually impossible for shippers engaged in this trade to avoid mooring at a Hekatomnid-controlled harbor[145]. As noted earlier, through Mausolos' contacts with Perinthos and Byzantium, his merchant fleets most probably gained access to important resources in the Black Sea.

Neighboring maritime communities naturally gravitated toward the emerging commercial centers of Karia. Following the demise of the Second Athenian Confederacy in 357 B.C.[146], some scholars argue that Rhodes, Kos, Iassos, Erythrai, Khios, and Byzantium formed a new confederation under the leadership of Mausolos[147]. The archaeological data obtained from these cities tend to support this argument. An undated inscription found in Erythrai reveals that Mausolos received special honors from that Ionian community[148]. Many states appear to have adapted their coinage to his specifications[149]. Following Mausolos' reign, the Rhodians began to strike tetradrachmae bearing a tiny depiction of a satrap's head, complete with Phrygian cap on the obverse and the Rhodian rose on the reverse. According to Hornblower, this shows that Rhodes had submitted to the authority of a satrap, most probably, the Hekatomnid one at Karia[150]. Similar numismatic data for Hekatomnid control survived on Kos[151]. At Miletos

142 Demosth. or. 56.3. 10; Aristot. oec. 2.1352a16–b25; Strab. 14.2.7–11; Semple 1921, 51. 52; Casson 1954, 169–173, esp. n. 33; P. Garnsey, Famine and Food Supply in the Graeco-Roman World. Responses to Risk and Crisis (Cambridge 1988) 110–113; F. S. Naiden, Ancient Supplication (Oxford 2006) 180. Keen (1993, 154) suggests that the reason for the expedition of Melesandros to Lycia during the Peloponnesian War may well have been the need for Athens to obtain access to the Egyptian grain as an alternative to the vulnerable Black Sea route.

143 Xen. hell. 2.2.1–2. 5–6; Plut. Lysandros 13.3–4; 14.1.

144 Regarding the Hekatomnids' control of the Rhodian *peraia* following the King's Peace, see Hornblower 1982, 128.

145 Ruzicka 1992, 38. For ancient Mediterranean navigation routes, see P. Arnaud, Les routes de la navigation antique. Itinéraires en Méditerranée (Paris 2005) 207–230; Davis 2009, 55. 78 f. 154. 271 fig. 3.4.

146 See above p. 135 n. 103.

147 Olmstead 1948, 425 f.; Pedersen 2015, 155. However, more evidence is needed for this view.

148 For discussion, see Hornblower 1982, 107, esp. n. 4; Fabiani 2013, 329.

149 R. H. J. Ashton, The Beginning of Bronze Coinage in Karia and Lykia, NumChron 166, 2006, 10 f.; Pedersen 2015, 155 n. 32.

150 Hornblower 1982, 129, for coin, see pl. 36 a.

151 Hornblower suggested that the Heracles portraits that appear on Koan silver coins may, in fact, represent Mausolos (Hornblower 1982, 134 n. 232). However, after the date of this hoard has been revised to 390–385 B.C., which is prior to Mausolos' ascension to the throne. For discussion, see R. H. J. Ashton – P. Kinns – K. Konuk – A. R. Meadows, The Hecatomnus Hoard (CH 5.17, 8.96, 9.387), in: A. Meadows – U. Wartenberg (eds.), Greek Hoards, Coin Hoards 9 (London 2002) 132; R. H. J. Ashton – N. Hardwick – P. Kinns – K. Konuk – A. R. Meadows, The

coins were struck bearing the abbreviated texts, ΕΚΑ[τόμνως] and ΜΑ[ύσσωλλος]. Although they remained on the Milesian standard, these coins are believed by some to demonstrate Hekatomnid influence in that city as well[152]. Further removed, Demosthenes mentions the activity of a merchant named Aratus, son of Athenippos of Halikarnassos in Athens. Aratus contracted a bottomry loan with local financiers to convey wine between Athens, Chalkidike, and the Black Sea[153]. This complex financial transaction required a thorough understanding and close familiarity with the business community of that great city. Similar transactions by Karian merchants abroad can be inferred from a surviving inscription from Phaselis. This document details an agreement between that community and Mausolos of Karia intended to resolve legal disputes arising from reciprocal payments of debts[154]. In addition, an inscription from Labraunda records that Mausolos granted the Knossians in Crete the right of *ateleia*, that is, the right to sail freely in and out of Karian ports with immunity from taxation[155]. These and other examples of monetary policy, legal transactions, commercial inducements, and trade concessions testify to the growing influence of the Hekatomnid dynasty in extra-regional trade.

In addition to his development of Karian ports, Mausolos encouraged the development of the region's interior as a means to generate more abundant surplus commodities. Several Karian poleis came into being at this time in the Karian interior, possibly to function as market and distribution centers for surpluses produced in the hinterlands[156]. In addition to traditional Karian strengths in agriculture and animal husbandry, the region underwent an extraordinary transformation through the cultivation of olive orchards, fruit trees, and vineyards during the Hellenistic era[157]. In recent years archaeological investigations on the Datça Peninsula have revealed that by beginning in the 4th c. B.C., the Knidians had transformed their agricultural landscape into highly productive groves and vineyards[158]. In other words, this transformation will have occurred during the reign of the Hekatomnids. To facilitate the transportation of Karian surplus commodities to nearby harbors, the Hekatomnids established specially maintained routes called ›royal roads‹ throughout the interior. According to Pseudo-Aristotle, any trees that extended towards a royal road or any fruit that fell on it was claimed by Mausolos as royal property and sold to his profit[159]. These roads undoubtedly facilitated the flow of commercial traffic, as well as military purposes, between the emerging settlements of the Karian

Pixodarus Hoard (CH 9.421), in: A. Meadows – U. Wartenberg (eds.), Greek Hoards, Coin Hoards 9 (London 2002) 240; Konuk 2013, 109, for coin, see pl. 2 no. 25.

152 Konuk 2013, 103 for discussion, esp. n. 12.

153 Demosth. or. 35 (Against Lacritus).

154 N. Tüner-Önen, Phaselis Antik Kenti ve Teritoryumu (PhD diss. Akdeniz University, Antalya 2008) 303 f.

155 J. Robert – L. Robert, Bulletin épigraphique, REG 86, 1973, 155 no. 407; Ruzicka 1992, 38 f.

156 For discussion, see Ruzicka 1992, 39.

157 Hornblower 1982, 8, esp. n. 39; Ruzicka 1992, 39. Prior to the 4th c. B.C. production was likely for subsistence purposes, see Sakarya et al. 2019, 331.

158 N. Tuna – N. Atıcı – İ. Sakarya, Burgaz Yerleşimindeki M.Ö. 4.-3. Yüzyıl Zeytinyağı ve Şarap Atölyeleri Üzerine Değerlendirmeler, in: Ü. Aydınğolu – A. K. Şenol (eds.), Antik Çağda Anadolu'da Zeytinyağı ve Şarap Üretimi. Uluslararası Sempozyum Bildirileri, 06–08 Kasım 2008, Mersin, Türkiye / Olive Oil and Wine Production in Anatolia during Antiquity. International Symposium Proceedings, 06–08 November 2008, Mersin, Turkey (Istanbul 2010) 199–212; Sakarya et al. (2019, 331) indicate that adaptations included conversion of hillslopes to terracing and improvements to shallow and rocky soil. The spread of vineyards generated surplus quantities of wine for export purposes. See also Tuna 2012, 30–36.

159 Ps.-Aristot. oec. 2.2.14b (2.1348a, 23–25).

interior and the various harbors along its coast[160]. Another local resource harnessed by the Hekatomnids was Karia's vast forests, not to mention, the high-altitude cedar forests of Lycia. These provided crucial timber and maritime supplies for Mausolos' growing navy and merchant marine[161]. These developments required nothing less than the complete transformation of the way everyday Karians went about their lives. Mausolos undoubtedly needed hundreds oarsmen and sailors to staff his merchant marine and naval fleet. This was probably the main objective to his synoecism of the Lelegian communities around Halikarnassos. Similar relocations most probably occurred among the farmers and herdsmen of the Karian interior, particularly in view of the archaeological evidence for landscape transformations throughout the region and the burgeoning prominence of the new capital city[162]. The available historical and archaeological evidence, thus, demonstrates an extensive economic transformation underway in Karia that coincides with the new-found power of the Hekatomnids.

CONCLUSION

To return to the potential significance of the mushroom-rimmed amphorae that emerged throughout the region at this time, the chronological issues and the dearth of identified production centers, discussed above, admittedly remain problematic. As some have argued, the slight differences visible in the design of the jar's mushroom rims may reflect specific typological and chronological developments. However, they may just as easily have resulted from contemporaneous production of a commonly utilized form by multiple independently working potters[163]. Indeed, the entire question is misleading because it fails to explain why so many production centers in Karia and throughout the wider region combined their energies to generate one single, characteristic, easily recognizable form, as opposed to a random number of locally distinct ones. Not only did 4th c. B.C. potters on Rhodes, at Knidos, and on Kos begin to generate a type of mushroom-rimmed amphora, but potters at Klazomenai, Erythrai, and on Samos also stopped producing earlier, well-known local types in order to begin generating this form. Equally significant is the fact that by the beginning of the 3rd c. B.C., this common production process came to an end. In its place, most of these polities began to generate their own local types, each one separate and distinct, and each one sustained over a long period of time. In fact, the Hellenistic Rhodian, Knidian, and Koan amphorae obtained such widespread visibility that they came to represent separate types or ›brands‹. The question remains why the mushroom-rimmed amphora achieved such common, if momentary, importance throughout the southwest coast of Anatolia and the Dodecanese during the 4th c. B.C.

We would propose that the mushroom-rimmed amphora reflects production and distribution of commodities generated under the aegis of the Hekatomnid dynasty in Karia. We have considered its economic transformation of Halikarnassos, neighboring Karian ports, and the Karian hinterland[164]. Moreover, we have discussed how the Hekatomnids aided and abetted

160 For discussion, see Ruzicka 1992, 39. For the Knidian peninsula, see Greene – Leidwanger 2019, 18.

161 Hornblower 1982, 8 n. 39. In the *Oeconomica*, a section on tax collection practices in Lycia indicates that Mausolos began to collect taxes in Lycia in the name of the Persian king, see Ps.-Aristot. oec. 2.2.14d (1348a, 28–34).

162 Ruzicka 1992, 40.

163 It is likely that the small differences visible in these forms result from the craftsmen's hands rather than from some typological/chronological consideration, see Rauh et al. 2013, 150 f. 164.

164 Tuna 2012, 30–36; Sakarya et al. 2019, 331.

Rhodes, Kos, Erythrai, Samos, and Byzantium during the Social War and lured them away from their long-standing association with Athens. As we mentioned, several of these trading communities, including Rhodes, Khios, Kos, Kaunos, and Patara, came to accept Hekatomnid garrisons[165]. Further abroad, the Hekatomnids engaged in commercial agreements and cooperation with trading communities in Lycia (Phaselis), Cyprus (Salamis), and Crete (Knossos). Pixodaros' participation in the Persian relief of Perinthos and Byzantium may reflect little more than his obligation to support the wishes of the Persian king. However, it is equally possible to infer a connection between his defense of these north Aegean trading communities and the presence of imported mushroom-rimmed amphorae that have surfaced in the Black Sea region[166]. In other words, regardless of whether we are discussing its production centers, its range of distribution, or its relatively brief chronology, the footprint of the mushroom-rimmed amphora matches that of the geo-political ambitions and activities of the Hekatomnids themselves. Indeed, the fact that the form goes largely out of use at the time of the Macedonian conquest of Anatolia (and the demise of the Hekatomnid dynasty) and the various component production centers go their separate ways indicates that the one guiding influence over the common production of this form was the hegemony of the Hekatomnid dynasty. While any argument about the fiscal objectives of this common production remains hypothetical, it is possible to suggest that the producers of the mushroom-rimmed amphora used the telltale feature of the rim as a ›visual cue‹ to alert the consumer to the origin of its contents in the southeastern corner of the Aegean[167]. Seemingly void of other forms of identifiers, such as amphora stamps or *tituli picti / dipinti*, each production center and perhaps each separate community of tax payers had to comply with varying local requirements that explain the differing capacities of the jars. In other words, the mushroom rim itself served as a marker of the form's ›geographical brand‹ and the Hekomnids' role in its development[168]. We hope that the discussion presented here sheds new light on and opens fresh pathways for the investigation of this poorly understood form.

Abbreviations:

Acar 2011	G. Acar, Patara-Tepecik Akropolü Bey Konağı Siyah Figürlü Seramikleri (M.A. diss. Akdeniz Univ., Antalya 2011)
Bass – Katzev 1968	G. F. Bass – M. L. Katzev, New Tools for Underwater Archaeology, Archaeology 21, 3, 1968, 164–181

[165] See above p. 135 f. n. 106.

[166] For the mushroom-rimmed amphorae found in the Black Sea Region, see Mantsevich 1947; Zeest 1960, 150–152 pls. 14–16; Doulgéri-Intzessiloglou – Garlan 1990, 386; S. Ju. Monachov, Греческие Амфоры В Причерноморье. Комплексы керамической тары VII–II веков до н. э. (Saratovskoye 1999) 242 f. pl. 98 nos. 1. 2 (Kurgan Solokha); 251 f. pl. 100 no. 1 (Elizavetovsky burial ground); 324 f. pl. 138 no. 8 (Kurgan M. Lepetikha); Monachov 1999, 163; Kac et al. 2002, 105 f. pl. 48 nos. Ad 80. 81; S. Ju. Monakhov – E. V. Kuznetsova, Overseas Trade in the Black Sea Region from the Archaic to the Hellenistic Period, in: V. Kozlovskaya (ed.), The Northern Black Sea in Antiquity. Networks, Connectivity, and Cultural Interactions (Cambridge 2017) 73–75.

[167] About the subject, see M. L. Lawall, Imitative Amphoras in the Greek World, MBAH 28, 2010, 49. 66; J. Moore, When Not Just Any Wine Will Do …? The Proliferation of Coan-Type Wine and Amphoras in the Greco-Roman World, MBAH 28, 2010, 101; Rauh et al. 2013, 152.

[168] In competition, brands establish differentiated and recognizable identities for goods and services, especially in skilled trades: A. Pike, Origination. The Geographies of Brands and Branding (New York, NY 2015) 29. 32.

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Abstract: Erkan Dündar, The Mushroom-Rimmed Amphora as an Indicator of Hekatomnid Regional Hegemony. An Analysis of Production Patterns Based on a Back-Filled Deposit at Patara

The excavations on the Tepecik settlement at Patara furnish important new evidence for the mushroom-rimmed amphorae in the 4th c. B.C. This evidence is based primarily on the ceramics recovered from a back-filled burnt soil layer in a deposit located on the Tepecik settlement. These finds include eight amphorae and two unguentaria. One of these amphorae is Lycian, and seven others belong to the mushroom-rimmed amphora type. Our analysis indicates that the mushroom-rimmed amphora reflects production and distribution of commodities generated under the aegis of the Hecatomnid dynasty in Karia and the mushroom rim could have been used as a geographical marker, a ›brand‹ by the Hekatomnids during the 4th c. B.C.

Keywords: Amphora – South Aegean – Patara – Karia – Hecatomnid Dynasty