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## THE LATE ROMAN AMPHORA WORKSHOPS OF PAROS ISLAND IN THE AEGEAN SEA Recent results

Paros is the third largest island of the Cyclades at the centre of the Aegean Sea. An episcopal seat already by the 4<sup>th</sup> century, it also belonged to the *Provincia Insularum*<sup>1</sup> and in the Justinianic years to the *quaestura justiniani exercitus*<sup>2</sup>. The comparatively little information for the history of Late Roman Paros can be enriched by the study of the pottery. In this paper are presented two Parian Late Roman Amphora kilns which add another important production center to the historical map of the Aegean commercial network of that period.

A few years ago, a rescue excavation took place at Lageri in Naousa, near Zoodhochos Pighi church. The excavation revealed some enormous amphora workshop wasters. A few architectural remains of rough walls and floors were connected with the buildings and the storehouses of a very active Late Roman port, near which those amphoras were produced and exported<sup>3</sup> (**fig. 1**). At the time, we suggested that the Parian workshops at this site produced two types of amphoras during the 6<sup>th</sup> and 7<sup>th</sup> century, right after the creation of the *quaestura exercitus* unit (536), the needs of which they obviously served and ceased to be active only when the settlements were abandoned around the middle of the 7<sup>th</sup> century<sup>4</sup> (**fig. 2**). These local types of amphoras, if not identical, shared several features of the well known

types LRA 1<sup>5</sup> and 13<sup>6</sup>. More specifically, the Parian type 1 has the typical characteristics of a cylindrical ribbed body, a cylindrical neck of around 8–10 cm in height, vertical handles and a rim diameter of 7–8 cm (**fig. 2,a–b**). The other type, the Parian type 2, has an ovoid body, elongated conical neck 9–10 cm high and arched handles with an oval section, as well as a rim with a maximum external diameter of 7–8 cm (**fig. 2,c–d**). The fabric of both amphora types is brown in colour (7 YR 6/6) and quite fine with several calcareous particles, mica flakes and other inclusions. Right after that, and in close proximity to the settlement, the excavation revealed also the location of a workshop complex with at least one rectangular ceramic kiln. A petrographical and chemical analysis of finds from both the settlement and the kiln was executed providing information on the characteristics of the local fabric<sup>7</sup>.

Very recently, another rescue excavation in the adjacent field of the same site revealed two quite well preserved amphora kilns. In this paper we present the preliminary results of their study. Only very few imported pottery sherds were found, among which were a few lamps and red slip ware sherds (**fig. 3**) of the 6<sup>th</sup> century, underlining the industrial character of the site<sup>8</sup>.

The quantity of amphoras brought to light from the kilns was enormous (**fig. 4**).

The dimensions of the kilns are around  $7.4 \times 3.9$  m (**fig. 5**) and  $7 \times 4.1$  m (**fig. 6**). Both of the kilns were built with local schistolithic rock. The exterior of their walls was supported by rubble masonry combined with clay mortar.

Also, both the kilns had a firing floor of a rectangular plan. A row of three square piers on each long side-wall supported the three arches which carried the floor of the upper chamber. The rectangular shape, as far as published examples from Greece are concerned, seems to be the most usual for the pottery kilns of the Late Roman Period<sup>9</sup>.

HIEROCLES, Synecdemus 686 (ed. E. Honigmann 1939, 32).

<sup>&</sup>lt;sup>2</sup> Under this unit, Caria, the Aegean Sea islands and Cyprus were suppling Moesia II and Scythia. G. Κιουπτζίαν, Receuil des inscriptions grecques chrétiennes des Cyclades. De la fin du IIIe au VIIe siècle après J.-C., (Paris 2000) 12–18; V. Penna, Κοινωνία και Οικονομία στο Αιγαίο κατά τους Βυζαντινούς Χρόνους (4°–12° αι.). In: P. Tselekas (ed.), Coins in the Aegean Islands. Mint, Circulation, Iconography, History. Proceedings of the Fifth Scientific Meeting, Mytilene, 16–19 September 2006, Οβολός 9 (Athens 2010) 11–42; A. Mitsani, Η χορηγία στις Κυκλάδες από τον 6° μέχρι τον 14° αι - Η μαρτυρία των επιγραφών. Epeteris tes Etaireias Byzantinon Spoudon 52, 2006, 391–446.

DIAMANTI 2015; DIAMANTI/KOUZELLI 2013 (forthcoming); DIAMANTI/ PETRIDIS/KOUZELI 2014, 184. – That rescue excavation, as well as the one of which the results are presented here, occurred with the assistance of A. Lamprakis and under the supervision of the former 2nd Ephorate of Byzantine Antiquities (now the Ephorate of Antiquities of Cyclades) of the Greek ministry of Culture. I sincerely thank my then director, dr. K. P. Dellaporta for her permission and encouragement for this research. The drawings in figs. 4, 8 and 9 are by N. Tsouris whom I warmly thank. I also warmly thank my colleague at the Ephorate of Antiquities of Cyclades G. Papadopoulou for giving me the first information about the site. It is worth noting here that in the past the occurrence of a large amount of pottery fragments in the area, suggested the existence of pottery storehouses or workshops belonging to the port of the Classical period: Photiou 1973, 10–11.

DIAMANTI/ KOUZELLI 2013 (forthcoming); DIAMANTI 2015, 541; 544.

RILEY 1979, 212–216; PEACOCK/WILLIAMS 1986, 185–187 (form 44); HAYES 1992, 63–64 (type 5); DIAMANTI 2010a, 50–51.

<sup>&</sup>lt;sup>6</sup> RILEY 1979, 231–232; PEACOCK/WILLIAMS 1986, 209 (form 54); HAYES 1992, 66, 71 (type 10, 29); DIAMANTI 2010a, 81.

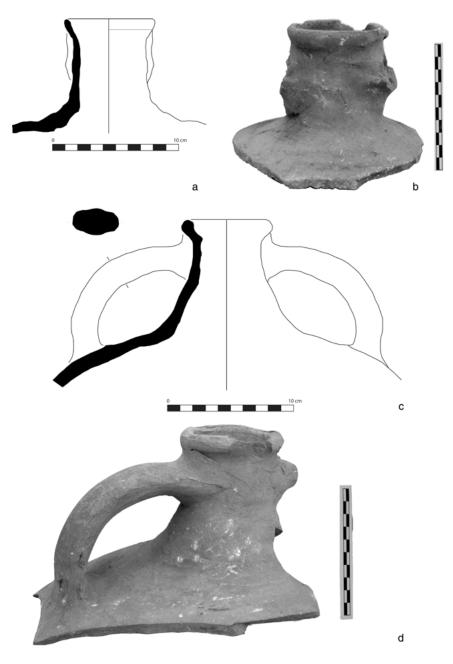
DIAMANTI/ KOUZELLI 2013 (forthcoming); DIAMANTI/PETRIDIS/KOUZELI 2014, 184.

<sup>&</sup>lt;sup>8</sup> J. W. Hayes, Late Roman Pottery (London 1972) 332–333; 337–338; Hayes 1992, 81–82.

RAPTIS 2012, 40–41; PETRIDIS 2013, 106–107. In the past amphora kilns, earlier but still of the Late Roman period, had been located at other sites in the Naousa area, five of which produced a quite big quantity of LRA 1's: EMPEREUR/PICON 1986, 501–507.



Fig. 1. Zoodhochos Pighi at Lageri, Naousa.



**Fig. 2.** Parian Amphora type 1 (a-b) and Parian Amphora type 2 (c-d).

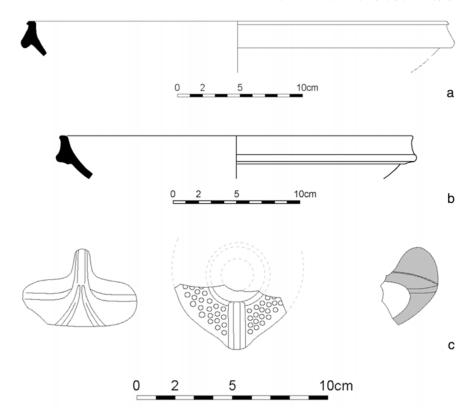


Fig. 3. Imported pottery of LRC, Form 3 Red Slip Wares (a-b) and Asia Minor lamp (c) of the 6<sup>th</sup> century

Finally, the floor of probably an auxiliary area, made from the local schistolithic rock, was revealed near the kilns and at the height of their arches (**fig. 7**) indicating the contemporary ground-level of the site.

The amphoras produced at the two kilns seem more similar to the type 1 of the Parian Late Roman amphoras, which we introduced while studying the nearby amphora wasters in the past: an amphora with a rim of 7-8 cm in diameter, a cylindrical neck of around 10 cm in height, not so vertical handles and a cylindrical ribbed body of century 20 cm diameter at its maximum (fig. 8a-b; 9a-c.d). Nevertheless, the usually hook-shaped interior of the rim resembles that of some of the Parian type 2 examples found in the previous excavation (fig. 9a-c). The further study of the material will shed more light on the characteristics of the morphology and fabric of these Late Roman Parian amphoras, while some of them are already in process of publication<sup>10</sup>.

The data provided so far by the excavation and its study in progress, indicates the dating of the Parian workshops of type 1 amphoras at Naousa from the second half of the 6th to the first half of the 7<sup>th</sup> century, as we had also assumed for the type 2<sup>11</sup>.

The Parian production center served by these kilns seems similar to the Koan one brought to light by the excavation of the University of Athens, at a Late Roman settlement at Halasarna, Kos which is also the only one known until now producing stamped amphoras: some of its examples bear the bust stamps of Emperors, as well as inscriptions which we connect with state officers such as Eparchs, especially the quaestor Iustinianus exercitus ("Eparch of the Islands") of the sources<sup>12</sup> and Kommerkiarioi. Both of the two types of Koan amphoras were produced at the end of the 6th to the first half of the 7th century,13 like the Parian ones. Further research on the Parian Late Roman amphora production will shed more light on the historical needs of these Aegean Sea massive productions of amphoras, which must be connected with the quaestura exercitus and the needs of the state for agricultural goods from the islands to support the army.

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C. E. ZACHARIAE (ed.), Ανέκδοτα. Theodori Scholastici breviarium

novellarum v. III (Leipzig 1843) 54-55. For the Koan LRA 1: DIAMANTI 2010a, 58-72; 203-206; 279-328: S/N

<sup>139-347</sup> Fig. 38-83 Pl. 5-10. - For the Koan LRA 13: EAD. 2010a, 80-114; 207-216; 331-399: S/N 359-617 fig. 87-139 pl. 11-19. - For the stamped Koan amphoras and in general for the subject of the stamped Late Roman Amphoras and the state control upon their production: EAD. 2008, 21-23; EAD. 2010a, 92-107; 164-169; 220-223; EAD. 2010b, 4; EAD. 2012, 2–3; OPAIȚ/DIAMANTI 2014, 59–60.

DIAMANTI/ KOUZELLI 2013 (forthcoming).

DIAMANTI 2015, 544.



Fig. 4. Amphora wasters near the kilns.



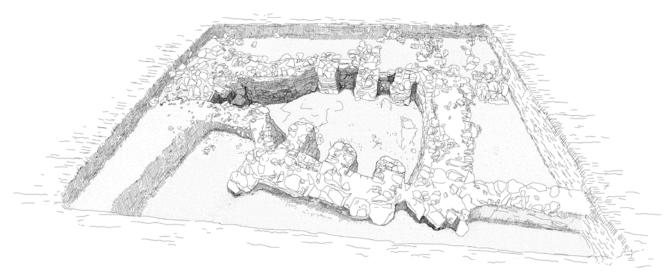


Fig. 5. One of two Parian Late Roman rectangular kilns.



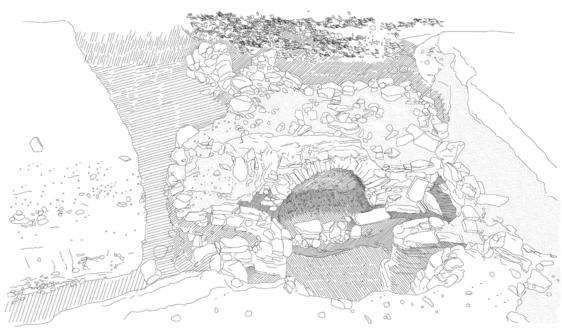


Fig. 6. The second kiln preserves one of the arches which supported the floor of the firing chamber.



Fig. 7. Floor near the kilns.

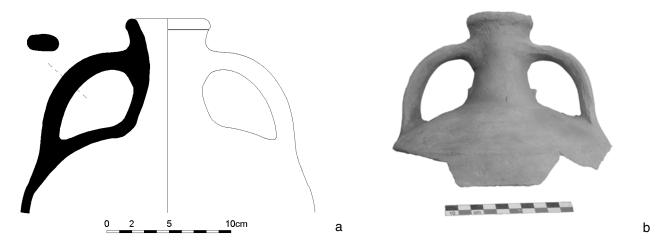


Fig. 8. Late Roman Parian Amphora type 1-Lageri Kilns.

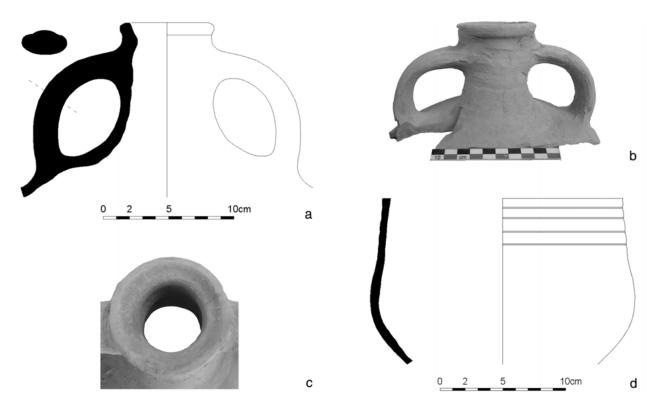


Fig. 9. Late Roman Parian Amphora type 1-Lageri Kilns.

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