Understanding changes in the supply pattern of Roman cooking pottery from Morphou Bay to Nea Paphos: evidence from the Paphos Agora Project

Abstract: The thin-walled cooking pottery of the early to late Roman period originating from the area of Morphou Bay in the northern part of Cyprus, excavated by the Paphos Agora Project of the Jagiellonian University in Kraków, is studied in this paper in order to shed new light on the nature of the supply patterns of this extraordinary class of pottery. The collected data—on the macroscopic characteristic of the ware and shape—and a chronological analysis as well as quantitative study of the assemblage have indicated a continuous presence of this group in Nea Paphos, reflecting perhaps some sort of special social requirements combined with an economic background.

Keywords: Nea Paphos, cooking pottery, Morphou Bay, early/late Roman period, macroscopic fabric analysis, typological studies

Nea Paphos in Cyprus was a large city of huge importance during the Hellenistic and Roman periods. Established in the late 4th or early 3rd century BCE, by the early Roman period (30 BCE–2nd century CE) the city reached a peak in its development, becoming the administrative center of a senatorial province, and the seat of the governor and proconsul. Several factors of different nature stood behind this advance, not the least a progressive Romanization of the citizens which led to many economic and social changes (Młynarczyk 1990), even as destructive earthquakes (dated to 76/77 and 126 CE)

Kamila Nocoń

Polish Centre of Mediterranean Archaeology, University of Warsaw

Polish Archaeology in the Mediterranean 30/2
Nocoń 2021: 231–249
https://doi.org/10.31338/uw.2083-537X.pam30.2.21

Acknowledgments
Macroscopic, typological studies, quantification and laboratory analyses of Early Roman cooking pottery were undertaken as part of the National Science Centre MAESTRO 6 grant (No. 2014/14/A/HS3/00283), directed by Prof. Ewdoksia Papuci-Władyka of the Jagiellonian University in Kraków, to whom I am sincerely grateful for permission to research and publish the material presented in this article. The Middle and Late Roman material was analyzed with funds from a National Science Centre Sonatina 4 grant (No. 2020/36/C/HS3/00173) implemented by the present author. The latter grant also covered work on the preparation of this article.
Warm words of thanks are addressed to Dr. Marina Solomidou-Ieronymidou, Director of the Department of Antiquities in Cyprus, for permission to study the Middle and Late Roman material from the Agora.

impacted the architectural reorganization of the city (Papuci-Władyka 2020). By contrast, the middle and late Roman periods (3rd–7th century CE) appear as the most enigmatic in the city's history. After several centuries of prosperity, serious changes of economic and cultural nature turned the city into a place apparently full of contrasts (Lichocka and Meyza 2001; Papuci-Władyka 2020: 79).

The Paphos Agora Project (PAP) of the Jagiellonian University in Kraków (see Papuci-Władyka and Machowski 2016; Papuci-Władyka et al. 2018; Papuci-Władyka 2020), in the field since 2011, has fleshed out this picture with new data, mostly reflecting the material culture of the period. This concerns in particular the many categories of imported pottery: tableware (Kajzer and Marzec 2020), amphorae (Dobosz 2020), lamps (Kajzer 2020; Kajzer et al. 2021) and cooking pottery (Nocoń 2020a; 2020b). Most of these imports came from *poleis* and production regions outside of Cyprus, with a considerably lower proportion of pottery sourced from different parts of the island (Papuci-Władyka and Miszk 2020: 511–515, Table 1).

Of particular interest among the artifacts found by the PAP expedition is a group of early to late Roman cooking pottery, exceptional in terms of vessel shape and technology: wheel-turned, thin-walled (thickness oscillating around 0.2–0.3 cm). John W. Hayes was the first to recognize it in Nea Paphos, in several deposits from the House of Dionysos. He described it as a presumed product of the city of Soli and distinguished two phases of production (Hayes 1991: 81); the second, from the 1st century CE, is best investigated and the sherds that could be related to it are presented in this paper.[1] Many scholars have linked the pottery more specifically with the neighborhood of Dhiorios, where pottery kilns have been uncovered (Catling 1972; Hammond et al. 2018). Several studies have shown that this category of pottery was present in Paphos from the 1st century BCE, but gained more popularity in the early Roman period and later again, in the middle and late Roman times (Hayes 1991; 2003; Giudice and Giudice 1999; Rowe 2004). The same trend is reflected at many other sites on the island: Soli (Westholm 1936), Salamis (Diederichs 1980), Aghios Philon (du Plat Taylor and Megaw 1981), Agia Napa-Makronisos (Hadjisavvas 1997), Panayia Ematousa (Wriedt Sørensen and Grønne 1992; Winther Jacobsen 2006), Troodos (Winther Jacobsen et al. 2013), Vassilikos Valley (Rautman 2016), Kourion's Amathous Gate Cemetery (Hammond et al. 2018) and Amathous (Touma 2018).

Thin-walled cooking pottery, although different from the Morphou Bay pottery in terms of fabric and vessel shape, was also produced in Nea Paphos, as demonstrated by Sandrine Élaigne (2014), based on a deposit of production waste from the early Roman period found on Fabrika Hill. So far, however, this fabric has not been evidenced among the cooking pottery collected from the PAP excavations (Nocoń 2020a; 2020b). Some

1 No examples from the earlier phase, dated from the 1st century BCE to the end of the 1st century CE, have been discovered so far among the cooking pottery from the PAP excavations. This phase was represented by a limited number of vessels: a casserole (Hayes 1991: 167, No. 16, Fig. 33:3) and a cooking pot (Hayes 1991: 171, No. 8, Fig. 29:7) from Well 17, found at a depth of 3–4 m, accompanied by coins (see Nicolaou 1990: Nos 16, 136).

similarity of fabric has been demonstrated between local-made cooking pottery and the thin-walled table pottery (RTW MG 6) from the Augustan period, represented so far only by bowls (Kajzer and Marzec 2020: 254–255).

The collection studied here includes 163 fragments or partly reconstructed vessels from the Agora (material excavated between 2011 and 2016), as well as from trial trenches (TT; material from 2017–2019, found only in TT.IV and TT.VIII). This study provides new data on forms, significantly supplementing the known repertoire of cooking pottery from Morphou Bay. Moreover, the discussed fragments come for the most part from contexts with well-established chronology, therefore enabling a more precise dating. A look at the diversity and scale of production of the pottery in question in the long term is also useful for illustrating the supply patterns in the case of the discussed imports.

METHODOLOGY

Systematic macroscopic examination of the fabric was based on a system proposed by Clive Orton and Michael Hughes (2013) with some modifications resulting from the nature of the PAP ceramic assemblage overall (Marzec, Kajzer, and Nocoń 2020). The description of the fabric includes information on the frequency, size and shape of both inclusions and voids; hardness; fresh break texture; feel of the surface; color of the surfaces; and characteristic of the fired core. Munsell Soil Color Charts (2019) were applied for color descriptions. All fragments were analyzed with the naked eye in daylight, with occasional use of a magnifying glass (10x).

The typology was based on diagnostic sherds, that is, rims and bases. The assemblage was divided into forms (cooking pots, casseroles and lids), then into types, in order, based on rim and bottom shapes.

The fragments were dated by comparison with published material from many different archaeological sites on Cyprus and/or the stratigraphy of the Agora and TTs, as well as a contextual dating of the finds.

A quantitative approach was employed to determine the proportions of the distribution of the pottery among the Agora and TTs, as well as to describe the frequency of vessel types and sizes.

Rim diameters were measured using rim charts; it was possible in the case of 149 fragments with rims preserved well enough to allow measurement.

ARCHAEOLOGICAL CONTEXT AND MATERIAL

The share of cooking pottery from Morphou Bay in the Agora and the trial trenches was established in relation to a contextual dating of the finds thanks to a thorough examination of site stratigraphy [*Table 1*]. Types dated to the early Roman period constituted 65% of the studied assemblage, while 35% of the sherds were assigned to the middle and late Roman periods.[2] Upon clos-

2 Several fragments found in late Hellenistic contexts were interpreted persuasively as later contamination (Miszk 2020: 127–128).

er inspection, the largest quantity of fragments assigned to the thin-walled pottery group was found in the East Portico (T.II), in rooms (R.) located in its central part. Fragments dated to the early Roman period were found mainly in contexts extending from the end of the 1st to the 2nd century CE. Most of them were found in rooms R.3 and R.5, in contexts linked to the last occupation phase of the East Portico until the reign of Hadrian (Miszk 2020: 151–152). 27 fragments came from strata in T.II dated to the 2nd century CE. A few sherds were also collected from the upper contexts in T.I, T.III and T.I, from stratigraphic sequences corresponding to the early Roman period. Examples from the 3rd century CE or later were found mostly in mixed surface layers in T.II, however with very modest traces of human activity dated to the late Roman period (Miszk 2020: 155). Compared to the Agora, the TTs yielded a limited number of sherds from strata corresponding to the late Roman period. Cooking pottery from Morphou Bay was recorded in several contexts (301, 302, 304, 332–334, 344) in TT.IV which is located in the vicinity of the tombs in the area called Ammoi, and the hypothetical line of the northern city walls (Papuci-Władyka 2020: 83, Fig. 5:22). The main structure (S.31) here is a lime kiln, probably dating to the late Roman or early Byzantine period (PAP Archive; Papuci-Władyka 2017; 2018). A few fragments representing this group were discovered in the area of TT.VIII located beyond the northwestern corner of the Agora (Papuci-Władyka 2019).

The preservation of the bulk of these pottery remains is very fragmentary. Only in a few cases could a complete vessel, or profile at least, be reconstructed.

Table 1. Chronological distribution of cooking pottery from Morphou Bay in the trenches in the Agora and the Trial Trenches

Context date CE)	Trenches in the Agora														Trial trenches		Total
	T.I	T.II											T.III	T.IV	TT.IV	T.VIII	
			R.1	R.2	R.3	R.5	R.9	R.10	R.15	R.16	R.18	R.21		R.30			
1st and 2nd c.						1		1					5	2			9
1st c.				1									5				6
Late 1st c.– –2nd c.	2																2
First half of 2nd c.					12				4		4		2	3			25
2nd c.		27			18	11			2				5	1			64
Middle & Late Roman		14	1		1	4	6	1	1	1		1	10	4	11	2	57
Total																	**163**

CHARACTERISTIC AND PROVENANCE OF THE FABRIC

Based on macroscopic observation the fabric was found to be characterized by the presence of very few coarse (LS SA)[3] yellow inclusions visible on the external surface. Revealed in a fresh break were a few to medium frequent (HS R and HS SA) yellow, black, and orange inclusions, as well as frequent fine (HS SR) white, yellow, and black inclusions. Voids in the fresh break are few to frequent, fine to medium, rounded in shape. The fabric is fairly hard, the fresh-break texture is hackly, the surface feels smooth save for some irregularities under the finger.

In terms of clay color, this fabric is not homogeneous [*Table 2*]. The differences in the firing seem to be correlated with the forms and their chronology. The color of the external and internal surfaces, as well as of the fresh break, of cooking pots and lids is reddish brown to red, indicating firing in an oxidizing atmosphere. However, a lid from the early Roman period has a fairly wide (about 1 cm), very dark grey (5YR 3/1) band on the inside of the rim. As for casseroles, the color of the external and internal surfaces ranges extensively between dark grey, very dark gray and red,

Table 2. Differences in the firing; fired core types: 2 – oxidized, 4 – not fully oxidized, 8 – fully reduced (After Orton and Hughes 2013: Fig. 13.1)

Period	Shape	Color external surface	Color internal surface	Color fresh break	Fired-core type	Quantity
Early Roman	Cooking pots	reddish brown 2.5YR 4/3	red 2.5YR 4/6	reddish brown 2.5YR 4/3	2	29
	Casseroles	very dark grey 5YR 3/1	red 2.5YR 4/6	red 2.5YR 4/6	2	61
		red 2.5YR 4/6	red 2.5YR 4/6	grey 2.5YR 5/6	4	5
	Lids	red 2.5YR 4/6	red 2.5 YR 4/6	red 2.5YR 4/6	–	11
Middle to late Roman	Cooking pots	reddish brown 2.5YR 4/3	reddish brown 2.5YR 4/3 to red 2.5 YR 4/6	red 2.5YR 4/6	2	13
	Casseroles	dark grey GLAY 1 4/N	reddish brown 2.5YR 4/3	reddish brown 2.5YR 4/3	2	28
		reddish brown 2.5YR 4/3	dark grey GLAY 1 4/N	dark grey GLAY 1 4/N	4	1
		red 2.5YR 5/6 to reddish brown 2.5YR 4/3	red 2.5YR 5/6	red 2.5YR 5/6	2	13
		dark grey GLAY 1 4/N	dark grey GLAY 1 4/N	red 2.5YR 5/6	2	1
	Lid	red 2.5YR 4/6	red 2.5YR 4/6	red 2.5YR 4/6	2	1

3 Abbreviations used in the description of inclusions: HS – high sphericity, LS – low sphericity; SA – subangular, SR – subrounded, R – rounded (based on Orton and Hughes 2013: 283, Fig. A.5).

and the fresh break is reddish brown, red or dark grey. This reflects different firing atmospheres, especially in the middle and late Roman periods.

Thin section petrography and elemental analyses (WD-XRF) were performed by Edyta Marzec on seven fragments of early Roman date uncovered on the Agora.[4] The examined fragments turned out to belong to a group matching in mineralogical and elemental composition the area of northern Cyprus, including the region around Morphou Bay, where the cities of Soli and Dhiorios are located (Marzec et al. in preparation). The production of this group of pottery could be linked to other locations in Cyprus (Hammond et al. 2018; for a discussion of this issue see Marzec et al. in preparation).

FORMS AND TYPES

EARLY ROMAN PERIOD

Three forms of cooking pottery are known from the early Roman period: cooking pot, casserole and lid, all of them coming in a few types [*Table 3*].

The first type of cooking pot with rims of triangular section, CP.1 [*Fig. 1:1–4*], was introduced on the Agora by the end of the 1st century CE and remained popular until the end of the 2nd century CE. One cooking pot [see *Fig. 1:4*] was found in one context with a casserole (PAP17/II/1624/P10) and a lid (PAP17/II/1624/P12) of Western Cyprus make, dating to the 2nd century CE (Nocoń 2020b), corroborating thus the dating of this type. The other type, CP.2, is a cooking pot with a short projecting rim [*Fig. 1:5*]. Cooking pot rim diameters indicate the existence of several variants. The smallest pots have a rim diameter between 11 cm and 15 cm, medium ones are between 16 cm and 20 cm, while the most common diameter is about 18 cm, suggesting that this was a standard size for these vessels. Only a few fragments are larger than 20 cm in diameter.

Casseroles of type C.1 have a wide rim with two shallow grooves [*Fig. 2:1–3*]. Other characteristic features include two curved handles (rounded in cross-section), an outward projection where the wall meets the conical-shaped bottom [*Fig. 2:4*]. Rim diameters range between 19 cm and 22 cm (most commonly 20 cm), rarely 24 cm; however, smaller examples (14 cm and 16 cm) were available as well. These vessels appeared for the first time at the end of the 1st century CE, becoming prevalent in 2nd century CE contexts. Casseroles of the C.2 type are represented on the Agora by a single fragment with the rim facing strongly inwards [*Fig. 2:5*]. The nearest parallel from the cemetery site at the Amathus Gate in Kurion (Hammond et al. 2018) indicates that the walls turned in strongly toward a slightly convex bottom. It is dated broadly from the 1st to the 3rd century CE.

The third form is a lid, type L.1, with a profiled rim and fine, profiled knob that is circular in section [*Fig. 2:6*].

4 Samples from seven sherds representing different forms of early Roman date from the Maloutena excavation were also provided by M. Miziołek; see Marzec et al. in preparation.

Table 3. Range of forms and types of cooking pottery from Morphou Bay in a chronological breakdown; CP – cooking pot, C – casserole, L – lid

Period	Dating	Type	Quantity	Fig.	References (if any)
Early Roman	End of 1st–2nd centuries	CP.1	28	1:1–4	Diederichs 1980: 45, Pl. 15:170; Hadjisavvas 1997: 107, Fig. 88:12, 115, Fig. 95:11, 128, Fig. 109:18, 137, Fig. 116:27; Hayes 2003: 476, Fig. 18:186; Rowe 2004: 172–173, Fig. 66:5; Hammond et al. 2018: Fig. 7:1,2
		CP.2	1	1:5	Hayes 1991: 197, No. 9, Fig. 36:3; Hadjisavvas 1997: 115, Fig. 95:18; Giudice et al. 2001: 275, Fig. 11:3(D3)
		C.1	65	2:1–4	Hayes 1991: 202–203, No. 10, Fig. 36.5; Wriedt Sørensen and Grønne 1992: 199, Fig. 9,48; Hadjisavvas 1997: 56–57, Fig. 41,1 and 3; Rowe 2004: 182–183, deposit 90, Inv. 7478, Fig. 74.3. and Inv. 7156, deposit 86; Giudice and Giudice 1999: 289, 290, No. 30, Fig. 3d:6; Winther-Jacobsen 2006: 234–235, Fig. 125, CW5c.18, CW5c.19, CW5e.21; Hammond et al. 2018: Form C4, Fig. 5:1–3; Nocoń 2020a: Pls 101:KW55, 102:KW58, 103:KW73
		C.2	1	2:5	Hammond et al. 2018: 117, Form C17, Fig. 5:6
		L.1	11	2:6	Catling 1972: 37–38, Fig. 23:P463; Hadjisavvas 1997: Fig. 41,1 and 3; Rowe 2004: Fig. 77:1; Nocoń 2020a: Pl. 100: KW44
Middle and late Roman	3rd century	CP.3	2	3:1	Hayes 2003: 481, Fig. 19:199
		CP.4	9	3:2	-
		CP.5	1	3:3	Hayes 2003: 481, Fig. 19:200
		C.3	7 rims 10 bottoms	4:1 4:5–8	Catling 1972: Fig. 23:P109
		C.4	3	4:2–3	-
		C.5	1	4:4	Du Plat Taylor and Megaw 1981: 221, Note 381, Fig. 45; Giudice et al. 2001: 275, Fig. 11:5(D5)
		L.2	1	4:9	Catling 1972: 37–38, Fig. 23:P463; Rowe 2004: Fig. 77:1
	4th–5th(?) centuries	C.6	1	5:1	Similar to Winther Jacobsen et al. 2013: 147, No. TPC426
		C.7	8	5:2–4	Catling 1972: 39, Fig. 24:P448, 47, Fig. 29:346; Rowe 2004: Fig. 75:5; Rautmann 2016: Fig. 14.60-P.25; Nocoń 2020a: Pl. 103:KW72
		C.8	11	5:5	Catling 1972: 38, Figs 23:P126, 20:436; Winther Jacobsen 2006: 235–236, No. CW5d.20; Winther Jacobsen et al. 2013: 185, No. TPC688
		C.9	1	5:6	–
	6th–7th centuries	CP.6	1	5:7	Rautmann 2016: 143, Fig. 5:10, 14.60-P.25; Touma 2018: Pl. 9:E79
		C.10	1	5:8–9	Close to Catling 1972: Fig. 29:P436

Other fragments of lids (with a rim diameter between 17 cm and 21 cm) were found in contexts from the early Roman period, with an indication to the 2nd century CE, however the occurrence of the type also in the 3rd century CE is not excluded, based on finds from the excavation of the Theater in Nea Paphos (Rowe 2004: Fig. 77:1). The lids probably formed a set for the casseroles of type C.1 discussed above, as suggested by the finds from the 2nd-century-CE tomb in Agia Napa-Makronisos (Hadjisavvas 1997: 56–57, Fig. 41, 1 and 3).

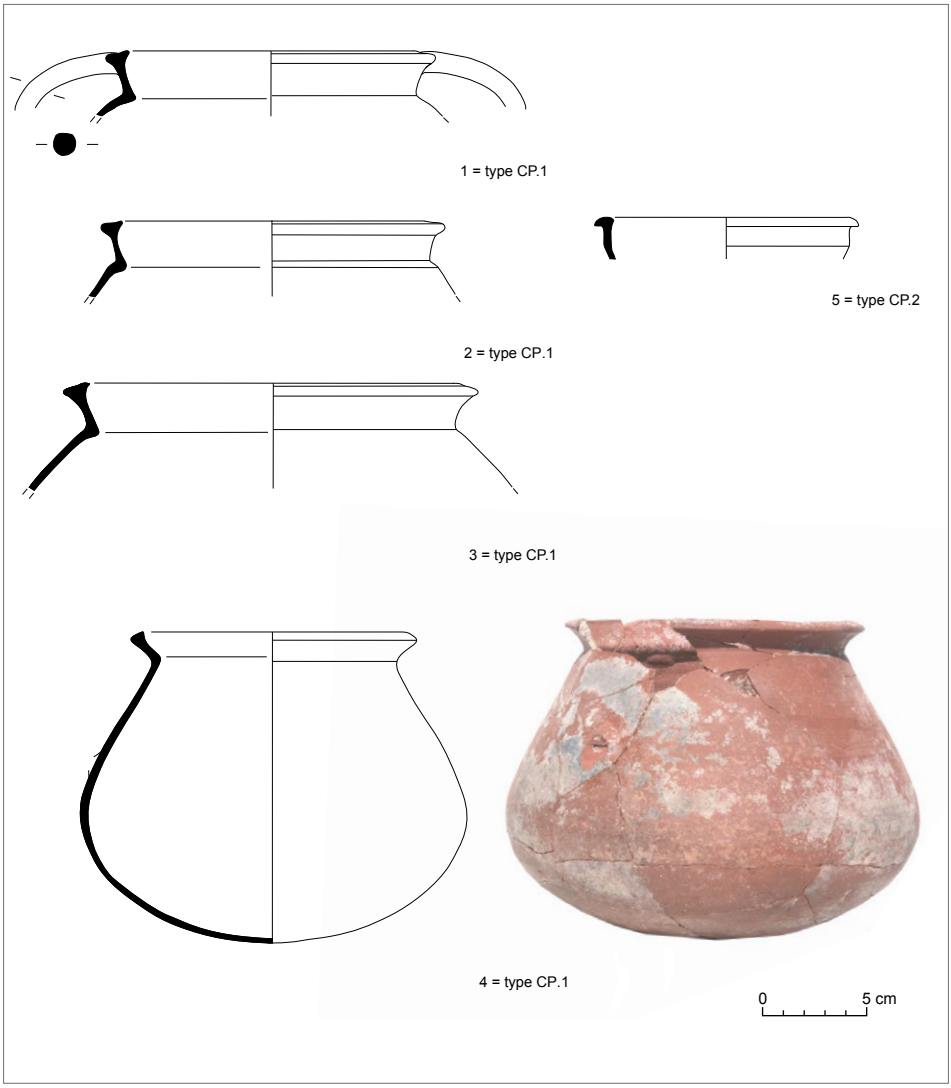

Fig. 1. Cooking pots of early Roman date from Morphou Bay (PAP, Institute of Archeology Jagiellonian University | photo K. Nocoń; drawing A. Jurkiewicz-Cora, K. Nocoń; digitizing K. Nocoń)

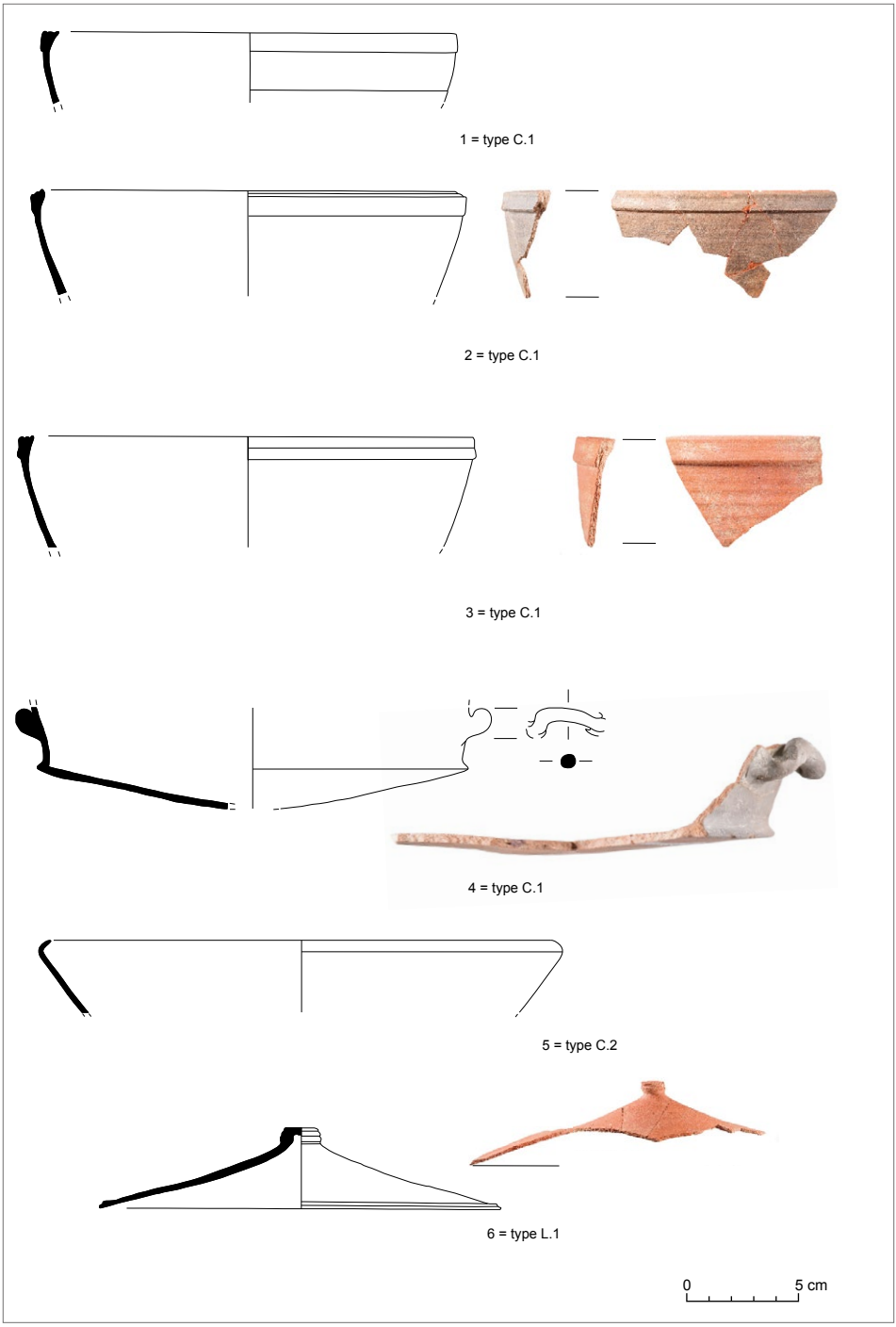

Fig. 2. Casseroles and lid of early Roman date from Morphou Bay (PAP, Institute of Archeology Jagiellonian University | photos A. Oleksiak; drawing A. Jurkiewicz-Cora, K. Nocoń; digitizing K. Nocoń)

MIDDLE AND LATE ROMAN PERIODS

Most of the fragments come from the 3rd century CE [see *Table 3*]. This chronological phase is represented by cooking pots of two types, CP.3 and CP.4 [*Fig. 3:1–2*], which were found mostly on the Agora. Another type, CP.5, is a cooking pot with a long projecting rim [*Fig. 3:3*]. The rim diameters indicate that the pots were produced in two sizes: smaller, the rims oscillating between 13 cm and 16 cm, and larger with rim diameters close to 20 cm. Close parallels are to be found at Saranda Kolones, in Deposit 8 from the 3rd century CE (Hayes 2003: 448, 480–481).

Casseroles of the C.3 type from this period differ in the particulars of rim shape [*Fig. 4:1*]. Type C.4 is characteristic because it lacks the grooves [*Fig. 4:2–3*]. Type C.5, with a strongly widened rim with two grooves and a slight folding of the wall [*Fig. 4:4*], is rare in the assemblage. Rim diameters vary from 21 cm to 24 cm (one example of 27 cm), suggesting that the vessels became bigger with time. The main difference lies in the bottom of casseroles of type C.3, which became shallower [*Fig. 4:5–7*] or flat [*Fig. 4:8*]. Parallels from Dhiorios suggest that these vessels were quite wide and shallow (Catling 1972: Fig. 23:109), while the Nea Paphos finds include very deep casseroles dating from this period; their provenance could be linked to the Morphou Bay production center (Hayes 2003: 481, Fig. 19:195).

There is also a fragment of a lid (L.2) with a knob dating from this period [*Fig. 4:9*].

Cooking pottery from the later phase of the late Roman period are not frequent in the Agora and the TTs and in most cases only small sherds were found. Moreover, casseroles prevail among the fragments with hardly any cooking pots attested.

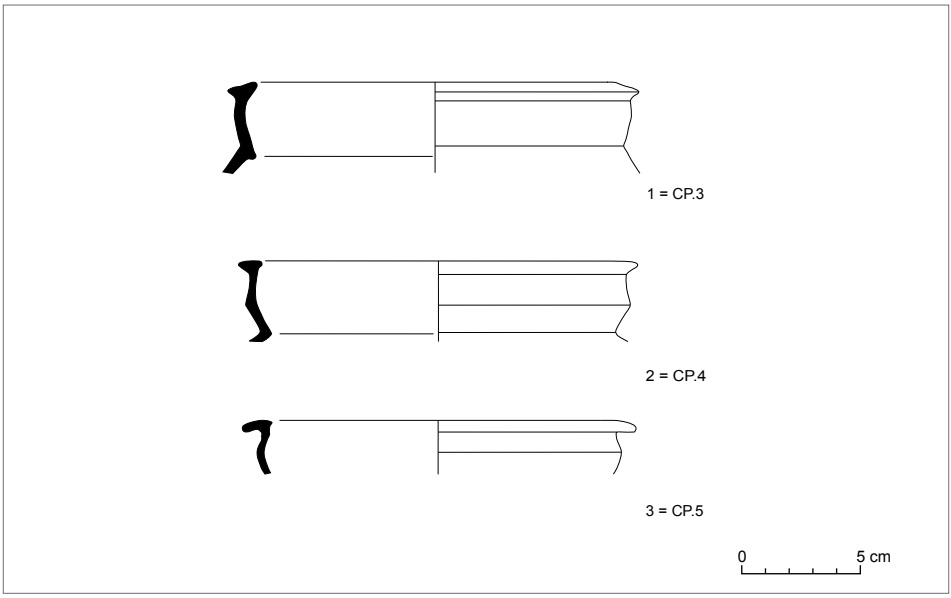

Fig. 3. Cooking pottery types from Morphou Bay from the 3rd century CE (PAP, Institute of Archeology Jagiellonian University | drawing and digitizing K. Nocoń)

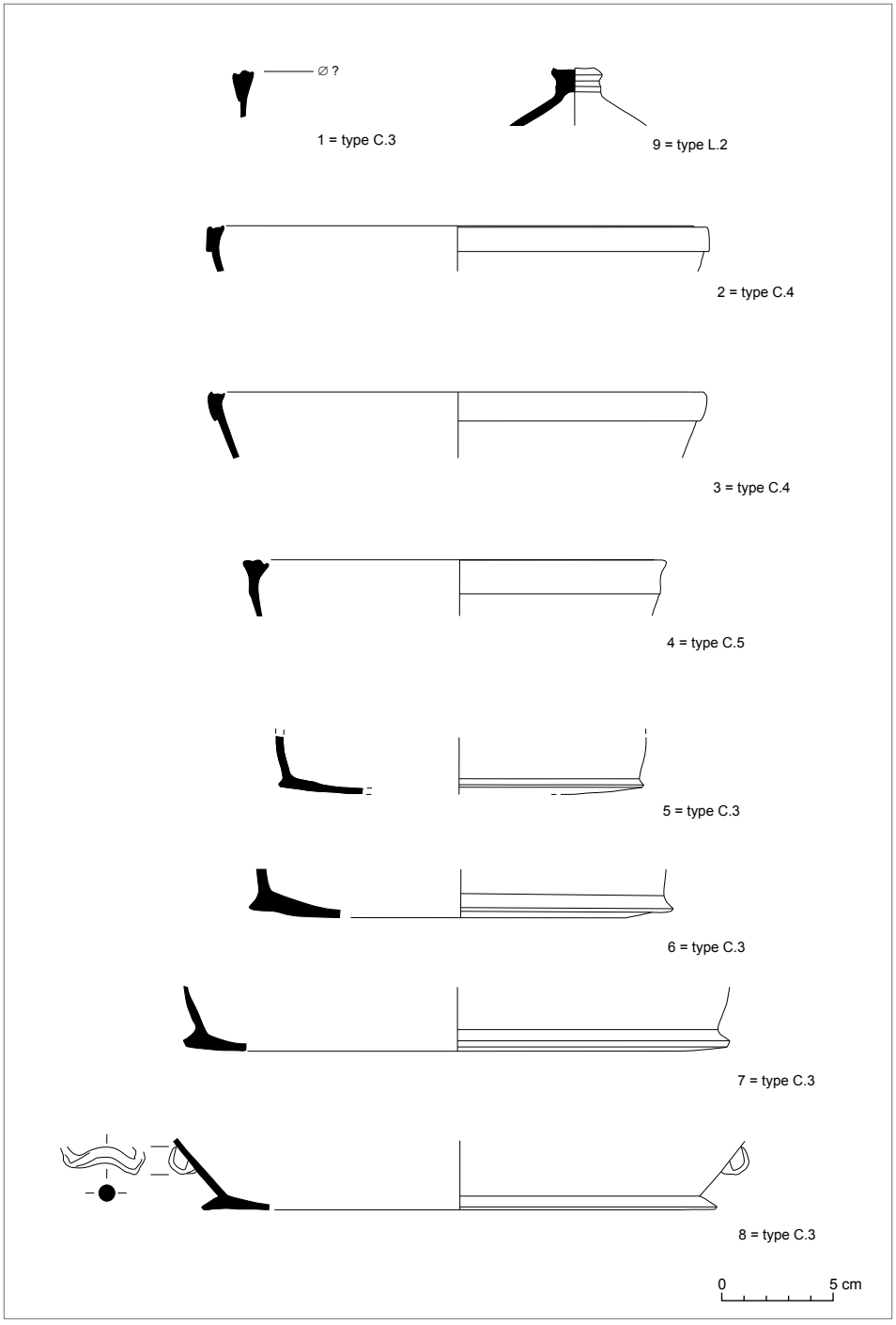

Fig. 4. Casseroles of different types and a lid, from Morphou Bay from the 3rd century CE (PAP, Institute of Archeology Jagiellonian University | drawing and digitizing K. Nocoń)

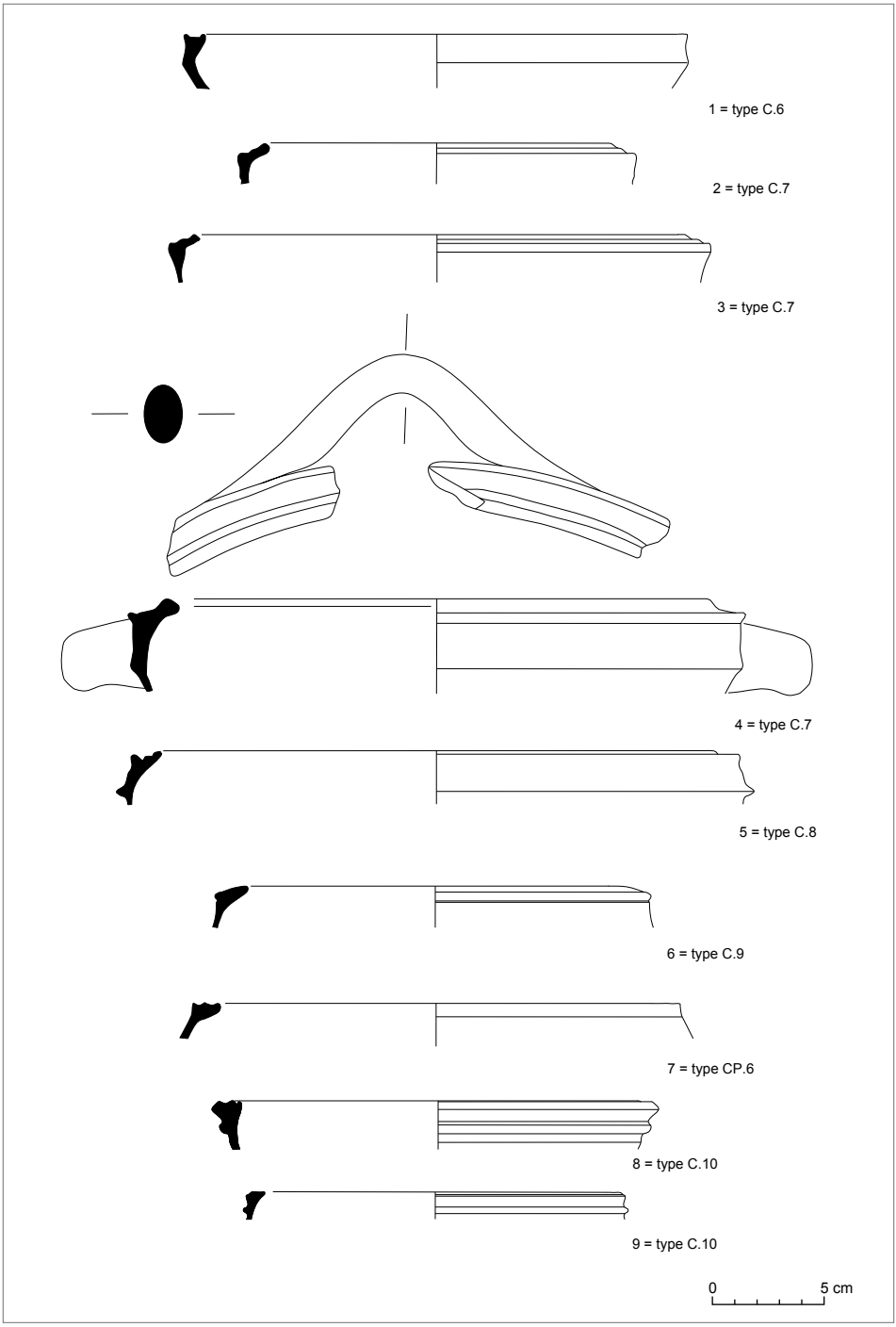

Fig. 5. Middle and Late Roman period casserole types and a cooking pot from Morphou Bay (PAP, Institute of Archeology Jagiellonian University | drawing and digitizing K. Nocoń)

The C.6 type is represented by just one fragment [*Fig. 5:1*], a narrow rim with two tiny vertical ribs and no grooves in between (rim diameter about 22 cm). This type differs from the ones described above, and could be a slightly later product. Casseroles of type C.7 are quite common and stand out for features like a rounded rim facing up, toward the vessel center, and a massive horizontal handle, which is oval in section [*Fig. 5:2–4*]. Rim diameters vary from 20 cm to 26 cm. Based on parallels from Dhiorios (Catling 1972: 39, Fig. 24:P448, 47, Fig. 29:346) and from the Theater excavation in Nea Paphos (Rowe 2004: Fig. 75:5), the presumed timespan of this type is the 4th–5th centuries CE. Casseroles of type C.8 [*Fig. 5:5*] developed from the previous type; they have two massive ribs on the external surface of the rim. The rim diameter is between 16 cm and 22 cm. Type C.9 [*Fig. 5:6*] has no published parallels; its dating is contextual. The fragment was found in a dated context in T.II on the Agora; amphorae from the 5th century CE set the date for this context (PAP Archive). The fragments of latest date in the assemblage include a cooking pot of type CP.6 with a rim diameter of about 22 cm [*Fig. 5:7*] and a casserole of type C.10 with two large ribs just below the rim [*Fig. 5:8–9*] with a rim diameter of about 18 cm. These types can be dated to the 6th and 7th centuries CE based on finds from Amathus (Touma 2018: 151, Pl. 9:E79), Dhiorios (Catling 1972: Fig. 29:P436) and Vassilikos Valley (Rautman 2016: 143, Fig. 5:10, 14.60-P.25).

DISCUSSION AND CONCLUSIONS

An in-depth look at the assemblage of thin-walled cooking pottery imported to Nea Paphos has shown that all through the Roman period these vessels were brought to Paphos from a production center located in the northern part of the island, in the area of Morphou Bay. Laboratory analyses have shown the fabric of this ware to be consistent with the geology of the northern part of the island. So far, these are the only imports of cooking pottery from other sites in Cyprus recognized among the pottery studied from the Agora and the TT trenches.

A typological and chronological study of the group also made it clear that thin-walled cooking ware was delivered to Nea Paphos continuously from the late 1st through the 7th century CE. There is considerable internal variability in the group. The evident development of forms and types helps to narrow down the chronology of this group in Nea Paphos.

The repertoire of forms which were supplied to the Agora during the early Roman period is limited, just three forms (cooking pots, casseroles and lids with a few types each), but they are quite common, especially from the end of the 1st to the end of the 2nd century CE. The large number of casseroles from the PAP excavations may indicate a special social role assigned to these vessels, confirmed by the quantities of vessels of this kind found in the city in general (Giudice and Giudice 1999; Hayes 1991; Rowe 2004).

The repertoire hardly changed in the middle and late Roman periods, but there was a greater variety of types despite lower numbers overall. Vessels dating to the

3rd century CE, identified in this assemblage, are an important contribution to the evidence of Middle Roman pottery coming from the PAP excavations, especially tableware (Kajzer and Marzec 2020), lamps (Kajzer 2020; Kajzer et al. 2021) and amphorae (Dobosz 2020).

The later phase of the late Roman period yielded less pottery, which was also more difficult to date for lack of archaeological data, hence the cautious dating of the types presented here. However, certain trends appear to be repeated, and casseroles are again among the most common forms represented by a variety of types.

These vessels were preferred for food processing connected with fire, but none of the collected fragments of cooking pots and casseroles bear any evidence of sooting on the rims and bottoms. Even so, it cannot be excluded that these vessels were used in accordance with their function. It is also important to keep in mind that both cooking pots and casseroles were part of tomb offerings as demonstrated by examples from the Aghia Napa-Macronissos necropolis (Hadjisavvas 1997).

The data presented here give insight into the economic background. Imports of thin-walled cooking wares peaked in the 2nd century CE, correspoding with the economic prosperity of Nea Paphos in the early Roman period. Reduced imports in the 3rd century could be related to a breakdown of Cyprus economy from the end of the 2nd century CE, caused by various factors with origins outside the island (Lund 1992: 198–199; Duncan-Jones 1996; Huebner 2021). This led to changes in the circulation of goods and a rearrangement of supply chains, which is especially reflected in the analysis of tableware and amphorae of the late Roman period (Lund 1992; 2006; 2015; 2020; Vaag 2006; Winther Jacobsen 2013: 204–205). The shortage could have led to a higher demand for local products, as shown for example by the evident growth of the production of cooking pottery, seen on a significant scale in the Dhiorios workshops (Catling 1972).

The wide distribution of products from these workshops, which the finds from the PAP excavations illustrate, gives new insight into consumer needs. The implications for understanding cooking-pottery circulation on Cyprus from the early to the late Roman periods are significant and they impact an assessment of the economic processes that took place on the island in a diachronic perspective.

Kamila Nocoń
https://orcid.org/0000-0003-2522-6981
University of Warsaw
Polish Centre of Mediterranean Archaeology
k.nocon@uw.edu.pl

How to cite this article: Nocoń, K. (2021). Understanding changes in the supply pattern of Roman cooking pottery from Morphou Bay to Nea Paphos: evidence from the Paphos Agora Project. *Polish Archaeology in the Mediterranean,* 30/2, 231–249. https://doi.org/10.31338/uw.2083-537X.pam30.2.21

References

Catling, H.W. (1972). An early Byzantine pottery factory at Dhiorios in Cyprus. *Levant*, 4, 1–82

Diederichs, C. (1980). *Salamine de Chypre* IX. *Céramiques hellénistiques, romaines et byzantines*. Paris: De Boccard

Dobosz, A. (2020). Hellenistic and Roman transport amphorae. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 323–362). Kraków: Historia Iagellonica

Duncan-Jones, R.P. (1996). The impact of the Antonine plague. *Journal of Roman Archaeology*, 9, 108–136

du Plat Taylor, J. and Megaw, A.H.S. (1981). Excavations at Ayios Philon, the ancient Carpasia. Part II: The early Christian buildings. *Report of the Department of Antiquities, Cyprus*, 1981, 209–250

Élaigne, S. (2014). Les céramiques à paroi fine dans l'Orient du début de l'Empire et leurs imitations égyptiennes, cnidiennes et paphiennes. *Rei Cretariae Romanae Fautorum Acta*, 43, 61–68

Giudice F., Giudice E., and Giudice G. (2001). Paphos, Garrison's Camp. VIIIa Campagna. *Report of the Department of Antiquities, Cyprus*, 2001, 255–290

Giudice, F. and Giudice, G. (1999). Paphos, Garrison's Camp. VIa campagna. *Report of the Department of Antiquities, Cyprus*, 1999, 279–313

Hadjisavvas, S. (1997). *Agia Napa: Excavations at Makronisos and the archaeology of the region*. Nicosia: Agia Napa Municipality; Cyprus Department of Antiquities

Hammond, M.D., Gabrieli, R.S., Ferguson, J.R., Glascock, M.D., and Wismann, T. (2018). Compositional analysis of Cypriot cookware from the Amathus-Gate Cemetery, Kourion, and the Theater at Fabrika Hill, Nea Paphos. *Report of the Department of Antiquities, Cyprus*, 2018, 113–140

Hayes, J.W. (1991). *Paphos* III. *The Hellenistic and Roman pottery*. Nicosia: Department of Antiquities

Hayes, J.W. (2003). Hellenistic and Roman pottery deposits from the 'Saranda Kolones' castle site at Paphos. *Annual of the British School at Athens*, 98, 447–516

Huebner, S.R. (2021). The "Plague of Cyprian": A revised view of the origin and spread of a 3rd-c. CE pandemic. *Journal of Roman Archaeology*, 34(1), 151–174

Kajzer, M. (2020). Hellenistic and Roman lamps. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 283–296). Kraków: Historia Iagellonica

Kajzer, M. and Marzec, E. (2020). Roman fine ware pottery (from the 1st century BC to the 7th century AD). In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 249–278). Kraków: Historia Iagellonica

Kajzer, M., Marzec, E., Kiriatzi, E., and Müller, N.S. (2021). Production and supply of ceramic oil lamps in Hellenistic and early Roman Nea Paphos, Cyprus: Integrated typological, chronological and provenance studies. *Annual of the British School at Athens*, 116, 291–357

Lichocka, B. and Meyza, H. (2001). Seismic events and the evidence of coins and pottery. The case of destruction of the House of Aion in Paphos. *Études et Travaux*, 19, 145–208

Lund, J. (1992). Centuries of darkness? A ceramic sidelight on Cyprus and the eastern Mediterranean between A.D. 200 to A.D. 350. In P. Åström (ed.), *Acta Cypria: Acts of an International Congress on Cypriote Archaeology held in Göteborg on 22–24 August, 1991* (pp. 193–213). Jonsered: P. Åströms förlag

Lund, J. (2006). Writing long-term history with potsherds: Problems – prospect. In D. Malfitana, J. Poblome, and J. Lund (eds), *Old pottery in a new century: Innovating perspectives on Roman pottery studies. Atti del convegno internazionale di studi, Catania, 22–24 aprile 2004* (=*Monografie dell'Istituto per i beni archeologici e monumentali* 1) (pp. 213–227). Catania: CNR. Istituto per i beni archeologici e monumentali

Lund, J. (2015). *A study of the circulation of ceramics in Cyprus from the 3rd century BC to the 3rd century AD* (=*Gösta Enbom Monographs* 5). Aarhus: Aarhus University Press

Lund, J. (2020). Cyprus as a contact zone in the 1st Millennium AD. *Ancient Civilizations from Scythia to Siberia*, 26, 322–331

Marzec, E., Kajzer, M., and Nocoń, K. (2020). Methodology – macroscopic analysis of pottery (table wares, unguentaria, lamps, and kitchen wares). In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 217–221). Kraków: Historia Iagellonica

Marzec, E., Nocoń, K., Miziołek, M., Kiriatzi, E., Müller, N.S. (in preparation). *Provenance of the Hellenistic and Early Roman cooking pottery from Nea Paphos, Cyprus: Local production and imports*

Miszk, Ł. (2020). Stratigraphy and architecture of the Agora. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 127–184). Kraków: Historia Iagellonica

Młynarczyk, J. (1990). *Nea Paphos in the Hellenistic period* (=*Nea Paphos* 3). Warsaw: Ed. Géologiques

Nicolaou, I. (1990). *Paphos* II. *The coins from the house of Dionysos*. Nicosia: The Department of Antiquities

Nocoń, K. (2020a). Hellenistic and Roman kitchen and cooking pottery. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 297–321). Kraków: Historia Iagellonica

Nocoń, K. (2020b). *Zmiany społeczne, kulturowe i ekonomiczne w Nea Pafos na Cyprze w okresie hellenistycznym i rzymskim w świetle badań nad ceramiką kuchenną ze stanowiska Agora* (Social, cultural and economic changes in Nea Paphos in Cyprus during the

Hellenistic and Roman period in the light of research on cooking pottery from the Agora) (Ph.D. diss.). Jagiellonian University in Kraków (in Polish)

Orton, C. and Hughes, M. (2013). *Pottery in archaeology* (2nd ed.). Cambridge: Cambridge University Press

Papuci-Władyka, E. (2017). *Paphos Agora Project. Season 2017*. Retrieved from https://paphos-agora.archeo.uj.edu.pl/en_GB/sezon2017 (accessed: 3.11.2021)

Papuci-Władyka, E. (2018). *Paphos Agora Project. Season 2018*. Retrieved from https://paphos-agora.archeo.uj.edu.pl/en_GB/sezon2018 (accessed: 3.11.2021)

Papuci-Władyka, E. (2019). *Paphos Agora Project. Season 2019*. Retrieved from https://paphos-agora.archeo.uj.edu.pl/en_GB/sezon2019 (accessed: 3.11.2021)

Papuci-Władyka, E. (2020). Paphos Agora Project (PAP): Its aims, stages of development, methodology and chronology. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 73–90). Kraków: Historia Iagellonica

Papuci-Władyka, E. and Machowski, W. (2016). Paphos Agora Project: Preliminary results of the 2011–2012 seasons of the Jagiellonian University (Krakow, Poland) excavations. In C. Balandier (ed.), *Nea Paphos: fondation et développement urbanistique d'une ville chypriote de l'antiquité à nos jours. Études archéologiques, historiques et patrimoniales: actes du 1er colloque international sur Paphos, Avignon, 30, 31 octobre et 1er novembre 2012* (pp. 67–77). Bordeaux: Ausonius Éditions

Papuci-Władyka, E. and Miszk, Ł. (2020). Summary of the results. In E. Papuci-Władyka (ed.), *Paphos Agora Project (PAP)* I. *Interdisciplinary research of the Jagiellonian University in Nea Paphos, UNESCO World Heritage Site (2011–2015) – first results* (pp. 505–516). Kraków: Historia Iagellonica

Papuci-Władyka, E., Machowski, W., Miszk, Ł. in collaboration with M. Biborski, J. Bodzek, A. Dobosz, M. Droste, M. Kajzer, E. Marzec, K. Nocoń, K. Rosińska-Balik, and M. Wacławik. (2018). Paphos Agora Project (PAP) 2011–2014: First preliminary report on excavations by Jagiellonian University in Krakow, Poland (with Appendix 1: Preliminary observations on animal remains from Krakow University excavations at the Agora of Nea Paphos by P. Croft). *Report of the Department of Antiquities, Cyprus*, New Series 1, 533–570

Rautman, M. (2016). Classical–Late Roman periods. In I.A. Todd (ed.), *Vasilikos Valley Project 10: The field survey of the Vasilikos Valley* II. *Artefacts recovered by the field survey* (=*Studies in Mediterranean Archaeology* 71/10) (pp. 129–157). Uppsala: Åströms Förlag

Rowe, A.H. (2004). *Reconsidering Late Roman Cyprus: Using new material from Nea Paphos to review current artefact typologies* (Ph.D. diss.). University of Sydney

Touma, M. (2018). The Late Roman pottery found in Amathus harbour. In J.-Y. Empereur (ed.), *The Hellenistic harbour of Amathus: Underwater excavations, 1984–1986*, II. *Artefacts found during excavations* (pp. 125–180). Athens: École française d'Athènes

Vaag, L.E. (2006). Pottery and plague. In D. Malfitana, J. Poblome, and J. Lund (eds), *Old pottery in a new century: Innovating perspectives on Roman pottery studies: atti del convegno internazionale di studi, Catania, 22–24 aprile 2004* (pp. 241–250). Catania: CNR. Istituto per i beni archeologici e monumentali

Westholm, A. (1936). *The temples of Soli: Studies on Cypriote art during Hellenistic and Roman periods*. Stockholm: Swedish Cyprus Expedition

Winther Jacobsen, K. (2006). Cooking wares. In L. Wriedt Sørensen and K. Winther Jacobsen (eds), *Panayia Ematousa* I. *A rural site in south-eastern Cyprus* (=*Monographs of the Danish Institute at Athens* 6) (pp. 231–243). Aarhus: Aarhus University Press

Winther Jacobsen, K. (2013). Supply mechanisms at non-agricultural production sites: Economic modelling in Late Roman Cyprus. In M.L. Lawall and J. Lund (eds), *The transport amphorae and trade of Cyprus* (=*Gösta Enbom Monographs* 3) (pp. 201–209). Aarhus: Aarhus University Press

Winther Jacobsen, K., Gabrieli, R.S., Horowitz, M.T., Janes, S., Sollars, L., and Vroom, J. (2013). Pottery chronotypes. In M. Given, A.B. Knapp, J. Noller, L. Sollars, and V. Kassianidou, *Landscape and interaction: The Troodos Archaeological and Environmental Survey Project, Cyprus* I. *Methodology, analysis and interpretation* (=*Levant Supplementary Series* 14) (pp. 353–371). Oxford: Oxbow Books

Wriedt Sørensen, L. and Grønne, C. (1992). Report of archaeological soundings at Panayia Ematousa, Aradhippou, Cyprus 1991. *Report of the Department of Antiquities Cyprus*, 1992, 185–203