A circular pool in the main courtyard of the "Hellenistic" House in Nea Paphos...

CYPRUS

# A circular pool in the main courtyard of the "Hellenistic" House in Nea Paphos. Preliminary remarks

# Marcin M. Romaniuk

Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences

**Abstract:** Excavations in the main courtyard of the "Hellenistic" House in Nea Paphos in 2016, Polish excavations, revealed a small circular pool with immured tops of Dressel 6A amphorae in the wall surrounding it and a circular imprint in the middle of the floor. The paper undertakes a discussion of possible form and function, putting forward a tentative interpretation based on a study of parallels that we are dealing with an ornamental pool, a popular furnishing of wealthy Roman house gardens, functioning perhaps as a fishpond (*piscina*) or a tank with water constantly running in and out, with a *labrum* or columnar pedestal standing in the middle.

Keywords: Nea Paphos, "Hellenistic" House, peristyle, circular pool, fishpond, *piscina*, Dressel 6A amphora, *labrum*, garden

A small circular pool of unusual form, comprising the tops of Dressel 6A amphora immured in its peripheral wall and a circular imprint in the middle of the floor, was discovered in 2016 in the main courtyard of the "Hellenistic" House in Nea Paphos excavated by a team from the Polish Centre of Mediterranean Archaeology University of Warsaw [Fig. 1]. It was situated approximately 0.55 m under the surface of the courtyard floor and was severely damaged. The fill did not contain any material from the demolition of the pool walls, but was replete with pottery dated broadly from the late 4th century BC to the mid 1st century AD. Thus it must have been dismantled intentionally and filled up with material originating from rubbish accumulated elsewhere (see Meyza, Romaniuk, and Więch 2017, in this volume). Considering the introduction of the amphora type immured in the wall of the pool (Peacock and Williams 1986: 98–101) as a *terminus post quem* and the dating of the latest ceramic material from the fill as a *terminus ante quem*, the time span for the functioning of this feature can be placed somewhere between the late 1st century BC and the mid 1st century AD, that is, in the early Roman period in Cyprus.

The interpretation of the form and function of this pool is not straightforward due to the poor condition of the structure, but enough characteristic features survive to warrant a discussion based on a review of parallels from the Roman world.

## CYPRUS

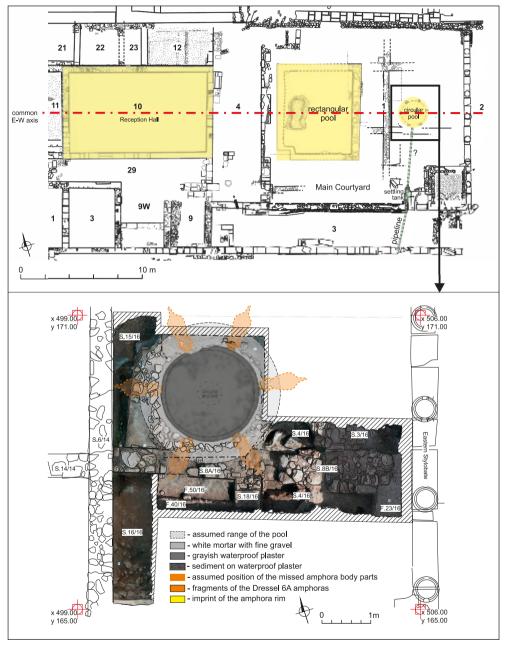


Fig. 1. Plan of the circular pool with its surroundings; above, location of the pool in the main courtyard within the central part of the "Hellenistic" House (PCMA Nea Paphos project/drawing M. Romaniuk; plan A. Brzozowska, A. Kubicka, S. Medeksza; processing M. Romaniuk)

# THE POOL

The only preserved parts of the pool are the circular flat floor and the lower parts of the surrounding wall, up to a maximum height of 0.31 m [Fig. 2]. The inner diameter is between 1.95 m and 1.99 m, and the surrounding wall may have been between 0.40 m and 0.60 m thick, although it is impossible to be exact as the outer face of the wall can hardly be seen. The wall, and probably the foundation under the floor, were built of mainly fist-size rough stones (occasionally up to 0.35 m long), set tightly side by side in an earth mortar. The floor and the inner face of the wall were bonded with a diagonal chamfer. The inside face of the structure was covered with white mortar mixed with fine gravel, which penetrated the gaps between the stones, forming a nearly smooth surface, later coated with a thin layer of grayish waterproof plaster.

The tops of Dressel 6A amphora were immured horizontally in the perioriented pheral wall, the mouths towards the center of the pool. They were placed at approximately the same level, the maximum difference being 0.03 m (measuring from the floor to the bottommost inner edge). Fragments of three such installations were preserved in situ, but only one consisted of an almost complete rim and neck with parts of the handles; the other two were merely small pieces of the rims. A fourth was clearly in place judging by the imprint of the rim in the wall. Considering the fairly regular arrangement of these fragments, set at intervals of approximately 0.90 m to 1.08 m (measuring straight section lines between the center points of the vessel mouths), it can be assumed that two

more vessels had once been immured in the unpreserved northwestern part of the wall.

A circular imprint, about 0.47 m in diameter, was faintly visible in the middle of the pool floor. It attests to the presence of a round base standing there long enough for such traces to form and be preserved. The base, and the presumed object standing on it, must have been of considerable weight judging by the small cracks in the waterproof plaster running along the edges of the imprint. The white mortar stains within the circle indicate a permanent installation.

Sediment covered the bottom of the pool in places. It seems to be cemented sludge [see *Fig. 1*] and it is visible mainly up against the wall. It is practically missing from the middle of the floor, suggesting that it had settled while the central standing object was still in place, and thus, while the pool was still in use.

No other structure around the pool could be attributed to it directly. The walls running on the western and southern sides appear to be older (Meyza, Romaniuk, and Wiech 2017, in this volume). A stone structure that could probably be related to it is a kind of platform or pedestal on the eastern side (S.3/16) [see Fig. 2], much too massive to be a simple wall. The eastern and northern sides of this structure escape identification, while the other two are only faintly recognizable. An analysis of the stratigraphy showed that both the pool and the structure mentioned above were embedded in the same strata dated to the early 3rd century BC (Meyza, Romaniuk, and Wiech 2017, in this volume), but it is not known whether they were introduced

## CYPRUS

at the same time/level, because the upper layers of this strata were apparently removed together with the upper parts of the pool. Other structures, potentially correlated with the pool, could have been removed at that time as well.

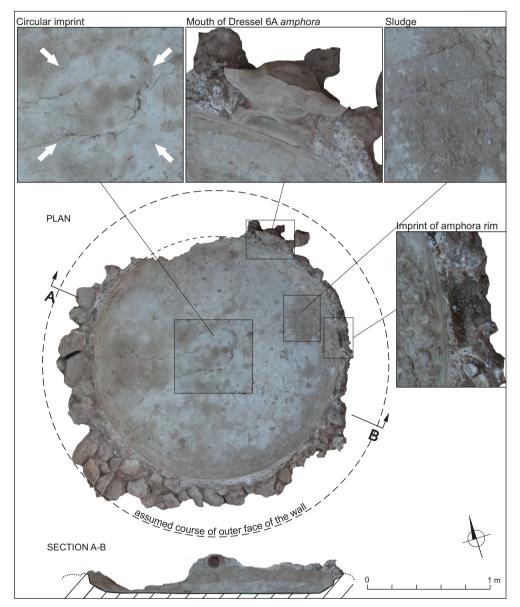


Fig. 2. Orthophoto plan of the circular pool with its characteristic features (PCMA Nea Paphos project/photo A. Kubicka, processing M. Romaniuk)

## DISCUSSION

## BACKGROUND

Any search for parallels for this feature require the functional context to be determined first and only then can a discussion of the function and original appearance be undertaken. The pool was discovered under the floor of the main courtyard (1), made of garden soil probably and dated, like the associated porticoes, to the end of the 1st and beginning of the 2nd century AD (Meyza, Romaniuk, and Wiech 2017, in this volume). An earlier courtyard could have existed in this place as suggested by the earlier foundation of the eastern portico stylobate of this courtyard, associated with layers from the late 2nd and early 1st century BC (Daszewski 1994: 103). Thus, the pool under discussion could have been a later addition, reflecting adaptation of the house in Roman times. Similarly, an earlier date for the reception hall (10), adjoining the courtyard from the west, also supports this idea, as rooms of this kind were an inherent part of wealthy house courtyards of the time. The earlier courtyard had to be slightly larger than the later one, having presumably to accommodate a large rectangular pool at its western end. The relation of the circular pool to the rectangular one is unknown, but their specific set-up suggests some kind of interconnection (at least in one of the two phases of the rectangular pool, see Meyza, Romaniuk, and Wiech 2017, in this volume). Namely, both pools were aligned on the same axis as the reception hall (A. Kubicka, personal communication) [see *Fig. 1*]. This correlation can hardly be accidental and it reflects a typical, well considered arrangement of the Roman domus with peristyle, giving visitors an

opportunity to admire the wealth and status of the owner as expressed in the magnificent decoration of this part of the building. Therefore, the location of the circular pool, as well as the absence of any installations of an industrial or bathing character in the nearby area, may suggest the pool's mainly decorative role, even if it simultaneously performed other functions, like water collection, for example.

In the Roman world, decorative pools were present more often in peristyle gardens, known mainly from the urban houses in the western provinces, and especially from Pompeii. However, in the case of the Nea Paphos pool, it seems more appropriate to search for parallels in the Near East. Similar structures from a period contemporary with the functioning of the pool in Paphos are hardly common in this region (Kamash 2006: 216, Table 9.2). Hence it is necessary for the purposes of the present discussion to refer repeatedly to finds from Pompeii, these being best known thanks to many years of studies by Wilhelmina Jashemski (for synthetic studies, see Jashemski 1979; 1993). Caution is recommended in view of the geographical differences between Pompeii and Nea Paphos. The latter was located in a more arid area and culturally influenced strongly not only by Roman, but also by Greek, Egyptian and Near Eastern traditions. Hence, the differences in natural conditions and not the least, the absence of any solid grounds for assuming that the said pool functioned within a garden as at Pompeii (Meyza, Romaniuk, and Wiech 2017, in this volume). Nevertheless, a pool of ornamental purpose in Nea Paphos at a time when similar structures had become

### CYPRUS

highly popular in the western Roman provinces, may suggest a growing Roman cultural influence in Cyprus territory, thus making such comparisons tenable.

VESSELS IMMURED IN WALLS Terracotta vessels or parts of them immured horizontally in the walls of pools are fairly well attested archaeologically, especially in Italy (Higginbotham 1997: 239, Note 69), but also in other parts of the Mediterranean region: France (e.g., Vienne, Clos de la Lombarde), Tunisia (e.g., Cuicul, Timgad), Egypt (Luxor, Abukir peninsula) and Israel (e.g., Khirbet Sabiya) (Marzano 2013: 207-208, Notes 47, 50, 51 with further references). The presence of such vessels is generally considered a prime indication of a pool being a fishpond, the Latin piscina (Marzano 2013: 207). Generally, they are interpreted as shady retreats for fish, corresponding probably to the *speci* (sing. *specus*) described by Columella (Col. 8.17.2), or as devices specifically devoted to enable the fish to hide and lay eggs. The latter proposition has been questioned, however, the Romans being thought of as probably unable to breed fish for the entire biological cycle in artificial ponds (Marzano 2013: 208). In any case, the ancient Paphians seem not to have been ignorant of the idea of breeding fish in a domestic context as the *piscina* with niches in the walls from the House of Dionysus may indicate, although that was a later construction (Nicolaou 1967: 101).

Interpreting the pool from the "Hellenistic" House as a fishpond raises several concerns, however, one of these being the issue of the amphora size. Since no trace of the bodies of these vessels have been found anywhere in the pool or its vicinity, it is impossible to say whether they were immured whole or just their top parts. Compared to the regular amphora size (usually about 0.95–0.96 m long, 0.35–0.36 m wide), the pool diameter was exceptionally small, merely twice the length of the amphoras. This makes the first assumption dubious at best. Insofar as examples of bigger vessels are known, like the *dolia* from Monteverde in Rome (Higginbotham 1997: 116), they were usually associated with much larger reservoirs. In the smaller pools interpreted as fishponds, small vessels or the bottom parts of larger ones were preferred as a rule. The case is well illustrated by a small rectangular (1.05 m by 2.15 m) and shallow (0.52 m) pool in the peristyle of the House of Gavius Rufus in Pompeii, where three small amphoras immured in the north wall formed niches only 15 cm deep (Jashemski 1993: 173, Fig. 208). It can be assumed that such small fishponds were intended for small fish not requiring the more spacious kind of niches. In view of this, the use of the upper parts of amphoras alone seems to be evident enough. Yet there was no trace of any closing or sealing elements at the broken end of the largest fragment of the amphora. Moreover, despite not finding any body parts of these vessels, it seems that the location and size of gaps in the wall south of the pool (S.8A/16), aligned with the E–W axis, is consistent with the presence of these vessels [see *Fig. 2*] and could indicate that, initially, whole vessels had been immured there. The gaps have also led Henryk Meyza to suggest a different solution (Meyza, Romaniuk, and Wiech 2017, in this volume), namely, that the immured upper parts of amphoras were intended as spouts for passing water in and out of the pool. Had this been the case, these necked rims would have been connected with pipes

running to the pool through the said gaps in the nearby wall. Reuse of fragments of ceramic vessels, including taking advantage of them as elements of drainage systems, was fairly common (Peña 2007: 180); it seems unreasonable, however, to install so many spouts in a pool of this size, even if only for decorative purposes.

## CIRCULAR IMPRINT

It seems obvious that the circular imprint in the middle of the floor of the pool was left by some standing object. None of the parallels found so far combine all the specific features, but pools with an object in the middle seem to be quite common in the peristyles of wealthy Roman houses. Again, the best examples are from Pompeii, where there are at least several features corresponding to the object under discussion. The first suggestion then would be a fountain, which usually took on the form of a *labrum* (a water-filled vessel with overhanging lip), a statue, or a column with or without a circular plate on its top. Such structures were usually supplied with water from a pipe sticking out of the bottom of the pool, connected to their inner channels. Regrettably, the pool discussed here had no such installation. Nonetheless, structures like a *labrum* could have been filled also with water jetted from a fountain located outside the pool [Fig. 3:A], as observed, for example, in the House of Balcony in Pompeii. The circular pattern of sludge distribution across the floor of the pool (see above) would be explained by a *labrum* with a circular top [*Fig.* 3:A]; the sludge would have been washed sideways, against the wall, by water dripping down in a circle. However, this is merely an assumption and for lack of any convincing traces of a fountain nearby it is difficult to argue in favor of a *labrum* supplied with water from a nearby fountain. At the moment it seems more probable that the circular imprint was left by a *labrum* filled with water manually or by an object of not strictly hydraulic character, for example a large flower-pot or a columnar pedestal under a decorative element like a small statue [*Fig. 3:B*]. The presence of a *labrum* or a flower pot seems less likely than that of a pedestal, mainly due to their customary presence in shallower basins not exceeding a dozen centimeters in depth.

## WATER SUPPLY

A limited natural supply of water in Nea Paphos forced residents to build wells, collect rainwater in cisterns and transport fresh water, apparently from outside. Both of the above proposed interpretations of the pool are based on the assumption that it was constantly being supplied with fresh water. Remains of a Roman aqueduct bringing water to Nea Paphos, found in several places along its probable course from Nea Paphos (Kato Paphos) to Lemba and higher up (Hadjisavvas 1977: 227–228), would argue in favor of this assumption. At issue is the dating of this facility, but it is assigned on the whole to the Roman period. Even so, it is quite possible that the pool was supplied with water from this aqueduct (for a general discussion of the aqueduct in Nea Paphos, see Młynarczyk 1990: 222–223).

There is a terracotta pipeline in the "Hellenistic" House, running from street A' to the north, apparently transporting water directly to a longitudinal rectangular settling tank, placed slightly lower in the southeastern corner of the main courtyard (1) [*Fig. 4*; see *Fig. 1*]. This pipeline, coming in directly from the street, suggests

## CYPRUS

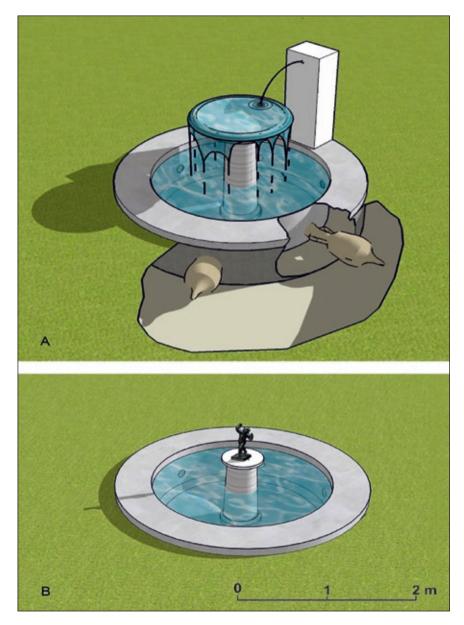


Fig. 3. Two simplified hypothetical 3D models of the circular pool feature from the "Hellenistic" House in Nea Paphos: A – circular basin with labrum and whole amphora; B – circular basin with columnar pedestal (Modeling M. Romaniuk)

A circular pool in the main courtyard of the "Hellenistic" House in Nea Paphos...

#### CYPRUS

that the building was linked to a public water supply system in the city. The pipeline apparently continued north of the tank, there being one, only partly preserved segment of terracotta pipe found there. The channel was directed straight toward the circular pool, but no connection between the two could be traced. The channel may have carried water to the edge of the pool, perhaps to the mouths of the amphoras as hypothesized by Meyza. An alternative destination would be a fountain adjoining the edge of the pool, but the settling tank in the courtyard suggests that the water pressure was insufficient to feed the latter. One cannot exclude of course the presence of devices providing the right pressure, not preserved to this day.

Looking for the discharge of water from the pool, one may assume that there were outlets situated somewhere over the line of inserted amphoras, probably near the top edge of the pool, the purpose of which was to control the water level or, again to follow Meyza's reasoning, the amphora mouths were put to this purpose.

Apart from the above, there is nothing to say that the "Hellenistic" House was equipped with a freshwater installation at the time when the circular pool was in use. However, in the case that we assume the pool to have been a fishpond, it should be noted that practically all the known fishponds with ceramic vessels were supplied with freshwater (Marzano 2013: 208). It is also to be noted that the



Fig. 4. Terracotta pipeline and settling tank in the southeastern corner of the main courtyard of the "Hellenistic" House; arrows indicating waterflow direction (PCMA Nea Paphos project/photo H. Meyza, processing M. Romaniuk)

spread of ornamental water devices, such as fountains and pools, in the house gardens of Pompeii is generally considered as a consequence of the introduction of a new aqueduct in the city in the Augustan period (Jashemski 1996: 53). Water in sufficient amounts allowed wealthy citizens to use it for purposes other than utilitarian, namely, as a display of wealth and status, expressed by the introduction of decorative elements in their peristyles. It cannot be excluded that a similar situation occurred in Nea Paphos, especially when one remembers Dio Cassius's mention (Cass. Dio. LIV, 23) of August laying out funds for the city's rebuilding after the earthquake of about 15 BC. The aqueduct could have been built at that time.

## POOL DEPTH, SHAPE AND SIZE The assumed depth of the pool differs depending on the hypothesis. As a fish-

Preliminary research the newly on discovered circular pool from the "Hellenistic" House in Nea Paphos shows that this structure, with its small size, circular shape, amphoras inserted in its walls and some object standing probably in the middle of its floor, was uncommon, not only in Cyprus, but also across Roman territory as such. No direct and comprehensive parallel, comprising all the features mentioned here, has been identified so far. This hinders a thorough understanding of its original form and function, especially considering its poor state of preservation.

It seems most likely that the pool constituted part of a decorative courtyard design from a wealthy Roman house, which pond, its minimum sufficient depth should have been roughly 0.50 m or more to contain fish (Farrar 1998: 70). This was feasible in terms of wall thickness. Keeping in mind the standard practice of placing vessels in the bottom parts of the walls and no higher than halfway to the top, the pool's depth should be at least twice the distance between the vessels and the bottom of the pool, that is, about 0.50 m in total. However, if the pool is assumed to have been little more than a tank with constantly flowing water, as Meyza thinks, it would not have to be much deeper than what has been preserved.

As regards the circular shape and size of the pool, it can be assigned to Farrar's type A (1998: 71–74), that is, simple forms of varied sizes, most common in all the provinces of the Empire, constructed throughout the Roman period, perhaps because of the simplicity of the design.

# CONCLUSION

the "Hellenistic" House indeed was in this phase. The location of the pool, aligned on the same axis as a large rectangular reservoir and the reception hall, evokes a well considered arrangement, aimed at demonstrating the high status and wealth of the house owner. The specific construction of the pool suggests that it was something more than a typical ornamental pond, although its exact character remains unclear.

A closer examination resulted in at least two ideas, differing mainly with regard to the interpretation of the immured vessels. The first one, more feasible in the author's opinion, is that the pool was a small fishpond, a Roman *piscina*, where whole amphoras or their upper parts were installed as fish shelters and nests. The A circular pool in the main courtyard of the "Hellenistic" House in Nea Paphos...

#### CYPRUS

second one, proposed by Henryk Meyza, says that only the mouths of the vessels were immured, the idea being to use them as spouts and outlets providing a constant flow of the water. Regardless of which hypothesis is the more feasible one, both are based on the same assumption that the pool was supplied with fresh water, carried perhaps from a nearby aqueduct. This must remain merely a supposition until there is evidence for the functioning of an aqueduct in Nea Paphos so early in the Roman period.

As regards the object within the pool, the most probable interpretation for now is that it was a pedestal supporting some decorative element. It seems more appropriate than a *labrum* or a large flower-pot considering the depth of the pool, which was probably between 0.31 m and 0.50 m or more, and so relatively too deep for these two.

None of the above hypotheses is free of doubt, yet they remain for now the best possible ideas for interpreting the newest finds of the Polish project excavating in Nea Paphos. Further work in the area may yet clarify the doubts raised with regard to the function and design of the circular pool from the "Hellenistic" House in the city.

## ACKNOWLEDGMENT

The author owes a debt of gratitude to Dr. Henryk Meyza for the opportunity to study the subject, as well as for his valuable comments on it. A word of thanks is due also Wioleta Hypiak for her assistance in collecting the literature on the topic.

Marcin M. Romaniuk, PhD candidate Institute of Mediterranean and Oriental Cultures, Polish Academy of Sciences 00-330 Warsaw, Poland, ul. Nowy Świat 72 mromaniuk@iksio.pan.pl

## REFERENCES

PRIMARY SOURCES	
Cass. Dio	Cassius Dio, Historiae romanae
Col.	Lucius Junius Moderatus Columella, De re rustica

#### Secondary sources

Daszewski, W.A. (1994). Nea Paphos 1993. PAM, 5, 101-110

Farrar, L. (1998). Ancient Roman gardens. Stroud: Sutton

Hadjisavvas, S. (1977). The archaeological survey of Paphos. A preliminary report. *Report of the Department of Antiquities, Cyprus*, 1977, 222–231

- Higginbotham, J.A. (1997). *Piscinae: Artificial fishponds in Roman Italy*. Chapel Hill, NC: University of North Carolina Press
- Jashemski, W.M.F. (1979). *The gardens of Pompeii, Herculaneum, and the villas destroyed by Vesuvius* I. New Rochelle, NY: Caratzas

Jashemski, W.M.F. (1993). *The gardens of Pompeii, Herculaneum, and the villas destroyed by Vesuvius* II. *Appendices*. New Rochelle, NY: Caratzas

#### CYPRUS

- Jashemski, W.M.F. (1996). The use of water in Pompeian gardens. In N. de Haan and G.C.M. Jansen (eds), Cura aquarum in Campania: Proceedings of the Ninth International Congress on the History of Water Management and Hydraulic Engineering in the Mediterranean region, Pompeii, 1–8 October 1994 [=BABESCH Supplement 4] (pp. 51–58). Leiden: Stichting Babesch
- Kamash, Z. (2006). Water supply and management in the Near East 63 BC-AD 636 (Ph.D. diss.). University of Oxford. Retrieved from http://archaeologydataservice.ac.uk/archives/view/ kamash\_2006 [accessed: 4.03.2017]
- Marzano, A. (2013). Harvesting the sea: The exploitation of marine resources in the Roman Mediterranean. Oxford: Oxford University Press
- Meyza, H., Romaniuk, M., and Więch, M. (2017). Nea Paphos. Seasons 2014 and 2016. *PAM*, 26/1, 397-426
- Młynarczyk, J. (1990). Nea Paphos in the Hellenistic period [=Nea Paphos 3]. Warsaw: Editions Géologiques
- Nicolaou, K. (1967). Excavations at Nea Paphos, the House of Dionysos: outline of the campaigns, 1964–1965. *Report of the Department of Antiquities, Cyprus*, 1967, 100–125
- Peacock, D.P.S. and Williams, D.F. (1986). Amphorae and the Roman economy: An introductory guide. London: Longman
- Peña, J.T. (2007). Roman pottery in the archaeological record. Cambridge: Cambridge University Press