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TO LIGHT ANTIQUITY. PERSPECTIVES  
FOR RESEARCH ON CLAY OIL LAMPS  
FROM THE AGORA IN NEA PAPHOS,  
CYPRUS

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**Abstract:** *Oil lamps as archaeological finds and in museum collections provide a wealth of information. Various types of studies may be applied to investigate their meaning in ancient times. When several methods are used simultaneously, the objects may be interpreted according to distinct aspects, enabling us to study this group of ceramic objects from a multidisciplinary, comprehensive perspective. Such aspects are described in this paper, supplemented by a case study concerning oil lamps from the Agora in Nea Paphos, Cyprus.*

**Keywords:** *Oil lamps; research methodology; Cyprus; Nea Paphos; Agora*

## **Introduction**

Artificial light is one of the most basic human inventions, and access to it is a basic human need. Its great importance can be exemplified by simply considering the connection between the Latin words *lux* and *luxuria*, which is no accident. Oil lamps are one of the groups of archaeological objects that may be properly interpreted, as we know that they were used as a basic source of light in ancient times. Their form is so characteristic that usually, even if highly fragmented, it is possible to distinguish them from other categories of objects, although this is only the preliminary stage of analysis.

Studies into ancient lamps, recently becoming more and more popular,<sup>1</sup> are a great opportunity for interdisciplinary research and application of modern analytical methods. The first aim of this article is to show what kind of information may be obtained through an analysis of ancient oil lamps. This paper, a collection of that information, organises the data acquired so far and provides a vision for possible interdisciplinary research. The second purpose is to present the option of applying comprehensive methodology to research of a particular group of objects found in the area of the Agora of Nea Paphos in Cyprus.<sup>2</sup>

### **Lamps as archaeological finds – context**

Oil lamps are found on various sites of both domestic and funeral character: in mines, military buildings, sanctuaries, cisterns and on cargo ships (Lapp 2004, 174). The variety of utility contexts indicates the popularity of this category of archaeological finds in ancient times. Proper interpretation of various functions of these small objects is undoubtedly valuable, but often not easy to define. Lamps could have been used for their most obvious utility, their basic function of supplying the light. Yet, they were often treated as symbolic or votive items. Lamps are well-attested in sanctuaries and places connected with cults, where they played an important role in some rituals that required light (Bailey 1972, 11–12; Fotiadi 2011; Dimakis 2015, 167). These lamps can be identified by their special size, form or decoration, such as the example of a multi-levelled, inscribed lamp from the Nymphaeum of Kafizin in Cyprus (Vessberg 1956, 187; Mitford 1980). In a necropolis, lamps could be used as grave goods or objects connected with burial customs. However, their presence in the vicinity of or inside the tomb could vary even within the same geographical and cultural area (Dimakis 2015, 165).

During late Hellenistic and Roman times, lamps gradually increased in importance. They came to be used not only for private or votive purposes but also to light public spaces such as streets, squares and theatres (Bailey 1972, 11). This could be explained by technological changes in their

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<sup>1</sup> The state of lamp studies has changed recently. A major step was the creation of the Lychnological Association in 2003, <http://www.lychnology.org>.

<sup>2</sup> The Agora has been explored since 2011 by the Department of Classical Archaeology, Institute of Archaeology, Jagiellonian University Krakow under the license of the Department of Antiquities in Cyprus. The project is funded by the National Science Center, Poland, grant MAESTRO no. 2014/14/A/HS3/00283; for more information see <http://www.paphos-agora.archeo.uj.edu.pl>.

production and by the adoption of moulds from the end of the 3rd century BC onwards (Bailey 1972, 13; Fitch and Goldman 1994, 5). In the Roman period, lamps began to function as carriers of sophisticated iconographical motifs. A number of scenes on discs were associated with different aspects of ancient life. It is hardly possible to link directly depictions to the place of use (Bailey 1972, 13; Lund 1995). For instance, lamps with erotic scenes could be found in brothels but, at the same time, they were used in private houses (Bailey 1980, 64). Lamps with depictions of gods can be connected with sanctuaries or other sacred places, masks and drama topics with theatres, chariot races and gladiators with amphitheatres, but such iconography could also simply indicate the popularity of some types of scenes associated with religion or daily life (see below). Some objects may be associated with historical personages (Bailey 1980, 43–44) or with special occasions, like New Years' lamps with the depiction of a winged Victoria (Bailey 1980, 28). Contextual studies are significant when comparing different find patterns within the same city. In turn, spatial distribution analysis could provide information about the level of illumination in particular spaces (Petruț *et al.* 2014, 81). Thanks to the high variability of forms, the presence of lamps in certain archaeological contexts could be very helpful in determining the chronology of layers.

### **Lamps as chronology indicators**

As mentioned above, oil lamps are quite precise date indicators. Some Roman types can be dated as precisely as *terra sigillata* or even coins. Clearly, it is troublesome to say how long such objects could last in their original context. We can easily imagine that some special items such as family heirlooms were used or kept for an extended period of time. Still, it is possible to create some chronological horizons and make compilations of parallel finds from different sites (Lund 1991). Despite that, it is essential for typological studies to be complemented by clay analysis, which is necessary because same forms were widely produced as imitations of distributed prototypes (see below). Nonetheless, the variety and the state of research on lamps from various parts of the Mediterranean provide chronological horizons of these objects and the database is still growing. We can refer to typologies from a number of sites or geographical regions (e.g. Loeschcke 1919; Broneer 1930; Vessberg 1956; Howland 1958; Bruneau 1965; Bussi re 2000; Sussman 2009; Sussman 2012). Thus, if the chronology of archaeological strata is uncertain, dating oil lamps and their context of finding based on comparative studies is possible.

### **Lamps as objects in daily use – the matter of effectiveness**

Some studies concerning the problem of effectiveness of lamps have recently been published. Experiments were conducted to show how these objects were applied to light interior spaces. It has been proved that the light provided by one lamp was sufficient for a symposium or for comfortable reading (Wunderlich 2003, 255; Moullou and Topalis 2011, 65–66). Other case studies, however, have shown that the presence of even a few oil lamps could not supply enough light for activities demanding focus on details (reading or gaming) and that they were instead used only for orientation and movement in a room after nightfall (Petruț *et al.* 2014, 85–88).

### **Lamps as pieces of art**

When thinking of Roman oil lamps, what comes to mind first is their rich iconography and variety of scenes on the discs. It is not surprising that 19th-century researchers and collectors focused mainly on these aspects of lamps, as they seem to be the most attractive. Such iconographical studies brought forth a wealth of information about daily life concerning religious aspects and mythological beliefs, as well as about ancient people and their domestic life, entertainment, professions and aesthetic preferences (Bailey 1980, 6–88). As mentioned above, the iconography could be sometimes connected with the place of use. The artistic level of many lamps was often very high, and the attention to details stunning. The repertoire of motifs and scenes characteristic for a particular region and place of production is also crucial, as it often helps to confirm the provenance. Many scenes were created in Italy and gained wide distribution along with the technology of production of relief mould-made lamps (Fitch and Goldman 1994, 44). Such imports often functioned as archetypes imitated in provincial workshops (Bailey 1965, 15) and their quality often suffered (Perlzweig 1963, 17).

### **Lamps as a pottery group**

Aside from their decorative and utilitarian functions, lamps should also be considered an indicator of the place of production. They were often made of the same clay as pottery vessels, particularly in early times and the Hellenistic period. The popular term ‘terracotta lamps’ can be associated rather with the Roman period, when the great majority of lamps were mould-made objects and their clay indeed identical to that of terracotta figurines.

Clay analysis can provide important information about the composition of clay, firing conditions, quality of execution and, therefore, the provenance. Particular fabrics may be distinguished macroscopically on the basis of clay characteristics (Orton *et al.* 1993, 67–75). Moreover, it is possible to apply archaeometrical methods to ascertain the chemical composition of clay or to provide an accurate image of physical features. It should be noted that for a long time archaeometric methods were not very popular for use in lamp studies. But XRF has now been used to study some Roman clay objects (Schneider and Wirz 1992; Eramo *et al.* 2013) and chromatography, coupled with mass spectrometry, to analyse oil residuals (Kimpfe *et al.* 2001). Petrographic thin-section analysis can provide valuable data about fabric composition (Lapp 2004, 174). Most significantly, the results must be compared with reference data obtained from similar studies (including other categories of pottery).

### **Lamps as epigraphical source**

Additional data collected during lamp studies refers to marks and inscriptions on lamps. The proportion of signed oil lamps varies depending on the area of provenance. For Italy, the percentage of such examples is rather high and includes about 30–40% of objects (Harris 1980, 128). However, in some provinces, like Cyprus, the first local marks appeared no earlier than the 4th century AD (type Vessberg 18). Signatures often indicate the name of the workshop owner or may be the mark of a particular place of production, like the signature ROMANESIS, which occurs on early Roman objects, probably produced in Knidos (Gordon and Cova 2010, 282–283). Yet, it is not always possible to make a simple connection between the place of manufacture and signature, a good example being the problem of FAVSTVS lamps, which are known from different parts of the Mediterranean and interpreted as produced in a few branches of the same workshop (Mikati 2003, 175).

### **Research on lamps from the Agora in Nea Paphos**

All the aspects of lamp studies may be applied to the analysis of a certain assemblage. The specific context of the Agora of Nea Paphos – the heart of the ancient city – makes it possible to study objects coming from a central place of trade, social life and place of worship in the ancient city. It is crucial to have a proper attitude toward such research. It is necessary to be

interdisciplinary and comprehensive. Preliminary results show a great variety of lamps representing different areas of production, including examples of Cypriot manufacture, which have already been described but are still not well-recognised (Hayes 1980, 75; Młynarczyk 1978; Młynarczyk 1992; Młynarczyk 1995; Młynarczyk 1998). The importance of the city of Nea Paphos during the Hellenistic and Roman periods is unquestionable and is reflected, among other things, in the diversity of goods. That opens the door to perceiving another aspect of lychnological studies: lamps as evidence for trade contacts. Even though lamps may in general not be considered as basic trade objects, it is clear that some workshops, at least temporarily, distributed their products over great distances. It is obvious that the presence of lamps does not always implicate economic exchange, as they could have served various purposes such as personal items, souvenirs (Bruneau 1977, 262–265; Katsioti 2008, 191) or votive offerings. However, the large percentage of certain types indicates that there was a demand for those objects. For the Late Hellenistic period, Ephesian oil lamps, of a widely distributed and imitated type, are a solid example of this phenomenon (Nicolaou 1972, 315; Giuliani 2008; Kajzer 2013). Other non-Cypriote objects found in the Agora of Nea Paphos, datable to the Hellenistic period, came from Knidos, Phoenicia, Attica, Rhodes and probably the East Greek workshops. There is little evidence of Egyptian imports, which goes well with other categories of pottery.

In Roman times, there was a sophisticated way of exchanging goods, ideas and people and the circulation of lamps was also included in that system (Harris 1980, 132–137). The distribution patterns of lamps changed over time, which was clearly connected with the political situation of the island and general directions of exchange (Kajzer 2016). The importance of other production centres in Italy, Syro-Palestine or Cilicia becomes more prominent when compared to previous periods.

The lamps from the Agora are being studied and interpreted in terms of a number of factors connected with the technology of production and context of finding as described above. It is possible to define some tendencies towards decorative motifs in the local repertoire. Research on locally manufactured objects has identified a few fabrics used for the production (Młynarczyk 1995, 207–208), but the issue requires further studies.<sup>3</sup>

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<sup>3</sup> The author of this paper is planning to study samples by using XRF method, to confirm locally produced and imported oil lamps from the Agora. The analysis will be the part of the project granted by National Science Centre, Poland (grant PRELUDIUM 10, no. 2015/19/N/HS3/01810).

The importance of Cypriot production is clearly visible, particularly during the late Roman period (4th–5th century AD) when types characteristic for the island started to be produced and distributed (Bussi re and Malfitana 2009; Katsioti 2014).

Furthermore, it is possible to observe different spatial distribution patterns within a specific site. This matter, however, is in the preliminary stage of research and awaits more detailed studies.

## Conclusion

A comprehensive view of studies of oil lamps opens the door for interdisciplinary research, which concerns typological, iconographical, epigraphical and contextual studies as well as macroscopic analysis and archaeometry. It is essential to note that each aspect might be equally important, so we should not disregard any of them or treat them as complementary elements. It is impossible to answer the archaeological questions in a definite way, but nonetheless we can always make well-informed speculations on these objects from the past.

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