

ATTIC HONEY: FAME, EVIDENCE AND CONNECTION WITH THE FUNERARY SPHERE

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ABSTRACT

Prized Attic honey is an often-neglected topic in studies of Athenian productions, despite the considerable spread of production, as attested by archaeological finds of terracotta beehives throughout the territory. Literary sources also frequently mention honey produced in Attica, especially the most famous and prized variety from Mount Hymettus.

In this paper, after a mention of the peculiarity of the traditions about honey in the classical world, the importance and fame of the Attic product is emphasised. The sources that praise the product are here classified in three groups, namely the authors who focus on its sweetness and fragrance, the ones who describe Attic honey generically in relation to its prestige and the sources which compares it to honey from other regions. Afterwards, my further goal is to assess the possible connection between honey and the funerary sphere in Attica. This relation is explored also through the reanalysis of some interpretations proposed for a fictile group of geometric Attic models.

KEYWORDS

Attic Honey, Attic Products, Beehives, Funerary Archaeology, Geometric Models

Gli studi sui prodotti ateniesi menzionano in modo generalmente marginale il pregiato miele attico, nonostante la notevole diffusione della produzione, attestata dai ritrovamenti archeologici di arnie in terracotta in tutto il territorio. Anche le fonti letterarie menzionano spesso il miele prodotto in Attica, in particolare la più famosa varietà del monte Imetto. Con il presente lavoro si intende riflettere sull'importanza del miele attico, concentrando l'attenzione soprattutto sul suo significato culturale. Inoltre, l'obiettivo è anche quello di valutare la possibile connessione tra il miele e la sfera funeraria in Attica. Questa relazione viene esplorata attraverso la rianalisi delle interpretazioni proposte per un gruppo di modellini geometrici fittili rinvenuti in contesti funerari ateniesi.

PAROLE CHIAVE

Miele attico, Produzioni attiche, Arnie, Archeologia funeraria, Modellini geometrici

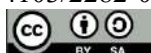
The importance of honey in the Greek economy and generally within the commercial routes of the ancient Mediterranean has been affirmed in several studies on the production and use of honey as well as beekeeping.¹ Nonetheless, this product also acquired a cultural meaning. In these terms, it is worth recalling an interesting episode from mythology which tells us that the name used by the Greeks to refer to the bee, *Melissa*, was also the name of a Nymph, who is said to have persuaded humanity to stop eating animals and, instead, to feed themselves with the nourishment given by trees. In order to do so, she gave a honeycomb to humans and other Nymphs.² Thus, this gift seems to constitute a sort of starting point of civilization in Greek culture, maybe not so different from the most famous donation of an ear of corn to Triptolemus.

One of the most renowned regions for the production of honey was Attica, as mentioned by several ancient authors, especially referring to the excellent honey produced in the area of mount Hymettus.³ The sources that

¹ See LAFAYE 1904; CRANE 1999; BALANDIER 2004; GIUMAN 2008; BORTOLIN 2008.

² *Schol. Pi. P.* 4 106a Drachmann. See also ANDÒ 1996, 66.

³ On the honey from mount Hymettus, see JONES 1976; cfr. also Moreno 2007, pp. 66-68. It is interesting to note that the ancient authors did not have a clear idea of the origin of the product. Aristotle (*Hist. an.* 5, 22.553b-554a) reports that honey fell naturally from the air (μέλι δὲ τὸ πίπτον ἐκ τοῦ ἀέρος) and refutes the fact that bees could produce it (οὐ ποιεῖ ἀλλὰ φέρει τὸ πίπτον). Similar theories can



praise the honey from Attica can be basically classified in three groups. The first group includes Aristophanes, Ovid, Martial, Columella, and Plutarch, who focus on its sweetness and pleasant scent.⁴ In all of these authors such qualities of honey become proverbial and terms of comparison. Plutarch's passage, above all, is especially fascinating because it reports an evidently common saying concerning Athens itself, with a significant comparison, saying that «it appears to be truly said of that city that the good men whom she breeds are of the highest excellence, and the bad men of the most despicable baseness, just as her soil produces sweetest honey and deadliest hemlock».⁵ In Roman times, moreover, Attic honey was certainly well known due to its excellent flavour and fragrance; in fact, the habit of drinking good wine mixed specifically with this product is well attested to.⁶ The second group describes Attic honey in relation to its quality and prestige and comprises of Aristophanes, Strabo, Martial, Dioscorides, Pausanias, and Lucianus.⁷ In particular, the former author specifies that Attic honey τετρώβολον τοῦτ' ἐστὶ, giving us an idea of its considerable value and cost in classical Athens.⁸ Additionally, we can add Pliny and Ovid to this group, since they mention Attic honey not just in regards to its quality, but also its beneficial properties.⁹ The third and last group compares it with honey from other regions and includes Horace, Strabo and Silius Italicus,¹⁰ but in this last group we can also include references to the commercial importance of the Attic production. In fact, Petronius and the earlier Theophrastus tell us about the attempts of importing Attic bees or planting Attic thyme in Italy by ambitious beekeepers to replicate the product, therefore implying that there was a wide market demand for this specific type of honey.¹¹ However, some difficulties in reading and interpreting these sources must be kept in mind. Above all, when honey is only said to be from Attica, it becomes difficult to clearly understand if authors are referring to the most known variety from mount Hymettus or if they are talking about the production of the entire region. Archaeological evidence returns a broader picture: in fact, it is evident that honey production was widely spread all around Attica and not only on Hymettus.¹² In contrast, it is noteworthy that, in addition to Hymettus, only the southern area of Attica around the silver mines of Lavrio is specifically mentioned in ancient sources as producing honey.¹³ The other sites in the region, where archaeological evidence connected to hives has been uncovered, are not explicitly mentioned.

Literary sources also provide some information on technical aspects of Attic honey production, particularly on the gathering phase, that allow us to understand how highly specialized the beekeeping technique of this region was. The above-mentioned passage from Strabo tells us that the common technique of using smoke to stun bees before harvesting honey was not used in the Lavrio area, probably to avoid altering the honey's

be also found in Theophrastus' thought and later in Latin authors' works, such as Pliny, who defined honey «the sky's sweat», «salivation of the astres» and «the refined air juice» (Theophr. fr. 190 Wimmer. Plin., *HN* XI 30; XI 13.32). See also Virgil, *G.*, 4. 1-2: «the celestial gift of aerial honey». Thus, Virgil reports, as Aristotle before him, the long-lasting opinion that honey was deposited on the flowers in the same way as dew (see SCARCIA 2012, p. 179) and this Virgilian passage is far from the empirical suggestions on beekeeping that he gives in chapter 4 (see WHITFIELD 1956, p. 101; WILKINSON 1969, pp. 33-36). However, the relationship of interdependence between the sources on this topic is not always clear. Some Latin authors show a direct interdependence, as, for instance, the agronomist Palladius, who depends on Columella (cfr. FRASER 1931, pp. 73-78). Cfr. also WITHFIELD 1956, p. 101, who divides Latin authors into two groups, those who deal with the topic based on previous works and those who have direct experience of honey production.

⁴ Ar. *Thesm.* 1192; Ov. *Tr.* 5, 4.26-30; Mart. 5, 37.19-11; Columella, *Rust.* 10.381-385; Plut. *Dion.* 58.

⁵ See Plut. *Dion.* 58, 1: ἔοικεν ἀληθῶς λέγεσθαι τὸ τὴν πόλιν ἐκείνην φέρειν ἀνδρας ἀρετῆ τε τοὺς ἀγαθοὺς ἀρίστους καὶ κακία τοὺς φαύλους πονηροτάτους, καθάπερ αὐτῶν καὶ ἡ χώρα κάλλιστον μέλι καὶ κώνειον ὠκυμορότατον ἀναδίδωσιν. Translation by B. Perrin.

⁶ Hor. *Sat.* 2, 2.15, 4.24; Mart. 13.108.

⁷ Ar. *Pax.* 252; Strabo 9.1.23; Mart. 13.104; Dsc. 2.82.1; Paus. 1.32.1; Lucian, *Navigium* 23.

⁸ Ar. *Pax.* 252 (421 BCE): Πόλεμος: φέρ' ἐπιχέω καὶ τὸ μέλι τοῦτ' ἀττικόν. Τρυγαῖος: οὗτος παραινῶ σοι μέλιτι χρῆσθ' ἀτέρω. Τετρώβολον τοῦτ' ἐστὶ: φείδου ἀττικοῦ.

⁹ Ov. *Ars am.* 2, 421-424; Plin. *HN* 11.13.32.

¹⁰ Hor. *Carm.* 2, 6.13-15; Strabo 10.5.19; Sil. 14.26.

¹¹ See Theophr., *Caus. Pl.* 6, 2, 4: «This plant (thyme) is sought and obtained by those in Athens who wish to export such herbs»; see also Petron. 38.3 and cfr. Plin. *HN* 21.31.57.

¹² The production of honey in Attica is archaeologically attested in Athens, but also in Vathy Pigadi, Rafti Bay area, Thorikos, Sounion, Aghia Photini, in the Aigaleos-Parnes gap on the hill locally known as Pyrgarhi, at Thimari, Charaka, on the peninsula of Stomi which closes the bay of Marathon to the east, and also in Voula, Vari, Myrrhinous, Trachones, Koroni, Yerouvouno, Thriasian Plain, Marathon, Ilioupolis, in a wide chronological range that spans from the Classical Period to the Roman Age. See LÜDORF 1998-1999, in general, and specifically on each site cfr. ROBINSON 1959, p. 35 n. G124; VAROUCHEA-CHRISTODOULOPOULOU 1961, p. 335, n. 11, fig. 6e; VANDERPOOL - MCCREDIE - STEINBERG 1962, p. 38 n. 46; SPARKES - TALCOTT 1970, pp. 217-218, 366 n. 1853, pl. 88; GEROULANOS 1973, pp. 443-448; JONES - GRAHAM - SACKETT 1973; JONES 1976, pp. 88-91; KNIGGE 1976, p. 166 nr. 397, 398; OSBORNE 1985, p. 193; JONES 1990, pp. 66-67; PETRAKOS 1992, p. 5; LOHMANN 1993; MUNN 1993, pp. 77-78, 91; POLOGIORGI 1998, pp. 127-128; LYGOURI-TOLIA 2000, p. 212; ZACHARIADOU 2000, pp. 149, 156-157; GINI-TSOFOPOULOU 2002, p. 165, fig. 17; STEINHAEUER 2002, p. 98; ROTROFF 2006, pp. 128-131; SALLIORA-OIKONOMAKOU 2007, pp. 59-60; BORTOLIN 2008, p. 175 n. 170; BOSSOLINO 2017, p. 508.

¹³ See Strabo 9.1.23.

aroma.¹⁴ But harvesting without smoke was probably a well-known habit and used throughout Attica. In fact, we can find a similar reference in Lucian of Samosata who generally referred to Attic honey (*Navigium* 23: μέλι...τὸ ἄπυρον). Likewise, Pliny the Elder (*HN* 11.15.40) provides us with further information about the period in which honey was gathered, saying that the harvest in Athens took place «at the beginning of the caprification», an agricultural technique for fig trees, that probably occurred in June, once again differentiating the region of Athens from others, in which the harvest was carried out «on the sacred day of Vulcan», meaning at the end of August.¹⁵ In addition, we have an interesting textual source regarding juridical and administrative rules concerning honey making in Attica. Plutarch (*Sol.* 23.8), in fact, describes laws instituted by Solon at the beginning of the 6th century regarding the position of hives on the territory. The apiary, comprised of many hives and owned by a beekeeper, had to be at least three hundred feet away from those which another apiarist had already installed. This law had probably twofold goal of preventing controversies and of organizing honey production in the land, demonstrating once again how prevalent it was in Attica.

Both in Attica and generally in the Greek world, the honey was used for several purposes. We commonly associate the product to its primary function as food or as a food sweetener,¹⁶ but it was also used in other fields, such as pharmacology.¹⁷ According to literary sources, indeed, pills called *thalassomeli* were made in Greece mixing honey with other ingredients and were used against intestinal disease.¹⁸ More specifically, certain types of honey seem to have had properties which made them ideal ingredients for medicines. In fact, Pliny reports an interesting tradition regarding honey of the island of Crete, saying that the honey coming from the mount Carma was never touched by flies (*HN* 21.46.79: *mons est Carma...intra quod spatim moscae non reperitur, natumque ibi mel nusquam attigunt. Hoc experiment singular medicamentis eligitur*). This virtue was linked by local people to the purity of the final product, so that the honey from mount Carma was preferred to prepare medicines.¹⁹

Another specific field for the use of honey throughout Greece is the sacred and ritual sphere, and epigraphic evidence from Attica in particular gives us interesting information on the offering of honey to gods.²⁰ For example, an inscription dated to the 4th century BCE from the deme of Aixone, located on the west coast of the region, contains a *lex sacra* that lists priestesses of various deities worshipped in the deme.²¹ We find references to the deity and to the priestesses or priests followed by the word *hieriosyna*, that usually indicate the parts of the offerings reserved to the personnel.²² In other words, it was a sort of salary and also a reimbursement of the expenses incurred by the priests who bought ingredients for the offerings in the rites. Among the items listed there are some cups (*kotylai*) of honey whose price was three obols each.²³ It is plausible that the purchased honey was used not only as a donation on its own, but as an ingredient, bought by the priests who are now reimbursed, for offerings like honey cakes, which were a very common donation.²⁴ They were put on the altar or aside it on a table, where there could be both cakes and meat or cakes offered in place of meat for deities that did not require blood sacrifices.²⁵

¹⁴ About the common use of smoke in beekeeping see CRANE 1999, pp. 341-346.

¹⁵ See BORGHINI *et al.* 1983, p. 565 nos. 40.2-3.

¹⁶ See ANDRÉ 1981, p. 186, for the late use of brown sugar in Greece, beginning in the 8th-9th century CE. Greeks were not without other forms of sweeteners, for example dates, but honey was also useful in the long-term storage of food. On the foodbase use of honey in the Mediterranean, see BORTOLIN 2008, pp. 22-26; GIUMAN 2008, p. 67.

¹⁷ See TOTELIN 2009, pp. 164-166 for Attic honey used in pharmacology, and pp. 69-70, 73, 126-30 for the general use of honey as ingredient for remedies; TOTELIN 2015, p. 31. Cfr. also GIUMAN 2008, pp. 68-69; BORTOLIN 2008, p. 26.

¹⁸ See GIUMAN 2008, p. 68. Cfr. Plin. *HN* 31.35.68: in order to create *thalassomeli*, honey was mixed with rain water and sea water. See also Dioscorid. 5.12. See also Plin. *HN* 11.15.38, about the usefulness of honey in order to cure ulcers and eye pain.

¹⁹ See CONTE 1984. The toponym *Carma* is not certain and not attested elsewhere: see ANDRÉ 1969, p. 125; ARAGOSTI *et al.* 1985, p. 197.

²⁰ See LAFAYE 1904, pp. 1704-1706; EKROTH 2002, pp. 65, 220, 221-2, 325; BORTOLIN 2008, pp. 28-33.

²¹ See SEG 54.214. The inscription is fragmentary. The first three fragments found in Alikí, were initially attributed to the deme of Halai Aixonides (*IG* II² 1356), but thanks to the finding of another fragment of this stone in Glyphada (SEG 46.173), A. P. Matthaiou could identify its provenance from the deme of Aixone; see MATTHAIIOU 1992/8. The last fragment (SEG 54.214) found again in Glyphada confirmed the attribution; see STAINCHAOUER 2004. About the inscription, cfr. also PARKER 2010; ACKERMANN 2018, pp. 271-292, n. 15, fig. 41.

²² See *LSJ*, s.v. ἱερεώσυνος (ἱερεώσυνα, τά). See SEG 54.214, lines 5, 9-10, 11-12, 16, 20, 23-24, 28, 31-32: ἱερεῖαι or ἱερεῖ ἱερεώσυνα. Cfr. ACKERMANN 2007, p. 119: «le terme ἱερεώσυνα, terme générique dans les lois sacrées, désignant aussi bien les émoluments en espèces qu'en nature ou, comme ici, les deux à la fois»; SCUILLION 2009, with parallels in Hebrew and Punic traditions.

²³ See SEG 54.214, lines 2-3, 7, 13-14, 17, 21, 25, 29, 34, 39.

²⁴ See ACKERMANN 2007, p. 126; ACKERMANN 2018, p. 285. For the custom of offering cakes, see KEARNS 1994; BRUIT ZAIDMAN 2005.

²⁵ See EKROTH 2002, p. 325; BRUIT ZAIDMAN 2005, pp. 35-37; ACKERMANN 2018, p. 285.

Among the deities that appear in the document, we can find the chthonic goddess Demeter, accompanied by the epiclesis of *Chloe*, whose priestess appears as one of the beneficiaries of the tree obols for the *kotyle* of honey.²⁶ Demeter herself had a privileged relationship with honey and bees. This is evident in the appellative of the priestesses of her cult, called *Melissai*. We can find an explanation of the term by a scholiast to Pindar: «Melisse: or priestesses; especially the ones of Demeter, improperly also all the other priestesses due to the purity of the insect».²⁷ It is shown from this passage that the title of *Melissa*, initially exclusively used by Demetrian priestesses, was then extended to the ones of other cults. However, if we can trust the scholiast, its first meaning remains within the context of the cults of Demeter, which is linked with the chthonic sphere.²⁸ Similarly, specifically in the Attic context, honey and bees are connected to other cults too, such as the one of the Nymphs.²⁹ A famous episode from the life of Plato, cited by many ancient authors, tells us that the philosopher was, as an infant, nourished by a swarm of bees which filled his mouth with honey in the cave of the Hymettus dedicated to the Nymphs, Pan, and Apollo.³⁰ Certainly, honey has a very strong symbolic connotation here, as being nourished by the Nymphs with the sweet substance certainly foreshadows the future philosopher's dialogical skills.

Therefore, honey was undoubtedly employed in rituals for gods, offered in vases or used as an ingredient for other types of donations. In addition to that, it was used in funerary rites and offerings. For example, the above-mentioned honey cakes were offered on the grave together with scented oils and the ribbons used to honour the dead.³¹ Starting with the Mycenaean and the Iron Age period in Greece, we can find literary references about the use of honey as an offering to the dead, often in the form of libations (*χοαί*).³² The substance was also present in one of the most notorious ancient literary funerals, the pyre of Patroclus. In the *Iliad* (23.170), Homer describes Achilles as leaving oil and honey on the pyre and, besides, Achilles himself will be honored by his companions through the offering of honey as described in the *Odyssey* (24.67). Likewise, in Attica honey and other kind of offerings, such as water, milk, oil, and wine, were poured in the ground and figuratively sent to the dead.³³

The significance of honey in Attic funerary cults is remarked by a suggestive interpretation of a peculiar category of Attic fictile materials. This group consists of about twenty-four Attic ceramic models of ovoid shape aligned on a base or isolated with a characteristic hole near the pointed top (Figure 1.1-2). In 1989 the scholar A. Chericì enumerated twenty-five similar finds, but only twenty of them are likely from an Attic context and are attributable to this category with sufficient certainty.³⁴ We can now update the catalog adding four more Attic examples. In fact, two similar models were found in Tomb 19 of Merenda, and another one from Athens is preserved at the British Museum (Figure 1.3).³⁵ More recently, one specimen was found during

²⁶ SEG 54.214, lines 16: Δήμητρος Χλόης. The cult of Demeter *Chloe* is also attested in Athens, Eleusis, Marathon, Paiania, Thorikos; see BRUMFIELD 1981, pp. 132 ff.; PARKER 1987, p. 141; BREMMER 2005, p. 158.

²⁷ *Schol. Pi. P.* 4.106c Drachmann. Other deities with chthonic character to whom offerings of honey were given were Zeus *Melichios*, Dionysus *Zagreus*, Hermes, Hekate, Ge, Erittonius. But honey was also tied to the cult of the Eumenides and Nymphs, see CHERICÌ 1991, p. 225; HAAS-LEBEGYEV 2014, p. 113. The name *Melissai* for the participants to the *Thesmophoria* is also linked to the name Melisseus, king of Paros (Apollod. Ath. *FGrHist* 244 F 89), since Demeter confided to his daughters the mysteries of her cult. The link between purity and the name *Melissai* appears also in Callim. *Hymn* II, 110-112.

²⁸ See PATERA 2012, pp. 203-207.

²⁹ On the Nymphs, see ANDÒ 1996; LARSON 2001; SOURVINOU-INWOOD 2005.

³⁰ See Ael. *VH* 10, 21; Olymp., *Vit. Pl.*, 1. The ancient sources are collected by RIGINOS 1976, pp. 17-21. See MARCHIANDI 2006, pp. 498 ff. The scholar believes that the cave mentioned in this episode is most likely the one in Vari on the west coast of Attica. Actually, neoplatonic philosophers probably thought this too as their custom of visiting the significant places that shaped Plato's personality is well-known and the thousands of ancient oil lamps found on the site of the Vari cave could attest to their presence.

³¹ See GARLAND 1985, p. 113; MARCHIANDI 2011, p. 91. See also the probable reference to these honey cakes in Ar. *Lys.*, 601: μελιτοῦτταν.

³² On the use of honey in funerary rituals and as funerary libation, see GARLAND 1985, p. 169 (with sources); EKROTH 2002, p. 278; MARCHIANDI 2011, p. 89 note 63; BORMETTI 2014, pp. 33-35.

³³ See MARCHIANDI 2011, p. 91.

³⁴ One example (CHERICÌ 1991, catalogue 1) comes from Corinth. Another non-Attic example (Ivi, cat. 21) is a small model in the Archaeological Museum of Patras. Regarding model number 9 of Chericì's catalogue, there is insufficient information, and in BOUZEK 1969, p. 269, C:4, cited by Chericì, the reference to *Agora* VIII, 92 note 41 is likely incorrect. Also, for number 23 and 24 the reference to the unpublished models is quite generic. Eventually, Chericì himself was uncertain about the exemplary cat. A, that seems different indeed. The item cat. 22 is doubtful, and the scholar did not see it personally; it is unpublished and preserved in the National Museum of Athens, where the description is 'provenance unknown' (I saw it in September 2022), but cfr. BOUZEK 1969, p. 269 n. C20: 'Athens NM 18679. Boeotian, LG'. The scholar does not explain the criteria used to assert a Boeotian origin. The model is not included in Lord Smithson's catalogue. For this uncertainty it seems imprudent to exclude this exemplary from the category of Attic models.

³⁵ The three models are published in WILLIAMS 2000, p. 392 (model from Athens: British Museum GR 1997.8-15.1) and in XAGORARI-GLEIBNER 2005, pp. 69-70 n. 159, 160, 113; HAAS-LEBEGYEV 2014, p. 121 (two models from Merenda: Brauron Museum, inv. 74-75,

the excavation of a tomb in the Phaleron cemetery.³⁶ These all date between the 9th and the first half of the 7th century BCE.³⁷

Among all the fictile models, the most famous are the ones that emerged from the female grave of the so-called *Rich Lady* (Tomb H 16:6) dating to the Geometric Period, discovered at the foot of the Areopagus of Athens.³⁸

The most interesting artefact from the burial, exposed in the Agora Museum of Athens, is well-known and it is constituted by five ovoid elements aligned on a chest-shaped base (*larnax*). At the top of each there is a small hole protected by a slight roof (Figure 2.1). The same characteristics can be found in another bigger model (28 cm height), found outside the pit, in an ash layer interpreted as the place of the *pyra* (Figure 2.2).³⁹ The objects raised immediate interest and scholars commonly accepted the identification by the editor, Evelyn Lord Smithson, as small granary models, symbols of the *status* of the deceased woman. The fictile models can more reasonably be identified as reproductions of small vertical hives made of perishable material, which did not survive in the archaeological documentation.⁴⁰ Chericci was the first to express concerns about the likelihood of Lord Smithson's hypothesis since it seems to take into account only the artefact with five cusps, number that she considered an implicit reference to the upper-class of the *pentakosiomedimnoi*, to which the deceased would have belonged.⁴¹ However, the model, despite being the most studied, is the only one in this complex shape, while the majority of the examples are actually constituted of a single element or groups of two or three cusps at most. If we accepted Lord Smithson's thesis, as Chericci noted, it would be difficult to believe that in these cases, to honor the dead, the family would choose to emphasize his belonging to one of the lowest Solonian classes of census, burying him with a unique ceramic 'granary' or two.⁴² Furthermore, to situate the *pentakosiomedimnoi*, intended as a census-class, in a chronological horizon dating between the 9th and 8th century BCE seems to be anachronistic. Even if one were to consider that the constitutional reform which divided Athenian citizens into the four census classes, attributed to Solon and dating to the beginning of the 6th century, could constitute the codification of a precedent social reality, the interpretation gives cause for concern.⁴³

Moreover, Lord Smithson's identification as granaries was mainly based on the comparison with Egyptian granary models dating to the Old and the Middle Kingdom. If, on one hand, Chericci's objection that the Greek and the Egyptian models cannot be compared, since they belonged to economic, social, cultural, geographic and historic realities that are far from each other,⁴⁴ might seem weak, considering a possible influence of Egyptian conservation methods, on the other hand, it should be also noted that the resemblance with the Egyptian granaries is not always noticeable.⁴⁵ In fact, some examples of granary models from Egypt, even if morphologically not so distinct from the Greek artifacts, show differences that are significant for a precise common interpretation. In particular, it is possible to identify an interesting example dated between 1980 and 1700 BCE (12th-13th Dynasty). It is an artifact in raw clay, made of nine cusps surrounded by an enclosure

on display). Another similar model was found in Tomb 6 of Nea Makri (Marathon), now preserved in Marathon Museum (see MAZARAKIS AINIAN 2011, p. 704), but its belonging to the category is not certain, since the drawing of the model does not show the characteristic hole near the pointed top. Moreover, it is very important to distinguish these items from some models that vaguely resemble the same pointed shape, but whose interpretation is completely different: see LAMBRUGO *forthcoming*.

³⁶ PAPPAS - LOURENTZATOU 2022, p. 110 n. 58 (with photograph).

³⁷ Most of the fictiles are decorated, *vd.*, e.g., CHERICCI 1991, cat. 8 (Athens, Agora Museum, inv. P7292. Cfr. YOUNG 1939, p. 186, fig. 138, C 149; LORD SMITHSON 1968, n. 8; BOUZEK 1969, p. 269 n. C3; DRERUP 1969, n. 12, Tab. VIII:3); Ivi, cat. 11 (Athens, National Museum, inv. 697. Cfr. PAULY-WISSOWA, suppl. VII, p. 249, s.v. «Haus»; LORD SMITHSON 1968, n. 10; BOUZEK 1969, p. 269 n. C7; DRERUP 1969, n. 13); Ivi, cat. 19 (Karlsruhe, Batisches Landesmuseum, inv. B 1511. Cfr. *CVI* Karlsruhe I (Hafner), 11, Tab. IV:5-8; LANGLOTZ 1954, p. 265; LORD SMITHSON, n. 7; BOUZEK 1969, p. 267 n. C11, fig. 2:1-2; DRERUP 1969, n. 14; KÜBLER 1970, p. 622 n. 297; VON FREYTAG LORINGHOFF 1975, p. 81; Tab. III-IV).

³⁸ See LORD SMITHSON 1968; LISTON - PAPADOPOULOS 2004 with an update on the osteological evidence in the burial. Cfr. also BOUZEK 1969, p. 266 n. C1; DRERUP 1969, O75.

³⁹ Agora Museum, inv. 27646; 27668. See LORD SMITHSON 1968, pp. 92-97. Cfr. CHERICCI 1991, cat. 2, 3; BOUZEK 1969, p. 269 n. C2; DRERUP 1969, n. 10. On the ash layer, see also SCAFURO 2015, p. 51.

⁴⁰ The first to support this hypothesis were MANTZOULINO 1979; CHERICCI 1991.

⁴¹ See LORD SMITHSON 1968, pp. 77 ff. The hypothesis is usually accepted: see, e.g., COLDSTREAM 1995, p. 395; MORRIS - PAPADOPOULOS 2004, pp. 226-229.

⁴² See CHERICCI 1991, p. 220.

⁴³ See CAMASSA 1996, pp. 571 ff.; CAMASSA 2007. In general, *cfr.* also RHODES 2006, pp. 248-260; WEES 2006, pp. 360-381; LODDO 2018, pp. 89-122.

⁴⁴ See CHERICCI 1991, pp. 218-220.

⁴⁵ See the model considered in MORRIS-PAPADOPOULOS 2004, pp. 230 (Middle Kingdom).

(Figure 3).⁴⁶ The shape of each cusp is more cylindrical than the Greek artifacts and the hole is small and made on the top.⁴⁷ The difficulty of comparing these Attic models with Egyptian granaries increases if we consider the reconstruction of J. M. Cook, who studied an Attic model preserved in the Ashmolean Museum in Oxford.⁴⁸ According to the scholar, if the structure is a granary, it should be «imagined as mainly underground, with the trap-door above ground-level and the roof-peak supported by a central pole inside».⁴⁹ If his idea that the structure was partly buried was correct, it would be even more diverse from the Egyptian granaries, whose cylindrical containers seem to be visibly out of the ground in iconography, as we can see for instance from the representation of the granaries picture of Iti and Neferu Tomb (Figure 4).⁵⁰

Although there have already been some proposals against the identification of the Attic fictile objects as granaries, they are still labeled as such in most of the museums where they are preserved and in many publications. However, it is not easy to agree with this hypothesis both for the anachronistic aspect of the symbolism of the *pentakosiomedimnoi* and for a not completely credible comparison with the Egyptian granaries. On the contrary, the interpretation of this peculiar ceramic class as the reproduction of a single hive or of a series of hives constituting an apiary seems to be quite convincing.

First of all, it seems necessary to specify that ancient types of hives can be divided into two main groups depending on how they were arranged in the apiary, namely horizontal and vertical ones. In Attica, the archaeological remains belong to horizontal ceramic hives. This type shows an elongated shape and is characterized by the presence of grooves on the internal surface, realized before firing the clay, that cover in horizontal or vertical direction the upper half, or less sometimes, of the internal walls of the vase.⁵¹ This device probably allowed a stronger adherence of the honeycombs to the internal walls. It has been conjectured, in fact, that the grooves were drawn on the internal upper half of the hive and from there the honeycombs developed towards the bottom and, consequently, this indication even allows the knowledge of the original orientation of the clay hive in the apiary.⁵²

As regard vertical hives, we do not have archaeological evidence in Attica, but, given the abundance of the production, it is probable that they were also used and were made of perishable materials, as the ancient sources suggest.⁵³ Then, the fictile models analyzed here may also offer precious data for reconstructing their shape, as well as informing us about the possible use and funerary symbology of honey in Attic contexts. In the classical world, information regarding vertical hives in perishable material comes almost exclusively from the literary tradition, which is still quite useful.⁵⁴ In particular, the Latin sources explain the function of the small holes made at the top of these ovoid elements, which were probably intended for inspection or aeration, or simply were conceived as flight holes.⁵⁵ But even medieval iconographic representations, much more numerous than in the previous periods, are very useful in understanding the shape of vertical hives. One of

⁴⁶ Turin, Museo Egizio, inv. S.15802; see D'AMICONE 2006, p. 118.

⁴⁷ In the Greek context it is possible to propose a comparison for this Egyptian artefact, which is however rather far from that of the Attic geometric models. In fact, it seems to find a closer connection, from a structural point of view, with a marble model coming from Melos (Munich, Staatliche Antikensammlungen und Glyptothek 1839 WAF), also interpreted as the reproduction of a Greek granary and, also in this case, very different from the Attic models, with more cylindrical cusp and a hole made on the top; see DINSMOOR 1927, pl. IV.

⁴⁸ Oxford, AN1928.314; cfr. COOK 1962, p. 33 fig. 6; BEAZLEY 1967, cat. 56; LORD SMITHSON 1968, n. 5; BOUZEK 1969, p. 269, n. C12; DRERUP 1969, n. 22, Tab. VII:2; CHERICI 1991, cat. 16, tav. VII:2 (ph.). Nonetheless, the item is already described in the Museum's record as a Late Geometric model beehive.

⁴⁹ See COOK 1962, p. 33, fig. 6.

⁵⁰ Turin, Museo Egizio, inv. S.14354.13; see recently MOISO 2016.

⁵¹ Since these grooves were probably drawn with a comb, they are defined in specialized terms as *combing*, hence the term *combed ware* is used for this ceramic class. See JONES - GRAHAM - SACKETT 1973, p. 444 fig. 18 (horizontal and vertical grooves). See also BORTOLIN 2008, p. 69-70, according to whom the grooves were made with a fine instrument (a comb, a small wooden stick or a small bone point); the scholar does not exclude that they could be simply due to the lathe. However, this possibility could be excluded because of the presence of deep irregular grooves (see GEROULANOS 1973, p. 445) and of lines developed vertically.

⁵² See JONES - GRAHAM - SACKETT 1973; HATJINA - MAVROFRIDIS - JONES 2018. The fact that the grooves indicated the original position of the hive was proposed on the basis of ethno-archaeological parallels. See also BRONEER 1959.

⁵³ Even if apiaries made of wood or cork were employed for beekeeping, there are no material remains in the archaeological record. See modern examples of hives in perishable material in MANTZOULINO 1979, p. 72; HATJINA - MAVROFRIDIS - JONES 2018. In Attica there is only one possible ceramic fragment of vertical hive, found in the Agora of Athens: see ROTROFF 2006, p. 129 n. 373. For a comparison, see vertical hives from Isthmia: ANDERSON-STOJANOVIĆ - JONES 2002.

⁵⁴ See, e.g., Varro, *Rust.* 3.16.15-17; Virgil, *G.*, 4.33-36; Columella 9.6.1-4; Plin. *HN* 21.47.80. Only one iconographic source survives, but its reliability is uncertain. The inscription, lost today, is considered a fake by the editors and the relief which possibly represents a vertical beehive, is probably the result of a reworking of the stone, see *CIL* VI 3124; cfr. BORTOLIN 2008, p. 64.

⁵⁵ Virgil, *G.*, IV 35; Varro, *Rust.* III 16.16; Columella IX 3-6. The two little holes on the lower part of the cusps in the five cusps model are possibly also flight holes. A similar function can be found on the terracotta lids for horizontal hive, see GEROULANOS 1973, p. 446.

these images can be a valuable comparison for the five cusps model. In fact, in observing the miniaturist *décor* (Figure 5) of a codex from the *Biblioteca Casanatense* of Rome, in the volume *Theatrum Sanitatis* by the Arab scholar Ububchasyam de Baldach (11th century CE), we can note a close affinity among the parts that compose the wicker hives represented and the corresponding components of the Greek models.⁵⁶ We can see the characteristic cusp shape, the flight hole and it is worth noting that a wooden structure is added to raise the hives from the ground. In fact, the use of an analogous structure in the apiary could also explain the particular shape of the *larnax* in the five-cusps model. Even if this miniaturist image was created in the 14th century, it is a valid and useful parallel, since the beekeeping technique shows an extremely conservative character in its practices, in accordance to the habitat conditions required for the safety of the beehive.⁵⁷ Moreover, many areas that in ancient times had been important centers for honey production, such as Attica, continue to be producers today.⁵⁸ Similar examples in shape can even be taken from the modern era and from present day samples and compared from an ethno-anthropological approach. In fact, the modern wicker beehives are very similar to the Greek models, as to those in medieval representations. They often have a cusp shape with the presence of the flight hole and, to be placed in the apiary, they are generally placed on a rise.⁵⁹ In the specific case of the *Rich Lady* Tomb, the *larnax* with the five cusps could indeed represent a big apiary. A recent very attractive interpretation, according to which the other artefacts found in the burial were tools related to the production of textiles, encourages the view that the object may be a model of a beehive, given the further use of honey in connection with the dyeing process.⁶⁰

However, taking into account all the artifacts at issue, to confirm the identification as beehives, it is important to draw attention to the context of discovery itself, since all the specimens whose find spot is known come from necropoleis. In particular, they come from burials located for instance in the Agora, on the slopes of the Areopagus, in the Kerameikos, in the necropolis of Kallithea, or in Eleusis, Marathon and so on.⁶¹ We have already pointed out that honey and bees were connected to chthonic deities, for example in the case of the Demetrian cults, and that there was also a relation to the funerary sphere.⁶² This correspondence can be seen in the Greek world starting from the Homeric poems, as mentioned, but we can also find an interesting clue of a symbolic relation between the bee and the human soul in a Roman funerary inscription which explicitly refers to Attic context. The epigraph not only mentions a bee, linking the insect to the funerary sphere, but it makes an explicit reference to the Attic bee, which apparently used to go to the tomb and leave the honey on it.⁶³ These examples give an idea of the relationship between the symbology of honey and bees and the funerary sphere within a large chronological range. Finally, it is Porphyry who definitely informs us that «honey was a symbol of death (this is a reason why the ancient people offered it to chthonic deities)».⁶⁴ The discovery of peculiar hive models in Attic burials, then, is not a surprise at all. Finally, it is possible to add a further hypothesis. Undoubtedly, the Attic small hive models could have alluded to the 'symbolic' burial of honey, but it is also conceivable that in some cases this had to be a concrete offering to the dead and not simply a symbolic one. In fact, almost all the cusps appear as real containers.⁶⁵ In this

⁵⁶ The volume is Codex 4182, see PAZZINI 1970, III, p. 99.

⁵⁷ On the deeply conservative methods practiced by beekeepers, and on the places of production, see the discussion in BORTOLIN 2008, p. 16.

⁵⁸ An example is the island of Malta, called *Melita* at least from the 4th century BCE, with a correspondence between toponym and production. The island still has a strong apicultural tradition today, see CRANE 1999, p. 188; but there are also examples in southern Italy and around the Mediterranean, see also BORTOLIN 2008, pp. 48 ff.

⁵⁹ See examples of traditional beekeeping throughout Europe in CRANE 1999, pp. 222, 238, 243 fig. 27.2c, 250-251, 256 (with the hive placed on an apiary made of wood), 333.

⁶⁰ MARTELLI 2016, pp. 117-144.

⁶¹ Only one specimen comes from a well in the Agora (CHERICI 1991, cat. 8). For the examples from Kerameikos, see Kerameikos Museum, inv. 4283 (VON FREYTAG LORINGHOFF 1975, p. 81 n. 11, Tab. XXII:5; MANTZOULINO 1979, p. 78 n. 16, fig. 6; CHERICI 1991, cat. 17), 4284 (VON FREYTAG LORINGHOFF 1975, p. 81 n. 12, Tab. XXII:5 in the centre, 23:1; MANTZOULINO 1979, p. 78 n. 16 fig. 6; CHERICI 1991, cat. 18), 4726 (BOHEN 1988, pp. 20, 79-80 n. 19, Tab. II:2; CHERICI 1991, cat. 5); on the one from the necropolis of Kallithea: see CALLIPOLITIS FEYTMANS 1963, pp. 413-414 fig. 7; LORD SMITHSON 1968, n. 3; BOUZEK 1969, p. 266, n. C6, fig. 2:4; DRERUP 1969, n. 20; CHERICI 1991, cat. 7; the example from Eleusis is from the so called 'Isis Tomb': see SKIAS 1898, pp. 106-110 col. 112 fig. 32; LORD SMITHSON 1968, n. 2; BOUZEK 1969, pp. 266 ff. n. C5, fig. 2:3; DRERUP 1969, n. 17; COLDSTREAM 1977, 79; CHERICI 1991, cat. 6. Also the exemplaries from Merenda and Marathon, mentioned above, come from funerary contexts.

⁶² See LAFAYE 1904, p. 1701; MAGNIEN 1950, p. 135 with reference to the ancient sources.

⁶³ *CIL* VIII 7854:*saep]e meis tumulis avis Attica parvula venit et satiata thymo stillantia mella relinquit*. The inscription is from Cirtia (Algeria).

⁶⁴ Porph., *De Antr. Nymph.*, 18-19.

⁶⁵ There are few cusps that do not seem containers and they are likely to be simple parts of *pyxis* lids in the shape of hives. Cfr. YOUNG 1939, p. 187, C 149, fig. 138. The model of the Kerameikos Museum, inv. 4726 and possibly the model that Chericic mentions as

respect, it seems stimulating to highlight that the context itself of the aforesaid biggest single model, found in the pyre's ash-layer near the *Rich Lady* pit, could recall an offering of honey similar to the ones on Patroclus and Achilles' pyres. It should not surprise to find a donation of precious Attic honey connected to such a rich grave. After all, the closed shape and the small hole of these fictiles, useful to avoid spillage, would be also quite suitable for containing such a precious offering.

However, if the outline of the vessel can give a clue of its filling, it is interesting to note that the fictile hives are identified only in tombs of the Geometric Period, although the use of honey in the funerary sphere probably continued in the Classical Age, as offering to the dead or maybe in association with the treatment of the body of the deceased.⁶⁶ Anyway, no clear traces seem to remain in the material culture. Indeed, since other vessels containing substances for funerary offerings or for the care of the bodies were placed in or near the burials, such as the several *lekythoi* that we can find in tombs, one could legitimately expect to find vessels for honey too. However, it is entirely likely that honey could be commonly placed in *kotylai* or other containers similar to those frequently used for other liquids, such as wine or milk, making it difficult to distinguish those that contained honey on the basis of the archaeological record.⁶⁷ Nevertheless, it cannot be completely ruled out that in some rare cases it could be possible to relate the vessels' peculiarities with their use as containers for honey. This has been proposed for some items of the funerary deposit of the so-called Sotades Tomb, discovered in Athens and dated to the mid-5th century.⁶⁸ The burial had valuable grave goods, namely a Red Figure and four Attic White-Ground cups, two drinking conical cups (*mastoi*) and two libation bowls (*phialai*).⁶⁹ Following the interpretation of the editor, in all these cases the scenes depicted on the vases are reminiscent of mythical episodes related to honey.⁷⁰ In view of this, it has been suggested that some of the vessels were used for libation with honey in practice or to contain it and, in particular, that the two *mastoi*, the decoration of which might recall a bee's abdomen, could possibly have carried honey.⁷¹ In most cases, however, the probable use of ceramic shapes commonly employed for drinking or pouring does not allow us to distinguish those aimed at containing honey, so that the extent of its use remains elusive to us. To conclude, it seems clear that in the classical world, and more specifically in the Attic context, honey and bees maintained a cultural value. The role of honey, then, is not only to be analyzed in its economic purpose or in its day-to-day uses. It reserved a clear importance in religion and in the funerary rituals in the same way as wine and oils, and the community was certainly aware of the preciousness of this substance.

preserved at the Marathon Museum (see CHIERICI 1991, cat. 20) are probable part of a *pyxis* lid. Also, the two little 'holes' at the base of each cusp of the *Rich Lady*'s model «do not penetrate the interior», as the editor specifies (LORD SMITHSON 1968, p. 94), so that their use as little honey-holders cannot be totally excluded.

⁶⁶ See BALANDIER 1993, p. 119; BORTOLIN 2008, p. 33. It is interesting to recall the passage from Xenophon recounting the death of Agesipolis, since it informs us that the king's body was covered with honey, certainly in order to preserve it, and transported to his homeland: see Xen., *Hell.* V, 3.19; cfr. also D.S. 15.93.6.

⁶⁷ See, e.g., SEG 54.214 for *kotylai* of honey; see also the papyrus *P. Cair. Zen.* 59012, which records a *stamnos* of Attic honey among the products imported to Alexandria.

⁶⁸ For the discovery of the tomb in the Northeast Necropolis at Athens, see MARCHIANDI 2014, p. 633.

⁶⁹ For the analysis of the vessels, see BURN 1985; TSINGARIDA 2003.

⁷⁰ See BURN 1985, pp. 96 ff. The iconography represents the myth of Glaucón (Apollod. 3, 17) and Aristaeus (Virgil, *G.*, 4.425-463); on the scenes, see also GIUMAN 2008, pp. 222-242.

⁷¹ See BORMETTI 2014, p. 38, who rightly points out also that the *mastoi* generally recall women's breasts (the same greek word *mastoi* means breasts) and the concepts of fertility and *kourotrophia*, but, according to the scholar, they would also recall the bee in this peculiar case. See also COHEN 2006, pp. 315-316. It has been suggested that honey, given its symbolic significance, could be also offered in other unusual pottery shapes, such as for a type of vessel, the *stamnoid olla* shape, characteristic of the Etruscan cemeteries between the 4th and 3rd century BCE: see BORMETTI 2014, p. 35.

APPENDIX



Figure 1.1. Fictile model, Kerameikos Museum inv. 4283 (H: 12.1; 11.3). Ephorate of Antiquities of Athens City, Archaeological Museum of Kerameikos © Hellenic Ministry of Culture / Organization of Cultural Resources Development (H.O.C.RE.D.).



Figure 1.2. Fictile model, Kerameikos Museum inv. 4284 (H: 9.2). Ephorate of Antiquities of Athens City, Archaeological Museum of Kerameikos © Hellenic Ministry of Culture / Organization of Cultural Resources Development (H.O.C.RE.D.).



Figure 1.3. Fictile model, British Museum inv. GR 1997,0815.1 (H: 9.5). © The Trustees of the British Museum.



Figure 2.1. The fictile model from the Rich Lady tomb (H: 11.5; 10.4; 10.6; 9.9; 11.0). Ephorate of Antiquities of Athens City, Ancient Agora, ASCSA: Agora Excavations © Hellenic Ministry of Culture / Organization of Cultural Resources Development (H.O.C.R.E.D.).



Figure 2.2. The fictile model from the ash-layer of the Rich Lady tomb (H: 28.0). Ephorate of Antiquities of Athens City, Ancient Agora, ASCSA: Agora Excavations © Hellenic Ministry of Culture / Organization of Cultural Resources Development (H.O.C.RE.D.).



Figure 3. Egyptian granary model. Courtesy of ©Museo Egizio, Torino.



Figure 4. Iti and Neferu Tomb painting (2118-1980 BCE). Courtesy of ©Museo Egizio, Torino.



Figure 5. Miniaturist décor of the Theatrum Sanitatis. Biblioteca Casanatense, Roma, Cod. 4182 (coll. MS4182TAV181), tav.181. From Pazzini 1970, III, 99.

REFERENCES

- ACKERMANN 2007 : D. Ackermann, *Rémunération des prêtres et déroulement des cultes dans le règlement religieux d'Aixônè (Attique)*, «Les Etudes Classiques» 75 (2007), pp. 111-136.
- ACKERMANN 2018 : D. Ackermann, *Une microhistoire d'Athènes. Le dème d'Aixônè dans l'Antiquité*, Atene, École Française d'Athènes, 2018.
- ANDERSON-STOYANOVA – JONES 2002 : V. R. Anderson-Stoyanova – E. J. Jones, *Ancient beehives from Isthmia*, «Hesperia» 71 (2002), pp. 345-376.
- ANDÒ 1996 : V. Andò, *Nymphe: la sposa e le Ninfe*, «Quaderni Urbinati di Cultura classica» 52 (1996), pp. 47-79.
- ANDRE 1969 : J. André, *Pline l'Ancien. Histoire Naturelle. Livre XXI*, Paris, Les Belles Lettres, 1969.
- ANDRE 1981 : J. André, *L'alimentation et la cuisine à Rome*, Paris, Les Belles Lettres, 1981.
- ARAGOSTI *et al.* 1985 : A. Aragosti *et alii*, *Plinio Storia Naturale III.2*, Torino, Einaudi, 1985.
- BALANDIER 1993: C. Balandier, *Production et usages du miel dans l'antiquité gréco-romaine*, in *Des hommes et des plantes. Plantes méditerranéennes, vocabulaire et usage anciens. Table ronde, Aix-en-Provence mai 1992*, a cura di M.C. Amouretti - C. Comet, Aix-en-Provence, Presses de L'Université de Provence, 1993, pp. 93-125.
- BALANDIER 2004: C. Balandier, *L'importance de la production du miel dans l'économie gréco-romaine*, «Pallas» 64 (2004), pp. 183-196
- BEAZLEY 1967 : J.D. Beazley, *Select Exhibition of Sir John and Lady Beazley Gift to the Ashmolean 1912-1966*, London, Oxford University Press, 1967.
- BOHEN 1988 : B. Bohen, *Die Geometrischen Pyxiden. Kerameikos 13*, Berlin-New York, W. de Gruyter & Company, 1988.
- BORGHINI *et al.* 1983 : A. Borghini *et alii*, *Plinio. Storia Naturale II*, Torino, Einaudi, 1983.
- BORMETTI 2014 : M. Bormetti, *Api e Miele nel Mediterraneo antico*, «Acme» 67, 1 (2014), pp. 7-50.
- BORTOLIN 2008 : R. Bortolin, *Archeologia del miele*, Mantova, Società Archeologica, 2008.
- BOSSOLINO 2017 : I. Bossolino, *Honey production in Attica, an antique excellence*, in *Patrimónios Alimentares de Aquém e Além-Mar*, a cura di J. Pinheiro - C. Soares, Coimbra, Imprensa da Universidade de Coimbra, 2017, pp. 499-519.
- BOUZEK 1969 : J. Bouzek, *Three rare shapes of Geometric Pottery*, «Listy Filologické» 92 (1969), pp. 264-270.
- BREMMER 2005 : J. N. Bremmer, *The Sacrifice of Pregnant Animals*, in *Greek Sacrificial Ritual: Olympian and Chthonian*, a cura di R. Hägg - B. Alroth, Stockholm, Svenska Institutet I Athen, 2005, pp. 155-165.
- BRONEER 1959 : O. Broneer, *Excavations at Isthmia*, «Hesperia» 28 (1959), pp. 298-343.
- BRUIT ZAIDMAN 2005 : L. Bruit Zaidman, *Offrandes et nourritures: repas des dieux et repas des hommes en Grèce ancienne*, in *La cuisine et l'autel: les sacrifices en questions dans les sociétés de la Méditerranée ancienne*, a cura di S. Georgoudi - R. Koch Piettre - F. Schmidt, Turnhout, Brepols, 2005, pp. 31-46.
- BRUMFIELD 1981 : A. C. Brumfield, *The Attic festivals of Demeter and their relation to the agricultural year*, New York, Arno Press, 1981.
- BURN 1985 : L. Burn, *Honey pots. Three White-Group cups by the Sotades Painter*, «Antike Kunst» 28 (1985), pp. 93-105.

- CALLIPOLITIS FEYTMANS 1963 : D. Callipolitis Feytmans, *Tombes de Callithea en Attique*, «Bulletin de Correspondance Hellénique» 87 (1963), pp. 404-430.
- CAMASSA 1996 : G. Camassa, *Leggi orali e leggi scritte. I legislatori*, in *I Greci. Storia cultura arte società 2. Una storia greca I: Formazione*, a cura di S. Settis, Torino, Einaudi, pp. 561-576.
- CAMASSA 2007 : G. Camassa, *Atene. La costruzione di una democrazia*, Roma, L'Erma di Bretschneider, 2007.
- CHERICI 1991 : A. Chericci, *Granai o arnie? Considerazioni su una classe fittile attica tra IX e VIII sec. a.C.*, «Atti dell'Accademia nazionale dei Lincei. Rendiconti» 44 (1989), pp. 215-230.
- CRANE 1999 : E. Crane, *The world history of beekeeping and honey hunting*, London, Duckworth, 1999.
- COHEN 2006 : B. Cohen, *The Colors of Clay: Special Techniques in Athenian Vases*. Los Angeles, J. Paul Getty Museum, 2006.
- COLDSTREAM 1977, J. N. Coldstream, *Geometric Greece*, London, Ernest Benn Limited, 1977.
- COLDSTREAM 1995 : J. N. Coldstream, *The Rich Lady of the Areopagus and Her Contemporaries*, «Hesperia» 64 (1995), pp. 391-403.
- CONTE 1984 : G. B. Conte, *Gaio Plinio Secondo. Storia Naturale, vol. III: Botanica*, Torino, Einaudi, 1984.
- COOK 1962 : J. M. Cook, *The Greeks in Ionia and the East*. London, Thames and Hudson, 1962.
- DINSMOOR 1927 : W. B. Dinsmoor, *The Architecture of Ancient Greece. An Account of its Historic Development*. London, Batsford, 1927.
- DRERUP 1969 : H. Drerup, *Griechische Baukunst in geometrischer Zeit. Archaeologia Homerica. Band II.O*, Göttingen, Vandenhoeck & Ruprecht, 1969.
- EKROTH 2002 : G. Ekroth, *The sacrificial rituals of Greek hero-cults in the Archaic to the early Hellenistic periods*, Liège, Presses universitaires de Liège, 2002.
- FRASER 1931 : M. H. Fraser, *Beekeeping in Antiquity*, London, University of London Press, 1931.
- GARLAND 1985 : R. Garland, *The Greek way of death*, Ithaca-New York, Cornell University Press, 1985.
- GEROULANOS 1973 : St. Geroulanos, *Appendix I: Beehives at Trachones, Attica*, in JONES - GRAHAM - SACKETT 1973, pp. 443-448.
- GINI-TSOFOPOULOU 2002 : E. Gini-Tsofopoulou, *Early Christian and Early Byzantine Periods (4th - 8th century)*, in *Mesogaia. History and culture of Mesogeia in Attica*, a cura di K. Tsouni - G.N. Aikaterinidis, Athens, Athens International Airport, 2002, pp. 150-165.
- GIUMAN 2008 : M. Giuman, *Melissa. Archeologia delle api e del miele nella Grecia antica*, Roma, Archaeologica, 2008.
- HAAS-LEBEGYEV 2014 : J. Haas-Lebegyev, *Interactions between Basketry and Pottery in Early Iron Age Attica, Greece*, in *Knowledge Networks and Craft Traditions in the Ancient World: Materials Crossovers*, a cura di K. Rebay-Salisbury, A. Brysbaert, L. Foxhall, London, Routledge, 2014, pp. 104-126.
- HATJINA - MAVROFRIDIS - JONES 2018 : *Beekeeping in the Mediterranean from Antiquity to the present*, a cura di F. Hatjina - G. Mavrofridis - R. Jones, Nea Moudania, Hellenic Agricultural Organization, 2018.
- JONES 1976 : J. E. Jones, *Hives and honey of Hymettus. Beekeeping in Ancient Greece*, «Archaeology» 29.2 (1976), pp. 80-91.

- JONES 1990 : J. E. Jones, *Ancient Beehives at Thorikos: Combed pots from the Velatouri*, in *Thorikos 9.1977-1982*, Gent, Comité des fouilles belges en Grèce, 1990, pp. 63-71.
- JONES - GRAHAM - SACKETT 1973 : J. E. Jones - A. J. Graham - H. L. Sackett, *An Attic country house below the cave of Pan at Vari*, «Annual of the British School of Archaeology at Athens» 68 (1973), pp. 355-452.
- KEARNS 1994 : E. Kearns, *Cakes in Greek Sacrifice Regulations*, in *Ancient Greek Cult Practice from the Epigraphical Evidence: Proceedings of the Second International Seminar on Ancient Greek Cult, Athens, 22-24 November 1991*, a cura di R. Hagg, Stockholm, Swedish Institute at Athens, pp. 65-70.
- KNIGGE 1976 : U. Knigge, *Der Südhügel. Kerameikos 9*, Berlin-New York, W. de Gruyter & Company, 1976.
- KÜBLER 1970 : K. Kübler, *Die Nekropole des späten 8. Bis frühen 6. Jahrhunderts. Kerameikos 6*, Berlin-New York, W. de Gruyter & Company, 1970.
- LAFAYE 1904 : G. Lafaye, s.v. «Mel», in *Dictionnaire Des Antiquités Grecques Et Romaines III*, a cura di C. D. Daremberg - E. Saglio, Paris, Hachette, pp. 1701-6.
- LAMBRUGO forthcoming : C. Lambrugo, *May a Spinning Top become a Chest? New Insights into the Cultural Meaning of Spinning Top at Early Iron Age Athens*, in *A Turning World: a Multidisciplinary Approach to the Spinning Top and others Toys and Games*, a cura di C. Lambrugo, forthcoming (2023).
- LANGLOTZ 1954 : E. Langlotz, *Recensione a CVA Karlsruhe I*, «Gymnasium» 61 (1954), p. 264.
- LARSON 2001 : J. Larson, *Greek nymphs: myth, cult, lore*, New York, Oxford University Press, 2001.
- LISTON - PAPADOPOULOS 2004 : M. A. Liston - J. K. Papadopoulos, *The 'Rich Athenian Lady' Was Pregnant: The Anthropology of a Geometric Tomb Reconsidered*, «Hesperia» 73, 1 (2004), pp. 7-38.
- LODDO 2018 : L. Loddo, *SOLONE DEMOTIKOTATOS: Il legislatore e il politico nella cultura democratica ateniese*, Milano, LED Edizioni Universitarie, 2018.
- LOHMANN 1993 : H. Lohmann, *Atene II. Forschungen zu Siedlungen und Wirtschaftsstruktur des klassischen Attika*, Köln, Böhlau, 1993.
- LORD SMITHSON 1968 : E. Lord Smithson, *The Tomb of a Rich Athenian Lady, ca. 850 B.C.*, «Hesperia» 37 (1968), pp. 77-116.
- LÜDORF 1998-1999 : G. Lüdorf, *Leitformen der Attischen Gebrauchskeramik: der Bienenkorb*, «Boreas» 21-22 (1998-1999), pp. 41-130.
- LYGOURI-TOLIA 2000 : E. Lygouri-Tolia, *EVANGELISMOS Station*, in *The city beneath the city: Antiquities from the Metropolitan Railway Excavations*, a cura di L. Parlama - N. C. Stampolidis, Athens, Harry N. Abrams, pp. 209-214.
- MAGNIEN 1950 : V. Magnien, *Les mystères d'Eleusis: leurs origines, le rituel de leurs initiations*, Paris, Payot, 1950.
- MANTZOULINO 1979 : R. E. Mantzoulinou, *Melissa Potnia*, «Athens Annals of Archaeology» 12 (1979), pp. 72-89.
- MARCHIANDI 2006 : D. Marchiandi, *Riflessioni sui santuari delle ninfe e di Pan nell'Attica Classica. A proposito di G. Schoerner - H.R. Goette, Die Pan-Grotte von Vari. Mit epigraphischen Anmerkungen von K. Hallof, (Band 1), Philipp von Zabern, Mainz am Rhein 2004*, «Annuario della Scuola Archeologica Italiana di Atene» 82, serie III.4, Tomo II (2006), pp. 497-510.
- MARCHIANDI 2011 : D. Marchiandi, *I periboli funerari dell'Attica classica: lo specchio di una 'borghesia'*, Atene-Paestum, Pandemos, 2011.
- MARCHIANDI 2014 : D. Marchiandi, *La Necropoli Nord-Est*, in *Topografia di Atene. Sviluppo urbano e monumenti dalle origini al III secolo d.C.*, 1.3, vol. 1, a cura di E. Greco, Atene-Paestum, Pandemos, 2014, pp. 631-638.

- MARTELLI 2016 : I. Martelli, *The Tomb of a Rich Athenian Lady, ca. 850 B.C.: Honey and Purple for a Textile Interpretation Attempt*, «Pasiphae» 10 (2016), pp. 117-144.
- MATTHAIYOU 1992-8 : A. P. Matthaiou, *Aixonika*, «Horos» 10-12 (1992-8), pp. 29-34.
- MAZARAKIS AINIAN 2011 : A. Mazarakis Ainian, *A Geometric Necropolis at Marathon. The Context*, in *The Dark Ages Revisited, International Conference Volos, 14-17 June 2007*, a cura di A. Mazarakis Ainian, Volos, University of Thessaly Press, pp. 703-716.
- MOISO 2016 : B. Moiso, *La Storia del Museo Egizio*, Torino, Franco Cosimo Panini, 2016.
- MORENO 2007 : A. Moreno, *Feeding the Democracy. The Athenian Grain Supply in the Fifth and Fourth Centuries BC*, Oxford, Oxford University Press, 2007.
- MORRIS - PAPADOPOULOS 2004 : S. P. Morris - J. K. Papadopoulos, *Of Granaries and Games: Egyptian Stowaways in an Athenian Chest*, «Hesperia» 33 (2004), pp. 225-242.
- MUNN 1993 : M. H. Munn, *The defense of Attica. The Dema Wall and the Boeotian War of 378-375 B.C.*, Berkeley, University of California Press, 1993.
- OSBORNE 1985 : R. Osborne, *Demos. the discovery of classical Attika*, New York, Cambridge University Press, 1985.
- PAPPAS - LOURENTZATOU 2022 : I. Pappas - I. Loirentzatu, *Phalēróthen. Between two worlds*, Athens, Archaeological Museum of Piraeus, 2022.
- PARKER 1987 : R. Parker, *Festivals of the Attic Demes*, in *Gifts to the Gods. Proceeding of the Uppsala Symposium 1985*, a cura di T. Linders - G. Nödquist, Uppsala, Acta Universitatis Upsaliensis, 1987, pp. 137-147.
- PARKER 2010 : R. Parker, *New Problems in Athenian Religion: the Sacred law from Aixone*, in *Myths, martyrs, and Modernity, Studies in Honour of J.N. Bremmer*, a cura di J. Dijkstra - J. Kroesen - Y. Kuiper, Leiden, Brill, 2010, pp. 193-208.
- PATERA 2012 : I. Patera, *Offrir en Grèce ancienne. Geste et contextes*, Stuttgart, Franz Steiner, 2012.
- PAZZINI 1970 : A. Pazzini, *Theatrum sanitatis. Liber magistri. Ububchasym de Baldach Codice Casanatense 4182*, Milano, Franco Maria Ricci Editore, 1970.
- PETRAKOS 1992 : C. V. Petrakos, *Anaskaphe Ramnountos*, «Praktika tes Akademias Athenon» 1989 (1992), pp. 1-37.
- POLOGIORGHI 1998 : M. I. Pologiorghi, *Μνημεία του δυτικού νεκροταφείου του Ωρωπού. Ανασκαφή στο οικόπεδο του Οργανισμού Σχολικών Κτιρίων στη Σκάλα Ωρωπού*, Athens, Υπουργείου Πολιτισμού, 1998.
- RIGINOS 1976 : A. S. Riginos, *Platonica. The anecdotes concerning the life and writings of Plato*, Leiden, Brill, 1976.
- ROBINSON 1959 : H. S. Robinson, *Pottery of the Roman Period. Chronology. The Athenian Agora 5*, Princeton, School of Classical Studies at Athens, 1959.
- RHODES 2006 : P.J. Rhodes, *The Reforms and Laws of Solon: An Optimistic View*, in *Solon of Athens: New Historical and Philological Approaches*, a cura di J.H. Blok - A. Lardinois, Leiden, Brill, 2006, pp. 248-260.
- ROTROFF 2006 : S. I. Rotroff, *Hellenistic pottery. The plain wares. The Athenian Agora 33*, Princeton, School of Classical Studies at Athens, 2006.
- SALLIORA-OIKONOMAKOU 2007 : M. Salliora-Oikonomakou, *Lavreotiki. The Lavrion Museum*, Athens, Hellenic Ministry of Culture, 2007.
- SCAFURO 2015 : M. Scafuro, *L'area tra il Kolonos Agraios e l'Areopago dall'XI al I secolo a.C.*, *Studi di Archeologia e Topografia di Atene e dell'Attica 8*, Atene-Paestum, Pandemos, 2015.

- SCARCIA 2012 : R. Scarcia, *Virgilio. Georgiche. Elogio della vita agreste*, Milano, BUR, 2012.
- SCULLION 2009 : S. Scullion, *Sacrificial Norms, Greek and Semitic: Holocausts and Hides in a Sacred Law of Aixone*, in *La norme en matière religieuse en Grèce ancienne, Actes du XI^e colloque du CIERGA (Rennes, septembre 2007)*, a cura di P. Brulé, Liège, Centre International d'Etude de la Religion Grecque Antique, 2009, pp. 153-169.
- SKIAS 1898 : A. N. Skias, Πανάρχεια Ελευσινιακή Νεκρόπολις, «Ephemeris Archaologike» 1898, pp. 28-122.
- SOURVINOU-INWOOD 2005 : C. Sourvinou-Inwood, *Hylas, the Nymphs, Dionysos and others: myth, ritual, ethnicity. Martin P. Nilsson lecture on Greek religion, delivered 1997 at the Swedish institute at Athens*, Stockholm, Swedish Institutes at Athens and Rome, 2005.
- SPARKES - TALCOTT 1970 : B. Sparkes – L. Talcott, *Black and plain pottery of the 6th, 5th and 4th Centuries B.C., The Athenian Agora 12.2*, Princeton, School of Classical Studies at Athens, 1970.
- STAINCHAUER 2002 : G. Stainchaouer, *The Classical Mesogaia (5th - 4th century BC)*, in *Mesogaia. History and culture of Mesogeia in Attica*, a cura di K. Tsouni, Athens, Athens International Airport, 2002, pp. 80 - 139.
- STAINCHAUER 2004 : G. Stainchaouer, Ιερός νόμος Αιζωνέων, in *Αττικά επιγραφαί (Πρακτικά συμποσίου εις μνήμην Adolf Wilhelm, 1864-1950)*, a cura di A. P. Matthaiou - G. E. Malouchou, Athens, Elleniki Epigraphiki Etaireia, pp. 155-173.
- TOTELIN 2009 : L. Totelin, *Hippocratic Recipes Oral and Written Transmission of Pharmacological Knowledge in Fifth- and Fourth-Century Greece*, in *Studies in Ancient Medicine. Vol. 34*, a cura di J. Scarborough et alii, Leiden-Boston, Brill, 2009.
- TOTELIN 2015 : L. Totelin, *When foods become remedies in ancient Greece: The curious case of garlic and other substances*, «Journal of Ethnopharmacology» 167 (2015), pp. 30-37.
- TSINGARIDA 2003 : A. Tsingarida, *Des offrandes pour l'éternité. Les vases de la «Tombe de Sotadès»*, in *Le vase grec et ses destins*, a cura di P. Rouillard - A. Verbank-Pièrard, Munich, Biering & Brinkmann, 2003, pp. 67-74
- VANDERPOOL - MCCREDIE - STEINBERG 1962 : E. Vanderpool - J. R. McCredie – A. Steinberg, *Koroni: a Ptolemaic camp on the east coast of Attica*, «Hesperia» 31.1 (1962), pp. 26-61.
- VAROUCHA-CHRISTODOULOPOULOU 1961 : E. Varoucha-Christodoulou, Συμβολή εις τον Χερμωνίδειον πόλεμος 266/5-263/2 π.Χ., «Ephemeris archaiologike» 1953-1954, pp. 321-349.
- VON FREYTAG LORINGHOFF 1975 : B. Von Freytag Loringhoff, *Neue Fruhattische Funde aus dem Keramerikos*, «Athenische Mitteilungen» 90 (1975), pp. 49-81.
- WEES 2006 : H. van Wees, *Mass and Elite in Solon's Athens: the Property Classes Revisited*, in *Solon of Athens: New Historical and Philological Approaches*, a cura di J.H. Blok - A. Lardinois, Leiden, Brill, 2006, pp. 351-389.
- WHITFIELD 1956 : B. G. Whitfield, *Virgil and bees. A study in ancient apicultural lore*, «Greece&Rome» 3 (1956), pp. 99-117.
- WILKINSON 1969 : L. P. Wilkinson, *The Georgics of Virgil: A Critical Survey*, New York, Cambridge University Press, 1969.
- WILLIAMS 2000 : D. Williams, *Of Geometric toys, symbols and votives*, in *Periplous. Papers on Classical Art and Archaeology presented to Sir John Boardman*, a cura di G. R. Tsetschkladze - A. J. N. W. Prag - A. M. Snodgrass, London, Thames & Hudson, 2000, pp. 388-396.
- XAGORARI-GLEIBNER 2005 : M. Xagorari-Gleißner, *Die geometrische Nekropole von Merenda. Die Funde aus der Grabung von I. Papadimitriou 1960-61*, Dettelbach, Verlag J. H. Röhl, 2005.

YOUNG 1939 : R. S. Young, *Late Geometric Graves and a Seventh Century Well in the Agora*, Princeton, American School of Classical Studies at Athens, 1939.

ZACHARIADOU 2000 : O. Zachariadou, *SYNTAGMA Station*, in *The city beneath the city: Antiquities from the Metropolitan Railway Excavations*, a cura di L. Parlama - N. C. Stampolidis, Athens, Harry N. Abrams Inc., 2000, pp. 149-160.