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THE BRONZE CALYX-KRATER FROM THE 'HEUZEY B' TOMB IN VERGINA (ANCIENT AIGAI)

For my friend and colleague Professor E. Papuci-Władyka

Abstract: The calyx-krater with masks of Maenads on the handles was found in the small built tomb 'Heuzey B' on the east side of the necropolis of ancient Aigai (Vergina). The tomb belongs to the burial group Heuzey and is dated to the last decades of the 4th century BC based on archaeological evidence. The new crater from Vergina (krater 'Heuzey') complements the small group of bronze krater of the second half of the 4th century BC, which served as the urn (Urne). It seems no coincidence that all of the examples come from Macedonia, as shown by the excavations (Vergina-Aigai, Pydna) or the comparative study (Athens, ex White Collection).

**Keywords:** 4th century BC; metal work; bronze vases; Aigai-Vergina; Heuzey

## **Prologue**

In 1998–1999, during the clearing of the remains of a Macedonian tomb in Palatitsia (first researched by L. Heuzey in 1856),¹ two small burials were discovered at the eastern limits of the large cemetery of Aigai (Vergina), which are now known as 'Heuzey A' and 'Heuzey B'. Unfortunately, 'Heuzey A' had been looted. 'Heuzey B', however, was of great interest, as all of its burial objects had been preserved. This fact, combined with the burial's

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<sup>&</sup>lt;sup>1</sup> See Heuzey and Daumet 1876, 226ff. (= Descamps-Lequime 2011, 325ff.); Drougou 1999; Drougou 1995–2000; Kottaridi 2013, 78–79; Drougou *et al.* forthcoming.

spatial relationship to 'Heuzey A', ensured that a strong chronological estimate could be made of both.<sup>2</sup> The small cist grave of 'Heuzey B' was built in full view of 'Heuzey A', directly to its north, which places its dating within the same period. This is confirmed by its clay vase funerary offerings, which come from the last quarter of the 4th century BC (around 320 BC). The weapons discovered inside this small cist grave reveal it to be the burial of a military male, whose bones were kept inside a large calyx-krater after his cremation. It is this krater that will be the subject of this article. The metal vases and the burial ware are wholly typical of tombs dating to the end of the 4th century BC in Macedonia. Nevertheless, it is the tomb's clay vases that contribute most to the relative chronology of the burial complex, although this dating cannot be entirely certain. The most important item to this end is a small terracotta plain lamp of the Drougou ΠΛ1 type dating to the end of the 4th century BC.<sup>3</sup>

The bronze calyx-krater, which was used as an ossuary, stands out from the other clay and metal vases of 'Heuzey B' due to its size and shape. It joins the very limited group of known 4th century bronze calyx-kraters (cf. below Appendix and n. 1). A feature of this particular period is the black-glazed clay calyx-krater, which is usually adorned with overlaid gold decoration and floral motifs (Kopcke 1964, 33ff.; Zimmermann 1998, 82ff.; Papanastasiou 2004, 32ff.; Agapaki 2005, 13–35; Barr-Sharrar 2008, 97ff.; Simon 2010, 146ff.; see also n. 1). This seems to be the most appropriate equivalent of contemporary red-figure calyx-kraters in terms of value and impression. Despite their large number, the latter can be considered equally significant only on a few occasions. However, the study of calyx-kraters

<sup>&</sup>lt;sup>2</sup> The big Macedonian tomb, L. Heuzey's discovery, has already lost most of its stone structure; still, it retains its archaeological value due to the reports of L. Heuzey and H. Daumet. It is evident nowadays that the three tombs belong to one burial complex, where another built tomb excavated by the 17th Ephorate of Prehistoric and Classical Antiquities should be also included (see Kottaridi 1998, 408ff.). It is noteworthy that a few tens of meters south of the 'Heuzey' graves, there are the 'Bellas' Macedonian tombs ('of the Generals') which in a sense represent the chronological 'continuity' of the 'Macedonian tomb' type in the 3rd century BC (see Andronikos 1984, 34–37; Drougou and Saatsoglou-Paliadeli 2005, 200ff.).

<sup>&</sup>lt;sup>3</sup> On the clay vessels of the tomb, see above n. 1. It is worthy of mentioning in the current study as well, the discovery in 'Heuzey A' tomb of a gold Carian coin issued by the king Pixodaros which offers the *terminus ante quem* of the 'Heuzey' burial group. See forthcoming publication of Drougou *et al*.

<sup>&</sup>lt;sup>4</sup> Kugioumtzi 2006, 148ff. Still influential the work of Schefold 1937. Also, see Campenon 1994, 35ff.; Kathariou 2002, 8, 90ff. (kraters); Papanastasiou 2004, 31ff.; Barr-Sharrar 2008, 97ff.; Simon 2010, 146–147. Previously, see Frank 1990. On the use of kraters in

is most certainly of worth, as they represent a characteristic element of the 4th century BC.

### Bronze calyx-krater

(Item nos. 26+27+38+39+41+42+28) (Pls. 1: 1, 2 and 2: 1). It possesses a lead, discus-shaped cover with a ring as a handle in its centre (item nos. 28+34). It is completely preserved except for one of the two heads on one handle. In many places, the body has been oxidised without any serious damage being caused apart from some small holes in the wall and the bottom of the vessel. Ht. 0.398m, lip diam. 0.455m, base diam. 0.15m, base ht. 0.25m [0.15m]. Handle ht. 0.1m, handle w. 0.077m, handle component w. 0.025m, head ht. 0.09m, head w. 0.055m, lip ht. 0.018m.

#### Lead disc cover of the calyx-krater

(Pl. 1: 1). Intact. Diam. 0.43m, thickness 0.015–0.02m. Irregular lead disc with a rough ring serving as a handle. See for example: similar lead caps (covers) of vases or vessels containing bones in Pydna (Besios and Athanasiadou 2014, 132) or in Amphipolis (Lazarides 2014, 109, fig. 77 = Deschamps-Lequime 2011, 332–333, figs. 533, 534).

The krater's body consists of a uniform hammered sheet, whereas the base, the handles and the lip are cast and ornamented. According to analysis conducted, the body's alloy differs from that of the handles and the base, as it contains more tin. Cast parts were adhered to the body by silver soldering. On cleaning the vase, the incised letters of M and N were revealed, which were obviously indicators of the correct placement of the handles (they are no longer visible). On the base's standing surface and at the point that corresponds to one of the heads, the letter  $\Delta$  can be seen. There are also incisions that would have rendered details on the heads of the handles.

On the whole, the krater is both tall and rather narrow, but with heavy cast handles and a heavy base (Pl. 2: 2). The latter has a conical shape with a wide ring on its lowest part, whilst its surface is decorated with

the 4th century BC see Fless 2002, 27ff. Worthy of note are the miniature clay calyx-kraters, the majority of which appears in the 4th century BC and the Hellenistic period, a phenomenon possibly associated with burial practices, cf. examples from Apulia, see Kotitsa 1998, 146ff., no. 107; Agapaki 2005, 31. For the special symbolism of the large-scale kraters and particularly in the 4th century BC in relation to contemporary philosophical views and in connection with burial practices, see Ignatiadou 2014.

a complex relief ornament formed by a Lesbian *kymation* with lotus flowers in between its heart-shaped elements. The individual features of the *kymation* are rendered using double grooves and strongly curved intermediate surfaces. The composition of the lip decoration is similar: a ring with a relief strip of beading (*astragal*) is positioned around the top of the lip's wide outward dropping curvature. The lip surface is adorned by an Ionic relief *kymation*, in which the large convex element of the egg is surrounded by double relief grooves.

The lower section of the vase (which can be termed its bottom) is relatively short and rounded on the outside, but at the transition point to the calyx-shaped section it forms a narrow 'shoulder'. The calyx-shaped upper section of the vase ends in a lip that opens up significantly outwards and slightly downwards with an overhanging *kymation*.

The large, cast  $\Pi$ -shaped handles (Pl. 3: 1, 2) both components of which are attached at the point where the two sections of the body are joined, strongly curve outwards and then turn towards the body.

The handles are formed by grooves and relief or flutings that terminate in long 'tongues' at the point where they adhere to the vase's body. In the same spot, there is a floral motif of acanthus leaves and flower-rosettes formed in such a way that the female head reliefs at the adhesion of the handles could be fitted. Between the lower parts of the handles are two half-leaves and a space that is covered by rosettes and a heart-shaped design. In contrast, there is simply one rosette with an accompanying half-leaf on each of the edges of the adhesions. The rosettes on the handles consist of six thick relief leaves joined in the middle by a relief button. Small relief leaves surround the 'tongues' of the handles above the arched heads.

The female heads on the handles (Pl. 4: 1, 2, 3), of which one is missing, are almost identical. The faces are oval or round. The surfaces of the forehead and cheeks are relatively large and curved with large eyes and nose and a small mouth acting as the bonding features that form the reverse triangle of the face's centre. Below the forehead and the large, wide incised arch of the brows, the large eyes are shaped by two modelled arches (the eyelid and the lower part of the eye) that face each other. The incised circle of the pupil is visible between them. The large nose is rooted between the eyes and the forehead and ends above the mouth, where it retains its large size. Contrastingly, the mouth, with its pronounced modelled lips, is small in size and its length is equal to that of the nose with its open nostrils or to one eye. The hair covers the head liberally and ends in two long free locks,

one on each side beneath the ear. The forehead is completely bare and the locks here are shaped in small incised or modelled groups of hair. The eyes, the ridges of the nostrils and the sides of the mouth form distinctive modelled bulks on the face thereby highlighting its plasticity vis-à-vis the wide curves of the cheeks and forehead. The result is a young female face with large heavy eyes and dishevelled hair, all the features typical of a young maenad. Thus far, archaeological research has discovered a small number of preserved bronze calyx-kraters dating to the 4th century BC. Alongside contemporary black-glazed clay models, they represent a trademark product of workshop production during this century and provide clues to their interrelation.

## Bronze calyx-kraters of the 4th century BC

#### Catalogue

- 1. Pydna. Πυ 207. Sevasti 'The Pappas Tumulus', tomb 2. Second quarter of 4th century BC. Besios 1987, 212, 213, figs. 8, 9; Vocotopoulou 1994, 189ff.; Vocotopoulou 1997, 261, no. 157 (340–330 BC); Barr-Sharrar 2008, 2, 98, fig. 89; Besios 2010, 286–287; Touloumtzidou 2010, 431–432, 440; *Il Dono di Dioniso* 2011, 149, fig. 2.; Sideris 2011, 288ff., 290ff.
- 2. Vergina. Tomb 'Heuzey B', (including excavation data). See Drougou and Saatsoglou-Paliadeli 2006, 198–199 (height corrected, instead of 0.7m read 0.4m [!]; fragments, handles etc. before the vase's conservation); cf. Drougou 1999, 540, figs. 3–5; Drougou 1995–2000, 242, fig. 8; Touloumtzidou 2010, 431–432, 440–441; Fox 2011, 169 (A. Kottaridi); Sideris 2011, 288–289; Kottaridi 2013, 78–79 (340–330 BC!).
- 3. Macedonia. Thessaloniki (currently?) (formerly White Levy Collection). See *Nόστοι* 2003, 208, no. 8 (330 BC); Chi-Gaunt 2005, nos. 9, 20; Touloumtzidou 2010, 432, 441; *Il Dono di Dioniso* 2011, 145ff.; Sideris 2011, 290.
  - 4. New York. White Levy Collection B'. Sideris 2011, 290.
- 5. Berlin. Antiken Sammlungen. No. 30622. From Maikop, Ukraine. Züchner 1938, 3ff.; Heilmeyer 1988, 136, pl. 136; Touloumtzidou 2010, 441.
- 6. Preserved masks from the handles of calyx-kraters found in Pella, Vocotopoulou 1994, 558, fig. 10, Louvre Br 1717 (from Galaxidi), Louvre MNC 1242 (Dodona?), National Museum, Karapanos Collection nos. 78–80 (Dodona); Touloumtzidou 2010, 433–434, 441.

## General bibliography

Vickers and Gill 1994, 174; Vocotopoulou 1994, 189ff.; Vocotopoulou 1997, 261ff., no. 157; Themelis 2000, 495–517; Barr-Sharrar 2008, 122ff. (see the last three works on relief decoration and passim); Touloumtzidou 2010, 427–441; Sideris 2011, 284–285.

On the 4th century BC clay calyx-kraters, see Schefold 1934, 25ff.; Kopcke 1964, 33ff., no. 55, pl. 201; McPhee 1981, 264ff.; Frank 1990, 23–35; Campenon 1994, 55ff.; Rotroff 1997, 135ff.; Zimmermann 1998, 82ff.; Kathariou 2002, 11ff.; Agapaki 2005, 8ff.; Touloumtzidou 2010, 427–441; Ignatiadou 2014, 55.

For lists of clay examples, see Kopcke 1964, 33ff.; Papanastasiou 2004, 111ff., mostly 147ff., pls. VIII–XXV. Also, Konstantopoulos 1986, 108, fig. 105 (Ialyssos); Riz 1990, 37, 4: 1 and 5: 1 (gilded clay example from a grave in Teano, Campania dated to 300 BC); Kotitsa 1998, 146–148 (Apulian, third quarter of 4th century BC), pl. 61, no. 104; Agapaki 2005, 8ff.; Barr-Sharrar 2008, 97–98; Simon 2010, 153ff.

The bronze calyx-kraters of Vergina and Sevasti-Pydna (Πυ 207)<sup>5</sup> are especially useful for researchers due to their documented provenance and their fairly accurate dating, based on excavation data. A third intact example, a bronze krater in the White Levy Collection with four Maenad heads on its handles, was stored at the Metropolitan Museum in New York until recently. In 2005, it was returned to Greece and has been kept at the Archaeological Museum of Thessaloniki since.<sup>6</sup> Another relatively unknown calyx-krater with Silenoi heads on the handles also belongs to the White Levy Collection. Fragments of similar vases, which are scattered across various museums in Greece, Europe and America should be added to this tiny group of intact calvx-kraters; the fragments of the 'Krater of the Maenads', kept in the Antikensammlung in Berlin, originally came from Maikop in Ukraine (Züchner 1938, 3ff.; Barr-Sharrar 2008, 148ff., fig. 137, n. 12). A handle from the Pella Museum and a head-mask from Western Macedonia (Agia Anna, Kastoria, in the Archaeological Museum of Kastoria) are examples of calyx-kraters that confirm (despite the small

<sup>&</sup>lt;sup>5</sup> On the Sevasti-Pydna krater see Vocotopoulou 1994, 189ff.; Vocotopoulou 1997, n. 157; Besios 2010, 287; Sideris 2011, 288–289.

<sup>&</sup>lt;sup>6</sup> Vocotopoulou 1994, 189ff.; *Nόστοι* 2008, n. 8; Sideris 2011, 289ff.; Ignatiadou 2014, 47, pl. 55.

<sup>&</sup>lt;sup>7</sup> Sideris (2011, 288, figs. 15, 16) refers to the calyx-krater of the 'Silenoi'. Based on the abovementioned photographs, the similarity with other bronze calyx-kraters under examinations is confirmed. See n. 6.

number of preserved specimens) the wider use of a metal version of the vase shape during the 4th century BC (Vocotopoulou 1994, 196, n. 25 and 26). However, the bronze kraters (both complete and in fragmentary form) dating to the 2nd and 1st centuries BC found in Pompeii and Boscoreale in Italy<sup>8</sup> constitute a substantial series that poses serious questions concerning provenance and chronology, as they could very well date to Hellenistic times.

Today, it is accepted by all that the shape of the calyx-krater (a disputed topic, best not discussed here) dominated 4th century production of clay and metal vessels. In addition, in the Hellenistic era, it appeared widely in funeral feast reliefs, or nekrodeipna, taking, for example, the form of architectural ornamentation. In relation to other objects and artistic works of earlier times, vases such as the krater acquired an ever increasing symbolic significance until they were finally incorporated into Hellenistic decoration. Finds at Pompeii and other Italian sites dating to the Roman Republic, as well as similar marble 'Neo-Attic' works, confirm that the shape persisted to this period, suggesting either the survival of specimens or that Classical models were copied (cf. Züchner 1938, 3ff.; Barr-Sharrar 2008, 148ff., fig. 137, n. 12; see also n. 8). The final phase of the Classical era (the 4th century BC) appears to have been a transitional period in which many changes occurred due to great economic, political and religious upheaval in the Greek region. The production of impressive red-figure clay vases with multi-coloured decoration ('Kerch vases') that were impractical for everyday use, were widely distributed outside Athens, and elaborate metal vessels, which competed against their splendid black-glazed counterparts, tended to predominate, just some of the changes taking place in the 4th century BC. It has been accepted by scholars that the relief decoration of later kraters has its origins in the work of the 4th century BC, since elements of it have been identified and attested in other 4th century BC relief metal vessels (e.g. the Berlin krater or the famous volute krater of Derveni). Furthermore, the view that Agapaki (2005, 37ff.; cf. Barr-Sharrar 2008, 98ff.; Ignatiadou 2014) expresses in her unpublished dissertation appears to be correct. She argues that these great and expensive vases were kept, even if in restored form, for many years, which partly explains the long preservation of the shape, at least symbolically. This is obviously not an isolated example of classical elements surviving into Hellenistic and miniature art. Indeed, it is a widely acknowledged fact that in Hellenistic times, at least so far

<sup>&</sup>lt;sup>8</sup> Pernice 1925; Barr-Sharrar 2008, 70–71, figs. 69, 140, 141 and 210-211; On similar marble kraters of the 'Neo-Attic workshop', see Fuchs 1959; Grassinger 1991.

as vase shape and associated iconographic themes are concerned, there was a return to Classical models (in particular to those of the 4th century BC) in the production of clay and metal vessels. The use and application of this calyx- and volute-krater shape in 4th century BC products is, therefore, especially impressive. This exhibition of luxury and embellishment in terms of size and wealth of employed materials decisively influenced both Hellenistic and miniature art, as well as the symbols, depictions and decorative motifs associated with cults and other social issues that formed a critical element of the period (Simon 2010, 146–157 [in connection with the symposion and the cult of Aphrodite]; Ignatiadou 2014). In this way, precious metal vases and vessels from the 4th century BC were passed on to the Hellenistic era, during which time they were either used or copied in the 2nd and 1st centuries BC. In short, it can be considered fact that the use of a differentiated form of vase and vessel can be clearly identified from as early as the 4th century BC. This area is, however, in definite need of further study. Apart from the important fact that their find-spots are known, the similarity in terms of shape and decorative elements of the two kraters from Vergina and Sevasti-Pydna is also worthy of note. At the same time, however, the Sevasti calyx-krater and the repatriated krater of the White Levy Collection are alike in that they both have a complex 'monumental' base built next to the 'krater base', as well as the actual base of the vase itself. The column-shaped foot of the 'krater base' stands in the middle of a cuboid base and ends above in a circular socket at the base of the vase. The latter bears a form previously observed in red-figure pottery of the early 4th century BC (cf. the volute krater-dinos of the Meleager Painter), as well as in painted depictions on an ornate bed from a Macedonian tomb at Potidea (Sismanidis 1997, 56-57, pl. 24: with depiction of kraters that stand upon similar complex bases; also, Kathariou 2002, 8, pl. 386; Barr-Sharrar 2008, 80ff., fig. 74, 94ff.). The base of the second krater of the White Levy Collection with the Silenoi masks appears to be similar. It is now certain that the use of monumental bases on vases was not an exclusive feature of large stone and metal vases from the Late Hellenistic and Early Roman Imperial period. However, it is also evident that the complex 'monumental' form of large vases had begun as early as the 4th century BC.9 On the Sevasti-Pydna krater, a simple kymation may be discerned on the lower part of the cube-shaped plinth's base sides, as well as a small step at the end of the tongue-shaped grooves

<sup>&</sup>lt;sup>9</sup> Similar elements of the shape can be seen on other shapes, such as the clay volute kraters (the South-Italian ones in particular), cf. Barr-Sharrar 2008, 91ff. At the same time, an analogous trend is observed to the corresponding marble monumental vases.

on the foot. The Vergina krater does not possess an impressive 'krater base', although the real base of the vase is a perfect match to the Sevasti one in terms of shape and relief decoration.

The relief ornaments (primarily the Ionic and Lesbian *kymation* on the lip and base) and the large cast handles are the main characteristics that the kraters share. The two Macedonian examples from Vergina and Sevasti-Pydna in fact prove to be almost identical in this respect. The bronze handle of the krater from Pella could also be added to this small group. The lip is adorned with a 'drooping' relief *kymation* crowned with a thin astragal garland, whilst the base bears a Lesbian *kymation* relief typical of the time. The large free handles form a large  $\Pi$  with deep and wide grooves and the long horizontal stem of the  $\Pi$  curves inwards towards the calyx-shaped body.

The handle grips on the body's surface are covered by large masks consisting of the heads of maenads, a well-known morphological theme of the second half of the 4th century BC. The facemask themes of the examples considered here all derive from Dionysiac iconography (Maenads, Silenoi) and this also applies to the larger depictions on the Berlin fragments and a wider group which includes the volute krater of Derveni. Based on excavation finds (i.e. the kraters of Vergina and Pydna), future research in this area should perhaps focus on burial practices when considering other examples of unknown provenance.

The rich finds from the area of ancient Macedonia and the more general region of northern Greece over the past 50 years constitute an impressive and multi-faceted collection of material that seems to confirm the belief of Vocotopoulou (1994, 190ff.; 1997, n. 157) and earlier scholars that it was of the utmost importance to the Greek world of the time. Nevertheless, a closer and more careful analysis demonstrates that theorising on particular origins or on production 'workshops' based on external morphological or aesthetic characteristics remains uncertain. This is because any classification

<sup>&</sup>lt;sup>10</sup> Cf. on the usual decorative motifs, especially on silver vases, Zimi 2011, 142ff. Also, Pfrommer 1982, 119ff.; Pfrommer 1987; Pfrommer 1993, 26ff.; Barr-Sharrar 2008, 31ff. Cf. also, von Graeve 1970 on similar composition of decorative motifs on bigger monuments without ignoring the analogous trend observed in monuments of contemporary architecture. The composition of the *kymatia* and tendrils may comprise the most typical feature of 4th century BC, since it is found in almost all art forms from architecture, metalwork to miniature art, cf. for example, the instances from pottery-painting or the cloth from Vergina, Drougou 1984, recently Romiopoulou and Schmidt-Douna 2010, 74ff., 93ff. (decorative elements of the structure as well as of ivory objects). See Fox 2011, 147 (the throne from the tomb of 'Eurydice').

is made on the basis of other variables of interpretation, such as chronology or the technology employed. Recent research has focused on the modelled features of the attached masks, yet it seems necessary to first ascertain the method of production used and to identify the quality of the material. An attempt has been made to classify the decorative masks of metal vessels according to their typological and stylistic characteristics with the aim of identifying their craftsmen and production workshops.<sup>11</sup> However, the figural types are on many occasions similar or identical, although there are important dissimilarities in their depiction. As a result, it is beyond doubt that direct observation can reveal many differences that could allow the 'creator' or 'workshop' to be classified (see Themelis and Touratsoglou 1997, 171–182 [Themelis]; Themelis 2000, 511ff.; Sideris 2002, 173ff.; Sideris 2011, 289ff., cf. also Barr-Sharrar 2008, 178-186). For example, the satyr on the lantern of Vergina is similar to many equivalent toreutic works, but the difference in the craftsman's ability is clear and obvious (Andronikos 1984, 158; Sideris 2011, 288).12

The similarities between the kraters of Sevasti-Pydna and Vergina and their chronological and geographical positioning suggests a close connection in terms of their creation. This could perhaps mean they share the same production centre or 'workshop', located either in the vicinity of or inside one of the two neighbouring cities, to which other well-known examples of metalwork could also be attributed.<sup>13</sup> The kraters' large and deep eyes

<sup>&</sup>lt;sup>11</sup> The decorative masks are affixed on the vase's wall below the handles with silver-soldering. The method of adhering the masks, the various complementary floral ornaments (see below) etc. constitute indications of both the intentional (ad hoc!) production process and the use (funerary?) of these bronze works in relation to other vessels for other purposes unknown to us. The factor of trading and distributing the molds of these works – a least known subject – should be also added. Cf. on the different interpretation suggestions, Sideris 2011, 286–288.

<sup>&</sup>lt;sup>12</sup> The fact that the lantern of Vergina, in addition to the other vessels, remains essentially unpublished, hinders any discussion on or formation of 'hands' or 'workshops'. One example of such difficulties is the relation of bronze vases to silver ones. This can be easily observed on the masks of the silver oinochoai from Philip's tomb. Even though, their connection is certain their differentiations are notable. The decorative masks of the bronze vessels from Philip's tomb attest to significant craftsmen, like the creator of the lantern, and the similar or 'same' examples should be assessed with caution.

<sup>&</sup>lt;sup>13</sup> It appears that the two cities had close relations. There are many findings from both areas indicative of this. Besides, the small distance between them accounts for the phenomenon while Pydna's harbour and the role played by Aigai created favourable conditions for the dynamic activities of their workshops. The connections observed in a variety of objects-finds from both excavations offer a wide field of research.

cover almost all of the upper half of the face, whilst the wide curves of the cheeks are positioned closer to the vertical nose and small, full mouth. The large round face is covered by a crown of dense curls made of thick, uneven, incised grooves that end up in long groups lower down. The heavy features of the face diminish towards its edges. The image is mainly dominated by the large cheeks and large eyes, exactly as is the case in other works, such as the female head of the earlier bronze oinochoe from Macedonian Tomb II ('Philip's') in the Great Tumulus in Vergina (Andronikos 1984, 158, fig. 124; Themelis 2000, 510ff.; Sideris 2011, 288. The chronological distance of these bronze vessels should be marked and interpreted). Sideris (2011, 288ff.), using an earlier study by Themelis (2000, 510ff.) on the formation of groups as a basis, distinguishes three large units to classify masks (and correctly not 'workshops'). This employs the concept of 'tradition' and uses the groupings of 'Macedonian' (with conservative tendencies), 'Athenian' and 'Corinthian'. Various individual groups are incorporated into these units, which use particular works, such as the Derveni krater or the Vergina lantern, to define their nature. Sideris (2011, 288ff.) places 'Corinthianising' works such as the Vergina krater, which he considers an indirect product of a Corinthian workshop (sic), in Themelis' (2000, 510ff.) '7th unit'. He also ascribes the masks of Dodona and the Louvre and the Maenads of the repatriated krater from the White Levy Collection to the same workshop. Nevertheless, the close relationship between the Pydna and Vergina kraters poses certain questions concerning the classification criteria of similar groupings. The relevance (or lack thereof) of several works from Vergina to certain examples from Pydna, Derveni etc. should be reconsidered through examination in-situ by researchers who possess knowledge of technical details (Andronikos 1984, 158, fig. 124; Themelis 2000, 510ff.; Sideris 2011, 288). Comparisons with corresponding silver examples from these places is important, but also in a way misleading. However, this issue lies beyond the scope of the present article. Indeed, the establishing of 'workshops' is a matter of interpretation, yet it ought not to be limited to purely morphologicalaesthetic similarities or differences. It has already been acknowledged that 'common' forms (topoi) were created in the second half of the 4th century BC as the result of a fusion of many contemporary artistic trends and creations; this is a phenomenon that can mainly be identified in the work of craftsmen, vase painting, metalwork etc.<sup>14</sup> The fact that other scholars,

<sup>&</sup>lt;sup>14</sup> Forms and trends, characteristics of various 'schools' or 'workshops' are identified primarily in miniature art but also in monuments of larger scale and significance while the difficulty in dating these monuments or other remains makes the whole issue even more

such as Barr-Sharrar (2008, 178ff.), detect influences from Athenian art in the same works of the 'Corinthianizing' group (according to Sideris) is of little surprise. As other scholars have noted (Sideris) however, it is true that stylistic and technical differences may be ascertained in the decoration of many similar vessels (Sismanidis 1997, 56–57, pl. 24: with depiction of kraters that stand upon similar complex bases; also, Kathariou 2002, 8, pl. 386; Barr-Sharrar 2008, 80ff., fig. 74, 94ff.; cf. also n. 10). Finally, it is worth noting that the distribution of all these goods (including works of art) created by artisans in the second half of the 4th century BC, shows that this Greek region was very attracted to the Macedonian court, which in turn brought about interaction and the development of common ways. Having expressed this general observation, it is nevertheless still necessary to closely examine the technical aspect of these works, in order that technology and other data (such as their use) can confirm current theories regarding the workshops that created such impressive metalwork.

The Vergina and Sevasti-Pydna kraters possess enough similarities to consider that they can both be attributed to a common tradition (or workshop) to which the White Levy Collection krater may also be added. The way in which the foot and the base of the krater were formed is similar, albeit with slight morphological differences. Similarities can also be detected on the Pella handle. However, it has already been mentioned that the decorative masks of the Vergina and Sevasti kraters can be connected with certainty. As far as basic characteristics are concerned, the mask of the maenad on the bronze oinochoe from Philip's tomb also seems to fit well, but the remarkably accurate and sharp rendering cannot be ignored, since it indicates either a better (or earlier?) mould or a more skilful hand. 15 It is necessary to compare kraters from the 4th century BC with corresponding clay examples, 16 since they appear equally as often in the second half of the century. This makes the relatively narrow, cylindrical, calyx-shaped body typical of the century's final decades (330-310 BC). The calyx's shape on the Vergina krater is rather narrow compared to the kraters of

complex. Nevertheless, it appears that in this interstice lies the beginning of the creation of the new Hellenistic trends in art.

<sup>&</sup>lt;sup>15</sup> It is the same difference in quality noticed in the figures on the Derveni volute krater in relation to other bronze works of this period. Cf. observations by Andronikos 1984, 159ff.; Barr-Sharrar 2008.

<sup>&</sup>lt;sup>16</sup> On the Sevasti-Pydna krater, see Vocotopoulou 1994, 189ff.; Vocotopoulou 1997, n. 157; Besios 2010, 287; Sideris 2011, 288–289. Cf. also *Nόστοι* 2008, n. 8; Sideris 2011, 289ff.; Ignatiadou 2014, 47, pl. 55.

the White Levy Collection. In contrast, the Sevasti-Pydna krater corresponds to the 'manieristic' shape of the Vergina vase, which, as mentioned previously, is similar in style to clay black-glazed kraters (see above).

The floral ornament<sup>17</sup> surrounding the masks is part of the composition of the kraters' handles. On the Vergina krater, curved acanthus half-leaves with open flower rosettes grow around the masks. This is an ornament notably different from those on the Sevasti-Pydna krater and the repatriated White Levy Collection krater. Despite the similarity of the iconographic themes of the masks on the calyx-kraters, the floral motifs on the Vergina krater are more elaborate and have more stylised elements (rosettes or flowers surrounded by half-leaves). 18 On the White Levy Collection krater, however, simple clear volutes flank and connect the masks with the edges of the handle, just as on the Pella handle. On the Sevasti krater, these ornaments are akin to the previously mentioned one, with a palmette as the connecting element between the two masks in the centre of the space. 19 It is therefore obvious that a certain degree of 'freedom' existed in the rendering of details and the completion of the vessel. This should be taken into account when determining the workshops of the kraters if no further information on their technique, the vessels' alloys, function or use exists. On the krater from the 'Heuzey B' tomb, the cast handles and the lip's ring are of excellent quality, whereas a very thin hammered sheet was used for the body. The result is that the elaborate and cast handles appear to be heavy on a vase with very thin walls. It is difficult to argue whether such a combination was adopted for the burial use of kraters given that other vases exist (as well as other vessels with ornate bodies) exactly like the White Levy one, which bears an ivy branch around the body at its mid-point.20

Alloy analysis has shown that the vessel contains a high percentage of tin, as was the case with the other large vessels within the burial group

<sup>&</sup>lt;sup>17</sup> The floral designs that adorn the 4th century BC metal vases and vessels comprise a huge topic that has not been studied adequately both in terms of their iconography and their function and symbolism. The same trends in decoration of clay vessels and in motifs should be included to this topic too. See above n. 10. Also, Möbius 1968; Valina 2006, 451ff.; Barr-Sharrar 2008, 39ff.

<sup>&</sup>lt;sup>18</sup> Cf. relatively similar floral elements on the bronze oinochoe from Philip's tomb, Andronikos 1984, 159.

<sup>&</sup>lt;sup>19</sup> Similarly see for example, the situlae, Teleaga 2008, 262–266, 446–447.

<sup>&</sup>lt;sup>20</sup> Cf. similar decoration on the clay black-glazed kraters that bear relief-floral decoration, see n. 16.

of 'Heuzey B'. A similar alloy quality can be found in the Sevasti krater, which may confirm the common provenance of the two vases.<sup>21</sup>

The Sevasti-Pydna krater contained a silver drachma of Alexander III. This find allows us to date the burial (and perhaps the krater, too) to the decade of 330-320 BC. Based on this information, Vocotopoulou (1994, 189–201, pls. 1–10, 11ff.; on the practical importance of the vessels in symposia, see Vocotopoulou 1998; Tsimbidou-Avloniti 2006, 114-134 [primarily 120–121]) placed the krater in the decade 340–330 BC. According to Price's study of Alexander III's coinage, this dating should probably be moved forward into the next decade (Touratsoglou 1988, 32, 33; Touratsoglou 2010, 116–120). The krater from the 'Heuzey B' tomb seems to confirm this chronological estimation, since the burial assemblage can be dated to the beginning of the penultimate decades of the 4th century BC on the basis of its pottery and on one clay lamp in particular (see Drougou et al. forthcoming). As a result, the kraters need not be considered earlier works, but rather vessels produced to serve the contemporary needs of symposia or burials. In this case, the relationship of the kraters (Sevasti and Vergina) appears to be most probable within the narrow period dictated by Alexander III's silver drachma and the pottery from the 'Heuzey B' tomb. A gold coin of Pixodaros of Caria (341-336 BC) from the 'Heuzey A' tomb provides us with the required upper chronological limit (terminus ante quem) for the current study (cf. n. 3). Contemporary equivalent clay examples of this shape create an impressive context for the relatively limited group of bronzes, because they stand out for their distinct decoration on glossy black glaze and, even more importantly, their shape was rendered in a dynamic way. With this in mind, the differences with 4th century BC red-figure kraters are of particular significance, as the shape appears to have lost both its potential and unity. In fact, this century seems to have laid special emphasis on a different perception of both material and shapes to that of the previous century, which contributed to the new aesthetics of daily life created by new economic and political circumstances.<sup>22</sup>

<sup>&</sup>lt;sup>21</sup> According to information from the Museum of Thessaloniki, the Sevasti krater may have the same bronze alloy. The presence of tin at a higher percentage, traced in the other bronze vessels of the 'Heuzey B' tomb as well possibly confirms their common origin. See forthcoming publication of the 'Heuzey' tombs by Drougou *et al*.

<sup>&</sup>lt;sup>22</sup> Cf. Züchner 1938, 3ff.; Barr-Sharrar 2008, 148ff., fig. 137, n. 12; see also variations or miniature tinplated vases, Agapaki 2005, pl. 35: 30. On the historical, economic and political context of the period, see Touratsoglou 2010.

# Appendix. The remaining metal vases and vessels of the 'Heuzey B' $tomb^{23}$

#### Catalogue

- 1. Bronze tin-plated oinochoe (item no. 35). Almost completely intact, but with small sherds and damage to the decorative figure on the handle and the base. Ht. 0.25m, body max. diam. 0.155m, base diam. 0.117m, lower part ht. 0.10m, lip l. 0.1m, lip w. 0.06m, handle w. 0.01m. Bronze. This vase consists of three sections: a cast handle, a decorative sheet on the handle and the body, which is formed by a sheet. The body is round with a concave cross-section and no base form. The wide standing surface of the vase bears concentric circle relief grooves arranged in a pair with a small circle as its centre. The body ends sharply at the shoulder, which is conical in the direction of the narrow neck and trefoil lip of the vase. The middle and larger lobes, which form the vase's spout, are surrounded at the back by two smaller ones that support the upper end of the handle. The large component at neck level bears parallel incisions and twists, thereby creating a handle with a circular cross-section; the end of the handle sits upon the vase's shoulder. The lower curved part of the handle bears an incised 'chevron' design lengthwise. There is a small, hammered ornament on the lower grip of the handle that depicts a considerably damaged, winged siren. The small female head at its centre covers the handle's grip. Type VI. Oinochoe. See Drougou 1999, 540ff.; Drougou 1995–2000, 247, fig. 9; Sideris 2011, 285; Zimi 2011, 37, n. 111. It is also noted by Touloumtzidou 2010, 519; Kottaridi 2013, 344 (Early Hellenistic times?). On the silver oinochoai of the Beazley VI type, see Andronikos 1984, 239, 240, fig. 172 (tomb of the 'Prince'); Rolley 2006, 314; Zimi 2011, 136ff., 182 (Vergina); cf. also Vocotopoulou 1997, fig. 177, 267; Kypraiou 1979, 57, no. 159, pl. 24; Krauskopf 1981; Krauskopf 1984, 83, 87; Bratsioti 1988, 282, no. 231; Lezzi-Hafter 1988, 306ff., pl. 191; Krauskopf 1995; Touloumtzidou 2010, 506-518.
- 2. Bronze stamnoid situla (item nos. 3+13). Complete. The movable arched handles have become affixed to the upper surface of the lip by corrosion with no possibility of being detached. Extensive wear on the body's wall with three holes in the lower section of the vase (from inside to out). Ht. 0.243m, lip and handle diam. 0.203m, base diam. 0.097m, base ht. 0.012m (standing surface w. 0.008m, base hole diam. 0.05m). Tin-plated bronze.

<sup>&</sup>lt;sup>23</sup> A full report on the metal vases and vessels from the tomb is included in a forthcoming publication on the 'Heuzey' tombs (Drougou *et al.*), which includes a complete bibliography.

The body is formed by a thin, hammered sheet, the base and handles are cast and the separate parts of the vase have been silver-soldered together. Round body, slightly curved at its lower section towards the base. Ring base with a curved outline and wide standing surface. A concave surface and small step are formed around its periphery on the interior. The lip takes no particular shape, but its upper surface is not visible. The formerly movable handles are supported on the lip by two pairs of diametrically placed rings. The rings are perforated and hold the components of the handles via two pairs of heads. At the back, between the nearly adjoining rings, a small free relief palmette can be discerned, which was made by incisions on the bronze. Below and in direct contact with the supporting rings of the handles is a large, heartshaped leaf that is formed by two large discs, the edges of which overlap the leaf's oblate tip. See Drougou 2009, 69-70; Touloumtzidou 2010, 349, no. 13; Kottaridi 2013, 345 (depiction). See also Andronikos 1984, 146, fig. 104, 211, figs. 176, 177 (tomb of the 'Prince'), mainly fig. 176 on the form of the handles' grip; Zimi 2011, 196ff. (silver examples). On other examples of this category and type see, Besios and Pappa 1995, 83 (grave 3); Themelis and Touratsoglou 1997, 33, nos. A2, 73, B29 and 103, Δ5, figs. 79 and 112 respectively; Marazov 2011, 165-166 (see the ornament on the handles' grip with no excavation data, second half or end of 4th century BC). For general information on the types and categories of the situla (bucket) see Schröder 1940; Zahlhaas 1971; Candela 1985, 24ff.; Shefton 1985; Romiopoulou 1989, 195ff., no.1; Themelis and Touratsoglou 1997, 33ff.; Sideris 2000, 5 ff. with a different base; Barr-Sharrar 2002; Teleaga 2008, 264, 449, pl.16: 2 (c. 300 BC); Touloumtzidou 2010, 322ff. (for general information on situla), 353–388; Zimi 2011, 53ff. (bibliography). Clay imitation, see Vocotopoulou 1990, 61–62, pl. 35 (tomb in Aeneia AIII); Besios and Athanasiadou 2014, 131–132, fig. 8 (Makrygialos, cemeteries of ancient Pydna, grave 5); Kottaridi 2013, 327 (depiction).

- 3. Tin-plated bronze stamnoid situla (item nos. 4+19). Intact with only a little damage to the wall of the vase. The movable handles have become affixed to the upper surface of the lip and cannot currently be detached. Ht. 0.244m (without base), base ht. 0.015m, ht. 0.259m, lip diam. 0.225m, base diam. 0.12m. Tin-plated bronze. The base and handles are cast. The base is silver-soldered. In terms of its general characteristics, the vase is similar to situla no. 3. Cf. jar-situla, cat. no. 2.
- 4. Tin-plate bronze kantharos (item no. 6). Intact. Traces of patina on the vase's surface.

Ht. 0.11m, lip diam. 0.086m, lip ht. 0.02m, base diam. 0.058m, foot ht. 0.035m. Tin-plated bronze. The vase consists of four sections (a body, two handles and a base with a foot), all of which are cast. Its main characteristics are its large, free handles, the high foot of its base and its large, heavy distinct lip. The base is wide and consists of a large ring and upper disc, where the high stem of the foot stands. See Drougou 2009, 69-70; Kottaridi 2013, 346 (Early Hellenistic times!). Cf. also Andriomenou 1975, 568–570, figs. 38, 39; Vocotopoulou 1975, 767ff., nos. 15, 18, figs. 24-27; Vatin and Rolley 1976, 102, nos. B10-13, figs. 176-179 (third quarter of 4th century BC); Pfrommer 1987, 7ff.; Zimmermann 1998, 14ff., pl. 6, 7; Sideris 2000, 11ff., figs. 15, 16; Rotroff 2002, 87ff.; Zimi and Sideris 2003, 45ff., pl. 14 (London, British Museum M.1882, 102.2); Teleaga 2008, 270; Besios 2010, 312, 186 (Makrygialos, plot 951, grave 187), (Methoni grave 3); Fox 2011, 179ff., fig. 206 (cat. no. 474 – last quarter of 4th century BC); Zimi 2011, 67ff., 206ff. (silver examples). For general information on the shape of the clay or metal kantharos in the Late Classical and Hellenistic periods, see Kallini 2007, particularly 235ff. (here cf. type MB1) and for similar clay examples (type IIB1), see Kallini 2007, 146.

- 5. Bronze kantharos (item nos. 11+12+14). Intact with patina on the surface. Ht. 0.115m, lip diam. 0.087m, base diam. 0.058m, (handle span 0.21m). The shape and its characteristics are similar to kantharos cat. no. 4.
- 6. Bronze patera (item nos. 33+36). Almost completely intact. Damage to the rim and the bottom of the vase, which contains traces of cloth. Ht. 0.045m, rim diam. 0.212m (rim w. 0.009m), base diam. 0.138m, handle 1. 0.154m (tube 1. 0.113m, tube diam. 0.025m). Bronze.

The phiale and the handle are both formed by a hammered sheet. The ram's head on the handle is cast. The vase's phiale is footless with a wide standing surface. The slightly curved wall ends in the horizontal rim. The handle is formed by a simple, smooth tube affixed to the body. The end of the handle bears the figure of a ram (finial) with an oblong head and practically no relief features. On silver examples, see Andronikos 1984, 213, 181–182 (Great Tumulus, tomb III); Kottaridi 2011, 57, 122, fig. 260; Zimi 2011, 59, 198 (before 311/311 BC!). On a clay example, see Vocotopoulou 1990, 60ff., no. 13, pls. 345, 346 (Aeneia). On the use of the vessel, see Vocotopoulou 1990, 60–61 (= Andronikos 1984, 157). Also, see Teleaga 2008, 277 (examples from the Balkan Peninsula and the Black Sea). On the shape, see Nuber 1968; Nuber 1972, 1, 354; Buchholz 1994, 150ff.; Touloumtzidou 2010, 610–620; Zimi 2011, 59.

7. Bronze wine-strainer ( $\eta\theta\mu\delta\varsigma$ ) (item no. 18). Fully preserved with distinct patina. L. 0.212m, diam. 0.099m, rim w. 0.012m, handle base w. 0.05m, handle plaque w. 0.018–0.02m. Cast bronze. There are eight series of holes on the bottom of the strainer in a rotating shape. The shallow hemispherical cup is crowned all around by a broad, plain rim. See Drougou 2009; Kottaridi 2013, 346 (Early Hellenistic times). Other examples, Teleaga 2008, 276ff., 455, no. 1945, pl. 112: 2 1931; Touloumtzidou 2010, 310–312. Generally, Teleaga 2008, 276ff; Touloumtzidou 2010, 304–320; Zimi 2011, 85ff.

8. Bronze arytaina ( $\kappa \dot{\nu} \alpha \theta o \varsigma$ ) (item no.10). Intact. Full 1. 0.212m, cup diam. 0.099m, handle base w. 0.05m, component w. 0.018–0.02m. Cast bronze. The vessel consists of a small hemispherical *kyathos* (cup) with an oblate standing surface and handle. The latter is formed by a strip-shaped component slightly broader at the grip point with the *kyathos*' and at its end, where a finial in the shape of a duck's head and an additional small component are located.

Nikolaidou-Patera 2007, pl. 35 (= Nikolaidou-Patera 1996, 567–572). For general information on the object, also see Hill 1942, 41ff.; Crosby 1943, 211ff.; Strong 1966, 46, 91; Oliver 1977, no. 30; Teleaga 2008, 277, nos. 1047, 1048, pl. 79, 177: 2; Touloumtzidou 2010, 279–280; Zimi 2011, 89ff. On other variations of *kyathoi*, mostly strainer-like, see Tiverios 2009.

- 9. Lebes (item no. 1). Part of the lip and shoulder of the vase is missing (fragments were found inside the vessel). Heavy damage to the surface. Ht.  $0.2m \pm$ , lip diam. 0.178m, max. diam. 0.27m. Hammered lead. Round body without a base or handles, slightly flattened in its lower part to create a 'standing base'. In the upper part of the vase, echoing the horizontal shoulder, the lip curves slightly outwards. Cf. bronze examples of the shape, Andronikos 1984, 159, fig. 73; Pingiatoglou 1991, 146 (n. 14,  $M\Delta$  474, 4th century BC). Cf. Karamitrou-Mentesidiou 2010, 140 (Aiani, Hellenistic). On rare lead vessels, cf. lead pyxides, such as those from the Hellenistic graves in Veroia, Drougou and Touratsoglou 1980, 39. For an earlier, elaborate, bronze example from the 5th century BC, see Besios 2010, 268 ('Louloudia' Kitros plot).
- 10. Iron tripod (item no. 2). Intact but heavily corroded all over. Ht. 0.201m (full ht. 0.225m), rim diam. 0.188m, foot w. 0.02m, rim w. 0.018m. Cast iron. Its three wide feet are connected by a relatively broad rim. Four independent broad protruding stands are also supported by this same rim. A visible corner is formed at the mid-point of the foot's height, whilst the components curve outwards to better support the tripod in

their lower section. Cf. Andronikos 1984, 159, fig. 125 (Vergina, Philip's tomb); Besios 2010, 292 (Sevasti-Pydna, grave 3); Fox 2011, 139, fig. 158 (cat. no. 199, c. 500 BC). The bronze example from Philip's tomb predates this by one century and is of a very different type, see Andronikos 1984, 159, fig. 73.

Clay vessels

The group of clay vessels discovered inside the tomb includes two black-glazed plates, six skyphoi, some bowls without handles and one askos of the Guttus type, in addition to the clay lamp (Drougou *et al.* forthcoming).

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#### References

**Agapaki A. 2005.** Αγαπάκη Α. *Απεικονίσεις αγγείων σε μνημεία της ελληνιστικής περιόδου*. (Unpublished doctoral thesis). Athens.

- **Andriomenou A. 1975.** Vases et lampes de bronze dans les collections privées d'Athènes. *BCH* 99, 535–589.
- **Andronikos M. 1984.** Ανδρόνικος Μ. *Βεργίνα. Οι βασιλικοί τάφοι και οι άλλες αρχαιότητες*. Athens.
- **Barr-Sharrar B. 2000.** Some observations on the cast bronze ovoid situla. *Kölner Jahrbuch* 33, 277–290.
- **Barr-Sharrar B. 2002.** Osservazioni sulla produzione di vasi in bronzo greci tra il Ve-III sec. In A. Giumlia-Mair and M. Rubinich (eds.), *Le arti di Efesto: capolavori in metallo dalla Magna Grecia*, 69–73. Trieste.
- Barr-Sharrar B. 2008. The Derveni Crater. Princeton.
- **Besios M. 1987.** Μπέσιος Μ. Ανασκαφές στη Β. Πιερία. Το Αρχαιολογικό Εργο στη Μακεδονία και στην Θράκη 1, 209–218.
- **Besios M. 2010.** Μπέσιος Μ. Πιερίδων Στέφανος: Πύδνα, Μεθώνη και οι αρχαιότητες της βόρειας Πιερίας. Katerini.
- **Besios M. and Pappa M. 1995.** Μπέσιος Μ., Παππά Μ. Πύδνα. Thessaloniki.
- **Besios M. and Athanasiadou A. 2014.** Μπέσιος Μ., Αθανασιάδου Α. Νεκροταφεία Πύδνας, ανασκαφή στο αγροτ. 691 Μακρύγιαλου. Το Αρχαιολογικό Έργο στη Μακεδονία και στην Θράκη 24/2010, 127–134.
- **Bratsioti L. (ed.) 1988.** Μπρατσιώτη Λ. Αρχαία Μακεδονία. Κατάλογος έκθεσης σε μουσεία της Αυστραλίας. Athens.
- **Buchholz H. G. 1994.** Sakralschaufeln im antiken Zypern. *RDAC* 1994, 143–150.
- **Campenon C. 1994.** La céramique attique à figures rouges autour de 400 avant J.C. Paris.
- **Candela M. 1985.** Situle metalliche e ceramiche a beccuccio nel IV e III secolo a.C. Origine e diffusione. *BaBesch* 60, 24–71.
- **Chi-Gaunt 2005.** Greek Bronze Vessels from the Collection of Shelby White and Leon Levy. Atlanta.
- Crosby M. 1943. A silver ladle and strainer. AJA 47, 209–216.
- **Descamps-Lequime S. (ed.) 2011.** Au royaume d'Alexandre le Grand. La Macedoine antique. Exposition Louvre 2011. Paris.

- **Drougou S. 1984.** Δρούγου Σ. Το χρυσοΰφαντο ύφασμα της Βεργίνας. Ιη Αμητός. Τιμητικός τόμος για τον καθ. Μ. Ανδρόνικο, 303–325. Thessaloniki.
- **Drougou S. 1999.** Δρούγου Σ. Ο νέος τάφος Heuzey. *Το Αρχαιολογικό* Εργο στη Μακεδονία και στην Θράκη 13, 535–546.
- **Drougou S. 1995–2000.** Δρούγου Σ. Βεργίνα. Οι τάφοι Heuzey. Νέες ανασκαφικές έρευνες. *Εγνατία* 5/1995–2000, 227–246.
- **Drougou S. 2009.** Δρούγου Σ. Βεργίνα, οι τάφοι Heuzey. *Το Αρχαιολογικό Έργο στη Μακεδονία και στην Θράκη*. Επετειακός τόμος 20 χρόνων, 63–73.
- **Drougou S., Kallini Ch. and Trakatelli L. forthcoming.** Δρούγου Σ., Καλλίνη Χ., Τρακατέλλη Λ. Βεργίνα. Η νεκρόπολη των Αιγών. Οι τάφοι «Heuzey». Ο τάφος «του περιστεριού» Παλατίτσια. (Published by T.A.P.).
- **Drougou S. and Saatsoglou-Paliadeli Ch. 2006.** Δρούγου Σ., Σαατσόγλου-Παλιαδέλη Χρ. *Βεργίνα. Ο τόπος και η ιστορία του*. Athens.
- **Drougou S. and Touratsoglou G. 1980.** Δρούγου Σ., Τουράτσογλου Γ. Ελληνιστικοί λαζευτοί τάφοι Βέροιας. Athens (2nd ed. 1998).
- Fless F. 2002. Rotfigurige Keramik als Handelsware. Rahden.
- Fox L. (ed.) 2011. Heracles to Alexander the Great. Oxford.
- Frank S. 1990. Attische Kelchkratere: Untersuchung zum Zusammenspiel von Gefässform und Bemalung. Munich.
- Fuchs W. 1959. Die Vorbilder der neuattischen Reliefs. (JdI-EH 20). Berlin.
- Graeve V. von 1970. Der Alexandersarkophag und seine Werkstatt. Berlin.
- **Grassinger D. 1991.** Römische Marmorkratere. (Monumenta Artis Romanae 18). Mainz.
- Heilmeyer W. P. 1988. Antikenmuseum in Berlin. Berlin.
- **Heuzey L. and Daumet H. 1876.** *Mission Archéologique de Macédoine.* Paris.
- **Hill D. K. 1942.** Wine ladles and strainers from ancient times. *The Journal of the Walters Art Gallery* 5, 40–55.
- **Ignatiadou D. 2014.** The Symbolic krater. *Cahiers du CVA France No 2*, 43–59.
- Il Dono di Dioniso 2011. Το δώρο του Διονύσου The gift of Dionysos. Εκθεση, Μουσείο Θεσσαλονίκης. Thessaloniki.

**Kallini Ch. 2007.** Καλλίνη Χ. Ο ελληνιστικός «κάνθαρος». Συμβολή στη μελέτη της ελληνιστικής κεραμικής. (Unpublished PhD thesis). Thessaloniki.

- **Karamitrou-Mentesidiou 2010.** Καραμήτρου-Μεντεσίδου Γ. *Αιανή*. Thessaloniki.
- **Kathariou K. 2002.** Καθαρίου Κ. Το εργαστήριο του ζωγράφου του Μελέαγρου και η εποχή του: παρατηρήσεις στην αττική κεραμική του πρώτου τετάρτου του 4ου αι. π.Χ. Thessaloniki.
- **Konstantopoulos G. 1986.** Κωνσταντινόπουλος Γ. Αρχαία Ρόδος. Athens.
- **Kopcke G. 1964.** Golddekorierte attische Schwarzfirnis-Keramik des 4. Jahrh. v. Chr. *AM* 79, 22–84.
- **Kotitsa Z. 1998.** Hellenistische Keramik im Martin von Wagner Museum der Universitaet Wuerzburg. Würzburg.
- **Kottaridi A. 1998.** Κοτταρίδη Α. Το αρχαιολογικό έργο στη Βεργίνα το 1998. Νέα ευρήματα από την νεκρόπολη των Αιγών. *Το Αρχαιολογικό Έργο στη Μακεδονία και στην Θράκη* 12, 405–412.
- **Kottaridi A. 2011.** Κοτταρίδη Α. Μακεδονικοί θησαυροί. Μία περιήγηση στο Μουσείο των Βασιλικών τάφων των Αιγών. Athens.
- **Kottaridi A. 2013.** Κοτταρίδη Α. *Αιγές, η βασιλική μητρόπολη των Μακεδόνων*. Athens.
- Krauskopf I. 1981. Etruskische und griechische Kannen der Form VI im 5 Jahrhundert. In Die Aufnahme fremder Kultureinflüsse und das Problem des Retardierens in der etruskischen Kunst. Symposium des Deutschen Archäologenverbands, Mannheim, 8.-10.1980, 146–155. (Schriften des Deutschen Archäologen-Verbandes 5). Mannheim.
- **Krauskopf I. 1984.** Terracotta-Imitationen der Bronzen Kannen der Form «Beazley VI». In *Ancient Greek and Related Pottery*. Proceedings of the International Vase Symposium, Amsterdam, 12–15 April 1984, 83–87. Amsterdam.
- **Krauskopf I. 1995.** Schnabelkannen und Griffphialen aus Bronze und Ton. *AA* 1995, 501–526.
- **Kugioumtzi D. 2006.** *Untersuchungen zur attischen rotfigurigen Keramik Produktion des 4. Jh v. Chr.* Würzburg.
- **Kypraiou L. (ed.) 1979.** Κυπραίου Λ. Θησαυροί της αρχαίας Μακεδονίας. Athens.
- **Lazarides D. 2014.** Λαζαρίδης Δ. *Οδηγός Αμφίπολης*. Athens (reprint).
- Lezzi-Hafter A. 1988. Der Eretria-Maler. Mainz.
- Marazov I. 2011. Thrace and the Ancient World. V. Bojkov Collection 2011. Sofia.

- **McPhee I. 1981.** Red figured pottery from Corinth, the Sacred Spring and elsewhere. *Hesperia* 50, 264–284.
- Vatin C. and Rolley C. 1976. Medeon de Phocide 5. Tombes hellenistiques: objects de metal-monnaies. Paris.
- Möbius H. 1968. Die Ornamente der griechischen Grabstelen Klassischen und nachklassischen Zeit. Munich.
- **Nikolaidou-Patera M. 1996.** Νικολαΐδου-Πατέρα Μ. Φάγρης: η αρχαία πόλη και το νεκροταφείο. Το Αρχαιολογικό Έργο στη Μακεδονία και στην Θράκη 10, 835–846.
- **Nikolaidou-Patera M. 2007.** Νικολαΐδου-Πατέρα Μ. Συμποτικά αγγεία από τον Φάγρητα. In Γ. Α. Πίκουλας (ed.), *Οίνον ιστορώ. Στα οινόπεδα του Παγγαίου*, 87–96. Athens.
- **Nuber H. U. 1968.** *Kanne und Griffschale.* (Unpublished doctoral thesis). Frankfurt.
- **Nuber H. U. 1972.** Kanne und Griffschale. *Berliner Römisch-Germanische Kommission* 53, 1–232.
- **Νόστοι 2003.** ΝΟΣΤΟΙ. Επαναπατρισθέντα Αριστουργήματα. Athens.
- **Oliver A. 1977.** Silver for the gods: 800 years of Greek and Roman silver. Toledo, Ohio.
- **Papanastasiou A. 2004.** Relations between Red-figured and Black-glazed Vases in Athens of the 4th c. B.C. Oxford.
- Pernice E. 1925. Die hellenistische Kunst in Pompeii 4. Gefässe und Geräte aus Bronze. Berlin.
- **Pfrommer M. 1982.** Grossgriechischer und mittelitalischer Einfluss in Rankenornamentik frühhellenistischer Zeit. *JdI* 97, 119–190.
- **Pfrommer M. 1987.** Studien zu alexandrinischer und grossgriechischer Toreutik frühhellenistischer Zeit. Berlin.
- **Pfrommer M. 1993.** Göttliche Fürsten in Boscoreale. Der Festsaal in der Villa des P. Fannius Synistor. Mainz.
- **Pingiatoglou 1991.** Πινγιάτογλου Σ. Το ιερό της Δήμητρας στο Δίον. Ανασκαφή 1991. Το Αρχαιολογικό Έργο στη Μακεδονία και στην Θράκη 5, 143–147.
- Riz A. E. 1990. Bronze Gefässe in der römische Wandmalerei. Mainz.
- *Rois, Cites, Necropoles. Meletemata* 45. Actes des Colloques de Nanterre 2002, Athens, 2004. Athens.
- **Rolley Cl. 2006.** La toreutique de Vergina est –elle un art de cour? In *Rois, Cites, Necropoles*, 311–319.
- **Romiopoulou K. 1989.** Ρωμιοπούλου Κ. Κλειστά ταφικά σύνολα υστεροκλασσικών γρόνων. Ιn Φίλια Έπη Γ', 194–199. Athens.

Rhomiopoulou K. and Schmidt-Dounas B. 2010. Das Palmettengrab in Lefkadia. Mainz.

- Rotroff S. 1997. Athenian Agora 29. Hellenistic Pottery. Athenian and Imported Wheelmade Tableware and Related Material. Princeton.
- **Rotroff S. 2002.** Attic West Slope Vase painting. *Hesperia* 2002, 59–102, pls. 14–46.
- **Schefold K. 1934.** *Untersuchungen zu den Kertscher Vasen.* Berlin, Leipzig. **Schröder B. 1940.** *Griechische Bronzeeimer im Berliner Antiquarium.* 74. Programm zum Winckelmanns. Berlin.
- **Shefton B. B. 1985.** Magna Grecia, Macedonia or neither? Some problems in 4th century B.C. Metalwork. In A. Stazio and M. L. Napolitano (eds.), *Magna Grecia, Epiro e Macedonia*. Atti del 24. Convegno di Studi sulla Magna Grecia, Taranto 5–10.10.1984, 399–410. Taranto.
- **Sideris A. 2000.** Les tombes de Derveni, quelques remarques sur la toreutique. *RA* 1, 3–36.
- **Sideris A. 2002.** Bronze drinking vases bearing dedicatory inscriptons. *Eirene* 38, 167–201.
- Sideris A. 2011. Σιδέρης Α. Προσωπεία της Τορευτικής στη Μακεδονία. Ιη Ταξιδεύοντας στην Κλασική Ελλάδα. Τόμος προς τιμή του καθηγητή Π. Θέμελη, 283–313. Athens.
- **Simon E. 2010.** Ein Fund attischer Keramik aus dem Jahrzehnt 340/330 v.Chr. In K. Weiss and E. Simon (eds.), *Folia in memoriam Ruth Lindner Collecta*. Dettelbach.
- **Sismanidis K. 1997.** Σισμανίδης Κ. Κλινες και κλινοειδείς κατασκευές των μακεδονικών τάφων. (Unpublished doctoral thesis). Athens.
- Strong D. E. 1966. Greek and Roman Gold and Silver Plate. London.
- **Teleaga E. 2008.** Griechische Importe in den Nekropolen an der unteren Donau, 6.Jh. Anfang des 3. Jhs v. Chr. Rahden.
- **Themelis P. 2000.** Θέμελης Π. Μεταλλοτεχνία Μακεδονική. In Μύρτος. Μελέτες στη μνήμη της Ιουλίας Βοκοτοπούλου, 495–517. Thessaloniki.
- **Themelis P. and Touratsoglou G. 1997.** Θέμελης Π., Τουράτσογλου Γ. Οι Τάφοι του Δερβενίου. Athens.
- **Tiverios M. 2009.** Τιβέριος Μ. Ηθμοειδής κύαθος. Ιη *Οίνον Ιστορώ.* Πότνια οίνου. Επιστημονικό Συμπόσιον προς τιμήν της Σταυρούλας Κουράκου-Δραγώνα, 9–116. Volos.
- **Touloumtzidou A. 2010.** Τουλουμτζίδου Α. Μετάλλινα αγγεία του 4ου αι. π.Χ. 2ου αι. π. Χ από τον ελλαδικό χώρο. (Unpublished PhD thesis). Thessaloniki.

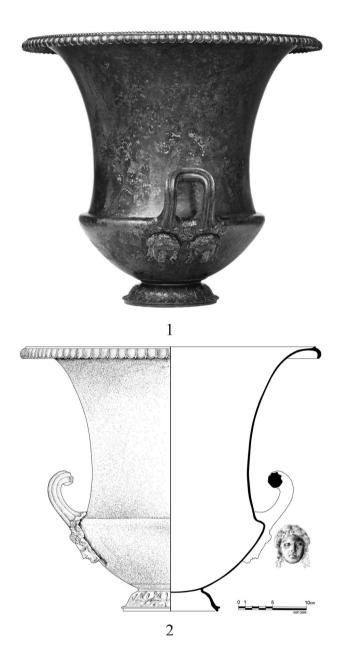
- **Touratsoglou G. 1988.** Dated gold. The evidence from Hellenistic Macedonia. In D. Williams (ed.), *The Art of the Greek Goldsmith*. London.
- **Touratsoglou G. 2010.** Τουράτσογλου Γ. Συμβολή στην Οικονομική Ιστορία του Βασιλείου της Αρχαίας Μακεδονίας (60 -3ος αι.  $\pi$ .X.). Athens.
- **Tsimbidou-Avloniti M. 2006.** La tombe macedonienne d' Hagios Athanasios près de Thessalonique. In *Rois, Cites, Necropoles*, 321–331.
- **Valina J. 2006.** Late Classical and Early Hellenistic Scroll Ornament. In *Kάλαθος. Studies in Honour of Asher Ovadiah*, 451–482. Tel Aviv.
- **Vickers M. and Gill D. 1994.** *Artful crafts. Ancient Greek Silverware and Pottery.* Oxford.
- **Vocotopoulou I. 1975.** Βοκοτοπουλου Ι. Χαλκαί κοριθιουργείς πρόχοι. Συμβολή εις την μελέτην της αρχαίας ελληνικής χαλκουργίας. Athens.
- **Vocotopoulou I. 1990.** Βοκοτοπούλου Ι. Οι Ταφικοί τύμβοι της Αίνειας. Athens.
- **Vokotopoulou I. 1994.** The kalyx krater of Sevaste in Pieria. In I. Worthington (ed.), *Ventures into Greek History*, 189–211. Oxford.
- **Vocotopoulou I. 1997.** Βοκοτοπούλου Ι. Αργυρά και χάλκινα έργα τέχνης. Athens.
- Zahlhaas G. 1971. Grossgriechische und römische Metalleimer. Munich.
- **Zimi E. 2011.** *Late Classical and Hellenistic Silver Plate from Macedonia.* Oxford.
- **Zimi E. and Sideris A. 2003.** Ζυμή Ε., Σίδερης Α. Χάλκινα σκεύη από το Γαλαξείδι. Πρώτη προσέγγιση. In *Το Γαλαξείδι. Από την αρχαιότητα έως σήμερα*, 35–60. Athens.
- **Zimmermann N. 1998.** Beziehungen zwischen Ton- und Metallgefässen spätklassischen und frühhellenistischer Zeit. Leidorf.
- Züchner N. 1938. The Berliner Maenaden Krater. BWPr 98, 3–34.

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Pl. 1. The bronze calyx-krater from the 'Heuzey B' tomb at Vergina, Aigai. Archive of the Vergina excavation 1 – View with a lead disc cover; 2 – View of the calyx-krater sites

PLATE 2 S. Drougou



Pl. 2. The bronze calyx-krater from the 'Heuzey B' tomb at Vergina, Aigai 1 – View of the calyx-krater site. Archive of the Vergina excavation; 2 – Drawing by T. Papadogonas



Pl. 3. The lower section of the Vergina calyx-krater – details. Archive of the Vergina excavation 1 – Vergina calyx-krater base; 2 – Vergina calyx-krater handle

PLATE 4 S. Drougou



Pl. 4. Female heads on the handles of the Vergina calyx-krater. Archive of the Vergina excavation