

INSCRIBED SILVER PLATE FROM TOMB II AT VERGINA

CHRONOLOGICAL IMPLICATIONS

ABSTRACT

Five items of silver plate from tomb II at Vergina are inscribed with their ancient weights. The inscriptions, using the acrophonic and alphabetic systems, suggest that the pieces were made to a drachma weight of ca. 4.2 g. This weight of drachma was introduced to Macedonia by Alexander the Great and does not appear to have been used by Philip II. The inscriptions on the silver add to the cumulative evidence provided by the cremated remains, black-gloss saltcellars, and iconography of the lion-hunt frieze that tomb II was the final resting place not of Philip II, but of Philip III Arrhidaios and Adea Eurydike.

The excavations by Manolis Andronikos at Vergina, the likely site of Aigai, have provided substantial evidence for the burials of members of the Macedonian royal family.¹ The wealth that has emerged from the excavation of tomb II, the so-called Tomb of Philip II that lay beneath the Great Tumulus at Vergina, has been awe-inspiring. The gold larnax, ivory-decorated couch, gold-decorated purple cloth, and silver plate point to the burial of an individual of high—and surely royal—status in Macedonian society. The reconstructed face of the individual placed in tomb II has convinced many that Philip II was indeed buried in this tomb.² Yet

1. For a tribute to Andronikos and his indisputable contribution to a modern understanding of Macedonian material culture, see Borza 1992.

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preparing the line drawings, and to Tracey Cullen and the anonymous *Hesperia* referees for their assistance.

2. Musgrave, Neave, and Prag 1984; Prag 1990; Musgrave 1991a. The identification of the tomb as that of Philip II was cited in the application for the archaeological site of Vergina to be granted the status of a UNESCO “World Heritage Site” (1996). Further details and reports can be obtained from whc.unesco.org/en/list/780 (accessed May 2, 2008).

the weight inscriptions found on some of the pieces of silver plate from the tomb pose a question about the possible date of the burial, and appear to support instead an identification of the principal occupant of the tomb as Philip III Arrhidaios.

THE SILVER PLATE

It is now well known that in antiquity gold and silver plate was valued as much for its bullion value as for its aesthetic qualities. Sometimes the vessels themselves were inscribed with their weight. The interpretation of such inscriptions and weights is complicated by the use of varying weight standards throughout antiquity. Five pieces of silver plate from tomb II at Vergina carry weight inscriptions: a strainer, a pair of stemless cups, and two calyx cups (Fig. 1).³ Two numerical systems, acrophonic and alphabetic, are used on these vessels.⁴ The five objects and their inscriptions can be listed as follows:

Plate marked with the acrophonic numeral system

1. Strainer

Inscription under the rim: MAXATA ΔΔΔΔ†

Weight inscription: 41 drachmas. Actual weight: 171.45 g.

Plate marked with the alphabetic numeral system

2. Stemless cup

Inscription: ΞΒ = -

Weight inscription: 62 drachmas and 3 obols. Actual weight: 266.2 g.

3. Stemless cup

Inscription: ΞΓ = -

Weight inscription: 63 drachmas and 3 obols. Actual weight: 296.8 g.

4. Calyx cup

Inscription: ϞΒ -

Weight inscription: 92 drachmas and 1 obol. Actual weight: 192.2 g.

5. Calyx cup

Inscription: ϞΔ = -

Weight inscription: 94 drachmas and 3 obols. Actual weight: 195.7 g.

3. For a list of the Vergina pieces with weights, see Themelis and Touratsoglou 1997, pp. 172, 216; see also Andronikos 1984, pp. 157–159. The vessels are in the Archaeological Museum in Vergina. Strainer: Andronikos 1984, p. 148, fig. 108; Drougou and Saatsoglou-Paliadeli 2000, p. 51, fig. 66. Stemless cups: Andronikos 1984, p. 148, figs. 106, 107. Calyx cups: Andronikos 1984, pp. 150–151, figs. 112–114.

For a description of units of weight

referred to below, see *OCD*³, pp. 1620–1621, s.v. weights. Some equivalencies are as follows: 6 obols = 1 drachma; 100 drachmas = 1 mina; 60 minas = 1 talent. Under Philip II, a stater (5 drachmas @ 2.88 g) = 14.40 g. Under Alexander the Great, a tetradrachm (4 drachmas @ 4.30 g) = 17.18 g. A daric = 8.25–8.46 g, and a *karsba* (10 darics) = 83.3 g.

4. For a convenient summary of numeral systems, see Woodhead 1981, pp. 108–112. For the alphabetic system, see Tod 1950.

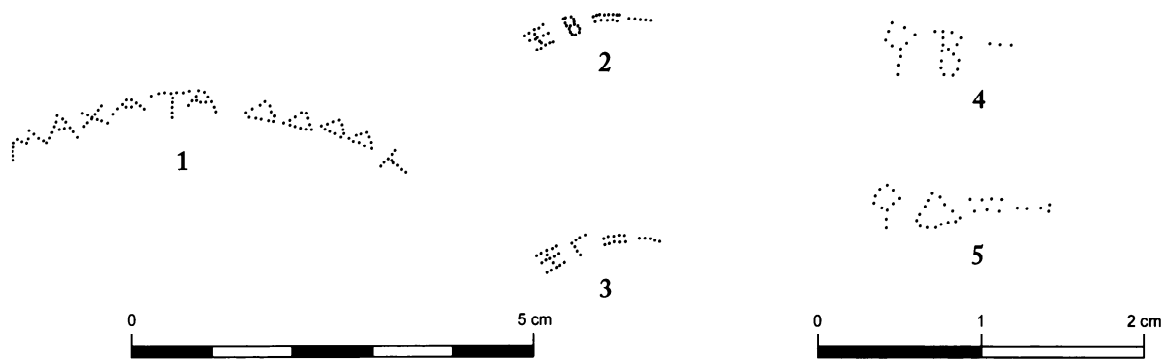


Figure 1. Weight inscriptions on five silver plate objects found in tomb II, Vergina: (1) strainer; (2) stemless cup; (3) stemless cup; (4) calyx cup; (5) calyx cup. Based on Andronikos 1980, p. 52, fig. 31. Drawing J. J. Shirley

WEIGHT INSCRIPTIONS ON PLATE

Weight inscriptions appear occasionally on extant silver and gold plate, perhaps reflecting accounting procedures. Thus, items listed in temple inventories may have been inscribed with their weights to help with identification and to ensure the honesty of those entrusted with their safekeeping. The same may have been true for royal and civic stores. The weight inscriptions can be divided into two broad groups. The first consists of inscriptions that record the weight of a single item. The second category refers to group weights: a number of pieces were weighed, and one of the pieces was then marked with the group weight.

The marking of single items of gold and silver plate with weight inscriptions is relatively rare. A gold phiale from the Panagyurishte treasure from Bulgaria carries two weight inscriptions: one for 100 units, and the other for 196 drachmas and a quarter obol.⁵ The phiale itself weighs 845.7 g, which can be expressed as 100 darics each weighing 8.45 g.⁶ The second inscription is the actual (gold) weight of the phiale expressed in silver drachmas.⁷ A gold phiale decorated with relief bees and acorns that surfaced through the antiquities market and was acquired by a New York collector before being returned to Italy carries a weight inscription of 115 gold units.⁸ This piece, which had been dedicated by a demarch named Achyris, weighs 982 g. This figure can be expressed as a weight of 115 darics or staters at 8.54 g, although this would be heavy for the daric.

The silver hydria used as a cremation container in tomb III at Vergina—the so-called Prince's Tomb—carries an alphabetic weight inscription on two lines, 5 minas (MNAIE) and 68 drachmas (ΔΠΑΞΗ); its weight of 2,300 g, however, suggests a drachma of 4.05 g, which is light.⁹ A fourth example is found on a Hellenistic silver relief bowl now in the Toledo Museum of Art, which carries an alphabetic weight inscription of 51 drachmas (ΔΠΑΧΝΑ).¹⁰ The bowl weighs 225.3 g, which yields a drachma of 4.42 g.

5. Plovdiv, Archaeological Museum 3204: Lewis 1986, p. 76; Marazov 1998, p. 148, no. 76.

6. Vickers 1990, p. 617.

7. A weight of 845.7 g at 4.31 g per drachma is equal to 196 drachmas and a quarter obol.

8. *SEG* XXXIX 1034; Manganaro

1989. For the legal aspects concerning the appearance of the phiale on the market, see Slayman 1998; Gerstenblith 2006, pp. 70, 84, n. 6.

9. Andronikos 1984, pp. 203, 212, 214, figs. 165, 183; Themelis and Touratsoglou 1997, pp. 172, 216; Drougou and Saatsoglou-Paliadeli

2000, p. 58, fig. 80; Papanastasiou 2004, p. 57, no. Hyd. 114. The weight of 2,300 g/568 drachmas = 4.05 g.

10. Toledo Museum of Art 75.11: Oliver 1977, pp. 78–79, no. 43; *Search for Alexander*, Chicago suppl., no. S-10; Pfrommer 1987, p. 265, no. KBk 128 (dated to the 2nd century B.C.).

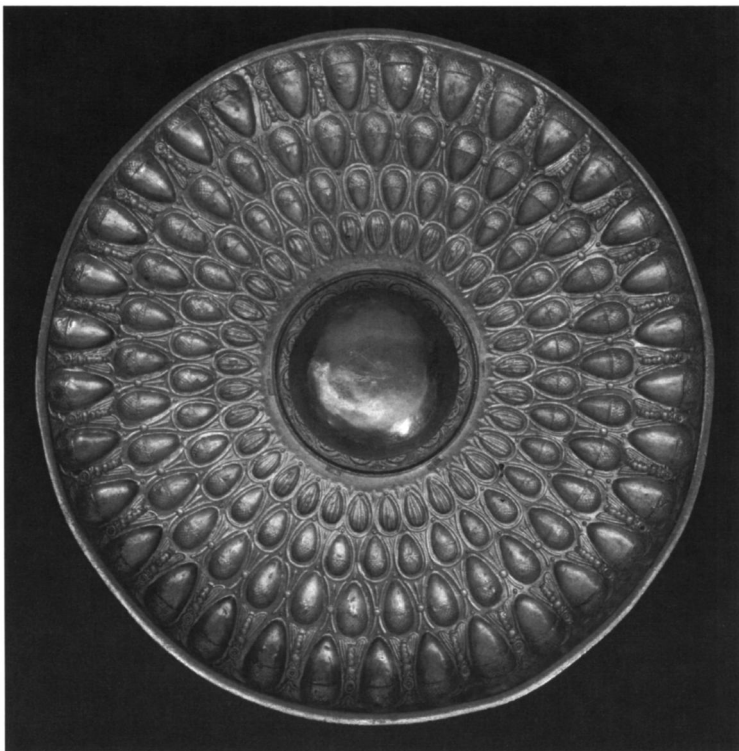


Figure 2. Gold phiale. New York, Metropolitan Museum of Art. Rogers Fund, 1962 (62.11.1). Photo © Metropolitan Museum of Art

It is clear from temple inventories that plate was often weighed in groups or sets.¹¹ As noted above, inscriptions on plate indicate that the weights of pairs and groups of items were then inscribed on a single item. A gold phiale, without a named findspot and now in the Metropolitan Museum of Art in New York, carries a Phoenician weight inscription of 180 units (Fig. 2).¹² The phiale appears to have been in Greek possession at some point as it also carries the beginning of a Greek personal name ("Pausi-"). The phiale itself weighs 747 g and the subsequent calculation yields a unit weight of 4.15 g, a value that makes no obvious sense for gold weights. Gold objects, for example the phiale from Panagyurishte, could be weighed in darics: twice 4.15 g gives a unit weight of 8.3 g, which is within the range for the daric. The weight recorded on the New York example (which on its own weighed 90 darics) would make sense if the vessel was originally one of a pair of gold phialai with a combined weight of 180 darics.

A silver phiale from Branichevo in Bulgaria carries two weight inscriptions: 50.5 drachmas and 2 obols (i.e., 50 drachmas and 5 obols), and 101 drachmas.¹³ The phiale weighs 164 g, so the two inscriptions indicate weight units of 3.23 g and 1.62 g, respectively. The best way to explain these two inscriptions is to see one relating to the weight of the phiale (50 drachmas and 5 obols), and the other relating to a pair of phialai with a combined weight of 101 drachmas; the missing phiale would have weighed 50 drachmas and 1 obol. One of the silver phialai from the Rogozen hoard in Bulgaria carries a weight inscription of 200 units.¹⁴ The phiale itself weighs 140.9 g, which would give a weight unit of 0.70 g. If the weight inscription describes six phialai, however, then each vessel would weigh a third of an Attic mina (with a drachma of 4.23 g).

11. For useful observations, see Lewis 1986.

12. New York, Metropolitan Museum of Art 62.11.1: Bothmer 1984, p. 50, no. 86; Vickers and Gill 1994, p. 44, fig. 2:4.

13. Shoumen, District Museum of History 408: Venedikov 1976, p. 67, no. 311. The phiale also bears the name Amatokos, an Odrysian ruler, and the name Teres, interpreted by Venedikov as the craftsman.

14. Sofia, National Museum of History 22341. Fol, Nikolov, and Hoddinott 1986, p. 38, no. 41. See also Vickers 1989a, p. 104.

EXTANT GOLD AND SILVER PLATE AND ROUND UNITS

It should not be unexpected that gold and silver plate was made to a round number of units. Gold and silver plate listed in temple inventories often seems to have been expressed in such units. Indeed, weights that appear irregular can sometimes be expressed in round numbers in another known weight system.¹⁵ It has been demonstrated that some of the seemingly strange weights found in the lists from the Athenian Acropolis can be understood in terms of a Persian weight standard.¹⁶ The gold phiale in the possession of Demus (Lysias 19.25) was used to raise a loan of 16 minas, and it is surely significant that 16 minas (960 drachmas in silver) is the equivalent of 100 gold darics.¹⁷

Extant gold and silver plate also appears to have been made to a round number of units. A gold phiale dedicated at Olympia by the Kypselids of Corinth weighs 835.8 g, which can be interpreted as 100 darics or 10 *karsha* (at 8.4 g); the phiale itself carries an inscription indicating that it was derived from "the spoils of Herakleia."¹⁸ Silver phialai in temple inventories were often made to weigh 1 mina and there are extant examples of the same unit. One phiale without a known findspot and now in the Metropolitan Museum of Art in New York weighs 422 g and was probably intended to weigh 1 mina.¹⁹ A silver phiale from Kozani in Macedonia, originally dedicated in a sanctuary of Athena at Megara, weighs 432 g, the equivalent of 1 mina using a drachma of 4.32 g.²⁰ Pieces of gold-figured silver plate from the cemetery at Duvanli in Bulgaria seem to have been made to an Attic standard. The phiale in the group weighs 428 g, the equivalent of 1 mina,²¹ and the two kantharoi from the Golemata Mound weigh 1,073 g and 854 g, respectively, the equivalent of 2½ minas (250 drachmas) at 4.29 g per drachma, and 2 minas (200 drachmas) at 4.27 g per drachma.²² A silver hydria in the Toledo Museum of Art, which is said to have been found in Macedonia, weighs 2,534.32 g, the equivalent of 6 minas (at a drachma of 4.22 g).²³

Many of the items of silver plate from tomb B at Derveni in Macedonia, in which the famous Derveni krater was found, seem to have been made to round numbers of drachmas; the weights of two plates at 100 drachmas each are particularly suggestive (Table 1: B15, B16).²⁴

15. Lewis 1986, pp. 76–77.

16. Vickers 1989b, 1992. A convenient overview can be found in Vickers and Gill 1994, pp. 33–54.

17. Vickers 1988; Vickers and Gill 1994, pp. 41, 43.

18. Boston, Museum of Fine Arts 21.1843: Vickers and Gill 1994, pp. 59, 65, fig. 3:2. The weight is sometimes incorrectly expressed as 2 Babylonian minas; on this issue, see Vickers and Gill 1994, p. 46, n. 113. For the possible location of Herakleia in Akarnania, see Pritchett 1992, pp. 100–101.

19. New York, Metropolitan

Museum of Art 1981.11.13: Bothmer 1984, p. 21, no. 12.

20. Kozani, Archaeological Museum 589: *Treasures*, p. 40, no. 45, pl. 10; Gill 1990; Jeffery 1990, p. 137, no. 2, pl. 22; Vickers and Gill 1994, p. 57. The looting probably took place in the Late Classical or Hellenistic period.

21. Plovdiv, Archaeological Museum 1515: Vickers 1990, p. 616; Vickers and Gill 1994, p. 41, fig. 2:2; Marazov 1998, pp. 138–139, no. 64.

22. Plovdiv, Archaeological Museum 1634: Vickers and Gill 1994, pp. 40–41; Marazov 1998, pp. 148–149, no. 77.

23. Toledo Museum of Art 79.1: *Toledo Museum of Art News* 21:4 (1979), p. 78 (ill.); *Search for Alexander*, Chicago suppl., no. S-9.

24. The finds are in the Archaeological Museum, Thessaloniki. For the Derveni krater, see most recently Barr-Sharrar 2008. Full details of the context and silver plate can be found in Themelis and Touratsoglou 1997. Minor discrepancies exist between the published weights and those supplied to me in 1987 by the Archaeological Museum in Thessaloniki (noted in Table 1).

TABLE 1. SILVER FROM TOMB B, DERVENI

<i>Cat. No.</i>	<i>Shape</i>	<i>Weight</i>	<i>Possible Ancient Weight</i>
B2	ladle	129.2 g ^a	30 dr @ 4.31 g
B3	askos	508.5 g ^b	118 dr @ 4.31 g
B4	wine strainer	162.6 g ^c	38 dr @ 4.28 g
B5	cup-kantharos	270 g ^d	63 dr @ 4.29 g
B6	cup-kantharos	271.11 g ^e	63 dr @ 4.30 g
B7	bowl	69.8 g	
B8	bowl	66.4 g	
B9	bowl	72 g	
B10	bowl	68.1 g	16 dr @ 4.26 g
B11	calyx cup	192.69 g	45 dr @ 4.28 g
B12	calyx cup	184.7 g	43 dr @ 4.30 g
B13	calyx cup	192.1 g	45 dr @ 4.27 g
B14	oinochoe	192.19 g ^f	45 dr @ 4.27 g
B15	plate	427.2 g	100 dr @ 4.27 g
B16	plate	427.36 g	100 dr @ 4.27 g
B17	plate	184.17 g	43 dr @ 4.28 g
B18	phiale	193 g	45 dr @ 4.29 g
B19	phiale	182 g	42 dr @ 4.33 g
B20	saltcellar	63.67 g (38.5 g)	15 dr @ 4.24 g
B21	saltcellar	63.9 g (37.2 g)	15 dr @ 4.26 g

Catalogue numbers and weights in grams are taken from Themelis and Touratsoglou 1997, pp. 65–70; dr = drachma.

^a Reported earlier as 129.35 g, which can be expressed as 30 dr @ 4.31 g.

^b Reported earlier as 511.32 g, which can be expressed as 120 dr @ 4.26 g.

^c Reported earlier as 162.93 g, which can be expressed as 39 dr @ 4.18 g.

^d Reported earlier as 286.17 g, which can be expressed as 65 dr @ 4.40 g.

^e Reported earlier as 271.55 g, which can be expressed as 65 dr @ 4.18 g; together, the cup-kantharoi could weigh 130 dr @ 4.29 g.

^f Reported earlier as 192.39 g, which can be expressed as 45 dr @ 4.28 g.

Sets of drinking vessels and other plate may have been made from a specified weight of silver or gold, although individual items within the set might not conform to a set weight. For example, a (hypothetical) set of four cups may have been made from 4 minas of silver, but each of the cups may have weighed slightly more or less than 100 drachmas. This phenomenon is observed in a series of 27 silver hydrias recorded in a Parthenon inventory from the end of the 5th century B.C.²⁵ Each hydria was probably intended to weigh approximately 1,000 drachmas (i.e., 10 minas), although some weighed as little as 982 drachmas, and others as much as 1,009 drachmas and 4 obols. Such evidence reminds us that we need to approach oddly expressed weights with caution as the piece of plate may originally have been made as part of a larger set. A possible example of this phenomenon in extant silver is presented by a set of three silver beakers from the tumulus at Dalboki in Thrace.²⁶ The combined weight of the beakers is 560.5 g,

25. *IG II²* 1424a, lines 192–219; Harris 1995, p. 276.

26. St. Petersburg, Hermitage 8636; Oxford, Ashmolean Museum 1948.102,

1948.103. The weights of the three beakers are 193.5, 183.8, and 183.2 g, respectively. See Vickers and Gill 1994, p. 50, fig. 2:5.

which can be expressed as 100 sigloi (at 5.61 g). On a larger scale, the two bags of silver plate in the Rogozen hoard from Bulgaria may have been weighed in preparation for melting down as they weigh the equivalent of 1,600 and 2,000 sigloi.²⁷

It should also be recognized that some silver may have been lost through cleaning and wear, thus making an object lighter. An example of this phenomenon can be seen in a nearly complete Roman silver mirror now in New York, with a Latin weight inscription that reads 0.5 pound, 1 ounce, and 10 scruples, the equivalent of 202.5 g.²⁸ The actual weight of the mirror is 192 g, however, suggesting a weight loss of approximately 5%. It is possible to appreciate why some ancient plate may have been kept in a patinated condition, as cleaning would have lowered the bullion value of the object.²⁹

THE VERGINA INSCRIPTIONS

Examples of marked gold and silver plate thus make it clear that weight inscriptions could indicate single items, pairs, or even groups. Pieces may also have been made in weights expressed by round numbers of units, either as individual items or as part of a set. These observations may apply to the Vergina silver plate as well. Furthermore, as noted above, the inscriptions on the vessels from tomb II (Fig. 1) are not consistent in the way in which they were applied, using different numerical systems.

ACROPHONIC WEIGHT INSCRIPTION

The strainer is the only object from tomb II with an acrophonic inscription; it is also inscribed with the Macedonian personal name of Machatas (Fig. 1:1).³⁰ The weight inscription is straightforward to interpret, as it states a weight of 41 drachmas that implies a drachma of 4.18 g. Weights of three other silver strainers are known. The example from Derveni tomb B (Table 1: B4) can be expressed as 38 drachmas (at 4.28 g).³¹ A second strainer is in the Walters Art Gallery in Baltimore, and was acquired from Dikran Kelekian, a dealer based in New York, in 1911.³² The findspot is reported as "Kavalla, Thessaly," although Amphipolis has been suggested

27. Vickers 1989a.

28. New York, Metropolitan Museum of Art 07.286.127: Oliver 1977, p. 139, no. 92; Bothmer 1984, p. 69, no. 129. The reading was made by Alan K. Bowman.

29. Vickers and Gill 1994, pp. 123–129. For the loss of silver in circulation, see Patterson 1972, a reference I owe to Tracey Rihll.

30. Andronikos 1984, pp. 157–158. Machatas was the name of a brother-in-law of Philip II; even if this identification is correct, however, the strainer

could have entered the royal treasury and therefore have ended up in the grave of another king. For personal names, see Berve 1926; Heckel 1988, 2006.

31. Thessaloniki, Archaeological Museum. *Treasures*, p. 61, no. 187, pl. 29; *Search for Alexander*, p. 167, no. 130, col. pl. 19; Themelis and Touratsoglou 1997, pp. 69–70, no. B4, pls. 11, 72.

32. Baltimore, Walters Art Gallery 57.910: Oliver 1977, pp. 44–45, no. 14.

as more likely.³³ The weight of this strainer (190.5 g) may be expressed as 45 drachmas (at 4.23 g). A third strainer for which the weight is known (156 g) is now in the J. Paul Getty Museum, but was formerly in the Fleischman collection.³⁴

ALPHABETIC WEIGHT INSCRIPTIONS

The two stemless cups and the two calyx cups from tomb II bear alphabetic weight inscriptions.³⁵ The similarity of the two stemless cups suggests that they were made as a pair. The separate weight inscriptions of 62 drachmas and 3 obols (Fig. 1:2), and 63 drachmas and 3 obols (Fig. 1:3) suggest that a drachma unit of 4.26/4.25 g was used. It is possible that the pair of cups was originally made to weigh 125 drachmas (at 4.25 g), but that when they came to be weighed prior to being placed in the tomb, slightly lighter or worn coins were used, thus giving the discrepancy of a drachma for the pair. This phenomenon of using worn drachmas for weighing objects has been recognized for other pieces of plate.³⁶

The inscriptions on the two calyx cups (Fig. 1: 4, 5) are immediately problematic. If the actual weight of each cup is divided by the figure in the inscription, then units of 2.09 g and 2.08 g, respectively, are obtained.³⁷ Andronikos was puzzled by this result, commenting that he did "not know of such a unit of weight for the ancient drachma."³⁸ Martin Price suggested that a weight standard of 2.10 g could relate to a fifth of a Macedonian stater (which consisted of five drachmas), although no coins of that weight are known to have been issued.³⁹ It would seem strange, however, that the strainer and the two stemless cups from tomb II at Vergina were weighed with a drachma standard of 4.18 g and ca. 4.26 g (i.e., a quarter of a tetradrachm), but that the calyx cups were weighed against a fifth of a stater (even though they were inscribed with the same numerical system as the stemless cups). Given that the closest parallels for this type of calyx cup come from Macedonia (see below), it seems likely that the two from tomb II were made in Macedonia and that the weight inscriptions were applied there.

Some silver and gold weight inscriptions relate to a pair of pieces rather than to a single item. This may account for the seemingly light weight of 2.08/2.09 g. In other words, do the weights inscribed on each of the two calyx cups relate to two pairs of calyx cups, of which only one from each pair was placed in the tomb and the other perhaps retained in the royal treasury?

33. See *Search for Alexander*, p. 167, under no. 130, where it is noted that Kavalla is in eastern Macedonia.

34. Malibu, J. Paul Getty Museum 96.AM.89.4: *Passion for Antiquities*, pp. 77–78, no. 31d. The piece surfaced on the New York antiquities market, exhibited at Michael Ward, Inc.: Rosasco 1989, no. 14. The weight standard used to make this strainer is not obvious.

35. The silver hydria from tomb III at Vergina is also inscribed using this system; see above, p. 337, n. 9. For the two stemless cups, see Papanastasiou 2004, p. 64, nos. Ky.39 and Ky.40.

36. Vickers and Gill 1994, p. 128; Vickers 1995.

37. Andronikos (1984, p. 158) ignored the horizontal lines as the markings for obols.

38. Andronikos 1984, p. 158.

39. Price 1991, p. 39. The only instances of this weight that he could cite were the two calyx cups from Vergina. Price is followed by Themelis and Touratsoglou (1997, p. 217): "the silver kalykes . . . seem to have been calculated on the basis of the 'Persian' drachma of 2.10 grams."

If the weights of 2.09 g and 2.08 g are doubled, the figure coincides with the drachma weight used for the strainer. One possible solution would be to explain the inscriptions as follows:

1. 192.2 g, which equaled a stated 92 drachmas and 1 obol:
 - a. Extant calyx cup: 46 drachmas (at 4.18 g)
 - b. Hypothetical calyx cup: 46 drachmas and 1 obol (at 4.18 g) with a weight of 192.5 g
2. 195.7 g, which equaled a stated 94 drachmas and 3 obols:
 - a. Extant calyx cup: 47 drachmas and 2 obols (at 4.14 g)
 - b. Hypothetical calyx cup: 47 drachmas and 1 obol (at 4.14 g) with a weight of 195.3 g

These weight standards may be applied to other extant silver calyx cups, such as those in museums in Brooklyn,⁴⁰ New York (two examples),⁴¹ Boston,⁴² and Malibu,⁴³ which can be expressed as 65, 44, 30, 40, and 33.5 drachmas, respectively (at 4.17, 4.18, 4.15, 4.12, and 4.13 g, respectively). Similar extant calyx cups are in collections in London⁴⁴ and Newcastle upon Tyne.⁴⁵

WEIGHT STANDARDS AT VERGINA

The inscribed pieces from tomb II at Vergina were not weighed to a consistent drachma weight. The strainer indicates a drachma of 4.18 g, the calyx cups (if they were weighed as a pair) a drachma of 4.18 g and 4.14 g, and the pair of stemless cups a drachma of 4.26 g and 4.25 g. The hydria from tomb III was apparently weighed with a drachma of 4.05 g. This implies that the pieces of plate were not weighed at the same time (or, at least, not with the same weights) prior to being placed in tomb II: if they had been, they would have shown a consistent weight standard. It is not clear when the pieces were inscribed. If the silver was weighed as it was transferred from the royal treasury to the tomb, it might be expected that more of the silver (and gold) found in the tomb would have been inscribed. It might also be expected that a single numerical system would have been used for

40. Brooklyn Museum 55.183 ("from Egypt"): Oliver 1977, p. 41, no. 11; Pfrommer 1987, p. 218, no. KaB A48, p. 255, no. KBk 66, pls. 55, 61, 62. Weight: 271.2 g.

41. New York, Metropolitan Museum of Art 1972.118.159, 1972.118.160 (bequest of Walter C. Baker): *Search for Alexander*, New York suppl., p. 13, nos. S48, S49; Bothmer 1984, p. 47, nos. 77, 78; Pfrommer 1987, p. 235, no. KaB M13, p. 230, no. KaB A161; Rotroff 2003, p. 214, fig. 2. Weights: 184 and 124.6 g, respectively.

42. Boston, Museum of Fine Arts

58.319 ("reported to be from Asia Minor"): Oliver 1977, p. 40, no. 10; Pfrommer 1987, p. 235, no. KaB M11. Purchased from Hugo Weissmann. Weight: 164.8 g.

43. Malibu, J. Paul Getty Museum, formerly Fleischman 31a: *Passion for Antiquities*, pp. 74–75, no. 31a. Weight 138.5 g. The piece surfaced on the New York antiquities market: Rosasco 1989, no. 14. Three other pieces were acquired with it, also published in *Passion for Antiquities*, pp. 74–78, nos. 31b–31d: a jug of a type found in the Rogozen treasure (230 g), a ladle (202 g), and a

strainer (156 g). For observations on the Fleischman collection, see Chipindale and Gill 2000; Gill and Chipindale 2007.

44. London, British Museum GR 1926.4-16.12: Pfrommer 1987, p. 236, no. KaB M15; Williams 2003, p. 230, fig. 3. Weight: 92.5 g (including restoration).

45. Newcastle upon Tyne, Shefton Museum 241: purchased at Sotheby's (London), July 13, 1970, lot 80. Pfrommer 1987, p. 238, no. KaB M35.

consistency. It seems far more likely, therefore, that the pieces were weighed either when they entered the treasury or as part of a stock check during the time that they were kept there.⁴⁶

During the 4th century B.C., a change occurred in Macedonian weights. Under Philip II the main coin in use was the Macedonian stater, which consisted of five drachmas (although the drachma coins were never minted).⁴⁷ The stater weighed 14.40 g, which gives a drachma weight of 2.88 g. Although the weight inscriptions from tomb II could be expressed in a unit of 2.09 g or 2.08 g, these units are much lighter than the putative drachma.⁴⁸ Moreover, the drachma weights derived from the inscriptions on the calyx cups and the stemless cups suggest that the calyx cups were weighed as pairs. It thus seems likely that the silver was not made in Macedonia during the reign of Philip II, as the weights do not correspond to the stater of 14.40 g or to the putative drachma of 2.88 g.

Alexander the Great introduced a new weight standard, increasing the weight of the Macedonian stater by 20% and, as Martin Price notes, adopting "the Greek system of four drachmae to the Attic tetradrachm."⁴⁹ With a tetradrachm of 17.18 g, the drachma weight would be 4.30 g.⁵⁰ Although the date of this change is not clear, the new standard may have been introduced either early in Alexander's reign or as late as 333 B.C.⁵¹ This development raises a key issue: either the silver plate from tomb II was weighed using a drachma standard employed after the start of Alexander the Great's reign, or the silver is not Macedonian and was weighed to a drachma standard from another part of the Greek world. As the calyx cups appear to be Macedonian in character (see below) and the burial of Philip II is likely to have taken place shortly after his assassination in 336 (and before Alexander had time to reform Macedonian weights), the evidence suggests that tomb II is not the burial place of Philip II.

In other words, if Philip was assassinated, the body cremated, and his ashes and silver plate placed in tomb II soon afterward, one must then explain why the silver plate placed in the tomb with him used a weight standard not employed in Macedonia until after the end of his reign. It would appear simpler to argue that tomb II is the tomb of a later Macedonian ruler. Alternatively, the silver could have been looted from other Greek cities using the heavier drachma weight, or the pieces could have been received by Philip as diplomatic gifts. However, the presence of the alphabetic numerical system, also used in tomb III, and the Macedonian character of the silver calyx cups point to a Macedonian origin for the silver and the related inscriptions. It is necessary to examine the basis for the dating of tomb II to decide between these conflicting interpretations.

46. The rarity of such weight inscriptions on extant silver would imply that these were not placed on the object at the time of manufacture or sale.

47. Price 1991, pp. 38–39.

48. Price 1991, p. 39.

49. Price 1991, pp. 38–39. Price further states (p. 38) that "the change

to the Attic standard, though instigated perhaps by the need for reform, was probably carried out in order to bring the Macedonian weight systems better into line with that of the Greek world."

50. Price (1991, p. 43) suggests that some Macedonian coins may have been minted at a slightly lighter weight.

51. Price 1991, pp. 27, 38.

THE DATE OF TOMB II

The independent dating of tomb II in which the silver was found is not straightforward.⁵² A full analysis of the dating will not be possible until the final publication of all the finds from the tomb appears. It is already possible, however, to select key pieces and groups. Several categories of evidence are considered here: pottery, silver plate, a gold-plated silver diadem, architecture, and the lion-hunt frieze.

The main chamber of tomb II contained four Attic black-gloss spool-shaped saltcellars (Fig. 3).⁵³ The lack of wear on the bases suggests that they were new when placed in the grave. Susan Rotroff has studied similar saltcellars from the Athenian Agora (Fig. 4) and concluded that they should be dated to between 325 and 295 B.C.⁵⁴ This chronology takes account of the down-dating of Late Classical pottery resulting from the finds from a Ptolemaic camp at Koroni in Attica.⁵⁵ Nevertheless, John Prag, who is keen to identify tomb II as that of Philip II, has suggested that the saltcellars are dated too late and that the revised Hellenistic chronology is too low.⁵⁶ As Eugene Borza has noted, Rotroff's chronology for the saltcellars points toward the identification of the occupant of tomb II as Philip III Arrhidaios.⁵⁷

Other fine pottery from the main chamber included a black-gloss lamp of Howland type 23D (Fig. 3).⁵⁸ This type is dated by Rotroff from 345 to ca. 275 B.C. on the basis of deposits in the Athenian Agora.⁵⁹ Parallels for a black-gloss chous can also be cited from the Agora.⁶⁰ One vessel comes from a cistern whose "dumped deposit" is dated to 375–300, and another from a well dated to 350–315(?).⁶¹ A third example was found in the lower fill of a well and cistern just to the west of the tholos that Rotroff has associated with a destruction in 294.⁶² A fourth example comes from a well that is dated to 375–325, although it contains later material from the 3rd century.⁶³

A red-figure shallow askos from tomb II decorated with the motif of an olive wreath is dated to 350–325 by Stella Drougou on the basis of parallels from tomb groups at Spina in Italy and at Marion on Cyprus.⁶⁴ Finally,

52. Barr-Sharrar 1991a; Borza and Palagia, forthcoming.

53. *Treasures*, pp. 53–54, nos. 134–137. See also Barr-Sharrar 1991b, p. 11; Drougou 2005, pp. 42–43, nos. 4–7. Spool saltcellars were also found in the pyre linked to the tomb: Drougou 2005, pp. 54–56, nos. 1–4. Two silver spool saltcellars were found in tomb III, the so-called Prince's Tomb: Andronikos 1984, p. 209. For Vergina as a fixed point for chronology, see *Agora* XXIX, p. 23.

54. Rotroff 1984, p. 351; *Agora* XXIX, pp. 166, 346, nos. 1067 (P 27769, deposit H 16:7), 1068 (P 19358, deposit D 16:1, lower fill), and 1069 (P 3509, deposit F 11:2, upper fill).

55. Vanderpool, McCredie, and Steinberg 1962, 1964; Grace 1963; Edwards 1963. For the implications, see *Agora* XXIX, pp. 32–33; see also Gill, Foxhall, and Bowden 1997, pp. 69–72. Drougou (2005, pp. 42–43, nos. 4–7) dates the saltcellars from Vergina to 350–325, but is apparently unaware of the implications of the revised dating of the Athenian Agora pottery. Hammond (1991, pp. 80–81), following Andronikos (1984, p. 64), opts for an earlier date of 350–325. In support of Rotroff, Borza (1991, pp. 35–36) refers to the "virtually incontestable evidence of the salt cellars." See also *Agora* XII, p. 137.

56. Prag and Neave 1997, p. 84.

57. Borza 1987, pp. 106–107.

58. Drougou 2005, pp. 38–39, no. 1 (dated 350–325).

59. *Agora* XXIX, p. 494.

60. *Agora* XII, p. 245, nos. 127 (P 6384, deposit D 15:3, dated ca. 350) and 128 (P 12989, deposit S 19:8, dated 350–325, but dated by Rotroff in *Agora* XXIX, p. 126, n. 25, to "the last quarter of the 4th century"), pl. 7; *Agora* XXIX, p. 293, no. 467 (P 4377, deposit F 12:3, lower fill, dated 325–300), fig. 34, pl. 46, also citing P 8302, deposit C 12:2.

61. *Agora* XXIX, pp. 442, 472.

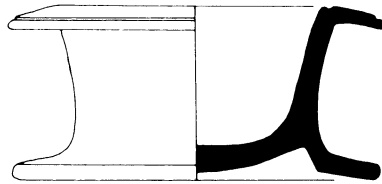
62. Rotroff 1984, p. 346; *Agora* XXIX, p. 449.

63. *Agora* XXIX, p. 440.

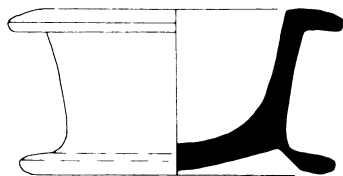
64. Drougou 2005, pp. 40–42, no. 3.



Figure 3. Group of black-gloss pottery from tomb II, Vergina. Drougou 2005, p. 34, fig. 1; courtesy Archaeological Society at Athens



P 27769



P 19358



P 3509

Figure 4. Attic black-gloss saltcellars from the Athenian Agora. Scale 1:2. After Rotroff 1984, p. 344, fig. 1; courtesy American School of Classical Studies at Athens

a pseudo-Cypriot amphora was found in the main chamber of tomb II.⁶⁵ Parallels for this vessel come from the Athenian Agora,⁶⁶ including examples from a well dated to 375–300, and from a pit dated to 310–250.⁶⁷ Overall, the parallels from the Agora indicate that tomb II should be dated to the time of Philip III Arrhidaios rather than Philip II.⁶⁸

Michael Pfrommer, in his study of silver calyx cups, has identified a specifically Macedonian type.⁶⁹ Calyx cups are one of the most common shapes in silver, although they are also known in bronze and clay.⁷⁰ The shape is derived from the Achaemenids.⁷¹ Silver examples are common finds in Macedonia and Thrace, although the shape is also known outside these regions.⁷² As Andrew Oliver Jr. has observed, the survival pattern may have more to do with funerary usage than with the areas in which the shape was used.⁷³ Rotroff has stated that it is tempting to regard silver calyx cups “as products of Macedonian silversmiths, or of silversmiths resident in Macedonia, and to identify them as particularly Macedonian objects.”⁷⁴ The bowls of the Vergina calyx cups are decorated with a series of petals radiating from the base; above them is a guilloche band, and then a frieze of “leaf and dart”; inside the lighter of the two (weighing 92 drachmas and 1 obol) is a relief medallion with the face of a Silen.⁷⁵

There are a number of close parallels for the decoration and shape of the calyx cups. The decoration on the bowl of the cups is very close to that found on one of the examples from tomb B at Derveni, although the inside of that cup is decorated with a relief head of Medusa,⁷⁶ and the single silver example from tomb Z is decorated with a head of a Silen.⁷⁷ Other calyx cups include one from a cist grave at Stavroupolis, Thessaloniki, decorated with the medallion of a woman,⁷⁸ which is itself similar to that found in an

65. Drougou 2005, pp. 43–44, no. 8. See also *Agora* XXIX, p. 177.

66. *Agora* XII, pp. 339–340, nos. 1484 (P 6154, deposit D 15:3), 1485 (P 8976, deposit Q 13–14:1-POU), 1486 (P 8977, deposit Q 13–14:1-POU), 1487 (P 23257), and 1488 (P 25684, deposit A 17:3), pl. 63.

67. *Agora* XXIX, pp. 434, 442.

68. This conclusion contradicts that drawn by Drougou (2005), who relies heavily on the pre-Koroni chronology. Drougou's dating has also influenced the work of Saatsoglou-Paliadeli (1993) on the funerary paintings at Vergina: “That the tomb cannot be dated later than the third quarter of the 4th century B.C., as already suggested by the excavator, has been recently ascertained, thanks to the study of the ceramics found immediately over the structure: Dr. Drougou dates them to the third quarter of the century. The publication of her study will hopefully put an end to the long controversy about the date of the tomb and the person for whom it was made” (p. 142, n. 209). In fact, the

opposite is true: the material discussed in Drougou's study, when dated by the orthodox chronological scheme proposed for the Athenian Agora, suggests a later date for the tomb.

69. Pfrommer 1987, pp. 234–238 (KaB M). For Pfrommer's methodology, see Gill 1989.

70. *Agora* XII, pp. 121–122; Shefton 1970; Pfrommer 1987; Barr-Sharrar 1991b, p. 13; Rotroff 2003, pp. 214–215; Williams 2003, pp. 229–230.

71. *Agora* XXIX, pp. 91–92. Rotroff (2003, p. 215) notes the popularity of the shape in black-gloss pottery from the last quarter of the 4th century B.C. in Athens and links it to “an increasing Macedonian presence in the city during that time.” For examples from eastern Turkey, see Curtis and Tallis 2005, p. 117, nos. 106–108.

72. Pfrommer 1987, pp. 56–61, 234–236. Archaeological contexts yielding silver calyx cups include Niki-siani (graves A and Δ), Sedes (grave Γ), Derveni (graves B and Z), Stavroupolis, and Vergina (tomb III). For the Der-

veni cups, see Themelis and Touratsoglou 1997, pp. 65–66, nos. B11–B13, pls. 8, 64, 65, and p. 122, no. Z12, pls. 23, 132.

73. Oliver, in *Passion for Antiquities*, p. 75, under no. 31a.

74. Rotroff 2003, p. 215. See also Barr-Sharrar 1982, pp. 131–132.

75. *Treasures*, p. 51, nos. 105, 106; *Search for Alexander*, p. 184, no. 164, col. pl. 33; Andronikos 1984, pp. 150–151, figs. 112–114; Pfrommer 1987, p. 235, nos. KaB M7, KaB M8; Themelis and Touratsoglou 1997, p. 176, fig. 47 (medallion).

76. *Treasures*, p. 62, no. 194; Pfrommer 1987, p. 234, no. KaB M4, pl. 55; Themelis and Touratsoglou 1997, pp. 65, 177, no. B11, fig. 48, pl. 64.

77. *Treasures*, p. 70, no. 261; Pfrommer 1987, p. 235, no. KaB M5; Themelis and Touratsoglou 1997, pp. 122, 177, no. Z12, fig. 47, pls. 23, 132.

78. *Treasures*, p. 73, no. 280, pl. 41; Pfrommer 1987, p. 235, no. KaB M6, pl. 62; Themelis and Touratsoglou 1997, pp. 174–175, fig. 46.

example from tomb 2 in the Pappas Tumulus at Sevesti.⁷⁹ A further calyx cup with a relief head and (worn) decoration on the outside comes from tomb Δ in the tumulus at Nikisiani.⁸⁰

The decoration on the body of the pair of calyx cups from tomb II at Vergina also finds parallels in an example from tomb Γ at Sedes⁸¹ and another from tomb A at Nikisiani.⁸² So similar are these calyx cups that Themelis and Touratsoglou have proposed attributing them, along with the two from tomb II at Vergina, to the same workshop, if not to the same craftsman.⁸³ The contexts of these similar calyx cups are normally dated from around 300 to the early 3rd century B.C., partially on numismatic evidence.⁸⁴ Thus, Pfrommer came to the conclusion that the two calyx cups from tomb II at Vergina, which he dated to ca. 330–316 B.C., were relatively late in the Macedonian series.⁸⁵ Indeed, the proportions of the two calyx cups are such that he felt it was unlikely that tomb II was the tomb of Philip II.⁸⁶

Although the chronology is based on a limited number of extant silver calyx cups that lack readily dated funerary contexts,⁸⁷ a date later than the reign of Philip II is still the most likely for the calyx cups from tomb II. The fact that the calyx cup was derived from Achaemenid prototypes may be suggestive if the inspiration came from booty acquired by Alexander the Great, although the shape may have been known in Greece by the middle of the 4th century B.C. If Pfrommer is correct in recognizing a Macedonian workshop, it seems likely that the silver cups found at Vergina were made in Macedonia and therefore that the weight inscriptions were added there.

Parallels for the silver wine strainer and the stemless cups found in tomb II also point to a date at the end of the 4th century, or perhaps the early 3rd. A similar wine strainer was found in tomb B at Derveni,⁸⁸ and others are known from tomb III at Vergina,⁸⁹ Potidaia in Macedonia,⁹⁰ the pyramid of King Arakamani (315–297 B.C.) at Meroë in the Sudan,⁹¹ and Kastamonu in Turkey.⁹²

79. Themelis and Touratsoglou 1997, pp. 174–175, fig. 46.

80. *Treasures*, p. 96, no. 405, pl. 56; *Search for Alexander*, p. 160, no. 118; Pfrommer 1987, p. 237, no. KaB M22, pl. 62; Themelis and Touratsoglou 1997, pp. 174–175, fig. 46.

81. *Treasures*, p. 78, no. 317, pl. 45; Pfrommer 1987, p. 234, no. KaB M3, pls. 43:d, 62.

82. *Treasures*, p. 96, no. 401, pl. 56; *Search for Alexander*, p. 160, no. 120; Pfrommer 1987, p. 234, no. KaB M2, pl. 62.

83. Themelis and Touratsoglou 1997, p. 174; see also p. 175, fig. 46, p. 217, metalworker 1, workshop A.

84. Pfrommer 1987, pp. 173–174, no. FK 17 (containing a coin of Philip II = Themelis and Touratsoglou 1997, p. 92, no. B135, pl. 105), p. 174, no. FK 18, p. 180, no. FK 43 (tomb Δ,

containing coins of Philip II, Alexander the Great, and Kassander), p. 182, nos. FK 52, 53; Themelis and Touratsoglou 1997, pp. 185, 221–222.

85. Pfrommer 1987, p. 235, nos. KaB M7, KaB M8.

86. Pfrommer 1987, p. 183, FK 59: “Aufgrund der Becherproportionen ist eine Interpretation als Grab Philipps II. äußerst unwahrscheinlich.”

87. Barr-Sharrar (1991b, pp. 14–15) urges caution: “[Pfrommer’s] chronology of these Macedonian calyx-cups is not well enough substantiated by dated material to justify his dating of tomb II to 316 B.C.” See also Borza 1991, pp. 36–37. For other useful observations on the lack of archaeological contexts for Hellenistic silver, see Rotroff 1982. For the intellectual consequences of losing archaeological contexts, see Gill and Chippindale

1993; Chippindale and Gill 2000; Brodie and Gill 2003.

88. *Treasures*, p. 61, no. 187, pl. 29; *Search for Alexander*, p. 167, no. 130, col. pl. 19; Themelis and Touratsoglou 1997, pp. 69–70, no. B4 (where a link with Vergina is drawn and other parallels cited), pls. 11, 72.

89. Vergina, Archaeological Museum. Andronikos 1984, p. 211, fig. 178; Papanastasiou 2004, p. 64, no. Ky.41.

90. Thessaloniki, Archaeological Museum 5145: Oliver 1977, p. 45, under no. 14; *Treasures*, p. 82, no. 349.

91. Boston, Museum of Fine Arts 24.874: Smith 1960, p. 184, fig. 124. The center of the strainer has been damaged.

92. Istanbul, Archaeological Museum 1415: Oliver 1977, p. 45, under no. 14.

Stemless cups are uncommon among extant silver plate, but in addition to the examples in tomb II, another was found in tomb III at Vergina.⁹³ Several, perhaps dating to the 3rd century B.C., have been found in Italy and Sicily: a pair from a "Gallic" burial at Montefortino near Pergola in central Italy,⁹⁴ three from the Paternò hoard in Sicily,⁹⁵ and one from Boscoreale.⁹⁶

The gold-plated silver diadem from the main chamber of tomb II may also be a feature introduced after Alexander's eastern conquests.⁹⁷ This royal symbol, perhaps worn on the headdress of Macedonian kings, the *kausia diadematophoros*, was reported by Andronikos and others as having been introduced by Alexander.⁹⁸ Although there has been opposition to this theory,⁹⁹ a late date for the diadem is possible, although not decisive.

Turning from finds to architecture, the barrel-vaulted roof of tomb II has also been seen as a chronological indicator. The form appears in Macedonia during the later part of the 4th century B.C. Some have argued for a late date, suggesting that the form, with the architectural facade, was perhaps introduced following Alexander the Great's conquests.¹⁰⁰ Others have argued that the barrel-vaulted roof could have predated Philip II's murder.¹⁰¹

One of the tombs used to date the introduction of the barrel-vaulted roof is the so-called Tomb of Eurydike at Vergina, found in 1987 near the "Rhomaios Tomb."¹⁰² As the Tomb of Eurydike has been dated by some to around 340 B.C., it has been suggested that the barrel-vaulted tomb II could similarly be dated to within Philip II's reign. The date for the Tomb of Eurydike, however, is based on the initial identification of the associated pottery; until this pottery is published in detail, it is hard to come to a definitive conclusion about the chronology. Attic red-figure pottery from inside the tomb is said to date from the 340s, and a Panathenaic amphora apparently dating to 344/3 was reported as coming from the remains of the pyre.¹⁰³ Even if this dating for the pottery is correct, the Panathenaic amphora provides only a terminus post quem of 344/3 for the burial.

The scene of a lion hunt in the painted frieze on the facade of tomb II has been seen by several as evidence for a later date.¹⁰⁴ The frieze has been

93. Andronikos 1984, p. 210, fig. 173. The weight is unavailable.

94. New York, Metropolitan Museum of Art 08.258.52, 08.258.53. Weight: 297 and 309 g, respectively. Oliver 1977, pp. 64–65, nos. 31, 32; Bothmer 1984, pp. 62–63, nos. 112, 113.

95. Berlin, Altes Museum. Oliver 1977, p. 65, nos. 32a, 32b; Platz-Hortser 2003.

96. London, British Museum. Walters 1921, p. 5, no. 15, pl. III; Oliver 1977, p. 65, fig. 32:c.

97. Lehmann 1980, p. 529. For the diadem, see *Treasures*, p. 55, no. 151, pl. 18; *Search for Alexander*, p. 183, no. 162, col. pl. 29.

98. Andronikos 1984, pp. 171–175;

Kingsley 1984. See also Palagia 2000, pp. 189–191.

99. Fredricksmeyer 1981, pp. 332–333; 1983, pp. 99–100; 1986; 1997; Calder 1981, 1983; Hammond 1991; and Saatsoglou-Paliadeli 1993, esp. p. 142, where the presence of the *kausia diadematophoros* in the hunting frieze of tomb II (see below) is viewed as evidence for fashions in dress before the time of Alexander the Great; see also Saatsoglou-Paliadeli 2004, p. 62.

100. Lehmann 1980; Borza 1987, pp. 107–109.

101. Fredricksmeyer 1983; Andronikos 1987; Tomlinson 1987.

102. The significance of this tomb has been noted by Borza (1987, p. 108); Hammond (1991, pp. 70–71; 1994,

p. 179); and Carney (2000, pp. 242–243), who calls it the "Tomb of the Throne." For a convenient summary with color images, see Drougou and Saatsoglou-Paliadeli 2000, pp. 60–61.

103. Hammond 1991, p. 71; 1994, p. 179. Also mentioned by Musgrave 1991a, p. 7, n. 25; Borza 1991, p. 37; Prag and Neave 1997, p. 84; Carney 2000, p. 242.

104. Borza 1987, pp. 109–110. For further comments on the frieze, see Reilly 1993. Hammond (1991, p. 80) notes that the frieze could predate Alexander. For a study of the frieze linking it to Philip II, see Saatsoglou-Paliadeli 2004, esp. pp. 153–169. See also Carney 2002.

interpreted as an image reflecting the interest of Persian rulers, and thus one that is more likely to have been introduced to Macedonia in the wake of Alexander's conquests. Olga Palagia has reviewed the evidence most recently, and proposed that the iconography is linked to the death and cremation of Hephaisteion in the autumn of 324, allowing the possibility that tomb II contained the remains of Philip III Arrhidaios.¹⁰⁵

Finally, some of the ivory heads from the couch in tomb II have been interpreted as portraits of Philip II and Alexander.¹⁰⁶ The connection between these putative portraits and the chryselephantine images created for the Philippeion at Olympia after 338 B.C. has rightly been seen as tenuous and certainly does not provide any clear chronological guide.¹⁰⁷ The presence of large quantities of gold and silver in the tomb may be more in keeping with the situation in Macedonia after Alexander's conquests than at the time of the death of Philip II.¹⁰⁸ Neither of these forms of evidence contributes decisively to the date assigned to tomb II.

THE IDENTITY OF THE OCCUPANTS OF TOMB II

If Vergina is to be identified with Aigai, it was the historic burial place for the rulers of Macedonia.¹⁰⁹ Given the iconography of items found within tomb II such as the couch and the larnax, it is very likely that the tomb contained a royal burial. If the silver was weighed to a drachma standard not introduced until the reign of Alexander the Great, and if the black-gloss saltcellars can be convincingly dated to 325–295 B.C., then tomb II is likely to postdate Philip's assassination and burial in 336. So whose tomb could it be if not that of Philip II?

Tomb II contained the cremated remains of two individuals, a middle-aged male inside a gold larnax placed inside a sarcophagus in the main chamber, and a female, 20–30 years of age, inside a second gold larnax from a sarcophagus in the antechamber.¹¹⁰ As Borza has noted, the presence of male and female cremations within the same royal tomb allows for only two options: Philip II with Kleopatra, and Philip III Arrhidaios with Adea Eurydike.¹¹¹

Reconstruction of the face of the male buried in tomb II has been used to support an identification of Philip II.¹¹² Questions have been raised, however, about the nature of the wounds inferred from the cremated remains

105. Palagia 2000, esp. p. 192.

106. Andronikos 1984, pp. 123–127, figs. 76–81. For further thoughts on the relevance of these portraits, see Prag, Musgrave, and Neave, forthcoming.

107. Lehmann 1980, p. 528; Fredricksmeyer 1981, pp. 331–332 (the Olympia portraits “can no longer be adduced in support of the attribution of the tomb to Philip”).

108. Price 1991, p. 25, citing Arr.

Anab. 7.9.6. See also Palagia 2000, p. 191.

109. Green 1982.

110. Xirotiris and Langenscheidt 1983; Musgrave 1990, 1991a, 1991b; Borza 1990, p. 261. The age of the male has been estimated at 35–55 and 45–50 years. The age of the woman has been placed between 20 and 30 years. For further views on the possible identity of the woman in the antechamber, see

Carney 2004.

111. Borza 1987, pp. 105–106. As both couples differed in age by roughly the same number of years, it is not possible to identify the bodies by assigning an age to the cremated remains. See also Carney 1991a, 1991b.

112. Musgrave, Neave, and Prag 1984; Musgrave 1985, 1991a, 1991b; Prag 1990; Prag and Neave 1997, pp. 53–84.

when compared with ancient testimonia.¹¹³ The evidence of leg greaves from the tomb has suggested to some that the deceased individual had a damaged left leg.¹¹⁴ Philip's wound, however, according to ancient accounts, was on his upper leg, and when the leg is specified, it is the right.¹¹⁵

More telling is Antonis Bartsiokas's study by macrophotography of the skeletal remains.¹¹⁶ His work has suggested that there is no convincing evidence for an eye injury, which has been the lynchpin for the identification of the male occupant of tomb II as Philip II.¹¹⁷ Indeed, Bartsiokas argues that, given the good state of preservation of the long bones, it appears that the body had been subjected to a dry bone cremation; in other words, the male inside tomb II had been dead for a considerable length of time before the body was cremated.¹¹⁸

If Bartsiokas is correct, the body cannot be that of Philip II, who was buried shortly after his assassination in 336; the ancient historical evidence does not indicate whether the burial was by cremation or inhumation. Philip III Arrhidaios was killed on the orders of Olympias in 317, and Adea Eurydike was forced to commit suicide.¹¹⁹ Olympias was killed in turn by Kassander,¹²⁰ and the remains of Arrhidaios and Adea Eurydike were then laid to rest at Aigai.¹²¹ Phyllis Lehmann's early assertion that tomb II contained the body of Philip III Arrhidaios and, by implication, that of Adea Eurydike as well, seems now to have been vindicated by Bartsiokas's study.¹²² The contemporary burial of Kynnane, Adea Eurydike's mother, need not have been in the same tomb, but is likely to have been near the royal grave.¹²³

113. Riginos 1994.

114. *Treasures*, p. 48, no. 88; *Search for Alexander*, p. 182, no. 15, col. pl. 27; Andronikos 1984, pp. 186–189, fig. 150.

115. Riginos 1994, pp. 116–118. For comments on the male leg bones from tomb II, see Musgrave 1991a, p. 6: "His left tibia is . . . seemingly of equal length to the right."

116. Bartsiokas 2000. John Prag kindly let me read the draft of his joint response: Prag, Musgrave, and Neave, forthcoming.

117. For the emphasis on damage to the area of the eye, and the link to Philip II, see Hammond 1991, p. 75; also Musgrave 1991a, pp. 3–4. For the original study, which did not find evidence for such damage, see Xirotiris and Langenscheidt 1983.

118. Bartsiokas 2000. Contrast Prag and Neave 1997, p. 60: "Practical experiments in cremation . . . served to confirm that these bones had been burnt with flesh on them, not 'macerated'

after a period of burial in the ground." For "the remarkable completeness of the skeleton in general," see Musgrave 1990, p. 276. Contrast the condition of the female skeleton from tomb II, which was considered to have been cremated soon after death: Musgrave 1991a, p. 5. Carney (1991a, pp. 19–20) suggests that "Olympias might have left the corpses of her enemies [sc. Arrhidaios and Eurydike] unburied"; see also Adams 1991a, p. 30. The issue of dry cremation is addressed further in Prag, Musgrave, and Neave, forthcoming.

119. Diod. Sic. 19.11.4–7. See Carney 2000, pp. 136–137, 141; 2006, pp. 75–76. For a summary, see Carney 1991a, pp. 19–20.

120. Diod. Sic. 19.51.5; Paus. 9.7.2. See also Carney 2000, pp. 143–144; 2006, pp. 82–87, 104.

121. Diod. Sic. 19.52.5. See also Carney 1991a, p. 20; 2000, p. 137. Carney (1991, p. 20) makes the point that Diodoros "does not say whether [the

bodies] were cremated or inhumed."

122. Lehmann 1980, 1982; see also Carney 2000, p. 234; Bartsiokas 2000, p. 514 ("The skeletal evidence that shows a dry bone cremation leaves no room for doubt that Royal Tomb II belongs to Philip III Arrhidaeus"). Musgrave (1991a, p. 5) thinks that Eurydike, who was about 20 years old at her death, would have been too young to be represented by this skeletal material. Elizabeth Carney reminds me that there is much uncertainty about the ages of the female members of the Macedonian royal family. See also Carney 2000, p. 241.

123. Lehmann 1980, p. 530. Musgrave (1991a, p. 5) argues that all three would have been buried together. Diodoros (19.52.5) only implies that the three were buried at Aigai, not that all three were buried in the same tomb. See also Adams 1991a, pp. 30–31; Carney 1991a, p. 20; 2000, pp. 130–131, 137; 2006, p. 72.

OTHER TOMBS AT VERGINA

If tomb II contained Philip III Arrhidaios and Eurydike, where then was Philip II buried? A potential candidate for his resting place is likely to be the cist grave, tomb I (the so-called Tomb of Persephone),¹²⁴ which contained the inhumed—not cremated—bones of an adult male, a woman aged ca. 25, and a “newly-born baby.”¹²⁵ Olympias probably murdered Kleopatra and her infant child after the assassination of Philip II.¹²⁶ Although the tomb had been looted prior to excavation, the walls were decorated with scenes showing the Rape of Persephone.¹²⁷

Tomb I has been dated to the mid-4th century B.C. on the basis of stamped black-gloss pottery.¹²⁸ A black-gloss plate with a rolled rim and decorated with linked palmettes and rouletting finds parallels at Olynthos (which would suggest a terminus ante quem of 348), Derveni (tombs A and Δ), and Athens (an example from a foundry pit in the Agora, and one from a homogeneous well deposit that included “an intact Thasian jar naming Telephanes,” which dates it to 345–335).¹²⁹ The tomb itself was found next to the heroon (Fig. 5).¹³⁰ If tomb I was indeed the tomb of Philip II, then it would support the argument that barrel-vaulted tombs started to replace the earlier form of cist graves following Alexander’s conquests in the east.

Of the other tombs under the Great Tumulus, tomb III, the so-called Prince’s Tomb, seems to have contained the cremated remains of an approximately 14-year-old male.¹³¹ As the objects in the tomb also seem to belong to the Late Classical–Early Hellenistic period, an identification of Alexander IV seems likely.¹³² Pieces include a black-gloss cup-kantharos with a molded rim, which finds parallels from the Athenian Agora dated to the end of the 4th century B.C.¹³³ A black-gloss guttus should also date to

124. Andronikos 1984, pp. 86–95; 1994.

125. Andronikos 1984, p. 87; 1994, p. 45. For the skeletal remains, see Musgrave 1990, pp. 274, 280; 1991a, p. 7; 1991b. Musgrave uses the absence of cremation to support his view that Philip II was not buried in tomb I. See also Borza 1987, p. 118; 1991, p. 38; Carney 2000, p. 236; 2006, p. 157, n. 7. For the typology of the tomb, see Hammond 1991, p. 70. Hammond (1991, p. 73) dates the tomb to ca. 370. See also Adams 1991a, pp. 31–32.

126. For a summary of the ancient evidence, see Carney 1991a, p. 18; 2000, pp. 72–75. See also Carney 2000, pp. 85–86, 234–244; 2006.

127. Andronikos 1984, pp. 86–95. Borza (1990, p. 266) suggests that the quality of the painting reflects a royal patron. For the possibility of looting in 274, see Plut. *Pyrrh.* 26.6; also Ham-

mond 1991, p. 79; Andronikos 1994, pp. 33–34.

128. Andronikos 1984, p. 86; Drougou 2005, pp. 24–27; see also Andronikos 1994, p. 45, for context. Hammond (1991, p. 74) was eager to adjust the date for these pots to 370/69 so that the tomb could be attributed to Amyntas III.

129. The Olynthos, Derveni, and Athenian examples are cited in Drougou 2005, pp. 25–26, under no. 1. For Derveni, see Themelis and Touratsoglou 1997, pp. 40, 104, nos. A40, Δ25, Δ26, pls. 47, 116, 117. The example from the foundry pit in Athens (*Agora* XII, p. 309, no. 1052, P 14649) comes from a deposit (E 3:2) dated to 375–350 on the basis of comparisons with pottery from Olynthos (*Agora* XXIX, p. 444). The piece from the well is dated to 350–325 (*Agora* XXIX, p. 309, no. 632, P 30930, deposit R 13:11, and

p. 471). For Olynthos as a fixed point, see *Agora* XXIX, pp. 18–20.

130. Andronikos 1984, p. 65. If the heroon was linked to Philip II, then its proximity to tomb I would be significant.

131. For the skeletal analyses, see Musgrave 1990, pp. 280–281; 1991a, pp. 7–8; 1991b. For tomb III, see Hammond 1991, p. 72; Adams 1991a, 1991b. The age of the deceased is generally given as 13–16 years, although Musgrave prefers an estimate closer to 13–14 years.

132. Borza 1987, p. 105; 1991, p. 36; Carney 2000, p. 234. For the pottery, see Drougou 2005, pp. 62–68. For possible reservations about the identification, see Adams 1991a, pp. 29–30.

133. Drougou 2005, pp. 62–68. Cf. *Agora* P 324: *Agora* XII, p. 283, no. 662, pl. 28; *Agora* XXIX, p. 250, no. 81, fig. 8, pl. 8 (315–300 B.C.).

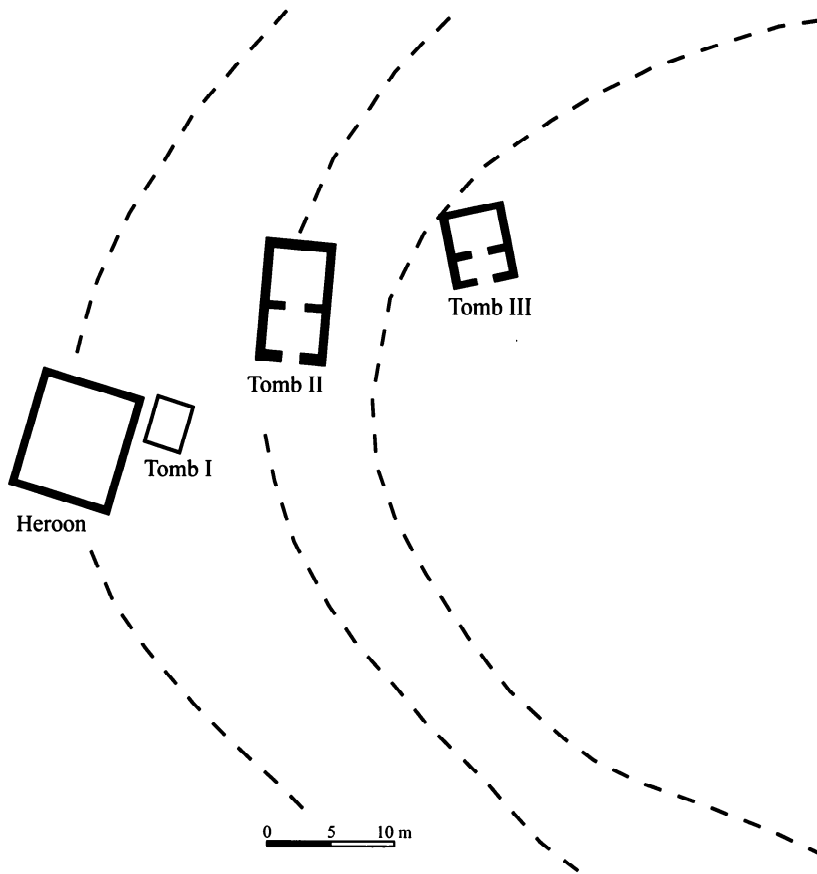


Figure 5. Plan of tombs under the Great Tumulus at Vergina. Drawing J. J. Shirley

the end of the 4th century.¹³⁴ A Howland type 26A lamp compares closely to examples from the late 4th century.¹³⁵ A pseudo-Cypriot amphora finds parallels in 4th-century contexts at Corinth and late-4th- to early-3rd-century contexts in the Athenian Agora.¹³⁶

Alexander IV, the son of Alexander the Great and Roxane, was born after his father's death. He was held by Kassander after the defeat of Olympias in 316, and was murdered by Kassander, perhaps in 311/10 or as late as 309.¹³⁷ If this identification is correct, then tomb III was created by Kassander.¹³⁸ It should also be noted that there are close parallels between the silver plate from tomb II and that from tomb III, for example, the calyx cups and the wine strainers, which could support the theory that they were nearly contemporary.¹³⁹

134. Drougou 2005, pp. 67–68, no. 2, fig. 59. Cf. Agora P 6952: *Agora* XII, p. 319, no. 1194, fig. 11, pl. 39; *Agora* XXIX, p. 352, no. 1140, fig. 71, pl. 83 (325–300 B.C.). Drougou (2005, pp. 67–68) cites the mid-4th-century date used by Sparkes and Talcott in *Agora* XII without noting that Rotroff has revised the date (see p. 347, n. 68, above).

135. E.g., Agora L 635: *Agora* IV, p. 83, no. 365, pls. 13, 40. Rotroff (*Agora* XXIX, p. 498) dates the type to 350–275 B.C.

136. Williams 1969, pp. 57–59, pl. 18; *Agora* XII, p. 340, no. 1488, pl. 63; for the Agora deposit, see *Agora* XII, p. 383, A 17:3, (320–290 B.C.).

137. Diod. Sic. 19.105.2–3; see also Paus. 9.7.2. For an overview, see Adams

1991a, pp. 28–29; Carney 2000, pp. 147–148.

138. Adams (1991a, p. 32) observes that if tomb II contained the remains of Arrhidaios, then both tombs II and III, which show similarities in form and content, were the work of Kassander.

139. For the implications of this apparent similarity in date, see Carney 2000, p. 243.

CONCLUSION

The weight inscriptions from tomb II at Vergina add to the small corpus of weight inscriptions known from extant gold and silver plate. Some of the inscribed pieces may have been weighed as single items and others as pairs, but they seem to have been weighed using a similar, although not identical, drachma of ca. 4.2 g, which was only introduced into Macedonia during the reign of Alexander the Great. Such a unit of measure was not in use in Macedonia during the reign of Philip II. The stylistic form of the calyx cups in particular is consistent with that of other silver vessels found in funerary contexts in Macedonia, which points to their creation in Macedonia for Macedonian clients. One interpretation is that the silver from tomb II was made in Macedonia, entered the royal treasury, was weighed at some point after Philip II's death, and was then selected to form the trappings for the burial in tomb II. If this was indeed the case, then tomb II cannot belong to Philip II.

The evidence provided by the silver inscriptions alone is not conclusive in dating tomb II or identifying its occupants. Added to other forms of evidence, however, it contributes to a cumulative picture. The restudied skeletal remains of the adult male point to an individual whose body had been subject to dry cremation and who had not suffered a trauma to the eye; together these features suggest that the deceased in tomb II is Philip III Arrhidaios. If this identification is correct, it would fit with the proposed date for the black-gloss saltcellars and other pottery, the late date for the silver, the iconography of the lion hunt from the tomb's frieze, the appearance of the diadem, and even the architectural form of tomb II. If tomb II represents the burial of Arrhidaios and Eurydike, and tomb III that of Alexander IV, it strengthens the argument that Philip II of Macedon, Kleopatra, and their infant child were buried in the cist grave, tomb I, adjacent to the heroon.

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