# Late Archaic to Late Antique Finds from Cistern No. 1 at Thorikos (2010 Campaign)

## Roald Docter, Patrick Monsieur, Winfred van de Put

#### Introduction

This study of the finds made during the 2010 campaign is preliminary and selective.<sup>1</sup> It aims at offering a chronological and functional overview of the fill of Cistern No. 1 and of the surface finds in its immediate surroundings. 1710 fragments (mainly pottery) from 56 different archaeological contexts (units) were counted, washed, bagged and registered. Of these, 721 were inventoried in a detailed manner on database-level by Winfred van de Put in the finds laboratory (42%).<sup>2</sup> Since the excavation of the cistern has not yet been finished, it was decided to keep all finds.<sup>3</sup> 122 fragments of 103 individual diagnostic items were recorded in a more detailed way with section drawings, descriptions and photographs with a view to publication (Cat. 1-103).<sup>4</sup> Apart from that, 21 paper bags with uncounted bone and shell from these archaeological contexts were registered, as well as 30 dry sieving samples (retrieved from sieves with 2.2, 4, and 8mm mesh sizes), 7 charcoal and 2 mortar samples.<sup>5</sup>

The discussion of the items follows the different general pottery classes and wares, with a subdivision based upon chronology. It is only in the concluding comments that the functional groups are discussed within their respective chronological horizons.

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<sup>&</sup>lt;sup>1</sup> The 2010 campaign lasted only 11 working days in the field (between 17 and 28 May 2010). The campaign was financially supported by the Belgian School at Athens and research funds of Ghent University. We would like to thank the secretary of the School, Mr. P. Iossif, as well as its director, Dr. S. Soetens, for their support. In Greece our thanks go Dr. I. Tsirigoti-Drakotou, Ms E. Andrikou and Ms D. Kai, as well as F. Spanou, S. Makri, and the other staff members of the Lavrio Museum.

<sup>&</sup>lt;sup>2</sup> The fact that the first part of the campaign consisted mainly of clearing the site of overgrowth, cleaning, and making a detailed plan of the surface layer of the stone infill, resulted in a very low number of finds that initially entered the finds laboratory. The backlog of 989 fragments has been reduced to 327 in 2011.

<sup>&</sup>lt;sup>3</sup> 4 crates with pottery finds and 1 carton box with bone, shell and samples have been deposited in the storerooms of the Lavrio Museum.

<sup>&</sup>lt;sup>4</sup> Section drawings were made by Roald Docter and later digitised by F. Gignac of Archéodesign (Montreal); photographs were taken by Winfred van de Put; descriptions are by both. Patrick Monsieur (Ghent University) studied the amphora material based upon this documentation (Cat. 65-88); figured and most of the black glaze pottery was studied by van de Put (Cat. 1-22), the other finds by Docter (Cat. 23-64; 89-103). Given the preliminary nature of this publication, no attempt has been made to balance the comments within the contribution. Hence, the comments to the individual items may be restricted to a mere reference to the well-known reference works, as *Agora* XII or XXIX, but may also be more elaborate.

<sup>&</sup>lt;sup>5</sup> Study of the faunal material is foreseen for the 2011 campaign and is in the hands of both Lilian Karali Giannakopoulou (National and Kapodistrian University of Athens) and her team, and of Eftychia Yanoulli. That such studies for Thorikos are much needed, may be clear from the fact that hitherto only one short note on the faunal remains of Thorikos has been published, Gautier 1967.

#### Decorated and semidecorated wares

## Black glaze and red-figure

The black glaze finds from the 2010 campaign are for the most part drinking vessels: skyphoi, (cup-) kantharoi and a cup make up 13 of the 21 catalogued black glaze items. Other drinking implements are a bowl and two, maybe three krater fragments. Plate, lamp, lebes and lekythos fragments complement the small catalogue. A separate entry is devoted to the numerous (often partly black glaze) lekanai.

For some fragments, it is possible they belonged to figured vases. The sturdy krater feet **Cat. 19-20** may well have belonged to red-figured vases, while the lekythos fragment **Cat. 12** probably carried a simple meander in a frieze on the shoulder.

Only one red-figured fragment came to light (Cat. 22), part of a mantle-figure, probably from the reverse of a closed shape (amphora or pelike) from the third quarter of the 5th century BCE.

Overall, the record is very similar to that of the domestic and industrial quarters in Thorikos. The dating in the publications of this material derives mainly from Agora XII, an example followed here but augmented by Agora XXIX, dealing with the Hellenistic fine-wares. The later examples in the catalogue fall between these two pivotal publications.

It is hazardous to estimate the percentage of red-figured vases from the entire ensemble from such a small sample, but with the one, possibly three, fragments out of a total of 721 inventoried, it will not have exceeded 0.5% of the total ceramic record; a number to be expected in a domestic setting. The quantity of krater fragments in the cistern fill (three feet from different kraters **Cat. 19-20** and TC10.179) is remarkable. The finds database records six fragments for washery 1, four for tower compound 1, three for House 1 and two for House 2, so it seems an infrequent shape, overrepresented here.<sup>6</sup>

## Skyphos

Cat. 1: TC10.25 (context T10-5-1), 1 wall fragment with transition to base of type A skyphos (**Fig. 1**). Max. diam. 5.9, PH 3.4; good black glaze on outside.

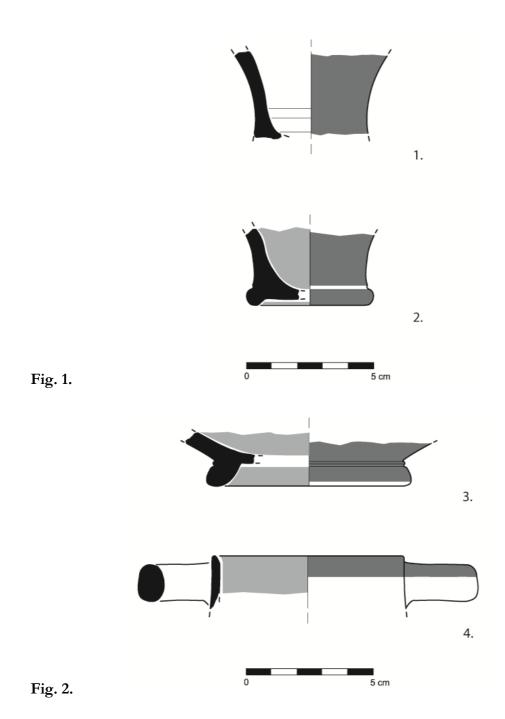
Cf. Agora P 26019 (Agora XII, no. 352).

Date: ca. 330 BCE.

Date. ia. 330 BCE.

Cat. 2: TC10.110 (context T10-8-2), 1 base fragment (**Fig. 1**). Diam. base 5, PH 2.9; good black glaze on both sides, miltos on lower part of base. As **Cat. 1**.

<sup>&</sup>lt;sup>6</sup> The number of krater fragments in the Thorikos database must be treated with caution (see below, n. 12), since at times apparently also lekane fragments have been classed under this heading. Also on the sites of the rural deme Atene, kraters seem to have a limited occurrence, Lohmann 1993, 47, 375, 432, 511, pls. 10,CH33-2; 25,PH33-3, 45,LE15-1.



## Bolsal (?)

Cat. 3: TC10.38 (context T10-5-2), 1 base fragment of bolsal, cup-skyphos or cup-kantharos (**Fig. 2**). Diam. base 8.0, PH 2.1; good black glaze on interior and exterior. Cf. bolsal Agora P 14242 (*Agora* XII, no. 558), and cup-kantharos Agora P 9343 (*Agora* XII, no. 651). Date: *ca.* 380-350 BCE.

Cat. 4: TC10.159 (context T10-15-1), 1 rim fragment with handle of bolsal or one-handler (**Fig. 2**). Diam. rim 7.5, PH 1.9, handle section 1x1.4; brownish glaze on inside and upper part of outside. Straight wall/rim and horizontal handles like bolsal, cf. Agora P 423 (*Agora* XII, no. 541), but handle too short and diameter too small. Cf. one-handler Thorikos TC86.1 (Mussche 1998, 68, no. 13, fig. 135). Date: late 5th century BCE?

## Cup

Cat. 5: TC10.34 (context T10-7-1), kylix, 1 floor fragment of tondo (**Fig. 3**). Diam. base *ca.* 4.5, PH 0.7; traces of black glaze on interior; band of rays around lost foot on exterior. For rays around foot, cf. the lekanis Agora P 24255 (*Agora* XII, no. 1221). Date: *ca.* 425-400 BCE.

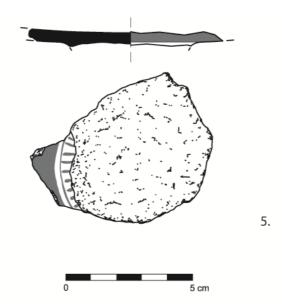


Fig. 3.

#### Plate or shallow bowl

Cat. 6: TC10.145 (context T10-8-3), 1 base fragment (Fig. 4).

Diam. base 12, PH 3; brown glaze on exterior; reddish brown glaze on interior.

Impressed palmettes within single-file rouletting on interior.

Cf Agora P 13543 (*Agora* XII, no. 835, 325 BCE), for shape of foot; Agora P 23418 (*Agora* XII, no. 611, 375-350 BCE) and P 5862 (*Agora* XII, no. 1047, 400-375 BCE) for the common palmettes and rouletting. Date: 375-325 BCE (shape).

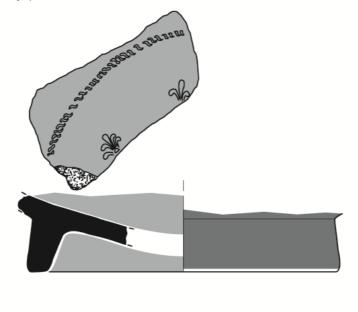


Fig. 4.

6.

## (Cup-) kantharos

Cat. 7: TC10.31 (context T10-7-2), 1 carination and upper body fragment of kantharos (Fig. 5). Max. diam. 6.5, PH 3.1; good black glaze on outside. Repair hole at top of fragment.

Cf. Agora P 12698 (Agora XII, no. 708).

Date: 350 BCE.

Cat. 8: TC10.41 (context T10-5-2), 1 wall fragment with spur and start of handle of cup-kantharos (Fig. 5). Max. diam. wall 11.0, PH 1.8, handle section 0.8x1.

Cf. Agora P 1828 (Agora XII, no. 709).

Date: 350-325 BCE.

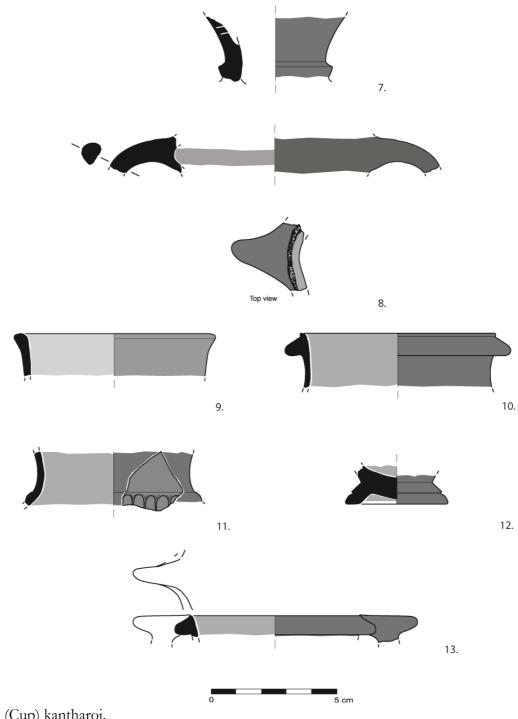


Fig. 5. (Cup) kantharoi.

Cat. 9: TC10.46 (context T10-5-2), 1 rim fragment of kantharos (Fig. 5).

Diam. rim 10, PH 2.1; reddish glaze on both sides.

Cf. Agora P 15409 (Agora XXIX, no. 9).

Date: 325-300 BCE.

Cat. 10: TC10.70 (context T10-5-2), 1 moulded rim fragment of kantharos (Fig. 5).

Diam. rim 11.5, PH 2.7; good black glaze on both sides.

Cf. Agora P 3778 (Agora XII, no. 704) and Agora P 22039 (Agora XXIX, no. 38).

Date: 325-300 BCE.

Cat. 11: TC10.71 (context T10-5-2), 1 carinated wall fragment of kantharos or cup-kantharos (Fig. 5).

Max. diam. 8.5, PH 2.6; good black glaze on both sides.

Cf. Agora P 13529 (Agora XII, no. 676) and Agora P 29180 (Agora XXIX, no. 94).

Date: 325-315 BCE.

Cat. 12: TC10.102 (context T10-8-2), 1 base fragment: ring foot in 2 degrees of kantharos (Fig. 5).

Diam. base 5, PH 1.8; good black glaze.

Cf. Agora P 12690 (Agora XII, no. 661) for foot.

Date: 350-325 BCE.

Cat. 13: TC10.103 (context T10-8-2), 1 rim fragment: moulded rim and slender spur (Fig. 5).

Diam. rim 10, PH 1.4; reddish-black glaze on both sides.

Cf. Agora P 6935 (Agora XII, no. 712) for slender spur, Agora P 12691 (Agora XII, no. 701) and Thorikos

TC68.678 (Mussche 1990, 50-51, no. 100) for moulded rim.

Date: 350-325 BCE.

#### Bowl

Cat. 14: TC10.147 (context T10-8-3), 1 rim fragment (Fig. 6).

Diam. rim 16, PH 1.2; black glaze on both sides.

Cf. Agora P 20141 (Agora XII, no. 690, XXIX, no. 130), bowl-kantharos.

Date: 325-300 BCE.

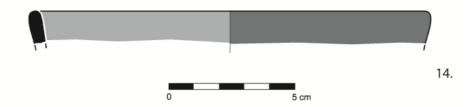


Fig. 6.

#### Pyxis, type D

Cat. 15: TC10.61 (context T10-5-2), 1 base fragment (**Fig. 7**).

Diam. base 10, PH 1; good black glaze.

Cf. Agora P 20510 (*Agora* XXIX, no. 1253), Agora P 24279 (*Agora* XII, no. 1309). Cf also Bingen 1968, 66, fig. 60 (from Thorikos).

Date uncertain.

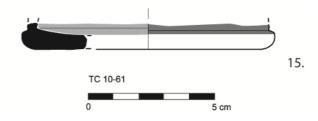


Fig. 7.

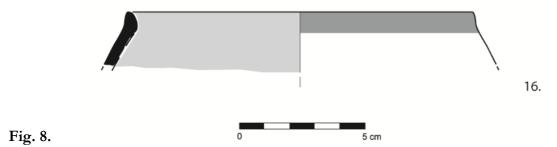
#### Lebes

Cat. 16: TC10.51 (context T10-6-3), 1 rim fragment: incurved, thickened rim (Fig. 8).

Diam. rim 14, PH 2.2; reddish glaze on interior and in band around exterior rim.

Cf. Agora P 2870 (Agora XII, no. 87) for shape and decoration.

Date: 320-300 BCE.



#### <u>Lamp</u>

Cat. 17: TC10.168 (context T10-13-1), 1 spout fragment (Fig. 9).

Cf. TC73.441 (Blondé 1983, 128 no. 230, fig.24), an 'inkwell' shape lamp; TC75.533 (Blondé 1983, 107 no. 150, fig. 16), globular lamp with offset rim, straight top dissimilar.

PH 1.6; good black glaze all over.

Date: 375-300 BCE.

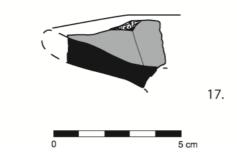


Fig. 9.

## Krater (Cat. 19-20 possibly figured)

Cat. 18: TC10.141 (context T10-11-1), 1 rim fragment of open shape, possibly krater; folded rim, tapering upwards (Fig. 10).

Diam. rim 33, PH 6.8; good black glaze on both sides.

Date: 5th century BCE?

Cat. 19: TC10.170 (context T10-13-1), 1 base fragment of bell krater. Lipped, groove of lip reserved (**Fig. 10**). Diam. base 20, PH 3.6; good black glaze on exterior, smoothened on lower part of base.

Cf. the bell-krater Berlin F 2643 (CVA 11, pl. 42, Beil. 9.3), Dinos Painter; decoration Polygnotan, see CVA Berlin 11, 47.

Date: 430-400 BCE.

Cat. 20: TC10.174 (context T10-10-3), 1 base fragment of bell krater (Fig. 10).

Diam. base 18, PH 3.7; reddish glaze on top of foot, smoothened on lower part of base.

Cf. the bell-krater Berlin F 2401 (CVA 11, pl. 40-41, Beil. 9.2), Clio Painter.

Date: 450-430 BCE.

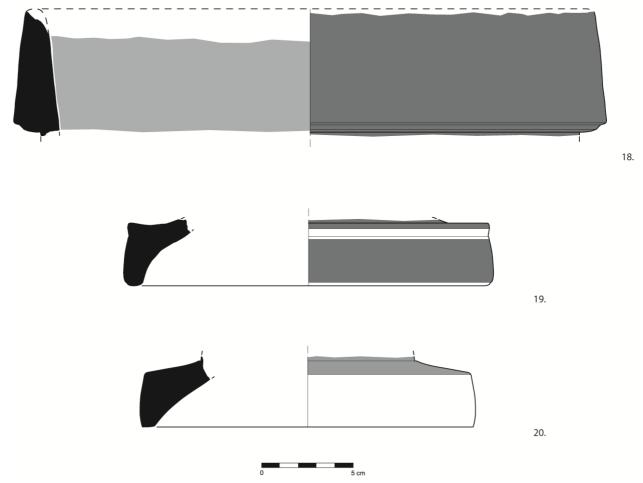


Fig. 10. Kraters.

#### Squat lekythos

Cat. 22: TC10.101 (context T10-8-2), 1 shoulder fragment.

Diam. shoulder at carination 5, PH 1.6; good black glaze on shoulder (Fig. 11).

Many similar lekythoi in Thorikos, e.g TC65.830 (*Thorikos* III 53, fig. 64) and in the Kerameikos, e.g. the lekythos in grave 370 (*Kerameikos* VII,2, 96, pl. 63.7, dated third quarter of the 5th century BCE). Date: ca. 450 BCE.

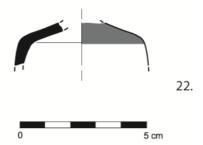


Fig. 11.

## Red figured closed shape

Cat. 21: TC10.100 (context T10-8-2), 1 wall fragment (Fig. 12a-b).

Max. diam. 26.5, PH 3.1. Mantle figure of reverse of closed vessel: upper part of leg and start of body, striped hem of himation; broad folds.

Cf. Agora P 1855 side B (*Agora* XXX, no. 274; Polygnotan, dated 440 BCE) for similar folds and hem stripes. Date: 450-425 BCE.

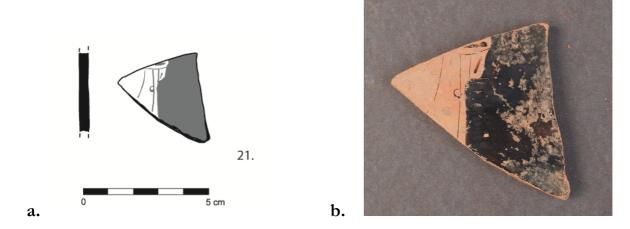


Fig. 12. Wall fragment of red-figured closed shape. (b. Photo by WvdP, not to scale).

#### Lekanai

In a monograph of the year 2000, G. Lüdorf discusses the class of Attic lekanai, offering a typology that goes beyond the classification in *Agora* XII and XXIX.<sup>7</sup> To a large extent she bases her observations upon the stratified material excavated in Thorikos since 1963, which was hitherto largely unpublished.<sup>8</sup> Of the 922 catalogue numbers, no less than 401 (43%) stem from Thorikos. Of these 401 items only 8 offer more or less complete profiles.

Attic lekanai served different functions, mainly in the sphere of the symposium, but also as washing basin, brazier and even potty (Lüdorf 2000, 10-13). This probably explains their wide popularity and also the high numbers of fragments in various archaeological contexts. Already in the survey of the rural dema of Atene, H. Lohmann (1993, 47) observed that lekanai occurred quite regularly in the rural households; also these have been included in the study of Lüdorf.

Lüdorf returned on the vessel shape in a recent contribution discussing pottery production in Attica (Lüdorf 2010, 157-159, pls. 40-41). On the basis of the distributon and occurrence in series of particular rim shapes she postulates, convincingly, a local production of lekanai and other pottery types in or near Thorikos.

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<sup>&</sup>lt;sup>7</sup> Agora XII, 213-216, figs. 15, 21, pls. 86-87, nos. 1754-1843; Agora XXIX, 167-168, figs. 66-68, nos. 1090-1105 ("deep bowl, projecting rim"). Lüdorf 2000, see also Fless 2003 and, more critically, Rotroff 2004. In using this study for the present classification of the finds from Cistern No. 1, one is faced with the uneasy feeling that the general framework of her typology is clear, but that the distinctions between one (sub)type or the other are sometimes difficult to follow (see e.g. the discussion with Cat. 26 and 35, below). It may well be that minor variations in shape are merely accidental or may be attributed to different potters working in the same tradition and even pottery workshop. In other cases it is clear that a more technological approach in studying the pottery, such as that advocated by the team of H.J. Franken of Leiden University (see Frendo 1988 for a critical discussion of the pros and cons), would have resulted in a more diversed typology. If one compares e.g. the three rim profiles illustrated on pl. 99 (Lüdorf 2000, LR127-129), it is clear that these are the results of three different pottery techniques. Lüdorf however considers them as one rim Form (III 1a).

8 Lüdorf 2000, 66-78. Unfortunately, the value of the stratigraphical information is often considered of less

<sup>&</sup>lt;sup>8</sup> Lüdorf 2000, 66-78. Unfortunately, the value of the stratigraphical information is often considered of less importance than the value of the 'typological' date of the item, which is established partly on other grounds; see particularly n. 9-11, below.

Cat. 23: TC10.1 (context T10-3-1), 1 wall fragment with handle root (Fig. 13).

Max. diam. 41, PH 5.8; handle section 2.1; reddish glaze in band below handle and brownish glaze 'à-la-brosse' on the inside.

The decoration of this wall fragment with handle is rather typical of lekanai: a painted band below the unpainted handles and handle zone (Lüdorf 2000, 36-37). The decoration scheme is generally dated to the 5th century BCE.

Cat. 24: TC10.55 (context T10-5-2), 1 rim fragment (Fig. 13).

Diam. rim 41, PH 3.

Cat. 25: TC10.106 (context T10-8-2), 1 rim fragment (Fig. 13).

Preserved diam. rim 32.5, PH 2.3; good quality black glaze on top of rim and on inside.

Cat. 26: TC10.66 (context T10-5-2), 1 rim fragment (Fig. 13).

Diam. rim 29, PH 3.2.

Cat. 27: TC10.63 (context T10-5-2), 1 rim fragment (Fig. 13).

Diam. rim?, PH 1.

Cat. 28: TC10.118 (context T10-8-2), 1 rim fragmenty(Fig. 13).

Diam. rim 42, PH 3.9.

The triangular rim of **Cat. 24** belongs to Lüdorf's rim Form X, "Lekanen mit dreikantigem Rand" (Lüdorf 2000, 28). She dates the rim shape generally early, from the late 6th to the first quarter of the 5th century BCE, although the archaeological contexts of some finds, as the Dema House seem to date the rim shape even to the last quarter of the 5th century BCE (on this, Lüdorf 2000, 28, 65). Especially LR499 from the Dema House is close, albeit of smaller dimensions (Lüdorf 2000, 28, 153, pl. 172). Two other parallels come from Athens: LR497 from well Q12:3 in the Agora, dated to 520-480 BCE (Lüdorf 2000, 28, 48-49, 153, pl. 171), and the fully preserved profile of L39 from the Kerameikos, tentatively dated to the first half of the 5th century BCE or even 480-460 BCE (Lüdorf 2000, 16, 28, 89, pl. 30).

For rim **Cat. 25** fairly good parallels may be found in Athens in the (second half of the) 7th, 6th and first quarter of the 5th century BCE. Although the rim edge is broken off, enough is preserved to show that it belongs to rim Form II 1 and lekane Form B of Lüdorf with horizontal handles attached directly to the rim ("Lekanen mit planem Rand und an den Rand angestrichenen Henkeln", Lüdorf 2000, 14-15, 19-20). A Kerameikos ostrakon of Menon dated to 471 BCE is particularly close (LR40: Lüdorf 2000, 19-20, 103, pl. 79), but also LR1 from well M11:3 in the Agora, with finds dated from 650-600 BCE untill the early 6th century (Lüdorf 2000, 19-20, 45, 98, pl. 72), and the fully preserved lekane L11 from the 'Eckterrasse' of the Kerameikos, dated to the last quarter of the 6th century BCE (Lüdorf 2000, 14-15, 19-20, 86, pl. 8) may be mentioned as parallels.

The best parallels for **Cat. 26** may be found in the material from Thorikos itself. Its shape is comparable with examples of rim Form II 1, e.g. LR14, a surface find from the Theatre tentatively dated to *ca.* 500 BCE (TC65.212: Lüdorf 2000, 19-20, 100, pl. 75), LR27, from a layer in the Tower Compound, *insula* 3, Room ASs, with finds probably dating to *ca.* 500 BCE (TC73.68: Lüdorf 2000, 19-20, 70, 101, pl. 77), and LR73, from upper layers in *insula* 13, tentatively dated to the 4th century BCE (TC69.827: Lüdorf 2000, 20, 74, 106, pl. 84). A separate type distinguished by Lüdorf, rim Form XII, offers a parallel (LR506 from *insula* 4 House 5 room KU), tentatively

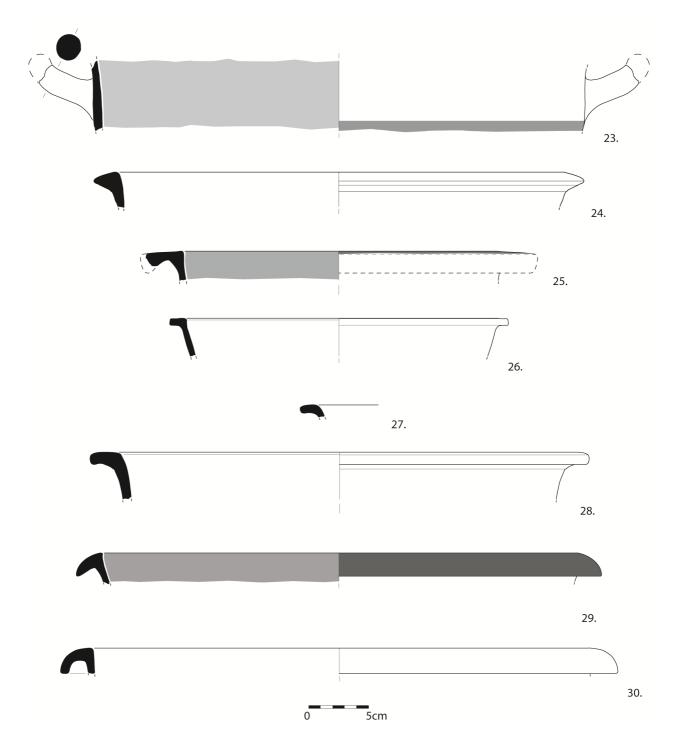


Fig. 13. Lekanai.

dated to the first half of the 5th century BCE (TC73.427: Lüdorf 2000, 28, 72, 154, pl. 173). The differences with rims of Form II 1 appear to be slight, however; the apparent distinctive feature of a rounded tendency of the upper rim surface is hardly noticeable, at least in the example of LR506.

Also the rims of Cat. 27 and 28 find parallels in rim Form II 1. The former may be confronted with an example of rim Form II 1b from Thorikos, LR74, found in the upper layers of *insula* 13, Room HG and tentatively dated to the 4th century BCE

(TC69.774: Lüdorf 2000, 20, 74, 106, pl. 84). **Cat. 28** is similar to rim LR26, a surface find from Thimari, which is tentatively dated to *ca.* 500 BCE (Lüdorf 2000, 19-20, 101, pl. 77). It may, however, also be compared with rim LR461 of Form VI from Thorikos, found in sondage 6 of the Theatre and tentatively dated to the first quarter of the 5th century BCE (TC63.323: Lüdorf 2000, 26-27, 75, 149, pl. 160).

Cat. 29: TC10.39 (context T10-5-2), 1 rim fragment (Fig. 13).

Diam. rim 44, PH 2.7; good black glaze on top of rim, thinner on in- and outside.

Cat. 30: TC10.40 (context T10-5-2), 2 joining rim fragments (Fig. 13).

Diam. rim 47, PH 2.

Cat. 31: TC10.76 (context T10-5-2), 1 rim fragment (Fig. 14).

Diam. rim 48, PH 2.7; brownish glaze on top of rim and on inside.

Cat. 32: TC10.108 (context T10-8-2), 1 rim fragment (Fig. 14).

Diam. rim 48, PH 2.4; brown glaze on inside, probably also on top of rim, but worn off.

Cat. 33: TC10.68+73 (context T10-5-2), 2 joining rim fragments (Fig. 14).

Diam. rim 44, PH 3.4; reddish glaze on top of rim and on inside.

Cat. 34: TC10.56 + TC10.79 (context T10-5-2), 1 rim fragment and 1 not-joining wall fragment (Fig. 14).

Diam. rim 41, PH 2.5; good black glaze on top of rim and on inside; outside smoothened red.

Cat. 35: TC10.105 (context T10-8-2), 1 rim fragment (Fig. 14).

Diam. rim 40, PH 2.7; red glaze on top of rim and on inside.

The seven rims **Cat. 29-35** belong to variants of the most common lekane rim shapes of the 5th century BCE, rim Form III. The first four, **Cat. 29-32**, belong to Lüdorf's rim Form III 1a, although **Cat. 29** has not (yet?) the canonical inverted U-shaped rim profile; it is rather of an inverted V-shape. It finds a good parallel in LR129 from Thorikos *insula* 3 Shop GF, stratigraphically dated to the first quarter of the 5th century BCE. The other three show the fully-fledged inverted U-shaped profile. For **Cat. 30-31** several good parallels come into question; a good one may be found in LR148 from Thorikos 'House 2' in the Theatre area, Room P, tentatively dated to the second quarter of the 5th century BCE (TC75.459: Lüdorf 2000, 22-23, 76, 115, pl. 103). Also for **Cat. 32** several parallels may be found, of which three from Thorikos are mentioned: LR155 from Sondage 4 in the Theatre, tentatively dated to the second quarter of the 5th century BCE (TC63.974: Lüdorf 2000, 22-23, 75, 115, pl. 105), LR179 from *insula* 4 House 5 Room KB, also tentatively dated to the second quarter of the 5th century BCE, and LR192 from a layer in *insula* 11 House 1 Room U, containing material dated to the time span 460-400 BCE.

<sup>&</sup>lt;sup>9</sup> TC71.206: Lüdorf 2000, 22-23, 69, 113, pl. 99; see also n. 8 above. The layer itself contains material that spans the whole first half of the 5th century BCE, however (Lüdorf 2000, 69).

<sup>&</sup>lt;sup>10</sup> TC71.965: Lüdorf 2000, 22-23, 72, 118, pl. 109. The layer itself contains both Archaic material and finds dating to within the second half of the 5th century BCE, however (Lüdorf 2000, 72).

<sup>&</sup>lt;sup>11</sup> TC86.59: Lüdorf 2000, 22-23, 73, 119-120, pl. 112. The indications on the dating of this piece are particularly unclear: (p. 73) the finds in "Lehmschicht I" date to the period 460-400 BCE; the date (of the lekane rim) is – typologically – indicated as 5th/4th century BCE; on p. 120 the date is given as late 5th/early 4th century BCE (460-400 BCE).

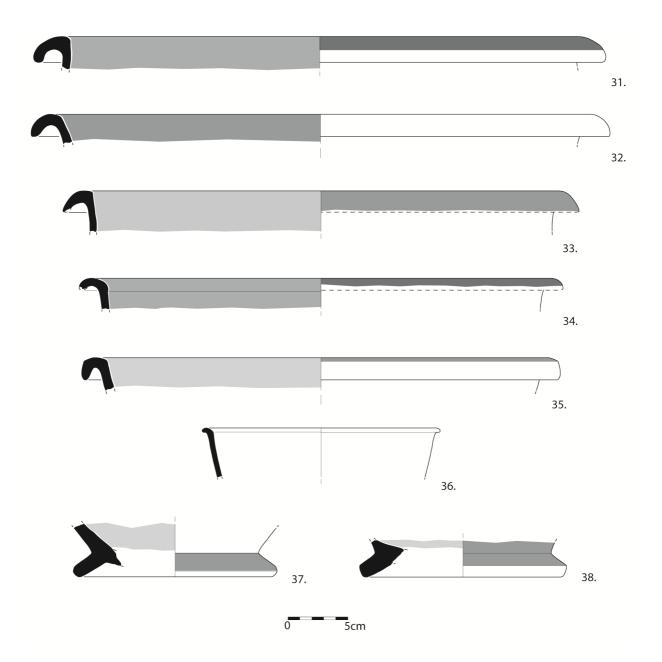


Fig. 14. Lekanai.

The two rims of **Cat. 33-34** find rather good parallels in examples of Lüdorf's rim Form III 2c. Two comparisons from the Theatre excavations in Thorikos are tentatively dated to the last quarter of the 5th century BCE. For **Cat. 33** one may refer to LR400, found in Sondage 6 (TC63.333: Lüdorf 2000, 25-26, 75, 142, pl. 148) and for **Cat. 34** to LR422, a surface find from Sondage 5 (TC63.638: Lüdorf 2000, 25-26, 75, 145, pl. 152).

It is particularly in looking for comparisons for the last rim fragment Cat. 35 that one touches upon the limitations of Lüdorf's lekane typology. It may be compared with three rims from Thorikos that G. Lüdorf assigns to three different shapes within rim Form III: LR149 of rim Form III 1a, from 'House 2' in the Theatre area, Room P, tentatively dated to the second quarter of the 5th century BCE (TC75.457: Lüdorf 2000, 22-23, 76, 115, pl. 103), LR363 of Form III 2b, a surface find, tentatively dated

to the 4th century BCE (TC63.295: Lüdorf 2000, 25, 77-78, 138, pl. 141), and LR396 of rim Form III 2c, from Sondage 6 in the Theatre, tentatively dated to the last quarter of the 5th century BCE (TC63.329: Lüdorf 2000, 25-26, 75, 142, pl. 147).

Cat. 36: TC10.144 (context T10-8-3), 1 rim fragment (**Fig. 14**). Diam. rim 20, PH 4; import?

As for the Plain Ware rim **Cat. 36** with its remarkably small diameter of 20cm, no exact confrontations in the published record of lekanai could be found, although a rather late rim may be mentioned. The Plain Ware rim fragment LR317 of rim Form III 1d from well G13:4 of the Athenian Agora, dated to 340-275 BCE, is comparable, although slightly more flaring (Lüdorf 2000, 24, 56-57, 133, pl. 131). Its diameter is exactly twice that of **Cat. 36**.

Cat. 37: TC10.111 (context T10-8-2), 1 base fragment (Fig. 14).

Diam. base 17, PH 4.3; reddish glaze in band on outside foot; brownish red glaze on inside.

Cat. 38: TC10.104 (context T10-8-2), 1 base fragment (Fig. 14).

Diam. base 17.5, PH 3.1; reddish glaze on outside foot, body, and on inside; underside of foot smoothened brownish; local?

Cat. 39: TC10.109 (context T10-8-2), 1 base fragment (Fig. 15).

Diam. base 17.5, PH 2.8; red glaze on outside foot and body; local?

Cat. 40: TC10.117 (context T10-8-2), 1 base fragment (Fig. 15).

Diam. base 12, PH 2.5.

Cat. 41: TC10.113 (context T10-8-2), 1 base fragment (Fig. 15).

Diam. base 16.5, PH 4.6.

Five bases may be attributed to lekanai (Cat. 37-41). Although Cat. 37 finds a good comparison in LB9, a surface find from Thimari, tentatively dated to the last quarter of the 6th and the first quarter of the 5th century BCE and belonging to the earliest foot Form 1a (Lüdorf 2000, 29, 162, pl. 177), it is more likely that it may be linked with examples of foot Form 2c as LB35, an ostrakon from the Athenian Kerameikos dated to 471 BCE (Lüdorf 2000, 30, 165, pl. 180). The decoration scheme of Cat. 37 with one painted band on the exterior of the foot seems to be characteristic for lekanai of the 5th century BCE (Lüdorf 2000, 36). Also Cat. 38 may be linked with examples of foot Form 2c as LB35 and LB36, both of which are ostraka of Megakles Hippokratous dated to 471 BCE (Lüdorf 2000, 30, 165, pl. 180). The foot decoration of LB36 is even identical to that of Cat. 38. A general date in the first half of the 5th century BCE seems plausible.

The best comparison for **Cat. 39** is found in foot Form 2b, LB 34 from *insula* 4 House 5, room KB in Thorikos, dated stratigraphically to the second quarter of the 5th century BCE (TC73.372: Lüdorf 2000, 30, 72, 165, pl. 180). A surface find from Thimari, LB26 of foot Form 2a tentatively dated to *ca.* 500 BCE, is also close in shape but seems to be shorter than **Cat. 39** (Lüdorf 2000, 30, 164, pl. 179). Foot Form 2b generally dates to the last two decades of the 6th and the first half of the 5th centuries BCE. In all fully preserved lekanai, feet of Form 2b belong to lekanai of Types C1 and C2 and are combined with thickened, rounded and sometimes triangular lekane rims, e.g. of Form X (see here, **Cat. 24**).

The Plain Ware base fragment **Cat. 40** finds good parallels in foot Form 2a and 2c. A surface find from Thimari, LB24 of foot Form 2a tentatively dated to *ca.* 500 BCE, is close in shape and dimensions (Lüdorf 2000, 30, 164, pl. 178). Also the Plain Ware base fragment LB38 of foot Form 2c, found in well H6:5 of the Athenian Agora and dated to 470-460 BCE, is comparable (Lüdorf 2000, 30, 51, 166, pl. 180).

The Plain Ware base fragment **Cat. 41** may generally be attributed to feet of Form 3. As comparison LB47 of foot Form 3a may be mentioned, a find from Thorikos tentatively dated to the first quarter of the 5th century BCE (TC63.355: Lüdorf 2000, 31-32, 77-78, 167, pl. 181). Undecorated feet seem to be rare within foot Form 3a, however. Also LB132 of foot Form 3d, an ostrakon of Megakles Hippokratous found in the Athenian Kerameikos and dated to 471 BCE, is close in shape (Lüdorf 2000, 34-35, 176, pl. 192). Most examples of foot Form 3d are dated to the first half of the 5th century BCE and seem to occur on the large lekanai of Type D with the typical inverted U-shaped lekane rim profiles (see here, **Cat. 30-35**).

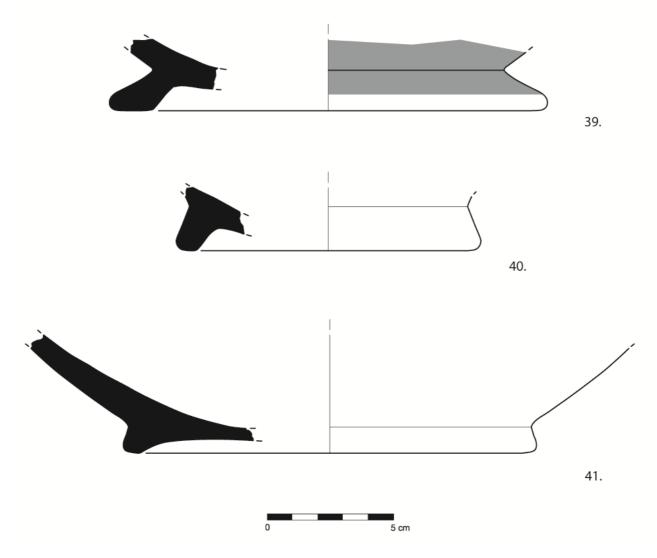


Fig. 15. Lekanai bases.

#### Lekane?

Cat. 42: TC10.43 (context T10-5-2), 1 base fragment (**Fig. 16**). Diam. base 14, PH 1.3.

It is not certain that this flat base fragment belonged to a lekane. The closest parallel is lekane base LB134 of Form 3d, a surface find tentatively dated to the first quarter of the 5th century BCE, but that one still has a slightly hollow base (Lüdorf 2000, 34-35, 176, pl. 192). Since the wall inclination of **Cat. 42** has not been preserved, a general date in the second half of the 5th and the whole 4th century BCE seems plausible.

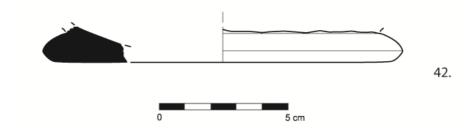


Fig. 16.

#### Spindle whorl

Cat. 43: TC10.173 (context T10-10-3), 1 spindle whorl (**Fig. 17a-b**). Max. diam. 4, H 3.2; black glaze in traces.

A comparable, but Corinthian black-figure spindle whorl has been published from Washery 1 (room AN) of insula 1 in Thorikos (TT64.12; Mussche 1967a, 60, fig. 61; Mussche 1978, 60, fig. 79). It has been dated to the last quarter of the 7th century BCE and has a comparable height of 3.6cm. The Thorikos database<sup>12</sup> lists 36 more spindle whorls of different chronologies, of which apparently 6 with full black glaze and 12 with black glaze or painted decoration. A similar, glazed spindle whorl has been published from a deposit of the second and third quarters of the 5th century BCE in the Athenian Agora (Rotroff, Oakley 1992, 34, 128, pl. 61, 371). It is more concave in its upper profile, however, and with a height of 4.5cm slightly larger. <sup>13</sup> The authors refer to a very similar spindle whorl, both in glazing and shape, from a mid-5th century BCE well in the Athenian Agora (Boulter 1953, 112, pl. 41,188). It has a preserved height of 3.5cm. The Athenian Agora excavations have given published evidence of several more examples.<sup>14</sup> The largest sample of these spindle whorls, however, has been found as dedications of women in the Sanctuary of the Nymphs in Athens.15 Equally from an Attic sanctuary site, and likewise as a votive, one may mention a black-figure spindle whorl from Loutsa (Kalogeropoulos 2010, pl. 43,3). The date of Cat. 43 may be set in the 6th or first half of the 5th century BCE on the basis of the published comparisons.

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<sup>&</sup>lt;sup>12</sup> The Thorikos Database in Access 2000 format has been made by K. Van Gelder, based upon older databases, and was last updated on 20.2.2002. In 2009, starting from this database, W. van de Put made a spreadsheet for data input during the excavations, which will be integrated in the general Thorikos Database.

<sup>&</sup>lt;sup>13</sup> MC1223. A second, similar one from the same deposit (MC1224) is not illustrated but apparently smaller.
<sup>14</sup> Sparkes, Talcott 1951, fig. 57 (MC250, MC373, MC781, MC937-938, MC948); Rotroff, Lamberton 2005, 32-34, fig. 37 (MC365, MC373, MC938, MC948).

<sup>&</sup>lt;sup>15</sup> Pandermalis et al. 2011, 6-7 with pl.



Fig. 17. Spindle whorl. (b. Photo by WvdP, not to scale).

#### Undecorated Wares (Cooking, Plain and Coarse Wares)

The previous publications of Thorikos frequently used the label 'Domestic Pottery' to designate all Plain and Cooking Wares, but also some semi-decorated wares as the lekanai discussed above. In the frame of the present contribution it is preferred to use the more precise labels of the different wares. These Coarse, Plain, and Cooking Wares make up of the bulk of the finds encountered in the excavations in Thorikos, but have only rarely been published in the (preliminary) reports for their own sake or as a meaningful part of the archaeological context. No more than 26 undecorated vessels from the first seven campaigns have been published in the first six preliminary volumes (*Thorikos* I-VI; Bronze Age not included), more from graves than from the settlement. This is an extremely low number in comparison with the figured and otherwise decorated wares, which comprise 94% of all published items (411). Essentially, this lack of attention for undecorated wares was not unlike the publication practise elsewhere in Greece at the time (but see e.g. Boulter 1953).

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<sup>&</sup>lt;sup>16</sup> This usage is very much in line with the conventional designation 'Household Ware' of the Athenian Agora excavations, cf. *Agora* XII, esp. 34.

<sup>&</sup>lt;sup>17</sup> See also Fless 2003, 469. The general proportions of (semi-)decorated wares and undecorated wares in Thorikos (*infra* 120-121) are very much in line with those encountered in the rural deme of Atene, Lohmann 1993, 47 ("Selbst Schwarzfirnisware ist selten, die Hauptmasse der Keramik besteht aus Gebrauchsgeschirr."). <sup>18</sup> See Servais 1968, 52, figs. 26-27 (pithos TC63.1063), Bingen 1968, 60-61, 67, 70-71, 73, figs. 43-44, 62-64, 76-77, 84 (jars TC63.4, TC63.15, TC63.24, hydria TC63.1); Bingen 1967a, 42-43, fig. 35 (amphora TC64.370); Hackens 1967a, 83-84, 86, 99-100, figs. 76, 82, 107-108 (amphorae TC63.1061, TC64.682; bowl TC63.182; basin TC64.1); Bingen 1967b, 38, 55, figs. 43, 67 (pithos TC65.882; basin/sarcophagus TT65.16); Mussche 1967b, 60, 68, figs. 71, 91 (chytra TC65.812; amphora TC65.880); Mussche 1968, 96, fig. 123 (amphora TC63.117); Hackens 1967b, 86, fig. 120 (chytra TC65.562); Bingen 1969, 106, 110, 113-114, 119, figs. 119-120, 122, 129, 140-141 (handmade jugs TC66.226, TC66.225; amphora TC66.181; chytra TC66.320, pyxis TC68.226); Mussche 1969, 123-124, figs. 130-131 (chytra TC66.70); Mussche 1971, 121, fig. 76 (lamp TC68.294 = Blondé 1983, 50, cat. 1, fig. 1); Bingen 1973, 7, fig. 1 (chytra TC69.126); Mussche 1978, 60, fig. 79 (spouted chytra TC68.1004); Devillers 1988, 70-71 (chytra TC63.1630 and lopas TC63.1634).

The publication strategy changed with *Thorikos* VII, when representative selections of the archaeological contexts, also containing undecorated wares, were published in the preliminary reports, mainly under the authorship of P. Spitaels.<sup>19</sup>

The publication of entire archaeological contexts by Spitaels and others has by necessity resulted in the presentation of the undecorated finds from these contexts. But even in these cases, the ritual and funerary character of these contexts dictate the (low) proportions of their undecorated contents. In 1988, M. Devillers published the finds from a votive deposit dating from the 7th untill the late 4th century BCE in the Mycenaean Grave no. 1 on the Acropolis of the Velatouri hill. Among the selection of 406 items, she included only two undecorated ones. Also in the second final report of the excavations of Thorikos, H. Mussche published 15 more undecorated vessels, of which four without illustration, mainly stemming from the theatre necropolis, which was published by him for the first time in a more or less coherent way.

The publication of individual material classes has also included undecorated items, as in the monograph on the lamps from Thorikos (Blondé 1983), in which 21 undecorated items were included, against 257 glazed ones (so 7.6%). It is also when provided with a graffito, dipinto or a stamp that some of the undecorated wares received more attention. In the third final report D. Vanhove (re-)published 86 of such vessels and fragments (against 146 decorated and semidecorated ones, so 37%). In both cases, however, these numbers and percentages would more realistically reflect historical realities of the distribution of decorated vs undecorated wares.

Few and mainly short monographic studies have been devoted to the Plain, Cooking and Coarse Wares from Thorikos: on beehives<sup>24</sup> and a Late Archaic/Early Classical relief-decorated basin relating to a pithos from Legrena and other relief wares from

<sup>&</sup>lt;sup>19</sup> 24 against 112 figured and (semi-)decorated fragments (18%): Spitaels 1978, 70, 72-73, fig. 29 (jug, kadoi, hydria TC68.513, TC71.581, TC68.592, TC68.593, TC68.594), 80-83, figs. 39-40 (jugs, chytrai, kadoi TC73.34, TC73.35, TC73.36, TC73.91, TC73.92, TC73.93, TC73.94, TC73.95, TC73.96, TC73.97, TC73.98. TC73.99), 86-87, fig. 44 (pithos TC73.79), 92-93 (pithoi TC66.293, TC66.294); 100-101, figs. 57-58 (amphora, chytra TC68.536, TC68.570); 103-105, figs. 60-63 (Late Roman amphorae TC73.186, TC73.187).

<sup>&</sup>lt;sup>20</sup> Devillers 1988, 70-71, cat. 405-406 (chytra TC63.1630; lopas TC63.1634); on the composition, see also Stissi 2002, 236, 250, table XVI.8.

<sup>&</sup>lt;sup>21</sup> Mussche 1998, 74, 166, fig. 160 (lekanis TC64.268), 76, 168, fig. 171 (tile TC78.27), 77, 171, figs. 183-184 (chytra TC85.01), 78, 172, figs. 178-188 (hydria TC85.05), 78, 174-174, figs. 189-190 (hydria TC85.08), 78, 174-175, figs. 191-192 (pithos TC85.21), 78, 176, fig. 193 (storage bin TC85.24), 79, 177, fig. 197 (amphora TC85.47), 79, 178, fig. 200 (miniature cup TC85.50), 180-181, figs. 210-211, 213 (amphora TC85.63), 83 (hydria TC88.55), 83 (jug? TC88.56), 84 (chytrai TC88.57 and TC88.58), 85,189, fig. 246 (miniature jug TC88.71).

<sup>&</sup>lt;sup>22</sup> Of these, two had already been published in a preliminary way, Blondé 1983, 50-52, cat. 1, 12-13, figs. 1-2, pl. 1 (TC68.294, TC68.960, TC68.588).

<sup>&</sup>lt;sup>23</sup> Vanhove 2006, based upon earlier preliminary publications and manuscripts: Bingen 1967a, 42-43, fig. 35 (amphora TC64.370); Mussche 1969, 128, figs. 159-160 (amphora TC66.121, TC66.143); Mussche 1971, 116, fig. 70 (amphora TC68.232); Spitaels 1978, 100-101, fig. 58 (amphora TC68.536); Bingen 1978, 174-179, figs. 94, 97, 102 (amphorae TC71.77 [erroneously as TC71.774], TC71.717, TC72.201); Monsieur 1989; Mussche 1998, 76, 168, fig. 171 (tile TC78.27).

<sup>&</sup>lt;sup>24</sup> Jones 1990. TC63.168, TC69.284, TC77.95. See also Mussche 1990, 59, cat. 124 for TC69.284 (Roman); Lüdorf 1998/1999, 58, 62, 87 (B19, B21). On the graffito of TC69.284, see Vanhove 2006, 62-63, 199, figs. 241-242.

Attica and its immediate surroundings.<sup>25</sup> A southeastern Attic origin for the basin and pithoi from Thorikos could be established by petrographical analyses (De Paepe 1979a; Helsen 1978, 167-168).<sup>26</sup> A similarly short contribution discussed two 4th and early 3rd century BCE cooking vessels from Thorikos.<sup>27</sup> The main contribution of the Thorikos excavations to the knowledge of Coarse, Plain and Cooking Ware pottery in Attica, undeniably, lies in the domain of petrographic studies (De Paepe 1979a, 1979b). It could be shown that the Coarse and Plain Wares may principally have originated in local production centres, whereas Cooking Wares were imported from the Saronic Gulf area (mainly Aegina) and the Southern Cyclades.

#### Closed vessels in Cooking Ware

Cat. 44: TC10.5 (context T10-3-2), 1 rim fragment (Fig. 18).

Diam. rim 12, PH 2.2; volcanic inclusions; import.

Cat. 45: TC10.6 (context T10-3-2), 1 rim fragment (Fig. 18).

Diam. rim 26, PH 1.6; volcanic inclusions; import.

Cat. 46: TC10.72 (context T10-5-2), 1 rim fragment (Fig. 18).

Diam. rim 24?, PH 1.4; import.

The rim fragment **Cat.** 44 finds a good parallel in a context from room ASnw in the Tower Compound excavations of Thorikos (Spitaels 1978, 80-81, fig. 39,59). The material in the context is dated to the 6th century and the first two decades of the 5th century BCE. The rim of that jug (TC73.36) also has a diameter of 12cm. The same context yielded a good parallel for **Cat.** 45, possibly of a kados (Spitaels 1978, 80-81, fig. 60), although with a smaller rim diameter (*ca.* 18cm) than **Cat.** 45. Similar rims are illustrated for kadoi from the Athenian Agora excavations (*Agora* XII, 202, 349, pl. 72, fig. 17, nos. 1607, 1610), but are also attested for chytrai (*Agora* XII, 372, pl. 93, no. 1932). Especially the latter chytra with a rim of 20cm and a date of 330-305 BCE, as well as a kados, dated to between 460 and 440 BCE, and provided with a rim of 22cm (*Agora* XII, 201-203, 349, pl. 72, fig. 17, no. 1607), come close in diameter. Also rim **Cat.** 46 may be connected with kadoi, although no exact parallel could be found.

Cat. 47: TC10.60 (context T10-5-2), 1 base fragment (**Fig. 18**). Diam. base 16, PH 2; secondarily burned; import.

Cat. 48: TC10.62 (context T10-5-2), 1 base fragment (Fig. 18).

Diam. base 13, PH 2.9; secondarily burned; import.

Cat. 49: TC10.112 (context T10-8-2), 1 base fragment (**Fig. 18**).

Diam. rim 11, PH 2.5; import.

Cat. 50: TC10.119 (context T10-8-2), 1 base fragment (Fig. 18).

Diam. base 8, PH 2; import.

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<sup>&</sup>lt;sup>25</sup> Helsen 1978: basin TC68.1108. Other comparisons for the decorative motifs in Thorikos are mentioned and illustrated in the article: TC63.825, TC66.293, TC66.294, TC68.613a, TC68.534, TC70.159, TC70.161, TC75.24. A fragment of a pithos decorated with the aid of the same seal has been published from the Kythnos Survey, Mazarakis Ainian 1995, 200-201, fig. 45,7; Mazarakis Ainian 1996, 271-272, fig. 29; Mazarakis Ainian 1998, 375-376. We thank the author for kindly providing the full bibliographical references.

<sup>26</sup> Mazarakis Ainian (see previous footnote) suggested that the seal with which the Thorikos basin and the Kythnos pithos had been decorated originated in Kythnos, given the sharpness of the details in the fragment found there. This does not contradict the findings of De Paepe, since the geology of Kythnos may well be related to that of southeastern Attica, or the seal may have travelled from Kythnos at a later stage.

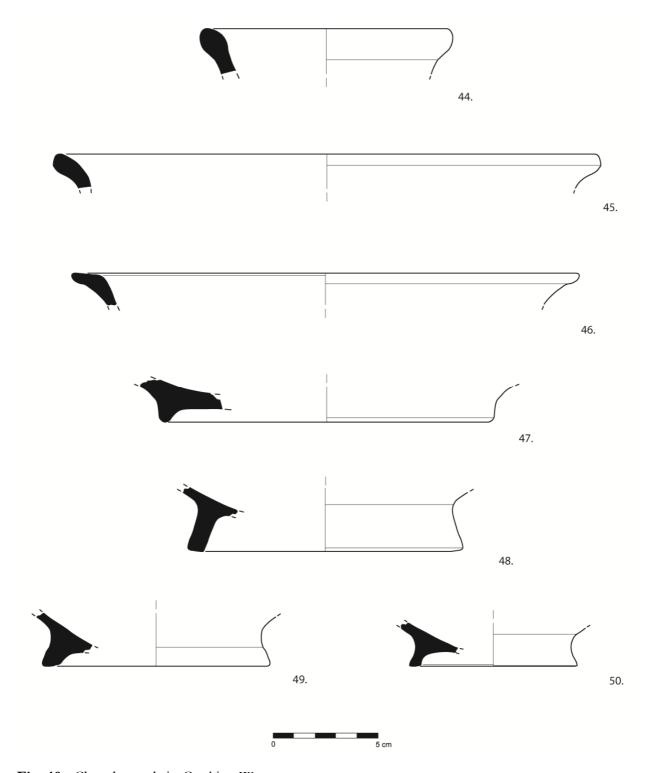


Fig. 18. Closed vessels in Cooking Ware.

The context from Thorikos mentioned above (with **Cat. 44-45**) also yielded a good parallel for the base of **Cat. 47** (Spitaels 1978, 82-83, fig. 40,65: TC73.95). With its base diameter of *ca.* 18cm, it also comes close in dimensions.

The high ring foot of **Cat. 48** most probably is to be attributed to a hydria, as e.g. the piece from the Athenian Agora (*Agora* XII, 200-201, 348, pl. 71, fig. 17, no. 1596), dated to *ca.* 425-400 BCE, and in Thorikos the hydria from a possible jar burial in the

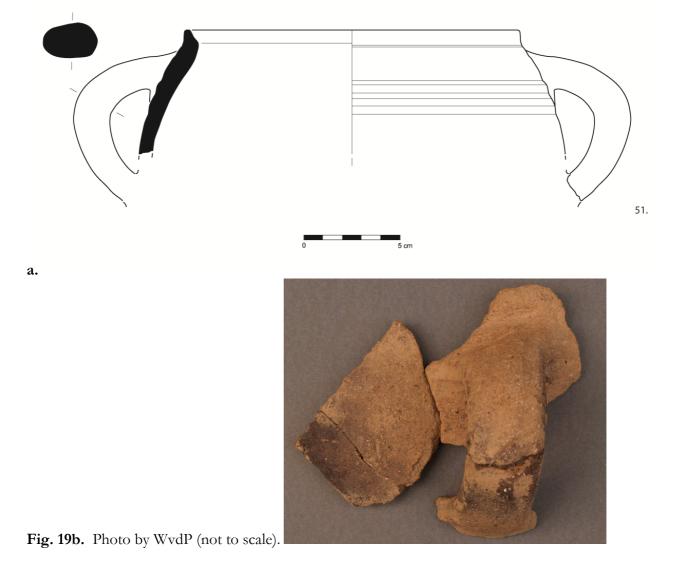
Theatre necropolis (TC85.8; Mussche 1998, 173-174, figs. 189-190). **Cat. 49-50** find less convincing parallels in the published record, although the ring foot of a kados in the Athenian Agora probably dated to 500-480 BCE (*Agora* XII, 202, pl. 72, fig. 17, no. 1603) is reminiscent.

#### Late Antique cooking pot

Cat. 51: TC10.160 (context T10-15-1), 4 joining rim fragments with handle (Fig. 19a-b).

Diam. rim 16, PH 9, handle section 1.8x2.7; import; secondarily burned on lower part, from the middle of the handle down.

The cooking pot does not find any parallel in the published repertoire of cooking vessels of Late Archaic to Early Hellenistic date in Thorikos, neither morphologically nor from a material point of view. It may belong to a class of cooking pots of the 'Corinth/Mitello' type, that seem to have been produced in the Otranto region (Arthur 2010, 80-81, 85, fig. 5), but apparently also in Athens (Saraga 2004). These date to the 7th and 8th centuries CE, but may have started already in the late 6th century CE.<sup>28</sup>



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<sup>28</sup> Laboratorio di Archeologia Medievale s.d.

#### Table amphorae

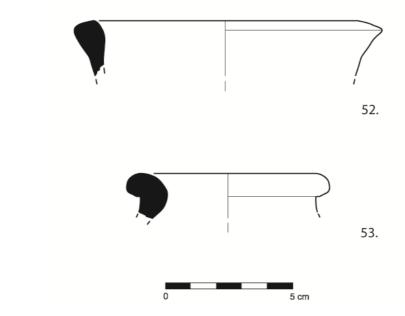
Cat. 52: TC10.69 (context T10-5-2), 1 rim fragment (Fig. 20).

Diam. rim 12, PH 2.1.

Cat. 53: TC10.75 (context T10-5-2), 1 rim fragment (Fig. 20).

Diam. rim 8, PH 1.7.

The rim shape of **Cat. 52** finds a good parallel in a table amphora from the Athenian Agora (*Agora* XII, 187, 337, no. 1445, fig. 12, pl. 60) found in a context of 500-480 BCE. Although that one is painted on the inside and even on the exterior of the rim, it appears that many examples are unpainted as the present one from Thorikos. For the other rim, **Cat. 53**, no good published parallel could be found.



#### Fig. 20.

#### <u>Olpe</u>

Cat. 54: TC10.74 (context T10-5-2), 1 rim fragment (Fig. 21).

Diam. rim 6, PH 0.8.

The rim appears to have belonged to an olpe, like several ones that have been published from the Athenian Agora (*Agora* XII, 77-78, 254, nos. 252, 260, 264, fig. 3, pls. 12-13), dated to *ca.* 550 and 500 BCE respectively.

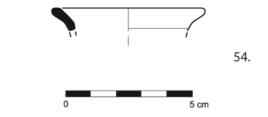


Fig. 21.

## Jugs

Cat. 55: TC10.65 (context T10-5-2), 1 base fragment (Fig. 22).

Diam. base 12.4, PH 1.7.

Cat. 56: TC10.116 (context T10-8-2), 1 handle fragment (Fig. 22).

PH 8.8, handle section 1.4x3; import?

Cat. 57: TC10.123 (context T10-8-2), 4 joining rim fragments with handle root (Fig. 22).

Diam. rim?, PH 8, handle section 1.2x2.5.

Cat. 58: TC10.158 (context T10-15-1), 1 handle fragment (Fig. 22).

PH 4.7, handle section 1.1x3.

Cat. 59: TC10.178 (context T10-17-4), 1 base fragment (Fig. 22).

Diam. base 4, PH 3.7; local?

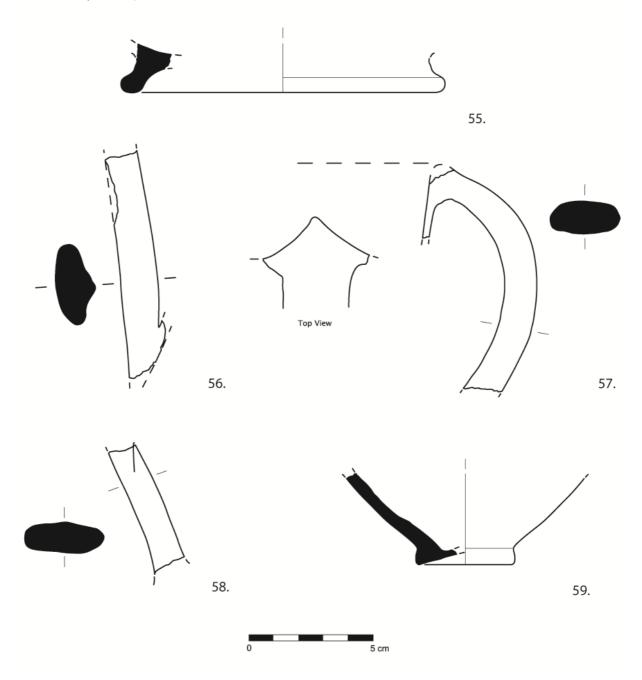


Fig. 22. Jugs in Plain Ware.

A good morphological parallel for **Cat. 55** would be offered by a lagynos foot from the Athenian Agora (*Agora* XXIX, 231, 397, no. 1550, fig. 93, pl. 120), dated to between 50 BCE and 50 CE. This chronology does not, however, correspond to any of the other fragments found in the cistern fill, so an earlier parallel is more likely. The high foot of a Cooking Ware jug in the Athenian Agora is comparable; it is dated by its context in the years 520-480 BCE (*Agora* XII, 205, 351, no. 1641, fig. 17, pl. 75).

The handle fragments **Cat. 56** and **Cat 58** may have belonged to several types of jugs of the Archaic or Classical periods. Good parallels for **Cat. 57** with its typical handle spur may be found in some trefoil mouth jugs from the Athenian Agora (*Agora* XII, 205, 351, nos. 1626, 1629, fig. 14, pl. 74), dated to 340-310 and 325-300 BCE, respectively.

A parallel for **Cat. 59** may be found in the base of the trefoil mouth jug from the Athenian Agora (*Agora* XII, 205, 351, no. 1626, fig. 14, pl. 74), dating to 340-310 BCE and already mentioned with **Cat. 57**. This base, however, is broader.

#### Basin or mortar

Cat. 60: TC10.57 (context T10-5-2), 1 rim fragment (Fig. 23).

Diam. rim ca. 40, PH 1.7; coarse clay; red wash on entire surface; import?

Cat. 61: TC10.142 (context T10-11-1), 1 base fragment (Fig. 23).

Diam. base 19, PH 5.9; coarse clay; import.

For **Cat. 60** one may suggest that it belonged to a basin, although no exact parallel could be found within the material presented in *Agora* XII. The lekane rim no. 1827, reused as an ostrakon for Hippokrates of 482 BCE, is comparable but has a definitely more elongated tendency (*Agora* XII, 214, fig. 20). The heavy base of a mortar or basin **Cat. 61** finds no convincing parallel in *Agora* XII.

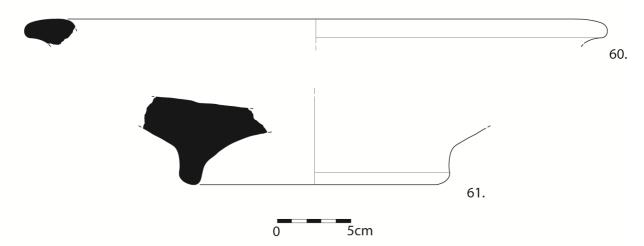


Fig. 23.

#### Rectangular basin or drain/water channel

Cat. 62: TC10.52 (context T10-5-2), 1 base fragment (**Fig. 24**).

PH 4.2, preserved width 13.4; coarse clay; roughened on underside; calcareous concretions on inside.

The base fragment may either have belonged to a terracotta drain or water channel, which would have been perfectly at home in the area of a cistern, or to a terracotta basin, like one encountered as sarcophagus for a child burial in the West Necropolis

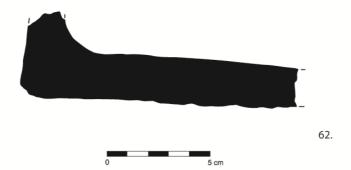


Fig. 24.

of Thorikos (Bingen 1967b, 55, fig. 67; TT65.16). The latter container has been tentatively dated by the excavator to after 300 BCE. A terracotta water channel has been found in the fill of a mid-5th century BCE well in the Athenian Agora (Boulter 1953, 112, cat. 192). Unfortunately, it has not been illustrated.

#### **Mortar**

Cat. 63: TC10.114 (context T10-8-2), 1 rim fragment with spout (Fig. 25).

Diam. rim 30, PH 2.5; length spout 7.4; import.

Mortars are part of the standard household pottery and from the 5th century BCE on were predominantly of Corinthian manufacture, exported to Athens and the rest of Attica. Although the rim has not been preserved, some clues as to the dating may be grasped by the specific shape of the spout, which has straight sides and is not yet of the 'fluked spout' versions that are generally considered to be a late feature (to within the 4th century BCE). In combination with the fabric that probably is of the (Corinthian) 'Sandy Class' type described in *Agora* XII (pp. 37, 222), and is less typical than the standard Corinthian fabric also used with louteria and the Corinthian A amphorae, one may arrive at a date in the 5th century BCE, probably the second or 3rd quarter of the 5th century BCE.

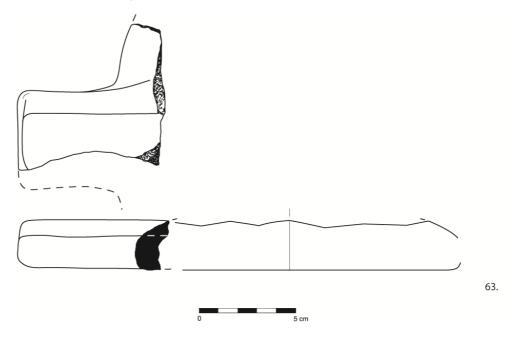


Fig. 25.

<sup>&</sup>lt;sup>29</sup> Generally on mortars, *Agora* XII, 221-223, fig. 16, pls. 90-92, nos. 1884-1921; for the present piece, cf. esp. nos. 1904 and 1912.

#### <u>Amphorae</u>

The finds from the cistern do not represent the variety of amphora types known from Thorikos (see P. Monsieur, in: Docter et al. 2010, 49-51). Archaic amphorae are quasi absent and there is a relative poverty of Classical amphorae, although these normally abound in almost every zone of the site. This contrasts with the rather high proportion of Late Roman and Early Byzantine amphorae. Within the surprising low number of amphorae from the Archaic and Classical periods we still find some of the most representative examples of the Lesbian/Aiolian and Chian types ('old style' and Late Classical), the groups of ring-toes and mushrooms of possible different origins (Northern Greece, Samos, coast of Asia Minor?). Some other main types as Chios 'new style', Corinthian A and B, and Mende are missing in the sample that has been studied to date. Thasos, which is generally not well represented on the site, has not been identified either. Besides these well-known types, the site of Thorikos as a whole yields a whole range of less well defined Archaic and Classical amphora types (e.g. from Klazomenai and Peparethos?), some of which one might have expected to be present in the cistern. There seems no presence of Hellenistic or Italic (neither Republican nor Early or High imperial) amphorae.

Most striking is of course the occurrence of Late Imperial and Early Byzantine amphorae. This points again, as has already been noted in previous publications, to a certain importance of Thorikos in Late Antique and Early Medieval times. There can be little doubt that this had to do with a resumption of mining activities, as the discovery of more than 60 lamps at the entrance of Mine no. 3 proves (Butcher 1982). Most probably these activities were concentrated on the extraction of lead. Lamps, amphorae and Cooking Ware were also recovered at other spots on the site, in different parts of the living quarters and on the top of the Velatouri hill (for an overview see Monsieur 2008). There was also a renewed activity in this period in the surroundings of Thorikos, as well as in the adjacent deme of Atene, as became clear from the finds of the Belgian and German surveys (Vanhove 1994; Lohman 1993). Some globular amphorae, one maybe from Cretan origin, turned up in Tower Compound 1 (Spitaels 1978, 103-105 and fig. 60-63; cf. Poulou-Papadimitriou, Nodarou 2007, esp. fig. 6, no. 14). Late Roman amphorae types 1 and 3, carrying wine from Cilicia and the region of Ephesos respectively, were recognized in the sectors of the Industrial Quarter and the Theatre Necropolis (Monsieur 2008 and unpublished). Up till now, no North African amphorae have turned up in Thorikos, although a spike and some African Red Slip Wares were picked up in the survey of Atene (Lohman 1993, CH15-53, CH-45 and pl. 7-8). Palestinian amphorae (LRA 4 and 5) were also not noticed in the cistern fill.

Unfortunately, due to the fact that most fragments are mere wall sherds, the finds in Cistern 1 remain for the better part unidentified. Only the Late Roman 1 and 2 amphorae could be identified with certainty. The first type was recognized by its specific fabric, the second type, of Aegean origin, by the peculiar profile of the rim. Late Roman 3 is presumed, but although a little micaceous, the composition of the

fabric remains unclear. The Cretan origin of two globular amphorae seems a reasonable identification. If the Archaic and Classical amphora fragments may be considered as residual material that slipped in the cistern after the it went out of use, it could be postulated that the Late Antique and Early Medieval amphorae reflect a renewed period of use of the cistern. As there can be no doubt about the resumed mining activities in this period, this hypothesis is at least worth considering (but see also the conclusions and Van Liefferinge et al., elsewhere in this volume). The amphorae, for instance, could have been of secondary use, to carry water for the miners and the labourers, or oil for the lamps. Yet, in the light of the possible late use of the cistern some serious problems of chronology appear. Indeed, the evidence of a coin hoard dated to 365-379 CE (discovered in tomb 519 of the Theatre Necropolis: Bingen 1990), the lamps and most of the amphorae point to a date between the 4th and 6th centuries CE, whereas at least one globular amphora must date from the 7th or 8th century CE if we follow J. Haves in the dating of some parallels from the excavations of the Polyeuktos church at the Saraçhane site in Constantinople (Hayes 1992, 66, 71, figs. 23, 57). Some finds from the survey of the deme of Atene also suggest that it outlived the end of Antiquity, undermining the idea that Thorikos and different sites of South-Attica came to an end with the Slavic incursions around 580 CE. It seems that Constantinople still kept an eye on this region.

#### Lesbian/Aiolian

Cat. 64: TC10.143 (context T10-8-3), 1 upper part of handle associated to wall (Fig. 26).

PH 7.8, handle section 2.5x2.5; 'Lesbian grey'.

Cat. 65: TC10.177 (context T10-17-4), 1 neck fragment with upper part shoulder (Fig. 26).

Diam. neck 11, PH 6.3; 'Lesbian grey'.

If the precise origin(s) of these amphora group still remains a matter of debate, the concentration of finds on the island and the results of archaeometric research make an attribution to Lesbos very plausible. However, for the same reasons the Aiolian coast can be considered as another possible region of production. Archaeologically, the production of Lesbian amphorae is attested from the 7th to 4th century BCE, although later texts still refer to Lesbian wine production. Lesbian amphorae are, if not abundant, well represented in Thorikos (Hackens 1967a, 99-100, figs. 106-107; Mussche 1967b, 68, fig. 91). The bow of the profile of the handle fragment **Cat. 64** could point to a date in the second half of the 5th century BCE (cf. Clinkenbeard 1982, pl. 70-71, no. 7). Concerning the second fragment **Cat. 65**, the large diameter of the neck and the low inclination of the shoulder seem to refer to a 7th-6th-century BCE typology (cf. Clinkenbeard 1982, pl. 69, 70-71, Nos. 1-3; Dupont 1998, fig. 23.4).

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<sup>&</sup>lt;sup>30</sup> Clinkenbeard 1982; Roberts, Glock 1986; Dupont 1998, 156-163; Lawall 1995, 196-217; Fantalkin, Tal 2010.

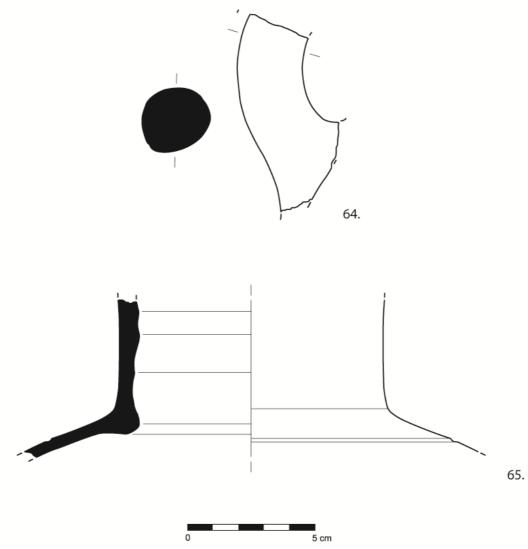


Fig. 26. Lesbian / Aiolian amphorae.

#### Chian

Cat. 66: TC10.35 (context T10-4-1), 1 handle fragment lower part (Fig. 27).

PH 7.5, handle section 2.5x4.2; fine light brown fabric.

Cat. 67: TC10.22 (context T10-5-1), 1 neck fragment with handle attachment (Fig. 27).

Diam. neck 13, PH 8.6, handle section 2.9x4.3; reddish yellow fabric (5 YR 6/6) with fine white inclusions.

Chian amphorae, especially the ancient types (old style type, bulging-neck type; Grace 1979, figs. 44-45; Lawall 1995, 88-103), are very common in Thorikos (Bingen 1967a, 42-43 and fig. 34-36). **Cat. 66** belongs to this type as becomes clear from the fabric, measurements, section and the light curve of the profile. The fragment does not allow for a more precise chronology than 6th or 5th century BCE, but before *ca.* 425 BCE when the new style or straight-neck type appeared. The fabric, the tubular profile of the neck and the upward position and the section of the handle of **Cat. 67** leave little doubt as to the later type with triangular (or conical) body profile, to be dated in the second half of 4th century BCE.<sup>31</sup>

<sup>&</sup>lt;sup>31</sup> For bibliography and other finds in Thorikos and elsewhere see Monsieur 1990.

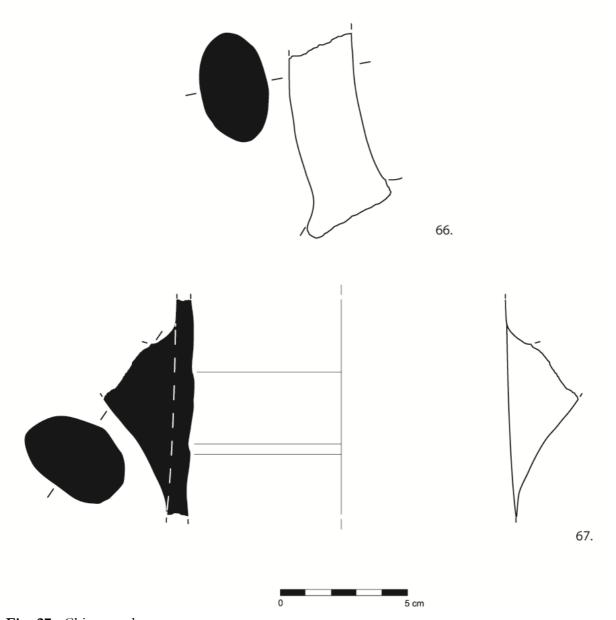


Fig. 27. Chian amphorae.

Samian? North Greek? Asia Minor coast and islands?

Cat. 68: TC10.64 (context T10-5-2), 1 rim fragment (Fig. 28).

Diam. rim 18, PH 3; white deposit on in- and outside.

Cat. 69: TC10.157 (context T10-15-1), 1 rim fragment (Fig. 28).

Diam. rim 16.5, PH 5.1.

Cat. 70: TC10.12 (context T10-3-2), 1 rim fragment (Fig. 28).

Diam. rim 20, PH 3.6; secondarily burned.

Amphorae with mushroom rims seem to appear from the last quarter of the 5th century BCE on and belong to a wide variety of production regions: North Greece, Klazomenai, Knidos, Rhodes, Samos *etc.*<sup>32</sup> A Samian origin for **Cat. 68** is tentatively proposed after comparing the fragment with better preserved, but unpublished

<sup>32</sup> For discussion and examples of mushroom rim types, see further Nørskov 2004; Blondé, Muller, Mulliez 1991, 229-230; Grandjean 1992, 573, no. 103.

examples from Thorikos and following the identification of this type by V. Grace.<sup>33</sup> 4th century BCE dates match with the chronology of the (unpublished) Thorikos contexts.

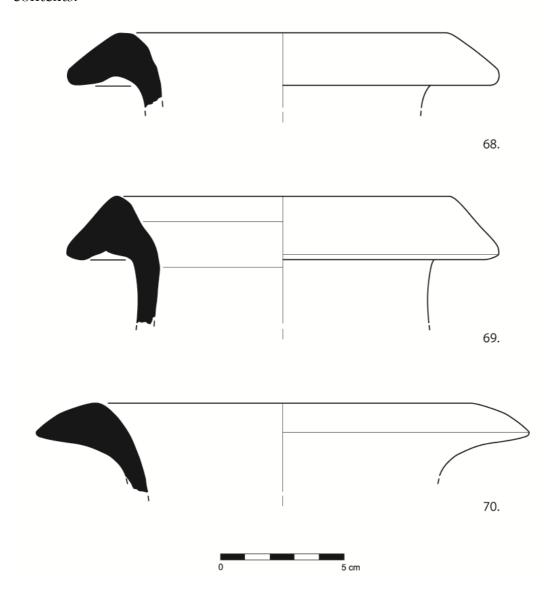


Fig. 28. Amphorae from Samos, northern Greece, Asia Minor coast or islands?

North Greek?

Cat. 71: TC10.97 (context T10-8-2), 1 base fragment (Fig. 29).

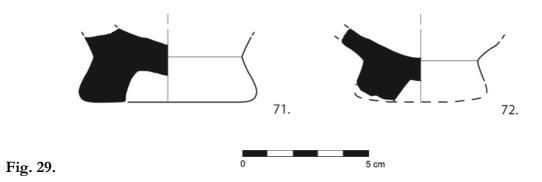
Diam. base 7, PH 2.8.

Cat. 72: TC10.98 (context T10-8-2), 1 base fragment (Fig. 29).

Preserved diam. base 5, PH 2.8.

The ring-toes of **Cat. 71** and **72** are most probably North Greek, but a Samian origin remains possible (Lawall 1995, 116-175, 176-195, Solokha I form: 216-232; Grandjean 1992, 547-548, no. 19). It is hard to associate them with complete examples; apparently, they belonged to amphora types presenting a globular body, with simple

<sup>&</sup>lt;sup>33</sup> Grace 1971, 81-82, pl. 15, no. 13; cf. type 2 of M. Lawall in Nørskov 2004; see also Solokha I form in Lawall 1995, 216-213, figs. 88-93; cf. *infra* ring-toes.



thickened rims or mushroom rims, as some complete examples found in the necropoleis of Thorikos testify.34 A general date in the 5th century BCE or the beginning of the 4th century BCE may be proposed.

#### Indeterminate Classical amphorae

Cat. 73: TC10.99 (context T10-8-2), 1 rim fragment with upper part handle (Fig. 30). Diam. rim 12, PH 6.6, handle section 2.5x4.1; orange brown fabric with white inclusions. Cat. 74: TC10.121 (context T10-8-2), 1 neck fragment with handle attachment (Fig. 30). Diam. neck 28.5?, PH 6.8, handle section 3x5.8.

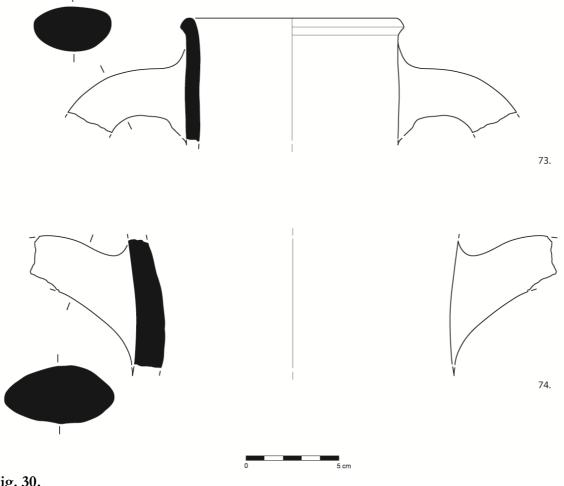


Fig. 30.

<sup>&</sup>lt;sup>34</sup> Bingen 1968, 63, figs. 50-51 (West Necropolis, tomb 3: ca. 500-450 BCE); Hackens 1967a, 83-84, figs. 75-76 (Theatre Necropolis, tomb 1: ca. 410-400 BCE, Solokha I form?); Bingen 1969, 110, fig. 122 (West Necropolis, tomb 81: ca. 475-450/440 BCE); Bingen 1984, 142-143, figs. 87-88: ca. 500-450 BCE).

Cat. 73 may be related to the Chian new style or straight-neck type, dated to the last quarter of the 5th and the first half of the 4th century BCE (Grace 1979, fig. 45; Lawall 1995, 88-103). Another possibility, based on both shape and fabric, is an amphora of East Greek origin as proposed for some finds in Thasos (Blondé, Muller, Mulliez 1991, 233-234, esp. no. 59, fig. 9).

#### Late Roman Amphora 1 (LRA 1)

Cat. 75: TC10.50 (context T10-6-3), 1 wall fragment (Fig. 31).

Max. diam. 39, PH 5.7; white deposit on outside; import.

Cat. 76: TC10.122 (context T10-8-2), 2 joining wall fragments (Fig. 31).

Max. diam. 29, PH 3.6; green-yellowish clay; import.

Cat. 77: TC10.149 (context T10-8-3), 6 wall fragments, 2 of which joining (Fig. 31).

Max. diam. 23, PH 9.2; import.

The fabric assigns at least two wall fragments to the Late Roman Amphora type 1. **Cat.** 77 belongs probably also to this group. In 1963, the first year of the Thorikos excavations, a substantial fragment (rim, handle, wall up to the middle) of a LRA 1 turned up when clearing the Late Classical Washery 1 in the Industrial Quarter (unpublished, cf. Monsieur 2008). Probably another fragment was found on the Velatouri (unpublished, cf. Monsieur 2008). The fabric enabled the identification of the production centres of these wine amphorae in southern Cilicia (Empereur, Picon 1989, 236-243). This attribution is confirmed by the discoveries of several workshops (for an overview, see Pieri 2005, 80), the most impressive complex having been excavated in Sebaste Elaioussa by an Italian team (Burragato *et al.* 2007). The combination of sub-types (LRA 1A, LRA 1A transition, LRA 1B) and chronology as presented by D. Pieri is difficult to follow, however (Pieri 2005, 69-85, pls. 1-22). Yet this is not relevant for the fragments of Cistern 1, but it could have been for the better preserved fragment of Washery 1. Only a general date from the second half of the 5th to the middle of the 7th century CE may be proposed.

#### Late Roman Amphora 2 (LRA 2)

Cat. 78: TC10.176 (context T10-17-3), 2 joining rim fragments, broken off at transition to handle (**Fig. 32a-b**).

Diam. rim 10, PH 7.3; coarse clay; import.

This is the first time a Late Roman Amphora 2 occurs in Thorikos. Following the typology of D. Pieri, the rim fragment belongs to the type LRA 2B (Pieri 2005, 85-93), commonly attested during the whole 6th century CE. The workshop of Kounoupi in the southern Argolid and some presumed workshops in Chios and Samos confirm a widely spread production in the Aegean. Different arguments, e.g. the spherical form and the funnel rim (cf. the earlier Baetican Dressel 20 and Haltern 70 amphorae), suggest olive-oil and eventually olives as its principal contents (Pieri 2005, 85-93; Swan 2004).

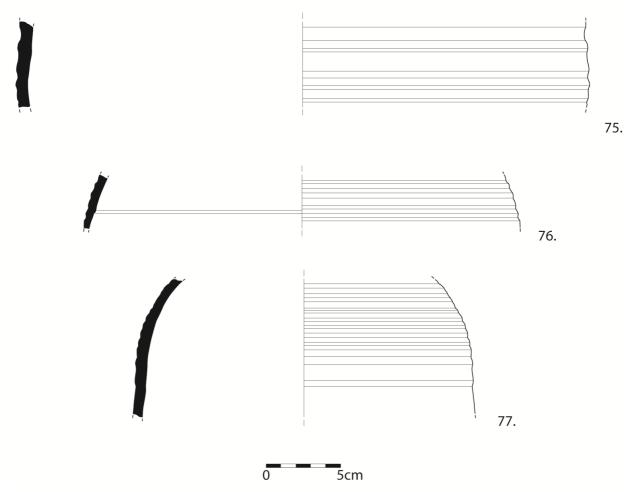
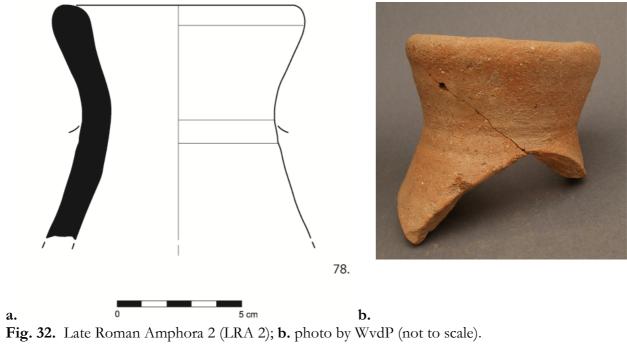


Fig. 31. Late Roman Amphora 1 (LRA 1).



Late Roman Amphora 3 (LRA 3)?

Cat. 79: TC10.150 (context T10-8-3), 1 wall fragment (Fig. 33).

Max. diam. 37, PH 4.2; import.

The Theatre Necropolis revealed the upper part of at least one Late Roman Amphora 3 type during the 1976 excavations (unpublished, cf. Monsieur 2008). The wall fragment found in Cistern 1 is tentatively assigned to this type because of some resemblance with the peculiar fabric of this wine container (although not so micaceous), considered as originating from the Ephesos region and the Meander valley (Robinson 1959, 17; Pieri 2005, 94-101). A general chronology in the 5th-6th centuries CE may be proposed.

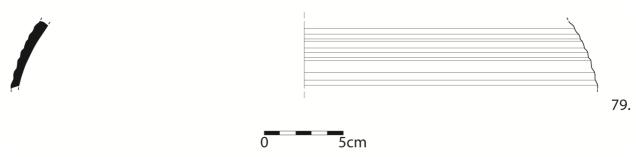


Fig. 33. Late Roman Amphora 3 (LRA 3).

Cretan globular amphorae?

Cat. 80: TC10.19 (context T10-5-1), 2 joining rim fragments with slightly ribbed handle (Fig. 34a-b).

Diam. rim 8, PH 10.2, handle section 2.2x3.6; sandy clay with sandy yellowish inclusions.

Cat. 81: TC10.156 (context T10-15-1), 1 neck fragment with handle root (Fig. 34a).

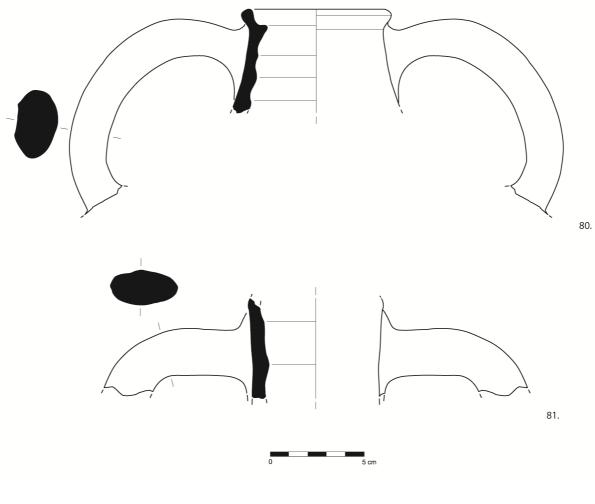
Diam. neck 7, PH 5.3, handle section 1.9x3.5.

**Cat. 80** is a remarkable fragment from a typological point of view. While the specific bow of the handle deserves attention, one is especially struck by the profile of the rim with its peculiar gutter or gully device at the inside (apparently for an *operculum?*). Because of this device and the profile in general, there can be little doubt that we have to associate this type with the later globular amphorae as distinguished by J. Hayes amongst the material revealed by the excavations of the Polyeuktos church (Saraçhane) in Constantinople (Hayes 1992, 66, 71, figs. 23, 57). The chronology points to the 7th-8th centuries CE, which seems to be confirmed by the finds of the Crypta Balbi in Rome and in Ostia. Some considerations about the later evolution of globular amphorae derived from the LRA 2-type in combination with some specific characteristics of Cretan amphorae from the 2nd and 3rd centuries CE on, strengthen the attribution of this fragment to a Cretan origin. In this manner (apart from the rim) we would like to classify also **Cat. 81** within the Cretan group, as well as a find from Tower Compound 1 in the Industrial Quarter (Spitaels 1978, 103, no. 136, figs. 62-63).

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<sup>&</sup>lt;sup>35</sup> Villa 1994, 354-356, 410-413, with bibliography, pl. 4, with no. 7 as an interesting parallel, pl. 11; cf. also Böttger 1974, 131-132, fig. 1, Hc for the Danube fortress of Iatrus.

<sup>&</sup>lt;sup>36</sup> Portale, Romeo 2000; Yangaki 2007; Pieri 2005, 89; cf. Marangou-Lerat 1995, for the earlier types.



a.

b.



Fig. 34. Cretan globular amphorae?; b. Cat. 80, photo by WvdP (not to scale).

#### Indeterminate Late Antique amphorae

Cat. 82: TC10.58 (context T10-5-2), 1 wall fragment (Fig. 35).

Max. diam. 42, PH 5.5; import.

Cat. 83: TC10.59 (context T10-5-2), 1 wall fragment (Fig. 35).

Max. diam. 25.5, PH 5.8; import.

Cat. 84: TC10.120 (context T10-8-2), 1 wall fragment (Fig. 35).

Max. diam. 21, PH 7.3; import?

Cat. 85: TC10.153 (context T10-15-1), 1 wall fragment (Fig. 35).

Max. diam. 18, PH 8.5; import.

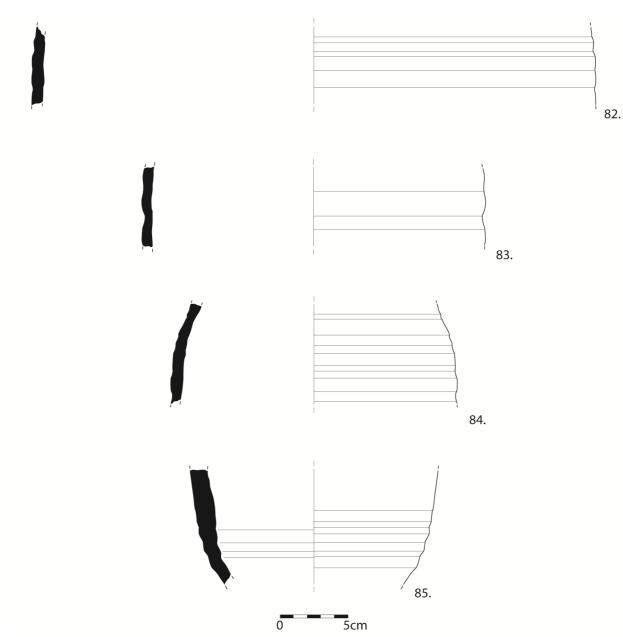


Fig. 35. Indeterminate Late Antique amphorae.

#### Indeterminate amphorae

Cat. 86: TC10.115 (context T10-8-2), 1 rim fragment with upper part of handle (Fig. 36). Diam. rim?, PH 5.5, handle section 1.5x3; coarse clay with many black and white inclusions. Cat. 87: TC10.67 (context T10-5-2), 1 rim fragment (Fig. 36). Diam. rim 8, PH 2.3.

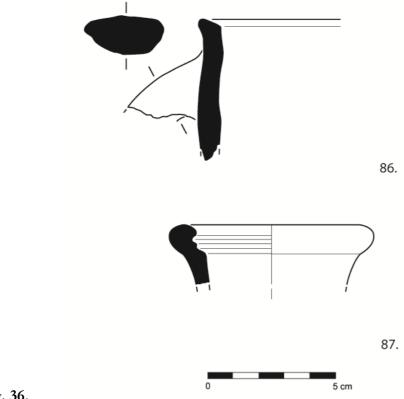


Fig. 36.

Neither the state of preservation, nor the fabric does allow any identification of **Cat. 86**. The peculiarly indented profile at the inside of the rim of **Cat. 87**, however, is remarkable. This element and the dimensions could point to an Early Byzantine amphora.

#### Pithos

Cat. 88: TC10.154 (context T10-15-1), 1 rim fragment (Fig. 37).

Diam. rim 54, PH 6.3; coarse clay.

Cat. 89: TC10.175 (context T10-1-2), 1 rim fragment (Fig. 37).

Diam. rim 36, PH 7.9; coarse clay; local?

Pithoi have received comparatively little attention in the past, which is definitely undeserved, if only because in Antiquity they may have constituted one of the most expensive categories of ceramic vessels. They are extremely difficult to date, because of the lack of good numbers of published examples and in view of their long periods of use (see now Giannopoulou 2010).

Rim fragment **Cat. 88** finds some comparissons in the published pottery repertoire of Thorikos.<sup>37</sup> Closest in shape is fragment TC76.98, tentatively dated to the second quarter of the 5th century BCE, with a rim diameter of 37cm (Van Hove 2006, 80-81, 210, figs. 283-284, cat. 135). A smaller pithos, re-used as a jar burial of a child dated to around 500 BCE, shows a rim shape that is more or less comparable (Mussche 1998, 78, 174, figs. 191-192, cat. 98: TC85.21). Its rim diameter is merely 29cm. The rather outturned, sometimes flat tendency of the rim is to be be found in other pithos rims

<sup>37</sup> The study of Attic pithoi (Bogess 1979) has, unfortunately, not been accessible to us.

of the Late Classical and Hellenistic periods: pithoi of the 4th century BCE and the Hellenistic period from Eleia (Giannopoulou 2010, 201, fig. 13) or a Hellenistic pithos from Corinth, dated to *ca.* 400-200 (contextually untill 146) BCE, provided with a rim diameter of 42cm (Bogess 1970, esp. figs. 1-2; Giannopoulou 2010, 207, fig. 31).

The rounded rim of **Cat. 89** finds no exact parallel in the published record, although generally the thick rounding of the rim seems to occur more often in examples post-dating the Classical and Hellenistic periods, even as late as the 19th century CE (Giannopoulou 2010, 207, fig. 33).

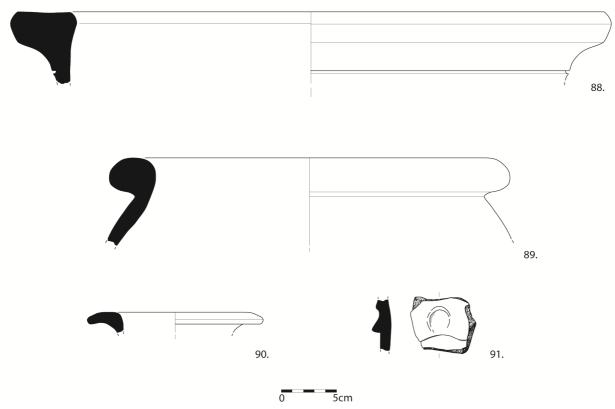


Fig. 37. Pithoi.

#### Pithos?

Cat. 90: TC10.42 (context T10-5-2), 1 rim fragment (Fig. 37).

Diam. rim 16, PH 1.7.

Cat. 91: TC10.155 (context T10-15-1), 1 wall fragment with handle root (Fig. 37).

Diam. wall?, PH 4.6.

The attribution of the rim **Cat. 90** to a precise shape remains relatively uncertain, since the particular form may be found with vessels of various functions, e.g. with basins. A deposit of the second and third quarter of the 5th century BCE in the Athenian Agora has yielded a similar rim profile from a hydria in Cooking Ware (Rotroff, Oakley 1992, 29, 121, fig. 26,329, pl. 58,329). Still, in view of the relatively small mouth opening, it seems not unlikely that we are dealing with a pithos mouth, as the one published from the South Necropolis of Thorikos (TC63.1063; Servais 1968, 52, figs. 26-27). It has a rim diameter of 15cm and is dated to the period 640-620 BCE by an ovoid Corinthian aryballos of the Tor Pisana Workshop.<sup>38</sup>

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<sup>&</sup>lt;sup>38</sup> Neeft 1987, 186-187, Subgroup D, missing from List LXXX on p. 338.

# Pessoi (counters, gaming pieces and the like)

Cat. 92: TC10.77 (context T10-5-2), 1 wall fragment of amphora (Fig. 38).

Dimensions 5.1x5.3; local?

Cat. 93: TC10.146 (context T10-8-3), 1 wall fragment of amphora (Fig. 38).

Dimensions 5.5x5.5.

The two rounded pottery sherds, neatly chipped around the edges, have very similar dimensions. Such objects of secondary use have conventionally been interpreted as gaming pieces or small lids.<sup>39</sup> It is not to be excluded, however, that these objects served other, commercial purposes. One could think of their function as casting counters (German: 'Rechenpfennige'), known from the Roman period and still in use in Europe during the Medieval period (Barnard 1917). These were used on a counting board to make simple addition and subtraction sums. The house-made objects would have played a role in daily commercial activities, like street markets etc. Ceramic disks from contexts of the Roman to Byzantine period have been similarly interpreted by the excavators of the British mission in Carthage (Henig, Fulford 1984, 251-252, fig. 96). Their graphics clearly suggest a preferential diameter for these disks in the range of 2.5-4.0cm.

Recently, J. Papadopoulos added a new interpretation to the corollary of possible functions, that of 'convenient' wipers (in: Lawall et al. 2002, 423-427, esp. with fig. 7). Although this usage seems very convincing for the many ostraka, that would have received in this manner a third life, conveniently showing an equal 'appreciation' for the politicians inscribed on them, it would in most cases be fairly cumbersome to cut nice round disks for such trivial and repetitive human actions. Unless, of course, the procedure involved a thorough cleaning of the disk after every wiping. One wonders, moreover, whether the ancient Greeks wouldn't rather have preferred other, more oval shapes?

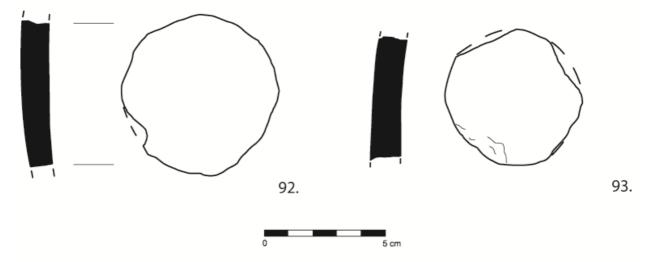


Fig. 38. Pessoi.

<sup>&</sup>lt;sup>39</sup> For Athens, Lawall *et al.* 2002, 423-425 with fig. 6. Also for Punic Carthage from the 7th century BCE on, one might cite several parallels, Docter 1997, 187, figs. 375-377, 422, 497; Docter 2007, 629, cat. 5349-5350.

### Tiles

Up to now, tiles have received little attention in the Thorikos publications. Among the illustrated exceptions is a rare fragment of a flat unpainted tile with a secondarily incised woman's head found in the remains of a funerary pyre in the theatre necropolis. The excavator has dated it to the 5th century BCE. The fact that the shape is indicated as 'flat' suggests it belongs to a Corinthian roofing system. One may mention also two equally flat tile fragments with identical stamps composed of three lines from House 1 in *insula* 11 (Room Q). The Thorikos database lists only 40 tiles on a total of 8336 entries, but this is hardly surprising given the general lack of attention paid to tiles in Classical Archaeology in the period when excavation took place in Thorikos (1963-1989).

The expectation that tiles would figure prominently in the excavated record of Thorikos can be substantiated by some rough figures given in an appendix by D. Vanhove (2006, 140-141). A large dump in Alley MC of square C4 i8 contained about 6000 sherds of the 5th century BCE. Of these, no less than 1020 (17%) were tile fragments. The composition is also remarkable: 950 fragments of flat tiles and only 70 of 'curved' ones. Pending further study, no more details are available.

The tile fragments found in the present cistern fill belong to both pan tiles and cover tiles of the Laconian roofing system, current in Greek domestic architecture (Wikander 1988, 209-211, figs. 3-4). Flat tiles of the Corinthian system are present in the fill, but have not been included in the present contribution since they did not occur in contexts studied in 2010.

One wonders where these large numbers of tiles were manufactured. Tile producing pottery workshops have been excavated in Attica, although dating to the Late Classical and Hellenistic periods: near Spata, dating to the late 4th to 2nd century BCE and in Argyroupoli dating to the 4th/3rd century BCE (Lohmann 1993, 43, n. 305; Lüdorf 2010, 155-156).

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Cat. 94: TC10.37 (context T10-5-2), 1 edge fragment (Fig. 39).
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PH 3.5; reddish glaze on top.

Cat. 95: TC10.54 (context T10-5-2), 1 edge fragment (Fig. 39).

PH 3.7; black glaze on top and on edge; local?

The two glazed tile fragments **Cat. 94-95** would seem to belong to fairly flat, concave pantiles with widths of more than 30cm. The fact, however, that only the convex sides of their surfaces have been glazed, shows that they were meant to function as cover tiles, rather than pan tiles. The variation in edge finishing suggests that they may have belonged to different production batches. One may refer to the production site of Phari (Thasos) for glazed pan tiles, found in a context of the first half of the 5th

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<sup>&</sup>lt;sup>40</sup> Mussche 1998, 76, 168, fig. 171, cat. 78 (TC78.27); Vanhove 2006, 108, 229, figs. 376-377.

<sup>&</sup>lt;sup>41</sup> Vanhove's (2006, 108) proposal to date the piece to the second quarter of the 5th century BCE on the basis of a confrontation with Attic figured wares seems to stretch the evidence too much.

<sup>&</sup>lt;sup>42</sup> Bingen 1990c, 151-153 (TE86.15, TE86.16). These stamps have not been included in the final publication of the graffiti, dipinti and stamps, Vanhove 2006.

<sup>&</sup>lt;sup>43</sup> See above, n. 12.

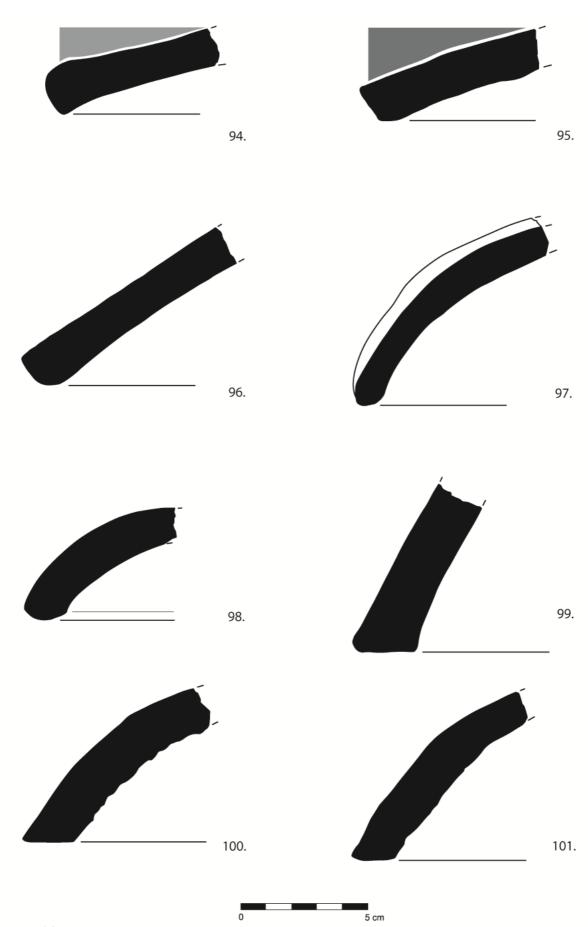


Fig. 39. Tiles.

century BCE, but there the concave, i.e. exterior surfaces had been covered with glaze (Perreault 1990, 203-205, figs. 2-3). The sole reconstructable tile from that production site had a length of 91.5cm; the widths are in the ranges of 39-41 and 35-37cm. The Stoa Gutter Well in Athens, dated to the period 490/480 BCE, contained a fully reconstructable glazed cover tile, of which the section is more semi-circular in shape than **Cat. 94-95**, more as with **Cat. 97-101** (Roberts, Glock 1986, 61-62, fig. 40, pl. 14). It has a length of 83.2cm. This length comes close to that stipulated by the well-known tile standard of the Athenian Agora: 2.5 Attic feet of 0.328cm = 82cm (Phillips Stevens 1950, 179, fig. 2, pl. 82,1). In that same publication, a pan tile (A938) and a cover tile (A1322) from the Agora excavations are illustrated (Phillips Stevens 1950, pl. 82,2). For both fragments presented here, one may tentatively suggest a date in the second half of the 6th and the first half of the 5th century BCE.

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Cat. 96: TC10.124 (context T10-8-2), 1 edge fragment (Fig. 39). PH 6.1.
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This unglazed tile fragment may have belonged to a pan tile (see discussion above, **Cat. 94-95**). Its date may be set in the second half of the 6th untill the late 4th century BCE.

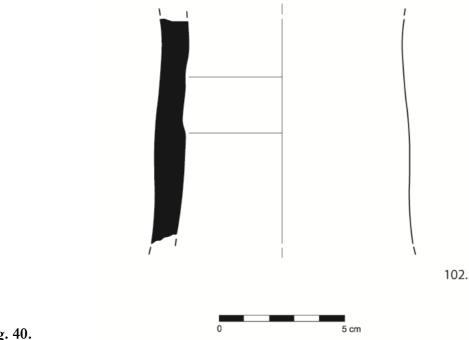
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Cat. 97: TC10.95 (context T10-8-2), 1 rim fragment with ridge at the end of the tile (Fig. 39). PH 7.6.
Cat. 98: TC10.53 (context T10-5-2), 1 edge fragment (Fig. 39). PH 4.9; local?
Cat. 99: TC10.23 (context T10-5-1), 1 edge fragment (Fig. 39). PH 6.6; reddish yellow (5 YR 7/6) clay with grainy structure.
Cat. 100: TC10.94 (context T10-8-2), 4 edge fragments, twice 2 joining (Fig. 39). PH 6.2; roughened on underside; import.
Cat. 101: TC10.148 (context T10-8-3), 2 edge fragments (Fig. 39). PH 6.6; roughened on underside.
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These five tile fragments seem to belong to conventional cover tiles in the Laconian system, more or less semi-circular in section. Cover tiles are smaller in width than pan tiles and normally of trapezoidal shape. Placed upon the roof, these tiles would cover the edges of two joining pan tiles, and their wider parts would be at the lower ends. A similar fully preserved cover tile (A1322) has been published from the Agora excavations (Phillips Stevens 1950, pl. 82,2). Also the production site of Phari (Thasos) has yielded similar cover tiles in a context of the first half of the 5th century BCE (Perreault 1990, 206-207, fig. 5). The ridge at the end of tile fragment **Cat. 97** suggests that it belongs to the wider lower end of the tile (cf. Perreault 1990, 207, figs. 4-5, pl. 26). Roughened concave sides of two of the fragments (**Cat. 100-101**) are encountered more often with such cover tiles, and would guarantee a better grip on the lower tiles. With pan tiles this principle is sometimes encountered on the convex, i.e. lower sides (cf. Perreault 1990, 204-205, fig. 3). The date of these tiles may be set in the second half of the 6th untill the late 4th century BCE.

# Water pipe

Cat. 102: TC10.96 (context T10-8-2), 1 wall fragment (**Fig. 40**). Diam. wall 10, PH 9; calcareous concretions on in- and outside.

Water pipes have been known rather well from 6th to 4th century BCE Athenian contexts. They are often semi-glazed, with the glaze applied in bands, and provided with joint tongues.<sup>44</sup> The present piece is smaller in diameter than most of the ones published from Athens that range between *ca.* 14 and 26cm, although smaller diameters of 11.5cm occur in 'Gruppe 4' of R. Tölle-Kastenbein (1994, 69) and of 10cm in a younger branch of the water channel of the Athenian Tholos (Tölle-Kastenbein 1994, 70). Moreover, **Cat. 102** seems to have been fully unglazed.



# Fig. 40.

#### Stone

Basalt mill stone

Cat. 103: TP10.152 (context T10-4-1), 1 rim fragment (Fig. 41).

Preserved width 12.8, PH 8.9, width of top edge 3.5.

The fragment belongs to a rectangular millstone as frequently used in the silver processing in the Laurion area.<sup>45</sup> The Museum of Lavrio has presently one on display at the entrance, several more in the garden and one on the inside. Their use may be grasped from the impressionistic reconstruction drawing made by C. Conophagos (see elsewhere in this volume, p. 73, fig. 18). Dating remains problematic: 6th to 4th century BCE.

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<sup>&</sup>lt;sup>44</sup> e.g. Boulter 1953, 112, pl. 41,192; Tölle-Kastenbein 1994; S. Marinakis, in: Parlama, Stampolidis 2000, 58; O. Zachariadou, in: Parlama, Stampolidis 2000, 154-155, figs. 7-8, p. 192, fig. 2; E. Lygouri-Tolia, in: Parlama, Stampolidis 2000, 222-223. See also Lang 1968.

<sup>&</sup>lt;sup>45</sup> In general on the role of mill stones in the process of silver extraction, see Conophagos 1980, 216-223; also Ardaillon 1897, 61; Tsaimou 1988; Tsaimou 2000, 115-116.

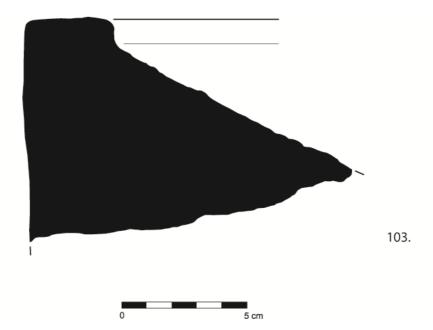


Fig. 41.

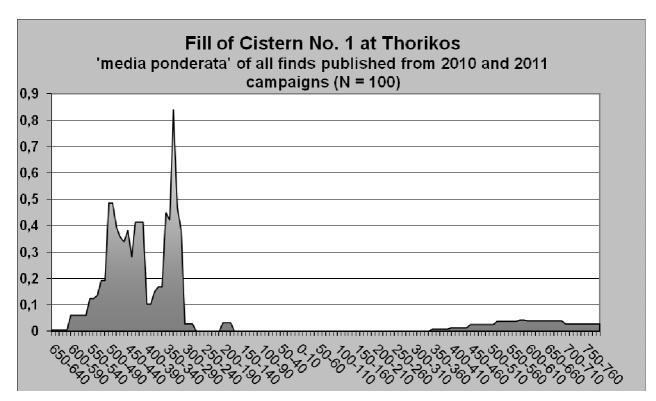
### Comment on the composition of the fill

In general, the fill of the cistern excavated in 2010 contains finds of two large chronological horizons. The majority of the finds published here (87%) originate in the previous activities that took place around the cistern, and most likely higher up the Velatouri. Only 13% of the finds may be attributed to the Late Antique phase, when the cistern was ultimately filled in (**Fig. 42**). Sherd size and the measure to which joins are encountered within the finds may play an important role in assigning material to one of the two major chronological horizons, especially in the case of chronologically less distinctive Plain, Cooking and Coarse Wares. It appears that the Late Archaic to Late Classical/Early Hellenistic material in the fill is much more fragmented, smaller and worn. The Late Antique fragments generally seem to be of larger sizes (cf. **Figs. 19a-b, 32, 34a-b**). It seems that several contexts with large numbers of animal bones (of relatively large sizes) belong exactly to this chronological horizon.

The Late Archaic to Early Hellenistic finds in the cistern's fill show two marked peaks: one comprising the 5th century and one the second half of the 4th century BCE, with a significant peak in the period 330-320 BCE (**Fig. 42**).

As to the Late Antique finds, one may note the fact that also in the northern part of Tower Compound 1 in *insula* 3 Late Roman amphorae have been found (Spitaels 1978, 103-105, figs. 60-63) in connection with possibly Late Roman domestic pottery, of which P. Spitaels mentions only two cooking pots. The amphorae are fairly well preserved and are clear evidence of a layer of abandonment. Judging from the description, the cooking vessels also seem to have been preserved with fairly large portions of their profiles, very much like the vessels discussed here (see **Cat. 51**, **Fig. 19a-b**). The amphorae (and presumably also the other finds) were found under a thick demolition layer composed of stones from the collapsed walls (Spitaels 1978, 106, fig. 64), very much as the situation encountered in Cistern No. 1.

<sup>&</sup>lt;sup>46</sup> Spitaels 1978, 103 with n. 45: TC68.719, TC65.766.



**Fig. 42.** Thorikos, Cistern No. 1. 'Media ponderata' of fill (published finds from 2010 and 2011 campaigns); prepared by R. Docter on basis of this report and that of S. Mortier, this volume.<sup>47</sup>

The Late Roman period in Thorikos has been cursorily treated in earlier publications. There is some evidence in the shape of lamps, amphorae and rock inscriptions and drawings, mainly in Mines nos. 3 and 4, *insula* 3 and the Theatre Necropolis, and mainly dating to the 5th century CE with some earlier material belonging to the 3rd/4th centuries CE and some material dating to the 6th.<sup>48</sup> H. Mussche describes the state of affairs as follows: "There are no demonstrable architectural remains, which leads one to conclude that it was once again a sort of squatter occupation, or a very rudimentary miners' settlement".<sup>49</sup>

The presentation of the finds of the 2010 campaign in Cistern No. 1 clearly show that this chronological picture has to be adjusted (see also **Fig. 42**). The finds of this latest phase of Thorikos' history seem to date more coherently to the 6th and 7th centuries CE (viz. between 520 and 700 CE). They even lead us into the Early Byzantine period, with clear indications of finds dating to within the 8th century CE. It is not unlikely that a more detailed restudy of previously excavated finds from other sectors on the site would confirm this chronology on a broader base.<sup>50</sup>

<sup>&</sup>lt;sup>47</sup> The graphic representation ('media ponderata') is based upon the work of N. Terrenato and G. Ricci: Terrenato, Ricci 1998; see also Van de Weghe *et al.* 2007.

<sup>&</sup>lt;sup>48</sup> See n. 47; Butcher 1982; Mussche 1990, 57-60, figs. 54-55, Mussche 1998, 65; Vanhove 2006, 63, 97, figs. 243-244, 342-343; Monsieur 2008; P. Monsieur in: Docter *et al.* 2010, 49-51, fig. 20.

<sup>&</sup>lt;sup>49</sup> Mussche 1998, 65. Apparently some architectural remains of the Late Hellenistic and Roman periods seem to have been published, however: Mussche 1990, 57-60, fig. 54.

<sup>&</sup>lt;sup>50</sup> It is highly likely that the distribution of Roman, Late Antique and even Early Byzantine finds on the site is much denser than expected, see e.g. Mussche's and Spitael's report in Catling 1979-1980, 19 (Theatre area).

Also from a topographical and functional point of view, the postulation of a squatter occupation in Thorikos in the (Late) Roman period is not a comfortable one. The distribution of finds over the area is just too extensive, even more so if one acknowledges the fact that especially these upper layers, structures and finds have been most liable to suffer from later destruction and erosion processes. The rather limited attention to finds of the period in the wider research agenda of the scholars working in Thorikos since 1963 will definitely not have helped this situation for the better. The main argument, however, in considering the squatter occupation theory not a realistic one is the fact that, apparently, the inhabitants of Thorikos continued using and respecting the earlier necropoleis, especially the Theatre Necropolis untill well into the Late Roman period.<sup>51</sup> Moreover, it seems that the mining activities at the time, small as they may have been in scale, were nonetheless extensive, and now also include Mine no. 2, situated to the East of the Cistern. Mussche is probably right in connecting these late mining activities from the 5th century CE on with "a greater demand for silver during the reign of Theodosius II (408-450 AD) and Marcianus (450-471 AD), who found themselves cut off from the silver mines in Spain (...)" (Mussche 1998, 65), although a possible extraction of lead is not to be excluded either. The ensuing connection of the end of occupation in Thorikos and the Laurion as a whole with the Slav incursions in 582/583 CE (Mussche 1998, 65), however, may not be tenible in the light of the finds presented here (esp. Cat. 51 and 80; Figs. 19a-b, 34a-b).

In a recent overview, T. Mattern (2010, with pl. 53) sketches the desperate state of affairs of our understanding of Late Antique and Early Byzantine Attika. Although the evidence he included for Thorikos is far from complete (Mattern 2010, 222, 229, pl. 53), the published picture for the whole of Laurion and even for well-studied areas elsewhere in Attika, seems to be hardly any better. Mattern lists a whole series of historically attested events during the (Late) Roman and Early Byzantine period that all may have disrupted – even temporarily – the human occupation and settlement pattern in Attika and, hence, may also be taken into consideration for Thorikos: the Heruli incursions of 267 CE, the Visigothic incursions under Alaric I between 395 and 397 CE, the ravaging of the coasts by the Vandal fleet in 475 CE, the large earthquake of 552 CE, and the Slav incursions since 582 CE (Mattern 2010, 202). Whatever historical event (if any) had affected Thorikos and may have caused a disruption of its occupation, it will not have been a final end. The present contribution shows that the the site recovered and witnessed a last – modest – phase till within the 8th century CE (esp. Cat. 51 and 80; Figs. 19a-b, 34a-b).

A last word on the composition of the fill regards the selection published here. Only 43 of the 103 pottery vessels and objects belong to the categories of figured and (semi-)decorated wares, which in previous preliminary and final reports figured so prominently (see above, p. 91). This means that 58% of all items belong to other, less

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<sup>&</sup>lt;sup>51</sup> Graves 516 and 519 of 3rd/4th century CE and end 4th/beginning 5th century CE, respectively, as well as graves 507 and 509: Catling 1979-1980, 19; Bingen 1990b; Mussche 1998, 65, 72, 75-76; Mattern 2010, 229, pl. 53.

conspicuous pottery classes. When looking at the database of the 2010 campaign (1373 fragments of the 1383 inventoried ones), it becomes clear that the selection published here still does not do full justice to the archaeological reality: 14% figured and (semi-) decorated wares vs. 86% Plain, Coarse, Handmade and Cooking Wares. Nevertheless, this presentation may offer a more balanced and representative view of the variety of material remains, and hence of human presence and activities in ancient Thorikos, than had been possible on the basis of previous publications.

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