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HESPERIA

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THE MIDDLE HELLADIC FINE GRAY BURNISHED (GRAY MINYAN) SEQUENCE AT MITROU, EAST LOKRIS

ABSTRACT

A preliminary, seven-phase Fine Gray Burnished (Gray Minyan) ceramic sequence has been developed at Mitrou, East Lokris, spanning the whole of the Middle Helladic period. Grounded in detailed stratigraphy from two different excavation areas, this ceramic sequence provides the first pottery chronology of its kind for Middle Helladic central Greece. By using quantitative analysis, the frequency of individual feature types has been determined for significant deposits, and distinct patterns of development over time can be observed. This sequence significantly increases our understanding of Fine Gray Burnished development within this important region and greatly improves the accuracy of relative dating methods in the immediate area.

The lack of a ceramic sequence grounded in stratigraphy and spanning the whole of the Middle Helladic (MH) period (ca. 2075–1600 B.C.) for central Greece has been a constant problem, inhibiting the understanding of the region and its place within the wider MH world.¹ Clear definition

1. The Mitrou project was financed by contributions from the University of Tennessee (Department of Classics, College of Arts and Sciences, Office of Research, Office of Graduate Studies), the National Endowment for the Humanities (grant nos. RZ-50652 and RZ-51162), the Institute for Aegean Prehistory, the Loeb Classical Library Foundation of Harvard University, the Ephorate of Antiquity of Phthiotida and Evrytania, Colby College, the University of Evansville, and private donors, as well as by single contributions from the University of Rhode Island (2005), the University of California at Santa Barbara (2005), the University of Kansas (2007), and Randolph-Macon College (2008). We are very grateful to all for their generosity.

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a difficult challenge with such fragmented material. Many thanks also to Eleni Zahou, Amy Cordner, Kate Kearney, Joanna Potenza, and Deanna Baker and their teams (excavators of trenches LE792 in 2007 and LX784 in 2008), the various apotheke managers over the years (particularly Kimberley Van den Berg, Teresa Hancock-Vitale, and Andrea Guzzetti), and the remaining members of the Mitrou Archaeological Project for their meticulous work. The two anonymous reviewers provided very valuable suggestions that made this article much stronger, and I thank them very much. Views, findings, and conclusions expressed in this publication do not necessarily reflect those of our sponsors or my colleagues, and mistakes and inaccuracies remain my own.



concerning the development of the very widespread “Gray Minyan” pottery (herein referred to as “Fine Gray Burnished” or FGB) in the southern part of central Greece is severely restricted, and ceramicists in key areas like Boiotia and Phokis have relied on stratified typologies from distant sites like Pevkakia-Magula in Thessaly and Lerna in the Argolid, on incomplete typologies like that of Eutresis, or on material from still only partially published sites such as Lefkandi and Thebes in order to interpret unstratified material.²

The newly excavated site of Mitrou provides an important opportunity to remedy the problematic situation in central Greece because of the quality and longevity of its stratigraphy and its potential for providing an important relative chronological reference point for future studies in the region.³ Mitrou is a small tidal islet in the Bay of Atalante, East Lokris, located on the northern Euboian Gulf, about 150 km northwest of Athens, 50 km north of the Mycenaean palatial center of Thebes, and approximately 20 km northeast of the important Mycenaean center of Orchomenos (Fig. 1).⁴

Figure 1. Mitrou and other selected Middle Bronze Age sites. C. M. Hale

2. See the problems encountered by Sarri (2010b, pp. 33–53, 201) when dealing with the Orchomenos IV material. The overall problem in central Greece is made apparent in Maran 1992a, pp. 301–318; Rutter 2001, pp. 132–133; Sarri 2010b, pp. 19–21; Pavúk and Horejs 2012, p. 15. Howell in Popham and Sackett 1968 produced his synthesis based on still-unpublished material from Lefkandi.

3. Hale 2015.

4. Tsokas et al. 2012, pp. 384–385, figs. 1, 2.

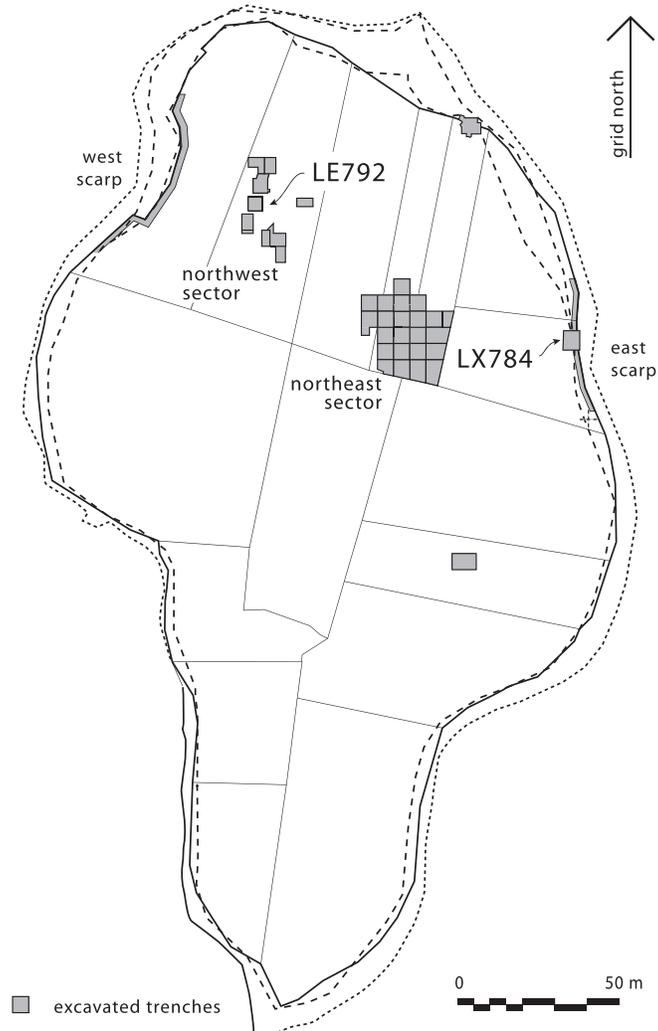


Figure 2. Mitrou plan with trenches LE792 and LX784. Drawing G. Bianco

5. Coleman and Murray 1988–1989; Kramer-Hajos 2002; Kramer-Hajos and O’Neill 2008; Van de Moortel 2009, p. 359.

6. The most recent comprehensive report can be found in Tsokas et al. 2012 and Van de Moortel and Zahou 2012. Summaries of specific periods have been published in Van de Moortel and Zahou 2004–2005, 2011; Van de Moortel 2009. Archaeological reports on the excavations seasons to date: Van de Moortel and Zahou 2004–2005, 2005–2006, 2006, 2007, 2008, 2009, 2010; see also mitrou.utk.edu.

7. Van de Moortel and Zahou 2008, p. 57; 2009, p. 51; 2012, pp. 1132–1133.

Although known by Greek archaeologists for years, Mitrou’s long occupation was first documented by the 1988–1989 Cornell Halai East Lokris Project (CHELP) surface survey of the region conducted by John Coleman of Cornell University and William Murray of the University of South Florida, which recovered ceramics and other finds of remarkable preservation and made specific note of the excellent chronological continuity seen on the islet’s scarps.⁵ Mitrou was excavated in 2004–2008 by the Mitrou Archaeological Project (MAP), a *synergasia* codirected by Aleydis Van de Moortel of the University of Tennessee, Knoxville, and Eleni Zahou of the Ephorate of Antiquities of Phthiotida and Evrytania, and carried out under the auspices of the American School of Classical Studies at Athens.⁶ These excavations have qualified CHELP’s observations and provided a complete pottery sequence from the late Early Helladic (EH) IIB period through to the Late Protogeometric period, indicating a long, unbroken occupation that included the whole of the MH period.⁷

Two of the deepest trenches excavated in 2007 (trench LE792 in the northwest area of the site, ca. 4.5 × 4.5 m) and 2008 (trench LX784 on the eastern scarp, ca. 6 × 5 m) revealed an unbroken sequence of MH occupation spanning the whole of the period (Fig. 2). The occupation is

preserved in an excellent stratigraphic sequence that was carefully documented along with its extensive and varied architecture. Architecture and features of trench LE792 included a number of parallel walls from different periods, cist graves, and the disintegrated remains of a MH boat preserved as a black stain (see Figs. 3, 4 below).⁸ In trench LX784 this included a number of walls (some of which make up corners from buildings K and L), hearths, clay-lined bins, pits, and a pithos burial (see Figs. 5, 6 below). This architecture from both trenches is frequently accompanied by variously preserved surfaces and floors. Because of their long and unbroken stratigraphy, these remains represent the best opportunity to date to improve our understanding of the development of MH material culture in the central Greek region. Furthermore, these trenches represent only a tiny fraction of the MH occupation of Mitrou, which, as we can surmise from the combined ceramic evidence produced both by the MAP and the CHELP surface surveys, as well as that found on the eastern and western sea scarps, must have spanned at least the northern half of the islet and continued into what is now the sea, east and west of the islet.⁹ Therefore, this analysis represents a pilot study that hopefully will be tested through future excavation in MH levels at Mitrou.

CHARACTERISTICS OF FINE GRAY BURNISHED POTTERY

Fine Gray Burnished pottery has commonly been referred to in publications on the MH period as “Gray Minyan.” However, the terminology related to “Minyan” wares in general has historically been inconsistently applied when scholars working in different regions have described ceramics of varying technical characteristics. Gauss and Kiriati recently demonstrated this inconsistency in a large table showing 35 different ways in which the term “Minyan” has been used and pottery of “Minyan” character has been described.¹⁰ This has led to confusion and a lack of understanding concerning the nature of the related ceramic classes themselves.¹¹ Using FGB here as a substitute term, as applied by Rutter,¹² ensures that only the physical descriptors related to the technical aspects of the pottery are used, devoid of subjective terminology, in order to preserve clarity. FGB pottery has been described in many publications, but I present a brief summary of its major characteristics here for reference.

Following a macroscopic analysis of the various fabrics evident at MH Mitrou, at least 15 different macroscopic fabric groups were identified, and virtually all FGB at Mitrou falls under Mitrou’s MH Macroscopic Fabric Group (MH MFG) 1.¹³ These MH MFGs have yet to be validated through a petrographic study, however, and are based purely on macroscopic observations. Generally, MH MFG 1 is very fine and well levigated. Rare occurrences of fine silver and very rare subrounded chalky white medium-coarse inclusions are present. Rare to very few voids are usually only visible in fresh breaks. These voids range from fine to medium-coarse in size, are usually thin and long, are subangular to angular in shape, and may be the result of small amounts of organics being burned out of the clay during

8. Van de Moortel 2012.

9. Coleman and Murray 1988–1989; C. Belz and A. Iacobelli (pers. comm.). Belz and Iacobelli are currently conducting the MAP surface survey, and I thank them for allowing me to refer to their observations here.

10. Gauss and Kiriati 2011, p. 182, table 59.

11. See Sarri 2010a, pp. 604–607.

12. Rutter 1983.

13. The frequency of inclusions for FGB was determined through frequency charts (Matthew, Woods, and Oliver 1991, pp. 216–263) and frequency labels (Kemp 1985, p. 17), and are as follows: very rare = <0.5%, rare = 0.5%–2%, very few = 2%–5%, few = 5%–15%. Parameters for the inclusion size descriptors used here are as follows: fine = <1.0 mm, medium-coarse = 1–3 mm.

firing. A common subgroup, MH MFG 1a, includes very rare medium-coarse subrounded to subangular matt black to gray inclusions.¹⁴

A defining characteristic of FGB ceramics has been their distinctive coloring. High-quality FGB has a uniform monochrome color over the surface and within the biscuit itself, typically with no discernible sandwiching of the core.¹⁵ At Mitrou, slight differences in core color, particularly at very thick sections, may occasionally be present, but these are so slight that they can arguably be overlooked if all other physical characteristics are consistent, especially if the exterior and interior surfaces are monochrome. This coloring is strictly imparted on the vessels through the firing process and not through any sort of wash or slip. When comparing different vessels, color may vary from dark gray (ca. 2.5Y 4/1, 10YR 4/1–GLE Y1 4/N) to gray (ca. 2.5Y 6/1, 10YR 6/1–GLE Y1 6/N) to light brownish gray (ca. 2.5Y 6/2) due to differences in the firing conditions and possibly the clay composition between batches of pottery.

This monochrome coloring makes FGB virtually unique among MH ceramics and was probably essential to the aesthetic value of the pottery. It was achieved through complex firing mechanics requiring, on the part of the potter, an extraordinary working knowledge of the equipment and the chemical processes involved. Iron oxide within the clay affects its coloring when fired. This ensures that, under the action of heat and depending on the percentage of iron oxide content, the clay fires to varying intensities of red.¹⁶ However, the red color can be maintained only if a free supply of oxygen prevents the reduction of the iron by the gases of combustion.¹⁷ By controlling the supply of oxygen the potter could ensure that the red ferric oxide (Fe_2O_3) was reduced to ferrous oxide (FeO), which is black.¹⁸ Therefore this “reduced atmosphere,” possibly coupled with an extended firing, was essential in order to produce the monochrome grayish color.¹⁹

However, the temperature within the kiln needed to be sufficiently high in order to fully fire the pottery, and the smoke within the kiln needed to be regulated in order to prevent irregular discoloration.²⁰ Any inaccuracy at all in any one of these variables resulted in imperfections, usually manifested in sandwiching of the core or a mottled surface color. In most cases, these pieces have been reclassified as Fine Dark Burnished (FDB) at Mitrou. These chemical processes may have been manipulated by the potter in later MH phases in order to deliberately produce “Minyan” ceramics of different colors, particularly the so-called Yellow Minyan pottery.

Another characteristic associated with FGB is the presence of a highly burnished surface on both the interior and the exterior of all pots.²¹ This effect was achieved by rubbing the leather hard surface of a newly formed vessel with a smooth pebble or rounded tool in a constant direction; this aligned the surface molecules and resulted in slightly reduced permeability and a high, regular sheen after the pot was fired.²² Burnishing is so regular on FGB pottery that individual burnishing streak marks are usually indiscernible, and the sheen is frequently present under handles and other hard-to-reach places. It may therefore be more accurate to refer to the surface treatment as “polishing” in the best cases.

The particularly fine fabric composition, the use of a reduced atmosphere during firing to produce a strictly monochrome surface color, and

14. The description of this fabric very closely matches that for Aigina's Macroscopic Group 4. The same observation of a consistent subgroup was also noted at Aigina. See Gauss and Kiriati 2011, pp. 52–53, 115–116.

15. Forsdyke 1914, pp. 129–130; Maran 1992a, p. 82; Gauss and Kiriati 2011, p. 52.

16. Franchet 1911, pp. 6, 83; Forsdyke 1914, p. 137; Shepard 1976, p. 150; Rice 2005, pp. 333–336.

17. Rice 2005, pp. 333–336.

18. Rice 2005, pp. 333–336.

19. Parts of this process have been qualified through experimental archaeology. See Letsch 1982, pp. 100–102; Spencer 2007, pp. 95–98, 120–125.

20. Forsdyke 1914, p. 140.

21. Forsdyke 1914, p. 141.

22. Rice 2005, pp. 138, 231.

the heavily burnished surface combine to produce a class of ceramic that is very hard, very smooth, fine, neither porous nor permeable, and which portrays a distinctive “soapy” texture.

In the past, many ceramicists have distinguished wheel-thrown from handmade pottery through observation of certain surface features, such as horizontal parallel striations and concentric undulations.²³ On the basis of these criteria, the vast majority of MH central Greek FGB ceramics have typically been considered to be wheel-thrown. However, in her recent study on the first wheelmade FGB pottery from EH III Lerna, which uses a very detailed methodology, Choleva has questioned this simplistic approach and determined that *none* of the FGB pots from EH III Lerna were wheel-thrown, despite the identification of a number of wheel-thrown pots in the original analysis.²⁴ Rather, these pots were constructed using a combination of coil-building and wheel-fashioning techniques.²⁵ Choleva therefore argues for the slow, conservative adoption of the potter’s wheel, which was originally incorporated as only a part of the contemporary coil-built methodology rather than as an immediate substitute.²⁶ In light of these new and convincing observations, the identification of manufacturing techniques for MH FGB ceramics on the Greek mainland needs to be reassessed, and it is likely that many (if not all) of these pots were in fact wheel-fashioned rather than wheel-thrown.

It was once thought that the technology related to FGB pottery production on the mainland arrived in Greece at the beginning of the Middle Bronze Age, with “the coming of the Greeks,” and was directly related to gray wares found at Troy. Thus, FGB was subsequently considered to be an Anatolian technology transferred to the Greek mainland through population movements at the beginning of the MH period.²⁷ This theory has since been convincingly refuted, and the independent development of these two pottery groups is now generally accepted, with local antecedents of FGB pottery clearly evident at Lerna and other MH sites, such as Pevkakia, Berbati, and now Mitrou.²⁸ Modern scholarship now considers FGB pottery to be part of a new material culture that first appears in southern Greece, along with the potter’s wheel, during the EH III period.²⁹ It has a wide distribution during the MH period and is found in regions such as central Greece, the northeast Peloponnese, Attica, the coastal regions of Thessaly, the islands of Euboia and Aigina, and in

23. Rice (2005, p. 129) goes so far as to state that wheelmade pottery (referring to the wheel-thrown technique) can be “*unambiguously* detected because sherds exhibit ‘rilling’—rhythmic ridges and grooves that spiral around the vessel walls” (my emphasis).

24. Choleva 2012; cf. Rutter 1995, p. 464; Pavúk and Horejs 2012, pp. 15–16. Choleva bases her approach on pioneering studies conducted on the technological analysis of the first wheelmade ceramics in the southern Levant by Courty and Roux 1995; Roux and

Courty 1998. See Choleva 2012, p. 344, n. 3.

25. Choleva 2012, p. 359. Wheel-fashioning refers to the process of initially forming a pot using coils and then finishing it on a wheel.

26. Choleva 2012, pp. 374–377.

27. Blegen 1928, 1963; Haley 1928; Mellaart 1958. See also McDonald and Thomas 1990, pp. 215–217; Pavúk and Horejs 2012, pp. 13–14, for summaries of this debate. The EH III FGB material at Mitrou will be published alongside the other EH III pottery from

Mitrou by Zahou. It is present in small quantities at EH III Mitrou, but is not considered in this analysis.

28. Caskey 1960; Säflund 1965; French 1967, 1969, 1973; Zerner 1978; Rutter 1983; Maran 1992a, 1992b. Pavúk and Horejs (2012, pp. 13–14) provide an excellent summary of the progress on this subject.

29. Note that the potter’s wheel appears in EH IIB in central Greece, prior to the appearance of true FGB. See Rutter 1983, pp. 336–338; 1993, p. 27.

various locations throughout the Cyclades.³⁰ At Mitrou FGB appears in secure contexts from EH III and continues throughout all phases of the MH period in ever-increasing quantities before dramatically falling away at some stage in Late Helladic (LH) I.

Since MH MFG 1 and MH MFG 1a are very common at Mitrou, they are assumed to be of local central Greek origin. Petrographic analyses of similar FGB fabrics at the contemporary sites of Kolonna, Eleusis, and Thebes have led Gauss and Kiriati to conclude that their chemical composition does not match that of other locally produced pottery at those sites, but is very closely related to local fabrics of Orchomenos.³¹ This confirmed the result of Zerner's petrographic analysis of the FGB fabrics at Lerna, which concluded that what she termed "true" Minyan fabric had been imported (probably from central Greece).³² Mommsen and his colleagues came to a similar conclusion when analyzing this fabric at Aigina, nominating the northern Boiotian region as the likely place of origin.³³ This supports both Dickinson's previous identification of Boiotia as a possible center of production for FGB based on regional distribution patterns, and Sarri's preference for Orchomenos based on her analysis of the assemblage composition at Orchomenos.³⁴ Thus, on present evidence, the region of Orchomenos, located only 20 km southwest of Mitrou, seems to be the most likely source of many high-quality FGB exports found in regions such as the Argolid and Aigina, and the FGB material from Mitrou likely belongs to this same region.

This does not necessarily suggest that all FGB pottery was produced at a single center. Slight differences in the morphology of certain vessels between sites such as Pevkakia, Lerna, Eretria, Platania, the Aspis at Argos, and Mitrou,³⁵ along with clear examples of similar pottery made from local clays at Kolonna, Ayia Irini, and Kirrha, and at multiple sites within the Argolid using local materials and manufacturing techniques, suggest that multiple centers were producing FGB in varying quantities and with varying degrees of success during the MH period.³⁶ In addition, Pavúk has recently made preliminary observations based on the study collections of pottery from central Greece, Euboia, the Corinthia, and the Argolid held at the British School at Athens and the American School of Classical Studies at Athens.³⁷ When considering technological characteristics, Pavúk has tentatively observed differences between FGB ceramics from eastern Boiotia or Euboia, and FGB ceramics likely produced in north-central

30. French 1972, p. 24, table 14; Kilian-Dirlmeier 1997, p. 116, figs. 64, 157; Dickinson 2007, p. 243; Pavúk and Horejs 2012, pp. 17–18, fig. 1.

31. Gauss and Kiriati 2011, pp. 143–144. See Cosmopoulos et al. 1999; Hilditch, Kiriati, and Kartsonaki 2005; Boileau 2006; Boileau, Tartaron, and Sarri 2007; Spencer 2007; Hilditch et al. 2008.

32. Zerner 1993, pp. 42–43.

33. Mommsen et al. 2001, pp. 85–86.

34. Dickinson 1977, p. 17; Sarri 2008.

35. For example, the interior rim grooves at Lerna (Rutter 1995, p. 258, fig. 116: P1327) have so far remained undiscovered at Mitrou and do not appear at Pevkakia. Similarly, the single lower rib pedestal bases that are so characteristic from Mitrou MH phases 4 and 5 are completely absent at Pevkakia. Further differences will be apparent once the FGB material from

other sites is fully published, but I thank Maria Papakonstantinou, Tobias Krapf, Anna Philippa-Touchais, Donna Crego, and John Overbeck for inviting me to look at their respective published and unpublished MH pottery and for allowing me to mention these small observations here.

36. Zerner 1986, p. 62; Whitbread, Kiriati, and Tartaron 2002, p. 123.

37. Pavúk and Horejs 2012, pp. 16–17.

Greece somewhere near Orchomenos, particularly with regard to fabric temper and firing temperature.³⁸

The repertoire of FGB shapes at all sites is famously narrow. The most common shapes were summed up effectively by Dickinson in his 1977 synthesis of the MH period.³⁹ These are almost exclusively open shapes, and at Mitrou they were likely used as the predominant tableware for the duration of the MH period. The kantharos (2–5, 8, 15, 25, 28, 37) and the two-handled bowl (1, 6, 10, 11) are the major FGB shapes of the early MH period, and the kantharos in particular continues throughout the MH period.⁴⁰ These were later joined by shallow carinated bowls with short shoulders and horizontally attached “basket” handles (7, 12), probably the antecedent to the distinctive “Pteleon goblet” of later phases (21–23).⁴¹ The latter part of the period is characterized by the quintessential MH FGB shape: the large multiple rib pedestal goblet sometimes referred to as the “Lianokhladi goblet” (19, 26, 29, 35, 36, 38).⁴² Other much rarer shapes, which also occur during the later parts of the period, include amphoriskoi, ribbed bowls (30, 31), and miniature kantharoi or teacups (25, 28), as well as unusual morphologies (32, 33).⁴³

The most complete and extensive sequence of FGB pottery to date is from Pevkakia-Magula in Thessaly, published by Maran in 1992.⁴⁴ The present analysis of the Mitrou material uses comparisons with the Pevkakia material where appropriate because of the large FGB assemblage recovered there, the deep and well-understood stratigraphy at the site, and the detailed typology constructed by Maran. Pevkakia represents the only other extensive and published FGB assemblage on the mainland that is grounded in detailed stratigraphy that spans the whole of the Middle Bronze Age. Where possible, parallels with other MH assemblages, specifically from Lerna, Eutresis, Orchomenos, and the Aspis at Argos, have been drawn as well, though these are often applicable only to certain phases or (in the case of Orchomenos) come from unstratified contexts. Thus, the detailed Mitrou sequence can be directly synchronized with the relative MH chronologies known on the mainland (see Table 2).

38. Pavúk and Horejs 2012, p. 17.

39. Dickinson 1977, pp. 17–21, fig. 2; Sarri (2010a, p. 608) also does an excellent job summarizing the shape repertoire.

40. The two-handled bowl develops from Bass Bowls in the EH III period. See Zerner 1978, pp. 192–193; Rutter 1983, p. 332, fig. 3; 1995, p. 355, fig. III.S-12.2. The kantharos is similarly attested at Lerna in EH III levels, appears throughout the MH period, and extends beyond. See Rutter 1995, pp. 348–354; Sarri 2010a, p. 608.

41. The term “Pteleon goblet” was first coined by Pavúk (2002, esp. p. 51) during his reevaluation of Blegen’s phasing system at Troy. The name originates from the complete examples of this shape found at Pteleon in northern

Greece, which were published by Verdelis (1952, pp. 139–140, fig. 9:10). New drawings were published in Maran 1992b, pp. 280–281, pl. 148. See Pavúk and Horejs 2012, pp. 41, 67. This shape is known mostly from late MH grave assemblages but has also been identified at Eutresis (Goldman 1931, p. 135, figs. 184, 185), Pevkakia (Maran 1992b, suppl. 12:1FIa, 1FIII), and other MH sites.

42. This term was probably first used by Childe (1915) for goblets he saw from excavations at Lianokhladi in the Spercheios Valley. This shape appears in most MH sites on the mainland in a number of variations.

43. Sarri 2010a, p. 608.

44. Maran 1992a, 1992b.

THE FINE GRAY BURNISHED CERAMIC SEQUENCE

Excavation of trench LE792 in the northwest excavation sector in 2007 and trench LX784 on the eastern scarp of the islet in 2008 revealed excellent stratigraphy (Fig. 2). Van de Moortel's stratigraphic analysis of these two trenches identified eight superimposed surfaces and floors in trench LE792 connected to walls and cist graves (Figs. 3, 4). In trench LX784 up to 10 superimposed surfaces or floors were recognized, all connected to walls that formed parts of buildings L and K, as well as later buildings, pits, clay-lined bins, and a very well-preserved hearth (Figs. 5, 6). From these levels, potentially significant deposits that were related to construction or destruction events and had been defined by especially well-preserved surfaces were isolated for this ceramic analysis.

The recent micromorphology study of trench LX784 by Karkanas has demonstrated that the EH and MH levels represent a continuous sequence of indoor floors that were meticulously maintained through extremely frequent replastering episodes.⁴⁵ These floor levels were so thin that it was very difficult to excavate them separately, or even to notice them with the naked eye in the field. Thankfully, trench LX784 was excavated through a combination of both natural stratigraphy and arbitrary spits, meaning that Stratigraphic Units (SUs) were changed frequently even when no surfaces were detected in the field. In addition, the micromorphology revealed that floors were not cleaned prior to these episodes of replastering, and that the debris produced inside houses through day-to-day activities was incorporated into the new surfaces.⁴⁶ Nor is there evidence for the removal of any floors themselves during the period. There was therefore a rapid buildup of floors during each architectural phase, producing impressively thick sequences, and preserving an associated gradual deposition of occupational debris (including pottery fragments). The combination of these factors resulted in deposits of fragmented ceramics that slowly and regularly accumulated, facilitating a very accurate analysis of development.

While the micromorphology results from trench LE792 have yet to be analyzed, preliminary observations of the MH levels suggest exterior surfaces between two separate buildings. Macroscopic stratigraphic analysis is more straightforward here, and a sequence of easily identifiable pebble street surfaces seems to have been constructed. These deposits are not as fine-grained as those from trench LX784, but they act as excellent checks against any possible biases associated with functional context in the latter trench.

While this stratigraphy played an essential role in developing the ceramic typology at Mitrou, it will be mentioned only briefly when locating ceramic deposits in their context. Broader interpretation of the stratigraphy for both trenches has been avoided. The sections, period plans, and brief descriptions presented here may be subject to slight changes as the analysis of the stratigraphy, some micromorphology, the function of certain architectural features, and their overall context is still ongoing.

As the accuracy of the sequence is directly related to the integrity of the stratigraphy, a homogeneity assessment for all identified secure deposits was conducted based on the feature sherds, such as rims, handles, bases, and decorated sherds (Table 1).⁴⁷ The characteristics seen in the overwhelming

45. Karkanas and Van de Moortel 2014.

46. Karkanas and Van de Moortel 2014, p. 209.

47. This follows the methodology implemented by Vitale 2013, p. 123, n. 2. See Table 1, where the homogeneity assessments of each context have been consolidated and grouped by phase. Feature sherds were separated from body sherds for the purpose of the homogeneity assessment on account of their better diagnostic and datable characteristics. Body sherds in general were much more difficult to date in isolation, and thus involve more uncertainty and a risk of inaccuracy.

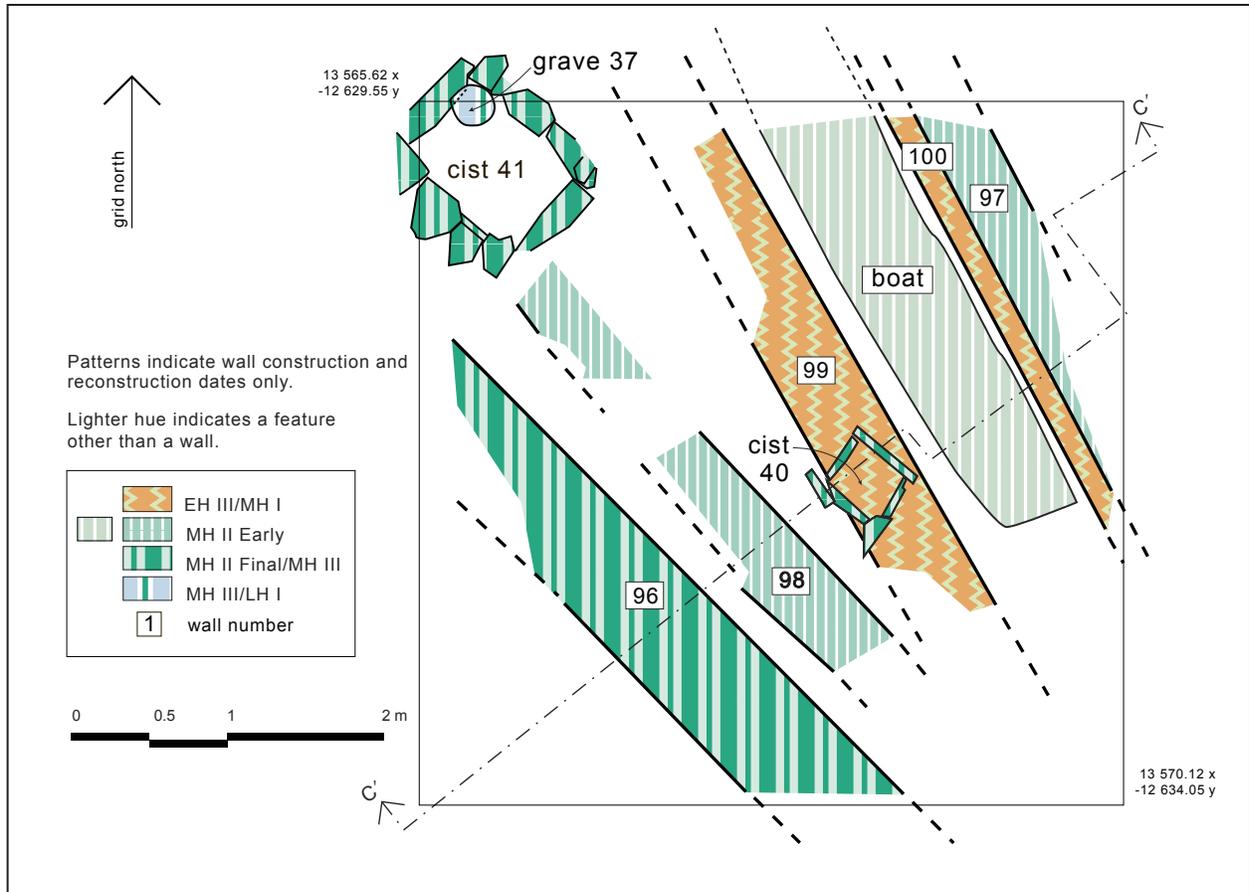


Figure 4. Trench LE792, MH period plan. Drawing G. Bianco, A. Van de Moortel, and C. M. Hale

majority of pottery fragments of a stratigraphic level were considered to be diagnostic of the ceramic phase of deposition. All distinctively early and late feature sherds were counted and weighed separately, and then removed from further consideration in this analysis. Some feature sherds could not be confidently assigned a MH date, nor could either a later or an earlier date be ruled out, so they were included in an “uncertain” category during this assessment. The percentage of MH material for each phase is inclusive of this uncertain material and therefore should be considered to be the maximum possible percentage of homogeneity. Depending on the percentage of earlier or later material represented within the uncertain category, the real homogeneity percentage may be slightly lower. Deposits that demonstrated greater than 5% late contamination in either weight or count were completely discounted from further analysis. It should be acknowledged that because of a lack of understanding concerning the nature of MH ceramic sequences within the central Greek region, this assessment was unable to identify contamination between MH phases during data gathering, and therefore the assessment is rather broad. However, it does present a general idea of the integrity of the stratigraphy. Any remaining undetected contaminants should be rendered statistically insignificant, particularly in the larger sample sizes.

All remaining MH sherds from significant deposits, including body sherds, were sorted, counted, and weighed in order to observe changes in assemblage composition. In the following analysis, assemblage composition

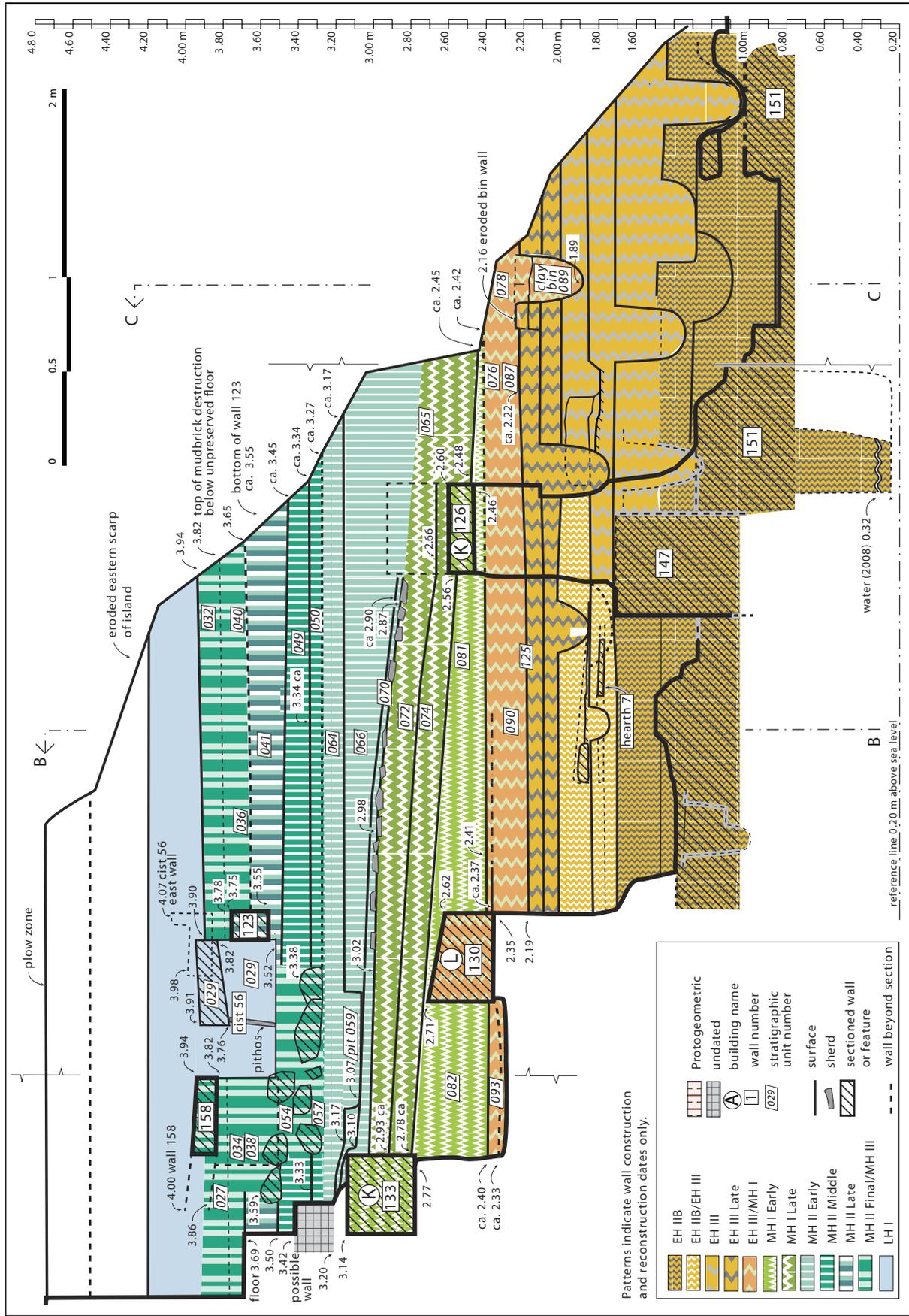


Figure 5. Trench LX784, schematic section A'-A', looking northeast. Drawing G. Bianco, A. Van de Moortel, and C. M. Hale

TABLE 1. HOMOGENEITY ASSESSMENT OF MH PHASES

<i>Phase</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
COUNTS							
Earlier	81 50.9%	64 27.1%	16 9.3%	81 7.5%	14 2.3%	36 3.2%	57 4.4%
MH	53 33.3%	148 62.7%	143 83.1%	883 82.3%	536 88.3%	966 85.2%	1,124 87.2%
Later	0 0.0%	0 0.0%	4 2.3%	33 3.1%	11 1.8%	8 0.7%	5 0.4%
Uncertain	25 15.7%	24 10.2%	9 5.2%	76 7.1%	46 7.4%	124 10.9%	103 8.0%
Total number	159	236	172	1,073	607	1,134	1,289
Maximum homogeneity	49.0%	72.9%	88.3%	89.4%	95.9%	96.1%	95.2%
WEIGHT (kg)							
Earlier	0.58 18.1%	0.535 11.1%	0.15 2.2%	0.445 1.5%	0.175 1.2%	0.16 0.6%	0.67 2.6%
MH	1.955 61.1%	3.87 80.6%	6.525 95.7%	28.505 94.8%	13.815 94.2%	24.61 93.6%	23.975 93.2%
Later	0 0.0%	0 0.0%	0.015 0.2%	0.405 1.3%	0.085 0.6%	0.09 0.3%	0.025 1.0%
Uncertain	0.665 20.8%	0.395 8.2%	0.13 1.9%	0.725 2.4%	0.59 4.0%	1.425 5.4%	1.05 4.1%
Total weight	3.2	4.8	6.82	30.08	14.665	26.285	25.72
Maximum homogeneity	81.9%	88.8%	97.6%	97.2%	98.2%	99.0%	97.3%

examination of individual feature sherds was undertaken. Feature sherds from the identified significant deposits were sorted into various ceramic classes based on the density and size of inclusions within the fabric, surface treatment, and decoration, adapted from the methodology employed by Rutter at Lerna.⁵⁰ The rims, handles, bases, and decorative sherds for each ceramic class were then further sorted into types according to morphological variations. This methodology unintentionally parallels a similar approach, recently published after this analysis began, used by Gauss and Kiriati at Kolonna with regard to defining and recording feature sherd variations with slight differences in the parameters chosen.⁵¹ The feature categories observed at Kolonna are at times more thorough when compared to the sample from Mitrou, but they are also concerned with a wider repertoire of pottery. It is not clear that further refinement of feature categories at Mitrou would have any overall effect on the understanding of the sequence. Indeed, further refinement may serve only to obscure statistical patterns within this relatively smaller sample size.⁵²

These different categories of feature sherds were quantified using counts for rims, handles, bases, and decorative additions, alongside estimated vessel equivalents (EVEs) for rims and bases. Counts are a simple

50. Rutter 1995, pp. 11–66.

51. Gauss and Kiriati 2011, pp. 35–38.

52. Strack 2011, pp. 57–59.

and efficient method of pottery quantification commonly used within Mediterranean prehistoric archaeology and are therefore useful for comparison between assemblages. At Mitrou, counting was always done before mending, except when breaks were fresh. While weights for individual feature sherds were not recorded in this analysis, weights were recorded for the bulk pottery (i.e., feature sherds and body sherds combined) of each ceramic class in order to provide a second method for analyzing overall assemblage composition alongside counts. As the majority of the feature sherds from the deposits used in this analysis come from similar contexts (fills), which consist of roughly similar ceramic categories, these categories likely have a stable breakage pattern in relation to each other, and therefore weights in combination with counts would offer limited additional data for the purpose of this typological analysis.⁵³ Counts as presented in this analysis are not representative of the amount of pottery at MH Mitrou, but rather the numerical relationship between different feature types in a particular phase and the changes in their frequency in relation to other feature types over time. Nevertheless, counts of pottery sherds can be problematic when used in isolation to estimate the actual representation of different types or classes. Counts are naturally biased toward vessels with large surface areas or breakage rates and do not take into account variable average sherd size.⁵⁴

To compensate for these shortcomings, EVEs were used when analyzing rims and bases.⁵⁵ In order to accurately measure the frequency of a particular rim or base type when compared to other types within a context, all rims and bases were classified and then measured using a standard diameter chart noting their percentage of preservation. These preservation percentages for each feature type were then added together to give a total. As a result, differential breakage patterns between different types do not affect the resulting data when using EVEs, which significantly improves precision over standard counts.⁵⁶ While EVEs have been criticized in the past,⁵⁷ Strack has recently defended their use in an experiment conducted on Iron Age pottery at Kalapodi in central Greece, where different ceramic quantitative methods were compared.⁵⁸ Strack concluded that currently EVEs represent the most accurate and practical method of pottery quantification for large assemblages of highly fragmented feature sherds⁵⁹ and are likely to become the standard for future pottery analysis.⁶⁰ Therefore, this study makes use of both counts and EVEs to allow for comparison with assemblages that use either method. However, EVEs were used only for rim and base features at Mitrou, as estimating handle preservation was considered too subjective to be an accurate method of quantification. For handles and decorative additions, only standard counts were used, and their shortcomings should be considered when interpreting the results of this study.

53. Strack 2011, p. 52.

54. Strack 2011, p. 49.

55. See, e.g., Egloff 1973; Orton, Tyers, and Vince 1993, pp. 172–173; Verdan 2011, pp. 166–169.

56. Orton 1982, p. 14; Strack 2011, p. 60.

57. Chase 1985.

58. Strack 2011, p. 54.

59. The MNI (minimum number of individuals) and AFC (aggregate feature counts) methods were also analyzed by Strack alongside the traditional count and weight methodologies. While MNI

may be less time-consuming than EVEs overall, EVEs are more accurate for highly fragmented and undifferentiated pottery assemblages. The AFC method was found to produce results similar to EVEs. See Strack 2011, p. 60.

60. Verdan 2011.

In order to compensate for the very different sample sizes present at MH Mitrou in different phases, both EVEs and counts for each feature type were always converted into a percentage, representing the frequency of that feature within the total number of rims, handles, bases, or decorative sherds in the relevant phase. Occasionally, there exists a significant difference between EVE and count percentages in a number of feature types and/or phases. Generally, the reason for this is variations within mean sherd size. Invariably in some deposits the sherd size is larger on average than in others, resulting in counts going down but also in EVEs sometimes going up relative to each other. In such cases, the EVE value is often the more precise, but the difference serves to highlight potential issues in varying mean sherd size when comparing deposits.

However, the EVE value is not always the more reliable, particularly with regard to all pedestal base types from Mitrou MH phase 4 through MH phase 7. There is a consistent and significant difference between EVE and count values for these bases for two reasons. First, while only sherds with a preserved rim were measured for a preservation percentage on a diameter chart for the EVE, all pedestal sherds were counted whether the rim was preserved or not. The reason for this was that it was rarely possible to further refine the pedestal base category based solely on the pedestal rim sherds alone because of the variable position of the rib on the pedestal body. However, the position of this rib was found to be important for chronology and was therefore an important piece of data to include in this analysis. A second consideration is that pedestal bases of all types have a much larger surface area and breakage rate than flat base types or ring bases, leading to their inherent overall overrepresentation within the counts for the assemblage. Therefore, neither quantitative method is more accurate than the other. In these cases, the true quantitative value is likely to be somewhere in between the EVE and count percentages.

This methodology enables the observation of any changes in the frequency of different ceramic classes across all phases of the MH period and also identifies any changes to the morphology and frequency of sensitive feature sherds over time. All of these data can be represented statistically, allowing more systematic observations.

The labels used for the seven phases presented below are not necessarily the final labels that will be applied to the Mitrou MH sequence within the final MAP publications. As study of earlier ceramic material from the EH III, EH II, and Final Neolithic periods is still ongoing, a site-specific labeling system that anticipates the results of these studies would be premature. Furthermore, the Mitrou MH phase numbers are accompanied by terms such as “MH I Early,” “MH II Final,” and so on. These terms are used here only as a way of placing the Mitrou MH sequence into a more general chronological context based on the more traditional tripartite chronological division of the MH period. These labels do not presume to definitively define the character of these phases beyond Mitrou but were devised to allow relative comparisons between the Mitrou sequence and the stratified MH typologies presented at other sites, such as Pevkakia, Eutresis, Lerna, Aigina, and the Aspis at Argos.

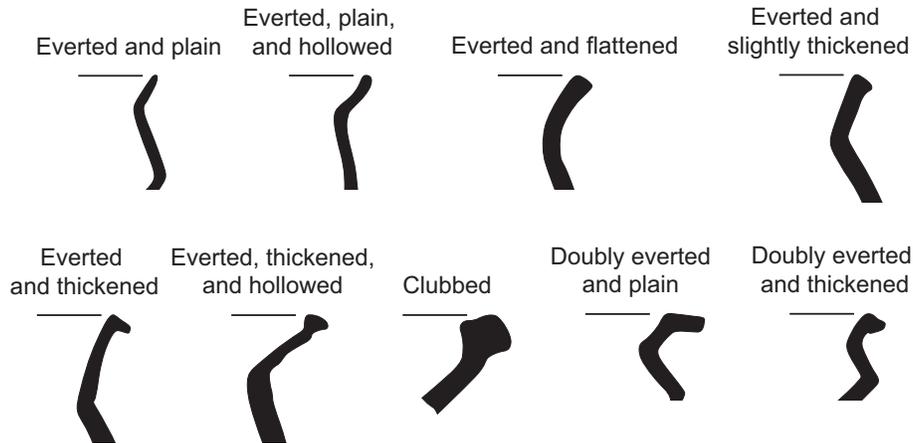


Figure 7. MH Fine Gray Burnished rim types. Drawings T. Ross

FEATURE TYPES

RIMS

Nine different FGB morphological rim types were recognized in MH deposits (Fig. 7). These fall into three groups. In the first group, everted and plain rims all lack any sort of thickening on the lip. Everted, plain, and hollowed rims also portray a slight hollowing on the interior. Everted and flattened rims are also everted but have been flattened at the lip. Kantharoi are always associated with these three rim types throughout the MH period. Two-handled bowls, on the other hand, are only associated with everted and plain rims during the very early stages of the MH period. A second group of rim types, called thickened rims, are almost all thickened on the exterior lip, but some very rare occurrences of thickening on the inside of the lip occasionally appear. These types of thickened rims are associated primarily with two-handled bowls and goblets. Everted and slightly thickened rims are everted and show this thickening, but it is not very pronounced. Everted and thickened rims show a pronounced thickening. Everted, thickened, and hollowed rims also have a pronounced thickening but feature, in addition, an interior hollowing that can range from quite shallow to very deep. Clubbed rims are very distinctive and can be described as such because of their extremely prominent “squared” thickening on the interior and exterior. The third group of rims are all doubly everted. Doubly everted and plain rims have a plain lip, whereas doubly everted and thickened rims have been thickened at the lip. These rim types are usually associated with Pteleon goblets or shallow carinated bowls with short shoulders.

HANDLES

Three different groups of FGB handles were recognized in the MH deposits at Mitrou (Fig. 8). The first group contains three different types of vertically attached strap handles. High-sung strap handles are vertically attached to the belly and the exterior lip of the vessel, and extend above the

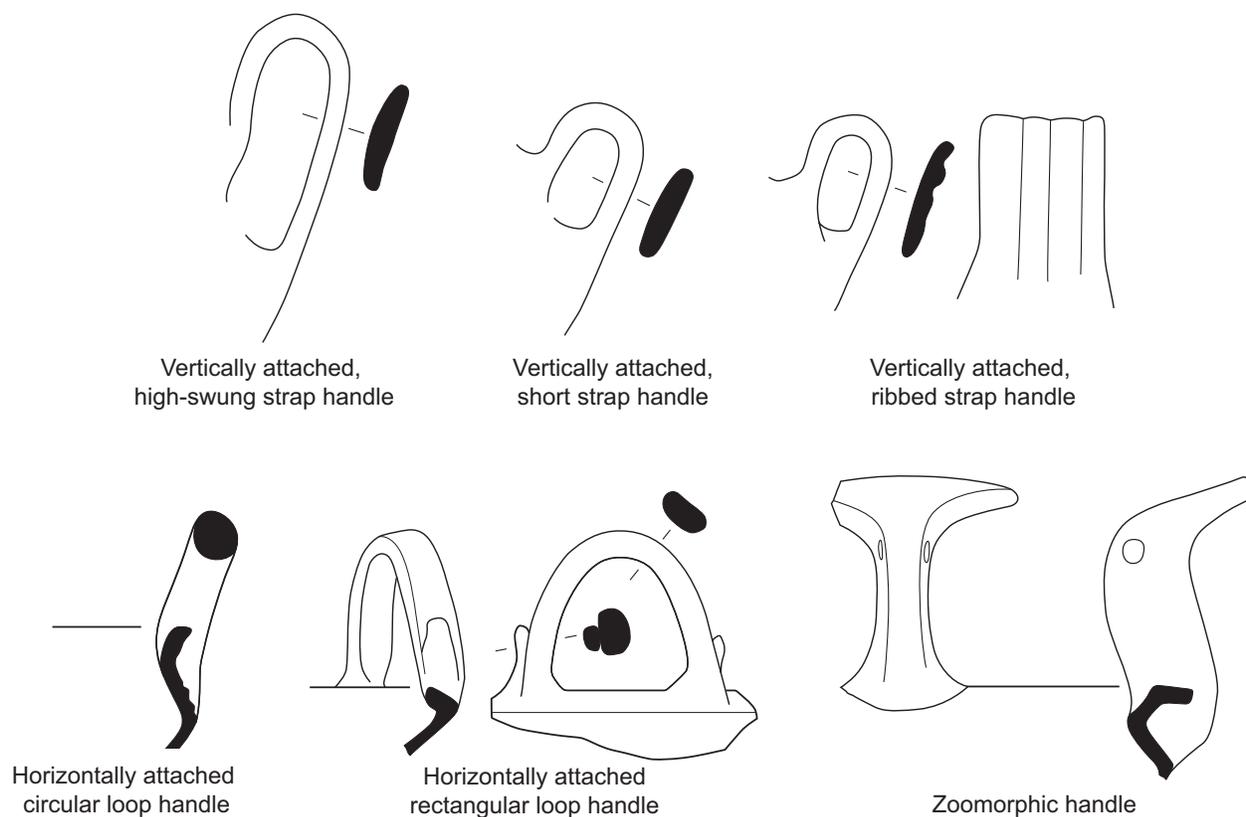


Figure 8. MH Fine Gray Burnished handle types. Drawings T. Ross

rim. Attachments to the interior of the lip are very rare. These high-slung strap handles are exclusively associated with kantharoi in FGB. Short strap handles, which are connected to two-handled bowls, goblets, ribbed bowls, and amphoriskoi, are attached to the belly and upper shoulder, and do not extend above the rim. High-slung strap handles always outnumber short strap handles in the repertoire, but this may be partly due to a higher breakage rate and larger surface area. Ribbed strap handles can be either high-slung or short but are decorated with multiple vertical ribs on the exterior.

The second group contains two different types of horizontally attached loop or “basket” handles. In FGB, these are attached horizontally to the upper shoulder of shallow carinated bowls or Pteleon goblets, cutting through the rim profile, and extending above the rim in a loop. Circular loop handles are plain and circular in profile, whereas rectangular loop handles are roughly rectangular in profile and occasionally also portray a deep groove running down the middle or a set of small plastic protrusions on the exterior spreading out from both points of connection to the rim.

Very rare handles are consolidated into a third group. Zoomorphic-like handles are the most prominent of these in the FGB pottery, and are also present in the FDB pottery at Mitrou. Zoomorphic-like handles are attached to shallow carinated bowls or goblets, and can sometimes feature a plastic imitation of a rivet on either side. The only other type of handle in the FGB pottery is a single occurrence of a very shallow horseshoe lug handle—a unique piece at Mitrou (not illustrated in Fig. 8).

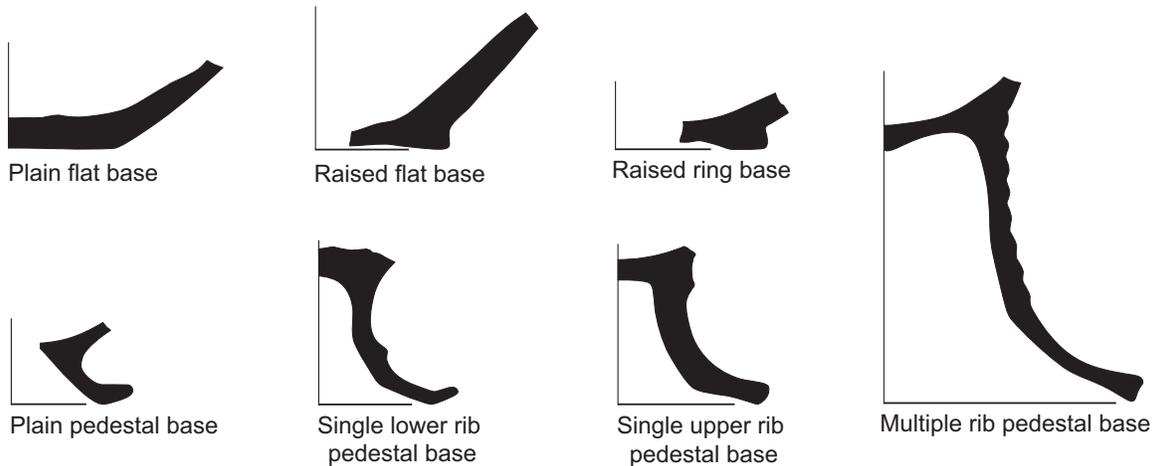


Figure 9. MH Fine Gray Burnished base types.
Drawings T. Ross

BASES

Seven types of bases were recorded at Mitrou (Fig. 9), and fall into two groups. Simple plain and flat bases are the most common. The raised flat bases have been noticeably elevated; this change is visible within the profile. Raised ring bases are similar to flat bases but have a wide raised ring on the outer edge of the base on the underside. These bases do not seem to be associated with any particular shape.

The second group of bases are all various types of pedestals. Plain pedestal bases are typically quite small and do not feature any added ribbing. Single lower rib pedestal bases feature a distinctive single horizontal rib on the lower part of the pedestal, whereas single upper rib pedestal bases show this rib on the middle or upper part of the pedestal. These bases have rarely been found associated with any particular shape, but on account of their size they are most likely from Pteleon goblets or small kantharoi. Finally, multiple rib pedestal bases are much larger than other pedestals in most cases and have multiple horizontal ribs running up the body of the pedestal. These are normally associated with large pedestaled Lianokhladi goblets, but the bowl and pedestal of this shape are hardly ever found attached.

OTHER FEATURES

Some feature sherds show various characteristics that were applied as additions to the surface treatment, possibly for decorative purposes (Fig. 10). Some of these additions on FGB are recognized in the MH deposits. A variety of grooves are frequently apparent and are usually very regular, 1–2 mm thick and only ca. 1 mm deep. Sherds with a lip groove show a single thin groove at the base of the exterior rim, usually at the point of eversion, that extends around the whole circumference of the vessel. Sherds with shoulder grooves have a set of parallel horizontal grooves on the upper shoulder, usually as a set of three in complete examples, but which are usually obscured by the handle attachment at the shoulder. Sherds that feature both these types of grooves on a single vessel are categorized separately but occur in comparatively smaller numbers because of preservation. A second type of

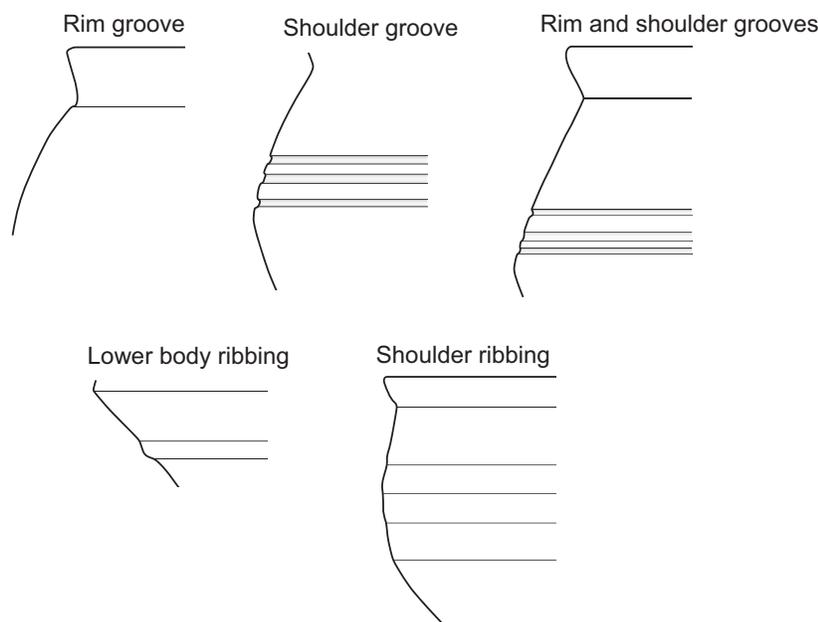


Figure 10. MH Fine Gray Burnished decoration types. Drawings T. Ross

decoration is representative of various forms of ribbing on the exterior of some shapes. Sherds from some late MH goblets occasionally portray a distinctive single horizontal rib on the lower body. Sherds with shoulder ribbing feature multiple shallow horizontal ribs on the exterior shoulders of distinctive shapes such as small amphoriskoi or ribbed bowls.

By recording the characteristics of every feature sherd in every significant ceramic deposit, the frequency of all feature types could be measured using both counts and EVEs. This methodology based on seriation and grounded in the stratigraphy has revealed seven distinct MH ceramic phases from the Mitrou material excavated from trenches LX784 and LE792 (Fig. 2; Table 2). These are presented here combined by phase, which provides a clear picture of the ceramic sequence with distinctive patterns of development.

A NOTE ON THE EH III PERIOD

Despite the close relationship between EH III and the beginning of the MH period as discussed above, I am not responsible for the study of the EH III material, despite its small presence at Mitrou. The analysis of the EH III material is being conducted by Eleni Zahou and is ongoing. A full description of this FGB pottery is therefore not possible at this time. However, some brief notes will be made here. FGB first appears at Mitrou during the EH III period in very small quantities, but FDB pottery is by far more common. The material from EH III contexts comes primarily from a series of pits, which were well stratified underneath the Mitrou MH phase 1 material. Morphologically, distinct differences between Mitrou MH phase 1 and this EH III material are apparent, though these are often subtle. At this early stage of research, it appears that there is a direct continuation of the EH III ceramic tradition during the MH period, which complements previous observations made at Lerna, Pevkakia, and Berbati.⁶¹

61. See n. 28, above.

TABLE 2. SYNCHRONIZATION OF SOME STRATIFIED AEGEAN MIDDLE BRONZE AGE RELATIVE CERAMIC CHRONOLOGIES, INCLUDING MITROU

<i>Mainland</i>	<i>*Mitrou</i>	<i>Pevkakia</i>	<i>Eutresis</i>	<i>*Lefkandi</i>	<i>*Lerna</i>	<i>*Kolonna</i>	<i>Ayia Irini</i>	
	Hale (present article)	Maran 1992a, 1992b	Goldman 1931; Maran 1992a	Popham and Sackett 1968; Maran 1992a, pp. 329–335	Zerner 1978, 1986, 1988, 2008; Maran 1992a	Gauss and Smetana 2003, 2007a, 2007b, 2008; Gauss and Kiriati 2011	Overbeck 1984, 1989; Davis 1986	
LH I	LH I	Late Bronze Age		3rd MH building horizon	6	V/VI	VI	
MH III (ends ca. 1675 B.C.)	MH phase 7	phase 7				V phase 7		phases J and K
MH II		MH phase 6 MH phase 5	phase 6	Late	2nd MH building horizon	5	V phases 4–5	IV
	Middle			1st MH building horizon				
	Early							
	MH phase 4	phase 5	Abandoned	4	V phase 3	phase H		
MH phase 3	phase 4	V phases 1–2					phase G	
MH phase 2								
MH I (begins ca. 2050 B.C.)	MH phase 1	phase 3	EH III	3	IV–V	phases F and G	Abandoned	
EH III	EH III	phase 2						IV phase 3

Dotted lines represent a separation of subphases based on poorly defined ceramic criteria.

* = only partially published.

MITROU MH PHASE 1: EH III–MH I

Stratigraphically this phase is represented in trench LX784 by the construction of the earthen floors of building L at ca. +2.40, and fill deposits located directly underneath (SUs LX784-076, LX784-087, LX784-090, LX784-093, and LX784-143). These floors abutted the base of wall 130 on the south and north (Figs. 5, 6). The fill of a circular clay bin (SU LX784-089) built into a lower EH III surface, at +2.20 below the northeast corner of this room, can also tentatively be placed in this phase, although the fill of this bin was contaminated with slope wash, which disqualified it from this analysis. Therefore, ceramic MH phase 1 may correspond to two subsequent events in trench LX784 (the abandonment of the EH III bin and the construction of building L). The early MH phases at Mitrou are not very well represented in trench LE792, as early occupation levels were reached in only small sections of excavation between walls 98 and 99

TABLE 3. MITROU MH CERAMIC ASSEMBLAGE COMPOSITION COUNTS

Ceramic Class	Phases						
	1	2	3	4	5	6	7
Painted pottery (consolidated)	23 6.1%	19 2.1%	12 2.2%	167 4.8%	125 4.9%	268 8.0%	365 7.6%
Fine Gray Burnished	9 2.4%	66 7.3%	58 10.7%	570 16.4%	490 19.2%	768 23.0%	1,161 24.3%
Fine Dark Burnished	51 13.5%	116 12.8%	92 17.0%	488 14.0%	320 12.5%	334 10.0%	426 8.9%
Fine Pale	21 5.5%	83 9.1%	34 6.3%	241 6.9%	223 8.7%	455 13.4%	704 14.7%
Medium-coarse pottery (consolidated)	166 43.8%	348 38.4%	184 34.0%	1,208 34.7%	969 38.0%	1,021 30.6%	1,349 28.3%
Coarse pottery (consolidated)	109 28.8%	274 30.2%	161 29.8%	810 23.2%	426 16.7%	486 14.6%	769 16.1%
Total	379 100%	906 100%	541 100%	3,484 100%	2,553 100%	3,332 100%	4,774 100%

(SUs LE792-098 and LE792-100; Figs. 3, 4). The excavations of these units removed the makeup of a possible surface at +2.73 and exposed a plaster floor at +2.56 where excavation stopped.

MH phase 1 deposits contained no obviously late sherds, though a fairly substantial quantity of unmendable and highly fragmented EH II–III material was often present (Table 1). Out of the 379 total MH sherds in these deposits, proper FGB represents a very small proportion, and FDB pottery is far more numerous (Table 3). This phase is distinguished from the underlying EH III material by a number of indicators, including an increased percentage of FDB pottery, the regular appearance of Dull Painted pottery (a specific class of painted pottery at Mitrou featuring thickly applied iron-based red paint),⁶² and the complete lack of Ayia Marina Light on Dark pottery, which is often apparent in EH III deposits. Slight morphological differences, particularly in the FDB ceramics, are also present, but these still await confirmation.

The small sample size of FGB feature sherds does not allow for a reliable quantitative examination, but some general remarks can be made, especially when taking into account the morphology of the FDB pottery, which consistently follows the development of the FGB sequence in later phases. Mitrou MH phase 1 is broadly equivalent to Pevkakia phase 3 as established by Maran.⁶³ The FGB fabric is not as fine as in later phases, and the burnishing is not as uniform. Monochrome biscuits are frequently very dark, almost black, in color. Some FGB sherds show evidence of a heavy-handed approach to burnishing that affected the topography of the sherd itself, causing a “rippling” effect, possibly due to excessive pressure. Very rounded kantharoi and two-handled bowls (usually without carinations) are the predominant vase shapes, and these often have a similar rim type and diameter, making accurate identification of fragmentary feature

62. Hale 2014.

63. For parallels at Pevkakia, see Maran 1992b, pls. 21–35; suppl. 6:1DIII, 1EI, 2CI, 1DI, 1EII, 7:1HI. For Kolonna parallels, see Gauss and Smetana 2007a, pp. 69–70, figs. 1:19/28-8, 19/28-10, 2:21b/06-2; 2007b, pp. 459–460, 462–463, pls. 6, 7:19/38-8, 9, 10:19/28-1. For Berbati parallels, see Säflund 1965, pp. 119, 153, figs. 94:b, c, 95, 122:1-4, 123:1-7. For Lerna parallels, see Zerner 1978, p. 233, figs. 1:deposit D607, profile of 1-2, deposit D563, profile of 1-4 (no interior grooves at Mitrou), 3:deposit D596, 1, 16:deposit BE435, 1-6, deposit BE448, 1. Other published but unstratified parallels from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 1:8 (profile), 10, 4:1, 6. Note that the presence of a distinctive “Early Matt Painted” import with direct parallels at the first city of Phylakopi also helps place this phase within the general chronological framework. See Edgar 1904, pp. 96–102, esp. pl. IX:4; Renfrew and Evans 2007, pp. 161–163, fig. 5:11, 12, pls. 21:b-d, 22:a; Williams and Vaughan 2007, p. 99.

sherds difficult. Rims are commonly everted and plain, but some everted and flattened rims also appear in the FDB class (Table 4). The single everted and thickened rim may represent a later contaminant from the slope wash associated with clay bin 089, as this rim type does not seem to appear in immediately subsequent phases. Most rims are typically longer than in later phases. The only handle types are vertically attached strap handles, including one which is ribbed (Table 5), and, while no bases are apparent in the FGB pottery from this phase, bases are exclusively plain and flat in all other categories (Table 6). Decoration is limited to some sherds showing a single horizontal groove at the base of the rim on the exterior (Table 7).

MITROU MH PHASE 2: MH I EARLY

In trench LX784, MH phase 2 is associated with the construction and abandonment of a rectangular clay bin (SUs LX784-086, LX784-088, and LX784-089) sunk into the ca. +2.40 floor of building L just south of wall 130 (Figs. 5, 6). The fill of a pit (SUs LX784-077 and LX784-080) cut farther southwest into this same floor also belongs to this phase. Major deposits include the construction of a hard but uneven earthen floor belonging to building K, sloping up from ca. +2.60 in the south at wall 126 to +2.80 in the north at wall 133, and fill underneath (SUs LX784-081, LX784-082, LX784-141, and LX784-142). These floors abut walls 126, 127, and 133 of building K. In the northwest of building K, just north of wall 126, a well-preserved oval plaster-and-pebble hearth was constructed in this phase on a base of MH phase 2 sherds (SUs LX784-084, LX784-083, LX784-063, and LX784-140). Thus, MH phase 2 in trench LX784 comprises the abandonment of building L, the construction of building K, and the construction of the hearth. This phase is not well represented in trench LE792 (Figs. 3, 4). Only one excavation unit (SU LE792-087), located west of wall 99 and with badly worn pottery, may date to this phase. Between walls 99 and 100, underneath the makeup of a rough gravel road at ca. +3.09/3.17, part of a small sounding may also date to this phase but may equally belong to MH phase 3 (SU LE792-099). This pottery was rather worn and not particularly diagnostic.

The EH material in these deposits is far less than in MH phase 1, and once again no obvious LH sherds are present (Table 1). MH phase 2 shows a marked increase in the presence of FGB as a proportion of a much larger sample of 906 total MH sherds (Table 3), allowing for confident quantitative observations.

This phase can largely be correlated with Maran's Pevkakia phase 4 (Table 2).⁶⁴ Kantharoi and two-handled bowls with no carination are the only major shapes, though very occasional rounded carinations are present on some pots (2, 3). While still only a relatively small sample and therefore somewhat sensitive to outliers, the MH phase 2 FGB rim EVEs generally agree with the counts (Table 4). Everted and plain rims occur, most often followed by everted and flattened rims. Small quantities of everted and slightly thickened rims also appear. Handles continue to be exclusively

64. For Pevkakia parallels, see Maran 1992b, pls. 35–46 (esp. pl. 41:15); suppl. 8:1EI, 1EII, 1HI, and 1HII. For Kolonna parallels, see the profiles and handles in Gauss and Smetana 2007a, pp. 79–80, figs. 2:21b/06-2, 3:XXXVII-1; Gauss and Kiriati 2011, p. 514, fig. 136:KOL 69. For Lerna parallels, see Zerner 1978, p. 239, figs. 7:deposit D BS General, 1–2, 11:deposit BD410, 4, 12:deposit BD155, 2, 18:deposit BE429, 1, 3–5. Other published but unstratified parallels from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 1:7, the profile of 8 and 10, 4:1, 6, 7, 8:24, 30:13, 15, 17, 19, 32:16, 17, 19.

TABLE 4. MITROU MH FINE GRAY BURNISHED RIM ESTIMATED VESSEL EQUIVALENTS AND COUNTS

<i>Rim Type</i>	<i>Phase 1</i>		<i>Phase 2</i>		<i>Phase 3</i>		<i>Phase 4</i>		<i>Phase 5</i>		<i>Phase 6</i>		<i>Phase 7</i>	
	<i>EVE</i>	<i>Count</i>												
Everted and plain	0.06 66.7%	1 50.0%	0.42 47.7%	8 47.1%	0.26 36.6%	7 58.3%	2.19 42.7%	37 44.6%	0.71 26.1%	20 37.0%	1.42 19.1%	21 16.0%	0.61 6.3%	23 12.6%
Everted, plain, and hollowed	-	-	-	-	-	-	-	-	-	-	0.45 6.0%	5 3.8%	1.41 14.5%	15 8.2%
Everted and flattened	-	-	0.38 43.2%	7 41.2%	-	-	0.6 11.7%	6 7.2%	0.07 2.6%	1 1.9%	-	-	-	-
Everted and slightly thickened	-	-	0.08 9.1%	2 11.8%	0.25 35.2%	3 25.0%	0.24 4.7%	4 4.8%	0.1 3.7%	2 3.7%	0.24 3.2%	4 3.1%	0.27 2.8%	5 2.7%
Everted and thickened	0.03 33.3%	1 50.0%	-	-	-	-	1.35 26.3%	28 33.7%	1.1 40.4%	19 35.2%	1.73 23.2%	36 27.5%	1.58 16.2%	30 16.4%
Everted, thickened, and hollowed	-	-	-	-	-	-	0.15 2.9%	3 3.6%	0.49 18.0%	8 14.8%	2.52 33.8%	53 40.5%	3.68 37.7%	71 39.0%
Clubbed	-	-	-	-	-	-	-	-	-	-	-	-	0.2 2.1%	3 1.6%
Doubly everted and plain	-	-	-	-	0.2 28.2%	2 16.7%	0.25 4.9%	1 1.2%	0.06 2.2%	1 1.9%	0.34 4.6%	7 5.3%	1.41 14.5%	24 13.2%
Doubly everted and thickened	-	-	-	-	-	-	0.35 6.8%	4 4.8%	0.19 7.0%	3 5.6%	0.75 10.1%	5 3.8%	0.59 6.1%	11 6.0%
Total	0.09 100%	2 100%	0.88 100%	17 100%	0.71 100%	12 100%	5.13 100%	83 100%	2.72 100%	54 100%	7.45 100%	131 100%	9.75 100%	182 100%

TABLE 5. MITROU MH FINE GRAY BURNISHED HANDLE COUNTS

<i>Handle Type</i>	<i>Phase</i>						
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
General strap	1 33.3%	5 31.3%	3 23.1%	27 36.0%	27 45.8%	30 36.1%	42 30.7%
High-swung strap	1 33.3%	7 43.8%	4 30.8%	33 44.0%	22 37.3%	29 34.9%	47 34.3%
Short strap	–	3 18.8%	2 15.4%	10 13.3%	7 11.9%	8 9.6%	23 16.8%
Ribbed strap	1 33.3%	1 6.3%	2 15.4%	1 1.3%	–	–	1 0.7%
Circular loop	–	–	1 7.7%	3 4.0%	–	2 2.4%	3 2.2%
Rectangular loop	–	–	–	1 1.3%	3 5.1%	14 16.9%	20 14.6%
Other	–	–	1 7.7%	–	–	–	1 0.7%
Total	3 100%	16 100%	13 100%	75 100%	59 100%	83 100%	137 100%

strap handle types (Table 5), and ribbed strap handles continue to appear in both FGB and FDB classes. Bases are again limited to plain and flat examples (Table 6), and decorative grooving on the upper shoulders of both kantharoi and two-handled bowls appears for the first time (Table 7).

1 Fine Gray Burnished two-handled bowl Fig. 11

LX784-081-016. Trench LX784, SU 081 [1].

Diam. rim 17.5 cm. Wt. 0.030 kg.

One sherd preserving 8% of the rim and ca. 5% of the body. Everted and flattened rim, shoulder grooves. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Rim: Maran 1992b, pls. 41:12, 46:13, 47:1; Gauss and Smetana 2007a, p. 70, fig. 2:21b/07-5; Sarri 2010a, pl. 1:9, 10. Grooving: Maran 1992b, pls. 37:8, 44:2; Sarri 2010a, pls. 1:7, 30:17, 32:16.

2 Fine Gray Burnished kantharos Fig. 11

LX784-063-019. Trench LX784, SU 063 [4].

Diam. rim ca. 16; W. handle 3.3 cm. Wt. 0.035 kg.

Four sherds preserving 3% of the rim, 5% of one handle, and ca. 10% of the body. Everted and plain rim, high-swung strap handle, shoulder grooves. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Zerner 1978, p. 250, fig. 18:deposit BE429, 1, 5; Maran 1992b, pls. 37:8, 46:15, 51:12, 55:14, 15; Gauss and Smetana 2007a, p. 69, fig. 1:19/28-8, 19/28-10; Sarri 2010a, pls. 1:7, 32:16, 17, 19.

MH phase 2, but likely late in the phase or early in phase 3.

TABLE 7. MITROU MH FINE GRAY BURNISHED DECORATIVE ADDITION COUNT

<i>Decorative Addition Type</i>	<i>Phase</i>						
	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>
Exterior rim groove	1 16.7%	5 11.9%	1 3.1%	10 4.1%	1 0.6%	1 0.4%	4 0.9%
Shoulder grooves	–	5 11.9%	5 15.6%	31 12.8%	6 3.6%	6 2.1%	2 0.5%
Rim and shoulder grooves	–	1 2.4%	–	3 1.2%	–	–	–
Lower body rib	–	–	–	–	–	1 0.4%	20 4.6%
Exterior shoulder ribs	–	–	–	–	–	–	4 0.9%
Simple incisions	–	–	–	2 0.8%	–	1 0.4%	–
No additions	5 83.3%	30 71.4%	26 81.3%	196 81.0%	158 95.8%	276 96.8%	409 93.2%
Total	6 100%	41 100%	32 100%	242 100%	165 100%	285 100%	439 100%

3 Fine Gray Burnished kantharos

Fig. 11

LX784-081-018. Trench LX784, SU 081 [1].

W. handle 4.5 cm. Wt. 0.040 kg.

One sherd preserving 15% of one handle. High-swung strap handle. Fabric: MH MFG 1. Core 2.5YR 5/1; interior fracture 2.5YR 5/2; exterior fracture 2.5YR 5/1; interior surface 2.5YR 4/1; exterior surface 2.5YR 4/1. “Hard” hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 38:1, 2, 41:6; Sarri 2010a, pl. 4:6, 9.

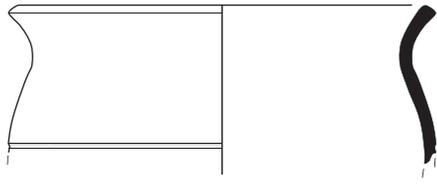
MITROU MH PHASE 3: MH I LATE

In trench LX784 this phase is associated with material found on top of the first floor of building K, defined in the north (SU LX784-074), and the pottery used in the construction of a second floor directly on top (SU LX784-072), at ca. +3.00/2.80 (Figs. 5, 6). Material lying immediately on top of this second floor is also associated with this phase, representing a burned destruction (SU LX784-070). In trench LE792, no surfaces or architecture definitively datable to MH phase 3 were discernible, although this is likely due to the limited excavation at this elevation.⁶⁵

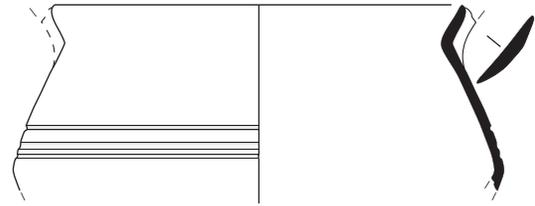
Residual EH II and EH III material continues to be less common than in previous phases, while very small amounts of late material were removed from some units. At only 2% overall and <1% in weight, any remaining undetected late contaminants should be rendered statistically insignificant (Table 1). In comparison to MH phase 2, FGB further increases as a proportion of the 541 total MH sherds during this phase (Table 3).

65. Some units from LE792 not included in this sample neither contain material that is definitively MH phase 2 or MH phase 3, nor are associated with architecture. Further excavation in this area should reveal better stratified MH phase 3 deposits. See discussion, p. 265, above.

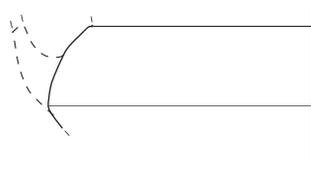
Phase 2



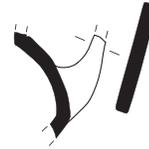
1



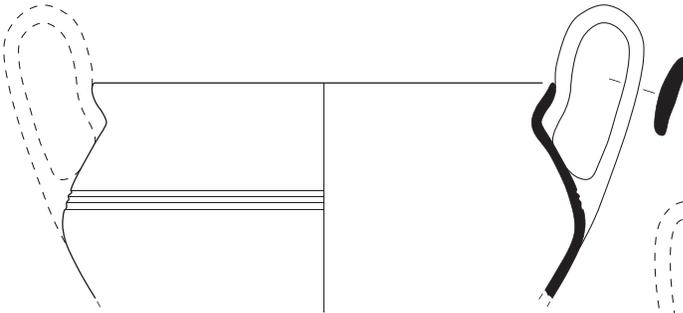
2



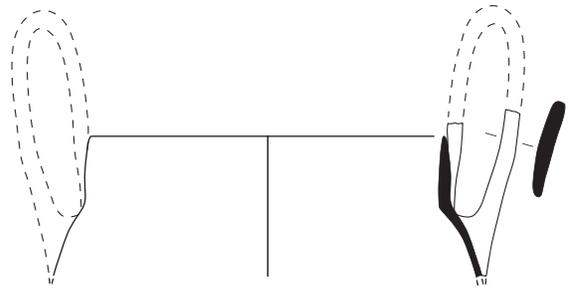
3



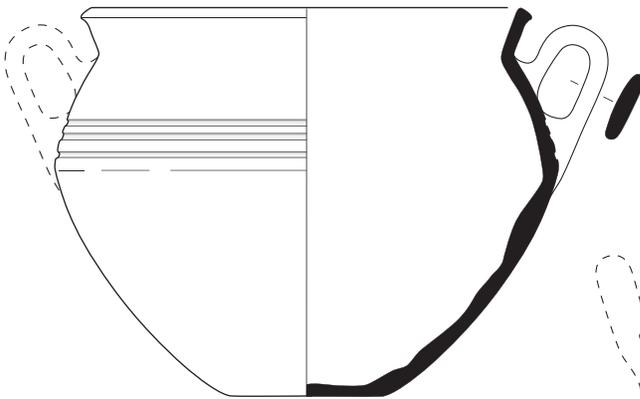
Phase 3



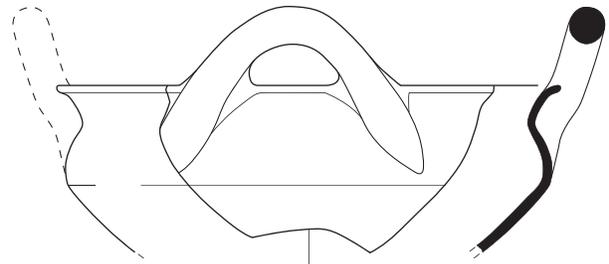
4



5



6



7

Figure 11 (*opposite*). Mitrou MH Fine Gray Burnished examples, MH phases 2–3. Scale 1:3. Drawings T. Ross

Mitrou MH phase 3 closely resembles the previous ceramic phase in many ways, but some subtle differences are apparent (Fig. 11). Two-handled bowls and kantharoi are still the dominant shapes, but these now consistently show faint carination creases on the belly.⁶⁶ Shallow carinated bowls also make their first appearance.⁶⁷ This shape appears at Pevkakia for the first time during Pevkakia phase 5, but in MH phase 3 at Mitrou there is an absence of other Pevkakia phase 5 profiles and characteristics.⁶⁸ Alongside the clear differences from Mitrou MH phase 2, this indicates that MH phase 3 may be chronologically located between Pevkakia phases 4 and 5 (Table 2). The small sample size of FGB rims in this phase means that the statistical data are sensitive to outliers. Everted and plain rims are evidently overrepresented in the count because of a high degree of fragmentation, but they are still the most common rim type overall (Table 4). Everted and slightly thickened rims are conversely underrepresented in the count and are likely almost as common as everted and plain rims. Two comparatively well-preserved doubly everted and plain rims also appear for the first time in this phase. In comparison to the previous phase, thickened rim types and doubly everted rim types are much more prevalent, whereas everted and flattened rims surprisingly (perhaps coincidentally as a result of their small reappearance in the next phase) do not appear at all in this sample. Strap handle types are still dominant, and ribbed strap handles are more common than before (Table 5). Horizontally attached circular loop handles make their first appearance in conjunction with body sherds belonging to the short-shouldered, shallow carinated bowl. A unique shallow horseshoe lug handle is a singleton at Mitrou and has been placed in the “other” category. Plain and flat bases are still the only base types to appear (Table 6), and horizontal shoulder grooving on both kantharoi and two-handled bowls continues to be the only type of FGB decoration (Table 7).

4 Fine Gray Burnished kantharos Fig. 11

LX784-070-013. Trench LX784, SU 070 [1].

Diam. rim 18.6; W. handle 3.3 cm. Wt. 0.110 kg.

One sherd preserving 5% of the rim and 100% of one handle. Everted and plain rim, high-swung strap handle, shoulder grooves. Fabric: MH FG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 37:8, 47:6, 55:14, 15. Without grooving: Zerner 1978, p. 250, fig. 18:deposit BE429 1, 5l; Maran 1992b, pls. 38:2, 41:6, 56:1, 58:18; Sarri 2010a, pl. 4:8.

5 Fine Gray Burnished kantharos Fig. 11

LX784-070-012. Trench LX784, SU 070 [10].

Diam. rim 15; Diam. base 5; W. handle 3.8 cm. Wt. 0.15 kg.

Ten joining sherds preserving 11% of the rim, 50% of one handle, 56% of the base, and ca. 50% of the body. Everted and plain rim, high-swung strap handle, plain flat base. Fabric: MH MFG 1. Core GLEY1 6/N; interior fracture 2.5Y 6/1; exterior fracture 2.5Y 6/1; interior surface GLEY1 5/N; exterior surface GLEY1 5/N. “Very hard” hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 37:3, 44:17; Sarri 2010b, pl. 4:1, 6; Philippa-Touchais and Touchais 2011, pp. 206, 212, figs. 12:24, 13:29, 37.

MH phase 3, but possibly an earlier piece in a slightly later context.

66. Similar creases are shown in Maran 1992b, suppl. 8:3G, 1FII.

67. Cf. Maran 1992b, suppl. 9:1EI, 10:1FIb.

68. For Pevkakia parallels, see Maran 1992b, suppl. 8:1EII, 1HI, 3G, 9:1EI, 1FIa, 10:1HI, 1HIII. Some features missing at Mitrou indicative of Pevkakia phase 5 include Maran 1992b, suppl. 9:1FIa, 1F1b (rims), 10:1FII (sharper carinations), and the bases indicated on drawing 10. Other published but unstratified parallels for this phase from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 1:7, 8–11 (profile), 4:1, 6, 8, 8:24, 19:9 (profile), 27:8, 11, 30:5, 10, 13, 15, 17, 19, 32:16, 29.

6 Fine Gray Burnished two-handled bowl Fig. 11

LX784-072-014. Trench LX784, SU 072 [11].

H. 15.6; Diam. rim 18; Diam. base 7; W. handle 2.7 cm; Wt. 0.345 kg.

Eleven sherds preserving 25% of the rim, 100% of one handle, 57% of the base, and ca. 30% of the body. Everted and slightly thickened rim, short strap handle, plain flat base, shoulder grooving. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5YR 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 46:15, 51:12, 55:8 (though with a thickened rim), 57:1. Similar base: Philippa-Touchais and Touchais 2011, pp. 206, 212, figs. 12:24, 13:29, 37. Similar profile but no grooving: Philippa-Touchais and Touchais 2011, p. 206, fig. 12:25.

7 Fine Gray Burnished carinated bowl Fig. 11

LX784-070-014. Trench LX784, SU 070 [4].

Diam. rim 21; W. handle 1.3 cm. Wt. 0.110 kg.

Four sherds preserving 20% of the rim, 100% of one handle, and ca. 20% of the body. Doubly everted and plain rim, high-swung strap handle. Fabric: MH MFG 1. Core 2.5YR 5/1; interior fracture 2.5YR 5/1; exterior fracture 2.5YR 5/1; interior surface 2.5YR 5/1; exterior surface 2.5YR 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pl. 55:7. No grooving: Maran 1992b, pl. 58:5. Different rim: Sarri 2010a, pl. 26:5.

MITROU MH PHASE 4: MH II EARLY

In trench LX784, MH phase 4 is associated with the exposure and makeup of a large sloping pink plaster surface at +3.16/3.05, as well as burned destruction debris of building K underneath (SU LX784-066) down to +3.00/2.85 (Figs. 5, 6). Above this and also associated with Mitrou MH phase 4 was a ca. 10–15 cm thick sequence of multiple layers of thick ashy soil below an informal earthen surface at ca. +3.25/3.15 (SU LX784-064). The fill of three circular pits (excavated in four SUs) cut into this surface in the western part of the trench also dates to this phase (SUs LX784-059, LX784-060, LX784-061, LX784-062). In trench LE792, the disintegrated remains of a large black carbon stain, interpreted as a disintegrated log boat (SU LE792-094), dates to MH phase 4 and lies on top of a gravel road at ca. +3.09/3.15 (Figs. 3, 4).⁶⁹ The makeup of the gravel road was excavated only in a small sounding in the southeast corner of the trench, which dates to this phase as well (SU LE792-097). The boat was covered by a thin layer of earth and pebbles at ca. +3.17/3.25, also dating to MH phase 4 (SUs LE792-088 and LE792-096, in the southeast corner of the trench). On top of this was a thick layer of earth and cobbles at ca. +3.25/3.35, the surface makeup of which also dates to this phase (SUs LE792-084 and LE792-095). Likewise, the pottery used in the construction of a third superimposed layer of cobbles at ca. +3.22/3.35 belongs to MH phase 4 (SU LE793-083). All three layers were interpreted by the excavators as superimposed road surfaces between walls 99 and 100.

69. Van de Moortel 2012.

One of the best-represented samples at Mitrou, the FGB of MH phase 4 again increases as a proportion of a very large sample of 3,484 total MH sherds (Table 3). FGB is now the dominant class of fine ware at Mitrou and outstrips FDB for the first time. Homogeneity continues to be high, and fragmented EH II and EH III material accounts for a very small percentage of the assemblage in most deposits (Table 1). Some LH contaminants were mostly limited to the northeast section of trench LX784, where three later pits were dug into MH phase 4 levels. These pits are distinct from, but lie just under, a large and mixed deposit of debris caused by later MH building activity, which was in turn cut by a LH I cist grave; these sherds may have originated from this activity. While these sherds were removed from the quantitative analysis, this later contamination represents a tiny proportion of the assemblage and was not considered extensive enough to warrant the removal of the entire deposit. Any outliers caused by any undetected late contamination should be rendered statistically insignificant.

This phase represents a relatively innovative period that sees the appearance of numerous characteristics closely associated with Pevkakia phase 5 (Table 2).⁷⁰ The dominant shapes are still the kantharos and the two-handled bowl, but these now often portray distinct carination creases and/or an occasionally higher shoulder, which results in a more angular profile in many cases (10, 12, 13).⁷¹ Furthermore, sherds belonging to shallow carinated bowls with a short shoulder are much more frequent than in previous phases.⁷²

Everted and plain rims remain the most common (Table 4). From this phase onward, these rims can mostly be associated with kantharoi, but almost never with two-handled bowls. Everted and fully thickened rims are probably slightly underrepresented in the count because of large average sherd size, and they can mostly be associated with two-handled bowls. Along with small quantities of everted and slightly thickened rims, this is a near inversion of the rim type distribution in the previous phase. Everted and flattened rims make up a small percentage but are likely underrepresented in the count because of relatively large average sherd size, and this marks a reappearance after their conspicuous absence in the previous phase. Doubly everted rim types are more apparent than in previous phases, and are also slightly underrepresented in the count, indicating an increase in the relative number of shallow carinated bowls. Three examples of everted thickened and hollowed rims appear, but the very slight hollowing on these rims is usually a characteristic strongly associated with MH phase 6 and later, and their presence may be a result of later contamination resulting from the disturbances in the northeast section of trench LX784.

Very little change appears in the FGB handles associated with MH phase 4 (Table 5). The vast majority are still strap handles, but only a single ribbed strap handle appears, and it is apparent that these have now all but disappeared. Horizontal loop handles are slightly more common than in the preceding phase, and one example of a horizontal rectangular loop handle could either be a later contaminant or it could be its first appearance.

70. For Pevkakia parallels, see Maran 1992a, pp. 359–363; 1992b, pls. 46–64, suppl. 9:1EI, 1FIa, 10:1FIb, 1HI, 1HIII. While also possibly later, for Kolonna parallels, see Gauss and Kiriati 2011, fig. 137:KOL 67, KOL 68. Other published but unstratified parallels (some of which could also be later) from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 2:2, the profile of 6, 4:8, 5:6, 9:1, 13:2–5, 7, 9, 11–13, 30, 14:3–5, 7, 9, 12, 18–20, 17:5, 6, 19:10, 26:3, 5, 27:7–11, 29:3, 7, 8, 10, 14, 21.

71. Cf. Maran 1992b, suppl. 9:20, 10:2, 5.

72. Cf. Maran 1992b, suppl. 9:1EI, 10:1FIb.

The nature of FGB bases changes drastically during MH phase 4 (Table 6). The previously ubiquitous plain and flat bases are comparatively less common, though they are slightly underrepresented in the count because of relatively large average sherd size. Rare occurrences of raised flat bases and raised ring bases both appear for the first time with the underrepresentation of raised ring bases in the count also due to large average sherd size. However, the major change during phase 4 is the introduction of previously unknown pedestal bases. Small plain pedestals with no horizontal ribbing and the slightly more common single lower rib pedestal bases are underrepresented in the count. Thus far, no complete vessel profiles with these pedestals have been found at Mitrou from this phase, but they are likely to belong to either kantharoi or shallow carinated bowls because of their size and their appearance on later examples. The diameter of many fragmentary pedestal rims classified as general pedestals because of poor preservation suggests that these two smaller pedestal types are likely the only types of pedestals during this phase. There is no evidence for the larger multiple rib pedestals.

Horizontal decorative grooving continues to consistently appear on all shapes during this phase. Two further sherds portray more complex incised motifs executed before firing, but these are almost unique pieces throughout the MH FGB assemblage at Mitrou and may in fact be imports from elsewhere.

Figure 12 (*opposite*). Mitrou MH Fine Gray Burnished examples, MH phases 4–5. Scale 1:3. Drawings T. Ross

8 Fine Gray Burnished kantharos Fig. 12

LX784-062-027. Trench LX784, SU 062 [8].

Diam. rim 9.5; W. handle 2.3 cm. Wt. 0.045 kg.

Eight sherds preserving 35% of the rim, 40% of one handle, and ca. 20% of the body. Everted and plain rim, high-swung strap handle, shoulder grooves. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 2.5Y 5/2; exterior fracture 2.5Y 5/2; interior surface 2.5Y 5/2; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 47:6, 51:8, 55:15; Sarri 2010a, pl. 8:2.

9 Fine Gray Burnished open shape Fig. 12

LE792-084-013. Trench LE792, SU 084 [1].

Wt. 0.040 kg.

One sherd preserving 80% of a pedestal base. Single lower rib pedestal base. Fabric: MH MFG 1. Core GLEY1 6/N; interior fracture GLEY1 6/N; exterior fracture GLEY1 6/N; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Sarri 2010a, pl. 29:3, 7, 8, 17, 21.

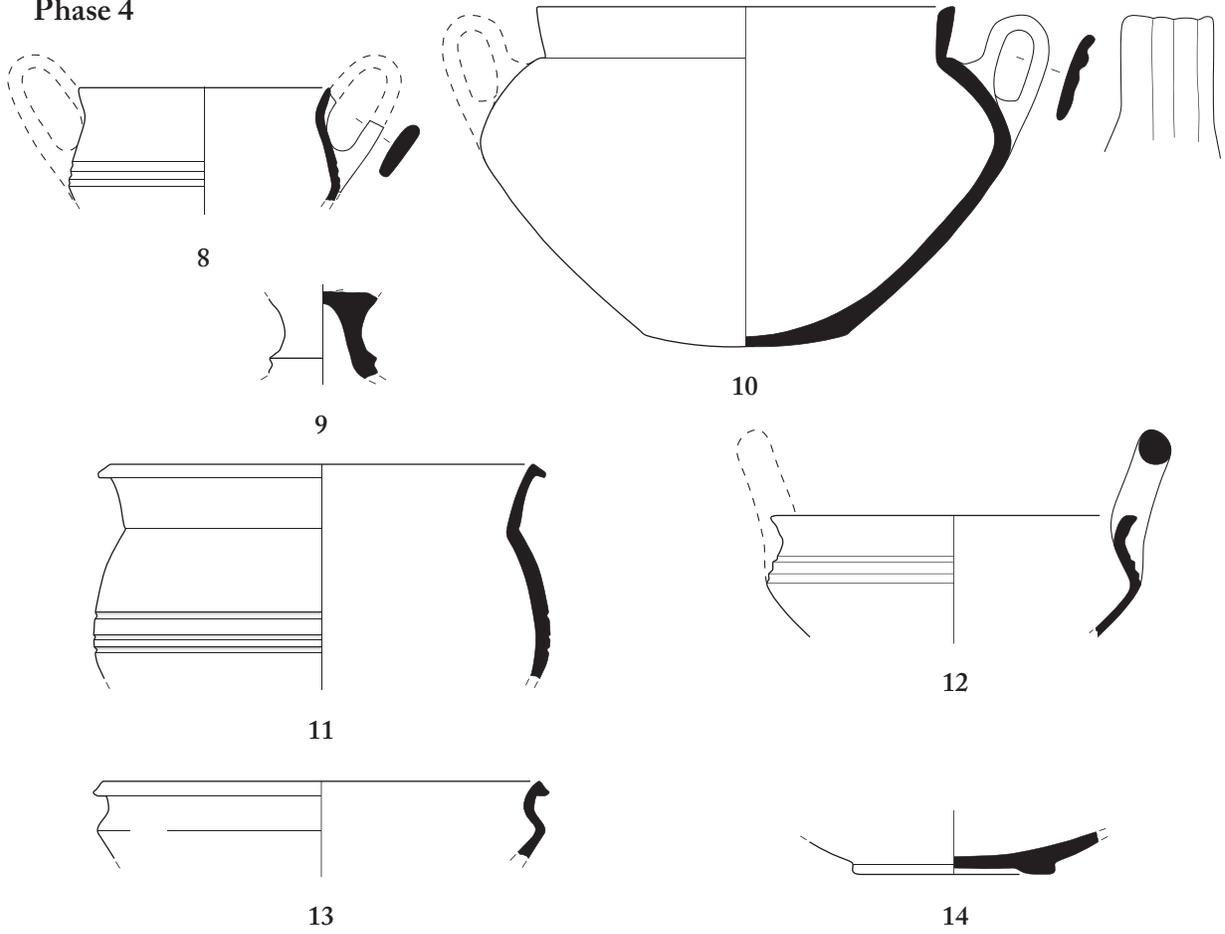
10 Fine Gray Burnished two-handled bowl Fig. 12

LX784-062-017. Trench LX784, SU 062 [17].

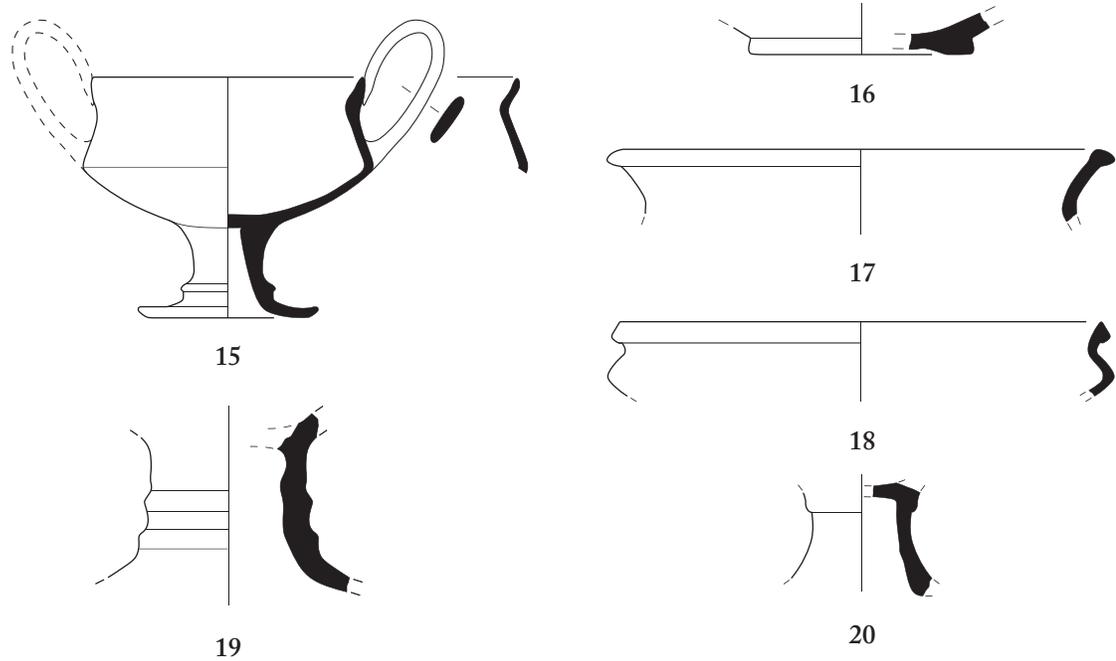
H. 13.5; Diam. rim 17.5; Diam. base 9; W. handle 3.6 cm. Wt. 0.490 kg.

Seventeen sherds preserving 10% of the rim, 100% of one handle, 40% of the base, and ca. 40% of the body. Everted and flattened rim, ribbed strap handle, plain flat base, exterior rim groove. This bowl has an unusually high shoulder. Fabric: MH MFG 2. Core GLEY1 5/N; interior fracture GLEY1 6/N; exterior fracture GLEY1 6/N; interior surface GLEY1 5/N; exterior surface GLEY1 5/N. “Very hard” hardness. Burnished on the interior and the exterior.

Phase 4



Phase 5



Maran 1992b, pls. 46:13, 47:1, 55:1, 2, 58:6; Sarri 2010a, pl. 1:8; Philippa-Touchais and Touchais 2011, p. 212, fig. 13:29, 37. Different base: Sarri 2010a, pl. 2:2. Morphology: Philippa-Touchais and Touchais 2011, p. 206, fig. 12:24.

11 Fine Gray Burnished two-handled bowl Fig. 12

LX784-066-017. Trench LX784, SU 066 [1].

Diam. rim 18 cm. Wt. 0.045 kg.

One sherd preserving 7% of the rim and ca. 5% of the body. Everted and thickened rim. Fabric: MH MFG 1. Core GLEY1 6/N; interior fracture GLEY1 6/N; exterior fracture GLEY1 6/N; interior surface GLEY1 6/N; exterior surface GLEY1 6/N. "Very hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 46:15, 51:7, 55:6, 58:15; Sarri 2010a, pl. 19:10.

12 Fine Gray Burnished carinated bowl Fig. 12

LX784-062-026. Trench LX784, SU 062 [2].

Diam. rim 15; W. handle 1.3 cm. Wt. 0.075 kg.

Two sherds preserving 25% of the rim and 100% of one handle. Doubly everted and plain rim, circular loop handle, shoulder grooves. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pl. 58:5; Sarri 2010a, pl. 27:12–15. No grooving; Maran 1992b, pl. 55:7. With thickened rims: Sarri 2010a, pl. 27:8, 10.

13 Fine Gray Burnished carinated bowl Fig. 12

LX784-060-017. Trench LX784, SU 060 [1].

Diam. rim 17.5 cm. Wt. 0.005 kg.

One sherd preserving 5% of the rim. Doubly everted and thickened rim. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 2.5Y 5/2; exterior fracture 2.5Y 5/2; interior surface 2.5Y 5/2; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pl. 46:14; Sarri 2010a, pls. 26:8, 9, 27:9.

14 Fine Gray Burnished open shape Fig. 12

LE792-084-012. Trench LE792, SU 084 [2].

Diam. base 8.5 cm. Wt. 0.050 kg.

Two sherds preserving 37% of the base. Raised ring base. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 55:11, 62:18; Sarri 2010a, pls. 2:2, 12:7, 9, 10, 13:4, 14:24; Philippa-Touchais and Touchais 2011, p. 212, fig. 13:31.

MITROU MH PHASE 5: MH II MIDDLE

In trench LX784, material lying on top of the informal earthen surface at ca. +3.25/3.15 (SU LX784-050) and directly underneath a higher earthen surface at ca. +3.35/3.30 dates to MH phase 5 (Figs. 5, 6). On top of this higher earthen surface was material from the same ceramic phase, covered by another informal earthen surface at ca. +3.43/3.53 (SU LX784-049). In trench LE792, a patchy white plaster surface or floor at ca. +3.34/3.49,

abutting both walls 97 and 98, was constructed in MH phase 5 (SU LE792-077; Figs. 3, 4). The debris underneath on the east and west sides of wall 99 likewise dated to this phase (SUs LE792-078 and LE792-079). This surface had been cut by two MH phase 7 cist graves (40 and 41) to the southwest and northwest, respectively, which may have introduced some later contamination into the construction fill of this surface.

Once again the homogeneity of these deposits is excellent, with almost no material that dates to earlier or later than the MH period (Table 1). The small amounts of late contaminants are all associated with excavation units that directly border units associated with the disturbed northeast area of trench LX784. However, these sherds, which are a very small part of the total assemblage, were removed from analysis, and were not considered extensive enough to justify removing the entire sample from consideration. FGB continues to increase in frequency and is now by far the most dominant class of fine unpainted pottery in the large sample of 2,553 total MH sherds (Table 3).

Clearly associated with Pevkakia phase 6 Early (Table 2), Mitrou MH phase 5 sees the very first occurrence of multiple ribbed pedestal bases commonly associated with the quintessential MH FGB shape—the multiple ribbed pedestaled goblet known as the Lianokladhi goblet (Table 6; 17, 19).⁷³ Kantharoi still occur alongside more frequent carinated bowls and rarer two-handled bowls, but all shapes now exhibit sharp carinations.

Typical everted and plain rims remain a significant part of the assemblage, though they are overrepresented in the count because of a relatively small average sherd size (Table 4). Thickened rims are by far the most dominant type during phase 5, many of which are simply everted and thickened, but everted, thickened, and hollowed rims appear more frequently than in previous phases. Furthermore, according to the EVEs, all of these thickened rims appear to be slightly underrepresented in the count because of their relatively larger average sherd size. Doubly everted rims also appear slightly more frequently in this phase. The single example of an everted and flattened rim, and two instances of everted and slightly thickened rims, may represent earlier kick-ups.

Some small changes appear with regard to handle types during phase 5 (Table 5). Strap handles are still by far the most common type, and short strap handles can now be associated with Lianokhladi goblets alongside two-handled bowls. Horizontal rectangular loop handles continue to appear, but circular loop handles are seemingly absent, and ribbed strap handles have completely disappeared.

Significant changes to the FGB bases characterize this phase (Table 6). Basic plain and flat bases are extremely underrepresented in the count because of very large average sherd size, as are raised ring bases to a slightly lesser extent. Pedestal bases form the majority of this sample in the count because of a higher breakage rate, larger surface area, and a lack of pedestal rim sherds, but they are underrepresented in the EVEs because of the lack of pedestal base rims. Nevertheless, this is still a significant increase when compared with the frequency of pedestal bases from previous phases. Single upper rib pedestal bases appear for the first time during the MH period,

73. For Pevkakia parallels, see Maran 1992b, pls. 64–82, suppl. 12:1FIa, 1FIb, 1HIII, 2CIII. Occasionally smaller versions of the multiple rib pedestal base may be related to Pteleon goblets; see Gauss and Smetana 2007a, p. 74, fig. 6:XXXV-4. For parallels from Kolonna that are probably equivalent to either Mitrou MH phase 5 or 6, see Gauss and Kiriati 2011, p. 514, figs. 136:KOL 62, KOL 75, 137:KOL 66, KOL 71. For Eutresis parallels, see Goldman 1931, pp. 136–137, 139, figs. 183, 184:3, 4, 185:1, 187:1, 3, 4; see also Dietz 1991, pp. 47, 55, figs. 7:18, 10:46. Other published but unstratified parallels from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 5:13, 6:7, 17:5–7, 12, 15, 18:1–3, 5, 6, 23:7, 13, 16–18, 24:2, 5, 7–9, 13, 14, 26:2–3, 5, 29:6, 9, 11, 12, 13, 15, 31:13, 18, 19.

probably associated closely with Pteleon goblets, alongside the first appearance of multiple rib pedestal bases associated with pedestaled goblets.

Decoration on FGB sherds is limited during phase 5 in comparison to previous phases. One example of a shallow horseshoe lug on a FGB feature sherd appears, but this is a completely unique occurrence during the MH period at Mitrou.

15 Fine Gray Burnished pedestaled kantharos Fig. 12

LE792-078-011. Trench LE792, SU 078 [15].

H. (with pedestal) 10; H. (without pedestal) 6.5; Diam. base 7; W. handle 2 cm. Wt. 0.100 kg.

Fifteen sherds preserving 5% of the rim, 100% of one handle, 17% of a pedestal base, and ca. 40% of the body. Everted and plain rim, high-swung strap handle, single lower rib pedestal base. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

No direct parallels but similar elements seen in Dietz 1991, p. 45, fig. 7:18; Maran 1992b, pls. 65:2, 69:9, 13, 82:2; Sarri 2010a, pls. 8:11, 13, 29:3, 8, 17, 21. Similar size but no carination: Philippa-Touchais and Touchais 2011, p. 212, fig. 13:32, 33.

16 Fine Gray Burnished open shape Fig. 12

LX784-050-020. Trench LX784, SU 050 [1].

Diam. base 9 cm. Wt. 0.020 kg.

One sherd preserving 25% of the base. Raised ring base. Fabric: MH MFG 1. Core 2.5Y 4/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Sarri 2010a, pls. 2:2, 12:7, 9, 13:4, 5, 9, 11, 12, 14:24.

17 Fine Gray Burnished Lianokhladi goblet or two-handled bowl Fig. 12

LX784-049-021. Trench LX784, SU 041 [1].

Diam. rim 19 cm. Wt. 0.015 kg.

One sherd preserving 17% of the rim. Everted, thickened, and hollowed rim. Fabric: MH MFG 1. Core 2.5Y 4/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Dietz 1991, p. 55, fig. 10:46; Maran 1992b, pls. 93:2, 3, 103:9-12; Sarri 2010a, pl. 17:2, 3, 8.

18 Fine Gray Burnished carinated bowl or Pteleon goblet Fig. 12

LX784-049-022. Trench LX784, SU 049 [1].

Diam. rim 19.5 cm. Wt. 0.010 kg.

One sherd preserving 8% of the rim. Doubly everted and thickened rim. Fabric: MH MFG 1. Core 2.5Y 4/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 68:12, 148:1-3; Sarri 2010a, pls. 26:4, 8, 14, 27:9.

19 Fine Gray Burnished Lianokhladi goblet Fig. 12

LX784-044-019. Trench LX784, SU 019 [1].

Wt. 0.050 kg.

One sherd preserving 25% of the pedestal base. Multiple rib pedestal base. Fabric: MH MFG 2. Core GLEY1 6/N; interior fracture GLEY1 6/N; exterior fracture GLEY1 6/N; interior surface GLEY1 6/N; exterior surface GLEY1 6/N. “Hard” hardness. Burnished on the interior and on the exterior.

Maran 1992b, pls. 69:1, 70:1–4; Sarri 2010a, pls. 15:1, 23:4, 7, 17.

20 Fine Gray Burnished open shape Fig. 12

LX784-050-026. Trench LX784, SU 050 [1].

Wt. 0.025 kg.

One sherd preserving ca. 60% of the pedestal base. Single upper rib pedestal base. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Maran 1992b, pls. 147:6, 151:11, 12; Sarri 2010a, pl. 29:6, 9, 11–13, 15.

MITROU MH PHASE 6: MH II LATE

This phase does not see a large amount of architectural activity in trench LX784 (Figs. 5, 6). A ca. 20 cm thick deposit directly overlying the surface at ca. +3.43/3.53 (SU LX784-041) can be dated to this phase. In the northwest corner, this surface was cut by three pits that seem to have been filled during MH phase 6, but were contaminated at a later date through the construction of a later LH I cist. These pits were discounted from the quantitative analysis. An informal surface at +3.65/3.68 abutting wall 123 on the east is securely dated to this phase. Southwest of wall 124, the makeup of a surface at ca. +3.65/3.70 (SU LX784-044), located below the bottom elevation of wall 124, and sherds from directly underneath wall 124 (SU LX784-047) date to this phase as well. In trench LE792, material lying on top of the MH phase 5 surface at ca. +3.34/3.49, abutting walls 97 and 98, dates to MH phase 6 (SUs LE792-075 and LE792-074; Figs. 3, 4).

While this phase is not extensive when considering stratigraphy and architecture, it is well represented in terms of pottery quantities. From a total sample size of 3,332 MH sherds, FGB continues to extend its dominance over the other fine unpainted classes (Table 3). Homogeneity is once again extremely high in a sample with almost negligible earlier or later material (Table 1). All late sherds are again associated with excavation units abutting the disturbed northeast section of trench LX784. While deposits from excavation units that physically form this area of disturbance were completely discounted from the quantitative analysis, some small contamination may have unintentionally spread to immediately adjacent excavation units. Nevertheless, this contamination occurs in very small numbers and can largely be discounted.

Many of the same characteristics apparent in MH phase 5 occur during MH phase 6 but with some distinct new features that correspond to Pevkakia phase 6 Middle (Table 2).⁷⁴ Goblets, kantharoi (sometimes quite small), and two-handled bowls continue to be the most common shapes, accompanied by the rarer “Pteleon goblets,” with their distinctive handle and base (21, 22). Most shapes continue to develop sharper carination creases and are usually very angular in profile.

74. For Pevkakia parallels, see Maran 1992b, pls. 82–106, suppl. 15:1FIa, 1F1b, 2CIII. For Kolonna parallels, see Gauss and Smetana 2007a, pp. 74–75, figs. 6:XXXV-4, XXXV-5, 7:XXXV-9; Gauss and Kiriati 2011, pp. 514–515, figs. 136:KOL 62, KOL 75, 137:KOL 66, KOL 71; also n. 74, above. For Eutresis parallels, see Goldman 1931, pp. 136–137, 139, figs. 183, 184:3, 4, 185:1, 2, 6, 187:1, 3, 4; see also Dietz 1991, p. 55, fig. 10:46. Further published but unstratified parallels from Orchomenos may include, but are not necessarily limited to, Sarri 2010b, pls. 8:11, 13, 14, 16:1, 2, 4, 5, 7, 8, 10, 17:2, 3, 6–9, 11, 12, 14, 15, 20:10, 26:2, 4, 6–8, 11, 14, among others.

Everted and plain rims continue to be prominent and are predominantly associated with kantharoi (Table 4). Everted, plain, and hollowed rims appear for the first time, following a distinct trend of rim hollowing that began in the previous phase but now accelerates. A very large proportion of the sample consists of thickened rim types. Regular everted and thickened rims continue to be present in strong numbers, but there is a significant increase in everted, thickened, and hollowed rims, despite a slight overrepresentation in the count. This serves as an important defining characteristic of MH phase 6 and later deposits. The doubly everted and plain rims in this sample are probably associated with shallow carinated bowls or Pteleon goblets, along with the doubly everted and thickened rims, which are significantly underrepresented in the count because of a relatively large average sherd size. Very rare appearances of everted and slightly thickened rims are probably early features persisting from previous phases.

The proportion of strap handles remains similar to that of earlier phases. Once again, no ribbed strap handles are present in this sample. Horizontal loop handles occur in significantly higher numbers compared to previous phases, and rectangular loop handles in particular are much more prevalent—a distinct characteristic of this phase.

FGB bases do not seem to change drastically (Table 6). The simple plain and flat bases persist, and these are very well preserved and are subsequently underrepresented in the count. Pedestal bases are the most common, but no definitely plain pedestals were identified. Single lower rib pedestal bases outnumber the single upper rib pedestal bases. Multiple rib pedestal bases are more common, but are also underrepresented in the EVEs because of the lack of pedestal rim sherds. Furthermore, many of the general pedestal rims are likely to belong to multiple rib pedestal bases because of their comparatively large diameters.

Decoration on FGB sherds becomes even less common during this phase, with the small amounts of sherds portraying horizontal grooving possibly representing early kick-ups (Table 7). One example of external horizontal shoulder ribs is more typically associated with ribbed bowls from MH phase 7, while another example of a simple incised FGB sherd is possibly an import to Mitrou because of the rarity of this decoration in the overall assemblage.

21 Fine Gray Burnished Pteleon goblet Fig. 13

LX784-041-026. Trench LX784, SU 041 [1].

Diam. rim 19; W. handle 1 cm. Wt. 0.010 kg.

One sherd preserving 3% of the rim and 20% of one handle. Doubly everted and thickened rim, rectangular loop handle. Fabric: MH MFG 1. Core GLEY1 6/N; interior fracture GLEY1 6/N; exterior fracture GLEY1 6/N; interior surface GLEY1 6/N; exterior surface GLEY1 6/N. “Very hard” hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 136, fig. 184:3, 4; Maran 1992b, pls. 93:7, 143:2, 148:1–3; Sarri 2010a, pl. 26:2–8.

22 Fine Gray Burnished Pteleon goblet Fig. 13

LX784-041-023. Trench LX784, SU 041 [1].

Diam. rim ca. 16 (distorted by handle); W. handle 1.5 cm. Wt. 0.040 kg.

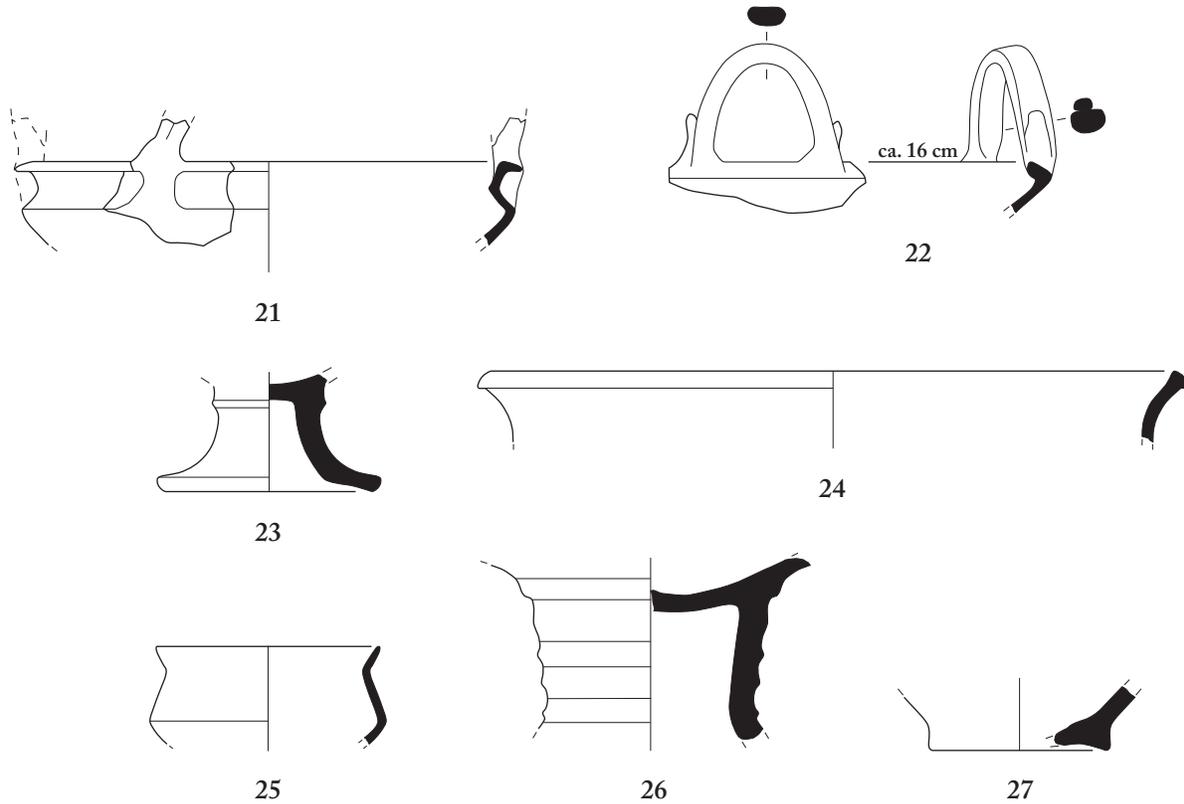


Figure 13. Mitrou MH Fine Gray Burnished examples, MH phase 6. Scale 1:3. Drawings T. Ross

One sherd preserving 18% of the rim and 100% of one handle. Doubly everted and plain rim, rectangular loop handle. Fabric: MH MFG 1. Core 10YR 5/1; interior fracture 10YR 5/1; exterior fracture 10YR 5/1; interior surface 10YR 5/1; exterior surface 10YR 5/1. “Hard” hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 136, fig. 184:3, 4; Maran 1992b, pls. 93:7, 143:2, 148:1–3; Sarri 2010a, pl. 26:2–8.

23 Fine Gray Burnished open shape, likely a Pteleon goblet Fig. 13
LX784-041-025. Trench LX784, SU 041 [1].
H. pedestal 4.8; Diam. base 9 cm. Wt. 0.070 kg.

One sherd preserving 11% of a pedestal base. Single upper rib pedestal base. Fabric: MH MFG 1. Core GLEY1 5/N; interior fracture GLEY1 5/N; exterior fracture GLEY1 5/N; interior surface GLEY1 5/N; exterior surface GLEY1 5/N. “Hard” hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 136, fig. 183:11, 12; Maran 1992b, pl. 97:15; Sarri 2010a, pl. 29:6, 9, 11–13, 15.

24 Fine Gray Burnished Lianokhladi goblet or two-handed bowl Fig. 13
LE792-074-014. Trench LE792, SU 027 [1].
Diam. rim 27 cm. Wt. 0.015 kg.

One sherd preserving 5% of the rim. Everted, thickened, and hollowed rim. Fabric: MH MFG 1. Core GLEY1 4/N; interior fracture GLEY1 4/N; exterior fracture GLEY1 4/N; interior surface GLEY1 4/N; exterior surface GLEY1 4/N. “Hard” hardness. Burnished on the interior and the exterior.

Dietz 1991, p. 55, fig. 10:46; Maran 1992b, pls. 93:2, 3, 103:9–12; Sarri 2010a, pl. 17:2, 3, 8.

25 Fine Gray Burnished kantharos Fig. 13

LX784-041-027. Trench LX784, SU 041 [1].

Diam. rim 9 cm. Wt. 0.015 kg.

One sherd preserving 26% of the rim and ca. 15% of the body. Everted, plain, and hollowed rim. Fabric: MH MFG 1. Core 2.5Y 6/2; interior fracture 2.5Y 6/2; exterior fracture 2.5Y 6/2; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 139, fig. 187:3, 4; Dietz 1991, p. 45, fig. 7:18; Maran 1992b, pls. 83:15, 84:2, 90:11, 97:5, 103:15; Sarri 2010a, pls. 6:7, 8:11, 13, 14, 31:15.

26 Fine Gray Burnished Lianokhladi goblet Fig. 13

LX784-041-034. Trench LX784, SU 041 [1].

Wt. 0.030 kg.

One sherd preserving ca. 25% of the pedestal base. Multiple rib pedestal base. Fabric: MH MFG 1. Core GLEY1 5/N; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Very hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 136, figs. 183:1–3, 5, 6, 184:3; Maran 1992b, pls. 97:7, 16, 17, 103:20; Sarri 2010a, pls. 23:1, 2, 4, 13–18, 24:1, 2, 5, 7, 13, 14. Morphology: Sarri 2010a, pl. 15:1.

27 Fine Gray Burnished open shape Fig. 13

LX784-041-030. Trench LX784, SU 041 [1].

Diam. base 7 cm. Wt. 0.020 kg.

One sherd preserving 27% of the base. Raised flat base. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 2.5Y 5/2; exterior fracture 2.5Y 5/2; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 140, fig. 191:3; Maran 1992b, pl. 68:9; Sarri 2010a, pl. 13:2, 7, 13, 30.

MITROU MH PHASE 7: MH II FINAL/MH III

The stratigraphy at this level in both trenches is not well preserved, and this makes it difficult to differentiate characteristics that may be representative of the end of MH II or MH III. It may be possible in future excavations at Mitrou to subdivide Mitrou MH phase 7, as characteristics from both Pevkakia phase 6 Late and phase 7 are present, datable to the final MH II and MH III phases, respectively (Table 2).⁷⁵ In trench LX784 at Mitrou, deposits of MH phase 7 include the fill of a small pit (SU LX784-048) cut into the MH phase 6 surface at ca. +3.65/3.70 just southwest and below wall 124, and likely associated with wall 123 (Figs. 5, 6). Material lying on top of this surface likewise is datable to this phase (SU LX784-040). Units found below the level of an earthen surface at ca. +3.68 in the west-central area of the trench also date to this phase but are contaminated by the MH III/LH I fill of a refuse pit with possible kiln debris. Furthermore, pottery used in the construction of a very large, patchy surface covering most of the trench at ca. +3.80/3.87 (SUs LX784-035 [surface makeup as well as lower part of a disturbed hearth] and LX784-036), and abutting walls 124 and 174, can be assigned to MH phase 7, as can the pottery from

75. For Pevkakia parallels, see Maran 1992b, pls. 106–121, suppl. 18:1AI, 1FIa, 2CII, 20:1FIa, 1FIb, 1HIII, 2CIII, 21:drawing 1. For Kolonna parallels, see Gauss and Smetana 2007a, pp. 74–75, 79, figs. 6:XXXV-4, XXXV-5, 7:XXXV-7, 12a/11-1, 12a/11-2, 11:FG 87-16, FG 88-14; Gauss and Kiriati 2011, p. 515, fig. 137:KOL 63. For Eutresis parallels, see Goldman 1931, pp. 136–137, 139, figs. 183–185, 187; see also Dietz 1991, pp. 55–56, 65, 80, figs. 10:46, 11:47, 16:99, 23:209. Some published but unstratified parallels from Orchomenos may include, but are not limited to, Sarri 2010b, pls. 8:2–8, 10–14, 18, 20, 21, 9:4–6, 8, 11:6, 15:3–5, 21:2–5, 7–17, 22:3–5, 23:1, 5, 26:2, 4, 6–8, 32:1, 4–9, 13, 15, 33:1, 2, 4–7, 9–10, 35:9.

the disturbed hearth, located on top of this surface (SUs LX784-028 and LX784-035). However, this surface was only partially preserved. In the northwest and central-west parts of the trench, an accumulation of stones at a similar elevation on top of a refuse pit with possible MH III/LH I kiln debris is similarly datable to MH phase 7 (SU LX784-034). Pottery from between the remains of dilapidated wall 128 also dates to this phase (SU LX784-032). Cutting through this large surface was a MH phase 7 pithos burial on the southern trench scarp that contained a number of large but incomplete vessels (SUs LX784-051, LX784-052, LX784-053). This surface was also cut by the bottoms of LH I cist graves 53 and 56. Directly above this surface was more MH phase 7 fill associated with the construction of the last patchy MH surface at ca. +3.90/4.00 (SU LX784-026).

In trench LE792 the picture is similar (Figs. 3, 4). The pottery found inside a gray clay and pebble surface at ca. +3.64/3.70, abutting walls 97 and 98, dates to MH phase 7 (SU LE792-073). Directly above was a second surface of similar construction at ca. +3.65/3.77, with pottery likewise belonging to this phase (SUs LE792-063 and LE792-068). This surface abutted wall 97 in the east but ran over wall 98 to the west. Cist graves 40 and 41, both dating to MH phase 7, cut through both of these floors. Both grave pits had been cut through the last MH phase 7 surface at ca. +3.88 (makeup removed with SU LE792-048), which is present across most of the trench and abuts wall 96 to the east. To the west, this wall is abutted by a surface at a similar elevation, removed with SU LE792-037, which likewise dates to MH phase 7.

From a sample of 4,774 total MH sherds, FGB once again is by far the most dominant ceramic class (Table 3). The prevalence of FGB over Fine Pale pottery is an important feature of this final MH phase at Mitrou because one of the defining characteristics for the beginning of LH I at Mitrou in stratigraphic deposits directly overlying MH phase 7 excavation units seems to be the dramatic rise in the numbers of Fine Pale pottery, which, by that stage, consistently equals or even overshadows the presence of FGB ceramics.⁷⁶ With the exception of a few excavation units that were discarded from analysis in trench LX784 where LH I cist graves cut into lower levels, the stratigraphy has largely not been disturbed by post-MH building activity such as foundations or pits. This means that once again the homogeneity of these units is very high (Table 1).

All of the characteristics from Mitrou MH phase 6 are present in phase 7 (Figs. 13–15). The same shapes occur in roughly the same proportions, but new unconventional shapes, such as very small kantharoi or teacups and ribbed bowls, appear in small numbers. The Lianokhladi goblets in this phase also tend to have shorter shoulders, very sharp carinations, very heavily hollowed rims, and a single horizontal rib on the lower body. Most of these characteristics are not present on the goblets from previous phases.

Everted and plain rims continue to consistently appear, but are overrepresented in the count because of relatively small average sherd size (Table 4). However, many more everted and plain rims are now also hollowed, and these are underrepresented in the count because of comparatively large average sherd size. All of these rim types can be associated with kantharoi, teacups, or ribbed bowls. Many of these rims are also distinctly shorter than

76. Salvatore Vitale and I are currently studying the LH I pottery at Mitrou. This observation is based on a preliminary investigation of assemblage composition within secure LH I deposits.

in earlier MH phases. Once again the vast majority of rims are of the thickened varieties and probably all belong to Lianokhladi goblets. Extremely high numbers of everted, thickened, and hollowed rims are present and, along with the above increase in everted, plain, and hollowed rims, this marks a significant overall increase in hollowed rims when compared to previous phases. Doubly everted and plain rims likely belonging to Pteleon goblets or shallow carinated bowls are slightly more frequent, indicating an increase in the presence of these shapes in this phase. The distinctive clubbed rim, probably belonging to some kind of large Lianokhladi goblet, appears for the first time with three examples, and more instances in the FDB class. Small numbers of slightly thickened rims may represent kick-ups from earlier MH phases.

With regard to handle types, very little changes during this phase (Table 5). Strap handles maintain their dominance, and a single ribbed strap handle may be an earlier kick-up. Horizontal loop handles also appear in similar proportions to the previous phase. Only one example of a more complex handle, with a zoomorphic-like profile and featuring plastic rivets, is present, but other examples have been identified in the FDB category, and in less secure MH phase 7 or very early LH I contexts.

Bases show only minor changes in this phase (Table 6). Simple plain and flat bases remain relatively common, while raised flat bases occur in very small amounts. The relatively large number of bases in this sample compared with previous phases is primarily due to an increase in the numbers of multiple ribbed pedestals. Many pedestal rims with large diameters, relegated to the general pedestal base category because of preservation, very likely belong to the large multiple rib pedestal type.

Decoration on FGB sherds is once again fairly rare (Table 7). Small instances of horizontal grooving are likely to be early kick-ups. External horizontal ribbing is much more common in this phase, particularly on the lower bodies of Lianokhladi goblets. This rib is highly distinctive for MH phase 7 at Mitrou and is completely absent from previous phases. While rarer, multiple ribbing on the external shoulder of some small bowls or amphoriskoi consistently appears in this phase and may be a feature of very late MH and very early LH I.

28 Fine Gray Burnished kantharos Fig. 14

LX784-057-016. Trench LX784, SU 016 [2].

Diam. rim 8; W. handle 1.7 cm. Wt. 0.035 kg.

Two sherds preserving 23% of the rim, 100% of one handle, and ca. 15% of the body. Everted, plain, and hollowed rim, high-swung strap handle. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Very hard" hardness. Burnished on the interior and the exterior. This piece comes from a slightly contaminated context but is a well-preserved example of typical MH phase 7 morphology.

Goldman 1931, p. 139, fig. 187:4; Maran 1992b, pls. 117:9, 146:1; Sarri 2010a, pl. 8:10, 12–14. Perhaps slightly earlier: Maran 1992b, pl. 97:1.

29 Fine Gray Burnished Lianokhladi goblet Fig. 14

LE792-086-011. Trench LE792, SU 086 [15], 085 [3].

Diam. rim 23; W. handle 2.9 cm. Wt. 0.415 kg.

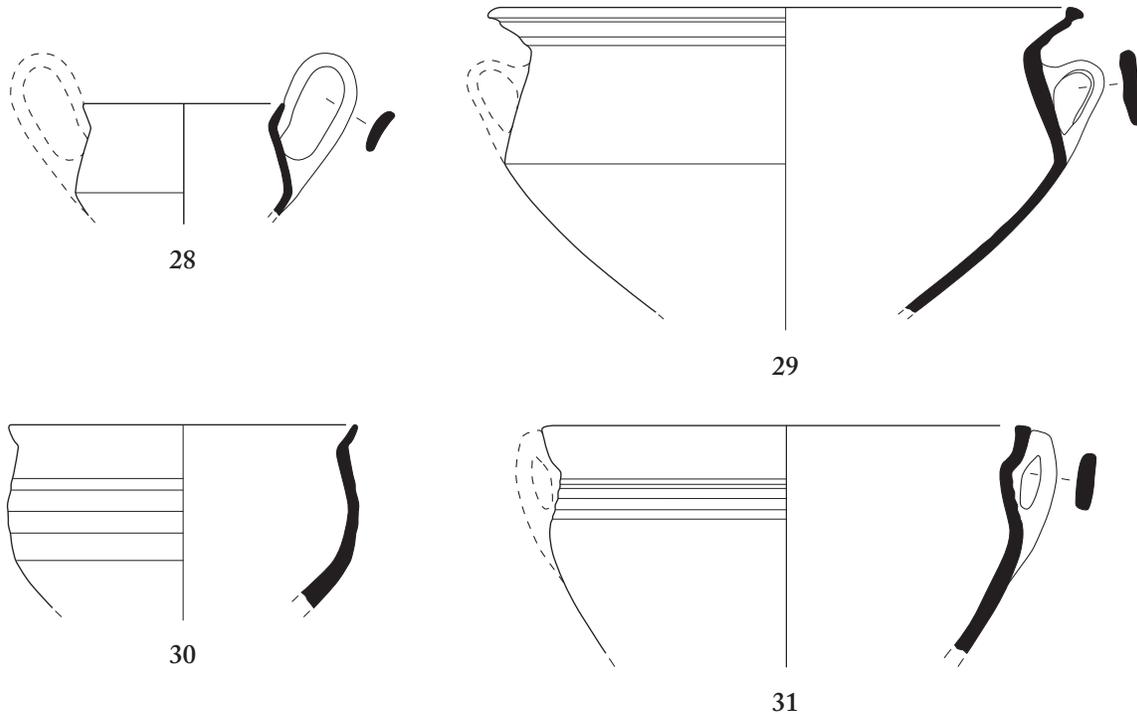


Figure 14. Mitrou MH Fine Gray Burnished examples, MH phase 7.
Scale 1:3. Drawings T. Ross

Eighteen sherds preserving 16% of the rim, 100% of both handles, and ca. 50% of the body. Everted, thickened, and hollowed rim, short strap handle. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 2.5Y 5/2; exterior fracture 2.5Y 5/2; interior surface 2.5Y 6/1; exterior surface 2.5Y 6/1. “Very hard” hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 137, fig. 185:5; Maran 1992b, pls. 113:9, 10, 13, 115:20, 117:10, 120:5; Sarri 2010a, pls. 16:1, 2, 4, 5, 7, 17:3, 8.

30 Fine Gray Burnished ribbed bowl Fig. 14

LE792-033-014. Trench LE792, SU 014 [1].

Wt. 0.015 kg.

One sherd preserving <1% of the rim and ca. 15% of the body. Everted and plain rim, exterior shoulder ribbing. Fabric: MH FG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. “Very hard” hardness. Burnished on the interior and the exterior.

Goldman 1931, pp. 139–140, figs. 187:2, 190:7, 192; Dietz 1991, p. 56, fig. 11:47; Maran 1992b, pl. 120:13–15; Sarri 2010a, pls. 32:6, 8, 13, 15, 33:1, 2, 4, 6, 7, 10.

31 Fine Dark Burnished ribbed bowl Fig. 14

LX784-057-011. Trench LX784, SU 057 [2].

Diam. rim ca. 19.5; W. handle 2.1 cm. Wt. 0.110 kg.

Two sherds preserving 2% of the rim, 100% of one handle, and ca. 15% of the body. Everted, thickened, and hollowed rim, short strap handle, exterior shoulder ribbing. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 7.5YR 6/4; exterior fracture 7.5YR 6/4; interior surface 7.5YR 5/4; exterior surface 7.5YR 5/4. “Very hard” hardness. Burnished on the interior and the exterior.

Dietz 1991, p. 65, fig. 16:99; Maran 1992b, pls. 120:13, 15, 136:12, 140:5, 143:5; Sarri 2010a, pls. 32:5, 13, 33:5, 9, 34:3, 5.

- 32 Fine Gray Burnished goblet Fig. 15
LE792-044-012. Trench LE792, SU 044 [1].
Diam. rim 30 cm. Wt. 0.050 kg.

One sherd preserving 5% of the rim. Clubbed rim. Fabric: MH MFG 1. Core 2.5Y 4/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 137, fig. 185:3; Maran 1992b, pls. 107:15, 151:8; Sarri 2010a, pl. 21:2, 3, 5, 6, 14.

- 33 Fine Gray Burnished carinated bowl Fig. 15
LE792-073-013. Trench LE792, SU 073 [2].
Diam. rim 24 cm. Wt. 0.060 kg.

Two sherds preserving 2% of the rim and 90% of one handle. Doubly everted and plain rim, zoomorphic handle. Fabric: MH MFG 1. Core 2.5Y 5/2; interior fracture 2.5Y 5/2; exterior fracture 2.5Y 5/2; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

For the general shape: Goldman 1931, p. 136, fig. 184:3, 4; Maran 1992b, pls. 5, 6; Sarri 2010a, pl. 26:2, 3, 5. No comparanda known for the handle.

- 34 Fine Gray Burnished Lianokhladi goblet Fig. 15
LE792-074-014. Trench LE792, SU 027 [1].
Diam. rim 20 cm. Wt. 0.015 kg.

One sherd preserving 5% of the rim. Everted, thickened, and hollowed rim. Fabric: MH MFG 1. Core GLEY1 4/N; interior fracture GLEY1 4/N; exterior fracture GLEY1 4/N; interior surface GLEY1 4/N; exterior surface GLEY1 4/N. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 137, fig. 185:2; Dietz 1991, p. 55, fig. 10:46; Maran 1992b, pls. 93:2, 3, 103:9–12; Sarri 2010a, pl. 17:2, 3, 8.

- 35 Fine Gray Burnished Lianokhladi goblet Fig. 15
LX784-040-011. Trench LX784, SU 040 [1].
Wt. 0.035 kg.

One sherd preserving ca. 15% of the body. Lower body rib. Fabric: MH MFG 1. Core 2.5Y 6/1; interior fracture 2.5Y 6/2; exterior fracture 2.5Y 6/2; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

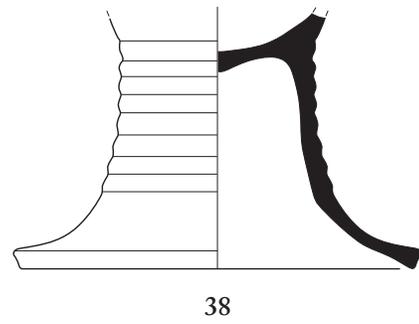
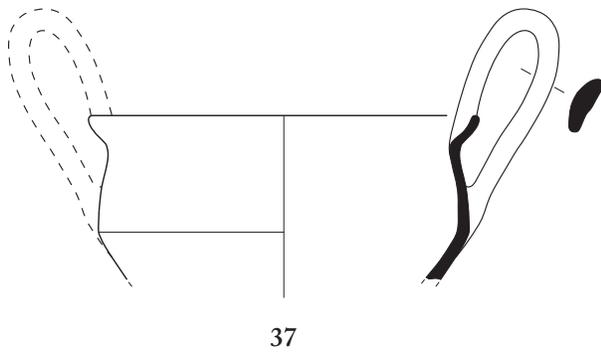
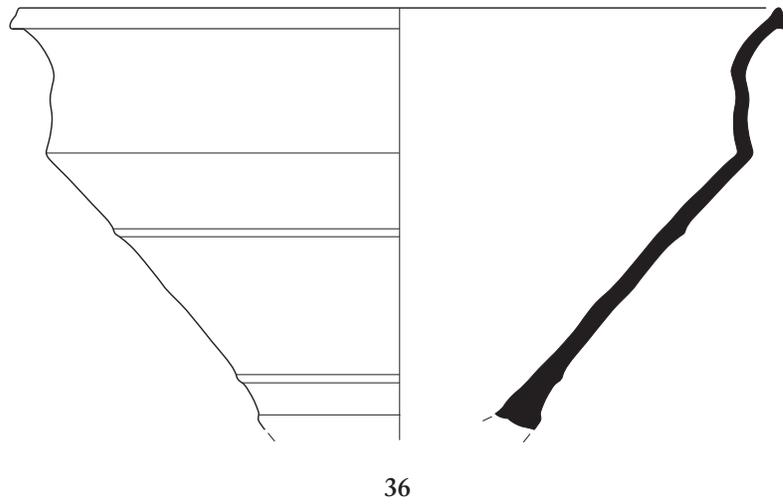
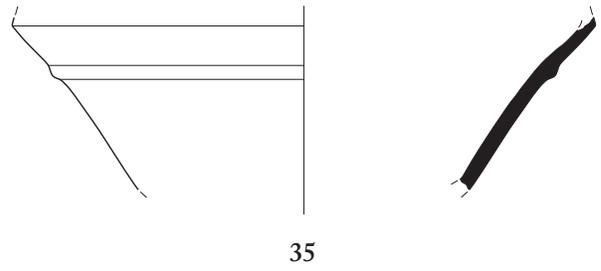
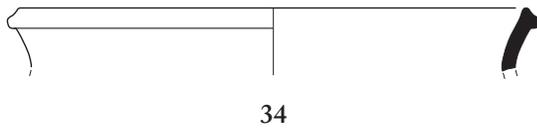
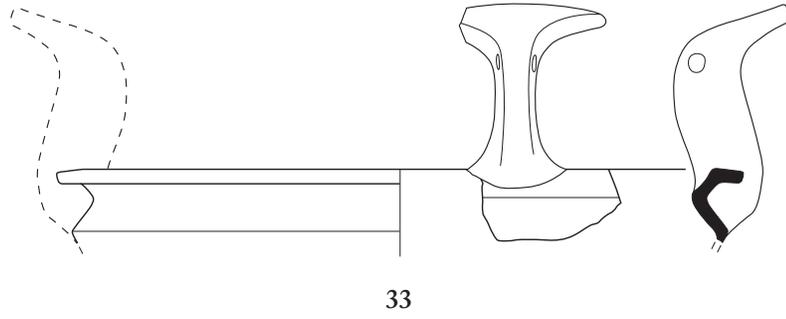
Goldman 1931, p. 136, fig. 184:1, 4, 5; Sarri 2010a, pl. 15:1–5.

- 36 Fine Dark Burnished Lianokhladi goblet Fig. 15
LX784-021-013. Trench LX784, SU 021 [9].
Diam. rim 29 cm. Wt. 0.350 kg.

Nine sherds preserving 31% of the rim, ca. 5% of the pedestal, and ca. 40% of the body. Everted, thickened, and hollowed rim, multiple rib pedestal base, lower body rib. Fabric: MH MFG 1. Core 2.5YR 6/6–2.5YR 6/1; interior fracture 2.5YR 6/6–2.5YR 6/1; exterior fracture 2.5YR 6/6–2.5YR 6/1; interior surface 7.5YR 4/3–10YR 5/1; exterior surface 7.5YR 4/3–10YR 5/1. "Very hard" hardness. Burnished on the interior and the exterior. Very mottled surface color indicative of a poorly controlled atmosphere during the firing process. This piece comes from a slightly mixed context and is technically FDB rather than FGB as a result of misfiring, but is included here as an excellent morphological example of typical phase 7 Lianokhladi goblets.

Goldman 1931, pp. 136–137, figs. 184:1, 5, 185:1, 2, 5; Maran 1992b, pls. 113:9, 10, 117:10, 120:5; Sarri 2010a, pls. 15:1, 3–5, 16:1, 2, 4, 5, 7, 8, 10.

Figure 15 (*opposite*). Mitrou MH Fine Gray Burnished examples, MH phase 7. Scale 1:3. Drawings T. Ross



37 Fine Gray Burnished kantharos Fig. 15

LX784-027-015. Trench LX784, SU 027 [1].

Diam. rim 16 cm. Wt. 0.070 kg.

One sherd preserving 9% of the rim and 100% of one handle. Everted, plain, and hollowed rim, high-swung strap handle. Fabric: MH MFG 1. Core 2.5Y 5/1; interior fracture 2.5Y 5/1; exterior fracture 2.5Y 5/1; interior surface 2.5Y 5/1; exterior surface 2.5Y 5/1. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, p. 139, fig. 187:4; Maran 1992b, pls. 113:12, 117:9; Sarri 2010a, 8:2–8, 10.

38 Fine Gray Burnished Lianokhladi goblet Fig. 15

LX784-052-015. Trench LX784, SU 015 [1].

Diam. base 15.5 cm. Wt. 0.355 kg.

One sherd preserving 76% of the pedestal base. Multiple rib pedestal base. Fabric: MH MFG 1. Core 2.5Y 4/1; interior fracture 2.5Y 4/1; exterior fracture 2.5Y 4/1; interior surface 2.5Y 4/1; exterior surface 2.5Y 4/1. "Hard" hardness. Burnished on the interior and the exterior.

Goldman 1931, pp. 136–137, figs. 183:1–3, 5, 184:3, 185:6; Dietz 1991, p. 80, fig. 23:209; Maran 1992b, pls. 108:1, 110:8, 115:19, 117:7, 14, 15; Sarri 2010a, pl. 23:1, 2, 4, 8, 13–18.

SUMMARY

The phasing system at Mitrou has been constructed in view of changes in the ceramic assemblage as a whole. The small but persistent changes observed in the diagnostic FGB fragments over time often form a foundation for placing these ceramic phases on a secure footing. Figures 16–20 show battleship curve diagrams depicting the frequency of FGB feature sherd types in each phase as identified in this analysis through EVE percentages (in the case of rims and bases) and count percentages (in the case of handles, additional features, and bases).⁷⁷ To understand the full character of each ceramic phase, these battleship curves and the tables from which they are constructed (Tables 4–7) should be read in conjunction with the illustrated examples of MH FGB profiles in Figures 11–15. No data are available for MH phase 1 in the absence of a larger sample, and only generalized observations were made.

MH phase 2 sees the frequent appearance of everted and plain rims alongside everted and flattened rims, the presence of ribbed strap handles, plain flat bases, and the appearance of decorative horizontal grooving on the upper shoulder of all shapes.

MH phase 3 sees a large number of everted and slightly thickened rims, along with the first appearances of doubly everted and plain rims,⁷⁸ an increased presence of ribbed strap handles, the first appearance of horizontal circular loop handles, and the continued predominance of plain flat bases.

MH phase 4 sees the appearance of large quantities of everted and fully thickened rims alongside small numbers of everted, thickened, and hollowed rims, doubly everted and thickened rims, and ribbed strap handles. Broad changes in regard to the base types serve as excellent diagnostic features of this phase, including the appearance of raised flat

77. Both EVE percentages and count percentages were included in the base summaries because of the problems exhibited in the quantification of the pedestal bases. See the discussion above on p. 238.

78. The sample size of rims in phase 3 is relatively small and therefore more sensitive to outliers. The accentuated presence of phase 3 doubly everted and plain rims as evidenced in Figure 16 may be overrepresented as a result of an outlier in the data.

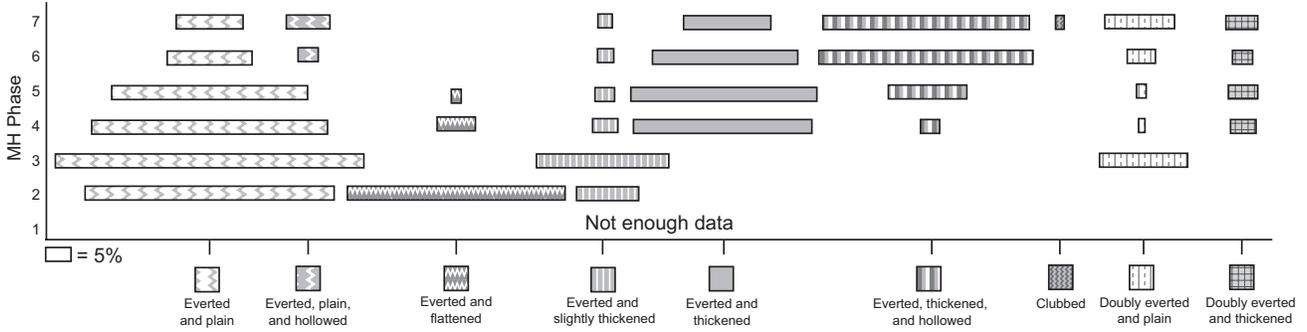


Figure 16. Summary of Fine Gray Burnished rim development by EVE. C. M. Hale

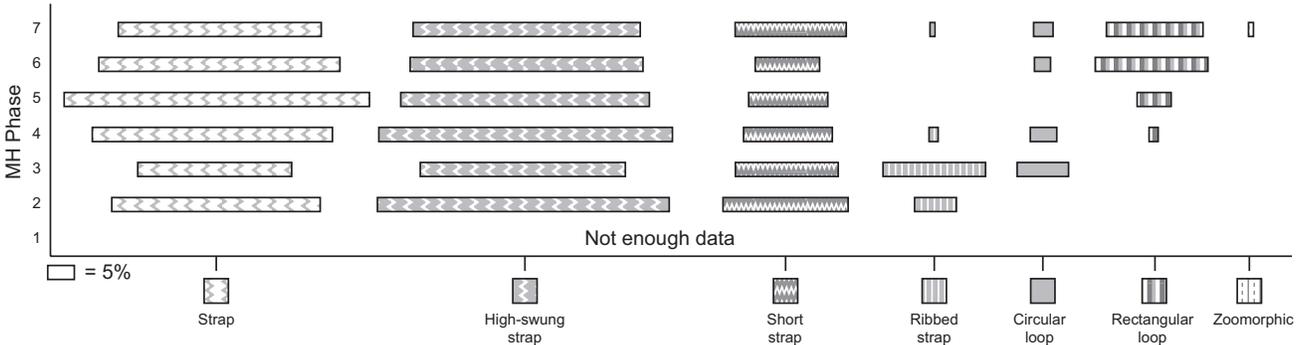


Figure 17. Summary of Fine Gray Burnished handle development by count. C. M. Hale

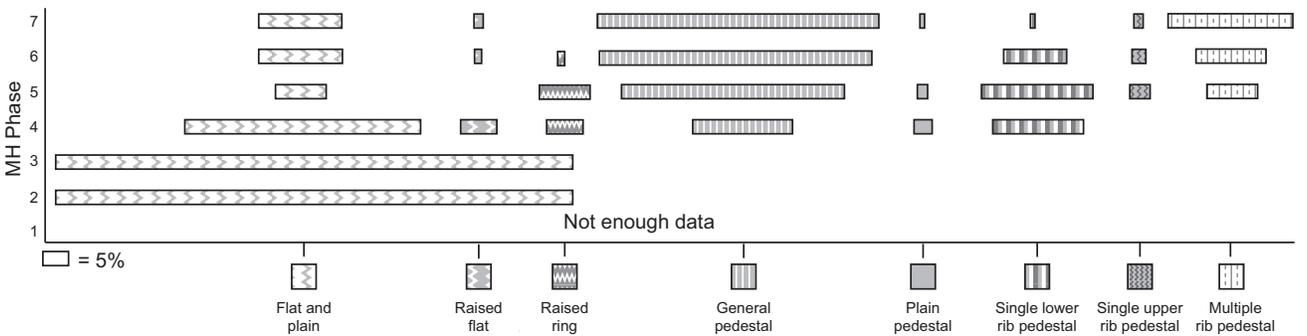


Figure 18. Summary of Fine Gray Burnished base development by count. C. M. Hale

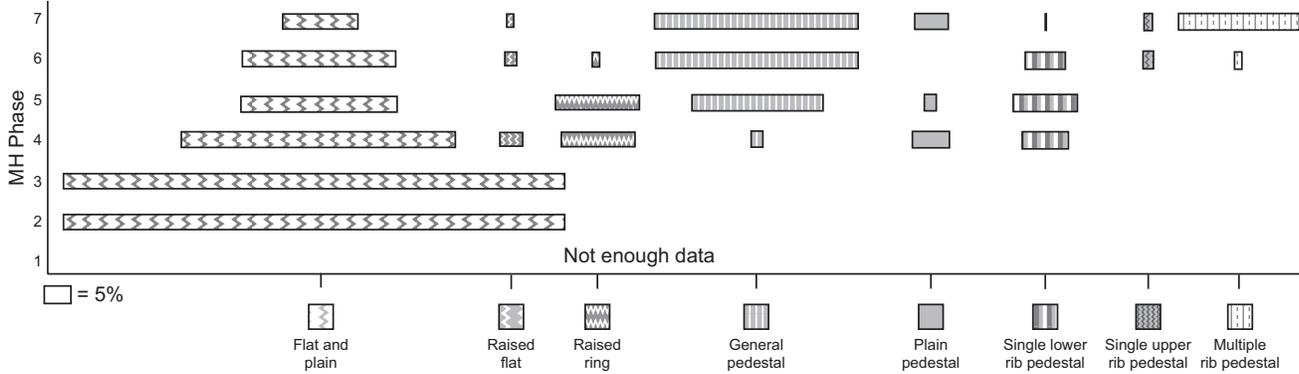


Figure 19. Summary of Fine Gray Burnished base development by EVE. C. M. Hale

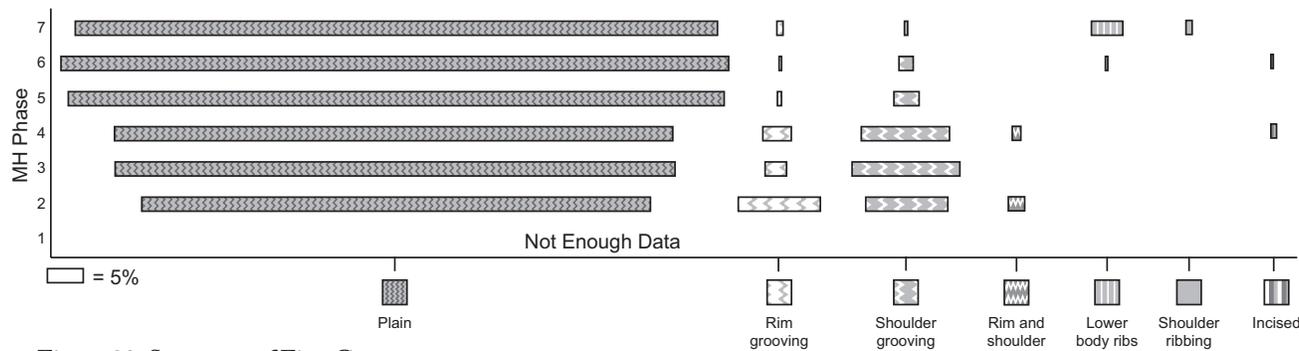


Figure 20. Summary of Fine Gray Burnished decorative development by count. C. M. Hale

bases, raised ring bases, plain pedestal bases, and, most distinctively, single lower rib pedestal bases.

MH phase 5 shows increasing numbers of everted and thickened rims alongside everted, thickened, and hollowed rims, and the disappearance of ribbed strap handles. This is accompanied by the increased presence of general pedestal bases and single lower rib pedestal bases alongside the first appearance of single upper rib pedestal bases and multiple rib pedestal bases. Fewer feature sherds show evidence for grooving in MH phase 5 than in previous phases.

MH phase 6 is characterized by the first appearance of everted, plain, and hollowed rims alongside the increased numbers of everted, thickened, and hollowed rims, larger numbers of horizontal rectangular loop handles, and very few feature sherds portraying decorative features.

Finally, MH phase 7 shows an increased presence of everted, plain, and hollowed rims, everted, thickened, and hollowed rims, and doubly everted and plain rims. Furthermore, this phase is characterized by the appearance of clubbed rims, the presence of zoomorphic-like handles, a drastically increased number of multiple rib pedestal bases, and the more regular appearance of external lower shoulder ribs on goblets and multiple external ribs on small bowls or amphoriskoi.

CONCLUSION

These observations go a long way to improve our understanding of MH FGB development in northern central Greece, likely a major region of production for this distinctive pottery. This is the first time in the region that a complete sequence of seven MH ceramic phases has been identified on the basis of stratigraphy and the changing frequencies of FGB feature sherd types, providing a very useful reference point for the region and for future excavations at Mitrou itself.

This sequence can be cross-dated with sequences from other notable MH sites that contain FGB pottery (Table 2), though the general regionalism of MH ceramic traditions can make this challenging at times. Future avenues for research include validating the preliminary identification of numerous potential imports from places such as Kea, Aigina, Melos, Thera, Thessaly, the Argolid, and the southeastern Aegean, which could serve as an important method of confirming the relative chronological synchronisms proposed in this article, and be very useful for investigating diachronic patterns in the interregional interactions between northern central Greece and other regions of the Aegean. The sequence presented here can be further tested in the future through more excavation at Mitrou. With the benefit of much larger sample sizes, the first three phases in particular can be either confirmed or further refined, and the final MH phase 7 has the potential to be subdivided. Finally, it is now possible to make intraregional comparisons with material from Orchomenos and Eutresis and to make some general remarks concerning a regional understanding of central Greek MH ceramic development. However, while the Mitrou MH assemblage represents a significant step forward, Mitrou itself is a coastal site located on the northern Euboian Gulf and may be subject to site-specific factors that influenced development in unique ways. Caution should be taken when applying these observations to inland settlements or to those farther south along the gulf. In this regard, the publication of a comparative stratified assemblage from a site like Lefkandi, Thebes, or Medeon is very much anticipated.⁷⁹

79. While not included in the comparanda for this paper, the recently published pottery from Eretria and Amarynthos in southern Euboia, and from Ayia Paraskevi in the Spercheios Valley, are important additions; see Krapf 2015; Papakonstantinou et al. 2015.

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