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Thoughts on the Capacities of Goblets and Consumption Practices in Middle Helladic and Early Mycenaean Settlements

Laetitia Phialon

Abstract

This article focuses on ceramic goblets found in settlement contexts, using their capacity as a leading criterion for a better understanding of drinking practices and consumption patterns in the MH - LH IIIA1 periods. It compares goblets of various sizes and capacities obtained by calculation methods with other individual open shapes and explores their use within wider ceramic assemblages. In total, the capacities of over one hundred goblets and more than 400 vessels of other shapes have been calculated. I argue that the largest goblets, at least those exceeding three litres in capacity, were certainly shared by several individuals in commensal activities, passing from hand to hand, as was probably the case at small-scale gatherings at Asine in the MH III period. From LH I onwards, this practice may have coexisted with the use of kraters for mixing drinks subsequently distributed in smaller individual drinking vessels, goblets included, among the participants at feasts or ceremonial drinking. The large number of drinking vessels and the wide capacity range of the LH IIB-IIIA1 goblets from the Menelaion of Sparta support this idea. This constitutes a milestone in the development of drinking events, which reached their peak in LH IIIB within the framework of huge feasting ceremonies organized by the Mycenaean palaces.

Keywords

Drinking vessels, ceramic, volume, Greece, Aegean Bronze Age, commensal practice, feasting.

Zusammenfassung – Überlegungen zu Fassungsvermögen von Kelchen und Trinkpraktiken in mittelhelladischen und frühmykenischen Siedlungen

Dieser Artikel konzentriert sich auf keramische Kelche, die in Siedlungskontexten gefunden wurden und deren Fassungsvermögen als führendes Kriterium für ein besseres Verständnis von Trinkpraktiken und Konsumgewohnheiten in den Perioden MH - SH IIIA1 verwendet wird. Kelche verschiedener Größen und durch Kalkulationen ermittelte Kapazitäten werden mit anderen individuellen offenen Formen verglichen und deren Verwendung in größeren Keramikensembles untersucht. Insgesamt wurden die Fassungsvermögen von mehr als hundert Kelchen und über 400 weiteren Gefäßen anderer Formen berechnet. Das Fazit lautet, dass die größten Kelche, zumindest die mit einem Fassungsvermögen von mehr als drei Litern, sicherlich von mehreren Personen bei entsprechenden Aktivitäten geteilt wurden, und von Hand zu Hand gingen, wie es wahrscheinlich bei kleineren Versammlungen in Asine in der MH III-Periode der Fall war. Von SH I an kann diese Praxis mit der Verwendung von Kratern zum Mischen von Getränken koexistiert haben, die anschließend in kleinere einzelne Trinkgefäße, einschließlich Kelchen, unter den TeilnehmerInnen an Festen oder zeremoniellem Trinken verteilt wurden. Die große Anzahl von Trinkgefäßen und der große Kapazitätsbereich der SH IIB-IIIA1 Kelche aus dem Menelaion von Sparta unterstützen diese Idee. Dies ist ein Meilenstein in der Entwicklung von Trinkveranstaltungen, die ihren Höhepunkt in SH IIIB im Rahmen riesiger Feiern, die von den mykenischen Palästen organisiert wurden, erreichten.

Schlüsselbegriffe

Trinkgefäße, Keramik, Volumen, Griechenland, Ägäische Bronzezeit, Kommensalität, Feste.

1. Introduction

Research on vessel capacities and ceramic containers in the Aegean Bronze Age has provided valuable insights into Minoan and Mycenaean storage patterns and metric systems.¹ Thanks especially to the measurements carried out on the pottery from the Palace of Nestor at Pylos,² absolute values for units of volume involved in Aegean Bronze Age scripts have been calculated.³ It has also been pointed out that large quantities of drink, wheat, and animals were certainly provisioned for feasting ceremonies, essentially in a religious context, as recorded in Linear B.⁴ Large amounts of wine were listed on the tablets and possibly stored in pottery receptacles such as pithoi at the palaces, notably at Pylos.⁵ In addition, the numerous drinking vessels and kraters kept in the LH IIIB pantries of the Palace of Nestor, which varied significantly in size and capacity, were certainly used on such special occasions.⁶

It has been stressed that the capacity range of the standard-sized kylikes from the Palace of Nestor and the smallest MH goblets from Asine were mostly similar.⁷ However, with the exception of the pottery from MH Asine, there is an apparent lack in research about the capacities of drinking vessels in assemblages ranging in date from the MH to LH I–IIIA1 periods, i.e. a period of more than 600 years (c. 2000 – c. 1370 BC). This article seeks to fill this gap by tracing the development of pottery shapes and drinking practices in the settlements of these periods. It brings with it a number of issues of interest, including the extent of drinking events and the nature of the drinks/foods consumed.

On the assumption that drinking vessels may have been filled with drinks from kraters, it can be suggested that goblets and other drinking vases probably held alcoholic beverages, and most likely wine mixed with water in the Late Bronze Age.⁸ A standard set for consumption of wine would include a krater, a dipper and drinking vessels,⁹ as well as a jug in the LH period.¹⁰ Nevertheless, one may wonder whether another pottery shape may have been used for mixing beverages, especially in the absence of kraters in ceramic assemblages. A hypothesis that this article aims to explore is that the largest MH – LH IIIA1 goblets, which could have held as much drink as the smallest LH I–IIIA1 kraters, may

¹ On oil or liquid contained in stirrup jars from Mycenae: TOURNAVITOU 1995, 81. - HASKELL 1984, 101 and n. 28. - On LH IIIB1 individual shapes and function: TOURNAVITOU 1992. - On graffiti, storage and capacities in Knossos: BOSKAMP 1996, 111-112. -On jars from Pylos and Zygouries: DARCQUE 2005, 226. - SHELMER-DINE 1985, 147. - THOMAS 1992, 321. - On capacities of jars from Rooms 23 and 24 at Pylos: DARCQUE 2005, 279-281. - On clay containers from various Minoan sites: CHRISTAKIS 2008. - For a pithos with a Linear A inscription, see CHRISTAKIS 2010. - On capacities of clay containers and built silos in Ayia Triada: PRIVITERA 2014. -On capacities of pithoi from Kastanas and Thessaloniki Toumba: MARGOMENOU 2008, esp. 204. - On traces of beeswax identified in pithoi from Thessaloniki Toumba: MARGOMENOU, ROUMPOU 2011, 131-132. - On capacities of pithoi from Akrotiri (Thera): NIKOLA-KOPOULOU 2002, 89-92. - For various types of contents as well as traces of beeswax that could prevent the evaporation of alcohol if applied on the internal surface of the vessels, see NIKOLAKOPOULOU 2002, 127-129.

² BLEGEN, LANG 1964. – On the capacities of 778 vessels of different shapes: BLEGEN, RAWSON 1966, 354–414. – HASKELL 1984, 101 and n. 28. – On the distribution and numbers of kylikes at the Palace of Nestor: BENDALL 2011, 112–124.

³ VENTRIS, CHADWICK 1973 [1956], 60, 394. – On weight values, degree of standardization in the quantity of a commodity, and units of volume for dry or liquid commodities: MICHAILIDOU 2008, 227, 287. – MICHAILIDOU 2010, 75–76.

^{4 585.6} litres of wine provisioned at the initiation of the wanax at Sphagianes, recorded on PY Un 2: PALAIMA 2004, 242-243. - WEIL-HARTNER 2008, 412. - WEILHARTNER 2017, 224 - On a total of 172.8 litres of wine recorded on PY Un 718, with Poseidon as recipient: Palmer 1994, 103. – Shelmerdine 2008, 401. – Zurbach 2015, 38. - On miniature kylikes related to feasting rituals from Room 7 at Pylos: STOCKER, DAVIS 2004, 189-190. - On drinking vessels and wine used in ritual contexts in Crete: PALMER 1994, 139-142. - On tablets recording paraphernalia used on ceremonial occasions, but not drinking vessels: PALAIMA 2004, 236. - However, di-pa (δέπας 'goblet') and ka-ra-te-ra (kpathp 'krater') as well as ideograms of cups are attested in Linear B: VENTRIS, CHADWICK 1973 [1956], 326-327, 331. - Bernabé, Luján 2008, 223-226 and Tab. 7/1. - Hruby 2010, 201-204 and Fig. 3. - On a krater listed among the goods on tablet MY Ue 611: PANAGIOTOPOULOS 2014, 170–171 and Tab. 5. – On ideograms of vases in Linear A: PERNA 2003.

⁵ About the wine magazine at Pylos, see PALMER 1994, 194: "Even if all the pithoi held wine, their total minimum capacity of 4682.575 l. falls below some of the totals listed in the texts, notably PY Vn 2011, which lists a total of 11,808 l., or the largest single entry in KN Gm 840, 4838.4 l. (line .2)", and Tab. 9/1.

⁶ BLEGEN, RAWSON 1966, 359–374 and Figs. 353–366 (6060 examples of drinking vessels, with capacities ranging from 0.009 to 7 litres); 399–402 and Figs. 387–388 (30 examples of kraters, with capacities ranging from 4 to 14.6 litres). – To sum up, 30 kraters (median capacity of 7.18 litres) and 52 tripods (average capacity of 0.69 and 0.96 litres) are recorded: Fox 2008, 138 and Pl. XXI; Tab. 2. – On pantries (Rooms 18–22) and metrical data used in the revision of the vessel typology: HRUBY 2010, esp. 213 and Fig. 19.

⁷ NORDQUIST 2002, 131. – On rim diameters and capacities of kylikes from Pylos: HRUBY 2010, 208–211.

⁸ On beverages, principally wine or beer: JUNG 2006, 412 and n. 39. – On alcohol, esp. in Megiddo: STOCKHAMMER 2011a, 288. – On Linear A and Linear B wine ideograms: PALMER 1994, Chap. 2. – On traces of fermented beverages in various ceramic vessels from Aegean Bronze Age sites attested by chemical analyses, even if kraters were not sampled: McGOVERN et al. 2008. – On mixed fermented beverages in Late Bronze Age conical cups, mugs, an askos, rhyton, and cooking vessels: TZEDAKIS, MARTLEW 1999, 166–171. – On drinking vessels from Armenoi: TZEDAKIS, MARTLEW 1999, 175–177. – HAMILAKIS 2008, 13–14.

⁹ On LH IIIA pottery shapes involved in a ritual of consumption of wine: WRIGHT 2004, 170. – On a variety of functions for the dipper family, with dippers from LH IIIC Lefkandi possibly used as cooking pots: LIS 2013, 8–10 and Fig. 1. – On dippers from Mitrou, as plausible cooking utensils: LIS 2015, 108 and Fig. 9/4.
10 SHELTON 2008, 222.

have been used either as mixing vessels or drinking vessels shared by several individuals.

Thus the question arises whether some goblets or stemmed bowls may have functioned as serving vessels.¹¹ By comparison, the Mycenaean stemmed bowl, a shape that occurred from LH IIIA2 (FS 304)12 to LH IIIC (Early), was a popular serving vessel in LH IIIA2 Tsoungiza¹³ and was probably used for holding both liquids and food.14 The idea that LH III and MH stemmed bowls may have been used in the same way for similar contents is appealing but remains conjectural, since these vessels belong to two distinct shapes and periods. Future organic residue analysis could shed light on this issue, but the hypothesis that some MH stemmed vessels regarded as goblets in this article held contents other than alcoholic beverages cannot be excluded.¹⁵ This idea may be reinforced by the results of a use-wear approach.¹⁶ The issue then becomes how to assess the diversified use of vessels and how to determine whether, in the case of the goblets, alcohol consumption was prevalent.¹⁷

In addition to sizes and specific morphological features, I argue that the capacity of ceramic vessels can be used as a leading criterion for understanding how goblets may have functioned with kantharoi, cups and kylikes – i.e., shapes traditionally seen as drinking vessels¹⁸ – and tableware shapes within wider assemblages in settlement contexts. This study will focus on pottery found in houses or large buildings, in some cases associated with a floor, as well as in refuse pits, from eleven sites on the Greek mainland: Asine (Argolid), Tsoungiza (Corinthia), Ayios Stephanos, Menelaion (Laconia), Nichoria (Messenia), Athens-Acropolis South Slope, Eleusis, Kiapha Thiti (Attica), Orchomenos (Boeotia), Krisa (Phocis), Pefkakia (Thessaly). Pottery assemblages from Kolonna on the island of Aegina will also be studied (Fig. 1).

The selection criteria of the deposits examined in this article are the availability of complete or nearly complete profiles allowing us to calculate the capacities of drinking vessels by using their line drawings (Appendix 1), as well as the consistency of the settlement assemblages, involving precise information about the contexts and dates of vessels. Drinking vessels from other MH and LH I-II settlements, like Korakou (Corinthia)¹⁹ and Ayios Vasileios (Laconia),²⁰ are too fragmentary for estimating capacities. Similarly, many vessel profiles from Kaloyerovrysi (Euboea) have been published, but complete examples are rare.²¹ The dimensions of some tableware shapes with complete profiles from Lefkandi (Euboea) are missing.²² As regards Iklaina, the last volume of the publication series came out in 2018, and includes five LH IIB and IIIA1 drinking vessels with complete profiles.²³ I will only point here to the fact that most of the inventoried pottery finds in this book (MH II/ III - LH IIIB/IIIC) are drinking vessels, but further analyses of the ceramic assemblages from this settlement will

¹¹ The idea that the matt-painted goblets from Argos have been used for drinking is questioned by Philippa-Touchais 2002, 21. – See also DIETZ 1991, 166.

¹² FS = Furumark's Shape, see Furumark 1972 [1941].

¹³ DABNEY, HALSTEAD, THOMAS 2004, 208–209 and Fig. 4; 202 and n. 17.

¹⁴ On residues of olive oil in a LH IIIB stemmed bowl from Mycenae: TZEDAKIS, MARTLEW 1999, 204–205 (No. 208). – On residues of barley, fermented wine, and also olive oil, in a LH IIIB/C deep bowl from Thebes: TZEDAKIS, MARTLEW 1999, 185 (No. 174). – On traces of fat in a LH IIIB shallow angular bowl: TZEDAKIS, MARTLEW 1999, 133 (No. 116).

¹⁵ For lipids of various animal and plant origins revealed by chemical analysis of organic residues from pottery, notably sherds of kantharoi and goblets from MH Argos, see DECAVALLAS 2011, 127, 174, 180, 224–225, 229 and Tabs. VI.i, VII.b, VII.d. – A different type of analysis would however be required in order to detect traces of tartaric acid in these samples (O. Decavallas, personal communication, 2019).

¹⁶ E.g., a LH IIIA2 carinated kylix (FS 267) from Tsoungiza with an interior abraded surface possibly used for consumption of food: LIS 2013, 11 and Fig. 12. – A use-wear analysis applied to an unpainted kylix found in a pithos at Iolkos would be helpful for understanding its function (scooping?): ADRYMI-SISMANI 2014, 212.

¹⁷ For a distinction between the use of a vase (Archaic funerary context) and its primary function, see COULIÉ et al. 2017, 573, 575. – On Roman vessels, see BADDILEY 2018, 18: "it is possible that the vessels were made with an end use in mind, but actual vessel use was likely to have been situational [...]".

¹⁸ E.g., SCHEIBLER 1998, 854, 858 and Fig. D, 'Trinkgefäße'. – TOUR-NAVITOU 1992, 195–196, 198; 210: "*Drinking vessels*. Vessels originally intended for the drinking of liquids or semi-liquid substances".

¹⁹ DICKINSON 1972. – DAVIS 1979. – By contrast, the post-palatial ceramic assemblages are well preserved (capacities of vases, courtesy of B. Lis), especially two LH IIIC Early formal drinking services (House P, northeast chamber), as discussed by J. Rutter, with examples from Mycenae and Tiryns, in a paper titled 'The Floor Deposits of LH IIIC Early at Korakou: Some Unconventional Approaches to Ceramic Analysis Made Possible by More Fully Preserved Pots' presented at the Conference 'Οξυδερκειν at Korakou: A Centennial Celebration of C. W. Blegen's 1915–1916 Excavations' on September 7, 2015. – For capacities (volumes) of LH IIIC vessels from Tiryns, see STOCKHAMMER 2008.

²⁰ See comment in Kardamaki 2017, 87.

²¹ SAMPSON 1993, Figs. 47 (No. 18, pedestalled goblet), 70 (No. 24, matt-painted Vapheio cup, LH I, see also p. 23), 71 (No. 27, matt-painted one-handled cup).

²² POPHAM, SACKETT 1968, Figs. 7–9. – On Lefkandi as a settlement used for MH synchronisms: MARAN 1992a, 329–335, 370 and Fig. 25.
23 COSMOPOULOS 2018, Figs. 10/P3226, 15/P3743, 21/P2878, P2882, P3763.

certainly stimulate future discussion on MH and early Mycenaean consumption practices.

This study is all the more important as research on Aegean Bronze Age consumption customs also addresses questions on the nature of the societies under study.²⁴ It involves assessments of the size of the groups and the social actors implied in this consumption,²⁵ as well as of the impact of social drinking,²⁶ in a timeframe that is marked by major cultural changes and a strong progression of social complexity from the Shaft Grave period at the MH III - LH I transition to the dawn of the palatial period in LH IIIA1. It also endeavours to explain how drinking consumption patterns developed, from limited household consumption in MH villages²⁷ to larger commensal consumption in LH II-IIIA1 settlements and mansions. In a world of "increased competition for power and prestige",²⁸ one may assume that the LH II-IIIA1 pottery assemblages studied in this article will provide evidence of large-scale social occasions.²⁹ It will also be argued that these events, which took place in regional centres different from the later palaces at Mycenae, Tiryns, Pylos and Thebes, may be regarded as forerunners of the palatial feasting ceremonies that may have included a thousand people in LH IIIB according to textual evidence in Linear B.³⁰

2. A Note on Computer Methods and Geometric Vessel Volumes

In this article, computer methods have been applied to calculate the capacities of various vessels using scale drawings: *Pot Utility* (© Jean-Paul Thalmann & Arcane, 2006) and the web-based applet *Calculating vessel capacities* (© Synthèse et Analyse [LISA] and Centre de recherches archéologiques [CReA]).³¹ Capacities obtained by using computer programs are geometric volumes of strictly symmetrical objects.³² In reality, most pottery vessels from the period under study, even wheelmade vases,³³ vary in diameter or height. Exact capacities can be estimated by direct measurement methods, i.e., by filling the vessels with material such as polystyrene beads.³⁴ However, practical difficulties can be avoided by computer-aided calculation.³⁵

In both computer programs, the scale must be checked. In *Calculating vessel capacities*, the exact measurement corresponding to 1 cm on the drawing must be entered (e.g., 1:3 scale), in some cases after using cross-multiplication on the basis of the rim diameter, or exceptionally on that of the height. In *Pot Utility*, the scale is set by clicking on the image in order to obtain a pixel number and by entering the equivalent measurement in cm (Fig. 2).

A volume obtained in *Calculating vessel capacities* can be reproduced, since the internal profile and vertical axis of the vessel are automatically extracted.³⁶ The central axis line must be strictly vertical, otherwise results will vary slightly. By contrast, in *Pot Utility*, the internal profile of a vase is selected by a series of manual clicks on the image. This may lead to some variations from one test to another. For this reason, I systematically used *Calculating vessel capacities* in my research and checked the results by using *Pot Utility*. All capacities provided in this article correspond to

²⁴ Wright 2004, 133. – Lindblom 2007, 123. – Stockhammer 2011a, 208. – Lis 2017.

²⁵ "Consumption of liquids by single individuals, or alternatively consumption on a massive scale by large numbers of participants [...]": RUTTER 2012, 73, 85–86 and n. 1. – The issue concerns settlement contexts as well as funerary ones, "family, clan, village, faction, region, political or religious group": HAMILAKIS 2008, 16.

²⁶ On social contexts in which private consumption by groups or commensal consumption of drink took place at the Late Bronze Age – Early Iron Age transition: BORGNA, LEVI 2015, 125, 128.

²⁷ On a basic twosome social unit in MH Asine: NORDQUIST 1987, 53. – This interpretation is discussed below. – See also elite practices in NORDQUIST 1999. – NORDQUIST 2002.

²⁸ LIS 2017, 184.

²⁹ Pantou 2014, esp. 388.

³⁰ See PALAIMA 2004, 229: "[PY] Un 138 gives us a good impression of what a banquet for a thousand or more people would have been like".

³¹ Pot Utility: THALMANN 2007. – Calculating vessel capacities: http://capacity.ulb.ac.be/ (last accessed 4.6.2020). – ENGELS, BAVAY, TSINGARIDA 2009. – Pixel images are imported or sent in these two programs. By contrast, AutoCAD, that requires vector files for processing the objects, is by far the most complex program, as pointed out in my poster presented at the 13th European Meeting on Ancient Ceramics, 24–26.11.2015, N.C.S.R. Demokritos, British School at Athens. – I thank Cydrisse Cateloy for providing me with Pot Utility, see CATELOY 2016, 46. – On the computer program Vase (not tested): YOUNGER 2003.

³² On volume calculation methods based on cones and truncated cones: DARCQUE 2005, 279. – ENGELS, BAVAY, TSINGARIDA 2009, 130 (bevel-walled cylinders).

³³ E.g., Mountjoy 1981, Fig. 8/59.

³⁴ ENGELS, BAVAY, TSINGARIDA 2009, 129–130. – Polystyrene beads are lighter than lentils and, thus, the optimal solid material for measuring vessel capacities. However, static electricity can cause them to adhere to the pot walls. The filling of vessels with water requires special preservation conditions of the objects and specific access to them. – CATELOY 2016, 46. – Small differences in capacity may be observed between the filling of vessels and the results of computer methods, see comment on Krisa below.

³⁵ On errors that may occur in illustration preparation and digitization: SENIOR, BIRNIE 1995, 327–328.

³⁶ Engels, Bavay, Tsingarida 2009, 131.



Fig. 1. Map of the settlements (numbered as in the Appendix 1).

the maximum internal volumes of the vessels, with water heights reaching the top of the rims, although the realistic use of these vessels implies lower filling heights.³⁷ In other words, these drinking vessels were probably only filled up to 70–90 %.

3. The MH – LH I Goblets: Morphology and Capacity 3.1. Pottery Classes and Specific Features of Individual Shapes

A large range of fine wares was produced in the MH period,³⁸ together with a wide range of shapes and variations among the drinking vessels (kantharos, cup, goblet).³⁹ MH and LH goblets are generally interpreted as footed/stemmed

³⁷ On the difference between the optimum fill (Opt), a more realistic 'optimum' fill level, and the maximum fill (Max): BADDILEY 2018, 1.

³⁸ FRENCH 1972. – DICKINSON 1977, 17–24. – PAVÚK, HOREJS 2012.
39 On the nomenclature of MH pottery shapes: Nordquist, Zerner 1987.

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Fig. 2. Internal volumes of vessels obtained in Pot Utility and Calculating vessel capacities (Krisa, Inv. 6088, see PHIALON 2018).



Fig. 3. Examples of MH and LH goblets. – 1. Brown-RM (SARRI 2010, Pl. 15/1), see also GM Lianokladhi goblets. – 2. YM (Nordquist 1987, Fig. 47/1). – 3. MP (Nordquist 1987, Fig. 50/6). – 4. Bichrome matt-ptd (SARRI 2010, Pl. 28/4). – 5. Unptd burnished, FS 263 (Mountjoy 1981, Fig. 8/57). – 6. Unptd polished, FS 270 (Mountjoy 1981, Fig. 10/90). – 7. Myc. decorated, Ephyraean (Mountjoy 1981, Fig. 15/177).

drinking vessels. The diversity of terms used in ceramic studies for describing pottery classes and shapes such as the goblets must be pointed out. The Minyan goblet⁴⁰ is also named stemmed bowl⁴¹ or *Fußschale* in German⁴² and *coupe* a *pied* in French.⁴³ In addition, the morphology and size of the goblets varied significantly in the MH – LH I period (Fig. 3/1–4). Some shapes such as the Lianokladhi goblets

were typically produced in unpainted burnished classes. Taking this into account, special attention must be given to the pottery classes, before focusing on the morphological features of the goblets.

MH goblets, wheelmade⁴⁴ or handmade⁴⁵ ones, belong to various burnished wares, such as Grey Minyan (GM), Brown Minyan (BM), Red Minyan (RM), Yellow Minyan (YM), Dark Burnished (DB) and Burnished Dark Tempered

⁴⁰ DICKINSON 1994, 111 and Fig. 5/6. – POURSAT 2008, 139 and Fig. 193. – TOUCHAIS 2008a, 190.

⁴¹ Nordquist 1987, 48–49.

⁴² Maran 1992b, 121.

⁴³ JANNORAY, VAN EFFENTERRE 1938, Pl. XLIII. – See also '*coupe*' in Philippa-Touchais 2002, 5–6.

⁴⁴ E.g., SARRI 2010, Pls. 15–29. – The generic term 'wheelmade' encompasses, however, a variety of different techniques. – On wheel-fashioning and wheel-thrown techniques: CHOLEVA 2012.
45 E.g., NORDQUIST 1987, Figs. 45, 47, 49–52.



Fig. 4. A Lianokladhi goblet and a Pteleon goblet (MARAN 1992a, Pls. 69/1, 148/3).

(DT) fabric. The term 'Minyan' has been inconsistently applied by scholars to describe different ceramic productions in different areas: 'fine' and 'coarse' pottery with a burnished surface; 'true Minyan' and 'imitations'; and 'local' productions.⁴⁶ It would be worthwhile to use unambiguous technical terms. For instance, Fine Grey Burnished is a term applied for Grey Minyan pottery at Mitrou.⁴⁷ By contrast, there is no exact equivalence between Red Minyan and Red Burnished Ware, between Black Minyan, Argive Minyan (AM) and Black or Dark Burnished Ware, which may refer to different classes and production environments. Therefore, the original terms used in the publications of pottery are maintained in this article (see Appendix 1).

Specific shapes of unpainted (unptd) burnished goblets have been attributed to distinguishable potting traditions: the Lianokladhi goblets to production centres in central Greece, the ribbed/grooved goblets to centres in the northeastern Peloponnese, especially the Argolid, and the plain, low pedestalled goblets to centres in either the northeastern Peloponnese, Aegina, or possibly Keos.⁴⁸ The shaft graves of Grave Circle B (GCB) at Mycenae provided 62 goblets attributed by Mylonas to the Minyan type.⁴⁹ It appears that more than the half of the GCB goblets that have been drawn,⁵⁰ i.e. 12 examples, can be related to shape 61B of Gauß and Lindblom, and thus most likely belong to a potting tradition located in the northeastern Peloponnese,⁵¹ unlike the Pteleon goblet from GCB, which may be assigned to a central Greek production.

As regards morphological features, it is worth noting that MH goblets, especially those of the Lianokladhi type⁵² produced in Fine Grey Burnished (Grey Minyan) Ware, have high-ribbed stems and strong carinated bodies, but some have low stems and rounded bodies, mostly at the end of the MH period. The Lianokladhi goblets, with rim diameters ranging from c. 20 to 30 cm and deep bowls, are usually larger than the Pteleon goblets, which do not exceed 22 cm in rim diameter⁵³ (Fig. 4). The high loop handles of Pteleon goblets or the thickening on the lip on goblets of the Lianokladhi type may have been uncomfortable for drinking,⁵⁴ but these specific features definitely did not constitute hindrances for that purpose. The thickening on the lip may even have prevented the users of these large and heavy goblets from hurting themselves on sharp edges.

54 See above Philippa-Touchais 2002, 21.

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⁴⁶ GAUSS, KIRIATZI 2011, 182, 184 and Tab. 59.

⁴⁷ HALE 2016, 246. – On the ceramic class termed Fine Grey Burnished: RUTTER 1983, 327–328.

⁴⁸ GAUSS, LINDBLOM 2017, 11–12 and Fig. 1/8.

⁴⁹ MYLONAS 1972–1973, 408. – Thirty-nine goblets were found on the grave floors, 22 others in fragmentary state in the filling of the graves: MYLONAS 1972–1973, 270.

⁵⁰ Goblets with a complete profile: Mylonas 1972–1973, A-1, B-10, Γ-49, Γ-51, Δ-69, Ζ-88, H-95, Ι-100, Ι-103, Λ-125, Λ-128, Λ-132, Μ-137, Ξ-173, Ξ-174, Ξ-176, Ο-209, Ο-213, Ο-216, Υ-232, Υ-233, Υ-234.

⁵¹ Shape 61B in GAUSS, LINDBLOM 2017, 11–12 and Fig. 1/8.

⁵² E.g., MARAN 1992a, Pl. 69/1. – HALE 2016, Figs. 14/29, 15/34–36. – Everted, thickened, and hollowed rims and lower body rims are typical MH II–III features in Mitrou: HALE 2016, 289 and Fig. 16; 290 and Fig. 20. – See also GAUSS, LINDBLOM 2017, 11–12 (shape 62B).

⁵³ E.g., Goldman 1931, Fig. 185 and No. 6. – Maran 1992a, Pl. 148/1–3. – Sarri 2010, Pl. 26. – Hale 2016, Fig. 16/21–23.



Fig. 5. Three MP Aeginetan drinking vessels. – 1. Bowl with hollowed base. – 2. Footed cup with raised horizontal handle or low pedestalled goblet. – 3. Cup with raised horizontal handle (SIEDENTOPF 1991, Cat. Nos. 505, 572, 594 and Pls. 90, 95, 97).

In some cases, the criteria for identifying individual shapes are more fluid than expected and the identification of goblets may be challenged. Goblets were also produced in Matt-Painted (MP) Wares. The broad production range includes MP vessels in Argive and Aeginetan micaceous wares in the MH period, and Argive and Boeotian bichrome types in MH III and LH I.⁵⁵ The difference in profile between the three following Aeginetan MP drinking vases is not very pronounced: a bowl with handle and hollowed, slightly splaying base; a footed cup with a raised horizontal handle that, in my opinion, could be regarded as a possible low pedestalled goblet on the assumption that this vase originally had two high loop handles; and a cup with a raised horizontal handle and splaying base (Fig. 5).⁵⁶

Another question is whether certain MH Aeginetan stemmed/pedestalled bowls, which vary in shape (rounded or carinated bowl, inverted or everted rim) and size, may have been used for drinking and thus can be added to the pedestalled goblets. Aeginetan carinated bowls with horizontal handles or lugs (*Knickrandschalen*) on high pedestal feet are especially likely to have been used as drinking vessels (Fig. 6).⁵⁷ Some have an everted rim and general profile similar to the Cycladic burnished pedestalled goblets with strong carination and shallow body.⁵⁸ The examples with very shallow bowls might also have served for presenting food, but certainly not for mixing drinks.

In contrast, one may assume that the MH I Aeginetan stemmed bowls and basins with horizontal handles and flat incurved/inturned rims – a feature not suited to drinking – were perhaps used for holding solid or liquid food.⁵⁹ In

⁵⁵ LINDBLOM, MOMMSEN, WHITBREAD [2009]. – SARRI 2010, 77– 78, 113, 123 and Pl. 28. – On Boeotian Mainland Polychrome MP (kraters, stamnoi), see also MATHIOUDAKI 2010.

⁵⁶ SIEDENTOPF 1991, Pls. 90/505, 95/572, 97/594, all classified as *Knickrandschalen und -schüsseln.* – I would like to thank M. Lindblom and W. Gauß for sharing their opinion on these vases and the vases 500–503. – Regarding vase 572, I would point out that the profile of this vase is close to that of the Pteleon goblet with a low foot/ pedestal, see for instance an Anatolian Grey Ware example in PAVÚK 2007, 209 and Fig. 3/7.

⁵⁷ See *Knickrandschalen und -schüsseln* in SIEDENTOPF 1991, 35, 87 and Pl. 89, Cat. Nos. 500–503, unknown context. – Shape identified as S-8 Carinated bowl on high pedestal foot in LINDBLOM 2001, 26–27 and Fig. 4.

⁵⁸ As an import in Aegina (Group XXXV, Kolonna IX), see Walter, Felten 1981, Pl. 121/435. – Gauss, Smetana 2007, 63 and Fig. 6/XXXV-10 (footed goblet). – For Kean examples of goblets, see Overbeck 1989, 154–155 and Pls. 74–75 (tall or short-stemmed goblets). – Abell, Hilditch 2016, 160 and Fig. 9.2/c.

⁵⁹ For an Aeginetan MP deep bowl with incurved rim (diam. 30 cm), MH I Early and Late, two vertically pierced lug handles, pedestal foot, found in Lerna, see ZERNER 1988, Fig. 6/16. – For a deep MP stemmed bowl with horizontal handles and slightly incurved rim (diam. 44.75 cm), found in Argos (MH I/II), see PHILIPPA-TOUCHAIS 2002, Figs. 1/1, 3/5. – For Argive light MP flat-rim basins, see DIETZ 1991, 44 (AC/9). – On bowls with incurved rims, and separately preserved pedestal feet from Aegina: SIEDENTOPF 1981, Pls. 79–83 (rims), 87–88 (feet).



Fig. 6. An Aeginetan MP pedestalled carinated bowl/goblet (*Knickrandschale*) with everted rim and horizontal handles/lugs (SIEDENTOPF 1991, Cat. No. 503 and Pl. 89).

any case, pedestalled vases displayed their contents well, and for this reason they may be seen as performative elements in commensal activities as early as the beginning of the MH period (c. 2000–1850 BC).⁶⁰ It is not excluded that large, pedestalled, deep rounded bowls may have served as mixing vessels like the LH kraters. This hypothesis could be confirmed if traces of tartaric acid were to be revealed by future residue analyses on such tableware shapes and by their association with sets of drinking vessels.

3.2. MH (- LH I) Goblet Capacities and Function(s)

In the MH I–II period, the variability in shape and capacity of the goblets can be explained by the fact that they belong to distinct production traditions. The group of the aforementioned Aeginetan MP pedestalled carinated bowls with everted rims (*Knickrandschalen*) can be seen as pedestalled goblets and were most likely used for drinking, since this group shows the smallest capacities (less than 0.5 litres) among the MH assemblages examined here, and their rim diameters mainly range from 15 to 19 cm, as do those of plain burnished MH goblets. These MP pedestalled carinated bowls/goblets were part of a local Aeginetan production, whereas the GM and plain burnished goblets from the same site, including a Lianokladhi goblet reaching three litres in capacity and two Pteleon goblets of c. one litre, were most likely imported from the mainland in MH II.⁶¹ A capacity of three litres is very large for a drinking vessel, but is still well below the capacity of a large MH I/II Aeginetan MP stemmed bowl from Argos,⁶² which reaches c. 21 litres, as obtained by calculation methods.

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In comparison, in the GCB assemblages from Mycenae, the Pteleon goblet is the smallest goblet (diam. 12.9, h. 13 cm) and it has the lowest capacity (c. 0.36 litres).⁶³ As mentioned above, 62 goblets have been attributed by Mylonas to the Minyan type.⁶⁴ These constitute the most frequent pottery shape represented in this grave circle, ahead of stamnoi, jugs, cups, and other open shapes. The relative height of the stems of the 22 GCB goblets with a complete profile varies greatly, from a very low stem to a stem that constitutes half of the total height in the case of the Pteleon goblet. By contrast, the

⁶⁰ That is to say, more than 250 years before the changes observed in the foodways of the early Mycenaean period by L1s 2017.

⁶¹ WALTER, FELTEN 1981, 175 and Pl. 121/437, 438, 440. – GAUSS, SMETANA 2007, 63 and Figs. 6/XXXV-4, XXXV-5; 7/XXXV-7: respectively, 1.08, 0.95 and 3.01 litres, see Appendix.

⁶² PHILIPPA-TOUCHAIS 2002, Fig. 3/5. – In comparison, the MH I Aeginetan stemmed bowl from Lerna is smaller (c. 6.45 litres): ZERNER 1988, Fig. 6/16.

⁶³ MYLONAS 1972–1973, 179 and Pl. 216/Ξ-173. – The goblet varies slightly in height (13–14 cm).

⁶⁴ Mylonas 1972–1973, 270, 408.

largest goblet from the GCB is ribbed/grooved, reaching a diameter of 27.4 cm and a height of 28.1 cm, with a capacity of three litres.⁶⁵ Both goblets are assigned to the MH IIIB phase by Soren Dietz.⁶⁶ The distinct capacity range of these two goblet types is striking, as confirmed by the following examples. This might also suggest a functional difference between them. Further in-depth examination of pottery assemblages would allow a better understanding of funerary customs involving drinking at funerals, as well as of funerary ideology and symbolic meaning at the transition from the MBA to the LBA. In this article, attention will, however, focus on settlement contexts.

Similarly, the Minyan goblets from Orchomenos (GM, BM) vary in shape (Lianokladhi, ribbed, Pteleon types). Among the goblets with complete profiles (rim diameters from 17.4 to 25 cm; capacities from 0.7 to 3.52 litres), the Pteleon goblet is again the smallest example,⁶⁷ while the largest goblet from Orchomenos belongs to the Lianokladhi type.68 Moreover, goblets with capacities larger than three litres were uncovered in the settlements of Eleusis, Krisa and Pefkakia (see Appendix 1); here again, these MH II-III goblets are of the Lianokladhi type.⁶⁹ In addition to GM Lianokladhi goblets, other goblet types have a capacity larger than three litres. The capacity of two YM goblets from Asine even exceeds four litres in MH III,⁷⁰ whereas that of a bichrome MP goblet from Orchomenos approximates three litres (Fig. 7).⁷¹ Furthermore, three other large goblets from Kiapha Thiti and Tsoungiza, dated to MH III and LH I, attributed to various ceramic productions (pale burnished, dark burnished, micaceous and slipped), have capacities between 2.26 and 2.64 litres.72

With the exception of Kolonna (Aegina), more than the half of the MH (– LH I) goblets studied here have capacities

65 Mylonas 1972–1973, 85 and Pl. 214/Δ-69.

67 Sarri 2010, Pl. 26/2.



Fig. 7. Rim diameters and capacities of MH(–LH I) goblets. – K = *Knickrandschale.* – L = Lianokladhi type. – P = Pteleon type.

larger than two litres. An increase in goblet capacity probably started in the GM production in late MH II, and then fully developed in other ceramic productions in MH III, the Aeginetan production included. For instance, a MH IIIB Aeginetan MP micaceous goblet uncovered in Asine,⁷³ with a capacity of c. 2.5 litres and a more rounded shape, has little in common with the MH II Aeginetan MP pedestalled carinated bowls/goblets from Kolonna.

Inasmuch as the capacities of the largest goblets can be up to six times larger than the smallest, the question arises of whether a goblet with a capacity larger than three litres was too large to be regarded as an individual drinking vessel. Were the drinks held in these goblets shared, and how? Could the Lianokladhi goblet from Pefkakia,74 with a capacity of 3.72 litres, have been used for a purpose other than drinking? Why does a Lianokladhi goblet from Mitrou (rim diam. 29 cm)⁷⁵ have an enormous capacity, possibly reaching six litres? While there is no reason to doubt that the Pteleon goblets served as drinking vessels, the large capacities of some Lianokladhi goblets introduce the idea that they may have been used for mixing beverages. Before considering this option, it is worth comparing the capacities of the goblets with those of other pottery shapes such as the kantharoi and cups.

3.3. A Comparison with MH - LH I Kantharoi and Cups

Kantharoi and cups are typical drinking vessels used in the MH period, produced in burnished and MP wares. In contrast to the MH goblets, which mostly have two small and

⁶⁶ DIETZ 1991, 202–203, BB-2 (Δ -69); 205, CB-2 (Ξ -173), which is, however, identified as Dark Burnished Ware.

⁶⁸ Sarri 2010, Pl. 15/1. – Gauss, Lindblom 2017, Fig. 1/8 (shape 62B, No. 2).

⁶⁹ Eleusis: COSMOPOULOS 2014a, II, Fig. 12/326. – Krisa: PHIA-LON 2018, Fig. 16, Inv. 6150 (courtesy E. Velli). – Pefkakia: MARAN 1992a, Pl. 69/1. – Parallels in Mitrou MH phase 7: HALE 2016, 263 and Tab. 2; 286–287 and Fig. 15/36. – The rim of the Krisa goblet Inv. 6150 is, however, everted and slightly thickened, and not hollowed. – For a Pteleon goblet with a smaller capacity, see COSMOPOULOS 2014a, II, Fig. 12/310.

⁷⁰ Nordquist 1987, Fig. 45/1-2.

⁷¹ Sarri 2010, Pl. 28/4.

⁷² Kiapha Thiti: MARAN 1992b, Pls. 22/689, 31/958. – Tsoungiza: RUTTER 2015, E49, capacities courtesy of J. Rutter and B. Lis.

⁷³ Nordquist 1987, Fig. 53/10.

⁷⁴ Maran 1992a, Pl. 69/1. – Gauss, Lindblom 2017, Fig. 1/8 (shape 62B, No. 3).

⁷⁵ HALE 2016, 286–287 and Fig. 15/36.

narrow vertical handles, MH kantharoi are characterized by two high vertical handles⁷⁶ and, generally, by a flat base. However, in some rare cases, LH I kantharoi are also stemmed, as illustrated by an example from the settlement of Tsoungiza.⁷⁷ The LH I shape repertoire in Tsoungiza also includes a plain stemmed cup,⁷⁸ a shape clearly distinct from contemporary goblets.

Among the best preserved kantharoi found in settlement contexts, the largest examples, in medium coarse (Tsoungiza) and Black Burnished Ware (Kolonna), reach 19.5 and c. 19.7 cm in diameter,⁷⁹ for a respective capacity of c. 1.91 and c. 3.91 litres. These capacities are unusually large for kantharoi, and closer to those of some large aforementioned goblets as well as to those of some bowls/basins, two-handled bowls or bowls with horizontal handles potentially used as serving vessels (from 3 to 4.8 litres) from Kolonna and other settlements.⁸⁰ Kantharoi of medium size, ranging from 8.5 to 16 cm in diameter, with a capacity that usually does not exceed one litre,⁸¹ are mostly smaller than MH goblets. Moreover, many kantharoi of miniature size, produced in various wares, with a rim no larger than 8.5 cm and a height of 4.5 cm, are characterized by a very low capacity of 0.02-0.13 litres. Kantharoi were likely used for drinking, except perhaps in the case of the largest example from Kolonna. The hypothesis that kantharoi may have been filled with beverages from goblets rather than from jugs should be tested through a contextual analysis.

Some drinking vessels are not sufficiently preserved for us to know if they had one or two high vertical handles. If these vases had only one high vertical handle, and thus were possibly used for drinking and dipping, they would be assigned to the large variety of cups (e.g., carinated, rounded, straight-sided or Vapheio, and panelled cups).⁸² One of the

82 GAUSS, LINDBLOM 2017, 9–10.

largest, best-preserved MH cups is a MH I Late DB carinated and high-swung handled cup from Ayios Stephanos (Laconia), with a rim diameter of c. 16 cm and a capacity of 1.1 litres,⁸³ as well as a MH III Lustrous decorated rounded cup which may have held up to c. 1.4 litres.⁸⁴ However, regardless of ware type (Minyan and burnished, MP, plain, medium coarse) and form, cups usually have a capacity much smaller than one litre, mostly falling between 0.1 and 0.5 litres. The smallest cups (miniature vases) have a diameter of 4 cm for a capacity of 0.03–0.04 litres.⁸⁵ Therefore, a majority of the MH - LH I cups are smaller in capacity than the goblets from these periods, which have capacities equal to or larger than 0.5 litres, aside from the group of the Aeginetan MP Knickrandschalen. Here again, cups may technically have been filled with beverages held in large goblets, but only a closer examination of the contexts may be able to shed light on the practical use of the latter.

4. Goblets in MH II – LH I Contexts 4.1. Kolonna on Aegina

The fortified and densely occupied Bronze Age settlement of Kolonna on Aegina provided many pottery deposits. MH contexts are described in pottery groups, which are assigned to successive occupation levels.⁸⁶ By contrast, Mycenaean pottery comes either from the LH settlement excavated below the later sanctuary of Apollo or from the cemeteries located on a hill, northeast of the sanctuary.⁸⁷ Therefore, I will concentrate on the MH corpus.⁸⁸

The MH shape range of tableware comprises bowls of various types, including spouted bowls, and cups, as well as kantharoi and goblets.⁸⁹ I assumed above that four MP carinated bowls with reconstructed stems/pedestals (*Knick-randschalen*) were more likely used as drinking vessels with low capacities (from 0.24 to 0.49 litres) because of their

⁷⁶ On MP kantharoi and kyathoi/cups of similar body shape from Aegina: SIEDENTOPF 1991, Pl. 114.

⁷⁷ E80, see RUTTER in press, also possibly regarded as a Mycenaean lustrous painted goblet. – For a burnished DT stemmed kantharos from a burial in Asine, see NORDQUIST 1987, Fig. 56/4.

⁷⁸ See RUTTER 2015, 214–215 and Fig. 3/E5.

⁷⁹ Tsoungiza: RUTTER 1990, 395 and Fig. 12.55/A, with a height of 16 cm up to the rim. – Kolonna (Aegina): WALTER, FELTEN 1981, 127 and Fig. 117 (No. 390, Inv. 409).

⁸⁰ Kolonna (Aegina), MP bowl/basin: GAUSS, SMETANA 2007, Fig. 7 (2/01-2). – Asine, GM rounded bowl, AM bowl/basin: NordQUIST 1987, Figs. 40 (As 2388), 44 (As 5297). – Orchomenos, GM two-handled bowls: SARRI 2010, Pl. 1/1, 11. – Pefkakia, bowls with horizontal handles: MARAN 1992a, Pls. 48/1, 138/1–2.

⁸¹ Larger kantharoi from Pefkakia: MARAN 1992a, Pl. 55/15 (1.57 litres). – Also from Kolonna (Aegina): WALTER, FELTEN 1981, Fig. 116 (No. 389, Inv. 406; c. 1.1 litres).

⁸³ ZERNER 2008, 231 and Fig. 5.14/1237. – See also cups with a diameter of c. 14 cm: Kolonna (Aegina): SIEDENTOPF 1991, Nos. 595, 626 (Inv. 2895, 2926). – Argos: PHILIPPA-TOUCHAIS 2002, 23 and Fig. 21/57 (calculated on the basis of a 1:5 scale).

⁸⁴ ZERNER 1988, Fig. 27/ 2. – Capacity calculated with a scale obtained by using cross-multiplication, on the basis of the rim diameter.
85 Asine: NORDQUIST 1987, Fig. 38/6 (As 2119). – Tsoungiza: RUTTER 1990, 397 and Fig. 13/67.

Fundgruppen, see WALTER, FELTEN 1981, 140–141. – On renamed groups and re-dated occupation levels: GAUSS, SMETANA 2007, 59 and Fig. B. – GAUSS, KIRIATZI 2011, 382 and Fig. 4.
HILLER 1975, 9–10.

⁸⁸ See below. – On LH IIIA2 and LH IIIB kraters without context: HILLER 1975, Pls. 36/360–361, 37/362–364, 38/365, and possibly Pl. 36/357–359 (LH IIIA1–IIIA2 fragments).

⁸⁹ Kolonna VII to X: Walter, Felten 1981, 123–138, 145–147. – Siedentopf 1991.

everted rims,⁹⁰ and thus may be regarded as goblets, in contrast to MP stemmed bowls with incurved rims that were probably serving vessels. However, the lack of information about their context does not allow us to confirm that these bowls/goblets complemented each other in the same set of drinking vessels.

In 'Alt-Ägina III,1', five GM or grey-brown burnished pedestalled goblets (three Pteleon, two Lianokladhi, most likely imported wares from central Greece) and a red burnished goblet (Cycladic import) are considered to be stemmed kraters and one, a stemmed bowl.⁹¹ Five of these goblets (three Pteleon, one Lianokladhi, and the Cycladic one) belong to Group XXXV, which was found on a house floor on the south slope of the settlement (Kolonna IX).92 This group also includes a pithos, an amphora, a jug, a cup and a kantharos. The capacities of four of these goblets have been calculated (Pteleon: 0.95 and 1.08 litres; Lianokladhi: 3.01 litres; Cycladic: 0.58 litres). The Lianokladhi goblet was large enough to have held beverages which were then distributed into some of the smaller drinking vessels, but its content would not have been sufficient for filling all of them. Thus, the idea that this goblet was used as a drinking vessel shared among two or three prominent participants is a plausible option.

It must be stressed that the largest pottery group of the MH settlement, i.e. Group XXVII (Kolonna VII–VIII), includes 40 pots of various shapes (e.g. pithos, amphora, jugs, as well as ten kantharoi and eight bowls of MP and burnished types), but no pedestalled goblets.⁹³ Three of the kantharoi may have contained between 0.84 and 3.91 litres.⁹⁴ Capacities of more than three litres are very large for kantharoi.⁹⁵ One can wonder whether these vases were used as individual drinking vessels, and not as serving ones. In

comparison, four kantharoi, also in a well-preserved state but smaller in capacity (from c. 0.21 to 0.27 litres) and size, were found in the niche closed in the wall of another house (Kolonna VIII).⁹⁶

4.2. Orchomenos (Boeotia)

Most pottery finds from the Bronze Age settlement of Orchomenos cannot be associated with structures, despite the large corpus of pottery published and the well-preserved pots. This issue concerns all of the Mycenaean pottery.97 However, one of the three GM pedestalled goblets found in House K 101-102 and another pedestalled goblet from the same assemblage have been identified in the MH corpus by Kalliope Sarri.⁹⁸ The profiles of both goblets (of Lianokladhi and Pteleon type respectively) were preserved so that we were able to calculate their respective capacities (2.8 litres and c. 0.7 litres, after using cross-multiplication). Two further pedestalled goblets may have held more than three litres,⁹⁹ but their contexts remain unknown, as is the case for kantharoi with a rather low capacity (less than one litre) and two-handled bowls of various capacities. Kraters are also well represented in the MH pottery corpus, but complete profiles are missing,¹⁰⁰ and their contexts also remain unknown. Kraters were used in quantity in LH I, since the corpus comprises many rim fragments of MP bichrome type, ranging in diameter from 22 to c. 40 cm. The LH I bichrome exemplar, with a rim diameter of c. 40 cm and a reconstructed profile, may have held c. 19.14 litres,¹⁰¹ which puts beyond any doubt that drinks held in this vase were distributed to many participants on special occasions, but no coherent drinking sets can be reconstructed.

4.3. Pefkakia (Thessaly)

In the MH settlement of Pefkakia, jars and amphorae as well as various drinking vessels – among others – were discovered in House 311B.¹⁰² The best-preserved pedestalled goblet

⁹⁰ SIEDENTOPF 1991, Pl. 89/500–503 (unknown context).

⁹¹ WALTER, FELTEN 1981, 175 and Nos. 437–441 (kleiner vs. großer Krater auf hohem Ständerfuß), 435 (Schale auf hohem Ständerfuß). – On vessels Nos. 437, 438, 440 (termed as 'footed goblets'): GAUSS, SMETANA 2007, 63 and Figs. 6/XXXV-4, XXXV-5; 7/XXXV-7.

⁹² WALTER, FELTEN 1981, 133, 147, 175 and Nos. 435, 437, 438, 439, 440. – There are, however, no other certain architectural remains related to this floor.

⁹³ This pottery assemblage was found in the filling layer of a house, i.e. 'Haus +12.68', at the end of the *Südtorgasse*: WALTER, FELTEN 1981, 123, 146.

⁹⁴ WALTER, FELTEN 1981, Nos. 378, 389–391. – For No. 378, see SIEDENTOPF 1991, No. 715; according to its narrow flat base, the bowl No. 387 with a capacity of 3.74 litres would not have contained liquid; the question remains open for the bowl No. 391 with a capacity of 1.83 litres.

⁹⁵ For another large kantharos (3.93 litres), see SIEDENTOPF 1991, No. 726.

⁹⁶ WALTER, FELTEN 1981, 130, 146 and Cat. Nos. 409–412. – SIE-DENTOPF 1991, Cat. Nos. 653–656; 0.28 litres for Nos. 653, 655, if we assume that the heights indicated by the author for these vases include their handles. – GAUSS, SMETANA 2007, 62 and Fig. 3/XXIX-1-4. – For two other kantharoi Nos. 724, 725, see SIEDENTOPF 1991, 103 and Pl. 112.

⁹⁷ Mountjoy 1983.

⁹⁸ This is the *Verbranntes Haus* of the Yellow layer: SARRI 2010, 40 and Pls. 15/5, 26/2 (*korbbenklige Fußschale*).

⁹⁹ Sarri 2010, Pls. 15/1, 28/4. – Gauss, Lindblom 2017, Fig. 1/8 (shape 62B, No. 2).

¹⁰⁰ Sarri 2010, Pls. 39–43.

¹⁰¹ Sarri 2010, Pl. 39/7.

¹⁰² Maran 1992a, 24–25.

from the settlement, of Lianokladhi type, comes from this storeroom for vessels.¹⁰³ It might have held up to 3.7 litres. This house also yielded fragments of other pedestalled goblets, fragments of bowls, kantharoi and a cup, as well as a juglet and fragments of closed vessels. On the other hand, several kantharoi, with a well-preserved profile, as well as some cups, were found in different MH houses and pits dated from MH to MH – LH I.¹⁰⁴ These drinking vessels, mainly in GM, were not concentrated in a particular room of the settlement, but their regular distribution denotes a regular household use, accompanied by two-handled bowls of various sizes and capacities. The large Lianokladhi goblet from House 311B may have held drinks distributed in kantharoi, but several pedestalled goblets, including this one, were most likely used for drinking on the same occasion.

4.4. Asine (Argolid), Part 1

At Asine, the houses of the Bronze Age settlement yielded significant sets of drinking vessels and tableware. The most important MH pottery assemblages belong to Group D,¹⁰⁵ which includes pedestalled goblets (i.e., stemmed bowls), kantharoi and cups in various pottery classes such as YM, MP, DB Wares. Pottery of this group comes from houses excavated on the Barbouna Slope (Buildings 1 and 2) and in the Lower Town (especially Houses B and D), i.e., the most important houses of the MH village.

It has been stressed that "in both houses [i.e., Buildings 1 and 2] drinking and pouring vessels were found in pairs, but not necessarily in the same fabric".¹⁰⁶ Building 1 provided two pairs of pedestalled goblets (c. 1.9 and c. 3 litres),¹⁰⁷ while Building 2 contained ten pedestalled goblets including three pairs, as well as five kantharoi including two pairs.¹⁰⁸ The capacity of the pedestalled goblets in Building 2 is, on average, a bit smaller (from c. 1.2 to c. 2.3 litres) than that of the goblets from Building 1. On the other hand, some kantharoi are quite large: one of them may have contained up to c. 1.2 litres, and two others c. 0.9 litres.¹⁰⁹ This pottery assemblage is all the more important as it constitutes a coherent set of drinking vessels in a good state of preservation. It also comprises a dipper and a miniature kantharos.¹¹⁰ Both buildings were occupied in the MH III period, in two successive phases.111

In addition, in House B, in the Lower Town, the pottery which had fallen from the upper floor also includes two pairs of vessels, i.e., two pedestalled goblets with a maximum capacity slightly larger than four litres,¹¹² dated to MH III, and two jugs with a cut-away neck.¹¹³ According to Gullög Nordquist, preserved goblets from Asine can mostly be divided into three capacity groups ranging from 0.85 litres to c. 2 litres,¹¹⁴ but some goblets have a capacity larger than two litres. By contrast, a pedestalled goblet, which may be associated with either House D or House E in the Lower Town,¹¹⁵ contained 0.97 litres.

One may wonder whether the goblets were used by a single person in the MH III period. This may be true for

¹⁰³ MARAN 1992a, Pl. 69/1. – GAUSS, LINDBLOM 2017, Fig. 1/8 (shape 62B, No. 3). – I thank J. Maran for drawing my attention to the diversity and quantity of vessels stored in this building; moreover, liquids were stored there in large containers, probably wine and/or oil, which were transferred to smaller vessels (hence the several funnels from this room).

¹⁰⁴ E.g. a kantharos (Tasse) in House 310B (phase 6 late): MARAN 1992a, 30-31 and Pl. 108/4. - A conical shallow cup (napfartiges Gefäß) and bowls in House 2, H-i V-Fläche: MARAN 1992a, 51-52 and Pls. 129/16, 129/17, 130/1. - For further bowls and kantharoi: House 314 (phase 4): MARAN 1992a, Pls. 37/1, 38/14, 16; 41/6, 42/9. - House 311A (phase 4): MARAN 1992a, Pl. 44/8. - House 310A1 (phase 5), House 310A2 (phase 6 middle), House 310B (phase 6 late): MARAN 1992a, Pls. 46/16, 47/1, 48/1, 83/15, 84/1, 2; 85/4, 108/7. - House 316B (phase 5): MARAN 1992a, Pl. 52/9. - House 319A (phase 5): MARAN 1992a, Pl. 55/3, 8, 15. - Pit 411 (phase 5) and Pit 411/421 (phase 6 middle): MARAN 1992a, Pls. 58/6, 98/4, 16; 104/8. - Find C (phase 6 early): MARAN 1992a, Pls. 64/10, 65/2. -House 313A (phase 6 middle): MARAN 1992a, Pls. 90/9, 11; 91/6. - House 315 (phase 6 middle): MARAN 1992a, Pls. 93/9, 94/11, 95/7. - Pit 413 (phase 6 middle): MARAN 1992a, Pl. 104/8. - Outside house (phase 6 middle-late): MARAN 1992a, Pl. 113/14. - Pit 407 (phase 7): MARAN 1992a, Pl. 119/1. - Various (phase 7): MARAN 1992a, Pls. 120/16, 121/5, 13. - For goblets from early Mycenaean graves, see BATZIOU-EFSTATHIOU 2015, 73.

¹⁰⁵ NORDQUIST 1987, 52 and Figs. 45–55. – The author classifies the pottery into six main groups (A–F).

¹⁰⁶ NORDQUIST 1987, 53. – NORDQUIST 1998. – NORDQUIST 2002.
107 NORDQUIST 1987, 52–53 and Figs. 49/2–3 (YM – burnished red fabric), 50/6–7 (both MP and DT).

¹⁰⁸ Building 2 contained at least 20 vessels: NORDQUIST 1987, 52–53 and Figs. 51/1–3, 52/4–5, 53/8–10 (pedestals not preserved), 54/16–17 (pair of goblets), 52/6–7 (pair of kantharoi), 54/13–15 (pair of kantharoi), 52/12 (mini kantharos). – NORDQUIST 1999, 569. – NORD-QUIST 2002, 130 (three pairs of goblets). – With regard to NORDQUIST 1987, Fig. 51/2, see GAUSS, LINDBLOM 2017, Fig. 1/8 (shape 61B, No. 1).

¹⁰⁹ See Nordquist 1987, Fig. 54/13 (MP type) and Figs. 52/6, 54/15.

¹¹⁰ Nordquist 1987, 52 and Fig. 53/11–12.

¹¹¹ RUTTER in press.

¹¹² On two goblets from Building B: NORDQUIST 1987, Fig. 45/1–2. – Vessels capacities from Asine are calculated with a scale obtained by using cross-multiplication on the basis of the rim diameter indicated on the vessel drawings in NORDQUIST 1987.

¹¹³ NORDQUIST 1987, 52 and Fig. 45/1–2, goblets of YM type and DT fabric.

¹¹⁴ NORDQUIST 2002, 131: "small shape with a capacity of 0.85 to ca. 1.4 litres, while medium-sized goblets can contain between 1.5 and 1.8 litres and a large group holds around 2 litres."

¹¹⁵ NORDQUIST 1987, 52 and Fig. 47/2. – Gauss, Lindblom 2017, Fig. 1/8 (shape 61B, No. 2).

the goblets with capacities of c. 1–2 litres, undetermined for those with a capacity falling between c. 2 and c. 2.5 litres, and challenged for the two largest ones with capacities slightly larger than four litres. The drinks held in the largest goblets may have been distributed into the smallest kantharoi and the smallest cups, as proposed by Nordquist.¹¹⁶ However, the drinking set from Building 2 also includes a kantharos (1.22 litres) with a capacity as large as a low pedestalled goblet (1.18 litres). I would support the hypothesis that the large goblets were circulated between the key participants. Finally, the limited number of drinking vessels suggests a number of participants on each occasion not exceeding 20.

4.5. Tsoungiza (Corinthia), Part 1

Tsoungiza was a settlement well occupied in the MH and LH periods. Late MH fragments uncovered in dumps (EU2, EU6),¹¹⁷ including goblets varying in size,¹¹⁸ may have been part of tableware sets constituted by goblets, kantharoi, angular cups and dippers,¹¹⁹ but this discarded material does not provide new information on how these vases may have functioned together. By contrast, drinking vessels and tableware with a complete profile (part of Group E) come from a floor deposit in the burnt destruction horizon of the West Building in EU7,¹²⁰ which is assigned to the earlier LH I phase of the settlement. Other vessels of Group E were found in the East Building and dated to the later LH I phase.¹²¹ Goblets, kantharoi and cups of various sizes and capacities, associated with a krater and two dippers in the West Building, constitute consistent tableware sets. Goblets and kantharoi were mostly found in Room 1 of this building, but both shapes also occurred in the pottery assemblage of Room 4, where a rather small krater (E51: 5.36 litres) and other small drinking vessels have also been found. One of

the goblets from Room 4 is quite large (E49: 2.64 litres). This goblet may have received beverages from the krater, which is almost exactly twice the size of the goblet in volume, but this would mean that only half of its content would have remained for the other drinking vessels. Another option is that the drinks were poured from jugs directly into this goblet. The final publication of the excavation may help us to assess better how these vases complemented each other.

4.6. Some Additional MH – LH I Assemblages in the Argolid (Lerna, Argos), Laconia (Ayios Stephanos), Messenia (Nichoria), Attica (Kiapha Thiti, Eleusis) and Central Greece (Eutresis, Kirrha, Krisa, Mitrou)

Significant assemblages of drinking vessels and tableware from other MH settlements deserve special attention either because they include vases that are sufficiently well preserved for calculating their capacities (Nichoria, Krisa, Eleusis, Kiapha Thiti) or because they constitute parts of abundant material uncovered in important regional settlements (Lerna, Argos, Mitrou). In one case (Eutresis), goblets were found in a deposit that provides relevant information. However, the review of these assemblages raises more questions than answers.

The MH and LH I pottery from Lerna in the Argolid belongs to various ceramic wares,122 but cannot be related to specific deposits within a building. It includes some vessels with complete profiles, such as two MH I bowls with incurved rims and a LH I goblet of red slipped and burnished class, as well as a MH I stemmed bowl with inturned rim, a MH II spouted deep bowl/jar and a MH III(/LH I) bichrome bowl, of Aeginetan MP class.¹²³ The small LH I low-stemmed goblet (c. 0.3 litres) was certainly used for drinking, whereas the Aeginetan MH I stemmed bowl with inturned rim (c. 6.45 litres) may have been used for serving food or mixing beverages, as seen above, but they certainly would not have functioned together because of their dates. Were the drinking sets composed of vessels belonging to various ceramic classes? In the case of Lustrous decorated pottery, the numerous small drinking vessels and tableware shapes may have constituted independent sets in MH I and possibly in MH II-III.124

In **Argos**, three of the five occupation levels (phases II to IV) excavated in the southeast sector on the Aspis range

¹¹⁶ NORDQUIST 2002, 131. – On the cup/dipper and smallest kantharos from Building 2: NORDQUIST 1987, Fig. 53/11–12. – These vases have respective capacities of 0.14 and 0.1 litres.

¹¹⁷ RUTTER 1990, 376. – These dumps were not associated with substantial architecture or floor deposits.

¹¹⁸ On MH III Tsoungiza goblets, see RUTTER 2015, 215: "rim diameters ranging between 0.19 and 0.35 m".

¹¹⁹ For fragments of goblets (pedestalled, MP or unpainted burnished), see RUTTER 1990, 423–431 and Figs. 7–10. – Most likely, some of them had a capacity larger than three litres, if we consider their diameter (c. 25–28 cm) and the heights of water originally reaching c. 13–15 cm. – Except for a deep kantharos ([A]55: 1.9 litres), the other MH III drinking vessels have smaller capacities (ranging from 0.04 to 0.41 litres).

¹²⁰ RUTTER 2015, 209, 214 and Fig. 3. – See also RUTTER 1989, 1–2. – WRIGHT 1982, 387.

¹²¹ RUTTER in press, Tab. 9.12 (M. K. Dabney, J. C. Wright, personal communication). – I warmly thank J. Rutter for sharing data about Tsoungiza pottery, including tables with capacities of vessels (courtesy of B. Lis).

¹²² ZERNER 1986. – On LH I funerary assemblages: LINDBLOM 2007. – On LH IIIA2 and IIIB Lerna: WIENCKE 1998.

¹²³ ZERNER 1988, 1 and Figs. 1/5–6, 3/18; 2 and Figs. 6/16, 7/20, 8/21.
124 Lustrous Decorated Ware also includes jars and jugs of gritty or coarse fabric: ZERNER 1988, 6–10 and Figs. 24–41.

in date from MH to LH I.¹²⁵ Although the architectural remains in this sector include an apsidal house covered by rectangular buildings, there is no deposit clearly related to any of these buildings. Pottery is mostly fragmentary, but some MH MP vessels have complete profiles.¹²⁶ Here, too, the question is whether the large stemmed bowls of micaceous fabric contained alcoholic beverages rather than other liquid or solid food,¹²⁷ especially that of c. 21 litres. The contents, if it was drink, could have been distributed to kantharoi of standard size, miniature kantharoi, cups,¹²⁸ and possibly goblets. The MP goblets are fragmentary, but vary in size, with rim diameters mostly falling between 20 and 30 cm.¹²⁹

Regarding Ayios Stephanos in Laconia, which was a well-occupied settlement in MH – LH I,¹³⁰ it must be stressed that the material of the MH occupation levels is very fragmentary¹³¹ and that several complete drinking vessels of MP, DB and coarse wares were found in burial contexts ranging from MH to LH IIA.¹³² Two floor deposits include drinking vessels but no well-preserved goblets: the first deposit (three cups, five closed vessels and other material) was found in the storeroom of the MH I Late apsidal house in Area Nu/Gamma 1,133 whereas the second (two bowls and a fragmentary cup) corresponds to a MH II floor deposit in Area Beta.¹³⁴ It seems that MH pedestalled goblets with ribbed stems were not used at Ayios Stephanos. Nevertheless, two kantharoi and a conical cup were uncovered in two adjacent MH III/LH I rooms,135 while four other vases (two kantharoi, a bowl and a base) come from the foundation trench of another wall in Area Nu/Gamma 1.136 Despite the presence of Mycenaean decorated pottery assigned to LH I, it is not possible to reconstitute coherent sets of drinking vessels that can be exclusively dated to this phase.¹³⁷ In addition, most YM and MP drinking vessels (goblets and others) are dated to LH I/IIA or LH IIA and thus cannot be exclusively assigned to LH I,¹³⁸ except for rare cases such as a LH I floor deposit that produced a gritty YM carinated cup in Area Lambda.139

The Bronze Age settlement of **Nichoria** in Messenia yielded a large amount of pottery ranging in date from MH to LH IIIA1.¹⁴⁰ MH I pottery is associated with Building Unit V-1, nearby pits and other structures such as melting hearths,¹⁴¹ but it is not related to a specific floor deposit. Vessels with a complete profile are mostly assigned to MH II (bowls and cups of plain or coarse ware). MH III pottery probably overlaps chronologically with the beginning of the LH I phase, since it includes bichrome and polychrome wares in addition to Minyan, plain, MP, lustrous painted and coarse wares. The goblet is the most popular plain shape

¹²⁵ PHILIPPA-TOUCHAIS 2002, 3. – On LH I pottery, see, for instance, the semi-ovoid cup (i.e., panelled cup) in PHILIPPA-TOUCHAIS 2002, 23–24 and Figs. 21/67–70, 22, with parallels in DIETZ 1991, 94–95 (No. 256) and Fig. 27; 161–163 (AB-15/16).

¹²⁶ PHILIPPA-TOUCHAIS 2002, 4 and n. 5. – On the shape range, i.e., the bowl (*jattes*), kantharos, goblet (*coupe*) and cup, as well as jar and jug: PHILIPPA-TOUCHAIS 2002, 5–6. – On further pottery coming from the settlement: TOUCHAIS 1998 (pictures but no drawings) and TOUCHAIS 2013 (drawings of pottery fragments).

¹²⁷ The rim diameters of the basins do not exceed 45 cm, the largest ones fall between 35 and 45 cm, the medium/standard ones between 25 and 35 cm, the small ones between 20 and 25 cm: PHILIPPA-TOUCHAIS 2002, 6 and n. 15. – For the stemmed basin: PHILIPPA-TOUCHAIS 2002, 7–8 and Figs. 1, 3/5.

¹²⁸ The rim diameters of the kantharoi mostly fall between 13 and 20 cm, those of the miniature kantharoi between 7 and 10 cm, those of the cups between 8 and 18 cm: PHILIPPA-TOUCHAIS 2002, 11–12 and n. 41, 49; 16 and n. 60; 21–23 and n. 88, 90, 100. – For examples with complete profiles, see PHILIPPA-TOUCHAIS 2002, Figs. 7/21, 9/36, 13/40–42, 21/56–58.

¹²⁹ PHILIPPA-TOUCHAIS 2002, 18. – On some larger examples, with a 1:5 scale: PHILIPPA-TOUCHAIS 2002, Fig. 16/43 (rim diam. 31 cm), 51 (rim diam. 37.75 cm).

¹³⁰ TAYLOUR, JANKO 2008, 566–578. – On traces of metal smelting and working in the MH III/LH I period: TAYLOUR, JANKO 2008, 102. – On the MH I Late apsidal house (Area Nu/Gamma 1): TAYLOUR, JANKO 2008, 112–119.

¹³¹ E.g., the MH II pottery from Area Nu/Gamma 1: TAYLOUR, JANKO 2008, 112.

¹³² E.g., vases (1321, 1482, 2212, 2221, 2290, 2313, 2314): ZERNER 2008. – On Bronze Age burials: TAYLOUR, JANKO 2008, 121–144. – LH I Mycenaean decorated drinking vessels with complete profiles (Vapheio cup and miniature cup) are also associated with burials: MOUNTJOY 2008, 370–371 and Fig. 6.36/3653, 3659. – For the most recent burial dates to LH IIIA2, see TAYLOUR, JANKO 2008, 132. – For LH IIB Mycenaean goblets with complete profiles found in burial contexts, see MOUNTJOY 2008, 330–331 and Fig. 6.18/3291; and possibly 367–368 and Fig. 6.35/3647.

¹³³ TAYLOUR, JANKO 2008, 117. – These are the kantharos 1830, the cup 1889 and the kantharos 1831.

¹³⁴ TAYLOUR, JANKO 2008, 58. – The bowl 1343 has a capacity of c. one litre. – In addition, a MH I carinated cup (1237; c. 1.1 litre) was found in destruction debris in Area Eta: TAYLOUR, JANKO 2008, 35.

¹³⁵ TAYLOUR, JANKO 2008, 105. – These three vases have a complete profile (kantharoi R297 and R514, cup R488): RUTTER, RUTTER 1976, 38–39 and Ill. 11/297; 42, 45 and Ill. 13/514.

¹³⁶ TAYLOUR, JANKO 2008, 107. – The kantharos R246 (RUTTER, RUTTER 1976, 36–37 and Ill. 10/246) has a capacity of 0.46 litres.

¹³⁷ A LH I Vapheio cup (3240) was found together with various small finds in a LH IIA fill, but did not constitute a drinking set: TAYLOUR, JANKO 2008, 51.

¹³⁸ E.g., in Area Lambda 1973–77: ZERNER 2008, 251–257 and Figs. 5.26/1535–1574, 5.27/1579–1604, 5.28/1607–1619, 5.29/1620–1672.

¹³⁹ Area Lambda 3/4, 1977: TAYLOUR, JANKO 2008, 91. – MOUNTJOY 2008, 347 and Fig. 6.25/3401.

¹⁴⁰ McDonald, Wilkie 1992, with contributions of different authors.

¹⁴¹ HOWELL 1992, 21–23, 26–27, 50. – MH I pottery is assigned to three different groups (A–C). Group C includes various ware types (e.g., Minyan, plain, painted, coarse).

in LH I and LH II, more so than the conical cups,¹⁴² but only one LH I goblet was complete enough to calculate its capacity (P3193: 1.11 litres).

In Attica, the settlement of Kiapha Thiti yielded numerous fragments of drinking vessels dated from MH III to LH IIIA1, some of them imported from Aegina, but few examples with complete profiles. An almost complete preserved goblet and fragments of four other goblets were uncovered with pithos fragments and vessels of various shapes in Trench 101, i.e., behind the gate of the fortification wall, dated to LH I,143 while a MH III goblet was uncovered with a pithos and various vessels in Trench 154, which revealed a white floor.144 Both well-preserved goblets, of two different dark fabrics, may have held more than two litres. On the other hand, three smaller goblets from this settlement (capacities falling between c. 0.25 and c. 1.2 litres) are of light fabric.145 Krater fragments were also uncovered in Kiapha Thiti, but most of these were found in the uppermost filling layers of the settlement.¹⁴⁶ Thus it is difficult to reconstitute coherent tableware sets that would comprise kraters and drinking vessels of various ceramic classes.

The same goes for the assemblages found at **Eleusis**. Among the large quantity of Bronze Age pottery from the acropolis, drinking vessels dated from a phase falling between MH II–III and LH IIIA1 were generally found in pyres, under pyres, in houses – in some cases associated with floors – and in graves. Pottery dated to different phases can be found in the same stratigraphic units (SU).¹⁴⁷ However, drinking vessels with complete preserved profiles were

147 For instance, pyre 56, with pottery ranging in date from LH I to LH IIIA1/IIIA2, see COSMOPOULOS 2014a, I, 20–21.

uncovered only in a limited number of SUs.¹⁴⁸ The context of MH II–III fragmentary pedestalled goblets termed as angular bowls by Michael B. Cosmopoulos remains unknown,¹⁴⁹ as is the context of three possible fragments of MH III/LH IA kraters.¹⁵⁰ Consequently, we will only note that the largest drinking vessels are the MH goblets (c. 2.27 to 3.13 litres) as well as a LH IIB Mycenaean Ephyraean goblet (c. 2.17 litres),¹⁵¹ followed by three other goblets (a LH IB burnished, a MH Pteleon, and a LH IIB Mycenaean one), LH I–II cups, and MH kantharoi of smaller capacities.¹⁵² Another issue is the interpretation of the LH II–III deposits found in the area of the 'Megaron B' (see below).

In central Greece, some drinking vessels are associated with specific buildings. At **Eutresis** in Boeotia, "a very large number of Minyan high-stemmed goblets in a fragmentary condition" were uncovered in House C.¹⁵³ Three of these goblets, of Lianokladhi type, have been drawn, but their dimensions are not indicated. If the largest goblet was used as a krater, we would expect an association with several small vessels rather than other goblets.

Several so-called goblets from **Kirrha** in Phocis, published in 1960, are kantharoi or cups.¹⁵⁴ Some of them, mostly of coarse fabric, were uncovered in Rooms f and d (MH Ib

¹⁴² DICKINSON, MARTIN, SHELMERDINE 1992, 478, 486: LH I: 66 % vs. 6 %, LH II: 40–80 % vs. 5–10 %. – It is questionable whether the conical cups can be interpreted as hints of Minoan influence in the early LH period, already initiated in MH, as suggested by a possible import, a small lustrous painted cup (P2579). – On MM influence on the mainland: HOWELL 1992, 79.

¹⁴³ MARAN 1992b, 80 and Pl. 22/689.

¹⁴⁴ SE 2: MARAN 1992b, 108 and Pl. 31/958.

¹⁴⁵ MARAN 1992b, Pls. 28/866, 31/948 (two MH III or LH I light red to yellow burnished goblets), 1/23 (a LH IIA Mycenaean goblet).

¹⁴⁶ MARAN 1992b, 182–183, 193. – However, Nos. 444–445 were possibly found in a layer with cooking pots and tableware: MARAN 1992b, 52–53. – No. 491 was possibly found in a layer with several drinking vessels: MARAN 1992b, 60. – LH I and LH II krater fragments from Kiapha Thiti, as well as the first LH I goblet mentioned above, are attributed to Aeginetan micaceous productions.

¹⁴⁸ Associated with houses: a LH IIA Vapheio cup on the floor of House I: COSMOPOULOS 2014a, I, 34–35 (No. 823). – On an EH III – MH I coarse one-handled cup associated with House B: COSMOPOU-LOS 2014a, I, 34 (No. 28). – On a GM goblet and a fairly coarse cup attributed to a MH III deposit found in House G, S SU 25, locus 2: COSMOPOULOS 2014a, I, 35 (Nos. 310, 504). – Associated with pyres: a LH IIA Vapheio cup, LH I semi-globular cups and MP cup, S SU 14: COSMOPOULOS 2014a, I, 20–21 (Nos. 694, 824), 22 (No. 695), 23 (No. 695). – On a LH I polished complete goblet in pyre 56, illustrated but not drawn: COSMOPOULOS 2014a, I, 16; II, 95 and Pl. 52 (No. 684).

¹⁴⁹ Cosmopoulos 2014a, II, Figs. 12–16 (Nos. 326–385), Figs. 18– 20 (Nos. 433–462). – On a MH/LH I goblet: Cosmopoulos 2014a, II, 58–59 (No. 414) and Pl. 33.

¹⁵⁰ COSMOPOULOS 2014a, II, 69 (Nos. 491–493) and Fig. 22. – On a deep bowl with a horizontal strap handle: COSMOPOULOS 2014a, II, 69 (No. 490).

¹⁵¹ These are angular bowls: COSMOPOULOS 2014a, II, Figs. 12/326, 18/433. – For the Ephyraean goblet, see COSMOPOULOS 2014a, II, Fig. 37/900.

¹⁵² Capacities calculated for cups vary greatly according to the dimension selected (i.e., rim diam. or vessel h.) for setting the scale. – Kantharoi are also named 'cups' with two high vertical strap handles, see for instance COSMOPOULOS 2014a, II, 43–44 and Fig. 12/295–298. – On a large semi-globular cup: COSMOPOULOS 2014a, II, Fig. 25/604.
153 This house was nicknamed 'House of the Tippler' by the excavators: GOLDMAN 1931, 36. – For the goblets, see GOLDMAN 1931, 135 and Fig. 185/3–5. – House C at Eutresis is assigned to the first MH level, corresponding to an advanced phase of the MH period: MARAN 1992a, 370 and Fig. 25.

¹⁵⁴ DOR et al. 1960, Pls. XXXV, XXXIX.

level), and in Room B (MH IIIA level).¹⁵⁵ To date there is a lack of pottery drawings coming from this settlement, but studies of pottery are ongoing. Nevertheless, drinking vessels were most often found either in the trenches opened in the settlement¹⁵⁶ or from graves and their immediate proximity, dated to MH III and LH I–II. Kraters must also be related to grave contexts.¹⁵⁷

By contrast, drinking vessel assemblages have been discovered in buildings of the neighbouring settlement at **Krisa**. A GM Lianokladhi goblet (Inv. 6150), dated to MH II–III, comes from Building A, and may have held a maximum of 3.18 litres,¹⁵⁸ whereas another deposit in Building D, assigned to the LH I phase, includes a large and a small kantharos, a ring-handled cup, and a dipper.¹⁵⁹ However, there is no association between goblets and other drinking vessels in the MH – LH I contexts, unlike later, in a LH IIIA1 building of this site.

At **Mitrou** in ancient East Lokris (Phthiotis), the GM drinking vessels and bowls illustrating the typological and chronological sequences all come from settlement contexts ranging in date from MH I to MH III.¹⁶⁰ Pottery was found, for instance, on top of the second floor of Building K in MH phase 3, from the fills of pits in MH phase 4, an earthen surface and white plaster dated to MH phase 5, and pits filled during MH phases 6 and 7. However, these vessels are fragmentary. One of the best-preserved examples, a Liano-kladhi goblet assigned to Mitrou MH phase 7,¹⁶¹ may have contained as much as c. six litres.

4.7. A Note on the Studied MH - LH I Settlement Contexts

Among the settlements selected above, only three of them produced floor deposits that included goblets sufficiently preserved for calculating capacities: Kolonna on Aegina, Asine and Tsoungiza. At Ayios Stephanos, the floor deposits have been excavated, but they did not yield well-preserved MH goblets. Elsewhere, ceramic materials come from occupation levels excavated in rooms (e.g., Orchomenos, Pefkakia and Krisa), from wash deposits or dumps (e.g. Nichoria).¹⁶² Additional information on capacities of goblets and other drinking vessels has been provided by the study of ceramic assemblages from Eleusis and Kiapha Thiti. The other relevant assemblages examined above come from major MH settlements such as Lerna and Argos (Argolid), Eutresis (Boeotia), Mitrou (Phthiotis) and Kirrha (Phocis), but only a limited amount of information on the capacities of drinking vessels or tableware has been gained from reviewing them.

From an architectural perspective, it is difficult to interpret the MH buildings that yielded pedestalled goblets in any other way than as houses for family units, most likely accommodating household activities. Even at Kolonna on Aegina, where the most impressive architectural remains have been excavated, the goblets found in primary deposits cannot be related to a large dwelling or building complex. The relevant set of tableware from Kolonna (Group XXXV, see above), including a goblet of c. three litres, four smaller goblets, other drinking vessels and tableware, was found in a floor deposit. Another plausible option is that commensal activities took place outside the houses. On the mainland, the most consistent sets of drinking vessels have been identified at Asine, Eutresis, Orchomenos and Pefkakia. They most often include goblets of medium and large capacities (1-4.2 litres), in some cases complemented with a limited number of small drinking vessels. In my opinion, the idea that MH settlements may also have hosted commensal activities, providing drinking vases for groups of people larger than the daily-domestic units, should definitely not be ruled out, especially when one takes into consideration the capacities of the largest goblets revealed above. The beverages held in them would certainly have been shared by several participants on drinking occasions. Despite the fact that some part of these beverages may have been dispensed into the smaller drinking vessels, the idea that the largest goblets would have functioned in the same way as the LH kraters has been challenged. Instead, it has been suggested that large goblets may also have circulated among the individuals, probably the most prominent ones.

The introduction of large kraters in LH I at Orchomenos (rim diam. from 22 to c. 40 cm) is the most compelling

¹⁵⁵ See Dor et al. 1960, 147–149, Inv. 6276, 6277, 6462, 6478. – Two small jugs (Inv. 6299, 6303) and an amphora (Inv. 6288) were found in other rooms assigned to the MH IIIA level.

¹⁵⁶ For instance, goblet Inv. 6284: Dor et al. 1960, 129 (No. 25) and Pl. XLIII. – See also Maran 1992a, 314 and n. 996.

¹⁵⁷ Dor et al. 1960, Inv. 6290 (MH IIIA), Inv. 6300 (MH IIIB, but must be re-dated to LH I, see PAVÚK, HOREJS 2012, 55), Inv. 6470 (MH IIIB).

¹⁵⁸ JANNORAY, VAN EFFENTERRE 1938, 113–114 and Fig. 2. – PHIA-LON 2018, 432, 440 and Fig. 16 (drawing Inv. 6150, courtesy E. Velli). **159** See PHIALON 2018 (capacities measured by filling vessels with lentils, unlike the computer methods applied in this article). – The deep kantharos Inv. 6096 could contain much more drink that the squat kantharos Inv. 6149 (capacities of 0.88 and 0.23 litres, respectively). – Drawing Inv. 6149, courtesy of E. Velli.

¹⁶⁰ HALE 2016.

¹⁶¹ HALE 2016, 286–287 and Fig. 15/36 (c. 5.4 litres with interior rim diam. 29 cm, c. 6 litres with 1:3 scale).

¹⁶² On methodological issues regarding floor deposits and classification of fills: KARDAMAKI 2017, 80. – On the Menelaion of Sparta (occupation levels excavated in rooms), and Athens-Acropolis South Slope (wells), see below.

argument that leads us to believe that drinking events developed then in certain settlements on the Greek mainland. However, no floor deposit from this period can help us to understand how these large kraters may have functioned with other vessels. Research on the ceramic materials from Mitrou and Kirrha is still ongoing. Some preliminary results on LH IIA pottery from Mitrou indicate that a pottery assemblage may include drinking and mixing vessels, i.e., a goblet, two cups and four kraters among others,¹⁶³ and therefore a surprisingly high number of kraters compared to that of the drinking vessels. Final publications are, of course, needed to check the completeness of tableware sets, and eventually to identify more accurately how drinking practices developed in settlements from LH I to LH IIA.

5. The LH II–IIIA1 Goblets: Morphology and Capacity 5.1. Mycenaean Drinking Vessels (Goblets, Cups, Kylikes) and Specific Features

Mycenaean goblets have consistent features,164 and are mostly regarded as wheelmade. They have a concave or domed foot, a deep rounded bowl, an everted rim, and one or two vertical strap handles,165 as illustrated, for instance, by the examples from the wells on the south slope of the Acropolis at Athens (FS 263, 270, 254, see above, Fig. 3/5-7).¹⁶⁶ Mycenaean pottery became the fine ware par excellence in most parts of the Peloponnese as well as in Attica, Euboea and Boeotia from LH IIA onwards, when the first decorated goblets were introduced, or in certain regions, especially in north central Greece, from LH IIB-IIIA1 onwards.¹⁶⁷ Most examined LH goblets are plain/unpainted (unptd), but lustrous monochrome painted and decorated examples are also well preserved. The rim diameter of goblets usually does not exceed 25 cm, but the largest goblet of this study (Menelaion, ET69, see below) has a diameter reaching 25.6 cm and a capacity of 5.88 litres. Nevertheless, most of the goblets examined here are much smaller with rim diameters falling between c. 10 and c. 17 cm, and capacities between 0.2 and 2 litres. Smaller goblets with capacities of less than one litre are even predominant in LH II-IIIA1

assemblages,¹⁶⁸ many of them having a capacity of less than 0.5 litres (Fig. 8). On the assumption that these vessels contained beverages in LH II–IIIA1, the large number of small goblets certainly used as individual vases like cups and kylikes illustrates an obvious shift in the drinking practices of the early Mycenaean period.



Fig. 8. Rim diameters and capacities of LH II-IIIA1 goblets.

In rare cases, drinking vessels have been regarded indifferently as goblets or stemmed cups, such as LH II 'washy coated' goblets with one handle in Nichoria (P3553, P3554, FS 263¹⁶⁹). The number of handles does not seem to be a relevant criterion for the term applied to these vessels.¹⁷⁰ Another issue is to distinguish the goblets FS 262 from the cups FS 211, 212 in the decorated Mycenaean pottery. Four vases from Aegina, only preserved in their lower parts, attributed to FS 262 by Stefan Hiller may also correspond to FS 211, 212 (LH IIA), as assumed by Penelope A. Mountjoy,¹⁷¹ despite the lack of solid stems.¹⁷² In comparison, FS 262 goblets from Laconia and Attica have deep interior profiles and

¹⁶³ VITALE 2012, 1148 and Fig. 1.

¹⁶⁴ E.g., FS 63, FS 70: Dickinson, Martin, Shelmerdine 1992, Fig. 9/8, 9, 12. – Mountjoy 1981, Fig. 8/28.

¹⁶⁵ MOUNTJOY 1986, 204. – On definitions of features: MOUNTJOY 1986, 201 and Fig. 270.

¹⁶⁶ MOUNTJOY 1981. – Stemless goblets are rare at the Menelaion: CATLING 2009, 89. – FS = Furumark's Shape, see Furumark 1972 [1941].

¹⁶⁷ On Mycenaean decorated pottery from different regions on the Greek mainland: MOUNTJOY 1999.

¹⁶⁸ In the Palace of Nestor, the kylikes of 'standard' size have capacities falling between 0.75 and 1.2 litres: BLEGEN, RAWSON 1966, 369.
169 DICKINSON, MARTIN, SHELMERDINE 1992, 534 and Fig. 9/22.

¹⁷⁰ On a handleless goblet, P3193, LH I: DICKINSON, MARTIN, SHELMERDINE 1992, 525 and Fig. 9/6. – Also 'conical cups' as a term used for small handleless bowls – a massive and simple shape – many of which have complete profiles.

¹⁷¹ HILLER 1975, 73 and Figs. 14–15, Pl. 6/84–87: *Schale*. – MOUNTJOY 1999, 506–507 and n. 180 (semi-globular cup, tall type, FS 211), 509 and n. 205 (FS 262 or tall version of FS 211). – On a fifth goblet FS 262 from Aegina, however with wrongly reconstituted foot and handle: HILLER 1975, 76 and Fig. 18, Pl. 7/112, cited by MOUNTJOY 1999, 509 and n. 205.

¹⁷² In previous research, MOUNTJOY 1986, 34–36 and Fig. 36, refers to a "FS 262. Cup with high handle".

splaying bases, with high handles obviously preserved,¹⁷³ which may be seen as a feature distinct from FS 211, 212. The aforementioned semi-globular or tall globular cup (FS 211) is of Mycenaean type and is dated to LH II-IIIA1. Other cup shapes are, for instance, the conical cup (FS 204, FS 230), the shallow cup (FS 219), the Vapheio cup (FS 224), and the high-handled cup (FS 237). The largest LH II-IIIA1 cups of this study, such as a cup from Athens (rim diam.: 17 cm; capacity: 0.74 litres¹⁷⁴), are smaller than the larger goblets. Moreover, the vast majority of them have capacities smaller than 0.5 litres (Appendix 1). These small capacities are fully consistent with the idea that cups of Mycenaean type were mostly used as individual drinking vessels. By contrast, one may argue for a diversified use of cups produced in coarser fabrics (cooking, eating - stews or soups for instance -, drinking).175

LH II and LH III stemmed drinking vases with two high handles are usually named goblets or kylikes, but not kantharoi.¹⁷⁶ The last goblets in the Mycenaean decorated shape repertoire are assigned to LH IIIA1, when the first kylikes characterized by a shallower profile than the goblets in this phase were introduced.¹⁷⁷ In addition, the stems of LH II– IIIA1 goblets are usually shorter and thicker than those of LH IIIA1 kylikes. The term 'goblet' is still used for post-II-IA1 monochrome examples.¹⁷⁸ However, the choice of applying a terminological distinction between 'goblets' and 'kylikes' may be challenged, since LH IIIA2–IIIC decorated examples with a deep profile are named 'kylikes' rather than 'goblets'.¹⁷⁹ Moreover, studies on Minoan pottery from Knossos hint at the possibility of terming 'kylikes' certain LM II drinking vessels also referred as 'goblets', such as examples with Ephyraean decoration.¹⁸⁰

In LH IIIA1, the rim diameters of Mycenaean decorated kylikes can reach 16.5 cm, but their capacities do not exceed c. 0.8 litres, as calculated in this research.¹⁸¹ These low capacities confirm that most kylikes were certainly used as individual drinking vessels. It is exceptional that goblets and stemmed bowls look alike, such as a LH IIIA1 mono-chrome goblet with horizontal handles and a stemmed bowl from the Menelaion (Fig. 9),¹⁸² and thus, there is little reason to believe that LH I–IIIA1 goblets usually functioned as serving vessels rather than drinking ones, as discussed in the introduction of this article.



Fig. 9. Goblet ST46, also named stemmed bowl (CATLING 2009, 95, 354 and Fig. 107).

5.2. A Comparison with the LH I-IIIA1 Kraters

Whereas kylikes and kraters are clearly distinct shapes, the similarity between some LH IIIA1 goblets and kraters may be pointed out.¹⁸³ This is especially true for kraters with an everted fine rim and two vertical strap handles, like some

183 E.g., Borgna 2004, 265.

¹⁷³ MOUNTJOY 1999, 256–258 and Fig. 84/34–37 (Laconia), 508– 509 and Fig. 180/40 (Attica, where examples of FS 262 have distinct features). – Goblets of type FS 262 are generally larger than cups of type FS 211, but the examples from Aegina are particularly tall, pres. h. 9.5 cm. – On LH IIB goblets varying in size and in shape, e.g. in Laconia (FS 254, 263, 270): MOUNTJOY 1999, 260–261 and Fig. 85/48–52.

¹⁷⁴ MOUNTJOY 1981, Fig. 7/47 (9864). – I do not include a cup/goblet from Asine: FRIZELL 1980, Fig. 8/161.

¹⁷⁵ For a miniature cooking cup from Tsoungiza (MH IIIB): RUTTER 2015, 212–213 and Fig. 2/C40.

¹⁷⁶ On LH IIIB kylikes with two or one high handle(s) in Pylos: BLEGEN, RAWSON 1966, Fig. 366 (shapes 30/a-b, 31-32). – Drinking vases with two high handles and a raised base – i.e., without stem – are called cups in BLEGEN, RAWSON 1966, Fig. 355 (shapes 18–19). – For LH IIIA2 "unpainted kantharos cups" (stemless), see VITALE 2008, 232 and Pl. XLIV/f-g.

¹⁷⁷ Mountjoy 1986, 51, 64–66.

¹⁷⁸ E.g., Tiryns: Podzuweit 2007, 56 and Pl. 22/5–9. – Menelaion: Catling 2009, 123 (WN41–45) and Fig. 165. – Ayios Stephanos (LH IIIA2): Taylour, Janko 2008, 308 and Fig. 6.6.

¹⁷⁹ For LH IIIA2 decorated and monochrome kylikes (FS 256, 257, 264, 269) from Attica, see MOUNTJOY 1999, 540–541 and Figs. 194/184–188, 195/189–196.

¹⁸⁰ Натzакі 2007, 203, 205 and Fig. 6.3/1–4 (1, 3. Ephyraean).

¹⁸¹ E.g., Athens: MOUNTJOY 1981, Fig. 25/360 (rim diam. 16.5 cm, capacity 0.66 litres). – Nichoria: DICKINSON, MARTIN, SHELMERDINE 1992, Fig. 9/31, P3616 (rim diam. 15.5 cm, capacity 0.79 litres).

¹⁸² The stemmed bowl CLO20 (see CATLING 2009, 100 and Fig. 117) has, however, a thicker rim and wall than goblet ST46, which has an exceptional horizontal handle, and is referred to variously as a stemmed bowl or goblet: CATLING 2009, 354 (stemmed bowl), 95 (goblet) and Fig. 107.



Fig. 10. A Mycenaean decorated krater (CATLING 2009, Fig. 183/PD8).



Fig. 11. A small krater and a large goblet from Krisa (Inv. 6082 and 6085, see Phialon 2018, Figs. 35, 37).

examples from Athens, Nichoria or the Menelaion, whose lower parts, however, are often missing.¹⁸⁴ These kraters differ from goblets mostly due to their larger size and ring base (Fig. 10).185 The krater rim diameters are usually larger than 25 cm, but some smaller examples do exist.¹⁸⁶ Conversely, goblets with diameters slightly larger than 25 cm have also been identified.187

The introduction of large quantities of kraters in ceramic assemblages on mainland sites goes back to LH I.188 The best-preserved early examples include a part of a large bichrome MP krater from Orchomenos (rim. diam. c. 35.6, calculated with a 1:3 scale) and a small, plain, pale burnished krater from Tsoungiza (rim diam. 24.5-25.7 cm).189 In contrast, all LH II-IIIA1 kraters are Mycenaean plain or decorated vases. As stated at the beginning of this article, Late Bronze Age kraters were certainly used in commensal activities for holding alcoholic beverages, and most likely for mixing wine with water. The krater is considered to be the symbol of the distribution of drinks in the Late Bronze Age¹⁹⁰ and as the main vase of the banquet, also from the Early Iron Age and Archaic period onwards.¹⁹¹ It was the focal point of the symposion in Ancient Greece.¹⁹² The possibility that other open vases may have been used as mixing

vessels should, however, not be excluded.¹⁹³ Once again the question of whether the large goblets could have been good candidates arises, but this time for LH II-IIIA1.

In this study, LH II-IIIA1 Mycenaean decorated, monochrome, unpainted, burnished, polished or rough goblets mainly come from Nichoria (Messenia), Athens-Acropolis South (Attica), and the Menelaion of Sparta (Laconia). The rim diameters of most goblets from Nichoria and Athens range from c. 10 to 17 cm, while their capacities fall between c. 0.25 and c. 1.5 litres, but some goblets from the Menelaion are larger in size and capacity, with rim diameters of 21 cm or more and capacities exceeding three litres. A goblet from the Menelaion (ET69), which reaches 25.6 cm in diameter and held 5.88 litres,¹⁹⁴ is even larger in size and capacity than the largest MH goblets from Asine,195 and appears to fix the upper limit of goblet capacities at c. six litres.¹⁹⁶ A Mycenaean undecorated goblet from Krisa (c. 4.08 litres) can be added to the largest LH II–IIIA1 goblets.¹⁹⁷ One may wonder why LH I-IIIA1 goblets and kraters are highly variable in shape, size and capacity, and also why some large goblets may have held as much drink as some contemporary small kraters, as attested by two LH examples from Krisa (Fig. 11).¹⁹⁸

In my opinion, it is quite likely that goblets that held more than three litres contained a mixture of wine and water, just like kraters. However, the fine and everted form of their rims again suggests that these goblets were not primarily used as mixing vessels but as drinking vessels. The hypothesis that goblets with a large capacity may have circulated among the participants at drinking occasions rather than having been used in a manner similar to the kraters must be further explored by a detailed contextual study. This use may have coexisted with that of kraters. By way of comparison, the capacities of nine LH II-IIIA1 kraters examined

¹⁸⁴ MOUNTJOY 1981, Fig. 7/41 (Inv. 9879, LH IIB-IIIA1, at the latest). - DICKINSON, MARTIN, SHELMERDINE 1992, Fig. 9/26 (P3578, FS6, LH IIIA1). - CATLING 2009, Figs. 89-90 (ET25-31), 164 (WN15 to WN19, LH IIIA1).

¹⁸⁵ E.g., at the Menelaion, CATLING 2009, Fig. 183 (PD8, LH IIIA1). - For an example with horizontal handles, see CATLING 2009, Fig. 130 (V6, LH IIIA1).

¹⁸⁶ Krater ET26 from the Menelaion, rim diam. 24 cm. - Krater X7 from the Menelaion (CATLING 2009, 112 and Fig. 142) could also be regarded as a large two-handled bowl. - Krisa, krater Inv. 6082, rim diam. 24.2 cm.

¹⁸⁷ E.g., Krater ET69: CATLING 2009, 89 and Fig. 93.

¹⁸⁸ RUTTER 1990, 440 and n. 50, especially in Tsoungiza. - On Korakou LH I kraters: DAVIS 1979. - However, special ceramic vessels were certainly in use earlier than LH I for holding drinks consumed by a group, such as the EH psykter from Tiryns: MORRIS 2008, 120, with reference to Müller 1938, 37 and Fig. 34, Pls. XXII/9, XIII.

¹⁸⁹ Orchomenos: SARRI 2010, Pl. 39/7. – Tsoungiza: RUTTER 2015, 214, E51.

^{190 &}quot;The Mycenaean krater, the most meaningful symbol of drink distribution, is a monumental version - again a kind of primus inter pares – of the individual drinking vessel [...]": BORGNA 2004, 265.

¹⁹¹ COULIÉ 2013, 39, 275: "vase-roi du banquet". – On the reclining banquet in the Archaic period: COULIÉ 2013, 124.

¹⁹² On the symposion in the Archaic age as a practice and social institution: SCHMITT-PANTEL 1990, 15. - On the symposion as a part of the banquet: ESPOSITO 2015, 13-14. - On the iconography of the krater as a focal point of the image: LISSARAGUE 1990, 197.

¹⁹³ KOTSONAS 2011, 946 assumes that "diverse open vessels could [...] have served for the mixing of wine and water at this early date", i.e., in Iron Age Crete, with reference to Nestor's large 'depas' ('Iliad' XI, 628-641).

¹⁹⁴ See CATLING 2009, 89 and Fig. 93.

¹⁹⁵ CATLING 2009, 344–347, esp. 346: "With the exception of ET69 (H. 0.258 and almost a krater), none exceeds 0.19 cm in diameter". But, see also ET107, with a rim diam. of 23 cm and a capacity of c. 4.47 litres.

¹⁹⁶ See also the MH goblet from Mitrou (c. six litres) in HALE 2016, 286-287 and Fig. 15/36.

¹⁹⁷ Phialon 2018, Fig. 37, Inv. 6085.

¹⁹⁸ LH IIIA1 krater Inv. 6082 (FS 279), LH II goblet Inv. 6085 (FS 263): Phialon 2018, Figs. 35, 37.

in this research fall between 3.89 and 19.43 litres¹⁹⁹ (Fig. 12); they largely exceed the capacities of most LH goblets. The difference with the MH goblets (see Fig. 7) is generally less pronounced.



Fig. 12. Rim diameters and capacities of LH II-IIIA1 kraters.

6. Goblets in LH II–IIIA1 Contexts 6.1. Tsoungiza (Corinthia), Part 2

The introduction of the krater in tableware sets is attested for the first time at Tsoungiza in LH I, a settlement already occupied in the MH period. This shape is also identified among the pottery fragments from a layer in EU10, which was probably the fill of a large pit dated to LH IIA.²⁰⁰ Kraters of this phase were larger than krater E51, but their fragmentary state does not allow us to calculate their capacities.²⁰¹ Moreover, the LH IIA assemblage of Tsoungiza comprises numerous fragments of goblets and cups that may have been used in association with these kraters. The two LH IIA goblets with a complete profile have a capacity lower than the large LH I goblet E49 (F16 and F23: 0.49 litres and 1.85 litres respectively; E49: 2.64 litres), and were certainly used as individual drinking vases in a larger set.

6.2. Asine (Argolid), Part 2

The settlement of Asine, already examined above, has yielded several MH goblets in well-defined contexts, some

200 RUTTER 1993, 53, 56. Pit in EU 10.

of them characterized by a capacity exceeding two litres. Among the LH vessels, a goblet with a capacity of 2.11 litres can be attributed to the LH IIB–IIIA1 phase.²⁰² Like other smaller drinking vessels,²⁰³ this goblet was uncovered in Stratum 2 of Room D on the southwest slope of the Barbouna Hill. A LH IIIA1 krater rim fragment belongs to the same assemblage.²⁰⁴ Its diameter, estimated as 32 cm, is even larger than the diameter of the large LH IIIB krater from this settlement²⁰⁵ and may exceed ten litres. This krater was large enough to contain drinks distributed to several drinking vessels, possibly including the goblet with a capacity of c. two litres, which may have been used as an individual or shared vase. In comparison, a large conical bowl of max. 3.4 litres was perhaps used for serving food in LH IIB– IIIA.²⁰⁶

6.3. Nichoria (Messenia)

In early Mycenaean times, LH II pottery comes mainly from three pits filled with debris,²⁰⁷ including some cups and a goblet with a complete profile.²⁰⁸ LH II goblets have rather small capacities, as attested by nine examples (0.23 to 1.3 litres). Area IV was the 'core' of the settlement, already well inhabited in the MH period.²⁰⁹ This area was occupied by Building Unit IV-4A in the LH IIIA1 phase.²¹⁰ Inventoried pottery from this phase comes from wash deposits in the area of Unit IV-4A. Two kraters (P3578, P3578) may have been associated with Unit IV-4A,²¹¹ without being directly related to a specific tableware set. However, goblets, cups and kylikes are well represented among the LH IIIA1 pottery shape range described in the catalogue, which also possibly includes dippers. Based on its large preserved part, the capacity of krater P3578 was certainly greater than 11.5 litres. By comparison, the capacities of LH IIIA1 drinking

¹⁹⁹ Krisa, Inv. 6082: PHIALON 2018, 455–456, 465, 477–478 and Fig. 35. – Athens-Acropolis South Slope: MOUNTJOY 1981, Fig. 7/41. – The question arises whether the large MP bowl with four handles from Kolonna (SIEDENTOPF 1991, 94 and Pl. 97/599) may be regarded as a krater, possibly of LH I date rather than MH III. – On the other hand, I would rather identify the vase X7 from the Menelaion as a late two-handled bowl than as a krater (2.79 litres).

²⁰¹ A krater/goblet body sherd (diam. 27 cm) and a MP (spouted) krater base: RUTTER 1993, 65, 80 and Fig. 6/18; 71, 84 and Fig. 7/33.

²⁰² FRIZELL 1980, Fig. 8/161, i.e., stemmed globular cup FS 263, 264. – In contrast to the capacity of c. 0.9 litres of the Ephyraean goblet: FRIZELL 1980, Fig. 15/134.

²⁰³ Three handleless cups are sufficiently well preserved for calculating their capacities (0.35 litres, 0.04 litres, 0.26 litres), see FRIZELL 1980, 49 and Fig. 8/148, 149, 152. – On a kylix or carinated cup FS 267 (0.27 litres): FRIZELL 1980, Fig. 9/169.

²⁰⁴ FRIZELL 1980, 48 and Fig. 7/141.

²⁰⁵ FRIZELL 1980, 57 and Fig. 10/196 (est. diam. 28 cm, from Room E).

²⁰⁶ FRIZELL 1980, Fig. 12/253 (Room F, Stratum 3).

²⁰⁷ Aschenbrenner et al. 1992, 363 (P3435–73).

²⁰⁸ This goblet (P3472), which may have held up to 1.06 litres, has one of the largest capacities calculated for the drinking vessels from Nichoria, half of which do not exceed 0.6 litres.

²⁰⁹ ASCHENBRENNER et al. 1992, 408 and Fig. 7/35-36.

²¹⁰ Dickinson, Martin, Shelmerdine 1992, 488.

²¹¹ In L23 Wcd and L23 Xd: Dickinson, Martin, Shelmerdine 1992, 534–535.

vessels mostly fall between 0.16 and 0.42 litres.²¹² The beverages held in these two kraters were certainly distributed into such drinking vessels, goblets included, on special occasions that took place in LH IIIA1, but no concrete set can be reconstructed with certainty. Despite this, the increasing number of LH II and LH IIIA1 fragmentary drinking vessels suggests that drinking events became larger during these periods.

6.4. Krisa (Phocis)

In the settlement of Krisa already occupied in the MH period, the later Building F, which was built above Building A (context of a GM goblet), also yielded drinking vessels and tableware that constitute a coherent set used in LH IIIA1. Three goblets, a kylix, and two cups, as well as a small Mycenaean decorated krater (Inv. 6082) and a hydria (Inv. 6133), were uncovered in Rooms g and h of Building F. The size of this set thus remains modest. The capacity of this krater is low (3.89 litres), but higher than the goblets belonging to this assemblage (capacities ranging from 0.54 to 1.62 litres), which are of various ceramic classes.²¹³ In contrast, the LH II goblet Inv. 6085, which comes from an unknown deposit, had a maximum capacity of 4.08 litres,²¹⁴ and thus was slightly larger than the LH IIIA1 krater (see Fig. 11).

6.5. Athens-Acropolis South Slope (Attica)

The four wells excavated on the south slope of the Acropolis at Athens yielded many mendable fragments and large fragments of various shapes in ceramic classes, such as Mycenaean pottery, burnished household ware and, more rarely, MP pottery.²¹⁵ Along with the remains of a LH I house north of the Erechtheion,²¹⁶ this material is the best evidence that the Acropolis was inhabited in the early Mycenaean period. Among the drinking vessels, cups, dippers, goblets, and kylikes are well represented.²¹⁷ The decorated Mycenaean pottery is clearly dated to LH IIA to LH IIIA1. This household equipment had been thrown into these wells by LH IIIA1 at the latest, and the pottery produced at an earlier date may have been used until this phase, i.e., during more than 50 years, since there is no stratified LH IIA layer in the filling of the wells that may be separated from a LH IIB–IIIA1 layer.²¹⁸ Alternatively, LH IIA fragments in these wells may have come from rubbish fills, like the GM and MP fragments of LH I date,²¹⁹ and only been thrown into the wells in LH IIIA1.

Matt monochrome and MP decorated fragments of six kraters also come from these wells – two of them with rim diameters of 20 and 30 cm, and a third with a spout and a rim diameter estimated as c. 27 cm.²²⁰ In addition, an unburnished krater with a rim diameter of 34 cm and a nearly complete profile would have held a maximum of 19.4 litres.²²¹ These kraters, especially the ones with a diameter exceeding 25 cm, certainly contained drink that was distributed into the smaller drinking vessels, goblets included, since goblet capacities ranged mostly from c. 0.2 to c. 0.8 litres, with the exception of a matt monochrome goblet (1.61 litres) and two burnished goblets (FS 263, 1.46 and 1.38 litres).²²² The high number of drinking vessels from these pits as well as the large size of some kraters point to the existence of large drinking events on the Acropolis.

6.6. The Menelaion of Sparta (Laconia)

Several LH IIB or LH IIIA1 deposits from the Menelaion of Sparta were associated with substantial buildings remains (mansions and buildings on the Menelaion Hill and on the Aetos South Slope, as well as structures on the North Hill). Consistent LH IIIA1 assemblages of drinking vessels were uncovered in rooms in Mansion 2 on the Menelaion Hill.²²³ Room VII of Mansion 2 yielded krater fragments, goblets, kylikes, and cups,²²⁴ which may have been used with bowls and cooking pots on special occasions. This set could have been completed by vessels from other rooms, such as Room V (among others, a well-preserved krater, goblets

²¹² See Appendix for two larger drinking vessels: goblet P3577 (1.03 litres), and kylix P3616 (0.79 litres). – The bowl P3629 (4.75 litres) is not identified as a drinking vessel.

²¹³ LH IIIA1 Mycenaean decorated kylix (Inv. 6086), goblet (Inv. 6087), and cup (Inv. 6151). – Two burnished goblets probably produced in LH II, Inv. 6130, 6132, and a semi-coarse cup. – Small differences in capacity are observed between the manual filling of vessels with lentils (PHIALON 2018, catalogue) and the use of computer methods in the present study.

²¹⁴ JANNORAY, VAN EFFENTERRE 1938, 127 (No. 28) and Pl. XXIII/2.

²¹⁵ Mountjoy 1981, 13.

²¹⁶ Iakovidis 2006, 73–75.

²¹⁷ There is no kantharos identified in the shape repertoire, but the two-high-handled open vase No. 86 (see MOUNTJOY 1981, Fig. 10) is assimilated to the goblet types (FS 272), as are goblets with a high handle (e.g. MOUNTJOY 1981, Nos. 380, 382, FS 270).

²¹⁸ Mountjoy 1981, 74–75.

²¹⁹ MOUNTJOY 1981, 18, 62 and Fig. 33.

²²⁰ MOUNTJOY 1981, 40 (No. 279, spouted; Nos. 280, 281, two other rims), 59, 62.

²²¹ MOUNTJOY 1981, Fig. 7/41. – With a large height of water reaching c. 28.2 cm.

²²² MOUNTJOY 1981, 59 and Fig. 30/405; 62 and Figs. 20/237, 28/384. – Goblets are mostly unpainted and burnished, polished or of rough surface, but some lustrous decorated examples occurred in these wells.

²²³ CATLING 2009, 17, 34–36, 50–51 (Rooms I to X, lower platform), and Figs. 22–24. – PANTOU 2014, 393 and Fig. 16.

²²⁴ Catling 2009, 108–110.

and cups²²⁵) or possibly Room II (two fragmentary kraters, goblets, small drinking vessels, two dippers and a jug²²⁶). The capacity of krater V6 (rim diam. 26.5–27 cm) is close to eight litres, and krater II15 may have held 18.8 litres.²²⁷ Other krater fragments from Mansion 2 vary in size and shape.²²⁸ The capacities of the largest ones, with rim diameters falling between 28 and 32 cm, may have exceeded ten litres.²²⁹

These kraters are obviously larger in size than the goblets, even the largest ones, as illustrated by three goblets from Room II (II13, II17, II18), with rim diameters of 24, 21 and 23 cm, and also in capacity (goblet II17: 3.21 litres). Drinks held in these kraters were certainly distributed to smaller drinking vessels, goblets included. Goblets from the Menelaion also vary in size and capacity. For instance, goblets from Mansion 2 have capacities ranging from 0.93 litres to 3.21 litres. Goblet V18 with a capacity of c. 1.04 litres comes from the same room as krater V6. The small so-called krater X7, with a capacity of less than 2.8 litres, was obviously not used with the largest goblets of this settlement. We would rather consider this vessel to be a late two-handled bowl. However, three small kylikes from Room X (X3-X5), with capacities of 0.28 or 0.35 litres, could have received drinks from 'krater' X7.

The rim diameters and capacities of kraters and goblets from the Menelaion are, in some cases, very close. LH IIIA1 kraters can have rim diameters smaller than 26 cm, such as two examples from the East Terrace, ET25 and ET26, with a rim diameter of 25.4 and 24 cm,²³⁰ and a capacity of c. 8 and c. 6.24 litres. These kraters are close in capacity and size to the large semi-monochrome goblet ET69 (rim diam.: 25.6 cm, capacity: 5.88 litres).²³¹ Liquid held in kraters ET25 and ET26 was certainly not distributed into large goblets such as ET69, but rather into smaller goblets, kylikes and cups, also uncovered in large numbers on the East Terrace. The same interpretation can be proposed for drinking vessel NB33 (rim diam. 26 cm) from the North Building.²³² On the other hand, larger fragmentary kraters with diameters falling between 28 and 33 cm (ET27–ET31)²³³ could have held much more drink than kraters ET25 and ET26. Their beverages could have been distributed into various vases, including the largest goblets from this assemblage.

Finally, a large quantity of fragmentary pottery was also uncovered in Building B on the Aetos South Slope.²³⁴ It includes drinking vessels dated to LH IIB–IIIA1 and fragments of two kraters.²³⁵ Krater AB25 (est. body diam. 40 cm) was certainly large enough to contain drink distributed later into numerous drinking vessels of various shapes and sizes, goblets included. Consequently, most goblets were used as individual vases in various built spaces of the Menelaion. The large corpus of LH IIIA1 pottery consisting mainly of drinking vessels suggests that hundreds of people might have taken part at drinking events in this place.

6.7. Ayios Stephanos

Despite the numerous LH II and LH IIIA1 fragmentary drinking vessels uncovered at Ayios Stephanos, a settlement also occupied in the MH period, there are only a few well-defined deposits that yielded coherent associations of drinking vessels and tableware. These are two fragmentary vessels dated to LH IIA in Area Beta. Both are older than the LH IIB deposit where they were found,²³⁶ but they were produced in the same phase as the LH IIA forge used for melting and working metal in this area.237 Two other deposits were uncovered in Area Lambda/Beta: the first corresponds to a LH IIA deposit in Room 10A consisting of a gritty MP hydria and a cup;²³⁸ the second, to a LH IIB floor deposit including a cup.²³⁹ Regarding the LH IIIA1 phase, one deposit in Area Beta, on the southwest terrace yielded fragmentary pottery: two dippers, a kylix, a goblet and a basin.240

²²⁵ CATLING 2009, 106–107.

²²⁶ Catling 2009, 103–104.

²²⁷ This LH IIB krater may have been similar in shape to a LH IIIA1 krater from Iklaina, see SHELMERDINE 2011, Pl. 12/434 (rim diam. 34 cm, base diam. 13 cm, h. 32 cm), capacity of 13.66 litres, with 1:3 scale, but 17.8 litres with rim diam. 34 cm.

²²⁸ On two krater fragments from Room III: Catling 2009, 104–105.

²²⁹ CATLING 2009, Figs. 124, 135: krater II16 with est. diam. 32 cm; krater VII10: diam. 30 cm; krater VII11: diam. 28 cm.

²³⁰ CATLING 2009, 88.

²³¹ CATLING 2009, 89.

²³² Catling 2009, 114.

²³³ CATLING 2009, 88.

²³⁴ On assemblages assigned to the three first phases of the building: CATLING 2009, 198. – There are four phases, the latest (Building B4) dates to LH IIIB.

²³⁵ CATLING 2009, 209–211. – The rim diameters of goblets from Building B do not exceed 19 cm.

²³⁶ Area B 3, 8, 9 and 10, 1974–77: a LH IIB floor deposit including two LH IIA goblets and two monochrome ring-handled cups, see TAYLOUR, JANKO 2008, 52–53 and Figs. 1.28/3268, 3281 (goblets), 3295–3296 (ring-handled cups with complete profiles).

²³⁷ Taylour, Janko 2008, 53, 56.

²³⁸ TAYLOUR, JANKO 2008, 80.

²³⁹ TAYLOUR, JANKO 2008, 74. – The two well-preserved goblets from this area, one (3667) dated to LH IIA, the other (3674) to LH IIB, were not associated with this floor deposit, but found in a wash layer (3672) or without precise context (3667). – For a ring-handled cup with complete profile found in the same area, see TAYLOUR, JANKO 2008, No. 373. – On MH III metallurgical activities: TAYLOUR, JANKO 2008, 575.

²⁴⁰ TAYLOUR, JANKO 2008, 51. – It is reported that the dipper 3305 with a complete profile was found southwest of Step I in Area Beta. – I wonder whether the kylix 3313 (FS 267), whose parallels are assigned to LH IIIB1 (see MOUNTJOY 2008, 334), might be an intrusion.

6.8. A Note on the Studied LH II-IIIA1 Settlement Contexts

Most of the architectural units that provided drinking vessels considered above are named 'buildings'. This neutral term does not involve a reflection on the function of these structures or on the people, products or activities they hosted. Certainly, drink consumption may have taken place outdoors. However, a more detailed approach to the main buildings that yielded kraters, goblets and other drinking vessels may contribute to a better understanding of Mycenaean drinking practices and social behaviour.

The two successive mansions respectively dated to LH IIB-IIIA1 and LH IIIA1 at the Menelaion of Sparta were the largest and most complex buildings preceding the LH IIIA2-IIIB palatial period on the Greek mainland.241 Rooms in Mansion 1 may have served various functions: domestic, administrative and ceremonial; some of these rooms had been used solely as stores or workrooms. Thus, Mansion 1 was interpreted as the most likely seat of an early Mycenaean chieftain in Laconia.242 From an architectural perspective, it may have hosted large-scale social events.²⁴³ Mansion 2, which seems to have benefited from an even larger storage capacity than Mansion 1,244 was still at the centre of the regional authority. The Menelaion thus appears more powerful than the settlement of Avios Stephanos in LH II-IIIA1.245 The Menelaion might have been a privileged place for feasting ceremonies. This view is supported by the large amounts of drinking vessels and tableware uncovered there,²⁴⁶ notably on the East Terrace, in rooms of Mansion 2, as well as in the area of the North Building. Therefore, in my opinion, occasions of large-scale food and drink consumption for the entire community might have taken place outdoors, as they did indoors in LH IIIA1.247

The question arises whether the smaller Unit IV-4A at Nichoria in Messenia and Building F at Krisa in Phocis, occupied in LH IIIA1,²⁴⁸ could also have been the venue

for such activities. The term 'megaron' has been applied by the excavators to both buildings,²⁴⁹ although neither unit reached the architectural complexity of the Menelaion and neither settlement functioned later as a palatial centre.

The assemblages of ceramic drinking vessels collected at both sites offer a contrasting view. Even if the pottery from Unit IV-4A comes from wash deposits, the diversity of shapes (e.g., goblets, cups, kylikes, krater, bowls) and the large amount of inventoried material²⁵⁰ suggests that drinking consumption at Nichoria was organized on a large and possibly regional scale. By contrast, only a few ceramic vases from Krisa were inventoried in the 1930s. Eleven of them come from the LH IIIA1 occupation level of Building F, but their dates are not homogeneous; no more than nine vases, including three or four LH IIIA1 drinking vessels and a LH IIIA1 krater (3.89 litres), may have functioned together,²⁵¹ and thus used by a limited group of individuals, i.e., a prominent family or the local elite.

Another issue is whether drinking vessels from the studied settlements may have been used in rituals or ceremonies. The only ceramic assemblage that has been found in a context that may have included religious activity comes from Eleusis, and more precisely from the area excavated under the Telesterion. It was found in association with the platform of 'Megaron B' and includes fragments of eight goblets, four kylikes, four cups, a large bowl or krater, another bowl or cup, three jars and an alabastron, ranging in date from LH IIB/IIIA1 to LH IIIA-B.252 According to Cosmopoulos, this assemblage and other finds from the interior of Megaron B suggest "that the building was used as a family residence" while it also served for cultic activity because of its special architectural features and the evidence of burned animal sacrifices.²⁵³ Thus, the use of drinking vessels seems to have been limited to the sphere of the local ruling elite. On the assumption that vessels and burned animal bones

²⁴¹ DARCQUE 2005, 141 and Fig. 133 (Mansion 1: 517 m²; Mansion 2: 800 m²) and Plans 88–89. – CATLING 2009, 12 (Mansion 1: 650 m²).

²⁴² CATLING 2009, 449–450.

²⁴³ PANTOU 2014, 382, 388, especially "in the central and east wings of Mansion 1 and the open space around it".

²⁴⁴ CATLING 2009, 451.

²⁴⁵ Taylour, Janko 2008, 572, 590, 592–595.

²⁴⁶ CATLING 2009, Figs. 89–150.

²⁴⁷ On "the largest variety of cooking forms" in LH IIB/IIIA1 at the Menelaion and "the appearance of an established culinary vocabulary": LIS 2017, 206, 211. – However, according to PANTOU 2014, 392, Mansion 2 was less accessible and open in plan than Mansion 1. – On the plausible idea that banqueting may have taken place in the courtyard (Court 58) at the Palace of Nestor, Pylos (LH IIIB): BENDALL 2011, 120.

²⁴⁸ DARCQUE 2005, 142 and Fig. 133 (Nichoria, IV-4A: 133 m²; Chrysso/Krisa, F1: 113 m²). – PHIALON 2018, 445 (Ensemble F).

²⁴⁹ Nichoria: Aschenbrenner et al. 1992, 407 and Fig. 7/36. – Krisa: Jannoray, van Effenterre 1937, 319.

²⁵⁰ Dickinson, Martin, Shelmerdine 1992, 488, 534–537 (P3556–P3645).

²⁵¹ LH II and IIIA1 goblets, cups and kylix, a LH IIIA1 hydria, a MH bowl and a LH IIIC amphora or hydria: PHIALON 2018, 445–449 and Figs. 18–19.

²⁵² E SU 5, locus 1: COSMOPOULOS 2014a, I, 93–95. – Another consistent deposit providing fragments of drinking vessels and tableware on the South Slope of the Acropolis (S SU 34, locus 1), assigned to LH IIIA1–IIIA2, includes fragments of various shapes (a krater, two mugs, a goblet, two kylikes and a jar), but cannot be related to architectural remains: COSMOPOULOS 2014a, I, 51.

²⁵³ COSMOPOULOS 2014a, I, 455. – On a small collection of burned animal bones from a drain excavated in this area of the Megaron B: COSMOPOULOS 2014a, I, 107–108.

were remains of feasting,²⁵⁴ this drinking occasion was restricted to a small circle of people, and it may have started with an animal sacrifice.²⁵⁵

7. Conclusions

The pottery examined in this research includes over a hundred goblets with complete or nearly complete body profiles, i.e. 90 % preserved, ranging in date from the MH to the LH IIIA1 period, whose capacities have been calculated. Goblets have been compared to other open shapes such as rounded or conical bowls, with or without handles, cups of various types, dippers, kantharoi and kylikes, as well as stemmed bowls, kraters and basins. The capacities of more than 400 vessels attributed to these shapes have been calculated besides the capacities of the goblets (Appendix 1). In addition to individual shapes, this study investigated assemblages and settlement contexts. However, only a few floor deposits included well-preserved goblets as part of consistent tableware sets in the twelve main settlements selected (Asine, Athens-Acropolis South Slope, Ayios Stephanos, Eleusis, Kiapha Thiti, Krisa, Menelaion, Nichoria, Orchomenos, Pefkakia, Tsoungiza, and Kolonna on Aegina).

This research first focused on the function of the stemmed vessels regarded as pedestalled goblets in the MH period. I argued that most MH II-III pedestalled goblets (plain, ribbed/grooved, Lianokladhi, Pteleon), as well as the MH Aeginetan pedestalled carinated bowls with everted rim and horizontal handles/lugs, must be regarded as drinking vessels for the reasons recalled hereafter. By contrast, I did not exclude the possibility that MH I/II stemmed bowls/ basins with large rim diameters and incurved rims, especially some examples from Kolonna on Aegina, Lerna and Argos, may have been used as serving vessels for liquid or food. The consumption of drink by large numbers of people may have taken place early in the MH period, as suggested by a MH I group from Kolonna VII-VIII that comprised forty vessels, including ten kantharoi and eight bowls,256 although coming from uncertain contexts.

The use of large goblets such as the Lianokladhi goblets seems to emerge already in the MH II period in central Greece and Thessaly. Goblets with various capacities may have functioned together in the MH II–III periods at Kolonna on Aegina, at Orchomenos and Pefkakia in central Greece, and at Asine in the Argolid. This variability in size and capacity has been interpreted in terms of drinking and social practices. Because of the large capacity of some MH II-III goblets, falling between c. three and c. six litres, I assumed that the beverages held in the largest goblets were shared by the participants in commensal activities. This has raised the question of how these beverages were shared. When assemblages included drinking vessels of smaller sizes and capacities, there was always a possibility that drinks from the large goblets were poured into these small vases. MH II-III deposits from Asine, Orchomenos, Pefkakia and other sites included several pedestalled goblets of various wares and a limited number of smaller drinking vessels. A close examination of these settlement contexts leads us to suggest another option: the largest goblets (c. 3-4 litres), and possibly the other large ones (c. 2-3 litres), may also have been used as drinking vessels passing from hand to hand, most likely between the key persons at these commensal occasions, functioning together with other goblets and drinking vases, rather than as mixing vessels whose contents would have been distributed into smaller drinking vessels.

Considering the assemblage from Building 2 at Asine (MH III), I estimate that between fifteen and twenty people were probably involved in social drinking on this occasion, on the assumption that two individuals could have shared the drinks held in the largest goblets.²⁵⁷ However, the pairing of eating and drinking vessels in this settlement would rather support the idea of an individual use of the goblets, by the host and the guest, for instance.²⁵⁸ This is plausible for the goblets with capacities of less than two litres, but questionable for the larger ones. Drinks were certainly distributed/poured into individual drinking vessels from jugs.²⁵⁹ High and massive goblet stems may have guaranteed a good display of the drinks at special occasions, gathering some fifteen people and surpassing the frame of daily-domestic units. If MH II-III goblets were used as mixing vessels, as in the case of the LH kraters, one would expect a larger number of small drinking vessels in the studied assemblages, which is not the case. In addition, the capacities of MH pedestalled goblets rarely exceed four litres, while LH I-IIIA1 kraters generally have a capacity larger than five litres. The upper capacities of LH mixing bowls may be explained by the increasing size of groups sharing drinks in commensal and feasting events from the MH to the LH IIIA1 periods.²⁶⁰

²⁵⁴ "The pottery associated with these bones includes open vases, kylikes, and goblets; although it cannot be excluded that these were remains of feasting, the sample is not sufficient to support this claim": COSMOPOULOS 2014b, 412.

²⁵⁵ On rituals of social drinking in the Homeric world, even in a domestic setting: PAPAKONSTANTINOU 2009.256 WALTER, FELTEN 1981, 123, 146.

²⁵⁷ On the assemblage in Building 2, with eight goblets, among which three or four with max. capacities exceeding two litres, and five kantharoi: NORDQUIST 1987, 52–53 and Figs. 51–54.
258 NORDQUIST 2002, 30.

²⁵⁹ For instance, assemblages with low and high pedestalled goblets and jugs from House B in Asine, or possibly from jars from Building 1 on the Barbouna Slope, see NORDQUIST 1987, 52.

²⁶⁰ On funerary evidence, see mainly WRIGHT 2004, 154–155.

In MH III and LH I, the participants in social drinking events that took place in the settlements seem to have been the local elites.²⁶¹ During the Shaft Grave period, funerary assemblages comprised numerous drinking vessels, especially in the Argolid, as illustrated by the material from Mycenae.²⁶² Drinks and meals were consumed in quantity at the funerals, such as at Lerna.²⁶³ This practice was obviously related to the emergence and display of high status individuals.²⁶⁴ A new study of funerary drinking assemblages focusing on the capacity of the vessels would surely lead to a better understanding of the development of consumption practices from late MH to LH IIIA1, as has been initiated for LH I cooking pots in Lerna,²⁶⁵ and it would refocus attention on metal vessels, such as the LH IIIA silver drinking vessels from Dendra.²⁶⁶

The introduction of the krater in LH I assemblages may be interpreted as a major change in drinking practices, involving a common vessel used for mixing liquids before they are shared among several participants. The size and capacity of kraters varied greatly in early Mycenaean times. Drinks held in kraters were not necessarily distributed into all the drinking vessels from the same assemblage, as suggested by LH I examples from Tsoungiza: the krater of Room 4 (5.36 litres) would soon have emptied if it had served the largest goblet (2.64 litres).²⁶⁷ On the other hand, it must be assumed that the largest kraters of the studied periods may have held up to 18–19 litres: the exemplars come from Orchomenos (LH I), Athens (LH II–IIIA1), and the Menelaion (LH IIB).²⁶⁸ Goblets of any size and capacity from these settlements may have received beverages from these large kraters. On the assumption that kraters contained wine mixed with water, it is very difficult to assess how much beverage people actually consumed in commensal occasions, possibly around 0.2–1 litre for most of them, as suggested by drinking vessels of these sites, and certainly no more than 2.5–3 litres.

In LH II-IIIA1, the drinking vessels, i.e., goblets, cups and kylikes, that were uncovered by their hundreds in the occupation levels of the two mansions at the Menelaion of Sparta, in the wash deposits of the settlement at Nichoria and in the wells on the south slope of the Acropolis in Athens, were certainly used in commensal activities most likely involving not only the ruling families but larger groups with a less privileged status. This is a significant shift observed in Mycenaean drinking practices. As was the case earlier in Minoan Crete,²⁶⁹ these events were certainly connected with the development of power and increasing complexity of social interactions. However, the use of goblets implies specific drinking practices in Mycenaean Greece. The wide range of goblet capacities in the same assemblages may be interpreted as the coexistence of new and old drinking practices but also as a possible hint of increasing inequality in social behaviour, involving differentiated ways of drinking, in the Mycenaean chiefdoms or principalities.270

In LH II–IIIA1, most of the goblets have a capacity smaller than one litre²⁷¹ and they obviously served as individual drinking vessels. However, some of them may have held more than three litres, for instance at the Menelaion near Sparta.²⁷² The drinks contained in these goblets were most likely shared, as was suggested above for the MH goblets. The same interpretation has been supported for the large kylikes from the later Palace of Nestor.²⁷³ Drinks held in large goblets and kylikes may have been shared by passing these vases among the participants taking part in the activity of social drinking. It is not excluded that smaller

²⁶¹ Nordquist 2002, 133. – Rutter 2012, 81.

²⁶² KARO 1930–1933. – MYLONAS 1972–1973. – DIETZ 1991. – By contrast, they are found in a limited number in the graves of the settlements studied in this article, such as two assemblages from graves dug into houses on the Barbouna Hill in Asine at the end of LH I: NORDQUIST 1987, 52. – On kantharoi with complete profiles from graves in Orchomenos: SARRI 2010, 51 and Pls. 6/10, 8/2, 9/8.

²⁶³ As regards LH I Lerna, the total available capacity of the Aeginetan CP "would thus amount to some 500 litres": LIS 2008, 143. – For Aeginetan cooking pots from Lerna VI, see LINDBLOM 2007, Fig. 10.
264 WHITTAKER 2008, 93. – On formalised drinking ceremonies in the late MH related to the warrior lifestyle of the newly-established or emerging elites: WHITTAKER 2008, 95.

²⁶⁵ On capacities of cooking pots in LH I Lerna (funerary context), see L1S 2008, 143: average extant pot capacity of four to five litres.

²⁶⁶ WRIGHT 2004, 145 and Fig. 4 (Tomb 10, Shaft II). – This new study will also allow us to tackle possible gender differences in feasting, see comment WRIGHT 2004, 129. – Sets of vessels, including goblets, were uncovered in both MH (– LH I) female and male graves in Asine: NORDQUIST 1999, 572. – NORDQUIST 2002, 126–127 (also children), 133.

²⁶⁷ For these two vases, see Rutter 2015, E51, E49.

²⁶⁸ Orchomenos: Sarri 2010, Pl. 39/7. – Athens: Mountjoy 1981, Fig. 7/41. – Menelaion: Catling 2009, Fig. 124/II15.

²⁶⁹ HAMILAKIS 1996, 25. – According to the author, these social processes (feasting and drinking ceremonies and intra-elite gift exchange) already took place in the proto-palatial period. – As regards the Cyclades, in LC II Ayia Irini, the conical cups were still the most common drinking shape, but abundant imported Mycenaean tableware, including Mycenaean goblets, suggests that similarities in drinking practices to those on the mainland existed: ABELL, HILDITCH 2016, 165.

²⁷⁰ The term 'principalities' ('princes') is indeed used by TOUCHAIS 2008b, 279, 281, and also DICKINSON 1994, 304, but 'chiefdoms' ('chiefs') by WRIGHT 2004, 155, 166, for the early Mycenaean period. **271** In Tsoungiza, goblets downsized to a smaller diameter range in the early LH I: RUTTER 2015, 215.

²⁷² ET69 is the goblet with the largest capacity calculated here (5.88 litres): CATLING 2009, 89 and Fig. 93.

²⁷³ DABNEY, HALSTEAD, THOMAS 2004, 203. – VITALE 2008, 232. – One of these kylikes holds seven litres: Blegen, Rawson 1966, 371 (29i).

drinking vessels with three or four handles²⁷⁴ were intended to be shared in the MH and LH periods, but the capacity is definitely a relevant criterion for tracking this practice. Circulating cups and circulation of wine are practices attested much later in Archaic banquets.²⁷⁵ Sharing drinking vessels may have reinforced the notion of belonging to peer-elites. If large-scale feasting and drinking ceremonies were part of a social strategy by the elites for consolidating and legitimating their power,²⁷⁶ the method of sharing the drinks by passing vases among the participants certainly aimed at the same objective.

This hypothesis is supported by the gesture of an individual depicted on the Campstool Fresco at Knossos, holding a goblet and handing it towards another individual who is opening his hand to receive it.²⁷⁷ Thus, this custom may also have occurred in LM II–IIIA Crete. In this context, the reconstruction of the banqueters associated with the Lyre Player in the LH IIIB megaron fresco at Pylos should perhaps be revisited, with only one person in each pair holding a drinking vessel instead of everyone doing so.²⁷⁸ The scenes depicted on these two Late Bronze Age frescoes illustrate the consumption of drinks on special occasions, during formal drinking ceremonies, but not directly large-scale feasting activities based on the consumption of food.²⁷⁹ Formal drinking ceremonies may have been specific moments in the unfolding of feasts.²⁸⁰ Ultimately, this raises the question of whether the use of large drinking vessels may have been linked to specific ritual practices associated with religious celebrations in palatial times. The same question arises for post-palatial practices, in particular with regard to a figure holding a large kylix, identified as female, on a LH IIIC Early amphora.²⁸¹

Another issue is whether the men depicted in pairs and in a limited number on the Knossian and Pylian frescoes represent a privileged circle of peer-elites drinking in independent ceremonies,²⁸² or whether this group was only a small part of a large number of feasting participants that may also have involved women and children, since the quantity of feasting provisions listed by the palace at Pylos might have been gathered for "a thousand and more people".283 The consumption of drink was a highly appreciated activity in social and ritual spheres. Wine was one of the major distributed commodities in the kingdoms of Knossos and Pylos.²⁸⁴ To this extent, feasting ceremonies may be regarded as acts of social integration into the palatial authority. It was a growing phenomenon in LH II-III, as attested by the LH II-IIIA1 drinking assemblages from the Menelaion, Nichoria and Athens,285 in the LH IIIB1 settlement at

²⁷⁴ For a LH IIIA2 unpainted three-handled kylix from Mitrou, see VITALE 2008, 232 and Pl. XLV/d. – For a three-handled kylix (FS 259) from Pefkakia, see BATZIOU-EFSTATHIOU 2015, 66 and Fig. 42. – For a LH I–II burnished goblet from Krisa (Inv. 6132), see PHIALON 2018, 449, 453, 492 and Fig. 69.

²⁷⁵ WECOWSKI 2014, 121–124.

²⁷⁶ HAMILAKIS 1996, 25.

²⁷⁷ EVANS 1935, 379–390 and Figs. 323–325, Pl. XXXI. – WRIGHT 2004, 164 and Fig. 15.

²⁷⁸ On a fresco with men at table, very fragmentary (Throne Room): LANG 1969, 80–81 (44 H 6) and Pls. 28, 125–126, A. – WRIGHT 2004, 163 and Fig. 13 (courtesy L. R. McCallum). – However, drinking vessels which were found in pairs in Room 8/00 at Tiryns (LH IIIC Early) lead STOCKHAMMER 2011b, 221, 224 to assume that this "placement" was "an obvious reference to palatial feasting". – For the LH IIIB feasting fresco at Pylos, see STOCKHAMMER 2011b, 213 and Fig. 3; however, on a mug likely "to be passed around among the heads of the elite families of this time" because of its large capacity (c. 3 litres, vs. the kylikes having a capacity of only 0.35–0.55 litres), see STOCKHAMMER 2011b, 224. – STOCKHAMMER 2008, 164, Pl. 49.

²⁷⁹ No ritual dining is depicted, but preparation for feasting is suggested by the depictions of hunting scenes and supply of tripods at Pylos: Lang 1969, 70–71 (21 H 48) and Pls. 15, 116, 122. – SHAW 1997, 496. – PINI 2008, 232. – For Tylissos (Crete), see SHAW 1972, 184 and Fig. 13. – WRIGHT 2004, 157 and Fig. 8. – For Ayia Irini (Kea), see MORGAN 2018, 288–289 and Figs. 9–10/a.

²⁸⁰ As emphasized by CONSTANTINIDIS 2008, 65, the "preparations of feasts would not have been limited to food and drink alone but to festive clothing (including jewellery and the use of perfumes), music, spaces and seating arrangements as well." – For an interpretation of the frescoes from the Throne Room at Pylos, see McCallum 1987, 296: "These three activities of procession, sacrifice, and banquet probably represented highlights of a major festival [...]". – Feasts are also "dynamic social practices": GIRELLA 2008, 177.

²⁸¹ GÜNTNER 2000, 22 and Pl. 5/1a–b. – For a LH IIIC krater fragment from Lefkandi decorated with a person dressed in a long robe, seated in front of a krater containing a kylix, see CROUWEL 2006, 240– 241, 249 (B2b), Pls. 59, 71. – CROUWEL, MORRIS 2015, 166. – Nevertheless, the socio-political background is completely different in the post-palatial period, characterized with "permeable hierarchies", and as regards the pictorial pottery, with "increasing depictions of competition": STOCKHAMMER 2011a, 219. – In comparison, it has been demonstrated that, in the 6th and 5th centuries BC, large drinking vessels were handled in specific rituals during religious celebrations, and were also related to hero cult and heroized funerary contexts: TSINGARIDA 2011, 73.

²⁸² "Drinking was obviously a central activity of feasting but could also be an independent ritual, such as for divinities or the dead": SHELTON 2008, 227.

²⁸³ On the number of participants, see above, in introduction: PALAIMA 2004, 229. – Later, in the Archaic period, "Greek commensality was essentially an all-male activity": MURRAY 1990, 6. 284 PALMER 1994, 84–85.

²⁸⁵ And particularly in LH IIB–IIIA1, when "the idea of a feasting service seems to have been crystallized": THOMAS 2011, 302. – However, goblets with capacities larger than three litres occurred only rarely in the LH II–IIIA1 drinking vessel assemblages.

Tsoungiza, for instance,²⁸⁶ and at its climax in the LH IIIB2 palatial context at Pylos. The present volumetric study on goblets, kraters and other tableware has endeavoured to address issues not merely about the function and use of pottery shapes, but also about the development of drinking practices in a diachronic approach.

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Appendix 1

Supplementary data on the capacities of drinking vessels and tableware obtained by calculation methods can be found at: doi: 10.1553/archaeologia104s195-A.

References

Abell, Hilditch 2016

N. ABELL, J. HILDITCH, Adoption and adaptation in pottery production practices: investigating Cycladic community interactions through the ceramic record of the second millennium BC. In: E. GOROGIANNI, P. PAVÚK, L. GIRELLA (Eds.), Beyond Thalassocracies: Understanding Processes of Minoanisation and Mycenaeanisation in the Aegean. Oxford 2016, 155–171.

Adrymi-Sismani 2014

Β. ΑΔΡΥΜΗ-ΣΙΣΜΑΝΗ, Ιωλκός: Η Εϋκτιμένη Πόλη του Ομήρου: ένα αστικό κέντρο στον μυχό του Παγασητικού κόλπου: το διοικητικό κέντρο, οι οικίες και το νεκροταφείο. Volos 2014.

Aschenbrenner et al. 1992

- S. E. ASCHENBRENNER, W. D. E. COULSON, W. P. DONOVAN, R. HOPE SIMPSON, W. A. MCDONALD, N. C. WILKIE, Late Helladic settlement: stratigraphy and architecture. In: W. MC-DONALD, N. WILKIE (Eds.), Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation. Minneapolis 1992, 359–454.
- BADDILEY 2018
- W. BADDILEY, Calculating liquid capacity to understand what could have been consumed from 'drinking' vessels, Internet Archaeology 50, 2018, 1–19.
- BATZIOU-EFSTATHIOU 2015
- A. BATZIOU-EFSTATHIOU, The Mycenaean settlement at Pefkakia: the harbour of Iolkos? In: J. WEILHARTNER, F. RUPPENSTEIN (Eds.), Tradition and Innovation in the Mycenaean Palatial Polities. Proceedings of an International Symposium held at the Austrian Academy of Sciences, Institute for Oriental and European Archaeology, Aegean and Anatolia Department, Vienna, 1–2 March, 2013. Mykenische Studien 34, Vienna 2015, 51–85.

Bendall 2011

- L. M. BENDALL, Fit for king? Hierarchy, exclusion, aspiration and desire in the social structure of Mycenaean banqueting. In: P. HALSTEAD, J. C. BARRETT (Eds.), Food, Cuisine and Society in Prehistoric Greece. Oxford 2011, 105–135.
- Bernabé, Luján 2008
- A. BERNABÉ, E. R. LUJÁN, Mycenaean technology. In: Y. DUHOUX, A. MORPURGO DAVIES (Eds.), A Companion to Linear B: Mycenaean Greek Texts and their World. Louvain-la-Neuve 2008, 201–233.

Blegen, Lang 1964

C. BLEGEN, M. LANG, The Palace of Nestor excavation: excavations of 1963, American Journal of Archaeology 68, 1964, 95–105.

Blegen, Rawson 1966

C. BLEGEN, M. RAWSON, The Palace of Nestor at Pylos in Western Messenia. Princeton 1966.

Borgna 2004

- E. BORGNA, Aegean feasting: a Minoan perspective. In: J. C. WRIGHT (Ed.), The Mycenaean Feast, Hesperia 73/2, Special Issue, 2004, 247–279.
- Borgna, Levi 2015
- E. BORGNA, S. T. LEVI, The Italo-Mycenaean connection: some considerations on the technological transfer in the field of pottery production. In: W. GAUSS, G. KLEBINDER-GAUSS, C. VON RÜDEN (Eds.), The Transmission of Technical Knowledge in the Production of Ancient Mediterranean Pottery. Proceedings of the International Conference at the Austrian Archaeological Institute at Athens, 23rd–25^{ch} November 2012. Vienna 2015, 115–138.

Boskamp 1996

A. BOSKAMP, Minoan storage capacities, Annual of the British School at Athens 91, 1996, 101–112.

Cateloy 2016

- C. CATELOY, Trade and capacity studies in the eastern Mediterranean: the first Levantine trade amphorae. In: S. DEMESTICHA, A. B. KNAPP (Eds.), Maritime Transport Containers in the Bronze–Iron Age Aegean and Eastern Mediterranean. Uppsala 2016, 39–55.
- Catling 2009
- H. W. CATLING with contributions by H. HUGUES-BROCK, N. BRO-DIE, G. JONES, R. E. JONES, Sparta: Menelaion I: The Bronze Age. The British School at Athens Suppl. 45, Athens 2009.

Choleva 2012

M. CHOLEVA, The first wheelmade pottery at Lerna: wheel-thrown or wheel-fashioned? Hesperia 81, 2012, 343–381.

Christakis 2008

- K. CHRISTAKIS, The Politics of Storage: Storage and Sociopolitical Complexity in Neopalatial Crete. Philadelphia 2008.
- Christakis 2010
- K. CHRISTAKIS, A wine offering to the Central Palace Sanctuary at Knossos: the evidence from KN Zb 27. In: O. KRZYSZKOWSKA (Ed.), Cretan Offerings. Studies in Honour of Peter Warren. The British School at Athens Studies 18, Athens 2010, 49–55.

Constantinidis 2008

D. CONSTANTINIDIS, From fields to feasts: interpreting Aegean architecture and iconography in relation to feast preparations. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 65–74.

²⁸⁶ THOMAS 1992, Tabs. 2/2–4, 8, 10. – A LH IIIB1 pit yielded more than 20,000 sherds, among them more than four thousand examples of fine open shapes. – For a staggering number of tripods from a LH IIIA2 (Early) pit, see LIS 2017, 209.

Cosmopoulos 2014a

- M. B. COSMOPOULOS, The Sanctuary of Demeter at Eleusis: The Bronze Age. The Archaeological Society at Athens 295–296, Athens 2014.
- Cosmopoulos 2014b
- M. B. COSMOPOULOS, Cult, continuity, and social memory: Mycenaean Eleusis and the transition to the Early Iron Age, American Journal of Archaeology 118/3, 2014, 401–427.
- Cosmopoulos 2018
- M. B. COSMOPOULOS with contributions by C. SHELMERDINE, P. THOMAS, J. GULIZIO, H. BRECOULAKI, Iklaina: The Monumental Buildings. The Archaeological Society at Athens Library 316, Athens 2018.
- Coulié 2013
- A. COULIÉ, La céramique grecque aux époques Géométrique et Orientalisante (XI^e-VI^e siècle av. J.-C.). Paris 2013.
- Coulié et al. 2017
- A. COULIÉ, D. FRÈRE, N. GARNIER, A. MARTON, Le tombeau A de Camiros: les vases archaïques et leurs contenus: l'apport de l'étude chronologique et des analyses chimiques des résidus, Bulletin de Correspondance Hellénique 141, 2017, 553–621.
- Crouwel 2006
- J. H. CROUWEL, Late Mycenaean pictorial pottery. In: D. EVELY (Ed.), Lefkandi IV: The Bronze Age: The Late Helladic IIIC Settlement at Xeropolis. London 2006, 233–255.

CROUWEL, MORRIS 2015

- J. H. CROUWEL, C. E. MORRIS, The Minoan amphoroid krater: from production to consumption, Annual of the British School at Athens 110, 2015, 147–201.
- Dabney, Halstead, Thomas 2004
- M. K. DABNEY, P. HALSTEAD, P. THOMAS, Mycenaean feasting on Tsoungiza at Ancient Nemea. In: J. C. WRIGHT (Ed.), The Mycenaean Feast, Hesperia 73/2, Special Issue, 2004, 197–215.

Darcque 2005

- P. DARCQUE, L'habitat mycénien: Formes et fonctions de l'espace bâti en Grèce continentale à la fin du II^e millénaire avant J.-C. Bibliothèque des écoles françaises d'Athènes et de Rome 319, Athens 2005.
- Davis 1979
- J. L. DAVIS, Late Helladic I pottery from Korakou, Hesperia 48, 1979, 234–263.
- Decavallas 2011
- O. DECAVALLAS, Étude de l'alimentation dans le domaine égéen au Néolithique et à l'âge du Bronze à partir de l'analyse chimique de résidus organiques conservés dans les poteries. PhD Dissertation, Université Montaigne – Bordeaux III 2011.

Dickinson 1972

- O. T. P. K. DICKINSON, Late Helladic IIA and IIB: some evidence from Korakou, Annual of the British School at Athens 67, 1972, 103–112.
- Dickinson 1977
- O. T. P. K. DICKINSON, The Origins of Mycenaean Civilisation. Studies in Mediterranean Archaeology 49, Göteborg 1977. DICKINSON 1994
- O. T. P. K. DICKINSON, The Aegean Bronze Age. Cambridge 1994.
- Dickinson, Martin, Shelmerdine 1992
- O. T. P. K. DICKINSON, S. L. MARTIN, C. W. SHELMERDINE, Mycenaean pottery from the settlement. In: W. McDonald, N. WILKIE (Eds.), Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation. Minneapolis 1992, 467–617.

Dietz 1991

- S. DIETZ, The Argolid at the Transition to the Mycenaean Age: Studies in the Chronology and Cultural Development in the Shaft Grave Period. Copenhagen 1991.
- Dor et al. 1960
- L. DOR, J. JANNORAY, H. VAN EFFENTERRE, M. VAN EFFENTERRE, Kirrha: Étude de préhistoire phocidienne. Paris 1960.
- Engels, Bavay, Tsingarida 2009
- L. ENGELS, L. BAVAY, A. TSINGARIDA, Calculating vessel capacities: a new web-based solution. In: A. TSINGARIDA (Ed.), Shapes and Uses of Greek Vases (7th-4th centuries B.C.). Bruxelles 2009, 129–133.

Esposito 2015

A. Esposito with the collaboration of E. RABEISEN, S. WIRTH (Eds.), Autour du "banquet": Modèles de consommation et usages sociaux. Dijon 2015.

Evans 1935

- A. EVANS, Palace of Minos IV.2: A Comparative Account of the Successive Stages of the Early Cretan Civilization as Illustrated by the Discoveries at Knossos. London 1935.
- Foster, Laffineur 2003
- K. P. FOSTER, R. LAFFINEUR (Eds.), METRON: Measuring the Aegean Bronze Age. Proceedings of the 9th International Aegean Conference, New Haven, Yale University, 18–21 April 2002. Aegaeum 24, Liège 2003.
- Fox 2008
- R. Fox, Tastes, smells and spaces: sensory perceptions and Mycenaean palatial feasting. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 133–140.

French 1972

- D. FRENCH, Notes on Prehistoric Pottery Groups from Central Greece. Athens 1972.
- Frizell 1980
- S. FRIZELL, An Early Mycenaean Settlement at Asine: The Late Helladic II B and III A:1 Pottery. Göteborg 1980.
- Furumark 1972 [1941]
- A. FURUMARK, Mycenaean Pottery I. Stockholm 1972 [1941].

Gauss, Lindblom 2017

W. GAUSS, M. LINDBLOM, Pre-Mycenaean pottery shapes of the Central Aegean: a new resource in development, in social change in Aegean prehistory. In: C. WIERSMA, S. VOUTSAKI (Eds.), Social Change in Aegean Prehistory. Oxford 2017, 1–15.

Gauss, Smetana 2007

W. GAUSS, R. SMETANA, The ceramic sequence of the SCIEM 2000 project. In: F. FELTEN, W. GAUSS, R. SMETANA (Eds.), Middle Helladic Pottery and Synchronisms. Proceedings of the International Workshop held at Salzburg, October 31st – November 2nd, 2004. Vienna 2007, 57–80.

W. GAUSS, M. LINDBLOM, R. A. K. SMITH, J. C. WRIGHT (Eds.), Our Cups Are Full: Pottery and Society in the Aegean Bronze Age. Papers presented to Jeremy B. Rutter on the Occasion of his 65th Birthday. Oxford 2011.

GIRELLA 2008

L. GIRELLA, Feast in 'transition'? An overview of feasting practices during MM III in Crete. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 167–178.

Gauss et al. 2011

Goldman 1931

- H. GOLDMAN, Excavations at Eutresis in Boeotia. Cambridge 1931. Güntner 2000
- W. GÜNTNER, Figürlich bemalte mykenische Keramik aus Tiryns. Tiryns XII, Mainz am Rhein 2000.
- HALE 2016
- C. M. HALE, The Middle Helladic fine gray burnished (Gray Minyan) sequence at Mitrou, East Lokris, Hesperia 85, 2016, 243-295.
- HAMILAKIS 1996
- Y. HAMILAKIS, Wine, oil and the dialectics of power in Bronze Age Crete: a review of the evidence, Oxford Journal of Archaeology 15/1, 1996, 1-32.

Y. HAMILAKIS, Time, performance, and the production of a mnemonic record: from feasting to an archaeology of eating and drinking. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 3-19.

HASKELL 1984

H. W. HASKELL, Pylos: stirrup jars and the international oil trade. In: C. W. Shelmerdine, T. G. Palaima (Eds.), Pylos Come Alive: Industry and Administration in a Mycenaean Palace. New York 1984, 97-107.

Натzакі 2007

- E. HATZAKI, Final Palatial (LM II–IIIA2) and Postpalatial (LM IIIB - LM IIIC Early): MUM south sector, long corridor cists, MUM pits (8, 10–11), Makritikhos 'kitchen', MUM north platform pits, and SEX southern half groups. In: N. MOMIGLIANO (Ed.), Knossos Pottery Handbook: Neolithic and Bronze Age (Minoan). The British School at Athens Studies 14, London 2007, 197–251. HILLER 1975
- S. HILLER, Mykenische Keramik. Alt-Ägina IV,1, Mainz 1975.
- HITCHCOCK, LAFFINEUR, CROWLEY 2008
- L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008.

HOWELL 1992

- R. J. HOWELL, Middle Helladic settlement: stratigraphy and architecture, Middle Helladic settlement: pottery. In: W. McDONALD, N. WILKIE (Eds.), Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation. Minneapolis 1992, 15–204. Hruby 2010
- J. HRUBY, Mycenaean pottery from Pylos: an indigenous typology, American Journal of Archaeology 114/2, 2010, 195-216.

Iakovidis 2006

- S. E. IAKOVIDIS, The Mycenaean Acropolis of Athens. The Archaeological Society at Athens Library 240, Athens 2006.
- JANNORAY, VAN EFFENTERRE 1938
- J. JANNORAY, H. VAN EFFENTERRE, Fouilles de Krisa II, Bulletin de Correspondance Hellénique 62, 1938, 110-148.

JUNG 2006

R. JUNG, Εύποτον ποτέριον: mykenische Keramik und mykenische Trinksitten in der Ägäis, in Syrien, Makedonien und Italien. In: Studi di Protostoria in Onore di Renato Peroni. Borgo San Lorenzo 2006, 407-423.

Kardamaki 2017

E. KARDAMAKI, The Late Helladic IIB to IIIA2 pottery sequence from the Mycenaean Palace at Ayios Vasileios, Laconia, Archaeologia Austriaca 101, 2017, 73-142.

Karo 1930–1933

G. KARO, Die Schachtgräber von Mykenai. Munich 1930–1933. Kotsonas 2011

A. KOTSONAS, Ceramic variability and drinking habits in Iron Age Crete. In: A. MAZARAKIS AINIAN (Ed.), The "Dark Ages" Revisited. Acts of an International Symposium in Memory of Wiliam D. E. Coulson, University of Thessaly, Volos, 14-17 June 2007, vol. II. Volos 2011, 943-955.

LANG 1969

- M. L. LANG, The Palace of Nestor at Pylos in Western Messenia: II. The Frescoes. Princeton 1969.
- LINDBLOM 2001
- M. LINDBLOM, Marks and Markers: Appearance, Distribution and Function of Middle and Late Helladic Manufacturers' Marks on Aeginetan Pottery. Studies in Mediterranean Archaeology 128, Jonsered 2001.
- LINDBLOM 2007
- M. LINDBLOM, Early Mycenaean mortuary meals at Lerna VI with special emphasis on their Aeginetan components. In: F. FELTEN, W. GAUSS, R. SMETANA (Eds.), Middle Helladic Pottery and Synchronisms. Proceedings of the International Workshop held at Salzburg, October 31st - November 2nd, 2004. Vienna 2007, 115-135.

LINDBLOM, MOMMSEN, WHITBREAD [2009]

- M. LINDBLOM, H. MOMMSEN, I. K. WHITBREAD, Bichrome pottery in the MBA-LBA Central Aegean. In: I. HEIN (Ed.), Manual on Bichrome Painted Pottery in the Eastern Mediterranean. Unpublished manuscript of 2009, 1-34.
- L1s 2008
- B. LIS, Cooked food in the Mycenaean feast-evidence from the cooking pots. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 141-149. LIS 2013
- B. LIS, Let's start from (a) scratch: new ways of looking at vessels' function, Archeologia 61, 2013, 7-14.

LIS 2015

B. L15, From cooking pots to cuisine: limitations and perspectives of a ceramic-based approach. In: M. SPATARO, A. VILLING (Eds.), Ceramics, Cuisine and Culture: The Archaeology and Science of Kitchen Pottery in the Ancient Mediterranean World. Oxford 2015, 104-114.

LIS 2017

- B. LIS, Foodways in Early Mycenaean Greece: innovative cooking sets and social hierarchy at Mitrou and other settlements on the Greek mainland, American Journal of Archaeology 121/2, 2017, 183-217.
- Lissarague 1990
- F. LISSARAGUE, Around the krater: an aspect of banquet imagery. In: O. MURRAY (Ed.), Sympotica: A Symposium on the Symposion. Oxford 1990, 196-209.

MARAN 1992a

J. MARAN, Die deutschen Ausgrabungen auf der Pevkakia-Magula in Thessalien III: Die mittlere Bronzezeit. Bonn 1992.

MARAN 1992b

J. MARAN, Kiapha Thiti: Ergebnisse der Ausgrabungen II, 2 (2. Jt. v. Chr.: Keramik und Kleinfunde). Marburg 1992.

MARGOMENOU 2008

D. MARGOMENOU, Food storage in prehistoric northern Greece: interrogating complexity at the margins of the 'Mycenaean world', Journal of Mediterranean Archaeology 21/2, 2008, 191–212.

HAMILAKIS 2008

Margomenou, Roumpou 2011

D. MARGOMENOU, M. ROUMPOU, Storage technologies as embedded social practices: studying pithos storage in prehistoric northern Greece. In: A. BRYSBAERT (Ed.), Tracing Prehistoric Social Networks through Technology: A Diachronic Perspective on the Aegean. New York – London 2011, 126–142.

Mathioudaki 2010

I. MATHIOUDAKI, "Mainland Polychrome" pottery: definition, chronology, typological correlations. In: A. PHILIPPA-TOUCHAIS, G. TOUCHAIS, S. VOUTSAKI, J. WRIGHT (Eds.), MESOHEL-LADIKA: La Grèce continentale au Bronze Moyen. Bulletin de Correspondance Hellénique Suppl. 52, Athens 2010, 621–633. MCCALLUM 1987

L. R. McCallum, Frescoes from the Throne Room at Pylos: a new interpretation, American Journal of Archaeology 91, 1987, 296. McDonald, Wilkie 1992

W. McDonald, N. WILKIE (Eds.), Excavations at Nichoria in Southwest Greece II: The Bronze Age Occupation. Minneapolis 1992. McGovern et al. 2008

P. E. MCGOVERN, D. L. GLUSKER, L. J. EXNER, G. R. HALL, The chemical identification of resinated wine and a mixed fermented beverage in Bronze Age pottery vessels of Greece. In: Y. TZEDA-KIS, H. MARTLEW, M. K. JONES (Eds.), Archaeology Meets Science: Biomolecular Investigations in Bronze Age Greece: The Primary Scientific Evidence 1997–2003. Oxford 2008, 169–218. MICHAILIDOU 2008

A. MICHAILIDOU, Weight and Value in Pre-coinage Societies II: Sidelights on Measurement from the Aegean and the Orient. Athens 2008.

- Michailidou 2010
- A. MICHAILIDOU, Measuring by weight in the Late Bronze Age Aegean: the people behind the measuring tools. In: I. MORLEY, C. RENFREW (Eds.), The Archaeology of Measurement: Comprehending Heaven, Earth and Time in Ancient Societies. Cambridge 2010, 71–87.

Morgan 2018

- L. MORGAN, Inspiration and innovation: the creation of wall-paintings in the absence of a pictorial pottery tradition at Ayia Irini, Kea. In: A. VLACHOPOULOS (Ed.), Χρωστήρες / Paintbrushes: Wall-painting and Vase-painting of the Second Millennium BC in Dialogue. Proceedings of the International Conference on Aegean Iconography held at Akrotiri, Thera, 24–26 May 2013. Athens 2018, 277–291.
- Morris 2008
- S. P. MORRIS, Wine and water in the Bronze Age: fermenting, mixing and serving vessels. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 113–123.
- Mountjoy 1981
- P. A. MOUNTJOY, Four Early Mycenaean Wells from the South Slope of the Acropolis at Athens. Gent 1981.

Mountjoy 1983

- P. MOUNTJOY, Orchomenos V: Mycenaean Pottery from Orchomenos, Eutresis and Other Boeotian Sites. Munich 1983.
 MOUNTJOY 1986
- P. A. MOUNTJOY, Mycenaean Decorated Pottery: A Guide to Identification. Studies in Mediterranean Archaeology 73, Göteborg 1986.

Mountjoy 1999

P. A. MOUNTJOY, Regional Mycenaean Decorated Pottery. Rahden 1999.

Mountjoy 2008

P. A. MOUNTJOY, The Late Helladic pottery. In: W. D. TAYLOUR, R. JANKO, Ayios Stephanos: Excavations at a Bronze Age and Medieval Settlement in Southern Laconia. The British School at Athens Suppl. 44, Athens 2008, 299–387.

Müller 1938

K. MÜLLER, Tiryns IV: Die Ergebnisse der Ausgrabungen des Instituts. Munich 1938.

Murray 1990

- O. MURRAY (Ed.), Sympotica: A Symposium on the Symposion. Oxford 1990, 3–13 (Sympotic history).
- Mylonas 1972–1973
- Γ. Ε. ΜΥΛΩΝΑΣ, Ο ταφικός κύκλος Β των Μυκηνών. Βιβλιοθήκη της εν Αθήναις Αρχαιολογικής Εταιρείας 73, Athens 1972–1973.

Nikolakopoulou 2002

- I. NIKOLAKOPOULOU, Storage, Storage Facilities and Island Economy: The Evidence from LCI Akrotiri, Thera. PhD Dissertation, University of Bristol 2002.
- Nordquist 1987
- G. NORDQUIST, A Middle Helladic Village: Asine in the Argolid. Uppsala 1987.
- Nordquist 1999
- G. NORDQUIST, Pairing of pots in the Middle Helladic period. In: P.P.BETANCOURT, V. KARAGEORGHIS, R. LAFFINEUR, W.-D. NIEMEIER (Eds.), Meletemata II: Studies in Aegean archaeology presented to Malcom H. Wiener as he enters his 65th year. Aegaeum 20, Liège 1999, 569–573.
- Nordquist 2002
- G. NORDQUIST, Pots, prestige and people: symbolic action in Middle Helladic burials, Opuscula Atheniensia 27, 2002, 119–135.
- Nordquist, Zerner 1987
- G. NORDQUIST, C. ZERNER, Work in progress: nomenclature of MH pottery shapes, Hydra: Working Papers in Middle Bronze Age Studies 3, 1987, 29–31.
- Overbeck 1989
- J. C. OVERBECK, Keos VII: Ayia Irini: Period IV, Part 1: The Stratigraphy and the Find Deposits. Mainz am Rhein 1989.
- Palaima 2004
- T. PALAIMA, Sacrificial feasting in the Linear B documents. In: J. C. WRIGHT (Ed.), The Mycenaean Feast, Hesperia 73/2, Special Issue, 2004, 217–246.
- Palmer 1994
- R. PALMER, Wine in the Mycenaean Palace Economy. Aegaeum 10, Liège 1994.
- Panagiotopoulos 2014
- D. PANAGIOTOPOULOS, Mykenische Siegelpraxis: Funktion, Kontext und administrative Verwendung mykenischer Tonplomben auf dem griechischen Festland und Kreta. Athenaia 5, Munich 2014. PANTOU 2014
- P. PANTOU, An architectural perspective on social change and ideology in Early Mycenaean Greece, American Journal of Archaeology 118/3, 2014, 369–400.

Papakonstantinou 2009

Z. PAPAKONSTANTINOU, Wine and wine drinking in the Homeric world, L'Antiquité Classique 78, 2009, 1–24.

Pavúk 2007

P. ΡΑνύκ, What can Troia tell us about the Middle Helladic period in the Southern Aegean? In: F. Felten, W. Gauss, R. Smetana (Eds.), Middle Helladic Pottery and Synchronisms. Proceedings of the International Workshop held at Salzburg, October 31st – November 2nd, 2004. Vienna 2007, 295–308.

Pavúk, Horejs 2012

P. PAVÚK, B. HOREJS, Mittel- und spätbronzezeitliche Keramik Griechenlands. Vienna 2012.

Perna 2003

M. PERNA, Ideograms of vases and fractions in Linear A script. In: K. P. FOSTER, R. LAFFINEUR (Eds.), METRON: Measuring the Aegean Bronze Age. Proceedings of the 9th International Aegean Conference, New Haven, Yale University, 18–21 April 2002. Aegaeum 24, Liège 2003, 343–347.

Phialon 2018

L. PHIALON, L'habitat de Krisa (Chrysso-Haghios Georgios) à l'âge du Bronze: un réexamen de la topographie du site et de la céramique, Bulletin de Correspondance Hellénique 142/2, 2018, 403–536.

Philippa-Touchais 2002

- A. PHILIPPA-TOUCHAIS, Aperçu des céramiques mésohelladiques à décor peint de l'Aspis d'Argos: I. La céramique à peinture mate, Bulletin de Correspondance Hellénique 126/1, 2002, 1–40.
- Pini 2008
- I. PINI, Are there any representations of feasting in the Aegean Bronze Age. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 249–255.

Podzuweit 2007

C. PODZUWEIT, Studien zur spätmykenischen Keramik (Tiryns XIV). Wiesbaden 2007.

Popham, Sackett 1968

M. R. Рорнам, L. H. Sackett (Eds.), Excavations at Lefkandi, Euboea, 1964–66: A Preliminary Report. London 1968.

Poursat 2008

J.-C. POURSAT, L'art égéen: 1. Grèce, Cyclades, Crète jusqu'au milieu du II^e millénaire av. J.-C. Paris 2008.

Privitera 2014

S. PRIVITERA, Long-term grain storage and political economy in Bronze Age Crete: contextualizing Ayia Triada's silo complexes, American Journal of Archaeology 118, 2014, 429–449.

Rutter 1983

- J. B. RUTTER, Fine Gray-Burnished pottery of the Early Helladic III period the ancestry of Gray Minyan, Hesperia 52, 1983, 327–355. RUTTER 1989
- J. B. RUTTER, A ceramic definition of Late Helladic I from Tsoungiza, Hydra: Working Papers in Middle Bronze Age Studies 6, 1989, 1–19.
- Rutter 1990
- J. B. RUTTER, Pottery groups from Tsoungiza of the end of the Middle Bronze Age, Hesperia 59, 1990, 375–458.

RUTTER 1993

J. B. RUTTER, A group of Late Helladic IIA pottery from Tsoungiza, Hesperia 62, 1993, 53–93.

Rutter 2012

J. B. RUTTER, Migrant drinking assemblages in Aegean Bronze Age settings. In: J. MARAN, P. W. STOCKHAMMER (Eds.), Materiality and Social Practice: Transformative Capacities of Intercultural Encounters. Oxford 2012, 73–88. Rutter 2015

J. B. RUTTER, Ceramic technology in rapid transition: the evidence from settlement deposits of the Shaft Grave era at Tsoungiza (Corinthia). In: W. GAUSS, G. KLEBINDER-GAUSS, C. VON RÜDEN (Eds.), The Transmission of Technical Knowledge in the Production of Ancient Mediterranean Pottery. Proceedings of the International Conference at the Austrian Archaeological Institute at Athens, 23rd–25th November 2012. Vienna 2015, 207–223.

RUTTER in press

J. B. RUTTER, Chapter 9: Middle Helladic III – Late Helladic II pottery groups. In: M. K. DABNEY, J. C. WRIGHT (Eds.), Nemea Valley Archaeological Project III: The Mycenaean Settlement on Tsoungiza Hill, 473–818, in press.

RUTTER, RUTTER 1976

J. B. RUTTER, S. H. RUTTER, The Transition to Mycenaean: A Stratified Middle Helladic II to Late Helladic IIA Pottery Sequence from Ayios Stephanos in Lakonia. Los Angeles 1976.

Sampson 1993

A. SAMPSON, Kaloyerovrisi: A Bronze Age Settlement at Phylla, Euboea. Athens 1993.

Sarri 2010

K. SARRI, Orchomenos IV: Orchomenos in der mittleren Bronzezeit. Munich 2010.

Scheibler 1998

I. SCHEIBLER, Gefäße, Gefäßformen/-typen. In: H. CANCIK, H. SCHNEIDER, M. LANDFESTER (Eds.), Der Neue Pauly: Enzyklopädie der Antike, Vol. 4: Altertum: Epo-Gro. Stuttgart – Weimar 1998, 853–861.

Schmitt-Pantel 1990

P. SCHMITT-PANTEL, Sacrificial meal and symposion: two models of civic institutions in the Archaic City? In: O. MURRAY (Ed.), Sympotica: A Symposium on the Symposion. Oxford 1990, 14–33.

Senior, Birnie 1995

L. M. SENIOR, D. P. BIRNIE, Accurately estimating vessel volume from profile illustrations, American Antiquity 60, 1995, 319–334. Shaw 1972

M. C. Shaw, The miniature frescoes of Tylissos reconsidered, Archäologischer Anzeiger 1972, 171–188.

Shaw 1997

M. C. SHAW, Aegean sponsors and artists: reflections of their roles in the patterns of distribution of themes and representational convention in the murals. In: R. LAFFINEUR, P. P. BETANCOURT (Eds.), TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age. Proceedings of the 6th International Aegean Conference. Aegaeum 16, Liège 1997, 481–504.

Shelmerdine 1985

- C. W. SHELMERDINE, The Perfume Industry of Mycenaean Pylos. Göteborg 1985.
- Shelmerdine 2008
- C. W. SHELMERDINE, Host and guest at a Mycenaean feast. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 401–410.

Shelmerdine 2011

C. W. SHELMERDINE, The 'Friendly Crater' from Iklaina. In: W. GAUSS, M. LINDBLOM, R. A. K. SMITH, J. C. WRIGHT (Eds.), Our Cups Are Full: Pottery and Society in the Aegean Bronze Age. Papers presented to Jeremy B. Rutter on the Occasion of his 65th Birthday. Oxford 2011, 251–256. Shelton 2008

- K. S. SHELTON, Drinking, toasting, consumption and libation: Late Helladic IIIA pottery and a cup for every occasion. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 221–228.
- Siedentopf 1991
- H. B. SIEDENTOPF, Mattbemalte Keramik der mittleren Bronzezeit. Alt-Ägina IV, 2, Mainz 1991.
- Stocker, Davis 2004
- S. R. STOCKER, J. L. DAVIS, Animal sacrifice, archives, and feasting at the Palace of Nestor. In: J. C. WRIGHT (Ed.), The Mycenaean Feast, Hesperia 73/2, Special Issue, 2004, 179–195.
- Stockhammer 2008
- P. W. STOCKHAMMER, Kontinuität und Wandel: Die Keramik der Nachpalastzeit aus der Unterstadt von Tiryns. PhD Dissertation, Ruprecht-Karls-Universität Heidelberg 2008.

Stockhammer 2011a

P. W. STOCKHAMMER, An Aegean glance at Megiddo. In: W. GAUSS, M. LINDBLOM, R. A. K. SMITH, J. C. WRIGHT (Eds.), Our Cups Are Full: Pottery and Society in the Aegean Bronze Age. Papers presented to Jeremy B. Rutter on the Occasion of his 65th Birthday. Oxford 2011, 282–296.

Stockhammer 2011b

P. W. STOCKHAMMER, HOUSEHOLd archaeology in LH IIIC Tiryns. In: A. YASUR-LANDAU, J. R. EBELING, L. B. MAZOW (Eds.), HOUSEHOLd Archaeology in Ancient Israel and Beyond. Leiden – Boston 2011, 207–236.

Taylour, Janko 2008

W. D. TAYLOUR, R. JANKO, Ayios Stephanos: Excavations at a Bronze Age and Medieval Settlement in Southern Laconia. The British School at Athens Suppl. 44, Athens 2008.

Thalmann 2007

- J.-P. THALMANN, A seldom used parameter in pottery studies: the capacity of pottery vessels. In: M. BIETAK, E. CZERNY (Eds.), The Synchronisation of Civilisations in Eastern Mediterranean in the Second Millennium B.C. Vienna 2007, 431–438.
- Тномая 1992
- P. M. THOMAS, LH IIIB:1 Pottery from Tsoungiza and Zygouries. PhD Dissertation, University of North Carolina at Chapel Hill 1992.
- **Тномаs 2011**
- P. M. THOMAS, Mycenaean tablewares and the curious careers of the angular kylix and shallow angular basin. In: W. GAUSS, M. LIND-BLOM, R. A. K. SMITH, J. C. WRIGHT (Eds.), Our Cups Are Full: Pottery and Society in the Aegean Bronze Age. Papers presented to Jeremy B. Rutter on the Occasion of his 65th Birthday. Oxford 2011, 297–305.

Touchais 1998

G. TOUCHAIS, Argos à l'époque mésohelladique. In: A. PARIENTE, G. TOUCHAIS (Eds.), Argos et l'Argolide: Topographie et urbanisme. Actes de la Table Ronde internationale Athènes-Argos. Athens 1998, 71–84.

Touchais 2008a

G. TOUCHAIS, LE Bronze Moyen hors de Crète. In: R. TREUIL, P. DARCQUE, J.-C. POURSAT, G. TOUCHAIS, Les civilisations égéennes du Néolithique et de l'Âge du Bronze, 2nd edition. Paris 2008, 185–216.

Touchais 2008b

G. TOUCHAIS, Le début du Bronze Récent hors de Crète. In: R. TREUIL, P. DARCQUE, J.-C. POURSAT, G. TOUCHAIS, LES civilisations égéennes du Néolithique et de l'Âge du Bronze, 2^{nd} edition. Paris 2008, 255–290.

Touchais 2013

G. TOUCHAIS, La colline de l'Aspis à l'époque mycénienne. In: D. MULLIEZ, A. BANAKA-DIMAKI (Eds.), Sur les pas de Wilhelm Vollgraff: Cent ans d'activités archéologiques à Argos. Athens 2013, 101–139.

Tournavitou 1992

- I. TOURNAVITOU, Practical use and social function: a neglected aspect of Mycenaean pottery, Annual of the British School at Athens 87, 1992, 181–210.
- Tournavitou 1995
- I. TOURNAVITOU, The "Ivory Houses" at Mycenae. The British School at Athens Suppl. 24, London 1995.

Tsingarida 2011

- A. TSINGARIDA, Qu'importe le flacon pourvu qu'on ait l'ivresse! Vases à boire monumentaux et célébrations divines. In: V. PIRENNE-DELFORGE, F. PRESCENDI (Eds.), "Nourrir les dieux?" Sacrifice et représentation du divin. Actes de la VI^e rencontre du Groupe de recherche européen "Figura. Représentation du divin dans les sociétés grecque et romaine", Université de Liège, 23–24 octobre 2009. Kernos Suppl. 26, Liège 2011, 59–78. TZEDAKIS, MARTLEW 1999
- Y. TZEDAKIS, H. MARTLEW (Eds.), Minoans and Mycenaeans: Flavours of their Time. Athens 1999.
- VENTRIS, CHADWICK 1973 [1956]
- M. VENTRIS, J. CHADWICK, Documents in Mycenaean Greek. Cambridge 1973 [1956].
- VITALE 2008
- S. VITALE, Ritual drinking and eating at LH IIIA2 Early Mitrou, East Lokris: evidence for Mycenaean feasting activities? In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 229–237.

VITALE 2012

- S. VITALE, Local traditions and mycenaeanization in Central Greece: a preliminary report on the Late Helladic IIIA to the Late Helladic IIIB from Mitrou, East Lokris. In: Α. ΜΑΖΑΡΑΚΗΣ ΑΙΝΙΑΝ (Ed.), Αρχαιολογικό έργο Θεσσαλίας και Στερεάς Ελλάδας 3. Πρακτικά επιστημονικής συνάντησης, Βόλος 12.3.–15.3. 2009. Volos 2012, 1147–1158.
- WALTER, FELTEN 1981
- H. WALTER, F. FELTEN, Die vorgeschichtliche Stadt: Befestigungen, Häuser, Funde. Alt-Ägina III/1, Mainz 1981.

Wecowski 2014

M. WECOWSKI, The Rise of the Aristocratic Banquet. Oxford 2014.

Weilhartner 2008

J. WEILHARTNER, Some observations on the commodities in the Linear B tablets referring to sacrificial banquets. In: L. A. HITCH-COCK, R. LAFFINEUR, J. L. CROWLEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 411–426.

Weilhartner 2017

- J. WEILHARTNER, Working for a feast: textual evidence for state-organized work feasts in Mycenaean Greece, American Journal of Archaeology 121, 2017, 219–236.
- Whittaker 2008
- H. WHITTAKER, The role of drinking in religious ritual in the Mycenaean period. In: L. A. HITCHCOCK, R. LAFFINEUR, J. L. CROW-LEY (Eds.), DAIS: The Aegean Feast. Proceedings of the 12th International Aegean Conference. Aegaeum 29, Liège 2008, 89–96.

Wiencke 1998

- M. H. WIENCKE, Mycenaean Lerna, Hesperia 67, 1998, 125–214. WRIGHT 1982
- J. C. WRIGHT, Excavations at Tsoungiza (Archaia Nemea) 1981, Hesperia 51, 1982, 375–397.
- Wright 2004
- J. C. WRIGHT, A survey of evidence for feasting in Mycenaean society. In: J. C. WRIGHT (Ed.), The Mycenaean Feast, Hesperia 73/2, Special Issue, 2004, 133–178.

Younger 2003

J. G. YOUNGER, Calculating vessel volumes. In: K. P. FOSTER, R. LAFFINEUR (Eds.), METRON: Measuring the Aegean Bronze Age. Proceedings of the 9th International Aegean Conference, New Haven, Yale University, 18–21 April 2002. Aegaeum 24, Liège 2003, 491–492.

Zerner 1986

C. ZERNER, Middle Helladic and Late Helladic I pottery from Lerna, Hydra: Working Papers in Middle Bronze Age Studies 2, 1986, 58–74.

Zerner 1988

C. ZERNER, Middle Helladic and Late Helladic I pottery from Lerna. Part II, Hydra: Working Papers in Middle Bronze Age Studies 4, 1988, 1–40.

Zerner 2008

 C. ZERNER, The Middle Helladic pottery, with the Middle Helladic wares from Late Helladic deposits and the potters' marks. In:
 W. D. TAYLOUR, R. JANKO, Ayios Stephanos: Excavations at a Bronze Age and Medieval Settlement in Southern Laconia. The British School at Athens Suppl. 44, Athens 2008, 177–298.

Zurbach 2015

J. ZURBACH, Festins royaux et communs dans les sociétés mycéniennes. In: A. ESPOSITO with the collaboration of E. RABEISEN, S. WIRTH (Eds.), Autour du "banquet": Modèles de consommation et usages sociaux. Dijon 2015, 31–41.

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