

PATTERNS OF EXCHANGE AND MOBILITY: THE CASE OF THE GREY WARE IN MIDDLE AND LATE MINOAN CRETE

by LUCA GIRELLA*

New finds and important contributions have recently offered a fresh overview on wheel-made grey ware on Crete and have also provided an occasion for an update on pottery imported from outside Crete¹. As a result the list of Grey Ware (henceforth: GW) in LM III contexts has been expanded, but mentions of such a ware in previous periods have been surprisingly neglected. The aim of this article is to re-examine the evidence of the GW on Crete, from the first appearance of Grey Minyan Ware to the later distribution of GW up to the LM IIIC period (Fig. 1, Table I)². As will be understandable from the following overview, most of the information comes from old excavations and publications, when both the identification and terminology of this ware were far from being neatly recognizable (i.e. the use of term *bucchero*). As a second aim of this contribution, drawing upon GW circulation, we shall inquire into patterns of mobility and exchange; in fact, as a 'foreign ware', the phenomenon of GW on Crete can be the ideal theatre for the exploration of pottery and human mobility.

For convenience's sake we shall distinguish four moments with distinct patterns of distribution: (1) the small scale world of the late Prepalatial period, when the unique Minyan bowl from Knossos – a MH I import – confirms the picture of the asymmetrical relationship between the Greek Mainland and Crete, which saw a large quantity of Minoan and Minoanizing pottery at coastal sites of southern and northeastern Peloponnese, but not the contrary. (2) A similar model is proposed here also for the Protopalatial period, when neither imports nor imitations were documented. (3) The Neopalatial period, when GW did remain a rare item and did not include any imports from Greek Mainland. Grey-burnished wheel-made vessels were exclusively produced in Minoan shapes and so far suggest a more internal circulation that seems to keep out the Greek Mainland. (4) The Mycenaean period, the sole period when evidence for GW increases dramatically, and Crete again participated in a more international circuit, in which both the Greek Mainland and western Mediterranean had active roles. GW examples from the cemeteries were usually closed shapes, miniaturized, and they might be interpreted as part of the Mycenaean funerary custom similarly attested in eastern Aegean. On the other hand, GW from the settlements was concentrated at Kommos and Khania, and it showed elements of local production, besides, in the latter case, vague reminiscences of *pseudominyan* ware from southern Italy.

* I would like to thank L. Vagnetti, J. Rutter, P. Pavúk and the anonymous referees for their valuable suggestions. I am also indebted to the many colleagues and friends who provided information concerning their forthcoming publications. I am grateful to E. Shalk for correcting the English text.

¹ Hallager, Hallager 2000, 304-305; Hallager, Hallager 2003, 254-256. See also Tsipopoulou, Vagnetti 1994, 47-48; Kalogeropoulos 1998, 55, 59, nr. 20-25; Girella 2007b. For the Cretan external relations see Watrous 1992, 149-183; Rutter 1999; Rutter 2006b.

² This paper is an extended version of a recent overview in Girella 2007b.

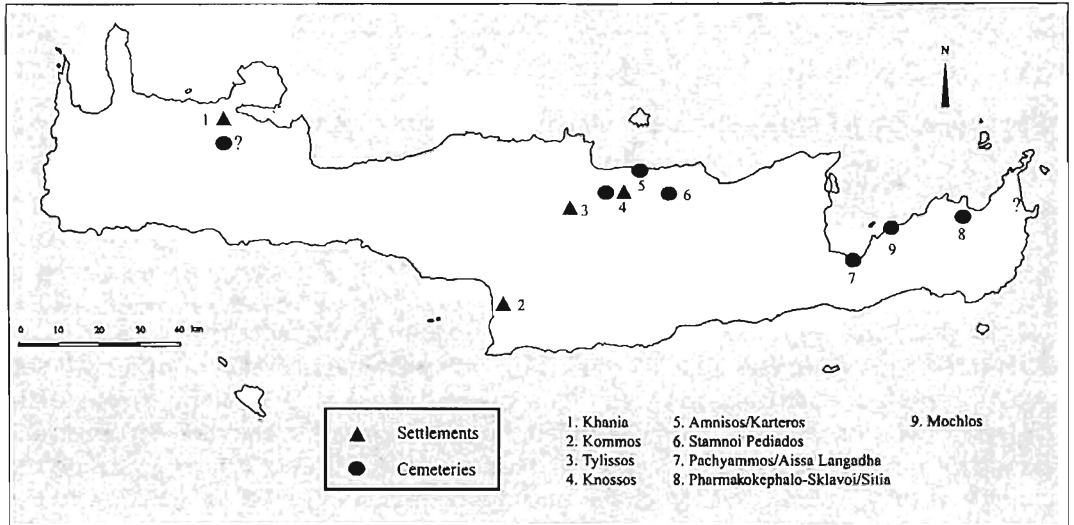


Fig. 1 – Geographical distribution of GW in Crete during the Bronze Age.

	W	NC	SC	E	Total
Total	88	7	7	5+	107+
Period					
MM IA		1			1
LM IA		1			1
LM IB		1	1		2
LM II		2			2
LM IIIA (?)	1	1	1	3+	6+
LM IIIA1			2		2
LM IIIA2		1	2	1	4
LM IIIA/B				1	1
LM IIIB1/2	4		1		5
LM IIIB2	71				71
LM IIIC	12				12
Shape					
Bowl		1		1	2
Cup	84	2	3		89
Kylix	3				3
Bridge-spouted jar		1			1
Round-mouthed jug		1			1
Three-handled jar				1	1
Juglet			2	1+	3+
Alabastron			1		1
Askos			1	2	3
Trick vase		1			1
Stirrup jar	1	1			2

Table I. GW from Minoan Crete (W = Western; NC = North Central; SC = South Central; E = Eastern).

FROM THE PREPALATIAL TO THE NEOPALATIAL PERIOD

The earliest and still isolated case of Grey Minyan Ware is reported at Knossos from a MM IA level (Figs. 2, 3a)³. Two large fragments of a two-handled rounded bowl with everted rim were found on the south side of the Royal Road⁴. The bowl is handmade, with a slightly sandy and greyish brown fabric; the exterior surface and the inner rim are burnished and five shallow grooves are on the shoulder, on which a vertical strap handle is more than half preserved. The vase was found in a rubbish fill probably created during MM IA, as the latest fragments seemed to show. Considered an EH III import by S. Hood, the bowl can be dated to MH IA as C. Zerner has already shown through parallels with similar vessels from Lerna V.A and B⁵.

The closest comparison for this bowl is a variety of the Grey Minyan ware on the Greek Mainland, called 'True Grey Minyan' by C. Zerner. The label indicates a distinctive variety of Minyan ware that was produced in Central Greece, perhaps at Orchomenos or another site in Boeotia⁶, and that has its forerunners in the well known 'Bass bowl', documented during EH III at Lerna (phase IV 2-3) and other sites in central and south-central Greece⁷.

This first example of a Grey Minyan import still sounds unusual and striking, especially when one considers the circulation of Grey Minyan vessels outside the Greek Mainland, whose chronology cannot be placed any earlier than MH II⁸.

³ Hood 1971, fig. 1. See also Dickinson 1977, 24; Betancourt 1985, 77; Kilian-Dirlmeier 1997, 157. S. Marinatos reported a small vessel in grey *bucchero* from Palaikastro, but the vessel turned out to be a MM IA beaked jug belonging to Drakones type: Marinatos 1927-28, 80, footnote 3. See also Hutchinson 1939-40, 38, pl. 14f.; Betancourt 1985, 127.

⁴ Hood, Smyth 1981, 51, nr. 214-215.

⁵ Rutter, Zerner 1984, 81 (Appendix II.A.1); Zerner 1978, 178, 197; Zerner unpublished manuscript, figs. 10, 14.

⁶ Zerner 1993, 47. For a different definition of Grey Minyan see also Kramer 2004, 137-144, who differentiates between Grey Minyan "True" and "Grainy".

⁷ As for the fabric, wheelmade or handmade, the two-handled bowl occurs in a variety of classes, among which 'Solidly Painted and Burnished' and 'Fine Grey-burnished' are attested: Rutter 1995, 360-367 (form XII, type 2). See also Rutter 1983a, 327-355; Rutter 1986, 29-57. Other patterns of continuity are the presence of the multiple grooved decoration on the shoulder and the two swung vertical strap-handles, rising from the shoulders and attached at the point of maximum diameter, but those of the Knossian bowl are more elongated. The bowl from Knossos has also a globular profile, more common during MH, and a shorter and sharp everted rim. Similarities are also noticeable with two-handled bowls from Pevkakia Phase 5, although this period corresponds to an advanced stage of both Lerna V and MM IA on Crete: Maran 1992a, pls. 46.16, 47.1. A two-handled bowl with grooved decoration on the shoulder comes also from Phase 6 *früh*, but it has an everted and flattened rim: Maran 1992a, pl. 68.7.

⁸ A list of this evidence is in Kilian-Dirlmeier 1997, 157. Imports and local imitations of Grey Minyan Ware, mostly represented by ring-stemmed goblets, are attested at Naxos (Mikri Vigla) (Barber, Hadjianastasiou 1989, 109, pl. 23f), Paros (Paroikia/Kastro) (Overbeck 1989a, 14-15, 21-22, pls. 8, 10, 48-51. See also Papagiannopoulou 1991, 178, pl. 60; Rubensohn 1917, 34-37, figs. 31-34), Mykonos (Palaikastro), Tenos (Akroterion Ourion), Syros (Ayios Loukas), and Siphnos (Kastro) (Scholes 1956, 15-16, 36, fig. 1. For Siphnos see also Brock 1949, 31-33, fig. 7), but the bulk of the evidence comes from Keos (Ayia Irini) (Overbeck 1989b, 11) and from Melos (Phylakopi) (Dawkins 1910-11, 16-18, pl. VII; Barber 1974, 30). A small concentration is also present in Thera (Akrotiri), whereas Grey Minyan ware is not attested on Kythera: Papagiannopoulou 1991, 48-49, 352, ns. 269-272, fig. 16, pl. 24 (second row). For new materials at Akrotiri see now Nikolakopoulou 2007, 349, 356, fig. 3.

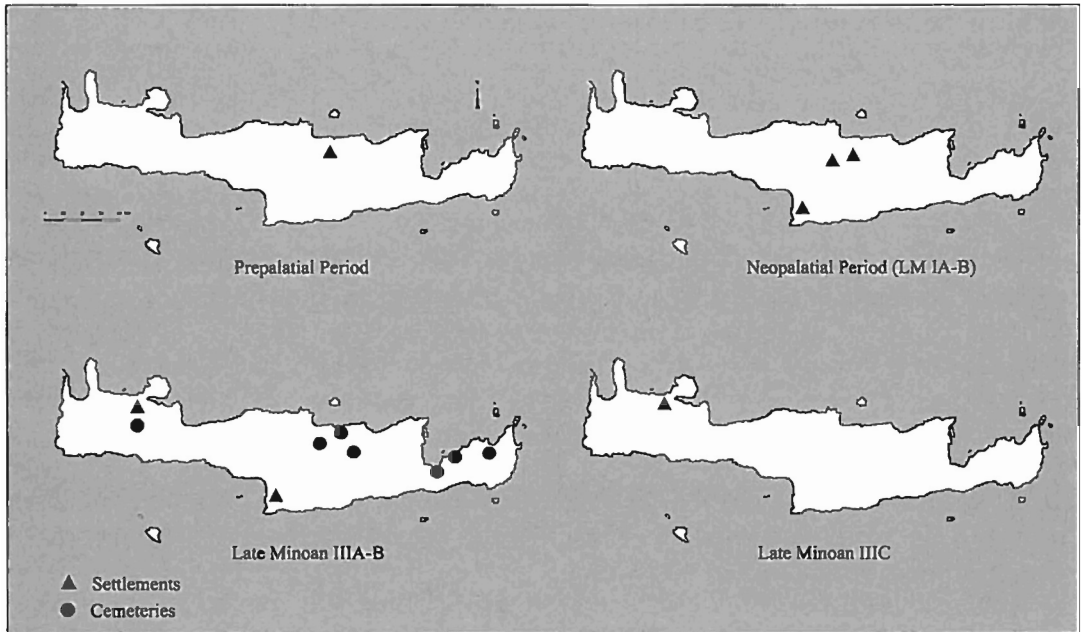


Fig. 2 – Geographical distribution of GW in Crete according to the periods discussed in the paper.

Moreover the Grey Minyan Ware in the Cyclades covers a short chronological range from MH II to MH III, a time, the last one, in which such ware dramatically decreased⁹.

Therefore, from a chronological perspective the imported Minyan bowl found at Knossos does remain unique. However, such a picture can be now enriched thanks to the new cycle of the excavations at Phaistos in the area west of the Palace. From a MM IA floor a large fragment of a unique bowl has come to light (Fig. 4)¹⁰. It has a light yellow clay with a very distinctive manufacture which recalls several classes of vessels produced in the Mesara plain during the Prepalatial period. The fine clay in the upper part of the vessel tends to become medium-coarse towards the bottom (layering technique); the bowl is also burnished on both sides. As for the profile, the Phaistian vessel has close connections with both the Knossian Minyan bowl and with Lerna V.A two-handed bowls. While awaiting the results from the petrological analyses¹¹, we think that there are good grounds for interpreting the vessel as a local imitation of a MH I Grey Minyan bowl. This find is not trivial, as we know how south-central Crete, and particularly Kommos, start having

⁹ But at Ayia Irini (Keos) burnishing Grey Minyan from Period IVc through Period VII will be routine, see Overbeck 1989b, 11.

¹⁰ The vessel comes from a level preceding the construction of the 'House South to the Ramp' and has been published by V. La Rosa as a probable imitation of 'transmarine' class of pottery: La Rosa 2002, 659, fig. 172. I would like to thank S. Todaro for allowing me to mention the vessel.

¹¹ The analysis is under the direction of P. Day. For the layering technique see Day, Relaki, Faber 2006, 46-48, figs. 10-13.

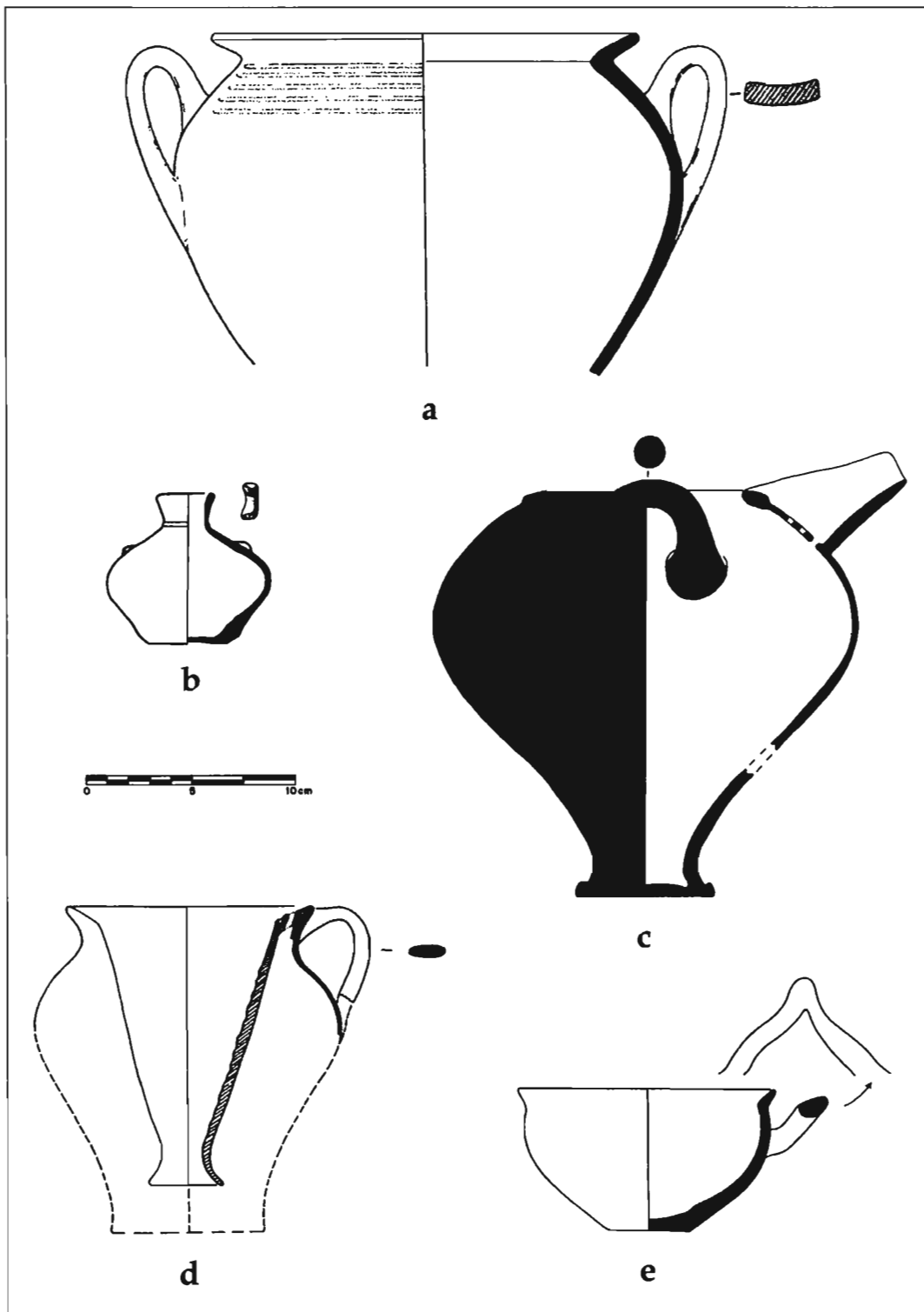


Fig. 3 – Selection of GW vessels from different periods: (a) Knossos, MM IA (after Hood 1971); (b) Kommos, LM IB (after Watrous 1992); (c) Knossos, LM IA (after Macdonald 1996); (d-e) Knossos, LM II (after Popham et al. 1984). Scale 1:3.

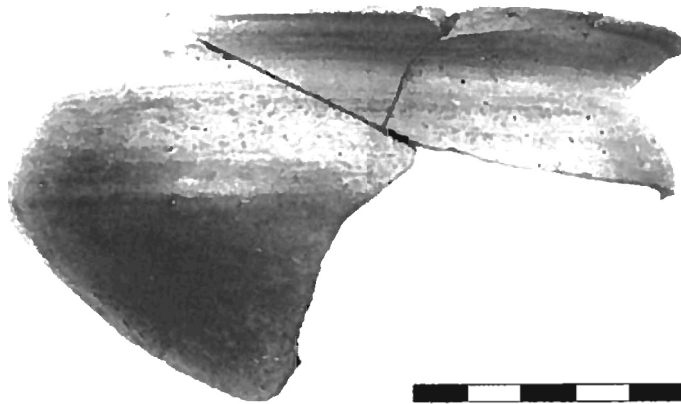


Fig. 4 – MM IA bowl underneath room XCVI from Phaistos (after La Rosa 2002).

intermittent contacts with the north and other regions from MM IB onwards¹². Bearing in mind the lack of evidence from this last site during MM IA, it is reasonable to see a sort of internal connection between Phaistos and the Knossian area, perhaps facilitated by the role of an intermediate region, such the Pediada, whose evidence during MM IA was markedly increasing¹³.

As well stressed by J. Rutter and C. Zerner more than twenty years ago, MH I saw a dramatic change in the intensity of Hellado-Minoan relations¹⁴. Although the evidence from southern and central Greek is far from being lavish, the presence of MM IA pottery, in terms of imports and Minoanizing pottery, is a very distinct feature of the beginning of MBA, and proves a direct involvement with the Greek Mainland (Fig. 5); hence, MM IA pottery is attested at Kythera¹⁵, Ayios Stephanos¹⁶,

¹² Van de Moortel 2006.

¹³ Panagiotakis 2004; Panagiotakis 2006, 169, fig. 4. It is highly probable that this connection would have continued the special network already started in EM I-II, when settlements from the Mesara plain traded specialized pottery northwards in return for copper and other valuables: Wilson, Day 1994; Day, Wilson 1997. Analyses of copper artefacts found in Mesara tombs have shown the provenience of copper from Kythnos and from Lavrion: Gale 1990. Also, daggers from Platanos contained tin: Branigan 2002, 33-44. See also Manning 1994. In particular, Manning hypothesizes that it was the use and control of goods, mostly metal, imported from foreign sources that facilitate the transformation of the elites into state rulers. For a general overview of other Cretan relations during MM IA see Watrous 2001, 196-198.

¹⁴ Rutter, Zerner 1984, 77-80.

¹⁵ Broodbank, Kiriati 2007. See also Broodbank 1999; Kiriati 2003. Additional references concerning the relations between Greek Mainland, Kythera and Crete during Middle and Late Bronze Age are also in: Rutter 2005; Broodbank, Kiriati, Rutter 2005.

¹⁶ Taylour 1972, 233, 257, figs. 16:1-2, pls. 45 a-b, 49d.1. Rutter and Zerner count also three unpublished barbotine cup fragments and one ridge-shouldered jug fragment: Rutter, Zerner 1984, 81 (Appendix II.B.4).

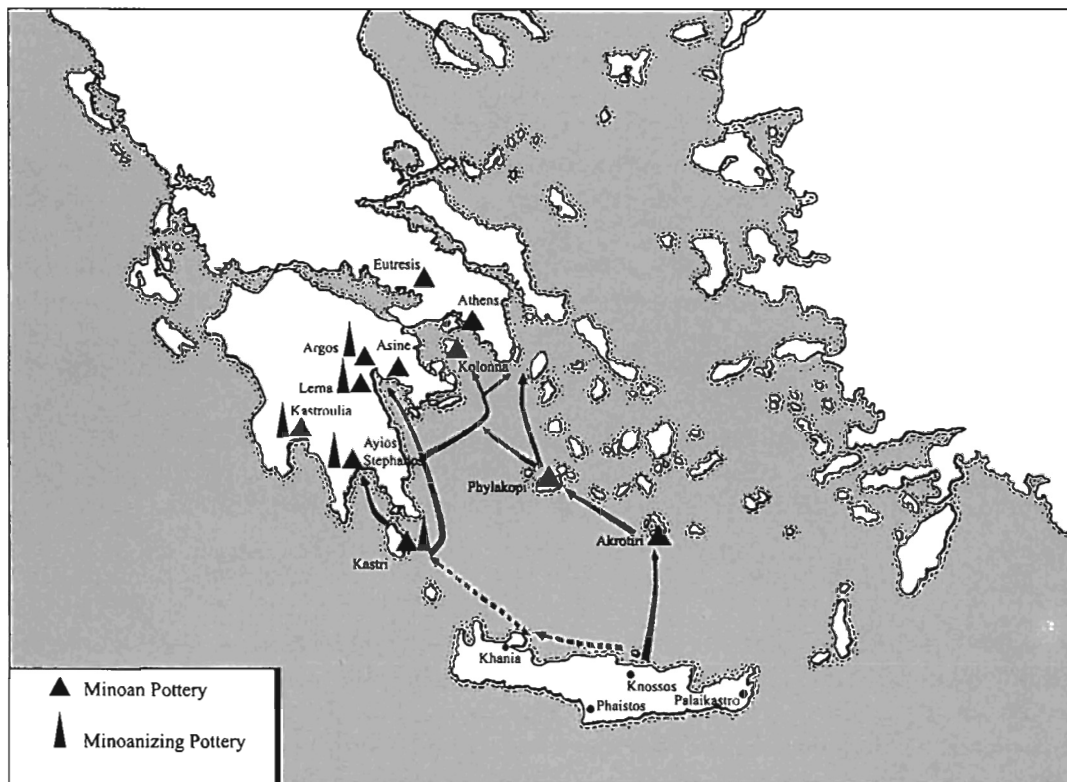


Fig. 5 – Distribution of MM IA pottery in the Aegean according to the sites mentioned in the text.

Eutresis¹⁷, Asine¹⁸, Argos/Aspis¹⁹ and Athens²⁰. Recently, new evidence about the beginning of MH period and Minoanizing or Minoan imports was provided by research at Messenian Kastroulia, where the pottery of one of the almost undisturbed MH I burial mounds shows strong resemblances with Nichoria and Lerna V.A.²¹

Nevertheless, it is Lerna that stands out among the aforementioned sites because of the number of both Minoan imports and Minoanizing imitations during MH I²². Aside from pottery, the Minoan presence is also testified by the occurrence of three terracotta loomweights of Minoan type²³. As for the pottery, the majority of

¹⁷ Rutter, Zerner 1984, 81 (Appendix II.B.5). It is an unpublished barbotine cup exhibited in Thebes Archaeological Museum.

¹⁸ Frödin, Persson 1938, 277-278, figs. 191.1, 192.4; Rutter, Zerner 1984, 81 (Appendix II.B.2).

¹⁹ Philippa-Touchais 2003, 10-12, 17-19, 31, 34, figs. 3, 8, 20.40-41, 22.a, 29. The Minoanizing pottery with MM I parallels comes from Phase II, corresponding with MH I-II. I would like to thank Anna Philippa-Touchais for kindly having shown me the pottery from the recent excavations in the Archaeological Museum in Argos in 2006.

²⁰ Knigge, Stichel, Woyski 1978, 64-65, figs. 36-37.

²¹ Rambach 2007.

²² Caskey 1956, 160, pl. 43c; Zerner 1978, 163-178; Zerner 1988, 6, fig. 24; Zerner unpublished, figs. 11-13, 15, 17-22. The total of Minoan and Minoanizing vessels from Lerna V.A and B levels, also considering those from mixed deposits, is over two hundred.

²³ Banks 1967, 466-572, pls. 9, 19. For the distribution of Minoan loomweights outside Crete see Carrington-Smith 1975, 276, 279-283.

Minoanizing MM IA sherds in Lerna V.A is close to the Minoan pottery from Kythera, but imports from eastern and western Crete have also been identified²⁴. By contrast, the evidence of MM IA imports from the islands is definitely meagre, and imitations of Minoan pottery are basically absent (Fig. 5)²⁵.

In sum, it can be logical to imagine two potential scenarios for the arrival of the Minyan bowl at Knossos: the first one would suggest a Cycladic string, notwithstanding the chronological incongruities and the absence of Grey Minyan Ware from the islands during MH I; nevertheless, the presence of MM IA pottery at Akrotiri, Phylakopi and Kolonna, alas very meagre, might be a clue of the existence of a sea-route, exclusively handled by the central and eastern part of Crete. This proposal can be also confirmed by the fact that only known mainland imports comes from Knossos.

The alternative scenario would be the south-west route, substantiated by the striking concentration of both Minoan imports and Minoanizing pottery, and with Kythera functioning as the logical bridge to the mainland and Argolid.

The MM IB-IIB period, that saw the rise of the First Palace phenomenon in Crete, was a phase of the major diffusion and distribution of Grey Minyan Ware on the Greek Mainland; nevertheless, none a piece of Grey Minyan Ware has been found so far on Crete. Also, during MH II contacts between Crete and the mainland increased significantly, and networks established in the preceding phase (such as that with Kythera and eastern Peloponnese) were still operating. Yet Cycladic centres, like Akrotiri, Phylakopi and Ayia Irini, played a major role in the definition of the 'Western String' network. Rutter and Zerner have identified two relevant and new developments: the circulation of Minoan vessels and other artefacts in different parts of the mainland, and the presence of stone vases among Minoan imports²⁶. There are few comments that one can add to this still valid picture. The discovery of Kamares Ware in the Cyclades, the Dodecanese, Cyprus, the Levant and Egypt leads us to suggest that it was used as a prestige and exchange item, but it is also necessary to note that shapes constantly refer to tableware and drinking habits. By observing the circulation of Minoan imports on the Greek Mainland during MH II (Aegina/Kolonna, Argos/Aspis, Ayios Stephanos, Lerna, Iolkos, Pevkakia, Mycenae, Orchomenos)²⁷, one can see the almost absolute predominance of shapes that functioned as an icon of Minoan pouring and drinking habits (the straight-sided cup, the tea cup, the bridge-spouted jar). Furthermore, at Ayios Stephanos, Lerna and Argos/Aspis Minoan tableware was also imitated and locally produced, and at Lerna it was found as furnishings in graves²⁸. This evidence allows us to suggest the promotion and spread of Minoan banquet etiquettes from Crete, on the one hand,

²⁴ Rutter 1983b, 72, footnote 24; Rutter, Zerner 1984, 79, footnote 20.

²⁵ Hiller 1993, 197; Gauß 2006, 438, figs. 1-3. For the Minoan presence at Aegina see Rutter, Zerner 1984, 81 (Appendix II.B.1); Hiller 1993, 197-199; Kilian-Dirlmeier 1997, 110-111, 136-154; Gauß, Smetana 2007, 61-63, figs. 3-5, especially 62, fig. 4 (XXVIII-18, 19).

²⁶ Rutter, Zerner 1984, 80-81.

²⁷ Rutter, Zerner 1984, 81-82 (Appendix III). For Orchomenos see Sarri 1998. I would like to thank K. Sarri for allowing me to mention the Minoan import from the old excavations at Orchomenos.

²⁸ Zerner 1990.

and, on the other, the integration of new habits among the communities of Greek Mainland. In the light of this picture, the absence of any mainland imports or imitations on Crete remains remarkable.

The mention of Minyan vessels during the Neopalatial period (MM III-LM IB) is very sporadic. A. Evans made a note of a Grey Minyan chalice from the destruction filling operation in the House of the Sacrificed Oxen, located at a southeastern angle to the palace of Knossos. The find is registered as "one fragment of a stem, apparently of a true Minyan chalice of the grey 'through and through' ware"²⁹. The re-examination of the deposits from this house by A. MacGillivray has produced a MM IIIA date for the chronology of the filling operation³⁰. Unfortunately, neither a photo was published by Evans nor is this fragment reported in MacGillivray's publication, hinting at a possible misinterpretation by Evans³¹.

Furthermore, C. Blegen informed that scanty fragments of 'Minyan ware' came to light in the eastern part of the island³². As far as western Crete is concerned, an unburnished grey-blue fabric, datable between MM III and LM I, has been reported from Nerokourou near Khania and interpreted as GW³³. Nevertheless, we think that in this case the characteristic fabric may be explained as a clay fired at very high temperature, rather than a proper wheel-made GW.

As a matter of fact, only three secure wheel-made grey vessels can be identified, and all of three are dated to an advanced and final stage of Neopalatial period (LM IA and B) (Fig. 2).

At Knossos, the find of a GW vase in a mature stage of LM IA is reported from the Area South of the Domestic Quarter. More precisely, near the Drain Shafts a set of tableware was discovered, which consisted of five bridge-spouted jars, one of which was in burnished GW (Fig. 3c)³⁴. The jar has a strainer spout, and given the pyriform shape, the coil handle and moulded bases, it can be considered as belonging to mature LM IA.

A grey vessel at Tyliossos of LM IB date is reported from a similar repertoire³⁵. It is a grey burnished round-mouthed jug with one strap vertical handle attached to the rim and a moulded base.

Lastly, the same date has been suggested for a wheel-made grey alabastron found at Kommos (Fig. 3b)³⁶. This unique piece has two double-horned lugs on opposite sides of the shoulder and has been considered by J. Rutter to be an import from an unknown Minoan centre³⁷.

²⁹ Evans 1928, 309. Dickinson 1977, 24.

³⁰ MacGillivray 1998, 46-49, with bibliography.

³¹ Supposing the fragment did get lost, there are probabilities that Evans referred to a foot-stemmed goblet, which was very common throughout MH II and MH III.

³² Blegen 1928, 150; Rutter, Zerner 1984, 82 (Appendix IV.A.1).

³³ Vagnetti 1985, 33, footnote 17; Tzedakis, Vagnetti *et al.* 1989, 133.

³⁴ Macdonald 1996, 21, fig. 3.

³⁵ Khatzidakis 1912, 206, fig. 10:d.

³⁶ Watrous 1992, 15, n. 270, fig. 18, pl. 6; Rutter 2006a, 459-460, n. 40/19, pl. 3.44.

³⁷ Rutter 2006b, 678-679.

Such a meagre number of vessels makes arduous any comprehensive interpretation of the GW production in Crete, and also any comparison with the Greek Mainland does not facilitate our task. Furthermore, it is worth noting that not ordinary but highly specialized vessels were realized in GW, and that they appear to belong to the Neopalatial pottery repertoire (Table I). Seen in this light, the circulation of GW vessels during the Neopalatial period could reflect a special function; therefore, it has been suggested that such vessels might be viewed as containers for some costly liquid or as for an unknown ritual purpose.

During the last stage of MH III and the beginning of LBA the picture of Grey Minyan Ware in Greece is varied³⁸. The general impression is that GW on Crete seems not to have been influenced or even inspired by the contemporary Greek Grey Minyan; considering the nature of Minoan trade and interconnection with the Aegean and eastern Mediterranean at the beginning of LBA³⁹, such a conclusion sounds at the least unusual. The involvement of Crete in the Greek Mainland gradually grew during MH III⁴⁰ and became a reality during LH I⁴¹. Nevertheless, in spite of a few LH I and II imports, the absence of any true Minyan vessels in Crete is worthy of attention, for it remains difficult to understand the wheel-made grey pottery production or imitation far from any prototype. Therefore, the hypothesis of an influence played by stone or metal vases on wheel-made grey Cretan vessels sounds very reasonable, also bearing in mind the long and well-tested tradition of Kamares and Neopalatial pottery production in exchanging schemes and inspirations with stone vases⁴². Indeed, ceramic skeuomorphs of stone vessels, albeit rare finds, are documented on Crete at Phaistos, Malia, Nerokourou, Pera Galenoi from Protopalatial to Neopalatial period⁴³.

As for the vessels from Knossos and Tylissos, the shapes have large comparisons with the Minoan sphere of pottery production; regardless, the presence of the moulded base and their context may suggest an imitation from stone or metal vases. The Knossian jar from the Drain Shafts was found together with four bridge-spouted jars with a very distinctive bifacial light-on-dark double axe decoration, and LM IB fragments including a Marine Style conical rhyton and a baggy alabastron. This evidence has been taken by C. Macdonald as proof of some cult activity in the area, even after the destruction in mature LM IA⁴⁴.

³⁸ For the problem of the MH III/MM III synchronism see Girella forthcoming.

³⁹ The bibliography is very large; a recent summary is in Rehak, Younger 2001, 426-433.

⁴⁰ Girella forthcoming.

⁴¹ The topic has been much discussed in the recent years: Hägg 1982; Dietz 1987; Dickinson 1996; Hiller 1996; Korres 1993, 237-239; Watrous 1993; Dietz 1998.

⁴² The problem was addressed for the Minyan Ware on the mainland: Rutter 1979, 464-469. As for Kamares Ware, the skeuomorphism aspects of Kamares pottery was stressed a long time ago by G. Walberg, who also demonstrates how such a long trend started in EM II: Walberg 1976, 36-42. Furthermore, it also has been argued that even Prepalatial Fine Painted and Fine Grey Wares imitated metal vessels: Wilson, Day 1994, 57-58.

⁴³ Mostly imitated shapes are the bird's nest bowl and blossom bowl, Phaistos: Levi, Carinci 1988, 165, pl. 77l. Malia: Dessenne 1959, 47 n. 1; *ÉtCrét XIII*, 67, n. 8476, pl. XXV. Pera Galenoi: Banou, Tsivilika 2006, 109, fig. 31.

⁴⁴ Macdonald 1996, 21, 23. Nerokourou: Tzedakis, Vagnetti et al. 1989, 157, n. 481, fig. 64.

Finally, an intentional imitation of containers carved from stone, such as steatite, has been argued for the alabastron from Kommos by Watrous and Rutter⁴⁵. Seen in this light, the Minoan stone vase production highlights some aspects of the Hellado-Minoan relations in this period. As was stressed by Rutter a long time ago, Ayios Stephanos is the only site to show an interesting facet of the Minoan influence upon Greek Mainland, for several shapes in Dark Grey Minyan from this site are close imitations of MM III and LM IA stone vases. Moreover, such an influence was not transmitted directly from Crete but *via* Kythera, where, besides local clay imitations, original imported stone versions have been found⁴⁶. Here ceramic skeuomorphs is a feature of local mortuary practice and ceramic versions seem to copy stone (blossom bowls) and metal vessels (ring-handled basins)⁴⁷. Because of the absence of shapes in GW derived from Minoan stone vases at other sites in the Peloponnese, the model of transmission and the role of Kythera explained by Rutter still remains valid.

THE POSTPALATIAL PERIOD

The information about GW during the Postpalatial period⁴⁸ is discontinuous in this period and reflects the quality and the age of the publications. As for LM II, the evidence of GW, though meagre, is somehow worthy of observations. Wheel-made grey burnished vessels have come to light in one of the major centres of LM II: Knossos. More precisely, two vessels of this ware are documented from the Unexplored Mansion: a semiglobular cup with a wishbone handle and a trick vase with an internal funnel and vertical strap-handle attached to the rim (Fig. 3d-e)⁴⁹. In both cases there is no proper correspondence with the current LM II pottery production, and again wheel-made vessels are not part of an ordinary set, but very exclusive. As for the wishbone-handled cup, it is part of a hardly vast circulation of

⁴⁵ Watrous 1992, 15; Rutter 2006a, 468; Rutter 2006b, 679-680. For stone alabastra see Warren 1969, pl.1. Very instructive is, for instance, the ink-pot alabastron (HTR 585) from a MM III context at Ayia Triada, which betrays metallic reminiscences but forerunners of later examples of LH IB/LM II: La Rosa 1986, 192, pl. Ib. Admittedly, Rutter also noted that the surface treatment of other LM IB vessels from Kommos is not dissimilar from the fine grey-burnished alabastron; therefore, the burnishing of the dark paint on a few vessels was meant to render the dark-coated surface more lustrous and similar to a stone vessel: Rutter 2006a, 475.

⁴⁶ Rutter 1979.

⁴⁷ The aspect was already noted by Coldstream: Coldstream, Huxley 1972 286; Bevan 2007, 128. Bevan, Kiriati, Knappett, Kappa, Papachristou 2002, 77-79, 93, pl. 13.8. I thank J. Rutter for drawing this aspect to my attention. Significantly, imitations of blossom bowls in dark grey clay have been recorded from Phylakopi (Atkinson et al. 1904, 139, fig. 111) and Ayia Irini (Cummer, Schofield 1984, 68, 104, pls. 53.361, 76.1170).

⁴⁸ The term is used here to indicate LM II-III C. Although elsewhere this long period has been subdivided in Mono Palatial (LM II-III A1) and Final Palatial (LM III A2-III B), the present account will take into consideration evidence that does not always offer good grounds for distinguishing between III A1 and III A2, and between III A2 and III B; thus the use of the term Postpalatial seems to be more appropriate. For the discussion of these terms see Rehak, Younger 2001, 384-385, 441-442.

⁴⁹ Popham et al. 1984, 163-64, 170, pls. 84: b-c; 87: d; 161: 6; 162: 5.

vessels that make their first appearance on Crete during LM IB and occur in both domestic and funerary contexts during LM II-III⁵⁰. G. Graziadio has argued that such Minoan vessels were likely inspired by Cypriot clay models rather than by analogous metal vessels, due basically to the lack of metal prototypes of any kind on Cyprus before LC IIA (LM IIIA)⁵¹. Nevertheless, the GW bowl from the Unexplored Mansion, because of its exotic feature, raises the question of a possible interference between metal and clay production. At any rate, these two LM II GW vessels seem to share the same spirit of the Neopalatial ones.

From LM IIIA onwards the presence of GW in Crete increases, and evidence comes from both cemeteries and settlements (Fig. 2). Fine wheel-made grey vessels are reported in the following cemeteries: a cup from tomb IX-D at Mavro Spelio (Knossos)⁵²; a hemispherical bowl from the chamber tomb of Karteros (Amnisos)⁵³; a ring-shaped askos (FS 196) from chamber tomb B at Stamnoi Pediados⁵⁴; a few juglets and one carinated bowl from Mochlos⁵⁵; a globular askos (FS 195) from a pithos burial at Aissa Langadha (Pachyammos)⁵⁶; and a three-handled piriform jar (FS 46, 48) from the Pharmakokephalo-Sklavoi (Sitia) cemetery (Fig. 6B)⁵⁷.

The vessel from Mavro Spelio is described as 'curved cup' in black *bucchero*, but the lack of any illustration makes it difficult to determine its chronological position. Also the chronology of chamber D is controversial, as the pottery evidence encompasses MM IIB, MM III, LM I and LM III vessels⁵⁸. The vessels from the Karteros-Amnisos tomb are dated to LM IIIA2/B and LM IIIB initial⁵⁹. The GW bowl has a very distinctive shape with the plain rim with horizontal relief moulding below and the presence of two concentric grooves on the interior bottom; it might be seen as a GW variant of FS 208, the grooved side type that is well known during LH IIIA2⁶⁰ or, more probably, as a clay imitation of LM IIIA metal prototypes, also reported from Crete (Sellopoulo, Tomb 3)⁶¹. The larnax, in which the bowl was found, had also two fireboxes and three cups with pulled-out spout, a band on the rim and plastic knobs⁶², that suggest a LM IIIA2 date for the burial and also for the GW bowl. Re-examination of the grave offerings in the Stamnoi chamber tomb allows a date for the grey askos between LM IIIA and B⁶³, while the globular askos

⁵⁰ Graziadio 1999.

⁵¹ Graziadio 2005, 331-332.

⁵² Forsdyke 1926-27, 269, IX-D.13.

⁵³ Marinatos 1927-28, 73, 80, fig. 6, pl. 2:18.

⁵⁴ Platon 1952, 628, fig. 8.

⁵⁵ Banou, Nicgorski, Smith 2008. I am grateful to Angus Smith for informing me about the unpublished wheel-made grey vessels from Mochlos cemetery.

⁵⁶ Boyd Hawes et al. 1908, 46, pl. 10:16.

⁵⁷ Tsipopoulou, Vagnetti 1994, figs. 1-2.

⁵⁸ Forsdyke 1926-27, 268-269.

⁵⁹ Kanta 1980, 39-40.

⁶⁰ Furumark 1941, 619-620; Furumark 1992, pl. 120.

⁶¹ Popham 1974, 242, fig. 25.11; Matthäus 1980a, 285-286, pl. 50 (431).

⁶² Marinatos 1927-28, 73, pl. 2:16-17.

⁶³ Kanta 1980, 53, 58.

from Aissa Langadha has a debatable chronology between a LM IIIA2⁶⁴ and IIIB date⁶⁵. A not particularly advanced stage of LM IIIA has been suggested for the three-handled jar from Pharmakokephalo-Sklavoi⁶⁶. Finally, as shown by evidence, the Mycenaean cemetery at Mochlos started during LM IIIA1, reaching its peak in LM IIIA2⁶⁷.

Additionally, Marinatos reported a grey stirrup jar in the cemetery at Knossos, without any other indications⁶⁸. Also, M. Tsipopoulou and L. Vagnetti inform of the acquisition from the Mitsotakis Collection of a small wheel-made grey stirrup jar together with several vessels of Kydonia workshop manufacture, and they do not exclude a provenance of the whole set from a west Cretan funerary context⁶⁹.

As far as the evidence from settlements is concerned, the sites of Kommos and Khania show a significant percentage of GW. At Kommos the fine wheel-made GW with 7 on 353 of total imported vessels identified represents only the 2%⁷⁰. Six grey wheel-made vessels datable to LM IIIA1, IIIA2 and IIIB have come to light in different sectors of the settlement (Hilltop, Central Hillside, House X, Civic Centre) (Fig. 6A): a small LM IIIA askos, two juglets of LM IIIA1 and LM IIIB and three cups: one shallow teacup from a LM IIIA1 context and two smaller of LM IIIA2⁷¹.

The largest collection of fine wheel-made grey vessels during the LM III period has been reported from Khania (Agia Aikaterini Square excavations), mostly from LM IIIB2 and IIIC strata (Fig. 6C-D)⁷². Seventy-five sherds have been inventoried from LM IIIB2 levels (4 of LM IIIB1/2, and 71 of LM IIIB2) (Fig. 6C), they are wheel-made with dark grey burnished surfaces and belong entirely to open shapes⁷³. Aside from two unusual shapes (a spouted cup and a cup with a slightly flaring rim and a vertical handle attached below), the majority of the sherds belongs to two shapes: the kylix and the carinated cup, the latter of which is the most predominant. Finally, other fragments belong to a rounded cup type⁷⁴. Cups have high-slung handles, are roll to oval in section, and the bases preserved are of three types: flatted, raised and ringed.

Twelve sherds have been reported from LM IIIC strata (Fig. 6D). They have the same fabric and surface treatment as LM IIIB2 ones and belong to rounded and carinated cups; the bases when preserved are all raised⁷⁵.

⁶⁴ Kanta 1980, 143; Hallager, Hallager 2003, 231.

⁶⁵ Misch 1992, 163; Kalogeropoulos 1998, 59.

⁶⁶ Tsipopoulou, Vagnetti 1994, 45.

⁶⁷ Banou, Nicgorski, Smith 2008; Banou 2005, 158-169; Smith 2005, 190-199.

⁶⁸ Marinatos 1927-28, 80, footnote 3 (IM 4470).

⁶⁹ Tsipopoulou, Vagnetti 1994, 47, footnote 16.

⁷⁰ Rutter 2006b, 683, table 3.115.

⁷¹ The askos: Rutter 2006b, 678. The juglets: Watrous 1992, 46, n. 803, fig. 76, pl. 53; 88, n. 1544, fig. 76, pl. 58. The cups: Watrous 1992, 30, n. 514, fig. 23, pl. 53; 164, n. 672, pl. 56; Rutter 2006a, 576, n. MI/Cr/5, pl. 3.87; Rutter 2006b, 678-679.

⁷² Hallager 1983, 358-363.

⁷³ Hallager, Hallager 2003, 254-256, 298-299, pl. 86.

⁷⁴ Hallager, Hallager 2003, 255.

⁷⁵ Hallager, Hallager 2000, 166-167, pl. 51. Only one sherd has a vertical handle preserved, oval in section and raised above the rim.

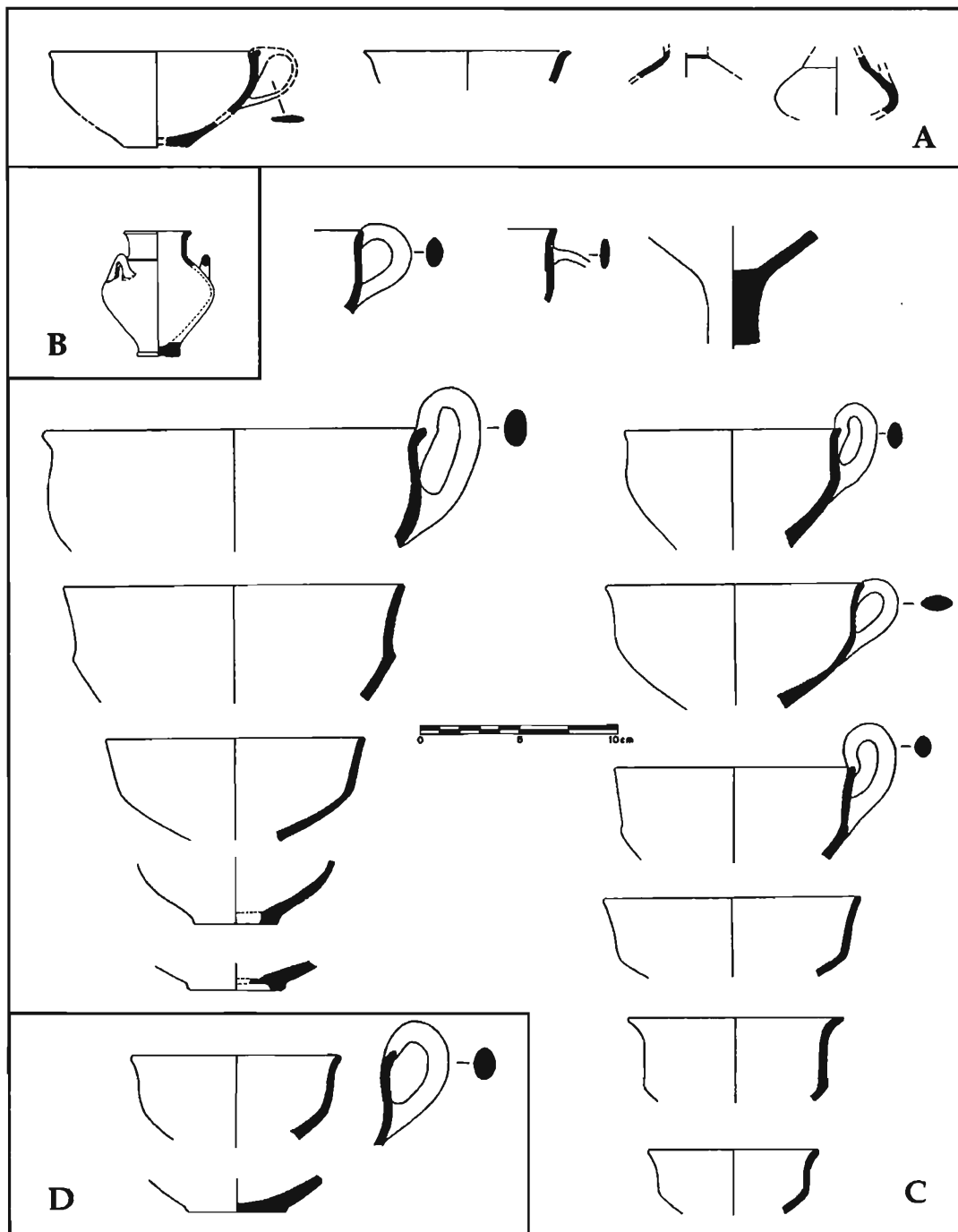


Fig. 6 – Selection of LM III GW vessels: (A) Kommos, LM IIIA and B (after Watrous 1992; Rutter 2006); (B) Pharmakokephalo-Sklavoi (after Tsipopoulou, Vagnetti 1994); (C) Khania, LM IIIB (after Hallager, Hallager 2003); (D) Khania, LM IIIC (after Hallager, Hallager 2000). Scale 1:3.

Finally, seven fragments were found in post-Minoan levels: one fragment of a solid stem kylix and another six that seem to belong to the carinated cup with a high-slung handle⁷⁶.

Nine LM IIIB2 and two LM IIIC sherds have been chemically analyzed and are similar in composition to the local ware⁷⁷. More specifically, local production of GW, being very low in calcium, is close to the non-calcareous White Ware, but some sherds also resemble the more calcareous and iron rich Plain and so-called LM IIIC wares⁷⁸.

Variouly explained as a Mycenaean presence⁷⁹ or as the result of the long Cretan tradition of ceramic imitations of stone vessels⁸⁰, the Cretan wheel-made GW is still waiting for a definitive response. An initial point needs to be commented upon: LM III is the only period to show the most considerable amount of GW on Crete, and this trend generally mirrors the more extensive phenomenon of the distribution of GW in the Aegean and eastern Mediterranean. The evaluation of the extension of GW in such a geographical setting is beyond the intention of this contribution. It suffices to say that this phenomenon has recently received much more attention. As for the Greek Mainland the trend starts in LH I and continues into LH III, during which the ware imitates shapes of the Mycenaean repertoire⁸¹. On the other hand, LH IIIC is also notable due to the appearance of GW that continues into the Iron Age⁸², and to the circulation of classes that betray Italian inspiration⁸³. GW now spreads to Cyprus and the eastern Mediterranean with a more decisive role played by western Anatolia and mostly Troy⁸⁴. Also northeast Aegean islands, where GW shows a high variability, fluctuate between Mycenaean and Anatolian influences⁸⁵. The same trend can also be argued for the Dodecanese (Vati/Passia, Ialysos, Eleona and Langadha, Messaria), which shows a considerable concentration of GW, mostly deriving from cemeteries⁸⁶.

⁷⁶ Hallager, Hallager 2000, 171.

⁷⁷ Hallager, Hallager 2003, 304-305.

⁷⁸ Hallager, Hallager 2003, 305, table 2.

⁷⁹ Tsipopoulou, Vagnetti 1994, 48-49; Tsipopoulou 2005, 311.

⁸⁰ Rutter 1979; Rutter 1999, 180; Rutter 2006b, 679-680.

⁸¹ A summary of the evidence is in Kalogeropoulos 1998, 57-58.

⁸² For instance several sites of Central Macedonia, such as Kastanas and Toumba Thessaloniki: Andreou, Kotsakis, Chourmouziadis 1990, 390. Jung 2002, 211. R. Jung, On the origin of the wheel-made Grey Ware found in Central Macedonia, in *Aegeo-Balkan Prehistory*.

http://www.aegeobalkanprehistory.net/article.php?id_art=4 (10 June 2007).

⁸³ Mostly Tiryns and Dhimini, see *infra*.

⁸⁴ For Cyprus and eastern Mediterranean see Buchholz 1973; Allen 1990, 143-164, figs. 57-62; Allen 1991, 151-167. More recently on Tell Kazel: Badre, Boileau, Jung, Mommsen 2005. Moreover, important contributions have recently come to light focusing on Troy and its relations with Aegean between Middle and Late Bronze Age: Pavúk 2002a; Pavúk 2002b; Pavúk 2005; Pavúk forthcoming. See also Mommsen, Pavúk 2007.

⁸⁵ For Lesbos: Lamb 1931-32, figs. 1-2; Lamb 1936, 136-145. For Chios: Hood 1982, 571-573. A not at all minor role is represented by west Anatolian coast, see Bayne 2000.

⁸⁶ A synthesis is in Kalogeropoulos 1998, 59. See also Benzi 1992, 7; Benzi 1996, 955-956; Girella 2005, 134, footnote 58.

Comparing Crete with the broad picture of the Aegean some peculiarities in the Cretan case emerge. Moreover, the evidence clearly reveals the existence of many dichotomies (cemeteries *vs.* settlements, Kommos *vs.* Khania), which should be commented upon here.

The evidence from cemeteries

GW in funerary contexts is limited to the LM IIIA and IIIB periods, and it is attested in the north of Crete. Although further research is necessary to clarify the complete picture of distribution, the evidence collected thus far comes from the Knossos area and eastern Crete, while that from western Crete should be viewed with reserve. Such a trend has been considered, especially for eastern Crete, as one of the main clues of a Mycenaeanization⁸⁷. At any rate, the concentration of wheel-made grey vessels on the northern coast of the island hints at contacts between the two cultural groups (Mycenaeans and Minoans) at the level of trade or immigrants. Furthermore, it seems from the evidence collected that the majority of these grey vessels date to the LM IIIA2 period, i.e. after the fall of Knossos palace. LM IIIA2 and IIIB see a shift in ceramic imports and trade relationships, economic contacts of many centres of northern Crete widen from Palaikastro to West Crete and mainland Greece⁸⁸. Changes in funerary customs are also visible in Crete,⁸⁹ and it seems most likely, then, that the introduction of GW into funeral equipment reflects the direct influence of Greek Mainland, where such a ware was attested in tombs since the beginning of LBA.

Secondly, it is worthy of note that the majority of these vessels belongs to closed shapes, and some of them are small or miniature (Table II). This peculiarity allows the hypothesis that they were containers for special liquids used in offering rituals⁹⁰. On the opposite, wheel-made grey vessels from the settlements belong mostly to open shapes (mainly cups and more rarely kylikes). A survey of shapes from funerary contexts underscores some peculiarities of Crete in comparison with the Aegean evidence. Jugs of various types and dimensions as well as cups mostly carinated and straight-sided are mainly reported from graves in the Aegean. On Crete carinated and straight-sided cups are unattested in graves so far; likewise, open shapes seldom occur, with the sole exception of the bowls from Mochlos and Karteros/Amnisos. Rather, the presence of some shapes, such as the askos, the three-handled piriform jar and the stirrup jar, might be reflective of local burial customs. That is something one could imagine for the stirrup jars, in whose production both western and central Crete were deeply involved. Stirrup jars in GW are not reported from the Greek Mainland, but the shape is attested at Ialysos cemetery and Troy⁹¹. Juglets reported from Mochlos are so far unique in Crete and have close comparisons with funeral

⁸⁷ Tsipopoulou, Vagnetti 1994, 49-50. See also Tsipopoulou 1995, 177-192.

⁸⁸ See the contributions from Driessen, Farnoux 1997 and D'Agata, Moody 2005. By far, the majority of LH III mainland imports comes from Khania, see Hallager 1993, 263-269; Hallager 2005, 277-292.

⁸⁹ Preston 2004.

⁹⁰ Tsipopoulou, Vagnetti 1994, 48-49.

⁹¹ Benzi 1996, pls. 5f, 24g, 44e; Blegen, Caskey, Rawson 1953, pl. 331; Blegen, Boulter, Caskey 1958, pl. 217. A fragment of a stirrup jar is also reported from Pyla-Kokkinokremos: Allen 1991, 163, fig. 15.7.

SHAPE	Funerary	Domestic
Rounded cup	X	X
Carinated cup		X
Bowl	X	
Kylix		X
Three-handled jar	X	
Stirrup jar	X	
Juglet	X	X
Askos	X	X

Table II. Occurrence of GW open and closed shapes from LM III contexts.

customs in the Dodecanese (Rhodes/Ialysos and Kos/Eleona, Langadha and Mesaria)⁹². Also rare are handled piriform jars: one example is from Troy and is a combination of local and Mycenaean features⁹³. Likewise, askoi are not well documented in wheel-made GW, despite their diffusion from LH IIIA in the Mycenaean repertoire: one is reported from a grave at Eleusis⁹⁴. Thus, the relatively wide diffusion of such a shape in Crete must be connected with a special circulation of vessels used for ritual purposes. It is worth mentioning here – even in the light of the Italian interconnections, which we shall discuss later – a wheel-made grey askos from a *Bronzo Recente* level (LH IIIB–C early) at Broglio di Trebisacce (Cosenza)⁹⁵. This last find is of importance, as it represents a noteworthy link for the transmission and development of this shape in western Mediterranean between *Bronzo Recente* and *Finale*⁹⁶. Summing up, also the dimensional patterns suggest that the influence of the Greek Mainland had a considerable weight in the transmission of specific forms to Crete, but also adapted to local needs. A similar pattern of evidence is also indicated by the case of the Dodecanese and particularly Rhodes, where GW is reported from LH IIIA1 at Ialysos and Trianda IIB levels, again suggesting a direct introduction from the mainland Greece simultaneously with the appearance of the Mycenaean presence on Rhodes and the first stage of Ialysos cemetery. Subsequently this production shows a local adaptation and betrays western Anatolian inspirations⁹⁷.

⁹² Benzi 1996, figs. 6-7, 13-18.

⁹³ Blegen, Caskey, Rawson 1953, pls. 324, 435 (34.310). See also Mountjoy 1999, 288-289, fig. 13.119 (C 41).

⁹⁴ Mylonas 1975, pl. 62β (500).

⁹⁵ Such similarity has already been noted in Bettelli 2002, 129, 200, fig. 79.10.

⁹⁶ It is, for instance, the case of the diffusion of the askos in Sicily that betrays Aegean similarities: Cultraro 2006.

⁹⁷ For Trianda see Monaco 1941, 152, fig. 5.8; 138, pls. XIII.a13, XIV.c1, c9; Benzi 1996, 955; Girella 2005, 134.

The evidence from settlements

Moving to the settlements, admittedly the patterns from Kommos and Khania show distinctive differences in the chronological distribution as well as the fabric and shapes (Table I). As far as Kommos is concerned, the recent assessment by Rutter of fine wheel-made GW has corrected some previous ideas of the pioneering study of Watrous, who had considered most of these vessels as non-Minoan, but rather 'Italian' imports⁹⁸. On the other hand, Rutter stresses the differences, concerning shape, fabric and technology, between the Kommos GW and the rest of contemporary wheel-made grey vessels known in southern Italy, Greek Mainland (Tiryns, Dhimini) and western Crete (Khania). Likewise, he also excludes connections with north-western Anatolian GW and opts for a Cretan production, not necessarily to be located in the western Mesara⁹⁹.

At Khania, the few sherds from LM IIIA–IIIB1, still unpublished, belong, as in the case of Kommos, to closed and in some cases miniature vessels¹⁰⁰, but the majority of evidence is reported from the LM IIIB2 and IIIC levels, filling adequately the chronological gap at Kommos. The Khania evidence is striking on account of the large number of vessels, but also on account of shapes not attested in Kommos, most of all the carinated cup (Fig. 6C-D). B. Hallager has also pointed out that, with a single exception, the wheel-made grey vessels were found in the same contexts as the Handmade Burnished Ware (HBW)¹⁰¹. The author has regularly underlined the strong similarities between the HBW and the southern Italy local *impasto* vessels of 'Subappennine culture' on the one side, and those between the GW and the so called *pseudominyan* ware from southern Italy, on the other¹⁰². The peak of GW in LM IIIB2, together with the coexistence of both GW and HBW, also seem to support the Hallager hypothesis that both wares were locally produced at Khania by or for an Italian 'colony'. This hypothesis has not been accepted unanimously¹⁰³. For L. Vagnetti the possibility of a Mycenaean influence upon LM IIIB GW must not be disregarded, bearing in mind the production of such a ware on the mainland had an interrupted development in MH tradition, which during LH II and IIIA used Mycenaean shapes in the GW, unknown in that period in Italy. On the other hand, she points out that the Cretan tradition in GW production, although feeble, did not break off during LM I and II. Furthermore, it has also been noted that, despite the occurrence of similar shapes (carinated cups and bowls) in the *pseudominyan* production (Fig. 7)¹⁰⁴, those from the Cretan centre show some significant

⁹⁸ Watrous 1989, 69-80. See also Watrous 1992, 164-165.

⁹⁹ Rutter 2006b, 678-679.

¹⁰⁰ Hallager, Hallager 2003, 255.

¹⁰¹ Hallager, Hallager 2003, 254, 361; Hallager 1985, 293-305. In particular, the two wares were confined to the 'Rubbish Area North', for which Erik Hallager has recently suggested a possible religious significance: Hallager 2001.

¹⁰² Hallager 1985; Bergonzi 1985, 360, fig. 19.3-6; Kilian 1988a, 133, fig. 7; Kilian 1988b 1988, 145-149; Hallager, Hallager 2000, 165-166, 171; Hallager, Hallager 2003, 253-256.

¹⁰³ Vagnetti 1985, 32-33; Peroni, Trucco, Vagnetti 1985, 68-69; Tsipopoulou, Vagnetti 1994, 48-50.

¹⁰⁴ The carinated cup with simple rim Hallager, Hallager 2003, pl. 86 (80-P 0829a) and Belardelli 1994, 293, fig. 93.3; the rounded cup with gently out-turned rim Hallager, Hallager 2003, pl. 86

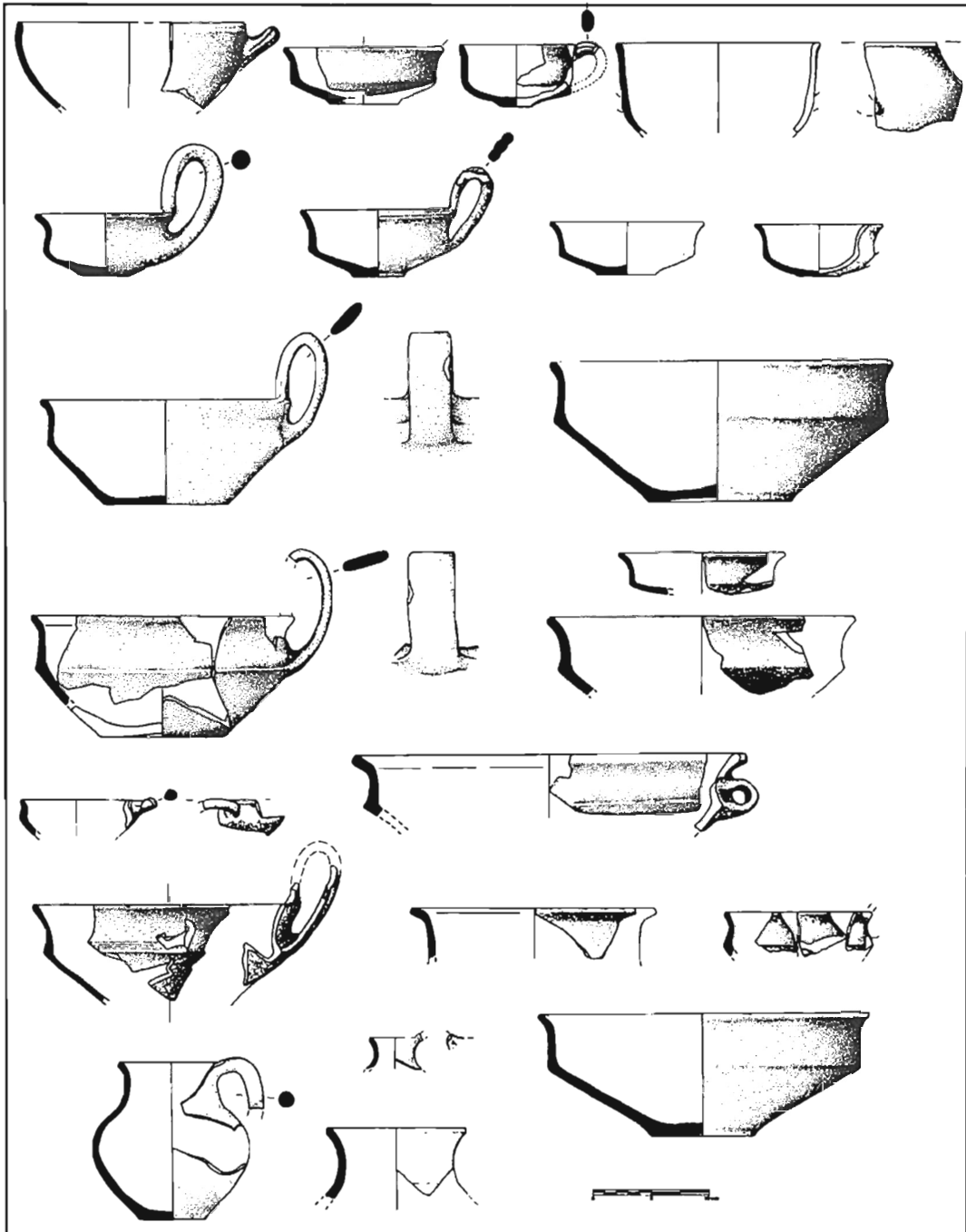


Fig. 7 · Wheel-thrown GW from the 'Central Hut' at Broglio di Trebisacce (Cosenza) (after Bettelli 2002). Scale 1:5.

differences¹⁰⁵, and a closer connection with the local Mycenaean repertoire (Fig. 8)¹⁰⁶. Furthermore, while carinated cups from Khania have slightly more rounded profiles, less flaring rims and handles that are roll to oval in section and not very high-slung, the examples from Italy have more pronounced carinated profiles, the upper bodies are also more flared, and the handles, usually strap in section, do accentually rise above the rim¹⁰⁷. In the end, it is worth stressing that apart from carinated cups, there are other shapes in Khania, such as the kylix and the spouted cup, which are not attested so far in the wheel-made GW production of southern Italy, and that they show more obvious correspondences with the local Mycenaean production.

CONCLUDING REMARKS

The foregoing survey of evidence enables us to draw some conclusions about GW circulation on Crete. While a great deal of uncertainty remains, a diachronic overview of the evidence helped to highlight some aspects within the asymmetrical occurrence of this ware on Crete. It seems that GW almost never represented a homogeneous facet of Minoan pottery production, it was rather a foreign component activating exchange mechanisms between Crete and the Greek Mainland.

(i) As far as the Prepalatial period is concerned, in spite of the considerable quantity of Minoan and Minoanizing pottery at the coastal sites in southern and north-eastern Peloponnese, the Minyan bowl at Knossos is the unique ceramic testimony of such a network in Crete so far, also admitting a pallid intermediate connection through the Cyclades. For such an asymmetrical relationship, a metal-oriented nature of the southward flow has been suggested¹⁰⁸. Indeed, mines on Siphnos were exploited for lead and silver during EB 1 and 2¹⁰⁹; likewise, the Cycladic islands of Paros, Andros, Kythnos, Syros, and Seriphos offer evidence of ancient

(80-P 0501a) and Belardelli 1994, 289, fig. 92.3; and the cup with S profile Hallager, Hallager 2003, pl. 86 (80-P 1464, 1289) and Belardelli 1994, 289, fig. 93.2; 293, fig. 95.1; but see also the identical type in the local painted Mycenaean repertoire: Hallager, Hallager 2003, pl. 48 (84-P 1295).

¹⁰⁵ Bettelli 1999, 466, footnote 29; Bettelli 2002; Jung 2006, 50.

¹⁰⁶ The GW rounded cups in Hallager, Hallager 2003, pl. 86 (80-P 0584, 82-P 1481, 84-P 0939/1086/1462) have comparisons with the *banded cups*: Hallager 2003, 106-107, fig. 1 b-c; Hallager, Hallager 2003, pl. 47. Also, the carinated cup Hallager, Hallager 2003, pl. 86 (80-P 0829a) has a correspondence with decorated shapes: Hallager 2003, 108, fig. 1d; Hallager, Hallager 2003, pls. 47-48. In this last case, B. Hallager notes the rarity of painted carinated cups from LM IIIB:2 levels and argues for an inspiration by either HBW and GW carinated cups. Finally, it is also worth stressing the correspondence between carinated and flaring rim cups (Hallager, Hallager 2003, pl. 86, 80-P 0258, 80-P 0501a) and the same shapes attested in plain ware: Hallager 2003, 114, fig. 3 e-f; Hallager, Hallager 2003, pl. 69.

¹⁰⁷ The case of Broglio di Trebisacce is very distinctive for the highest concentration of *pseudominyan* ware: Bergonzi, Cardarelli 1982, pls. 14-17; Belardelli 1994, figs. 93-100; Bettelli 2002, 73-89, figs. 25-36. A general overview is in Belardelli, Bettelli 2007.

¹⁰⁸ Rutter, Zerner 1984, 77-79. See also Broodbank, Kiriati 2007, 267-268.

¹⁰⁹ Pernicka, Wagner 1985, 200-211.

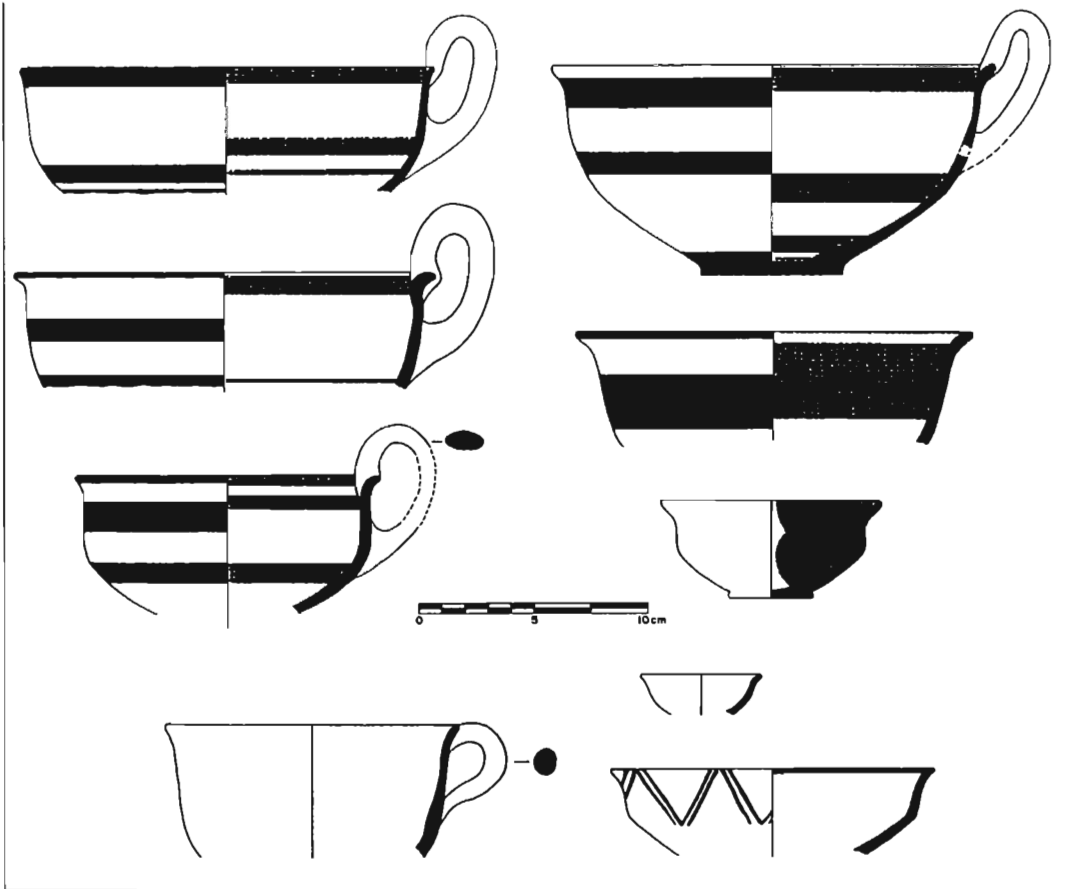


Fig. 8 – Selection of LM IIIB:2 vessels from Khania (after Hallager, Hallager 2003).

copper mining¹¹⁰. But further research has proven that as early as the MC period Lavrion ore sources did replace Siphnos and other Cycladic centres as the dominant source of lead and silver in the Aegean¹¹¹.

On the other hand, concerning the Kythera connection, the exploitation of raw material and metal sources meets some obstacles already during the Prepalatial period, for the stones from the Peloponnese were not used in Crete until the Palatial period and the supply of metals does remain undemonstrated during EBA¹¹².

¹¹⁰ The Minoan interest is now confirmed by the ore smelted at Chrysokamino, a FN-EB age smelting workshop on the northeastern coast: Betancourt 2006a. Significantly, the most important period for the workshop was during EM III/MM IA, as the FN sherds found in the site do not have any direct association with metallurgical activities, see: Betancourt 2006a, 67-97; 2006b. As for the copper provenience, lead isotope and chemical analyses demonstrate that copper ores arrived at Chrysokamino by sea. The lead isotope composition of analyzed slags shows compositions that would result from using the Lavrion and Cycladic ores separately, or mixed in one smelting charge: Betancourt 2006a, 299-319.

¹¹¹ Gale, Stos-Gale 1981; Gale, Stos-Gale, Davis 1984, 389-406.

¹¹² Stos-Gale, Gale 1983, 61.

Nevertheless, the metal objects recently discovered at Kastroulia reveal a peculiar interest for southeastern Messenia, and they may be seen as the result of the involvement in the metal-rich trade network of the Adriatic and Ionian gulfs¹¹³.

While quantified evidence of metal sources is not yet available for Cretan sites, an idea of the potential of such exchange system to establish differentials between communities can be seen from the circulation of Minoan and Minoanizing pottery on the mainland. Spread discontinuously in southern Greece and in the Cyclades MM IA pottery is the dawn of a more matured trade system that involved Crete and the mainland during the palatial eras. However, at the same time, it is the clue that Minoan pottery already started circulating as a luxury good and was to be imitated as well by the more enterprising mainland centres, probably triggered by the movement of Cretan workers. Likewise, the occurrence of Minoan loomweights at Lerna indicates that also weaving in Minoan style was done in the mainland¹¹⁴.

This configuration of interconnection deserves further exploration. Also admitting a metal nature of the trade, what remains unclear is the role of Cretan contribution in the transaction with the Helladic communities. It is unanimously accepted that by EB II the Cretan demand for off-island raw materials gradually increased, but what precisely the Minoans exchanged with the mainland centres remains still unclear and should be thoroughly investigated¹¹⁵. By comparing the single Helladic import at Knossos with the gradual spread of Minoan pottery northward at the beginning of MBA we have drawn the following conclusions: firstly, were the Minoans to visit the Greek Mainland, and not the opposite; secondly, the only visible items of these transactions are pottery and, to some extent, loomweights. Although we know very few about exchange modes of this early period, it is reasonable to imagine for small-scale societies a system based on reciprocity where goods are moved between symmetrical groups¹¹⁶. In this non-market mode of integration goods are given as gifts between people, villages, or tribes. Gift giving becomes a source of social power, because of the generosity of giving and the obligations that arise from receiving prestige goods¹¹⁷. Nevertheless, what should be stressed here is that the idea that Minoans would have exchanged metals (or whatever other good) for pottery is not ultimately convincing. I would rather like to suggest that pottery might have functioned as a protocol either to start or to finish the transaction between the buyer and the seller. Indeed, much of the Minoan pottery consists of fine shapes associated with drinking and pouring (footed goblets, straight-sided cups, barbotine jugs), and it might suggest the adoption of toasting and drinking rituals as tokens given by the Minoans to create cooperative relationships, alliances, or political power. Unfortunately, the archaeological record does not help

¹¹³ For such a network see Maran 1998, 445.

¹¹⁴ Such a scenario can be supported by admitting also Minoan residents at the site: Carrington-Smith 1975, 276-286.

¹¹⁵ As it has been argued by I. Hamilakis there is no direct archaeological evidence to substantiate the 'Mediterranean polyculture' model elaborated by C. Renfrew, as it seems that the systematic exploitation of olive oil and wine initiated during the second palace period; Hamilakis 1996.

¹¹⁶ Sahlins 1972, 185-275.

¹¹⁷ Mauss 1970; Barrett, Damilati 2004, 154-162.

to distinguish, according with Sahlins definition, between 'balanced' and 'negative' reciprocity. As for the latter one, reciprocity can be 'asymmetrical' when two diverse socio-cultural groups meet each other (like the Helladic and the Minoan one); however, this would not have prejudiced the circulation of goods. In this respect, in the reciprocity practice often there is an obligation to not only give an initial gift, but also to reciprocate that gift. From a ceramic perspective it seems that Minoans were not interested in Helladic pottery, hence the uniqueness of the Minyan bowl found at Knossos. Moreover, it is likely that the pottery does not tell the whole story, as gifts exchanged would have also consisted of invisible values consisting of ritual and technological knowledge¹¹⁸.

(ii) Imports or imitation of Minyan vessels are not documented during the First Palace phase. Unless still unrecognizable, Grey Minyan continued to be an unknown item on Crete during MM IB-IIIB. Crete continued to import metals and stones from the mainland and exchanged such raw materials with pottery knowledge and technology, but, as it was argued from our analysis, Kamares Ware now functioned as a prestige good, and it was deposited in graves as a status symbol. Aside from different production groups, Kamares ware operated as a unifying factor in Crete and constituted collective identities that identified with palatial authorities. The presence of such regional pottery identities made any interest in mainland pottery very feeble. In this respect, a similar model to that drawn for the previous period can be suggested. A more dendritic north-south exchange system dominates on palatial Crete, that controlled other networks for half-millennium (the south-west, the north-south, and the south-east routes)¹¹⁹. As was the case of the MM IA pottery, distribution of imports and imitations suggest the adoption of Cretan drinking custom by non-Cretan communities, and again Minyan ware did not reach the Cretan shores.

(iii) A similar framework for the Second Palace phase has been suggested, as it turned out that the few GW vessels on Crete has not been influenced or even inspired by the contemporary Greek Grey Minyan. Conversely, our argument was that stone or metal prototypes kept playing a major role in producing vessels with dark-coated and lustrous surfaces. The fact that the totality of the shapes belongs to the Neopalatial pottery repertoire, with special attention to serving and ritual vessels, suggests that the contemporary mainland classes (Grey and Yellow Minyan) were basically unknown on Crete during this period. On the other hand, evidence from Crete, though limited to few cases, would suggest the diffusion of an alternative production in dark burnished ware imitating precious vessels (made of stone or metal) that reached the mainland by means of two paths of transmission (Kythira and/or Cyclades). To what extent such stone or metal vessels were imitated as important markers of prestige and political legitimacy one needs still to investigate.

¹¹⁸ Knapp 1998.

¹¹⁹ Broodbank 2000, 356-357.

(iv) Notwithstanding the growing evidence of GW on the island, the present analysis has pinpointed the asymmetrical character of GW distribution. Particularly, two fundamental points emerged: firstly, the diverse incidence of GW in domestic and funerary assemblages (Fig. 9, Table II); secondly, the disproportion between its occurrence respectively on LM IIIA-B1 and IIB2-IIIC periods (Table I), in terms of quantity and social implications. Therefore, during LM III GW circulated within Minoan communities with different levels of consumption.

The presence of closed and/or miniature GW vessels in funerary contexts recalls a mainland tradition, but it is equally widespread in south-eastern Aegean¹²⁰. Thus, it has been argued that GW vessels were locally produced in Crete, but, at the same time, inspired by Mycenaean funerary customs. Further, our hypothesis is that such an attitude was triggered after the collapse of the Knossos palace by a wider and freer trade interconnections. How much the Minoan tradition to perceive GW as an imitation of stone or metal vessels might have played a role is hard to estimate, but it is indisputable that such distinctive vessels circulated as valuable objects. What remains remarkable is the provincialism of the Cretan case in comparison with other areas where Mycenaean pottery is imitated in local or GW. For instance, along the coastal zone of western Anatolia and the close islands, the general repertoire of north-west Anatolian GW boasts of shapes, such as kraters, jugs, juglets, stirrup jars and kylikes, that functioned as equivalents of the Mycenaean banquet etiquette¹²¹. Conversely, this phenomenon had a minor impact on Crete, and perhaps it encountered forms of 'resistance' after the fall of Knossos, when one can register significant changes in funerary assemblages, such as the drastic decrease of the kylix. In this perspective such changes imply a prevalence of Minoan traits according to a different social structure and composition of population; hence the scarce attention paid by the Minoans to GW.

By contrast, the settlement pattern has suggested a different approach. Taken as a whole, the imported vessels from Postpalatial Kommos and Khania witness two different exchange networks: Kommos was more interested in the eastern Mediterranean and western Anatolia, but also Kythera, Greek Mainland and southern Sardinia¹²², while Khania was shared between Cyprus and southern Italy¹²³. The extraneousness of GW at Kommos from the rest of foreign contexts, in which this ware was attested, indicates its local production, and perhaps, according to Rutter, still under the Minoan tradition of imitating stone vessels¹²⁴. Also, the HBW at Kommos has a Sardinian provenance and is quite different from that attested in both southern Italy and Khania¹²⁵. As for Khania, if, on the one hand, the simultaneous findspot of both GW and HBW, the shape familiarities between these and the *pseudominyan* ware and local *impasto* of southern Italy respectively, and the presence of the most distinct Italian GW shape (the carinated cup) are suggestive

¹²⁰ Kalogeropoulos 1998, 57-60; Benzi 1996, 955-967.

¹²¹ Allen 1990, 184.

¹²² Rutter 2006b.

¹²³ Hallager, Hallager 2003, 262-263.

¹²⁴ Rutter 2006b, 679-680.

¹²⁵ Bergonzi 1985; Hallager, Hallager 2003, 253-254, pls. 84-85; Rutter 2006b, 677-678.

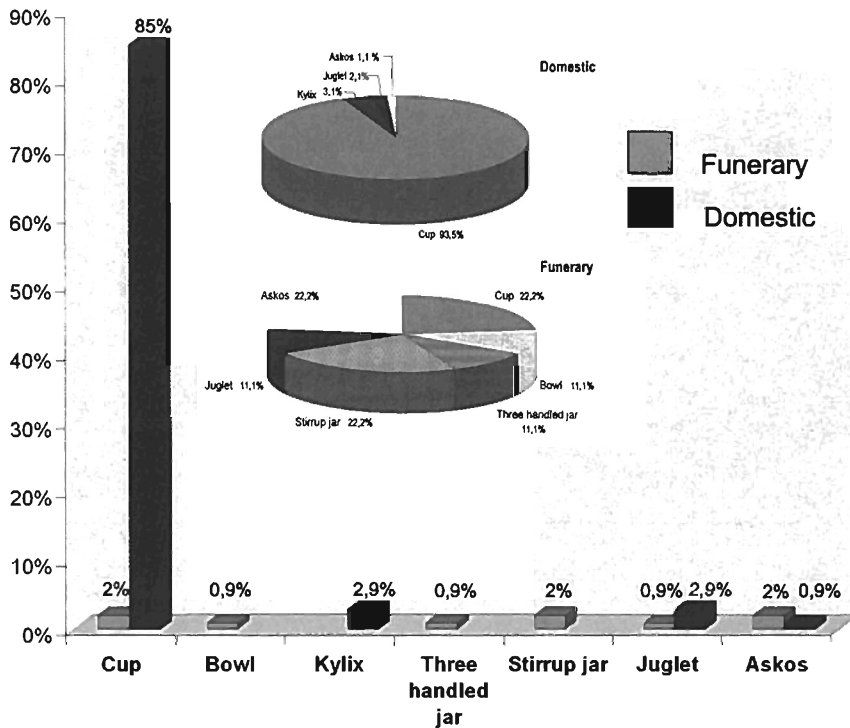


Fig. 9 – Percentages of GW from funerary and domestic contexts on LM III Crete.

of an Italian connection for the local production of GW, then, on the other hand, the formal dissimilarities make such an interconnection vanish¹²⁶. Therefore, a local Cretan production of this ware is more preferable. Regardless of some familiarity with the Italian *pseudominyan* ware (Fig. 7), GW from LM IIIB and IIIC levels at Khania shows a stronger connection with the LM local production¹²⁷. Furthermore, it is also reasonable to exclude Central Greece as a source of inspiration. Various cups and bowls are documented at Tiryns, but deep bowls FT 284/285 represent the most frequent shape (Fig. 10B)¹²⁸. At Dhimini, in southern Thessaly, GW comes from the LH IIIC Early reoccupation in the area of Megaron A: common shapes are the carinated cup and the strap-handled bowl FT 295 (Fig. 10A), but other shapes,

¹²⁶ See also Belardelli, Bettelli 2007, 483.

¹²⁷ Moreover, the supposed connection with the GW production at Kos claimed by B. Hallager especially for the carinated cups (Hallager, Hallager 2003, 263, note 594) is less evident. In fact, at Kos, in both Eleona and Langadha cemeteries, these cups occur in GW, but they have different shape (FS 230). See Morricone 1965-66, 296, figs. 30 (1329), 153 (93), 191 (138), 271 (s.n.); Benzi 1996, 955, note 54, figs. 19-21. Another cup FS 230 is also in red-burnished ware: Benzi 1996, 956, fig. 25. GW cups FS 230 are also reported from Ialysos (Benzi 1992, pl. 791), Múskebi (Boysal 1969, pls. 22:6, 23:7, 24:1), Psara (unpublished, but exhibited in the Archaeological Museum of Chios), and from the Greek mainland (Blegen 1937, 379, figs. 167:338, 235:470, 530:1032), but they are not attested on Crete.

¹²⁸ At Tiryns wheel-made GW is reported from LH IIIB and IIIC horizons: Kilian 1988b, 131, fig. 26.18; Belardelli 1996; Belardelli 1999; Belardelli, Bettelli 1999, 473-474.

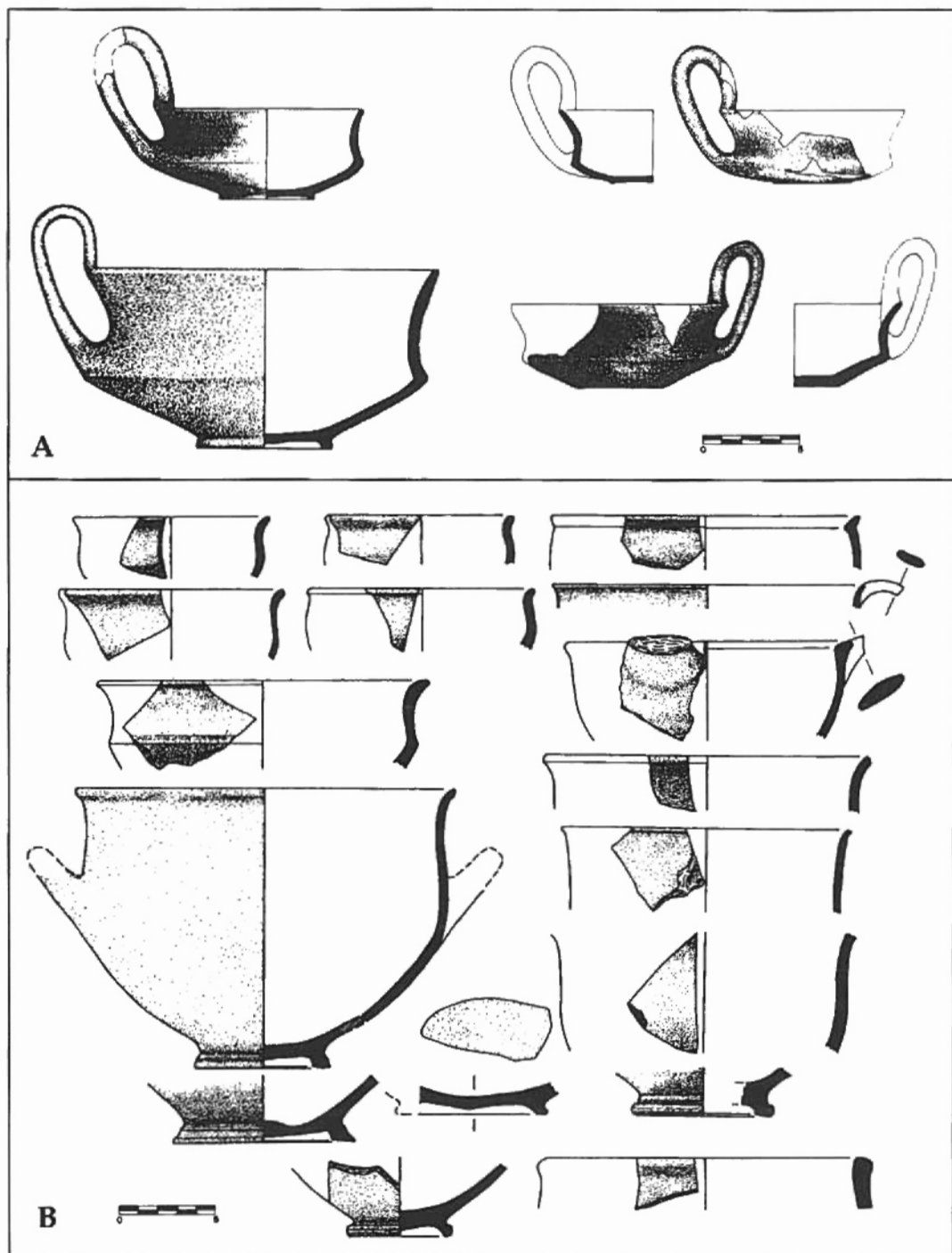


Fig. 10 - Selection of GW vessels from Greece: (A) Dhimini, LH III C (after Adrymi-Sismani 2006b); (B) Tiryns, LH III B and C (after Kilian 1988). Scale 1:3.

such as the belly-handled amphora, are attested¹²⁹. Thus, it seems more probable that GW at Khania was locally produced and inspired by Cretan Minoan-Mycenaean models.

Unlike the HBW, which had no former Aegean ancestry and is certainly ascribable to Italian models, the GW class is not completely extraneous to Crete. The irregular appearance and distribution during the Postpalatial period make clear how dangerous the use of a unique model to understand this phenomenon can be; rather, this irregularity and distribution can prove: (1) the different degrees of circulation of GW (vessels for burial gifts and for domestic uses); (2) the co-occurrence in one case (Khania) with the HBW, which reminds us of the situation in Raum 127 at Tiryns¹³⁰; (3) the possible perception of GW as both similar to and different from the proper Mycenaean ware; (4) the interaction of both a Mycenaean tradition and a new manufacture that has been ascribed to the coming of people from Italy to Greece, as the cases of Tiryns and Dhimini on the mainland confirm.

Further research is necessary to clarify distribution and provenience of wheel-made GW on Crete, but we firmly believe that it is necessary not to consider this class as a univocal event. Bearing in mind the quality and distribution of such a ware at other sites on Greek Mainland, one can see more clearly how shapes in GW were not distant from the Mycenaean repertoire, but at the same time they were accepted and adapted to local needs by means of morphological modifications. The 'Italian' contribution in the alteration and adaptation of the GW range of shapes in Greece is not uniform everywhere, and for the time being it is better documented at Tiryns¹³¹; on the other hand, we have seen that at Khania it is definitely less visible, but not absent. In this light, it becomes more clear how GW is just one aspect of a multifaceted phenomenon, which occurred between IIIB and IIIC and which saw the penetration and circulation in the Aegean and eastern Mediterranean of metal artefacts that have strong resemblances with European mainland and specifically Italian. Like the Greek Mainland, also Crete during LM IIIB and IIIC saw a similar flow of such metal objects (the flanged-hilted sword, violin-bow fibula, flange-hilted dagger of Pertosa type, rayed-wheel pin), often together with the HBW¹³². This aspect is worth of more exploration in the future, for it lies beyond the limits of this paper. Nevertheless, the circulation of 'Italian' metal objects in Crete illustrates a considerable movement of material and people¹³³, who could

¹²⁹ For Dhimini see Adrymi-Sismani 2003, 88-89, fig. 10; Adrymi-Sismani 2006a, 90-91, figs. 6-7; Adrymi-Sismani 2006b, 28-30, 35, fig. 21. Connections within HBW and GW at Dhimini and *impasto* and *pseudominyan* ware from southern Italy have been stressed in Jung 2006, 48-50, 202-203.

¹³⁰ Belardelli, Bettelli 1999.

¹³¹ Belardelli 1999, 455. Clues of this interconnection are the ratio between closed and open shapes, the contemporaneous appearance of forms that resemble Aegean and hand-made *impasto* repertoire.

¹³² Carancini, Peroni 1997, 595-601; Bettelli 2002, 132-137; Eder, Jung 2005, 485-495.

¹³³ Matthäus 1980b, 109-139. Here we would like to remember just the most important finds. The violin-bow fibula from a LM IIIC level at Khania is probably an import from Italy made of Sardinian copper (Hallager, Hallager 2000, 108, 179, 211, pls. 95, 107 a.1). This type is also reported since LM IIIB at Malia, Psychro, Kissamos and Karphi/Tsermiadon, but also from the Dodecanese (Kos/Langadha): Sapouna-Sakellarakis 1978, 16-22, 37-39, pls. 1-2 (Type Ie). At Knossos HBW has been reported, but also one flanged-hilted dagger of Pertosa type from the Zafer Papoura cemetery (Evans 1905,

also have facilitated the manufacture of new types of wares, with the aim to satisfy the 'foreign' tastes of new settlers. The westward flow of metals and other foreign objects is just one side of the decentralized maritime trading activity, which had grown up after the collapse of the Mycenaean palaces. Such a collapse also removed obstacles to the penetration of private traders, long-distance routes grew, and they were made up of many individual links. As the Sherratts have well explained, those parts of the Aegean that benefited from these movements were areas "accessible from east-west sea lanes or stopping points along them", such as Crete, western Greece and the Ionian islands¹³⁴. The co-existence of both GW and HBW on the one hand (Khania) and that one of HBW with bronzes in shapes widespread in Italy on the other (Khania, Knossos) are the proof that GW was also part of such a phenomenon that saw an exchange of techniques and ideological values. Recently it has been suggested that the sudden shortage of copper, the lifeblood of Bronze Age political economy, would have encouraged the entrepreneurial trading activity, with an increasing involvement of the western Mediterranean communities with the entourages of the Mycenaean societies¹³⁵. Although this hypothesis looks very reasonable, it needs to be verified. After the collapse of the Mycenaean palatial system the drying-up of raw materials may have stimulated movements of metalsmiths from Italy towards Greece, who integrated at different levels in the Postpalatial communities. Future and more thorough studies of these and other patterns (pottery, metals, funerary rites) need to clarify the character and the value of this interconnection.

Luca Girella

Via Carducci 13

I - 95037 San Giovanni La Punta (CT)

BIBLIOGRAPHY

- Adrymi-Sismani V. 2003, Μυκηναϊκή Ιωλκός, *AAA* 32-34, (1999-2001), 71-100.
 Adrymi-Sismani V. 2006a, Η γκρίζα ψευδομινύεια και η στιλβωμένη χειροποίητη κεραμική από τον μυκηναϊκό Διμηνίου, in *Αρχαιολογικό Έργο Θεσσαλίας και Στερεάς Ελλάδας 1. Πρακτικά επιστημονικής συνάντησης*, Βόλος 27.2-2.3.2003, Volos, 85-110.
 Adrymi-Sismani V. 2006b, Le palais de Iolkos et sa destruction, *BCH* 128-129, 1-54.
 Agouridis C. 1997, Sea Routes and Navigation in the Third Millennium Aegean, *OJA* 16, 1-24.
 Allen S.H. 1990, *Northwest Anatolian Grey Wares in the Late Bronze Age: Analysis and Distribution in the Eastern Mediterranean*, Unpublished PhD. Diss., Brown University, UMI 9101726, Ann Arbor.

472, fig. 90) and one knife of Matrei type from the Stratigraphical Museum Excavations (AR, 1982-83, 71, 83, figs. 50-51.). On the cultic deposit from Psychro cave see Bettelli 2002, 132, fig. 61B. From Phaistos, although extraneous to the GW and HBW production, a knife close to the Matrei type with a nautilus figure incised on the blade has been reported (Milojčić 1955, fig. 1.13).

¹³⁴ Sherratt, Sherratt 1991, 372-374. See also Sherratt 2000, 82-98.

¹³⁵ Bettelli 2002, 136.

- Allen S.H. 1991, Late Bronze Age Grey Wares in Cyprus, in J.A. Barlow, D.L. Bolger, and B. Kling (eds.), *Cypriot Ceramics: Reading the Prehistoric Record*, University of Pennsylvania, Philadelphia, 151-167.
- Andreou St., Kotsakis K., Chourmouziadis G. 1990, Ανασκαφή στην Τούμπα της Θεσσαλονίκης 1989, *Egnatia* 2, 381-404.
- Atkinson T.D. et al. 1904, *Excavations at Phylakopi in Melos Conducted by the British School at Athens*, London.
- Badre L., Boileau M.C., Jung R., and Mommsen H. 2005, The Provenance of Aegean and Syrian-Type Pottery Found at Tell Kazel (Syria), *A&L* 15, 15-47.
- Banks E.C. 1967, *The Early and Middle Helladic Small objects from Lerna*, Ph.D. dissertation Cincinnati (University Microfilms 67-15948).
- Banou E. 2005, LM III Mochlos (East Crete) versus LM III Viannos (Central Eastern Crete): Differences and Similarities, in A.L. D'Agata and J. Moody (eds.), 145-173.
- Banou E.S., Tsvilika E. 2006, Provincial Middle Minoan Pottery: the Case of Pera Galenoi, in M.H. Wiener et al. (eds.), *Pottery and Society. The Impact of Recent Studies in Minoan Pottery. Gold Medal Colloquium in Honor of Philip P. Betancourt. 104th Annual Meeting of the Archaeological Institute of America, New Orleans, 5 January 2003*, Boston, 95-117.
- Banou E., Nicgorski A., and Smith R.A.K. 2008, The Pottery, in J. Soles (ed.), *Mochlos II A. Period IV. The Mycenaean Settlement and Cemetery. The Sites*. Philadelphia.
- Barber R. 1974, Phylakopi 1911 and the history of the later Cycladic Bronze Age, *BSA* 69, 1-53.
- Barber R., Hadjianastasiou O. 1989, Mikre Vigla: A Bronze Age Settlement on Naxos, *BSA* 84, 63-162.
- Barrett J.C., Damilati K. 2004, 'Some Light on the Early Origins of Them All'. Generalization and the Explanation of Civilization Revisited, in J.C. Barrett and P. Halstead (eds.), *The Emergence of Civilisation Revisited*, Sheffield Studies in Aegean Prehistory 6, Oxford, 145-169.
- Bayne N.P. 2000, *The Grey Wares of Northwest Anatolia in the Middle and Late Bronze Age and Early Iron Age and their Relation to the Early Greek Settlements*, Asia Minor Studien 37, Bonn.
- Belardelli C. 1994, La ceramica grigia, in R. Peroni and F. Trucco (eds.), *Enotri e Micenei nella Sibaritide I. Broglio di Trebisacce*, Taranto, 265-346.
- Belardelli C. 1996, Materiali di tradizione mesoelladica dagli strati micenei di Tirinto, in E. De Miro, L. Godart, and A. Sacconi (eds.), *Atti e Memorie del Secondo Congresso Internazionale di Micenologia*, Roma, III, 1137-1144.
- Belardelli C. 1999, Produzioni artigianali tardoelladiche dall'Italia meridionale in Argolide: la ceramica pseudominia di Tirinto, in V. La Rosa, D. Palermo, L. Vagnetti (eds.), 451-460.
- Belardelli C., Bettelli M. 1999, La *Raum* 127 dell'*Unterburg* di Tirinto: distribuzione della ceramica pseudominia e HBW, in V. La Rosa, D. Palermo, L. Vagnetti (eds.), 473-474.
- Belardelli C., Bettelli M. 2007, Different technological levels of pottery production: Barbarian and Grey Ware between the Aegean and Europe in the Late Bronze Age, in I. Galanaki, H. Tomas, Y. Galanakis, and R. Laffineur (eds.), *Between the Aegean and Baltic Seas. Prehistory across borders. Proceedings of the International Conference, University of Zagreb, 11-14 April 2005*, *Aegaeum* 27, Liège and Austin, 481-485.
- Benzi M. 1992, *Rodi e la civiltà micenea*, Roma.
- Benzi M. 1996, Problems of the Mycenaean Expansion in the South-Eastern Aegean, in E. De Miro, L. Godart, A. Sacconi (eds.), *Atti e memorie del Secondo Congresso Internazionale di Micenologia - III*, Roma, 947-78.
- Bergonzi G. 1985, Southern Italy and the Aegean during the Late Bronze Age: Economic Strategies and Specialised Craft Products, in C. Malone and S. Stoddart (eds.), *Papers in Italian Archaeology IV, Part III, Patters in Protohistory*, BAR IS 245, Oxford, 355-387.
- Bergonzi G., Cardarelli A. 1982, Due produzioni dell'artigianato specializzato: la ceramica grigia e i dolii cordonati, in G. Bergonzi et al. (eds.), *Ricerche sulla Protostoria della Sibaritide*, 2, Napoli, 94-103.

- Betancourt Ph.P. 1985, *The History of Minoan Pottery*, Princeton.
- Betancourt Ph.P. 2006a, *The Chrysokamino Metallurgy Workshop and its Territory*, *Hesperia* Suppl. 36, The American School of Classical Studies in Athens.
- Betancourt Ph.P. 2006b, Excavations at Chrysokamino, Crete: Reconstructing EM III/MM IA Copper Smelting Processes, in *Θ' Διεθνές Κρητολογικό Συνέδριο (Ελούντα, 1-6 Οκτωβρίου 2001)*, A1, Irakleio, 211-218.
- Bettelli M. 1999, Da occidente a oriente: uomini, modelli e manufatti dall'Italia all'Egeo nella tarda età del Bronzo, in V. La Rosa, D. Palermo, L. Vagnetti (eds.), 461-472.
- Bettelli M. 2002, *Italia meridionale e mondo miceneo. Ricerche su dinamiche di acculturazione e aspetti archeologici, con particolare riferimento ai versanti adriatico e ionico della penisola italiana*. Grandi contesti e problemi della protostoria italiana 5, Firenze.
- Bevan A. 2007, *Stone Vessels and Values in the Bronze Age Mediterranean*, Cambridge.
- Bevan A., Kiriati E., Knappett C., Kappa E., Papachristou S. 2002, Excavation of Neopalatial Deposits at Tholos (Kastri), Kythera, *BSA* 97, 55-96.
- Blegen C.W. 1928, The Coming of the Greeks: The Geographical Distribution of the Prehistoric Remains in Greece, *AJA* 32, 146-154.
- Blegen C.W. 1937, *Prosymna: The Helladic Settlement Preceding the Argive Heraeum*, Cambridge.
- Blegen C.W., Caskey J.L., Rawson M. 1953, *Troy III: The Sixth Settlement*. Princeton.
- Blegen C.W., Coulter C., Caskey J. 1958, *Troia IV: Settlements VIIa, VIIb, VIII*, Princeton.
- Boyd Hawes H. et al. 1908, *Gournia, Vasiliki and Other Prehistoric Sites on the Isthmus of Hierapetra, Crete*, Philadelphia.
- Boysal Y. 1969, *Katalog der Vasen in Museum in Bodrum I. Mykenisch-protogeometrisch*, Ankara.
- Branigan K. 2002, Foundations in the Dust? Craft and Technology in Early Minoan II Crete, *Cretan Studies* 7, 33-44.
- Brock J.K. 1949, Excavations in Siphnos, *BSA* 44, 1-92.
- Broodbank C. 1999, Kythera Survey: Preliminary Report on the 1998 Season, *BSA* 94, 191-214.
- Broodbank C. 2000, *An Island Archaeology of the Early Cyclades*, Cambridge.
- Broodbank C. 2004, Minoanisation, *PCPS* 50, 46-91.
- Broodbank C., Kiriati E. 2007, The first "Minoans" of Kythera Revisited: Technology, Demography, and Landscape in Prepalatial Aegean, *AJA* 111, 241-274.
- Broodbank C., Kiriati E., Rutter J.B. 2005, From Pharaoh's Feet to the Slave-Women of Pylos? The History and Cultural Dynamics of Kythera in the Third Palace Period, in A. Dakouri-Hild and S.E. Sherratt (eds.), *Autochthon: Papers Presented to O.T.P.K. Dickinson on the Occasion of his Retirement*, *BAR International Series* 1432, Oxford, 70-96.
- Buchholz H.G. 1973, Grey Trojan Ware in Cyprus and North Syria, in R.A. Crossland, and A. Birchall (eds.), *Bronze Age Migrations in the Aegean. Archaeological and Linguistic Problems in Greek prehistory*, London, 179-187.
- Carancini G.L., Peroni R. 1997, La koinè metallurgica, in M. Bernabò Brea, A. Cardarelli, M. Cremaschi (eds.), *Le Terramare. La più antica civiltà padana*, Milano, 595-601.
- Carrington-Smith J. 1975, *Spinning, weaving and textile production in prehistoric Greece*. Ph.D. diss. of the University of Tasmania, Hobart.
- Caskey J.L. 1956, Excavations at Lerna, 1955, *Hesperia* 25, 25-49.
- Coldstream J.N., Huxley G.L. 1972, *Kythera: Excavations and Studies Conducted by the University of Pennsylvania Museum and the British School at Athens*, London.
- Crego D.M. 2007, Exchange in Period IV at Ayia Irini on Kea, in Felten F., Gauß W., and Smetana R. (eds.), 331-336.
- Cultraro M. 2006, L'askos a collo cilindrico nel repertorio vascolare del Bronzo Recente e Finale siciliano: origine della forma e articolazione tipo-cronologica, in *Studi in onore di Renato Peroni*, Firenze, 365-371.
- Cummer W.W., Schofield E. 1984, *Keos III. Ayia Irini: House A*, Mainz on Rhine.
- D'Agata A.L., Moody J. (eds.) 2005, *Ariadne's Threads: Connections between Crete and the Greek Mainland in the Postpalatial Period (LM IIIA2 to LM IIIC)*, Athens.

- Dawkins R.M., Droop J.P. 1910-11, Excavations at Phylakopi in Melos, 1911, *BSA* 17, 1-22.
- Day P.M., Relaki M., and Faber E.W. 2006, Pottery Making and Social Reproduction in the Bronze Age Mesara, in M.H. Wiener et al. (eds.), *Pottery and Society. The Impact of Recent Studies in Minoan Pottery. Gold Medal Colloquium in Honor of Philip P. Betancourt. 104th Annual Meeting of the Archaeological Institute of America, New Orleans, 5 January 2003*, Boston, 22-72.
- Day P.M., Wilson D.E., and Kiriati E. 1997, Reassessing Specialization in Prepalatial Cretan Ceramic Production, in R. Laffineur and P.P. Betancourt (eds.), *TEXNH: Craftsmen, Craftswomen and Craftsmanship in the Aegean Bronze Age, Aegaeum* 16, Liège, 275- 289.
- Dessenne A. 1959, *Fouilles Exécutées à Malia. Explorations des Maisons et Quartiers d'Habitation*, EtCret XI, Paris.
- Dickinson O.T.P.K. 1977, *The Origins of Mycenaean Civilization*, Göteborg.
- Dickinson O.T.P.K. 1996, Minoans in Mainland Greece, Mycenaeans in Crete?, *Cretan Studies* 5, 63-71.
- Dietz S. 1987, Some Notes on the Pattern of Foreign Influence in the B Circle at Mycenae (The Ceramic Evidence), in *Kolloquium zur ägäischen Vorgeschichte, Mannheim, 20.-22.2.1986. Schriften des deutschen Archäologen-Verbandes*, IX, 113-119.
- Dietz S. 1998, The Cyclades and the Mainland in the Shaft Grave Period - A Summary, *Proceedings of the Danish Institute at Athens* 2, 9-36.
- Driessen J., Farnoux A. (eds.) 1997, *La Crète mycénienne: Actes de la Table Ronde Internationale organisée par l'École française d'Athènes (26-28 Mars 1991)*, *BCH Supplément* 30, Athènes.
- Eder B., Jung R. 2005, On the Character of Social Relations between Greece and Italy in the 12th/11th C. BC., in R. Laffineur, E. Greco (eds.), 485-495.
- Evans A. 1905, *The Prehistoric Tombs at Knossos*, *Archaeologia* 59:2.
- Evans A. 1928, *The Palace of Minos* II, London.
- Felten F., Gauß W., and Smetana R. (eds.) 2007, *Middle Helladic Pottery and Synchronisms. Proceedings of the International Workshop held at Salzburg, October 31st-November 2nd, 2004*, Ägina-Kolonna, Forschungen und Ergebnisse 1, Wien.
- Forsdyke E.J. 1926-27, The Mavro Spelio Cemetery at Knossos, *BSA* 28, 243-296.
- Frödin O., Persson A.W. 1938, *Asine. Results of the Swedish Excavations, 1922-1930*, Stockholm.
- Furumark A. 1941, *The Mycenaean Pottery. Analysis and Classification*, Stockholm.
- Furumark A. 1992, *Mycenaean Pottery III. Plates*, Stockholm.
- Gale N.H. 1990, The Provenance of Metals for EBA Crete - Local or Cycladic?, in *Ζ' Διεθνές, Κρητολογικό Συνέδριο*, A1, Chania, 299-316.
- Gale N.H., Stos-Gale Z.A. 1981, Cycladic Lead and Silver Metallurgy, *BSA* 76, 169-224.
- Gale N.H., Stos-Gale Z.A., Davis J.L. 1984, The Provenance of Lead Used at Ayia Irini, Keos, *Hesperia* 53, 389-406.
- Gauß W. 2006, Minos auf Ägina – Beobachtungen zu den Beziehungen Ägina zu Kreta, in E. Czerny et al. (eds.), *Timelines. Studies in Honour of Manfred Bietak*, *Orientalia Lovanensia Analecta* 149:2, Leuven, 435-446.
- Gauß W., Smetana R. 2007, Aegina Kolonna, the Ceramic Sequence of the SCIEM 2000 Project, in Felten F., Gauß W., and Smetana R. (eds.), 53-80.
- Girella L. 2001, Alcune considerazioni in margine al MM III: Archanes e Festòs, *Creta Antica* 2, 57-69.
- Girella L. 2005, Ialysos, foreign relations in the Late Bronze Age. A Funerary Perspective, in R. Laffineur, E. Greco (eds.), 129-139.
- Girella L. 2007a, Toward a definition of the Middle Minoan III ceramic sequence in South-Central Crete: returning to the traditional MM IIIA and IIIB division?, in Felten F., Gauß W., and Smetana R. (eds.), 233-255.
- Girella L. 2007b, A Survey of Grey Wares on Crete in the Middle and Late Bronze Age, 23 Jun. 2007. Aegeo-Balkan Prehistory: http://www.aegeobalkanprehistory.net/article.php?id_art=2.
- Girella L. forthcoming, MH III and MM III: Ceramic synchronisms in the transition to the

- Late Bronze Age, in G. Touchais *et al.* (eds.), *MESOHELLADIKA. The Greek Mainland in the Middle Bronze Age. International Conference, Athens, 8-12 March 2006*, BCH Suppl., Athens.
- Graziadio G. 1999, L'adozione della wishbone handle nell'Egeo: un aspetto trascurato dei rapporti cipro-egrei, in V. La Rosa, D. Palermo, L. Vagnetti (eds.), 365-377.
- Graziadio G. 2005, Relations between the Aegean and Cyprus at the Beginning of LBA: An Overview of the Archaeological Evidence, in R. Laffineur, E. Greco (eds.), 323-334.
- Hägg R. 1982, On the Nature of the Minoan Influence in Early Mycenaean Messenia, *OpAth* 14, 27-37.
- Haggis D.C. 2002, Integration and Complexity in the Late Prepalatial Period: A View from the Countryside in Eastern Crete, in Y. Hamilakis (ed.), *Labyrinth Revisited. Rethinking 'Minoan' Archaeology*, Oxford, 120-142.
- Hallager B.P. 1983, Italians in Late Bronze Age Khania, in *Magna Grecia e Mondo Miceneo. Atti del XXII Convegno di Studi sulla Magna Grecia, Taranto 7-11 ottobre 1982*, Taranto, 358-363.
- Hallager B.P. 1985, Crete and Italy in the Late Bronze Age III Period, *AJA* 89, 293-305.
- Hallager B.P. 1993, Mycenaean Pottery in Crete, in Zerner C.W., Zerner P., and Winder J. (eds.), 263-269.
- Hallager B.P. 2003, Late Minoan IIIB2 and Late Minoan IIIC Pottery in Khania, in S. Deger-Jalkotzy and M. Zavadil (eds.), *LH IIIC Chronology and Synchronisms. Proceedings of the International Workshop held at the Austrian Academy of Sciences at Vienna, May 7th and 8th, 2001*, Wien, 105-116.
- Hallager B.P. 2005, The Synchronisms Mainland-West Crete in the LM IIIA2-IIIB Period, in D'Agata A.L., Moody J. (eds.), 277-292.
- Hallager E. 2001, A Waste Deposit from a LBA-Shrine in Khania?, in R. Laffineur and R. Hägg (eds.), *Potnia. Deities and Religion in the Aegean Bronze Age. 8th International Aegean Conference, Göteborg, 12-15 April 2000*, *Aegaeum* 22, Liège, 175-180.
- Hallager E., Hallager B.P. 2000, *The Greek-Swedish Excavations at the Agia Aikaterini Square Kastelli, Khania 1970-1987. The Late Minoan IIIC Settlement*. Vol. II. Stockholm.
- Hallager E., Hallager B.P. 2003, *The Greek-Swedish Excavations at the Agia Aikaterini Square Kastelli, Khania 1970-1987 and 2001. The Late Minoan IIIB:2 Settlement*. Vol. III. Stockholm.
- Hamilakis Y. 1996, Wine, Oil and the Dialectics of Power in Bronze Age Crete: A Review of the Evidence, *OJA* 16.1, 1-32.
- Hiller S. 1993, Minoan and Minoanizing Pottery on Aegina, in Zerner C.W., Zerner P., and Winder J. (eds.), 197-199.
- Hiller S. 1996, Knossos and Pylos. A Case of Special Relationship?, *Cretan Studies* 5, 73-83.
- Hood S.F. 1971, An Early Helladic III import at Knossos and Anatolian connections, in *Mélanges de préhistoire d'archéocivilisation et d'ethnologie offerts à André Varagnac*, Paris, 427-436.
- Hood S.F. 1982, *Prehistoric Emporio and Ayio Gala. Excavations in Chios 1938-1955, Volume II*. BSA, Suppl. 16, London.
- Hood S.F., Smyth D. 1981, *Archaeological Survey of the Knossos Area*, BSA Supplementary Volume 14, London.
- Hutchinson R.W. 1939-40, Unpublished objects from Palaikastro and Praisos, *BSA* 40, 38-50.
- Jung R. 2002, *Kastanas. Ausgrabungen in einem Siedlungshügel der Bronze- und Eisenzeit Makedoniens 1975-1979. Die Drehscheibenkeramik der Schichten 19 bis 11*. Prähistorische Archäologie in Südosteuropa 18, Kiel.
- Jung R. 2006, *XΠΟΝΟΛΟΓΙΑ COMPARATA. Vergleichende Chronologie von Südgriechenland und Süditalien von ca. 1700/1600 bis 1000 v.u. Z.*, Wien.
- Kalogeropoulos K. 1998, *Die frühmykenischen Grabfunde von Analipsis (Südöstliches Arkadien)*, Bibliothek der Archäologischen Gesellschaft zu Athen BD. 175, Athen.
- Kanta A. 1980, *The Late Minoan III Period in Crete. A Survey of Sites, Pottery, and their Distribution*, SIMA 58, Göteborg.

- Khatzidakis I. 1912, Τύλισος Μινωϊκή, *ArchEph* 51, 197-233.
- Kilian K. 1988a, Mycenaeans Up To Date. Trends and Changes in Recent Research, in L.B. French and K.A. Wardle (eds.), *Problems in Greek Prehistory. Papers Presented at the Centenary Conference of the British School of Archaeology at Athens, Manchester, April 1986*, Bristol, 115-152.
- Kilian K. 1988b, Ausgrabungen in Tiryns 1982/3. Bericht zu den Grabungen, *AA*, 105-151.
- Kilian-Dirlmeier I. 1997, *Alt-Ägina IV/3. Das mittelbronzezeitliche Schachtgrab von Ägina*. Kataloge vor- und frühgeschichtlicher Altertümer 27, Mainz.
- Kiriati E. 2003, Sherds, Fabrics and Clay Sources: Reconstructing the Ceramic Landscapes of Prehistoric Kythera, in R. Laffineur, K. Foster (eds.), *METRON: Measuring the Aegean Bronze Age, Aegaeum* 24, Liège and Austin, 123-130.
- Knapp A.B. 1998, Mediterranean Bronze Age Trade: Distance, Power, and Place, in E.H. Cline and D. Harris-Cline (eds.), *The Aegean and the Orient in the Second Millennium: Proceedings of the 50th Anniversary Symposium, Cincinnati, 18-20 April 1997, Aegaeum* 18. Liège and Austin, 193-207.
- Knappett C., Nikolakopoulou I. 2005, Exchange and Affiliation Networks in the MBA Southern Aegean: Crete, Akrotiri and Miletus, in R. Laffineur, E. Greco (eds.), 175-183.
- Knigge U, Stichel R.H.W., Woyski K. 1978, Kerameikos. Tätigkeitsbericht 1975/76, *AA* 44-67.
- Korres G.K. 1993, Messenia and its Commercial Connections in the Bronze Age, in Zerner C.W., Zerner P., and Winder J. (eds.), 237-239.
- Kramer J.L. 2004, *Analysis and Classification of the Late Helladic I Pottery in the Northeastern Peloponnese of Greece*, Ph.D. Dissertation, University of Cincinnati.
- Laffineur R., Greco E. (eds.) 2005, *EMPORIA. Aegeans in Central and Eastern Mediterranean. 10th International Aegean Conference, Athens, 14-18 April 2004, Aegaeum* 25, Liège and Austin.
- Lamb W. 1931-32, Antissa, *BSA* 32, 41-67.
- Lamb W. 1936, *Excavations at Thermi on Lesbos*, Cambridge.
- La Rosa V. 1986, Le nuove indagini ad Haghia Triada, in *Z' Διεθνές Κρητολογικό Συνέδριο, Heraklion*, 190-198.
- La Rosa V. 2002, Le campagne di scavo 2000-2002 a Festòs, *ASAtene* 80, 635-869.
- La Rosa V., Palermo D., Vagnetti L. 1999, *Επί πόντον πλαζόμενοι. Simposio italiano di studi egei dedicato a L. Bernabò Brea e G. Pugliese Caratelli, Roma 18-20 febbraio 1998*, Roma.
- Levi D., Carinci F. 1988, *Festòs e la civiltà minoica*, II2, Roma.
- Macdonald C.F. 1996, Notes on Some Late Minoan IA Contexts from the Palace of Minos and its Immediate Vicinity, in D. Evely, I. Lemos, and S. Sherratt (eds.), *Minotaur and Centaur. Studies in the Archaeology of Crete and Euboea presented to Mervyn Popham*, *BAR IS* 638, Oxford, 17-26.
- MacGillivray J.A. 1998, *Knossos: Pottery Groups of the Old Palace Period*, *BSA Studies* 5, London.
- Manning S. 1994, The Emergence of Divergence: Development and Decline on Bronze Age Crete and the Cyclades, in C. Mathers and S. Stoddart (eds.), *Development and Decline in the Mediterranean Bronze Age, Sheffield Archaeological Monograph* 8, Sheffield, 221-270.
- Maran J. 1992a, *Pevkakia-Magula III. Die mittlere Bronzezeit*, Bonn.
- Maran J. 1998, *Kulturwandel auf dem griechischen Festland und den Kykladen im späten 3. Jahrtausend v. Chr. Studien zu den kulturellen Verhältnissen in Südosteuropa und dem zentralen sowie östlichen Mittelmeerraum in der späten Kupfer- und frühen Bronzezeit*, Bonn.
- Marinatos S. 1927-28, Υστερομινωϊκός λαξευτός τάφος εν Καρτερώ Κρήτης, *ArchDelt* 11, 68-90.
- Matthäus H. 1980a, *Die Bronzegefäße der kretisch-mykenischen Kultur*, PBF II-1, München.
- Matthäus H. 1980b, Italien und Griechenland in der ausgehenden Bronzezeit. Studien zu einigen Formen der Metallindustrie beider Gebiete, *JdI* 95, 109-139.
- Mauss M. 1970, *The Gift: Forms and Function of Exchange in Archaic Societies*, London.
- Milojčić J. 1955, Einige 'mitteleuropäische' Fremdlinge auf Kreta, *JRGZM* 2, 153-169.
- Misch P. 1992, *Die Askoi in der Bronzezeit*, *SIMA PB* 100, Jonsered.

- Mommsen H., Pavúk P. 2007, Provenance of the Grey and Tan Wares from Troia, Cyprus and Levant. The Contribution of Neutron Activation Analysis, *Studia Troica* 17, 25-41.
- Monaco G. 1941, Scavi nella zona micenea di Jaliso 1935-36, *Clara Rhodos* 10, 41-183.
- Morricone L. 1965-66, Eleona e Langada: sepolcreti della tarda età del Bronzo a Coò, *ASAtene* 43-44, 5-311.
- Mountjoy P. 1999, The Destruction of Troia VIh, *Studia Troica* 9, 253-293.
- Mylonas G. 1975, *Το δυτικόν νεκροταφείον της Ελευσίνας*, Atene.
- Nikolakopoulou I. 2007, Aspects of Interaction between the Cyclades and the Mainland in the Middle Bronze Age, in Felten F., Gauß W., and Smetana R. (eds.), 347-359.
- Overbeck J.C. 1989a, *The Bronze Age Pottery from the Kastro at Paros*, SIMA – PB 78, Jonsered.
- Overbeck J.C. 1989b, *Ayia Irini: Period IV. Part 1: The stratigraphy and the find deposits*, Mainz.
- Panagiotakis N. 2003, L'évolution archéologique de la Pédiada (Crète centrale): premier bilan d'une prospection, *BCH* 127, 327-430.
- Panagiotakis N. 2004, Contacts Between Knossos and the Pediada Region in Central Crete, in G. Cadogan, E. Hatzaki and A. Vasilaki (eds.), *Knossos: Palace, City, State. Proceedings of the Conference in Herakleion organized by the British School at Athens and the 23rd Ephoria of Prehistoric and Classical Antiquities of Herakleion, in November 2000, for the Centenary of Sir Arthur Evans's Excavations at Knossos*, BSA Studies 12, London, 147-150.
- Panagiotakis N. 2006, Οικιστική τοπογραφία στην επαρχία Πεδιάδος απο τη νεολιθική ως την ύστερη εποχή του χαλκού, in *Θ' Διεθνές Κρητολογικό Συνέδριο (Ελούντα, 1-6 Οκτωβρίου 2001)*, A2, Heraklion, 167-182.
- Panagiotaki M. 1999, *The Central Palace Sanctuary at Knossos*, BSA Suppl. 31, London.
- Papagiannopoulou A.G. 1991, *The Influence of Middle Minoan Pottery on the Cyclades*, SIMA – PB 96, Göteborg.
- Pavúk P. 2002a, Troia VI and VIIa. The Blegen Pottery Shapes: Towards a Typology, *Studia Troica* 12, 35-71.
- Pavúk P. 2002b, Das Aufkommen und die Verbreitung der Grauminoischen Ware in Westanatolien, in H. Blum, B. Faist, P. Pfälzner, and A.-M. Wittke (eds.), *Brückenland Anatolien? Ursachen, Extensität und Modi des Kulturaustausches zwischen Anatolien und seinen Nachbarn*, Tübingen, 99-115.
- Pavúk P. 2005, Aegeans and Anatolians. A Trojan Perspective, in R. Laffineur, E. Greco (eds.), 269-279.
- Pavúk P. forthcoming, Minyan or not. The second millennium Grey Ware in western Anatolia and its relation to Mainland Greece, in G. Touchais *et al.* (eds.), *MESOHELLADIKA. The Greek Mainland in the Middle Bronze Age. International Conference, Athens, 8.-12. March 2006*, Athens.
- Pernicka E., Wagner G.A. 1985, Die metallurgische Bedeutung von Sifnos im Altertum, in G.A. Wagner and G. Weisgerber (eds.), *Silber, Blei und Gold auf Sifnos: Prähistorische und antike Metallproduktion (Der Anschnitt, Beiheft 3)*, Bochum, 200-211.
- Peroni R., Trucco F., Vagnetti L. 1985, Broglio di Trebisacce (CS), in M. Marazzi, S. Tusa, and L. Vagnetti (eds.), *Traffici micenei nel Mediterraneo: problemi storici e documentazione archeologica. Atti del convegno di Palermo, Maggio 11-12 e Dicembre 3-6, 1984*. Istituto per la storia e l'archeologia della Magna Grecia, Taranto, 55-69.
- Philippa-Touchais A. 2003, Aperçu des céramiques mésohelladiques à décor peint de l'Aspis d'Argos, II. La céramique à peinture lustrée, *BCH* 127, 1-47.
- Platon N. 1952, Ανασκαφή ΥΜ ΙΙΙ λαξευτών τάφων εις την περιοχήν Επισκοπής και Σταμνιών Πεδιάδος Ηρακλείου, *Prakt* 108, 619-630.
- Popham M.R. 1974, Sellopoulo Tombs 3 and 4. Two Late Minoan Graves near Knossos, *BSA* 69, 195-257.
- Popham M.R. *et al.* 1984, *The Minoan Unexplored Mansion at Knossos*, BSA Suppl. 17, London.
- Preston L. 2004, A Mortuary Perspective on Political Changes in Late Minoan II-III B Crete, *AJA* 108, 321-348.

- Rambach J. 2007, Investigations of the two MH I Burial Mounds at Messenian Kastroulia (Near Ellinika, Ancient Thouria), in Felten F., Gauß W., and Smetana R. (eds.), 137-150.
- Rehak P., Younger J.G. 2001, Review of Aegean Prehistory VII: Neopalatial, Final Palatial, and Postpalatial Crete, in T. Cullen (ed.), *Aegean Prehistory. A Review*, AJA Suppl. 1, Boston, 383-465.
- Rubensohn O. 1917, Die prähistorischen und frühgeschichtlichen Funde auf dem Burghügel von Paros, *AM* 49, 1-98
- Rutter J.B. 1979, Stone Vases and Minyan Ware: A Facet of Minoan Influence on Middle Helladic Laconia, *AJA* 83, 464-469.
- Rutter J.B. 1983a, Fine Gray-Burnished Pottery of the Early Helladic III Period: The Ancestry of Gray Minyan, *Hesperia* 52, 327-355.
- Rutter J.B. 1983b, Some observations on the Cyclades in the Later Third and Early Second Millennia, *AJA* 87, 69-74.
- Rutter J.B. 1986, Some Comments on the Nature and Significance of the Ceramic Transition from Early Helladic III to Middle Helladic, *Hydra* 2, 29-57.
- Rutter J.B. 1995, *Lerna III. The Pottery of Lerna IV*, Princeton.
- Rutter J.B. 1999, Cretan External Relations during Late Minoan IIIA2-B (ca. 1370-1200 BC): A View from the Mesara, in W. Phelps, Y. Lolos, and Y. Vichos (eds.), *The Point Iria Wreck: Interconnections in the Mediterranean ca. 1200 B.C. Proceedings of the International Conference, Island of Spetses, 19 Sept. 1998*, Athens, 139-186.
- Rutter J.B. 2005, Southern Triangles Revisited: Laconia, Messenia, and Crete in the 14th – 12th Centuries B.C., in A.L. D'Agata and J. Moody (eds.), 17-50.
- Rutter J.B. 2006a, Minoan Pottery from the Southern Area: Neopalatial and Late Minoan Pottery, in J.W. Shaw and M.C. Shaw (eds.), *Kommos V. The Monumental Minoan Buildings at Kommos*, Princeton and Oxford, 377-630.
- Rutter J.B. 2006b, Ceramic Imports of the Neopalatial and Later Bronze Age Eras, in J.W. Shaw and M.C. Shaw (eds.), *Kommos V. The Monumental Minoan Buildings at Kommos*, Princeton and Oxford, 646-688.
- Rutter J.B., Rutter S.H. 1976, *The Transition to the Mycenaean. A Stratified MH II to LH IIA Pottery Sequence from Ayios Stephanos in Lakonia*, Los Angeles.
- Rutter J.B., Zerner C.W. 1984, Early Hellado-Minoan Contacts, in R. Hägg and N. Marinatos (eds.), *The Minoan Thalassocracy: Myth and Reality. Proceedings of the 3rd International Symposium at the Swedish Institute in Athens, 31 May-5 June 1982*, Stockholm, 75-82.
- Sahlins M. 1972, *Stone Age Economics*, Chicago.
- Sapouna-Sakellarakis E. 1978, *Die Fibeln der griechischen Inseln*, PBF XIV.4, München.
- Sarri K. 1998, *Orchomenos in der mittleren Bronzezeit*, Ph.D. dissertation, University of Heidelberg.
- Scholes K. 1956, The Cyclades in the Later Bronze Age: A Synopsis, *BSA* 51, 9-40.
- Smith R.A.K. 2005, Minoans, Mycenaean and Mochlos: The Formation of regional Identity in Late Minoan III Crete, in A.L. D'Agata and J. Moody (eds.), 185-204.
- Sherratt S. 2000, Circulation of metals and the end of the Bronze Age in the Eastern Mediterranean, in C.F.E. Pare (ed.), *Metals Make the World Go Round: The Supply and Circulation of Metals in Bronze Age Europe. Proceedings of a conference held at the University of Birmingham in June 1997*, Oxford, 82-98.
- Sherratt A., Sherratt S. 1991, From Luxuries to Commodities: The Nature of Mediterranean Bronze Age Trading Systems, in N. Gale (ed.), *Bronze Age Trade in the Mediterranean*, Jonsered, 351-386.
- Stos-Gale Z.A., Gale N.H. 1983, The Minoan Thalassocracy and the Aegean Metal Trade, in R. Hägg and N. Marinatos (eds.), *The Minoan Thalassocracy: Myth and Reality Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May - 5 June 1982*, Göteborg, 59-64.
- Taylor W.D. 1972, Excavations at Ayios Stephanos, *BSA* 67, 205-270
- Tsipopoulou M. 1995, Late Minoan III Sitia. Patterns of Settlement and Land Use, in M. Tsipopoulou and L. Vagnetti (eds.), *Achlada. Scavi e Ricerche della Missione Greco-Italiana in Creta Orientale (1991-1993)*, Roma, 177-192.

- Tsipopoulou M. 2005, 'Mycenoans' at the Isthmus of Ierapetra: Some (Preliminary) thoughts on the Foundation of the (Eteo) Cretan Cultural Identity, in A. L. D'Agata and J. Moody (eds.), 303-333.
- Tsipopoulou M., Vagnetti L. 1994, A Late Minoan III Grey Wheel-Made Piriform Jar from Eastern Crete, *SMEA* 34, 43-50.
- Tzedakis Y., Vagnetti L. et al. 1989, *Scavi a Nerokourou, Kydonia*, I, Roma.
- Vagnetti L. 1985, Late Minoan III Crete and Italy: another view, *PP*, 29-33.
- Van de Moortel A. 2006, Ceramic Imports at Kommos. Ceramic Imports of the Protopalatial Era, in J.W. Shaw and M.C. Shaw (eds.), *Kommos V. The Monumental Minoan Buildings at Kommos*, Princeton and Oxford, 630-646.
- Walberg G. 1976, *Kamarea: A Study of the Character of Palatial Middle Minoan Pottery*. Acta Universitatis Upsaliensis, Boreas 8, Uppsala.
- Warren P.M. 1969, *Minoan Stone Vases*, Cambridge.
- Watrous L.V. 1989, A Preliminary Report on Imported 'Italian' Wares from the Late Bronze Age Site of Kommos on Crete, *SMEA* 27, 69-80.
- Watrous L.V. 1992, *Kommos III. The Late Bronze Age Pottery*, Princeton.
- Watrous L.V. 1993, Cretan Relations with the Aegean in the Late Bronze Age, in Zerner C.W., Zerner P., and Winder J. (eds.), 81-90.
- Watrous L.V. 2001, Review of Aegean Prehistory III: Crete from Earliest Prehistory through the Protopalatial Period, in T. Cullen (ed.), *Aegean Prehistory. A Review*, *AJA* Suppl. 1, Boston, 157-215.
- Watrous L.V. 2004, State Formation (Middle Minoan IA), in L.V. Watrous, D. Hadzi-Vallianou, and H. Blitzer (eds.), *The Plain of Phaistos. Cycles of Social Complexities in the Mesara Region of Crete*, Los Angeles, 153-176.
- Wilson D.E., Day P.M. 1994, Ceramic Regionalism in Prepalatial Central Crete: The Mesara Imports from EM IB to EM IIA Knossos, *BSA* 89, 1-87.
- Zerner C.W. 1978, *The Beginning of the Middle Helladic Period at Lerna*, Ph.D. dissertation, University of Cincinnati (University Microfilms 79-04772).
- Zerner C.W. 1988, Middle Helladic and Late Helladic I Pottery from Lerna: Part II, *Hydra* 4, 1-10.
- Zerner C.W. 1990, Ceramic and Ceremony: Pottery and Burials from Lerna in the Middle and Early Late Bronze Ages, in R. Hägg and G.C. Nordquist (eds.), *Celebration of Death and Divinity in Bronze Age Argolid. Proceedings of the Sixth International Symposium at the Swedish Institute at Athens, 11-13 June 1988*, Athens, 23-34.
- Zerner C.W. 1993, New Perspectives on Trade in the Middle and Early Late Helladic Periods on the Mainland, in C.W. Zerner, P. Zerner, and J. Winder (eds.), 39-56.
- Zerner C.W. unpublished manuscript, *Lerna V: Area D*.
- Zerner C.W., Zerner P., and Winder J. (eds.) 1993, *Wace and Blegen: Pottery as Evidence for Trade in the Aegean Bronze Age 1939-1989. Proceedings of the International Conference held at the American School of Classical Studies, Athens, Dec. 2-3, 1989*, Amsterdam.