

Consuming power: Kamares Ware in Protopalatial Knossos

PETER M. DAY & DAVID E. WILSON*

A new study of Kamares ware, integrating stylistic and petrographic analysis, suggests that Protopalatial Knossos was a centre of ritual consumption rather than production, obtaining some of its specialized vessels for drinking and feasting ceremonies from production centres elsewhere in central Crete.

Key-words: Aegean, Crete, Bronze Age, Knossos, Kamares Ware

Introduction

Around 1900 BC, shortly after the beginning of Middle Minoan in ceramic terms, the first palaces on Crete were constructed at Knossos and Phaistos (for locations see FIGURE 1). This marked the advent of what is known as the Protopalatial period. Despite the poor preservation of the early form of these palaces and an even greater dearth of information regarding the settlements which immediately preceded them, the mobilization of labour implied by the appearance of such monumental architecture was taken to indicate a watershed in terms of societal complexity (Cherry 1986: 21, 27). The palaces and their contents have been seen as directly reflecting economic power and control in terms of the production and/or redistribution of agricultural goods and items of material culture (Renfrew 1972: 296–7).

The appearance of the palaces marks the introduction of large, central buildings which use repeated architectural elements and formulae to create ceremonial space. That these either housed or represented a powerful élite has formed a fulcrum for the interpretation of Middle and Late Bronze Age (LBA) society not only in Crete, but also in the broader Aegean world.

An evolutionary view-point sees the introduction of the palaces as the result of a progression from a relatively simple level of

socio-economic organization, based on reciprocity, to a complex system of the redistribution of goods whose circulation was effected and controlled by a central authority. The application of the label 'palace' to a number of successive buildings spanning the Middle and the beginning of the Late Bronze Age has obscured basic organizational differences between them. It is undeniable that the Linear B administrative archive of LBA Knossos shows a central authority controlling the movement of goods from outlying areas, as shown by specialist craft workshops of that period. Yet the function of the final use of the LBA palace has formed the basis of the assumption that the earlier Protopalatial palace structures were used in a similar fashion as primarily storage and re-distribution centres for the produce of the hinterland and as craft production centres (Renfrew 1972: 296–7).

While the exact size and plan of the palace at Knossos in its original form during Middle Minoan may never be reconstructable (MacGillivray 1994), the rich ceramic deposits associated with successive phases of construction and rebuilding of this First Palace provide invaluable evidence for the meaning and function of the building and the surrounding settlement. Large deposits of drinking and pouring vessels were found both within the palace in successive destruction horizons or outside,

* Day, Sheffield Centre for Aegean Archaeology, Department of Archaeology & Prehistory, University of Sheffield, Northgate House, West Street, Sheffield S1 4ET, England. p.m.day@sheffield.ac.uk
Wilson, Department of Classical Studies, University of Western Ontario, London, Ontario, Canada N6A 3K7. dwilson@julian.uwo.ca

Received 13 September 1997, accepted 15 December 1997, revised 4 February 1998.

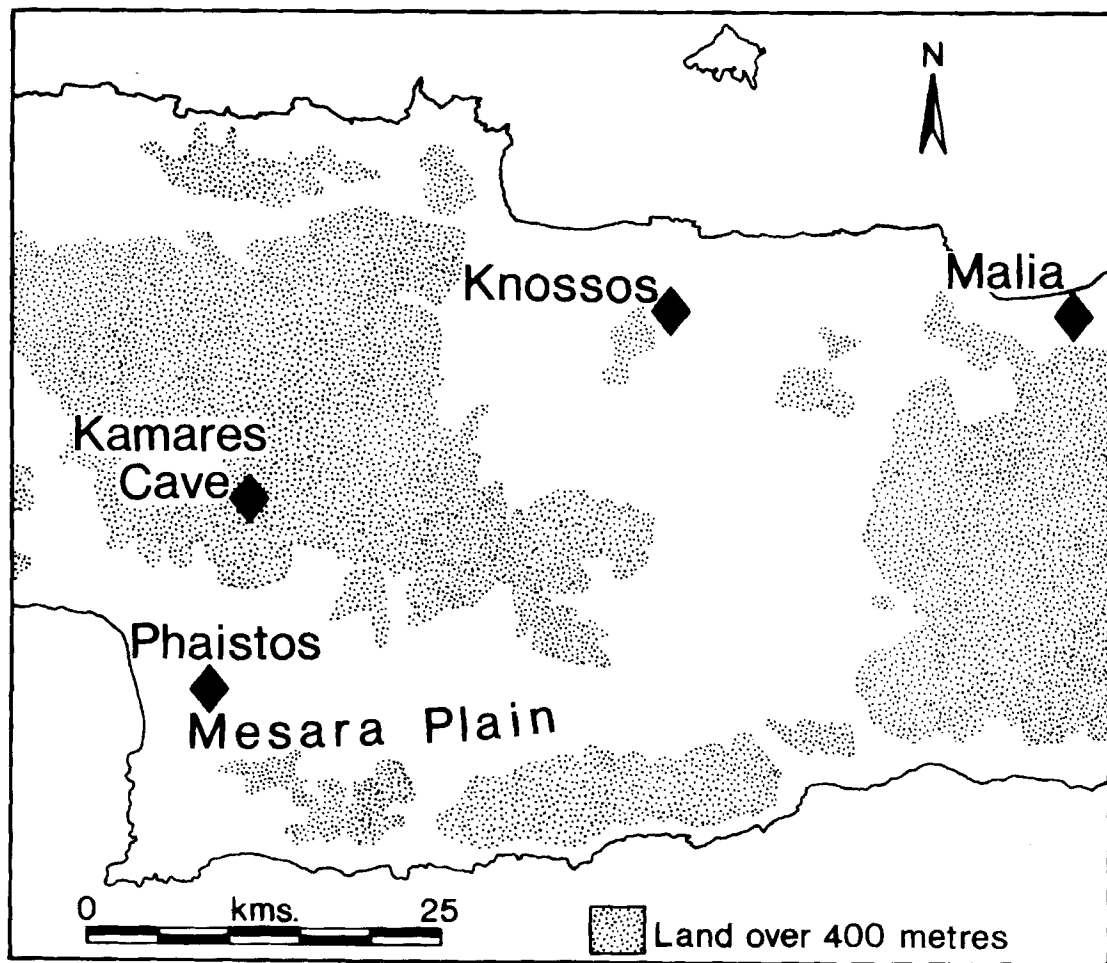


FIGURE 1. Map of central Crete showing locations mentioned in the text.

mainly as fills, the largest of which were sealed beneath the later West Court of the new palace building. While none of this pottery appears to come from its primary context of use, its sizable quantities and function suggest some form of large-scale, possibly ceremonial consumption of drink.

In this article we consider Kamares Ware: the high-quality, polychrome decorated pottery which can be argued to be symbolic of hierarchy and power in the Protopalatial period. The economic role of the Minoan palace is much debated, although most argue for its role as a centre of both the redistribution of subsistence goods and the production of specialized craft objects (e.g. Branigan 1987). It must be emphasized, however, that there is little, if any, clear

evidence for pottery manufacture in Middle Minoan Central Crete (although see Carinci 1997) and the find contexts of Kamares Ware tell us where it was being consumed, but not necessarily where it was produced.

Defining Kamares Ware

The use of the term 'Kamares Ware' can be problematic (MacGillivray 1986; *in press*), but most would agree on the general criteria we outline below for describing a characteristic technique of decorating pottery found in restricted contexts in Middle Minoan. Kamares Ware was named after the sacred cave on the southern flank of the Idaean mountain range in which it was first found in 1890 (Mariani 1895; Dawkins & Laistner 1912–13: 1–2, 13–21). Shortly after,

excavations of the palace sites of Phaistos and Knossos uncovered substantial deposits of this same ware. Its restricted distribution to the Kamares Cave and these two palace sites in Central Crete, with only rare finds elsewhere, suggested its largely palatial and, therefore, élite nature. Recent discoveries have shown that it has a broader distribution than previously thought, but outside the palatial centres does not appear to be common and may occur in very restricted contexts. Kamares Ware in stylistic terms is usually characterized by a black slipped surface with a combination of both abstract and naturalistic motifs in polychrome decoration, normally white and red paint. The finer vessels are wheel-made and a small number of these with remarkably thin walls have been called 'egg-shell ware'. Larger vessels with a coarser fabric are hand-made, but are decorated in a similar fashion to their fine counterparts, forming part of the same group.

The technical accomplishments of this type of pottery, early in the 2nd millennium BC, are notable. The high-quality, metallic black slip is produced by oxidation–reduction–oxidation firing of an iron-rich slip. This technique, along with the production of the red and white colours in the polychrome effect, have been discussed in the light of analytical work (Noll 1982; Betancourt & Swann 1989). Such effects require a detailed technical knowledge and excellent control of firing conditions and, as in the Early Minoan period (Betancourt 1984; Kilikoglou 1994; Day *et al.* 1997), demonstrate substantial investment in both skill and equipment.

The shapes in this ware are based on variations of a few basic types, whose forms reflect their probable role in conspicuous consumption: a variety of drinking cups, the bridge-spouted jar which was a common pouring vessel, beak-spouted jugs, amphorae for liquid storage, large pedestalled serving bowls, low tripod stands or tables and storage *pithoi* (Betancourt 1985: 97–100).

Close similarities in fabric, paint and decoration among these shapes argue for functional sets of vessels made by the same potters or potting group (MacGillivray 1987: 274). That such sets have been found at both Knossos and Phaistos point to a form of social drinking practice, which played an important role in the function and symbolic meaning of these two centres.

Kamares Ware and the location of production

Since the bulk of Kamares Ware has been found at Knossos and Phaistos, the common assumption has been that its production was controlled by these two palace centres, each presumably with its own local production. However, as yet there exists no physical evidence for its production at either site (for Phaistos see Carinci 1997). Much has been made of the supposed coincidence, during MMIB, of the introduction of the potter's wheel in Crete contemporary with the building of the first palaces, the implication being that economic intensification in Minoan society at this time brought about a change in the pottery system. In fact, wheel-made pottery is already present at the end of the Prepalatial period at Knossos, albeit in very limited numbers, as evidenced by a small group of footed goblets in EMIII and MMIA contexts. It is not the introduction of wheel technology at the beginning of Protopalatial, but the marked intensification of its use which is the significant point.

The assumption that Kamares Ware was manufactured in the palace centres has been largely influenced by the economic reading of the Minoan palaces as centres of production and redistribution (e.g. Walberg 1976: 126; Cherry 1986: 37; Halstead 1981). Despite efforts to argue that some built structures within the palaces are concerned with pottery manufacture (e.g. Laffineur 1990), there is no direct evidence for pottery production in the Protopalatial period at Knossos. At Phaistos the presence of wasters of Protopalatial date have suggested pottery production in the vicinity to Carinci (1997), whilst a kiln excavated to the west of the West Court has been re-dated recently to the latest phase of the Protopalatial period (Tomasello 1996). In work assessing the potential of the local environment of Knossos for pottery manufacture, it was suggested that the nearest raw material sources compatible with Minoan pottery found in the palace are located 5 km to the south around Mount Juktas (Day 1988), and a kiln structure has been noted within that area (MacGillivray 1987). Indeed, MacGillivray has suggested dissociating the location of production of Kamares Ware from the palaces themselves, with potters working wherever the environmental conditions were best suited (MacGillivray 1987). However, he felt that pro-

duction might be located near-by each palace and that 'the function of the palaces . . . may not have been to manufacture fine pottery, but to receive it, store it and see to its distribution' (MacGillivray 1987: 277–8). Of course, such a dislocation does not mean a lack of potential control over the producers of this pottery. However, we would argue that the appearance of the finest of these vessels at both Central Cretan palace sites does not imply necessarily that both controlled separate production locations.

It is still the case, however, that although the similarities between Kamares Ware at Knossos and Phaistos are in some cases so close that it is impossible to attribute the origin of production of these vessels to either site (Walberg 1987: 12), with the exception of MacGillivray (1987: 278), this ware is still presumed to have been produced in or near the palace centres where it was consumed. When Kamares Ware has been found outside of Knossos or Phaistos, the assumption has normally been for a palatial origin of manufacture. Examples of this ware from the Kamares Cave are argued to be from Phaistos on the basis of geographical proximity and similarities in style (Walberg 1987: 283). The Kamares Ware from Phaistos and its harbour town at Kommos is identical in style, yet in this case production has been suggested at both sites (Betancourt 1990: 29–30, 33, 36–7). It may be suggested, however, on the basis of stylistic similarities and of its regional distribution, that much of the finest Kamares Ware found at Knossos and Phaistos shared a common origin and may have been made in the same production area in Central Crete.

Some of the polychrome decorated wares found outside Central Crete seem to comprise regional variants. One group from the palace site of Malia to the east (Poursat 1983; 1997) is of local manufacture. A contemporary, polychrome style, whose centre of production has been convincingly argued to be in East Crete, has a distribution which includes Knossos and as far afield as Egypt (Floyd 1997; for Knossos now add Momigliano & Wilson 1996: P7, 9, 10).

The symbolic associations of Kamares Ware in Central Crete formed an important aspect of Cherry's ideas of 'peer polity interaction'. According to his model (Cherry 1986), Knossos and Phaistos would have been in competition in many spheres, amongst which was their ability to produce fine craft items for ceremo-

nial and élite use. With regard to Kamares Ware he states (Cherry 1986, 37, *our italics*):

Very significantly, neither site can be regarded as the originator of the style: it emerged with the palaces themselves *in more than one polity*.

The palatial workshops of these two central Cretan palaces were argued to have produced ceramics in competitive emulation (Cherry 1986: 37–8). That control of craft production and access to technical knowledge both expresses and increases social prestige and power is clear, yet Helms has stressed that the acquisition of finished products from outside one's community is in some cases as prestigious as the control of craftspeople themselves (Helms 1993: 160–70). Therefore the effect of an élite either obtaining Kamares Ware from elsewhere or producing it locally may have been much the same in terms of prestige, yet its origin of manufacture is important for our understanding of whether these palace structures in the Protopalatial period really were centres of ceramic production, or its control, rather than consumption. Raw material sources and patterns of their manipulation show striking diachronic consistency in the Minoan period, suggesting that at least some locations of manufacture were consistent over long periods of time, but such patterns give us little concrete evidence as to whether such craftspeople were attached or independent.

Ceramic analysis in central Crete: the picture in the Prepalatial period

We have outlined above the link that has been made between Kamares Ware and the establishment of the palaces. To consider this further, it is instructive to ask about the nature of pottery production and consumption prior to the palatial period.

Recently major projects have been carried out on the production and distribution of pottery in East and Central Crete during the Prepalatial period, using detailed stylistic, petrographic, elemental and scanning electron microscope analyses (Wilson & Day 1994; Day *et al.* 1997; Whitelaw *et al.* 1997). Results of these studies to date have shown that, rather than the anticipated pattern of most communities or households producing pottery for their own use, already in Early Minoan I and II pro-

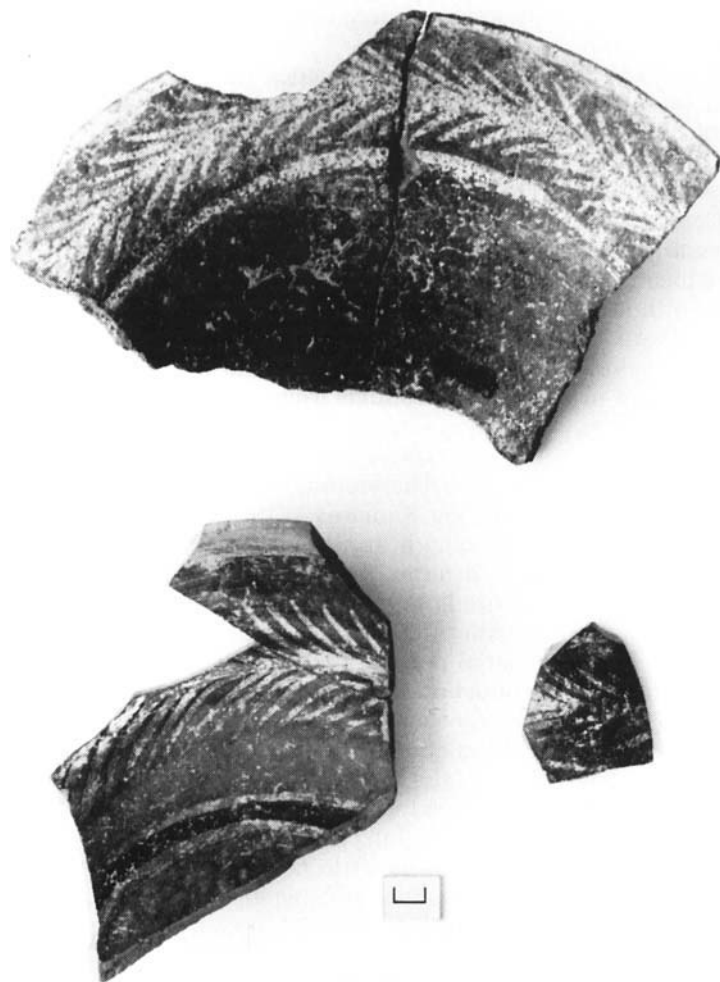


FIGURE 2. Coarse-ware bowl/fruitstand, fine-ware large bowl, and fine straight-sided cup, showing the same foliate band motif and paint colours, Knossos MMIIB (B.I.20: 333; B.I.20: 339; B.I.20: 347).

duction was based in a restricted number of areas, which produced pottery of specific types. Ceramic vessels from these centres were then distributed over long distances within the island. In short, it has been argued that pottery production was a specialized activity already in Prepalatial times, and that the consumption patterns indicate the movement of pottery throughout the island (Day *et al.* 1997) in its own right and not as an accompaniment to other transactions.

This picture has been shown to pertain even to large sites such as Knossos, where the finest-quality pottery of EMI-IIA seems to have been imported from the Plain of the Mesara in the South of Crete (Wilson & Day 1994) and the ordinary painted wares share a common

origin with those of other sites in both the north and south of the island. The finest comprise a relatively restricted number of wares and shapes and may be considered prestige goods used in some form of ritualized activity, possibly cult practice. Many of the vessels were parts of drinking and pouring sets, which emphasizes the dual nature of the large-scale consumption taking place at Knossos at this time: the consumption of both high-quality pottery and of its liquid contents.

If the production of such high-quality vessels found at Knossos has been shown to be non-local during the Prepalatial period, and the pottery system is already very complex, this calls into question the assumption that all the Minoan pottery at Knossos in the First Palace period is locally produced.

Ceramic petrography of Protopalatial Kamares Ware

As part of a continuing programme of ceramic analysis at Knossos, pottery of Protopalatial date (MMIB–MMIIB) from the palace at Knossos has been analysed. A full range of wares has been sampled using petrographic analysis, totalling over 200 samples. These include storage and cooking vessels, with a representative sample of polychrome decorated fine to coarse pottery, including Kamares Ware. Over 60 examples of polychrome and related pottery were examined in thin section. Petrographic analysis was chosen as it has not been possible to distinguish, by chemical analysis, different production centres in the Mesara Plain and North Central Crete (Jones 1986).

As petrographic analysis often provides more information when applied to coarser fabrics, due to their higher content of identifiable non-plastic inclusions, stylistic 'sets' of related material, in coarse to fine fabrics were analysed in order to infer provenance information even of fine wares (see FIGURES 2 & 3). For this reason, the coarser Kamares Ware vessels sampled in this study provided the best petrographic evidence for possible location/s of production. It is then possible through stylistic links, the comparison of the clay groundmass in thin section and comparison of paint colour in both the coarse and fine fabrics, to argue that the finer range of Kamares Ware is manufactured in the same location as the coarse.

The fabrics analysed are almost all familiar from the analysis of pottery from the preceding Prepalatial period. It appears that there is a remarkable continuity in the raw material sources and the paste recipes used by some potters in Central Crete from the Prepalatial, through the First Palace periods and into the Late Bronze Age. Therefore Kamares Ware may be viewed within the context of pottery production in centres which existed already in the Prepalatial period, and perhaps not as the product of workshops which were established with the First Palaces.

Moreover, analysis of some vessels which have enough non-plastic inclusions to provide clear petrological information shows them to be incompatible with the geology of the environs of Knossos. In fact, many occur in fabrics which are local to south central Crete and, more particularly, the Mesara Plain. Such fabrics are



FIGURE 3. Coarse fruitstand rim, coarse-ware jug/jar and fine-ware jug/jar, showing the same vertical floral motif, slip and paint colour, Knossos MMII. Fruitstand rim has identical floral motif on reverse (L.III.1: 996; B.I.20: 350; L.III.1: 996).

both distinctive and well-documented, being characterized by well-rounded sand grains which comprise schists, serpentinite, altered igneous rocks and siltstones, mainly derived from the ophiolite and gneiss series which borders the plain to both the north and south. These fabrics have been documented in both Prepalatial and Neopalatial pottery from the Mesara plain and in some cases are identical to fabrics present in the EMIIA Mesara imports to Knossos (Wilson & Day 1994; Myer & Betancourt 1990).

Vessels of both the Pre- and Protopalatial periods share other macroscopic technological/forming characteristics which confirm the above observations on the petrological microscope. Appliqué features, such as feet and pellets in Mesara pottery of both EM and MM, have additional sand tempering; jugs frequently have an applied band around the neck and other metallicizing skeuomorphic features; surface decoration, notably the iron reduction black, is of very high quality; and even clay fabric

colours can be similar or identical in the two periods, with distinctive grey and pink colours frequently present in the sherd break.

Quantification of these heavily selected deposits is very difficult. But it seems that, amongst the polychrome pottery at Knossos, on the grounds of decorative style, distinctive paint colours, the quality of iron-rich slips, clay colour, inclusions and other technological features, a substantial portion of the most 'palatial' of Bronze Age ceramic styles is not necessarily produced in workshops in the area of Knossos. On the contrary, much of the highest quality Kamares Ware appears to be a continuation of the tradition of high-quality special ceramics going back to Prepalatial times, a high proportion of which came out of other areas of central Crete, notably the Mesara Plain and its surrounding hills.

'Palatial' and 'provincial' pottery production

Much has been based on the terms *palatial* and *provincial* in discussion of Middle Minoan pottery. Walberg's work has formed the background for most consideration of this suggested division in production. Yet in some cases her dichotomy was based on the pottery's findspot rather than its location of manufacture. Even though the Kamares Ware found at Kamilari and Aghia Triada is closely linked in style to that found at the palace of Phaistos, only 3 km distant, Walberg classifies it as provincial (Walberg 1983: 92–3; but see MacGillivray 1986). In yet other cases, pottery found in palatial contexts at Malia is considered to be provincial.

Such a confusion has only added to the perception of the palaces as controllers or indeed the location of ceramic production centres. Of course, bearing in mind our suggestion that some of the Kamares Ware found at Knossos has its origin in south central Crete, one could argue that it was produced in a palatial production centre, at Phaistos. There are indeed strong similarities between the colour and motifs of Kamares ware, notably foliate bands, and the brightly coloured fresco paintings of the First Palace at Phaistos (Boulotis 1995: figure 8; cf. FIGURE 2). What seems certain is that there were pottery-production centres in or near the Mesara Plain which had a long-standing tradition of high-quality pottery, going back to the beginning of Early Minoan. They may have existed

in the Prepalatial period as rural agglomerations of workshops, but in the absence of any physical remains of such installations, it is difficult to go further at this stage.

However, the Middle Minoan pottery traditions seem to be the successors, both in terms of technical knowledge and clay paste recipes, of a system which existed before the building of the palaces. With further work, it may be possible to investigate their link to the palace, whether it was one of supplying an élite demand as independent rather than attached specialists (Costin 1991: 4–7, 11–13). Yet clearly some production of polychrome pottery in Middle Minoan Crete took place physically within a palatial context. The palatial centre at Malia had its own distinctive production of polychrome pottery, in workshops at Quarter Mu.

To summarize, we now have the possibility that a significant portion of the classic, high-quality Kamares Ware which was *consumed* in such large quantities within the Knossos Palace precincts was not produced there, or even in the environs of Knossos. Rather, some can be demonstrated to have its origin further south in Central Crete. We might immediately emphasize two implications, the first regarding peer polity interaction and the second concerning the nature and use of the first palace at Knossos.

Production centre or consumption centre — the first palace at Knossos

That Kamares Ware vessels are about display is indisputable. Their elaborate shapes and decoration and their clear function in a ceremonial or feasting context demonstrate that they were meant to be seen. Their use conferred prestige. The fact that they have many metallicizing traits seems further to confirm that they were involved in a system where material objects in a specialized context were used to symbolize social status and convey ritual meaning.

In recent work, Hamilakis has indicated the importance of feasting and communal drinking ceremonies in bolstering and legitimating the power of ruling élites of the Neopalatial period in Crete (Hamilakis 1996). He links the rise in the numbers of large deposits of conical cups to increased feasting as social mobilization and the intensification of exploitation of the olive and vine. We would also see the ear-

lier Protopalatial palaces as the setting for such ceremonies involving food and especially drink, perhaps within a cultic context (MacGillivray 1987: 287–9).

It is suggested, however, that it is not just food and drink being consumed, but also the most prestigious ‘hardware’ of such ritual consumption, such as Kamares Ware and its metal equivalents. Obtaining and controlling the supply of such material objects would have provided a source of power. In the case of Knossos, we see little need also to bestow upon the palace precincts the role of pottery producer or controller of production. On the contrary, we suggest that the tradition from which the finest Kamares Ware develops had its epicentre in south central Crete.

Knossos’ action in consuming prestige ceramics from the south should not be viewed in isolation. Such a striking monumental symbol as Knossos would have had a major stake in the trade and manufacture of metals, which most likely made it cast its gaze to the islands to the north. Yet such economic interests and demand for objects of display and consumption may have meant the control of a more specific area of craft production by this powerful centre, not necessarily located within the immediate environs of Knossos. Recent discoveries at Poros Katsambas now bear this out, providing strong evidence for a gateway port on the north coast as well as a major production centre supplying Knossos with a variety of craft goods (Dimopoulou 1997).

Kamares Ware and the palace at Knossos

While not denying that some craft activities take place within palace structures, the suggestion that all Kamares Ware found at Knossos is also produced there or in the environs seems to be unfounded. Such a finding bolsters our view of Knossos as a monumental structure which consumes and deposits, which is concerned with social mobilization, ceremony and perhaps ultimately domination. The evolutionary view of production, linked to palace centralized workshops, at least as far as these ceramics are concerned, is shown to be an over-simplification, as some of these ceramics seem to have their origin in what might be considered the ‘territory’ of another palace.

Indeed the importation of ritual vessels from the Mesara to Knossos can be traced back to the beginning of Minoan times. Not only does

the special functional use of vessels obtained from locations in Central Crete continue into the Old Palace period, but links in traditions of manufacture also exist, suggesting a common source of production for these imports in both Early and Middle Minoan. Potters in the south of Crete were producing functionally specialized vessels for ritual use which were distributed to a restricted number of centres from EMI; although such vessels might have changed in meaning on export from their source area, such a pattern might even be indicative of shared religious practice by the beginning of the Bronze Age in Central Crete.

Kamares Ware and other polychrome pottery make up an important part of the artefactual evidence for ritualized activity within the first palaces at Knossos and Phaistos. Although patterns may change over the life-time of the First Palace, the quantities and types of pottery found in the palatial deposits indicate specialized and repeated eating–drinking practices on a large scale. The prestige status of Kamares Ware further supports this argument for feasting activity within the palaces, exploited by an élite. In ranked societies such ritualized practice can take on a symbolic meaning and evolve into religious festivals where ‘spiritualism rather than wealth is monitored, and supernatural favours instead of food are redistributed’ (Moody 1987: 240).

Although we suggest divorcing the locations of production and consumption of these élite vessels we have analysed, the monumentality of palatial architecture and the conspicuous consumption of prestige goods such as Kamares Ware may be due to competitive emulation between palaces where neighbouring states competed for higher inter-polity status (Renfrew 1986: 8). The principal forum in which such inter-polity competition may have taken place was at the palatial centres in pan-polity gatherings, with the focus on religious ritual within the palaces themselves.

Acknowledgements. We would like to thank the Greek Archaeological Service and the Managing Committee of the British School at Athens for permission to sample for analysis the material mentioned here. Fieldwork and analyses were funded by the British Academy Applied Science in Archaeology Fund and the Social Sciences and Humanities Research Council of Canada, to whom we are very grateful. In reviews of the submitted text, the constructive comments of Carl Knappett and an anonymous reviewer are gratefully acknowledged.

References

- BETANCOURT, P.P. (ed.). 1984. *East Cretan White-on-dark Ware*. Philadelphia (PA): University Museum.
1985. *The history of Minoan pottery*. Princeton (NJ): Princeton University Press.
1990. *Kommos II. The final Neolithic through Middle Minoan III pottery*. Princeton (NJ): Princeton University Press.
- BETANCOURT, P.P. & C.P. SWANN. 1989. PIXE analysis of Middle Minoan pigments from Kommos, in Maniatis (1989): 177–81.
- BOULOTIS, C. 1995. Αιγαιακές Τοιχογραφίες: Ένας Πολύχρωμος αφηγηματικός λόγος, *Αρχαιολογία & Τέχνες* 55: 13–30.
- BRANIGAN, K. 1987. The economic role of the first palaces, in Hägg & Marinatos (1987): 245–9.
- CARINCI, F. 1997. Pottery workshops at Phaestos and Haghia Triadha in the Protopalatial period, in Laffineur & Betancourt (1997): 317–22.
- CHERRY, J.F. 1986. Politics and palaces: some problems in Minoan state formation, in Renfrew & Cherry (1986): 19–45.
- COSTIN, C.L. 1991. Craft specialization: issues in defining, documenting, and explaining the organization of production, in M.B. Schiffer (ed.), *Archaeological method and theory* 3: 1–56. Tucson (AZ): University of Arizona Press.
- DAWKINS, R.M. & M.L.W. LAISTNER. 1912–1913. The excavation of the Kamares Cave in Crete, *Annual of the British School at Athens* 19: 1–34.
- DAY, P.M. 1988. The production and distribution of storage jars in Neopalatial Crete, in French & Wardle (1988): 499–508.
- DAY, P.M., D.E. WILSON & E. KIRIATZI. 1997. Reassessing specialization in Prepalatial Cretan ceramic production, in Laffineur & Betancourt (1997): 275–89.
- DIMOPOULOU, N. 1997. Workshops and craftsmen in the harbour town of Knossos at Poros Katsambas, in Laffineur & Betancourt (1997): 433–8.
- EVELY, D., H. HUGHES-BROCK & N. MOMIGLIANO (ed.). 1994. *Knossos. A labyrinth of history. Papers presented in honour of Sinclair Hood*. Oxford: British School at Athens.
- FLOYD, C. 1997. The Alternating Floral Style as evidence for pottery workshops in east Crete during the Protopalatial period, in Laffineur & Betancourt (1997): 313–16.
- FRENCH, E.B. & K.A. WARDLE (ed.). 1988. *Problems in Greek prehistory. Papers presented at the centenary conference of the British School of Archaeology at Athens, Manchester, April 1986*. Bristol: Bristol Classical Press.
- HÄGG, R. & N. MARINATOS (ed.). 1987. *The function of the Minoan palace*. Stockholm: Skrifter Utgivna Av Svenska Institutet i Athen.
- HALSTEAD, P. 1981. From determinism to uncertainty: social storage and the rise of the Minoan palace, in A. Sheridan & G. Bailey (ed.), *Economic archaeology. Towards an integration of ecological and social approaches*: 187–213. Oxford: British Archaeological Reports. International series 96.
- HAMILAKIS, Y. 1996. Wine, oil, and the dialectics of power in Bronze Age Crete: a review of the evidence, *Oxford Journal of Archaeology* 15(1): 1–32.
- HELMS, M.W. 1993. *Craft and the kingly ideal. Art, trade, and power*. Austin (TX): University of Texas Press.
- JONES, R.E. 1986. *Greek and Cypriot pottery. A review of scientific studies*. Athens: British School at Athens. Fitch Laboratory occasional paper 1.
- KILIKOGLU, V. 1994. Scanning electron microscopy, in Wilson & Day 1994: 70–75.
- KRZYSZKOWSKA, O. & L. NIXON (ed.). 1983. *Minoan society. Proceedings of the Cambridge Colloquium 1981*. Bristol: Bristol Classical Press.
- LAFFINEUR, R. 1990. Habitat Égéen et reconstitutions: quelques réflexions méthodologiques à propos du quartier nord-est du palais de Cnossos, in P. Darcque & R. Treuil (ed.), *L'Habitat Égéen préhistorique*: 3–19. Paris: *Bulletin de Correspondance Hellénique* supplementary volume 19.
- LAFFINEUR, R. & P.P. BETANCOURT (ed.). 1997. *TEXNH. Craftsmen, craftswomen, and craftsmanship in the Aegean Bronze Age. Proceedings of the 6th International Aegean Conference. Philadelphia, Temple University, 18–21 April 1996*. Liège: Université de Liège. *Aegaeum* 16.
- MACGILLIVRAY, J.A. 1986. Review of G. Walberg, *Provincial Middle Minoan Pottery*, *Journal of Hellenic Studies* 106: 249–50.
1987. Pottery workshops and the old palaces in Crete, in Hägg & Marinatos (1987): 273–9.
1994. The early history of the Palace at Knossos, in D. Evely *et al.* 1994: 45–55.
- In press. *Knossos: pottery groups of the Old Palace Period*. British School at Athens supplementary volume.
- MANIATIS, Y. 1989. *Archaeometry. Proceedings of the 25th International Symposium*. Amsterdam: Elsevier.
- MARIANI, L. 1995. Antichità Cretesi. Vasi di Kamares, *Monumenti Antichi* 6: 334–42.
- MYER, G.H. & P.P. BETANCOURT. 1990. The fabrics at Kommos, in Betancourt (1990): 1–13.
- MOMIGLIANO, N. & D.E. WILSON. 1996. Knossos 1993: excavations outside the south front of the Palace, *Annual of the British School at Athens* 91: 1–57.
- MOODY, J.A. 1987. The Minoan palace as a prestige artefact, in Hägg & Marinatos (1987): 245–9.
- NOLL, W. 1982. Mineralogie und Technik der Keramik in Altkretas, *Neues Jahrbuch für Mineralogie* 143(2): 150–99.
- POURSAT, J.-C. 1983. Ateliers et sanctuaires à l'époque des premiers palais, in Krzyszkowska & Nixon (1983): 277–80.
1997. Potiers et peintres à Malia (Quartier Mu), Crète: le Kamares provincial entre tradition et innovation, in Laffineur & Betancourt (1997): 301–4.
- RENFREW, C. 1972. *The emergence of civilisation: the Cyclades and the Aegean in the 3rd millennium BC*. London: Methuen.
1986. Introduction: peer polity interaction and socio-political change, in Renfrew & Cherry (1986): 1–18.
- RENFREW, C. & J.F. CHERRY (ed.). 1986. *Peer polity interaction and socio-political change*. Cambridge: Cambridge University Press.
- TOMASELLO, F. 1996. Fornaci a Festòs ed Haghia Triada dall'età mediominoica alla geometrica, in E. Gavrilaki (ed.), *Κεραμικά εργαστήρια στην Κρήτη από την αρχαιότητα ως σήμερα*: 25–37. Rethymnon.
- WALBERG, G. 1976. *Kamares. A study of the character of palatial Middle Minoan pottery*. Uppsala: *Acta Universitatis Upsaliensis*.
1983. *Provincial Middle Minoan pottery*. Mainz: von Zabern.
1987. Palatial and provincial workshops in the Middle Minoan period, in Hägg & Marinatos (1987): 281–5.
- WHITELAW, T.M., P.M. DAY, E. KIRIATZI, V. KILIKOGLU & D.E. WILSON. 1997. Ceramic traditions at EMIIB Myrtos, Fournou Korifi, in Betancourt & Laffineur (1997): 265–74.
- WILSON, D.E. & P.M. DAY. 1994. Ceramic regionalism in prepalatial central Crete: the Mesara imports at EMI to EMIIA Knossos, *Annual of the British School at Athens* 89: 1–87.