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### Colonial cups? The Minoan plain handleless cup as iconic inter-regional object

Knappett, C.J.; Hilditch, J.R.

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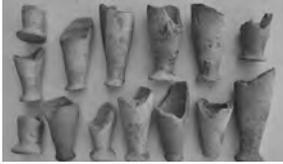
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## 4 Colonial Cups? The Minoan Plain Handleless Cup as Icon and Index

*Carl Knappett and Jill Hilditch*

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### Plain Wares?

Why do standardised, mass-produced plain wares occur across many areas of the eastern Mediterranean in later prehistory? A common response is that it results from increased population in urban agglomerations and the concomitant need for specialists to ‘economise’ by producing more vessels in less time. The standardisation is seen as a result of routinisation, as potters spend more and more of their time producing pottery to meet demand, and the plainness of the pottery derives from the pressure to invest less labour in each pot. Certainly, such arguments have been put forward in the Aegean Bronze Age in connection with conical cups (Davis and Lewis 1985; Van de Moortel 2002; Berg 2004; see also Crewe, Chapter 5). While conical cups are by no means the only kind of plain ware in the Aegean Bronze Age—there are all manner of plain cooking pots—they are notable for being *the* form of plain drinking vessel, particularly for Minoan Crete. Conical cups appear to have been rapidly, and in some cases roughly, made, a fact that seemingly lends support to the ‘economising’ argument. Yet this angle fails to take into account the very widespread adoption of the form across sites of widely differing sizes from palatial centres like Knossos and Malia to small villages and farmsteads. Not only this, but the conical cup sees almost immediate uptake across sites beyond Crete, such as in the Cyclades and Asia Minor. Can a single ‘economising’ argument really apply to such a range of settlements? Might there not be another explanation?

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*Plain Pottery Traditions of the Eastern Mediterranean and Near East: Production, Use, and Social Significance*, edited by Claudia Glatz, 91–113. © 2015 Left Coast Press, Inc. All rights reserved.

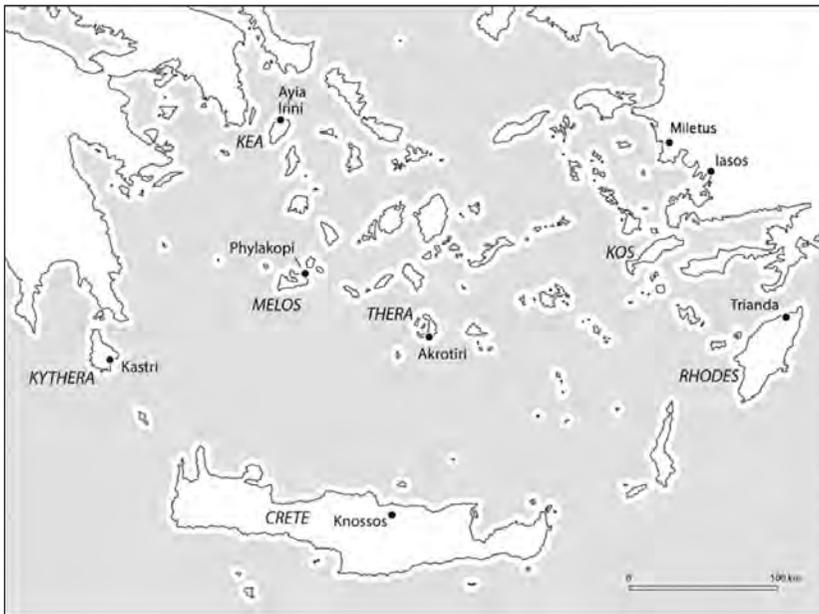
### Conical Cups – What, Where and When?

Conical cups are small, plain, handleless vessels, often about 4 cm in height, 4 cm across the base and 9 cm at the rim with a capacity of 100–150 ml. They are invariably ‘wheel fashioned’, that is to say made with a combination of coils and rotative kinetic energy (Roux and Courty 1998). Unbelievably numerous at sites all over Crete (fig. 4.1), not just settlements large and small, but also burials, peak sanctuaries and caves, they constitute a large percentage of all the pottery found and must in archaeological collections across the island number in the hundreds of thousands. Furthermore, conical cups are found not only on Crete. They are extremely common at sites across the Aegean, principally at those considered either Minoan colonies or ‘Minoanised’, such as Kastri on Kythera, Ayia Irini on Kea, Akrotiri on Thera, Phylakopi on Melos, Trianda on Rhodes and Miletus and Iasos in Asia Minor (fig. 4.2). It seems that conical cups, and the practices they enact, are an integral part of Minoan civilisation on and off Crete.

But conical cups are not found in all periods of the Bronze Age. They do not occur in the Prepalatial Bronze Age periods on Crete, around 3000–1950 BC (table 4.1). One might imagine, then, that they come along with the First Palace Period (c. 1950–1700 BC; see table 4.1) perhaps to meet the increased demand associated with these new population centres at sites like Knossos, Phaistos and Malia. But this is not the case either. There is much pottery and plenty of drinking vessels – certainly the palaces seem to be centres for large-scale ceremonial feasting (Day and Wilson 1998, 2002). Yet there is no single identifiable ceramic type involved in these practices. This is in part because of regional variation. The three main palaces of Knossos, Phaistos and Malia seem to be more or less on par and differentiate themselves through material culture (Cherry 1986; Knappett 2008; Manning 2008). In Knossos,



**Figure 4.1** Detailed map of Crete with sites mentioned in text



**Figure 4.2** Map of Aegean with sites mentioned in text

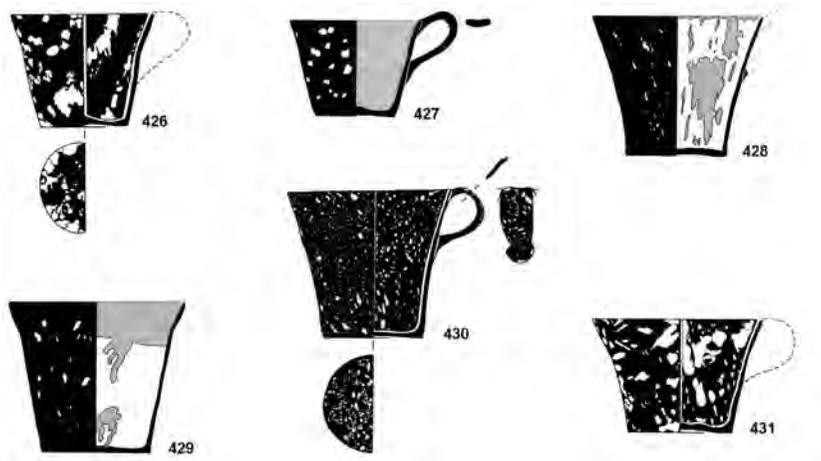
**Table 4.1** Chronological table showing parallels for pre-Minoan and Minoan levels for the major off-island sites with Crete

<i>Absolute Chronology</i>	<i>Crete</i>		<i>Akrotiri (Thera)</i>	<i>Ayia Irini (Kea)</i>	<i>Phylakopi (Melos)</i>	<i>Miletus (Anatolia)</i>
<i>c. 2200–2100 BC</i>		EM III	EC III			
<i>c. 2100–1950 BC</i>	Prepalatial	MM IA		GAP	City I–ii/iii	
<i>c. 1950–1900 BC</i>		MM IB	Phase A			Phase II
<i>c. 1900–1700 BC</i>	First Palace	MM II	Phase B	Period IV	City II–ii	
<i>c. 1700–1650 BC</i>		MM IIIA	Phase C			Phase III
<i>c. 1650–1600 BC</i>		MM IIIB	Phase D	Period V	City II–iii	
<i>c. 1600–1525 BC</i>	Second Palace	LM IA	LC I		City III–i	Phase IV
<i>c. 1525–1450 BC</i>		LM IB		Period VI		

for example, the footed goblet (fig. 4.3) is a common drinking form but is only rarely found outside north-central Crete. At sites in the Mesara Plain (e.g. Phaistos, Ayia Triadha) and Amari Valley (e.g. Monastiraki) there are small conical handleless drinking forms, often decorated (and not to be confused with conical cups), that do not seem to appear elsewhere. All regions use handled cups principally of straight-sided, hemispherical or carinated forms



**Figure 4.3** Footed goblets (Knossos)



**Figure 4.4** Straight-sided cups

(figs. 4.4–4.6). However, there are conspicuous regional differences between them in details of shape and decoration. There appears to be a lot of fluidity in how ceramic forms were used in feasting and other practices. In the extensive town complex of Quartier Mu at Malia, for example, the destruction horizon of the end of the First Palace Period preserved many thousands of vessels (Poursat and Knappett 2005). In this assemblage we recognise roughly 200 distinct pottery types, among which approximately 40 are drinking vessels of various kinds. Though there may have been some particular associations between given forms – for example the carinated cup – and a given status,



Figure 4.5 Hemispherical cup

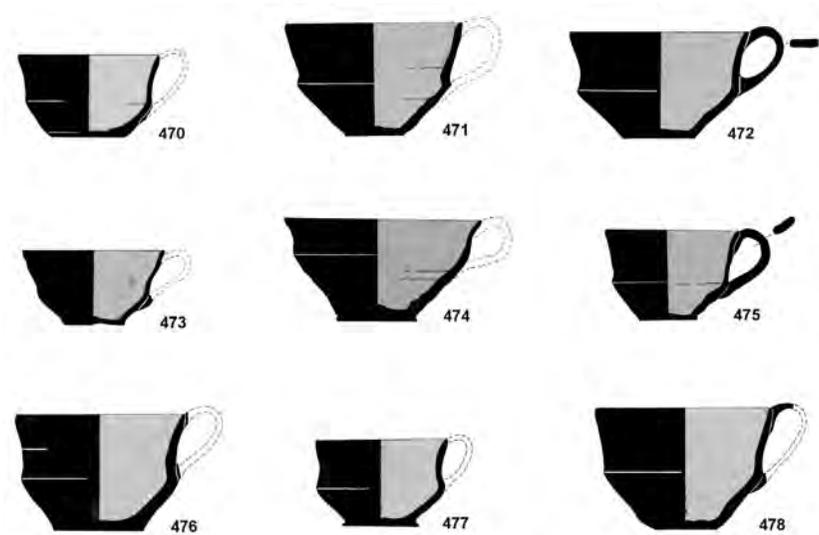
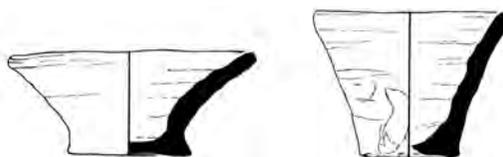


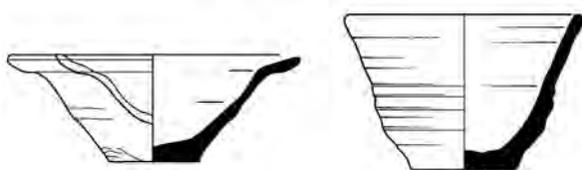
Figure 4.6 Carinated cups

practice or contents that now escapes us, there is nothing that can be described as a single, mass produced, handleless plain vessel type. The same appears to hold true for all other First Palace Period settlements.

In fact, it is only in the Second Palace Period ([*c.* 1700–1450 BC] see table 4.1) that the conical cup emerges as a widespread plain, mass-produced drinking vessel. The initial forms in the Middle Minoan (MM) IIIA and IIIB (*c.* 1700–1600 BC) phases show regional variation. At Knossos, for example, the MM IIIA conical cups come in two basic variants, broad and shallow or tall and conical (fig. 4.7). The broad shallow type is often between 10 and 12 cm in rim diameter and about 4 cm tall. It usually has very pronounced



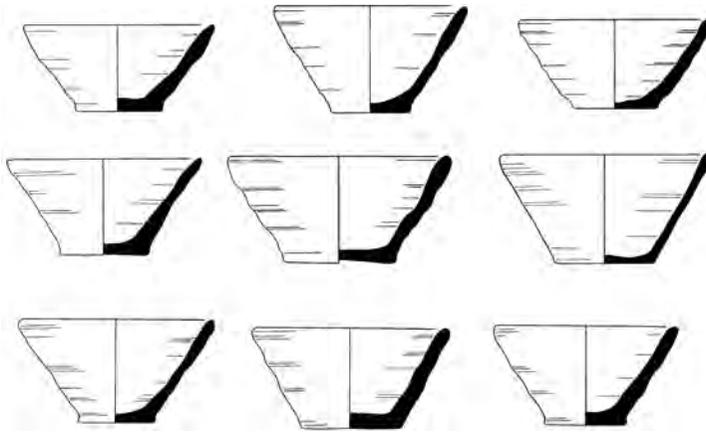
**Figure 4.7** MM IIIA conical cups: broad and shallow vs. tall and conical (Knossos)



**Figure 4.8** Ledge-rim vs. s-profile shapes (Palaikastro)

rilling at the interior, a technological feature even commented upon by Evans (Evans 1921: 589; see also Hood 1996). The tall type is around 5.5 to 6 cm in height but shares the same technological features and fabric. Both types appear to have been wheel fashioned (Knappett 2004). In the next phase, MM IIIB, these two types seem to have been slowly replaced by a single conical, generally smaller form, which was the precursor for the standardised Late Minoan (LM) IA form (*c.* 1600–1525 BC). At Palaikastro, on the other hand, in the far east of the island, the first mass-produced, plain, handleless cups of MM IIIA are a little different. Although there is a similar split between broad shallow and tall conical types, the former invariably has a distinct ledge rim, and the latter is a faint s-shaped profile (fig. 4.8). As at Knossos, the two types are otherwise indistinguishable in their fabric and technology, here too showing telltale signs of the wheel-fashioning technique. In MM IIIB, though, the two types continue strongly, and the ledge-rim variant simply shows a rather less pronounced ledge (Knappett and Cunningham 2003). It is only in LM IA that a single, standardised conical cup type appeared (fig. 4.9).

Here we have just mentioned two sites, Knossos and Palaikastro, by way of example: but conical cups are produced and consumed through each of these Neopalatial phases everywhere on Crete (for another example, MM III Mesara in Girella 2007). Furthermore, the trend towards greater homogeneity is also widespread, as Van de Moortel (2002) argues, with a more standardised form that emerges across many sites in LM IA. It seems that for the first time feasting ceremonies can be associated with a single pottery type. Out of the fluidity and regional multiplicity of the First Palace Period came this simple, repeatable type, iconic and recognisable everywhere.



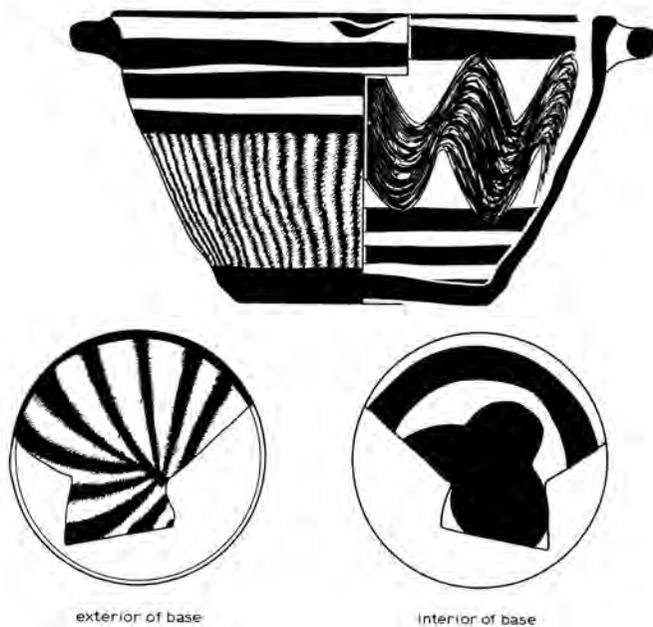
**Figure 4.9** LM IA standardised cup (Palaikastro)

### Contextualising Conical Cups

Let us look briefly at the context of this change. The transformations that come with the Second Palace Period are radical. All sites on Crete suffer major destructive episodes at the end of the First Palace Period (MM IIB, c. 1700 BC). These are sometimes attributed to seismic activity: though there is also evidence for concern with defence at the end of the period, in eastern Crete at least. This is seen with occupation of the refuge site at Katalimata (Nowicki 2008), construction of cisterns at Myrto Pyrgos (Cadogan 1977–78) and the subfloor deposition of bronze cauldrons at Quartier Mu (Poursat 1992). Certainly in the aftermath of these destructions, it was eastern Cretan sites that seem to have been the slowest to recover, shown by an apparent break in occupation at some sites (see Cadogan 2013; though note Palaikastro an interesting exception). In the centre of the island, however, there is an immediate frenzy of building activity, particularly at Knossos and to a lesser extent at Phaistos (Macdonald and Knappett 2013). Knossos is reconstructed bigger and better with more monumental architecture and a redesign of some quarters of the palace (Knappett *et al.* forthcoming). The activity at Phaistos seems less decisive though, and Phaistos seems to give way to other neighbouring sites, namely Ayia Triadha and Kommos (Macdonald and Knappett 2013). These sites seem to show evidence for influence from Knossos and have the same kinds of monumental architecture and associated practices as the use of frescoes. In between the north and south, a palace was built for the first time in this period at Galatas, surely under strong guidance from Knossos (Rethemiotakis 2002). Even sites farther afield, in the west and the east (e.g. Palaikastro), show signs of connections with north-central Crete and particularly Knossos. And with this radical shift in the political geography of

the island we see changes not only in settlement hierarchy and architecture, but also portable material culture. Pottery decorative styles become homogeneous across the island: new dark-on-light styles, such as ‘tortoiseshell ripple’, (fig. 4.10) become widespread.

Thus, the appearance of the conical cup across the island occurs hand-in-hand with the emergence of Knossos as a supraregional power. Can this just be a coincidence? Minoan archaeologists have not often asked *why* conical cups appear. They are usually just seen as a cornerstone of Minoan civilisation in the Second Palace Period, as defining a feature of the ‘acme’ of Minoan civilisation as its fine architecture (Shaw 2009; McEnroe 2010), elaborate luxury goods in a range of materials (e.g. Betancourt 2008), innumerable sites (Driessen and Macdonald 1997) and interregional exchange and influence (e.g. Hägg and Marinatos 1984; Wiener 1990; Broodbank 2004; Macdonald *et al.* 2009). However, if we do ask *why* conical cups, they need to be considered as intrinsic to particular strategies within political economies (for political economy in the Aegean Bronze Age, see Pullen 2010). For example, there may have been new kinds of feasting practices emergent in the Second Palace Period that were more frequent or applicable in a wider range of settings: for such practices, the adaptability and disposability of a form like the conical cup were extremely useful. These ideas are encapsulated in



**Figure 4.10** Tortoise shell ripple (Palaikastro)

the term *token hospitality* (Rupp and Tsipopoulou 1999). This term suggests that visitors to particular households or institutions were offered a very quick and easy ‘token’, a mere sip from a tiny cup that was then disposed of as unceremoniously as a polystyrene or paper cup may be today. That such practices intensified in the Second Palace Period – judging from the ubiquity of conical cups – may be in some way attributable to the greater penetration of ritual into everyday life. We might also link this to the increased numbers of *rhyta* (ceremonial libation vessels) across many contexts, forms used in ceremonial procession, and the proliferation of ‘palatial’ architectural forms, such as the Minoan Hall, that may have been the destinations for processions and ceremonial consumption (Koehl 2006). Add to this the intensified use of standardised iconography, such as bulls, horns of consecration and double axes (Haysom 2010), and a picture of standardised, frequently repeated cult practices begins to emerge. It is in this context that the conical cup has to be placed.

### Off-Island Patterns

Yet there is a broader scale in which we need to embed the conical cup. It is also in the Second Palace Period that the off-island influence mentioned earlier kicks in. There was certainly contact between Crete and many of the aforementioned sites in the preceding First Palace Period, but nothing on the scale of the Second Palace Period. For example, at Akrotiri on Thera, First Palace Period Cretan imports represent around 1–2% of the ceramic assemblage, while in the Second Palace Period that figure jumps to 10–15% (Knappett and Nikolakopoulou 2005, 2008). Moreover, the range of pottery imported increases dramatically, as does the degree of influence on local types. One might imagine that conical cups would not appear as part of these off-island assemblages until they had first become established on Crete itself. Yet this is not at all what happens. At the coastal Anatolian sites of Iasos and Miletus, conical cups appear in abundance within Neopalatial deposits (Momigliano 2005, 2009, 2012; Kaiser 2009). At Miletus, the Period IV conical cups are ‘quite standardised’ (fig. 4.11) and manufactured in the local ‘light paste with lime inclusions’, alongside other small open shapes of the local repertoire (Kaiser 2009: 160). Most examples show string-cut bases, suggesting the use of the potter’s wheel for their manufacture. In addition to the 530 complete cups, well over 20 times this number of base sherds have been identified (producing an average of 12 conical cups per square metre!). Although the resolution of the stratigraphic sequence at Iasos is hazier, several hundred conical cups have been recorded from levels datable between MM IIIB and LM IA. They appear, on the whole, in locally compatible fabrics, though a few imports have been identified, including examples from neighbouring Miletus ([fig. 4.12] Momigliano 2012, fig. 113). As with the Milesian cups, there is evidence that most Iasian conical cups



Figure 4.11 Milesian conical cups

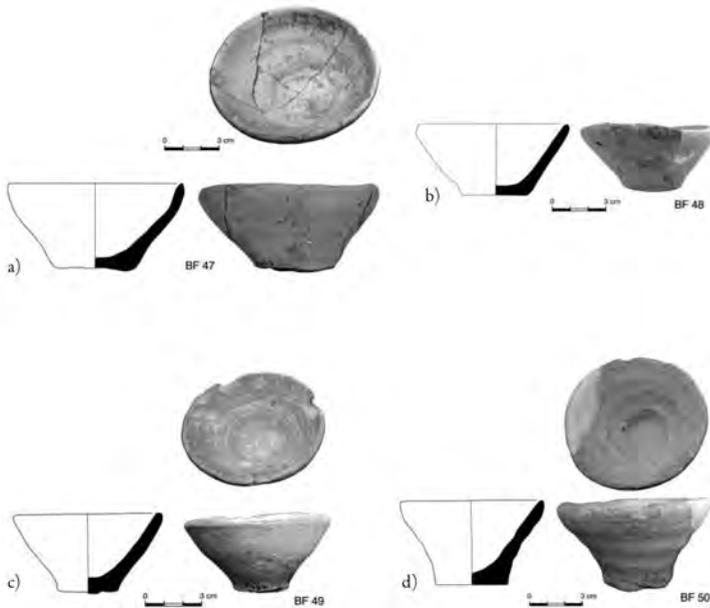


Figure 4.12 Iasian conical cups (from Momigliano 2009, fig. 18)

were made ‘using proper “Minoan” templates, techniques and motor habits’ (Momigliano 2009: 133), that is using the potter’s wheel.

A similar story emerges from the major settlements of the Cyclades. New evidence from Akrotiri shows that in this very first phase of the Second Palace Period (MM IIIA) not only are a very small number of conical cups imported from Crete, they are produced in some quantities locally (fig. 4.13). This is a dramatic development as plain wares of this kind are not at all part of the local Cycladic traditions. Moreover, these Minoan-style plain wares are wheel fashioned, the first use of this technique in the Cyclades for such vessels. It would seem that the spread of Minoan conical cups beyond the borders of Crete is not straightforward: their adoption and distribution are inextricably linked, not only to consumption practices but the choices involved in the production of these vessels by off-island communities. That is to say, the conical cup seems inseparable from the wheel-fashioning technique.

Within the Cyclades, one might observe that a Creto-centric drive to identify and characterise Minoan objects has dominated the interpretation of late Middle to Late Bronze Age occupation at the major sites of Akrotiri, Ayia Irini and Phylakopi, lending support to the concept of an almost inevitable, monolithic process of ‘Minoanisation’, or becoming Minoan (Whitelaw 2005). The wheel-fashioned conical cup is often the primary marker for these Minoanised horizons, and they signify contact and the transfer of technological knowledge between the palatial centres of Crete and the smaller off-island settlements. However, the status of these settlements as colonies (Branigan



**Figure 4.13** Local Theran conical cups

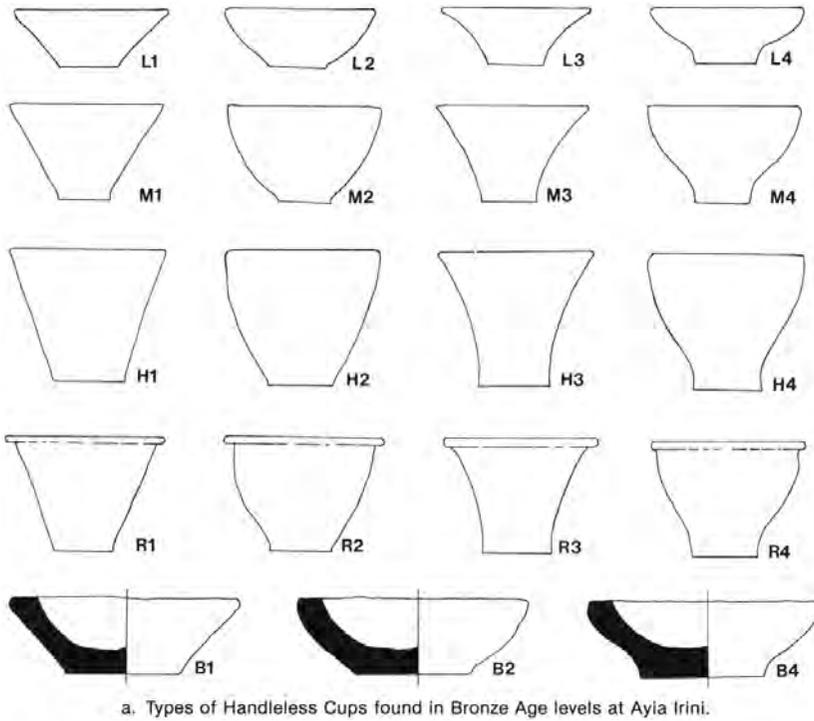
1981, 1984) or preferential trading partners (Davis 1979; Cherry and Davis 1982; Barber 1984) has been much debated. New studies have deliberately sought to redress this balance by focussing on the transition between typically local, pre-Minoanised and later Minoanised deposits, in material and technological terms (Berg 2004, 2007; Knappett and Nikolakopoulou 2008; Hilditch 2009). These studies show that, through the investigation of technical behaviours and social interactions at the site level, we can shed light on the enigmatic innovation of plain handleless vessels within off-island communities during the Second Palace Period.

### The Cyclades and the Conical Cup

At Ayia Irini, the evidence for conical cups is overwhelming – over 8000 vessels – and they are often found in clusters of several hundred within a single room, such as those excavated in House A (Cummer and Schofield 1984). Conical cups, as well as other plain handleless cups and saucers, first appeared during Period V (table 4.1) and were predominantly manufactured using locally available micaceous clays (fig. 4.14). The initial range of small, open profiles is quite broad (bell, conical, rounded and straight-sided), though this decreases during the subsequent Period VI into a more restricted repertoire (fig. 4.15). Only limited numbers of conical cups are imported from Crete alongside other more frequent vessel shapes that most closely parallel central Crete, such as Keftiu cups, bridge-spouted jars and lentoid flasks (Davis 1986: 103). However, in contrast to the bulk of locally produced, handmade pottery, the conical cups were mainly produced using the potter's wheel. This is the first use of this technique within the local production tradition at Ayia Irini, and it is particularly significant in that it appears to have been used almost exclusively for small, plain handleless cups. Davis and Lewis (1985) quantitatively assessed the conical cups at Ayia Irini as part of a wider



**Figure 4.14** Local red-brown conical cups at Ayia Irini (photograph by Hilditch, with permission of E. Gorogianni and R. Fitzsimons)



**Figure 4.15** Conical cup types at Ayia Irini (from Davis 1986 – fig. 5.3)

study of pottery mechanisation within the prehistoric Cyclades. They argued that as the settlement became part of wider exchange networks, potters had to respond to consumer pressures beyond their immediate households, thereby creating mass-market potential and in turn, mass-production techniques that promoted simplification, standardisation and routinisation (Davis and Lewis 1985: 82). By the Late Cycladic (LC) II Period, Davis and Lewis (1985) highlight a decrease in the range of small open shapes manufactured, alongside decreases in physical variation, such as vessel height, wall width, rim and base diameters and vessel weight. This standardisation, they argue, reflected production activities by a limited number of local specialists who adopted specific time and labour-saving practices to compete against Cretan potters within regional exchange markets. These practices were, therefore, necessary to sustain local potting communities in the face of ‘fearsome’ Cretan competitors, who already had an advantage through the earlier adoption of mechanised techniques, not to mention the perceived prestige value of all things Minoan within the islands (Davis and Lewis 1985: 89). In effect, Davis and Lewis do not attribute growing population levels within Ayia Irini as the primary factor driving mechanisation and standardisation, but the widening

external pressures and competition created by the participation of Ayia Irini within expanding exchange networks.

Davis and Cherry (2007) proposed a similar argument for the development of conical cups at Phylakopi on Melos. However, recent analysis of the Melian material by Berg (2004, 2007) has revealed some interesting distinctions between Phylakopi and Ayia Irini. As with Ayia Irini, the first small, plain handleless cups appeared at Phylakopi towards the end of the Second City phase (see table 4.1) and gradually increased throughout the LC I Period. From their very inception, these vessels were exclusively wheelmade (Berg 2004: 79), and other Minoanised vessels were manufactured using traditional hand-building techniques. Over the course of the LC Period, these two settlements diverged in their material culture patterns. As Ayia Irini potters produced increasingly similar small handleless vessels, the potters at Phylakopi showed no inclination towards standardisation. Despite the difficulties in chronological separation between late Middle Cycladic (MC) and LC I deposits at Phylakopi, Berg undertook a thorough quantitative analysis of the conical cups and other Minoanised shapes within the ceramic assemblage. She highlights that the variation in average weight of conical cups did not decrease over time, thereby lending no support to the standardisation argument of routinisation driven by a need for mass production (Berg 2007: 102). Although Berg's work noted a standardisation of ceramic fabric for conical cups at Phylakopi and Ayia Irini, these observations have yet to be analytically characterised within the production sequence of the local potting communities at these sites.

In contrast, the recent excavations at Akrotiri have produced a new detailed phasing for the MC period allowing detailed consideration of the appearance of Minoan traits within the ceramic assemblage ([see table 4.1] Knappett and Nikolakopoulou 2005, 2008; Nikolakopoulou *et al.* 2008). The range of local potting behaviours and production sequences from the pre-Minoanised Phase B (MM II) and the Minoanised Phase C (MM IIIA) deposits were characterised using an integrated analytical programme that combines macroscopic, petrographic and chemical techniques. These production sequences, or *chaînes opératoires*, were then compared to assess the introduction of Minoan shapes and techniques into the local potting tradition. The earliest conical cups, as well as their precursors, the ledge-rim bowls (fig. 4.16), were consistently wheel fashioned, as were early imitations of straight-sided cups and the occasional Cycladic piriform cup (Knappett and Nikolakopoulou 2005). Apart from a few red-slipped and burnished ledge-rim bowl examples – a particularly local twist on a Minoan shape – all these small, wheel-fashioned, handleless vessels are plain and undecorated, as seen at other sites across the Cyclades. However, no macroscopic differences in ceramic fabric between the local and Minoanised shapes are observed, and petrographic analysis confirms their inclusion within the local tradition of raw material exploitation and processing for other plain, undecorated wares



**Figure 4.16** Akrotiri ledge-rim bowls

within the assemblage during Phases B and C (Hilditch 2009). In other words, the adoption of a new technique and shape within the local repertoire is in stark contrast to the continuity observed in the earlier stages of paste preparation – the conical cup and its precursors are simultaneously embedded and discontinuous within the production behaviours of the local potting community. If we contrast this picture with the parallel importation of a range of larger wheelmade Cretan shapes and their local imitations that used only hand-building techniques, then the argument for the adoption of the conical cup as a competitive strategy or a step farther along the path to specialised, full-time, mechanised pottery production seems flawed.

### The Conical Cup as Strategic Choice

There are a number of similarities between the major Cycladic settlements at the start of the Second Palace Period. First, settlement organisation and material culture traditions show continuity from earlier periods. This fact argues against large-scale colonisation from Crete or Minoan hegemony. Second, the conical cup appeared simultaneously, albeit tentatively, at all three settlements, with a few imported examples. Third, this shape and other small, open, handleless shapes were produced locally on each island and used the same Minoan technology, the potter's wheel. That the conical cup was transmitted from Crete to facilitate specific ritual practices seems obvious, yet why did the islanders not use shapes already within their local repertoires? Why did they simultaneously adopt the small handleless vessel and wheel technology? The answer is perhaps remarkably simple – to create as 'perfect' a Minoan imitation as possible. Other Minoan vessel imitations were manufactured using familiar hand-building techniques for island potters, yet not the roughly made, plain handleless cups. The potter's wheel, an innovation within the islands, would have been a far more difficult technique to learn (Roux and Corbetta 1989), so the intrinsic value of the wheel-produced cup must have been far greater than the same shape built by hand. This also seems

at odds with the association of the conical cup with the performance of ‘token hospitality’, particularly if considered alongside their inherent disposability too. Why did the islanders invest so much in producing such a simple shape with a ‘difficult’ technology, especially as the use of the wheel might have been virtually undetectable by the consumers of such a vessel?

Berg (2007) has begun to touch upon the complex social interactions that may have driven such an innovation. She dismisses the competitive model of Davis and Lewis (1985) on the basis that few Cretan conical cups were imported to Kea, and no Keian examples have been identified on Crete. She emphasises that conical cup production was for local consumption, and therefore, the standardisation seen within the Aya Irini assemblage can be better explained as the competition between different potting groups within the settlement. The potter’s wheel represented a local strategy for negotiating community identities and value systems within the islands in the face of growing palatial power on Crete (Berg 2007: 107). In his earlier discussion on the spread of Minoan material culture, Wiener (1984) proposes that the appearance of conical cups in the Cyclades and Kythera was not part of his wider ‘Versailles effect’, the local demand for a socially desirable product. Instead, he argues that these shapes provided ‘better evidence for the actual presence of significant numbers of Minoans or descendants of Minoans’ in these locations (Wiener 1984: 20). Wiener’s distinction resonates with our rejection of economic or competitive strategies for the spread of the conical cup and offers an alternative interpretation for the presence of conical cups amongst the islands. However, over the past five years, ceramic analysis has afforded a fresh perspective on the provenance and technology of conical cups that demands a reassessment of earlier models for Minoan presence. Detailed technological studies that focus on fabric analysis and forming techniques suggest that Cycladic communities selectively chose which aspects of Minoan society to imitate and participate in – theirs was no slavish attempt to become Minoan, rather a deliberate, selective ‘process of emulation engaged in strategically by local communities’ (Knappett and Nikolakopoulou 2008: 2).

So, if conical cups are neither the material expression of population pressure, nor an imposed Minoan practice, what might better explain them? Let us return to one of our opening statements: ‘conical cups, and the practices they enact, are an integral part of Minoan civilisation on and off Crete’. In other words, off-island communities first emulated Minoan cultural traits through those most iconic of Minoan artefacts, conical cups. This fact could be key to the rapid adoption of plain handleless vessels across the Aegean – the iconic status of the conical cup may have been just as desirable/powerful an indicator of Minoan identity in the later Bronze Age as it is today for Aegean archaeologists. As Momigliano (2009: 137) rightly points out, ‘the “Minoanisation” of the Aegean is a very complex phenomenon, encompassing many different processes (acculturation, emulation, trade, etc.) acting at local,

intra- and interregional levels'. Yet the transmission and adoption of the conical cup 'package' seems to transcend these different types of interactions: it appears simultaneously across Crete and at numerous sites off-island. Furthermore, the conical cup also signifies the nascent use of the potter's wheel at many Aegean sites (though it may have appeared earlier in coastal Anatolia – see Şahoğlu 2005), transmission of which is assumed to have taken place through intensive social engagement between potting communities and not the intermittent/brief/low-intensity contact that can characterise exchange or trading interactions.

### **Going Round in Circles – The Potter's Wheel and the Conical Cup**

The use of the potter's wheel, for conical cup manufacture – be it wheel fashioned, finished, or formed – is so bound up with Minoan technological traditions (widely established as a production technique during the MM IB period [Knappett 1999]) that it is difficult to attribute off-island production to local potters. The skills required to procure and competently use the wheel cannot be transmitted simply through visual observation, either of a finished vessel or a potter at work. Instead, this technique has been shown to require a long-term investment, the physical learning and copying of bodily gestures and positions (Roux and Corbetta 1989), thereby implying a degree of intense, long-term contact between Cretan and local off-island potting communities. Kiriati and Broodbank have discussed the nature of such interactions within the context of their work on the ceramic deposits of Kastri on Kythera (Kiriati 2003; Broodbank and Kiriati 2007). Yet, where Kythera offers evidence for settlement by migrant Minoan craftspeople with their own distinctive paste-processing and wheel production templates (from as early as the MM IB period [Broodbank and Kiriati 2007]), the ceramic evidence at Akrotiri suggests that the introduction of the potter's wheel was very much embedded within the local production tradition (Hilditch 2014). In short, we have yet to thoroughly engage with the question of off-island craft transmission and the role that producer and consumer played within these complex interactions. Were potters manufacturing the conical cup as they had been taught by other 'Minoan' potters? Or were the consumers, the willing participants within Minoan practices, demanding that the key object for their rituals be as Minoan as it could possibly be? Both scenarios presuppose an intimate knowledge of Minoan production techniques by either producer or consumer, though the former is more likely if we consider the physical constraints involved in transmitting a new forming technique (Roux and Corbetta 1989).

We have shown that the wheel was not initially employed as a labour- or time-saving device: the earliest examples appear in small quantities and could just as easily have been manufactured by hand. Nor was it a purely aesthetic

choice, by either potter or consumer, as most examples are undecorated, often rough in character and coarser in fabric than the local fine ware repertoire. We are left to consider the iconic nature of the conical cup: it seems that the production technique was as heavily embedded in the perceived meaning or value of the vessel as the context of consumption. We can suggest that the desire of consumers to participate within Minoan practices required an iconic object. Whether the practices were institutionalised feasting ceremonies or briefer gestures of token hospitality, they might have influenced or directly led to the adoption of a new manufacturing technique, at least within the Cyclades. This iconic package, instantly recognisable as a Minoan object, imbued with value through the method of its creation, served as a locus for the deliberate participation within Minoan practices and, possibly, for the strategic negotiation of local or Minoan identities. To put this another way, it may not have been enough to have the conical cup as an icon – it had to be an index too. Just as photographs are iconic signs that are causally made to resemble their referents – as indeed are various forms of ‘imprinted’ mould-made objects (Knappett 2002) – so might one understand the conical cup as a combination of iconic and indexical properties. It was not enough for the conical cup to look like a conical cup ought to look: it also had to look like it was made like a conical cup ought to be made – that is on the wheel. Interestingly, Belting (2004) discusses this combination of iconic and indexical sign properties in relation to the origins of art in early societies. Belting notes the people’s desire to presence the absent dead person through substitution with an effigy that was not only icon but also index. He points to examples of Levantine Pre-Pottery Neolithic B skull effigies that make an image of the departed by actually incorporating the departed into the image through the very skull itself, which is then plastered and decorated.

### **Conical Cups = Colonial Cups**

To sum up, mass-produced, wheel-fashioned, plain drinking vessels actually first appeared simultaneously across Crete *and* the southern Aegean. Hence, they are from the very first, not just conical cups but ‘colonial cups’. This term actually derives from an error made by a student in an exam, who meant to write ‘conical cups’. But it also happens to tie in nicely with recent ideas on the ‘colonialising’ role of artefacts themselves (see Gosden 2004). Rather than artefacts merely being the reflection of some colonialising process carried out by human agents, they can be considered as agents of colonialism themselves. Eminently iconic and highly recognisable in their simple plainness (paradoxically), ‘colonial cups’ seem to have been an effective means for Knossian elites to objectify and embed their power in material practices. This was not only achieved through such plain wares but through a whole suite of interrelated material culture forms: ashlar masonry, architectural styles

such as the Minoan Hall and lustral basin, figurative frescoes and rhyta. It is as if the Second Palace Period brings with it a standardised, coherent, objectified material culture, and the conical/colonial cup is one of a series of new 'objects' that iconically cemented palatial power. Even the rise of a single centre (Knossos) might be seen as a clearer objectification of Minoan power in a single place, whereas before it was more distributed and somehow by the same token less iconic. And yet this iconic network is not a set of free-floating images: it is grounded in a set of indexical relations whereby objects have to be closely tied to particular embodied practices of production and consumption.

Competing polities need to find means to feed their political economies, and one option is to extend their reach across greater temporal ranges and spatial distances to extract more resources. Iconic objects facilitate this extension by allowing a 'release from proximity' (Gamble 1998), since they exist as concepts, as well as artefacts per se. Thus, they can transcend space and time more readily, especially when different objects are interconnected in networks. This is what standardised plain wares can achieve, though there are of course other strategies, such as creating highly elaborate 'artworks', which palatial centres also engaged in very intensively. The success of Knossos may in part have lain in its ability to devise multiple means for extending the range of its political economy, with one strategy being the creation of simple plain ware forms that were iconic, widely recognisable, and embedded in everyday practices and bodily routines. If such a conjunction of the iconic and the indexical was thus an effective strategy for extended palatial power, then the conical cup conveyed this combination in a very simple, condensed way. Perhaps plain wares simply helped to make these connections plain.

## References

- Barber, R. L. N., 1984. 'The Status of Phylakopi in Creto-Cycladic Relations'. In *The Minoan Thalassocracy: Myth and Reality; Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June 1982*, edited by R. Hägg and N. Marinatos, 179–82. Göteborg: Paul Åströms Förlag.
- Belting, H., 2004. *Pour une Anthropologie des Images*. Paris: Gallimard.
- Berg, I., 2004. 'The Meanings of Standardization: Conical Cups in the Late Bronze Age Aegean'. *Antiquity* 78: 74–85.
- 2007. *Negotiating Island Identities: The Active Use of Pottery in the Middle and Late Bronze Age Cyclades*. Piscataway, NJ: Gorgias Press.
- Betancourt, P., 2008. *Introduction to Aegean Art*. Philadelphia: INSTAP Academic Press.
- Branigan, K., 1981. 'Minoan Colonialism'. *The Annual of the British School at Athens* 76: 23–34.
- 1984. 'Minoan Community Colonies in the Aegean?' In *The Minoan Thalassocracy: Myth and Reality; Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June 1982*, edited by R. Hägg and N. Marinatos, 49–52. Göteborg: Paul Åströms Förlag.

- Broodbank, C., 2004. 'Minoanisation'. *Proceedings of the Cambridge Philological Society* 50: 46–91.
- Broodbank, C., and E. Kiriati, 2007. 'The First "Minoans" of Kythera Revisited: Technology, Demography, and Landscape in the Prepalatial Aegean'. *American Journal of Archaeology* 111: 241–74.
- Cadogan, G., 1977–78. 'Pyrgos, Crete, 1970–77'. *Archaeological Reports* 24: 70–84.
- 2013. 'Where has Middle Minoan III gone? A Lack at Myrtos–Pyrgos – and Elsewhere? What does it mean?' In *Intermezzo: Intermediacy and Regeneration in MM III Crete*, edited by C. Macdonald and C. Knappett, 179–81. London: British School at Athens.
- Cherry, J. F., 1986. 'Politics and Palaces: Some Problems in Minoan State Formation'. In *Peer Polity Interaction and Socio-Political Change*, edited by A. C. Renfrew and J. F. Cherry, 19–45. Cambridge: Cambridge University Press.
- Cherry, J. F. and J. L. Davis, 1982. 'The Cyclades and the Greek Mainland in LC I: The Evidence of the Pottery'. *American Journal of Archaeology* 86: 333–41.
- Cummer, W. W. and E. Schofield, 1984. Ayia Irini: House A (Keos III). Mainz: Philipp von Zabern.
- Davis, J. L., 1979. 'Minos and Dexithea: Crete and the Cyclades in the Later Bronze Age'. In *Papers in Cycladic Prehistory*, edited by J. L. Davis and J. Cherry, 143–57. Los Angeles: UCLA Institute of Archaeology.
- 1986. *Keos V: Ayia Irini Period V*. Mainz: Philipp von Zabern.
- Davis, J. L. and J. Cherry, 2007. 'The Cycladic Pottery from Late Bronze I Levels'. In *Excavations at Phylakopi in Melos 1974–77*, edited by A. C. Renfrew, 265–306. London: British School at Athens.
- Davis, J. L. and H. B. Lewis, 1985. 'Mechanization of Pottery Production: A Case Study from the Cycladic Islands'. In *Prehistoric Production and Exchange: The Aegean and Eastern Mediterranean*, edited by A. B. Knapp and T. Stech, 79–92. Los Angeles: University of California Press.
- Day, P. M. and D. E. Wilson, 1998. 'Consuming Power: Kamares Ware in Protopalatial Knossos'. *Antiquity* 72: 350–58.
- 2002. 'Landscapes of Memory, Craft and Power in Prepalatial and Protopalatial Knossos'. In *Labyrinth Revisited: Rethinking 'Minoan' Archaeology*, edited by Y. Hamilakis, 143–66. Oxford: Oxbow Books.
- Driessen, J. and C. F. Macdonald, 1997. *The Troubled Island. Minoan Crete Before and After the Santorini Eruption*. Aegaeum 17, Liège: Université de Liège.
- Evans, A. J., 1921. *The Palace of Minos at Knossos*. Volume I. London: Macmillan.
- Gamble, C., 1998. 'Palaeolithic Society and the Release from Proximity: A Network Approach to Intimate Relations'. *World Archaeology* 29: 426–49.
- Girella, L., 2007. 'Toward a Definition of the MM III Ceramic Sequence in South-Central Crete: Returning to the Traditional MM and IIIB Division?' In *Middle Helladic Pottery and Synchronisms*, edited by F. Felten, W. Gauss and R. Smetana, 233–55. Vienna: Austrian Academy of Sciences Press.
- Gosden, C., 2004. *Archaeology and Colonialism: Cultural Contact from 5000 BC to the Present*. Cambridge: Cambridge University Press.
- Hägg, R., and N. Marinatos, eds., 1984. *The Minoan Thalassocracy: Myth and Reality; Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June 1982*. Göteborg: Paul Åströms Förlag.

- Haysom, M., 2010. 'The Double-axe: A Contextual Approach to the Understanding of a Cretan Symbol in the Neopalatial Period'. *Oxford Journal of Archaeology* 29(1): 35–55.
- Hilditch, J., 2009. 'Reconstructing Technical Choice, Social Practice and Networks of Exchange in the Middle Bronze Age of the Cyclades: the Ceramic Perspective'. Archaeology. Unpublished PhD Thesis, University of Exeter.
- 2014. 'Analyzing Technological Standardization: Revisiting the Minoan Conical Cup'. In *Understanding Standardization and Variation in Mediterranean Ceramics: Mid 2nd to Late 1st Millennium BC*, edited by A. Kotsonas, 25–38. Leuven: Peeters.
- Hood, M. S. F., 1996. 'Back to Basics with Middle Minoan IIIB'. In *Minotaur and Centaur: Studies in the Archaeology of Crete and Euboea Presented to Mervyn Popham*, edited by D. Evely, I. S. Lemos and S. Sherratt, 10–16. BAR International Series 638. Oxford: Archaeopress.
- Kaiser, I., 2009. 'Miletus IV: The Locally Produced Coarse Wares'. In *The Minoans in the Central, Eastern and Northern Aegean – New Evidence*, edited by C. F. Macdonald, E. Hallager and W.-D. Niemeier, 159–65. Monographs of the Danish Institute at Athens, vol. 8. Athens: Danish Institute at Athens.
- Kiriati, E., 2003. 'Sherds, Fabrics and Clay Sources: Reconstructing the Ceramic Landscapes of Prehistoric Kythera'. In *Measuring the Aegean Bronze Age, Proceedings of the 9th International Aegean Conference, 18–21 April 2002, New Haven, Yale University*, edited by K. P. Forster and R. Laffineur *METRON: Measuring*, 123–30. Liège: Université de Liège.
- Knappett, C., 1999. 'Tradition and Innovation in Pottery Forming Technology: Wheel-Throwing at Middle Minoan Knossos'. *The Annual of the British School at Athens* 94: 101–29.
- 2002. 'Photographs, Skeuomorphs and Marionettes: Some Thoughts on Mind, Agency and Object'. *Journal of Material Culture* 7(1): 97–117.
- 2004. 'Technological Innovation and Social Diversity at Middle Minoan Knossos'. In *Knossos: Palace, City, State*, edited by G. Cadogan, E. Hatzaki and A. Vasilakis, 257–65. British School at Athens Studies No. 12. London: British School at Athens.
- 2008. 'The Material Culture of Protopalatial Crete'. In *The Cambridge Companion to the Aegean Bronze Age*, edited by C. Shelmerdine, 121–39. Cambridge: Cambridge University Press.
- Knappett, C., and T. F. Cunningham, 2003. 'Three Neopalatial Deposits from Palaikastro, East Crete'. *The Annual of the British School at Athens* 98: 107–87.
- Knappett, C., and I. Nikolakopoulou, 2005. 'Exchange and Affiliation Networks in the MBA southern Aegean: Crete, Akrotiri and Miletus'. In *EMPORIA: Aegeans in the Central and Eastern Mediterranean: Proceedings of the 10th International Aegean Conference, Italian School of Archaeology, Athens, 14–18 April 2004*, edited by R. Laffineur and E. Greco, 175–84. Liège: Université de Liège/University of Texas.
- 2008. 'Colonialism without Colonies? A Bronze Age Case Study from Akrotiri, Thera'. *Hesperia* 77: 1–42.
- Knappett, C., C. F. Macdonald and I. Mathioudaki, *From First to Second Palace at Knossos: An Integrated Ceramic and Architectural Study of Evans' MM III Deposits*

- from the Palace of Minos*. British School at Athens Studies Series. London: British School at Athens (forthcoming).
- Koehl, R. B., 2006. *Aegean Bronze Age Rhyta*. Prehistory Monographs 19. Philadelphia, PA: INSTAP Academic Press.
- Macdonald, C. F., E. Hallager and W.-D. Niemeier, eds., 2009. *The Minoans in the Central, Eastern and Northern Aegean – New Evidence*. Monographs of the Danish Institute at Athens, vol. 8. Athens: Danish Institute at Athens.
- Macdonald, C. F. and C. Knappett, eds., 2013. *Intermezzo: Intermediacy and Regeneration in MM III Crete*. British School at Athens Studies no. 21. London: British School at Athens.
- Manning, S., 2008. 'Protopalatial Crete: Formation of the Palaces'. In *The Cambridge Companion to the Aegean Bronze Age*, edited by C. Shelmerdine, 105–20. Cambridge: Cambridge University Press.
- McEnroe, J. C., 2010. *Architecture of Minoan Crete: Constructing Identity in the Aegean Bronze Age*. Austin: University of Texas Press.
- Momigliano, N., 2005. 'Iasos and the Aegean Islands before the Santorini Eruption'. In *Emporia: Aegeans in Central and Eastern Mediterranean*, edited by R. Laffineur and E. Greco, 217–25. Liège: Université de Liège.
- 2009. 'Minoans at Iasos?' In *The Minoans in the Central, Eastern and Northern Aegean – New Evidence*, edited by C. F. Macdonald, F. Hallager and W.-D. Niemeier, 121–40. Monographs of the Danish Institute at Athens, vol. 8. Athens: Danish Institute at Athens.
- 2012. *Bronze Age Carian Iasos: Structures and Finds from the Area of the Roman Agora*. Rome: Giorgio Bretschneider Editore.
- Nikolakopoulou, I., F. Georma, A. Moschou and F. Sophianou, 2008. 'Trapped in the Middle: New Stratigraphical and Ceramic Evidence from Akrotiri, Thera'. In *Orizon: A Colloquium on the Prehistory of the Cyclades, Cambridge, 25–28 March 2004*, edited by A. C. Renfrew, N. Brodie, G. Gavalas and J. Doole, 311–24. Cambridge: McDonald Institute Monographs.
- Nowicki, K., 2008. *Monastiraki Katalimata: Excavation of a Cretan Refuge Site, 1993–2000*. Philadelphia, PA: INSTAP Academic Press.
- Poursat, J.-C., 1992. *Guide de Malia: Quartier Mu*. Ecole Française d'Athènes, sites et monuments VIII. Athens: Ecole Française d'Athènes.
- Poursat, J.-C., and C. Knappett, 2005. *Le Quartier Mu IV – La Poterie du Minoen Moyen II: Production et Utilisation*. Etudes Crétoises 33, Paris.
- Pullen, D., ed., 2010. *Political Economies of the Aegean Bronze Age*. Oxford: Oxbow Books.
- Rethemiotakis, G., 2002. 'Evidence on Social and Economic Changes at Galatas and Pediada in the New-Palace Period'. In *MONUMENTS OF MINOS: Rethinking the Minoan Palaces*, edited by J. Driessen, I. Schoep and R. Laffineur, 55–69. Aegaeum 23. Liège: Université de Liège.
- Roux, V., and Corbetta, D., 1989. *The Potter's Wheel: Craft Specialization and Technical Competence*. New Delhi: Oxford and IBH Publishing.
- Roux, V., and M.-A. Courty, 1998. 'Identification of Wheel-fashioning Methods: Technological Analysis of 4th–3rd Millennium BC Oriental Ceramics'. *Journal of Archaeological Science* 25(8): 747–63.

- Rupp, D., and M. Tsipopoulou, 1999. 'Conical Cup Concentrations at Neopalatial Petras: A Case for a Ritualised Reception Ceremony with Token Hospitality'. In *MELETEMATATA: Studies in Aegean Archaeology Presented to Malcolm H. Wiener as he enters his 65th Year*, edited by P. P. Betancourt, V. Karageorghis, R. Laffineur and W.-D. Niemeier, 729–39. Aegaeum 20. Liège: Université de Liège.
- Şahoğlu, V., 2005. 'The Anatolian Trade Network During the Early Bronze Age'. *Oxford Journal of Archaeology* 24(4): 339–61.
- Shaw, J. W., 2009. *Minoan Architecture: Materials and Techniques*. Studi di archeologia cretese. Padova: Bottega d'Erasmus.
- Van de Moortel, A., 2002. 'Pottery as a Barometer of Economic Change: from the Protopalatial to the Neopalatial Society in Central Crete'. In *Labyrinth Revisited: Rethinking 'Minoan' Archaeology*, edited by Y. Hamilakis, 189–211. Oxford: Oxbow Books.
- Whitelaw, T., 2005. 'A Tale of Three Cities: Chronology and Minoanisation at Phylakopi in Melos'. In *Autochthon: Papers Presented to O.T.P.K. Dickinson on the Occasion of his Retirement*, edited by A. Dakouri-Hild and S. Sherratt, 37–69. Oxford: Archaeopress.
- Wiener, M. H., 1984. 'Crete and the Cyclades in LM I: The Tale of the Conical Cups'. In *The Minoan Thalassocracy: Myth and Reality; Proceedings of the Third International Symposium at the Swedish Institute in Athens, 31 May–5 June 1982*, edited by R. Hägg and N. Marinatos, 17–26. Göteborg: Paul Åströms Förlag.
- 1990. 'The Isles of Crete? The Minoan Thalassocracy Revisited'. In *Thera and the Aegean World III, vol. 1: Archaeology*, edited by D. A. Hardy, C. Doumas, J. A. Sakellarakis and P. M. Warren, 128–61. London: The Thera Foundation.

