

Sophistication in Simplicity: The First Production of Wheelmade Pottery on Late Bronze Age Cyprus

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Abstract

My aim in this paper is to explore the significance of the first production of wheelmade pottery during the earlier part of the Late Bronze Age on Cyprus (ca. 1650–1320 BC), considering a combination of technological and stylistic ceramic attributes. I examine the evidence—using unpublished pottery data from the key site of Enkomi in comparison with other published settlements—within the framework of a range of transformations in society and material culture that occurred during this period. I argue that the initial impact of integration into eastern Mediterranean trading systems precipitated an attempt by sectors of the population to acquire the accoutrements of ‘urban’ living, including the introduction of a range of Levantine-inspired vessels of standardized and simplified appearance, particularly associated with new communal consumption practices. However, lacking the urban infrastructure with which the introduction of wheel-forming technology is otherwise associated, the Cypriot response appears to be unique for the Bronze Age eastern Mediterranean. This challenges the persistent assumption of an evolutionary sequence whereby ostensibly superior wheelmade pottery gradually replaces handmade wares. The evidence suggests instead a dynamic process whereby the entire Cypriot population is actively involved in the construction of social identity as expressed through material culture.

Keywords: Cyprus, Late Bronze Age, wheelmade pottery, social identity, technology transfer, feasting

Introduction

The skill of manufacturing wheelmade pottery involves a series of complex, interlinked technological and cultural choices (van der Leeuw 1993), seldom explicitly addressed in archaeological discourse. Wheelmade pottery occurring in archaeological assemblages is often held to signal an aspect of the ‘social complexity package’, appearing alongside other features such as economic specialization and political administration, with the associated implications of full-time craft specialization and mass production in highly stratified societies (Stod-

dart 1998: 928; Wattenmaker 1998: 129). Loney (2000: 659) has also noted an embedded economic determinism in archaeological studies of wheelmade pottery, with problem-solving or time-saving aspects assumed to lead to the simplification and standardization of forms. Others (Roux and Courty 1998; Knappe 1999; Roux 2003; Berg 2006), however, have emphasized that economic considerations are of little relevance for the adoption of such a technology and the Cypriot evidence indicates the same. As I discuss in this paper, the introduction of a range of multi-purpose plain

wares on Cyprus may be viewed as a deliberate choice to acquire what is here termed 'urban-style' pottery. This involved both stylistic and technological borrowings, intimately associated with the adoption of new cultural practices influenced by increasing contact with contemporary Levantine urban centres.

Within the eastern Mediterranean Bronze Age, Cyprus appears to be unique in the mode of adoption of the potters' wheel. There is, for example, no progression from small to larger vessels or modification of turntable techniques as seen on Crete at this time (Knappett 1999; 2004), and no constraints in expertise apparent in the construction of only smaller vessels as seen on Bronze Age Melos (Berg 2006: 249). Crucially, the Cypriot material shows no evidence at all for the use of a rotational device in forming or finishing the vessels prior to the first appearance of wheelmade pottery. Whilst potters within a given society often employ different techniques for different classes of vessels (Wattenmaker 1998: 127; Roux 2003: 20), on Cyprus the majority of styles for which the wheel was adopted continued to be manufactured in *both* handmade and wheelmade forms. For the wares forming the focus of this paper, individuals or groups of potters utilized visually identical fabrics and constructed the same vessel types using different technologies. Wheelmade pottery did not displace the handmade wares and, in fact, production of Cypriot handmade pottery styles increased, both for local use and for export in quantity to surrounding regions. The significance of this process for changes in Cypriot identity and social organization is explored below. It is not until around 350 years later, in the late 13th century BC, that both the handmade and earlier wheelmade forms began to be replaced by a complex of painted and plain wheelmade wares (some imitating Mycenaean styles), which may be considered to represent the first truly standardized and mass-produced pottery repertoire on the island (Sherratt 1991: 193).

My aim in this paper is to examine how and why pottery formed on a rotational device was first produced on Cyprus in the mid-second millennium, some one thousand years after it became common in neighbouring regions. This question has received little attention, partly due to an assumption made by archaeologists working on Cyprus during the earlier 20th century that the first wheelmade wares were all imports from the Levant and therefore indicative of trade or migration (Gjerstad 1926: 208-209). Other archaeologists were uncomfortable with this conclusion, particularly because of the large quantities of some styles occurring in both settlement and mortuary deposits (Sjöqvist 1940: 87-91). It was not until a series of provenance studies demonstrated that the vessels were manufactured from Cypriot clays that this view was challenged (e.g. Artzy 1973; Artzy *et al.* 1974; 1976). Since the publication of these archaeometric results, it has been accepted that the wares in question were locally produced, but nobody has undertaken an investigation of the technological changes involved; it has simply been assumed that the wheelmade wares gradually replaced the handmade versions (Artzy *et al.* 1976: 24). The omission also arises from a lack of published stratified data, as most evidence comes from disturbed or difficult to interpret multi-period tombs. The only substantial body of material with which to investigate these processes is the pottery from the earliest occupation strata at the Late Cypriot settlement of Enkomi (Dikaios 1969-71), recently re-examined in depth (Crewe 2004).

Pottery Manufacturing Techniques and Recent Research

Diagnostic complications arise from recent work demonstrating a number of different technological options between slow/fast wheel and primary/secondary forming techniques (as classified by Rye 1981: 62-67). These

techniques result in vessels of similar appearance, and therefore traditional methods of identifying mode of production based on surface features may not be diagnostic¹ (see Courty and Roux 1995; Roux and Courty 1998). Briefly, wheel-throwing utilizes 'rotative kinetic energy' (RKE) to raise the walls and form the rough-out of the vessel as well as to carry out later modifications to shape. Wheel-shaping uses coil-building to create the rough-out and may use either slow rotation or RKE to thin the walls later and create the final form. It is also possible to use RKE initially to join the coils and create the rough-out (Roux and Courty 1998: 748; Knappett 2004: 259). In this case, wheel-shaping should be considered a primary forming technique but further secondary shaping or finishing is still required. If RKE has been employed in finishing, then the vessel will exhibit features traditionally considered diagnostic of thrown pottery (Rye 1981: 74–75), such as rilling and compression ridges.

The key difference between wheel-throwing and wheel-shaping technology is that, with the latter, multiple steps are required in the primary production of the rough-out (discounting universal additional steps such as the addition of handles) and there is very little associated gain in speed of production (Courty and Roux 1995: 48; Roux and Courty 1998: 748). Both techniques, however, are closely related in terms of the necessity of learning a new, radically different set of motor skills from hand-building techniques. Both also require a lengthy apprenticeship in order to gain proficiency (Roux 2003: 18, with refs.). The need for an apprenticeship highlights the fact that a change from handmade to wheelmade pottery, particularly in contexts of technology transfer, requires extensive interaction between potters. This has important implications for the present study, necessitating some relationship between Cypriot and foreign potters. The presence of a

pre-existing body of specialists is implied and the technology should be viewed as deliberately acquired (Courty and Roux 1995: 48). Gosselain's (2000: 193) ethnoarchaeological research with pottery-making communities in Africa led him to conclude that manufacturing technique is the most deeply internalized aspect of production, resistant to change and embedded in social identity. These factors emphasize the intentionality of the adoption and transform the technology into a social practice that 'engenders self-awareness, forges social relationships, and both reaffirms and contests tradition' (Dobres 2001: 48).

Further research on 2nd-millennium BC assemblages is required to establish whether throwing was employed but it is certainly not possible currently to assume knowledge of this technique. Based upon both Minoan evidence (Knappett 2004) and the Cypriot data, at least some of the vessels were coil-built and wheel-shaped using RKE, but it is still possible that other vessels were thrown. For the purposes of this paper, 'wheelmade' refers only to the use of high-speed rotation utilizing continuous pressure and exploiting RKE, used for joining coils and/or for shaping of the vessel, and need not imply wheel-thrown pottery. It is also not necessary that the device employed was a fully functional fast wheel, as experimental studies have shown that sufficient momentum for throwing small vessels may be generated with turntables (Amiran and Shenhav 1984; Powell 1995). Use of the term handmade within this paper implies that both primary and secondary forming were carried out without RKE but rotation may have been used for a range of secondary techniques, such as thinning, scraping and fashioning of bases or rims. Whilst the distinction is important in terms of understanding past technologies, answers to questions of how or why technological transfer occurred will be equally valid for the appearance of both wheel-throwing and wheel-shaping techniques.

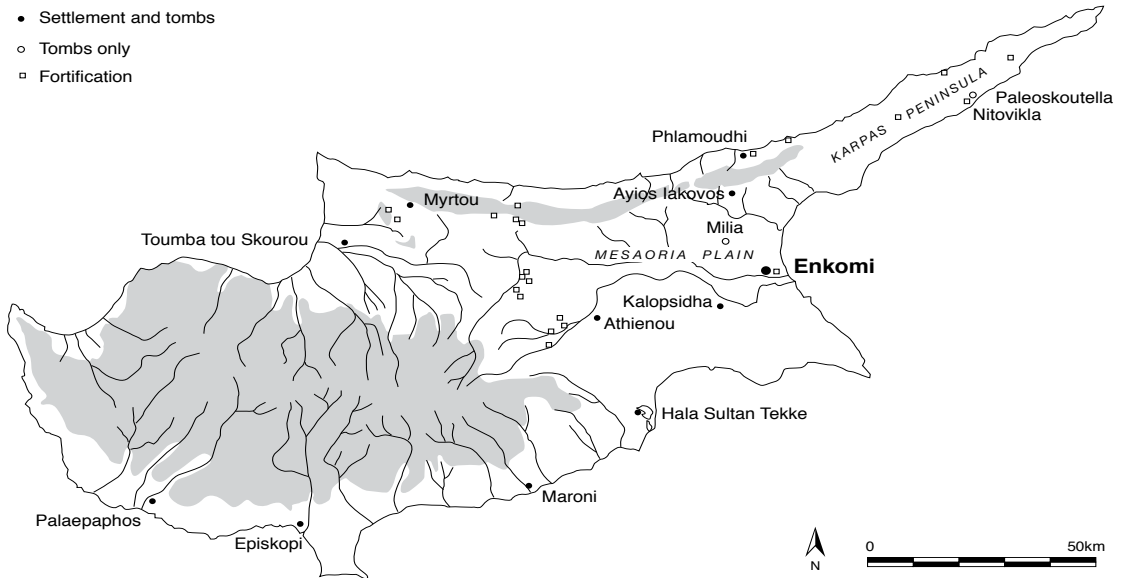


Figure 1. Map of Cyprus showing Late Cypriot sites mentioned in the text.

Relative chronological phase	Approx. date BC	Enkomi Levels (Dikaïos 1969–71)	Enkomi modified phasing
Early Cypriot (EC) I–III	2400/2300–1950		
Middle Cypriot (MC) I	1950–1850		
Middle Cypriot (MC) II	1850–1750		
Middle Cypriot (MC) III	1750–1650	Level A, Areas I and III	Ambiguous in Area I, LC IA in Area III
Late Cypriot (LC) IA	1650–1550	Level IA, Areas I and III	LC IA1 Area I, LC IA2 Area III
Late Cypriot (LC) IB	1550–1400	Level IB, Areas I and III	LC IB1 only in Area I, all LC IB and into LC IIA1 in Area III
Late Cypriot (LC) IIA–B	1400–1340/15	Level IIA, Areas I and III	LC IIA2–IIB in Areas I and III
Late Cypriot (LC) IIC	1340/15–1200	Level IIB, Areas I and III	LC IIC1 in Area I, all LC IIC in Area III
Late Cypriot (LC) IIIA	1200–1100	Level IIIA, Areas I and III	LC IIC2 in Area I, LC IIIA1 in Area III
Late Cypriot (LC) IIIB	1100–1050	Level IIIB–C, Areas I and III	LC IIIA–possibly IIIB in Areas I and III

Table 1. Relative chronological phases of the Cypriot Bronze Age with approximate absolute dates (Merrillees 1992; Manning *et al.* 2001). The last two columns show the relative dates of the ‘Levels’ (building phases) assigned by Dikaïos to the Enkomi Areas I and III structures and modified versions of these based on later research (Levels A–IIA, Crewe 2004; Levels IB–IIA, Eriksson 1993; Levels IIB–IIIA, Negbi 1986; Level IIIB–C, Iacovou 1988 and Kling 1989).

The Beginning of the Late Bronze Age on Cyprus

On Cyprus, the end of the Middle Bronze Age (Middle Cypriot [MC] III) and the beginning of the Late Bronze Age (Late Cypriot [LC] IA) (Table 1) saw a range of dramatic changes in the island's settlement patterns and material culture, changes accompanied by evidence for increased interaction with the surrounding region. These included abandonment of MC villages and many cemeteries and relocation to new coastal settlements with intramural tombs, such as Enkomi and Morphou *Toumba tou Skourou* (Figure 1). A range of Levantine and Egyptian imports (and Cypriot imitations of these) occur in tombs and, during the later LC IB period, the first evidence for literacy and local seal production. One of these LC

I innovations is the first local pottery manufactured on a rotational device. The impetus for these changes is widely held to be foreign demand for Cypriot copper and the subsequent integration of Cyprus into east Mediterranean socio-political and ideological systems (Knapp 1988; Muhly 1989; Philip 1991; Peltenburg 1996; Keswani 1996; Webb 1999).

In terms of exports (other than the unknown extent of the copper trade at this point in time), the pottery styles of eastern Cyprus are prevalent during LC IA. From LC IB, however, styles developed in the west and central areas of the island dominate, namely the White Slip and Base-ring wares (Merrillees 1971: 78; Manning 2001: 82) (see Table 2). This has been viewed as evidence that the regionalism prevalent in Cypriot pottery of the earlier

<i>Ware group</i>	<i>Ware subset</i>	<i>Period produced</i>	<i>Regional variants produced</i>
Base-ring	Proto Base-ring	LC IA1	NW, C, SC, U
	Base-ring (I–II)	LC IA2–IIC	NW, C, SC, SW
Bichrome	Bichrome Handmade	LC IA2	NW, E
	Bichrome Wheelmade	LC I	K, E (?)
	Bichrome uncertain technology	LC I	E, U
Plain White	Plain White Handmade	MC III–LC III	All (by LC II)
	Plain White Wheelmade I	LC I–IIB	All (by LC II)
	Plain White Wheelmade II	LC II–III	All
	Plain White uncertain technology	LC I–III	All (by LC II)
Red-on-Red and Red-on-Black		MC II–LC I	K
Red Polished	(I–VI)	EC I–LC IA1	All
Red Slip and Black Slip	Red/Black Slip (I–V)	MC I–LC I	All
	Red/Black Slip Wheelmade	LC I	All (?)
	Red/Black Slip uncertain technology	LC I	All (?)
White Painted	White Painted (II–VI)	MC I–LC I	NW, N, C, K, E, SC
	White Painted Wheelmade I	LC IA	E, U
	White Painted Wheelmade II	LC IA2–IIB	E
	White Painted Wheelmade III	LC IIC–III	E, SW, SC, U
	White Painted uncertain technology	LC IA	E, U
White Slip	Proto White Slip	LC IA1	NW, C, U
	White Slip (I–II)	LC IA2–IIC	NW, C, SW, U

Table 2. Groups and subsets for Middle–Late Cypriot Bronze Age pottery wares featuring in this paper. Unless otherwise noted, all are handmade. Cypriot ceramic regional zones (after Merrillees 1971; Knapp and Cherry 1994: 160): NC = north coast; NW = northwest; K = Karpas Peninsula; E = eastern Mesaoria Plain and coast; C = central inland; SC = south coast; SW = southwest coast; U = uncertain areas of production.

Bronze Age had ceased and that the east had adopted and begun to produce these styles. The evidence from Enkomi and other eastern sites, however, does not support widespread LC IB use of these wares except as grave goods and it is not until LC II that an island-wide pottery repertoire is in place (Crewe 2007a). This point is addressed further in relation to the pottery data (below).

We have little understanding of the specific mechanisms through which LC society became so transformed (ca. 1650 BC), resulting in the appearance of towns and centres with evidence for a high degree of socio-political, administrative and religious organization by LC IIC, some 300 years later. The LC IIC towns (ca. 1340/15–1200 BC) are usually held to be autonomous, but views differ as to whether this represents devolution from centralized control during the earlier LC (Knapp 1996a; Peltenburg 1996; Webb 1999) or a continuation of the regionally-based organisation of the preceding periods (Keswani 1993; 1996; Manning and De Mita 1997). Whichever way the LC II situation is interpreted, it is primarily with the LC I evidence that this paper is concerned and the scenario favoured here is that LC I Cyprus was characterised by a number of groups competing for both wealth and power. This is supported by the widespread distribution of exotics at both coastal and inland sites at this time (Keswani 2004: 143), alongside the geographically dispersed nature of Cypriot resources and landfalls, highlighting the difficulty for one locality to control trade and foreign contacts (Manning and De Mita 1997: 107).

Key to understanding the beginning of the LC period is the presence of a number of 'fortifications', one of which is located at Enkomi (Figure 1). Some are substantial multi-roomed structures, others are smaller platforms or watchtowers. All seem to have been located with the aim of either commanding a prominent position within the landscape or enabling a view to the surrounding area (Fortin 1981:

482–88). Fortification is probably a misnomer for many of these buildings, but whatever their specific function they represent the first non-domestic, 'monumental' architecture seen in the Late Cypriot. Their apparently contemporaneous construction is considered to reflect upheaval on the island, possibly related to competition for copper resources or trade links, population growth, the rise of local elites, or fear of invaders; it has even been held that they were the foreigner's strongholds (Peltenburg 1996: 30–32). The fortifications are discussed in detail elsewhere (Crewe 2004: 131–34) but two current interpretations are important here. The first is that they represent a strategy by the fledgling state of Enkomi to ensure control of routes to the copper sources, and others may have been part of the territory of the northwestern side of *Toumba tou Skourou*. (Peltenburg 1996: 30); the second is that they were part of the process of local elite emulation of Levantine practices (Philip 1991: 93). The latter interpretation is supported by the pottery evidence presented in this paper. Furthermore, it is the final abandonment of these structures in LC IIA that signals the demise of a system of competing locally based groups and the transformation to institutionalized socio-political systems centred on one or more of the coastal centres.

The Situation at Enkomi (Figure 2)

Central to interpretation of the beginning of the LC period is the coastal settlement of Enkomi, often considered to be the first state-like entity on the island and identified by some with the *Alashiya* of Near Eastern documentary sources (Muhly 1989; Peltenburg 1996; on the texts, see Knapp 1996b). In terms of both settlement and mortuary evidence, Enkomi remains the most extensively excavated and published LC coastal town (major reports include Murray *et al.* 1900; Gjerstad *et al.* 1934; Schaeffer 1936; 1952; 1971; Dikaios 1969–71; Courtois 1984). Whilst undoubtedly

one of the most important LC settlements, this bias has led to Enkomi's designation as the 'prime' site (noted by Catling 1962: 143), and the lack of excavated remains at other coastal towns during LC I makes it impossible to establish Enkomi's relative importance at this time. Like these other settlements, the majority of the evidence from Enkomi derives from the more extensive and better preserved LC IIC–IIIA periods.

My analysis is concerned with the component of Enkomi excavated by the Cypriot Department of Antiquities from 1948–58 (Dikaios 1969–71), as this remains the only area of the site with substantial exposure of LC I–IIB deposits (Figure 2). Although discussion of the architecture and stratigraphy was thorough, publication of the pottery was incomplete. Dikaios (1969–71: 441–74) published statistics of the percentages of the fine and decorated wares within the assemblage but the plain

wares, as well as the pottery he considered to be residual from MC occupation, were not included. Over half of the assemblage was thus omitted from the statistics, dramatically skewing percentages of fine and decorated pottery. Full understanding of this material may also shed light on the extent of Enkomi's involvement in the dissemination of new technology in relation to the possible pre-eminence of the site during LC I.

Dikaios' excavation was concentrated in Area I and Area III, each of which contained a single building dated to LCI, with evidence of restructuring and new constructions dated to LC IIA–B before being extensively overbuilt during LC IIC (Table 1). As the two areas are not stratigraphically linked and there are differences in the sequences of construction and abandonment, they are treated as discrete assemblages within this paper. Differences between the assemblages appear to

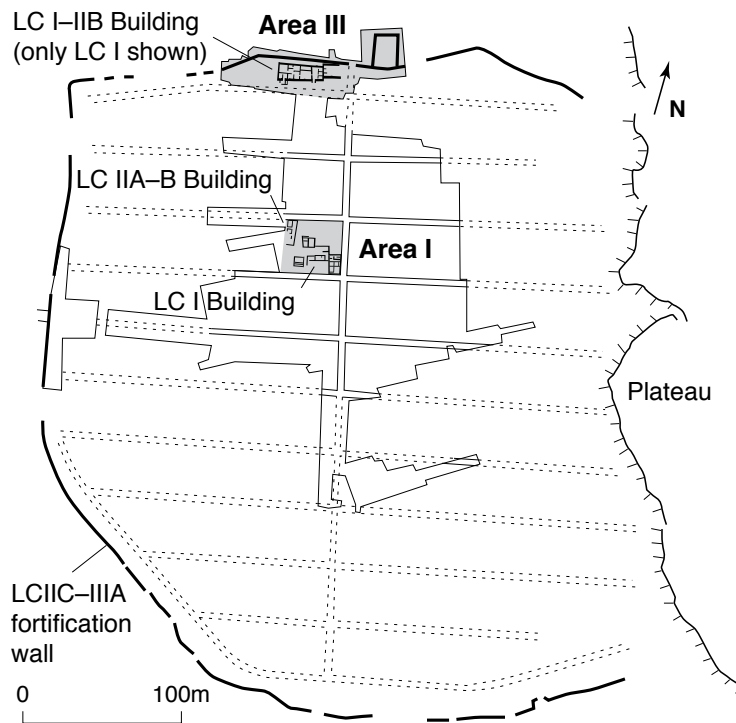


Figure 2. Plan of Enkomi showing the Cypriot Department of Antiquities' excavation areas and the LCIIC–IIIA town grid and fortification wall.

be largely chronological and not related to use or the status of the inhabitants of the two buildings (Crewe 2004: 225-27 for further discussion). The Area I building was erected first in LC IA1,² seemingly abandoned early in LC IB. The area lay vacant until LC IIC. During LC IIA–B, a new building was constructed in a previously unoccupied part of the site. This building mainly lay outside the limits of Dikaïos' trench and was disturbed by LC IIC construction. Reliable contextual information is limited to the deposits from one room (Room 142), which does appear to be a special assemblage, containing a large proportion of fine and imported pottery (discussed further below). Initial construction in Area III (the fortification building) occurred in LC IA2, with a destruction at the end of the period and several LC IB rebuilding episodes prior to restructuring in LC IIA–B. Level A deposits, underlying the buildings in both areas and dated to MC III by Dikaïos (1969–71: 15, 153), are problematic and not discussed here. I now focus upon the Enkomi assemblage, first placing the material within the context of the broader pottery repertoire of the island.

Late Cypriot Pottery Production

A range of handmade wares common in the MC period continued to be manufactured during LC I (some showing typological changes), with production of some wares ceasing by LC II at the latest, particularly some of the Red-on-Black and White Painted varieties (Åström 1964; 1972b; Merrillees 2002 and see Table 2). Other wares first appearing in the MC, including the Plain White ware, Red/Black Slip and White Painted wares, were manufactured in both wheelmade and handmade forms during LC I (discussed further below). Pottery styles of MC III exhibit a greater degree of regional interaction, borrowing of forms and motifs, and a greater willingness for experimentation than during the preceding periods, perhaps suggest-

ing that movements of peoples within Cyprus increased at the same time that external contacts intensified (Herscher 1972: 29; Frankel 1988: 31). LC I pottery is characterized by the mixture of novel and traditional attributes and an increase in the number of ware-specific forms. Even within the handmade tradition, innovation is attested in vessel forms and in the use of a turntable for aspects of Base-ring production (Vaughan 1991: 122). Storage jars, cooking pots and the majority of coarse wares continue to be handmade throughout the LC period.

Pottery production workshops have been excavated in LC I settlement contexts at Morphou *Toumba tou Skourou* (Vermeule and Wolsky 1990), Phlamoudhi *Melissa* (Smith 2005: 35-36) and at the isolated LC II production site of Sanidha (Todd and Pilides 1993), but no wheelmade wares were produced at these localities. Wasters found in quantity at Kalopsidha (Åström 1966: 8) and Episkopi *Bamboula* (Daniel 1938: 266) have been held to indicate that pottery production was carried out at these sites as well. Local production in certain wares at Enkomi has also been asserted, based upon the presence of over-fired vessels (Keswani 1991: 112). None of the Enkomi examples, however, were wasters and all were functional, if misshapen, vessels. The similarity in fabrics of the bulk of the assemblage (discussed below) suggests that manufacture was local but there is no evidence for production within the site of Enkomi itself.

Whilst certainly specialized, pottery production seems to have remained largely decentralized in villages throughout the LC period, which has ramifications for the mechanisms of technology transfer discussed below. An exception may be the production of White Painted Wheelmade (WPWM) III ware, probably concentrated within the coastal centres of Enkomi, Kition and Palaepaphos from late LC IIC (Knapp and Cherry 1994: 62). It is not possible to establish whether LC I specialization

was full- or part-time, attached or independent. A combination of types is likely but it remains the case that all types of specialization may occur in all types of societies and are difficult to correlate without supporting excavated workshops or textual documentation (Clark and Parry 1990; Rosen 1997: 84). Whatever the mode of production, a study of Plain White vessels from tombs at Enkomi indicates the likelihood of multiple production centres in the east for Plain White Wheelmade I ware and an apparent increase in standardization within Plain White Wheelmade II vessels, manufactured from LC IIC onward (Keswani 1991: 108-10, 116).

The LC I–IIB Enkomi Pottery Assemblage

Fabrics and Wares. The Enkomi assemblage primarily comprises redeposited material from secondary fills (19,610 sherds).³ The majority of the material cannot be classified beyond large or small, open or closed vessels. Some typological innovations appearing during MC III or LC I are apparent, however, and these

quickly became the norm across all technologies. Round bases are still common on juglets (Figure 3.8) and some small bowls (Figure 4.6), but the overwhelming majority of large closed vessels have flat bases (Figure 6.2). Open vessels were often equipped with ring bases (Figure 3.6). Handles are attached to the exterior of large closed vessels for both handmade and wheelmade forms by LC IB (Figure 7.2); but the earlier, EC–MC technique of attaching the handle through the vessel wall remains more common until LC IIC for many handmade wares (Figures 6.1 and 6.4), including the Base-ring and White Slip wares.

The primary local Enkomi fabric used for both handmade and wheelmade vessels is cream-buff-pink (greenish when over-fired) calcareous marl containing varying quantities of alluvial sand. Handmade and wheelmade fabrics are visually indistinguishable and distinctive from the earlier handmade fabrics from the site of Kalopsidha and the Karpas peninsula. Importantly, this new fabric has a more pronounced texture (either gritty or smooth) and is often more highly fired than

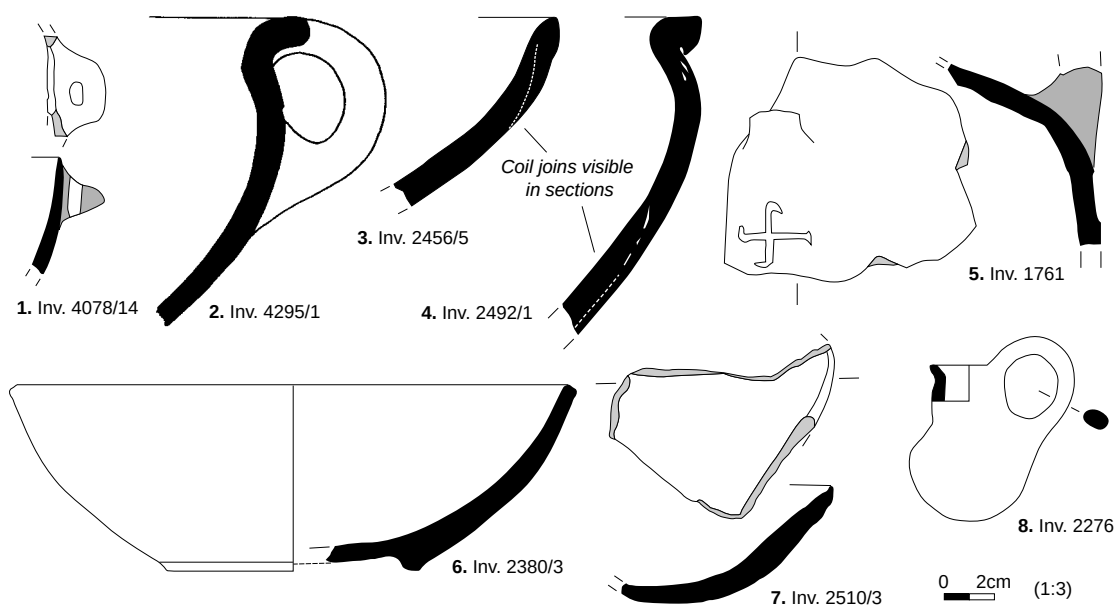


Figure 3. Plain White Handmade ware from Enkomi.

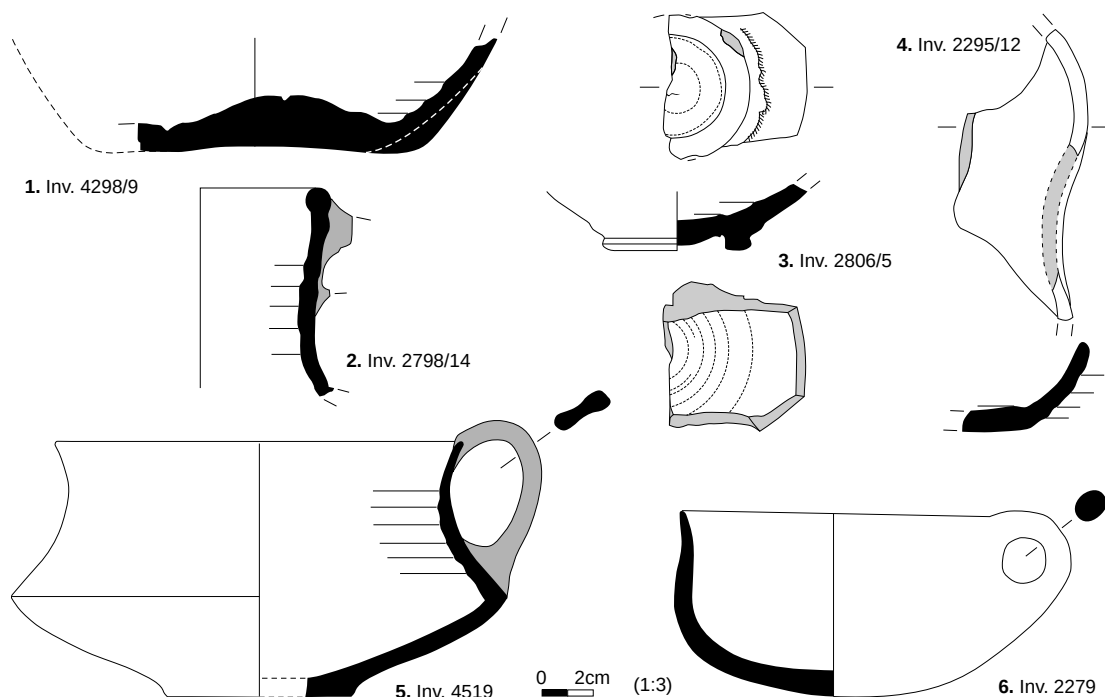


Figure 4. Plain White Wheelmade ware from Enkomi.

the earlier versions. Producers and consumers alike would have noticed this, despite the overlay of a familiar slip or paint. Whilst the fabric *appears* to be standardized across the technologies, recent research has demonstrated that similar fabrics are not an indicator of true standardization and nor are they correlated with an increase in specialization (Arnold 2000: 369). In addition, Gosselain (2000: 191) has demonstrated that modification of paste is a part of the production process susceptible to change, and may be transmitted by viewing of a finished vessel. The uniformity of fabrics probably occurred due to a combination of factors: (1) the exploitation of new clay and/or temper sources resulting from the move to the coast; and (2) the imitation of tempering techniques by potters attempting to create vessels as close to the appearance of new styles and techniques as possible (discussed below).

The material under study encompasses three classes of pottery wares, defined by fabric and surface treatment, each including two or more

subsets. The descriptions below focus on the Enkomi assemblage, but the occurrence of these wares at other sites is discussed in the following section.

1. *The Plain White group* (Figures 3–5). The origins of this ware are enigmatic and the term Plain White encompasses a range of plain wares, both with and without a white slip. A few early examples of Plain White Handmade wares may date to MC II (Åström 1972a: 166) but the ware does not become common before LC I, when Plain White Wheelmade also appears. The ware exhibits a range of forms and features that are new to the Cypriot repertoire and broadly similar to Middle Bronze Age Levantine types (Catling 1957: 59; Åström 1972a: 232; Åström 1972c: 747). Carinated bowls with ring bases, bowls with hook rims, lamps and kraters are all derivative of Levantine styles, but the majority of closed shapes and many features such as handles are Cypriot in inspiration. Table 3 illustrates the increasing importance of this ware in the Enkomi



Figure 5. Plain White ware (Inv. 2336/6, 1. exterior and 2. interior view).

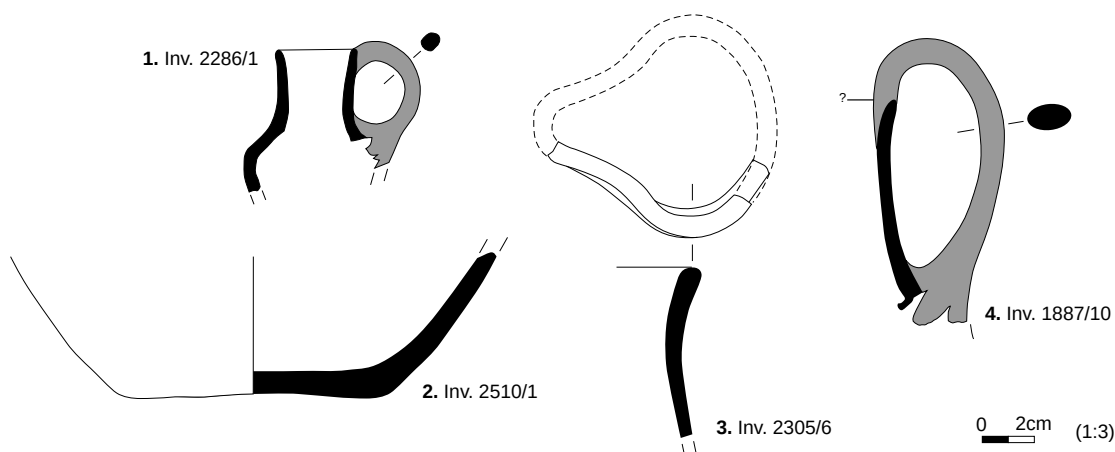


Figure 6. Red/Black Slip Handmade ware from Enkomi.

assemblage. The majority of vessels are made from the primary fabric described above, but examples of finer fabrics occur, particularly in small vessels.

2. *The Red/Black Slip group* (Figures 6–7). This category encompasses all variants of Red Slip and Black Slip wares. Surfaces are covered with a matt red-brown-black slip. Red/Black Slip wares from the north are often decorated but usually plain in eastern Cyprus (Åström

1972a: 103). Table 3 shows that Red/Black Slip comprises 20–30% of the LC I assemblage, but production of both techniques ceased by the end of LC IB. By far the most common vessel types are large, flat-based jugs: around 95% of all handmade and 99% of all wheelmade Red/Black Slip at Enkomi. Both the handmade and wheelmade jugs are manufactured from the same fabric and take the same forms, also identical to the Plain White jugs.

Site/period/region	Ware		LC IA	LC IB	LC IIA–B	Primary publications	
Enkomi (LC IA–IIB)	R/BS HM	Area III	19.0%	10.1%	4.5%	Dikaïos 1969–71; Crewe 2004	
		Area I	21.8%	22.0%	0.9%		
Eastern Mesaoria	R/BS WM/U	Area III	5.9%	9.1%	5.6%		
		Area I	3.2%	5.9%	0.6%		
	PW HM	Area III	7.2%	4.9%	12.8%		
		Area I	5.3%	5.7%	16%		
	PW WM/U	Area III	19.3%	25.4%	24.7%		
		Area I	8.7%	14.1%	15.5%		
	WP WM II	Area III	2.9%	7.4%	9.0%		
Area I		0.1%	1.9%	–			
Bichrome WM/U, Area III		1.3%	1.5%	0.9%	–		
	WP WM/U I	Area I	0.8%	1.7%			
Kalopsidha Trench 3 (LC IA1)	R/BS HM		43%			Åström 1966; 1972a	
	R/BS WM		1.9%				
Eastern Mesaoria	PW HM		30%				
	PW WM		1.9%				
	Painted WM		0.1%				
Morphou <i>Toumba</i> <i>tou Skourou</i> (LC I)	R/BS HM		most common ware	very common		Vermeule and Wolsky 1990	
	R/BS WM		10% of total R/BS	more frequent			
	Northwest	PW HM		unknown quantity	more frequent		
		PW WM		‘some’	‘many’		
	Painted WM		–	–			
Myrtou <i>Pighadhes</i> (LC IA–IIB)	R/BS HM		most common ware	very common	none by LC IIB	Du Plat Taylor 1957; Catling 1957	
	R/BS WM		rare	rare	more in LC IIA		
	Northwest	PW HM		rare	rare	more common	
		PW WM		–	–	more in LC IIB	
	Painted WM		Very rare non-local not dated to a phase				
Episkopi <i>Bamboula</i> (LC IA2–IIB)	R/BSHM		common	common	rare by LC IIB	Daniel 1938; 1941; Benson 1970;	
	R/BS WM		common	common	rare by LC IIB		
	Southwest	PW HM		common	common	amount increases	Åström 1972c
		PW WM		–	–	rare until LC IIC	
		Painted WM		–	rare non-local	rare non-local	
Phlamoudhi <i>Voinari</i> (LC IA–end IB or beginning IIA)	R/BS HM		common	common		Al-Radi 1983; Horowitz 2007	
	R/BS WM		– *	– *			
	Karpas	PW HM		common	fairly common		
		PW WM		rare	rare		
		Painted WM		very rare	very rare		
Korovia <i>Nitovikla</i> (LC IA–IIA)	Excavated in arbitrary spits and very few useable contexts. LC IA contexts prior to fortress construction have up to 55% WM wares (mainly R/BS), significant quantites					Hult 1992; 2001	
Karpas	PW HM. Bichrome WM, R/BS HM and PW WM rare. LC IA2–IB fortress construction and occupation deposits have 6–27% R/BS WM, 2–15% PW WM, 26–59% PW HM (including pithoi), little R/BS HM and around 7% Bichrome WM.						
Ayios Iakovos (MC III and LC I)	MC III pit beneath LC IIA cultic area: 300 sherds comprising 41% R/BS HM, 37% PW HM, 21% Red-on-Red/Red-on-Black.					Gjerstad <i>et al.</i> 1934; Sjoqvist 1940;	
Karpas	LC I deposit under Iron Age sanctuary: No stratigraphy published but R/BS HM and WM, PW HM and WM, Bichrome WM and WP WM main wares. WM wares at 90% of deposit. R/BS WM most common.						
Hala Sultan Tekke (LC I)	All wares in unknown quantity.					Åström <i>et al.</i> 1983; Åström and Herscher-Brown	
South coast 1989;							
						Åström 2001	
Maroni <i>Vournes</i> (LC I)	All wares in unknown quantity.					Herscher 2001; Manning <i>et al.</i> 2002	
South coast							

* Although no R/BS WM identified by the excavators, some sherds described as having a ‘combed effect’ (Al Radi 1983: 41)

Table 3. Proportions of Red/Black Slip (R/BS), Plain White (PW) and painted wares (White Painted [WP] Wheelmade I, White Painted Wheelmade II and Bichrome Wheelmade) in published LC I–IIB settlement deposits (not including tomb data). HM = handmade, WM = wheelmade, U = uncertain technology.

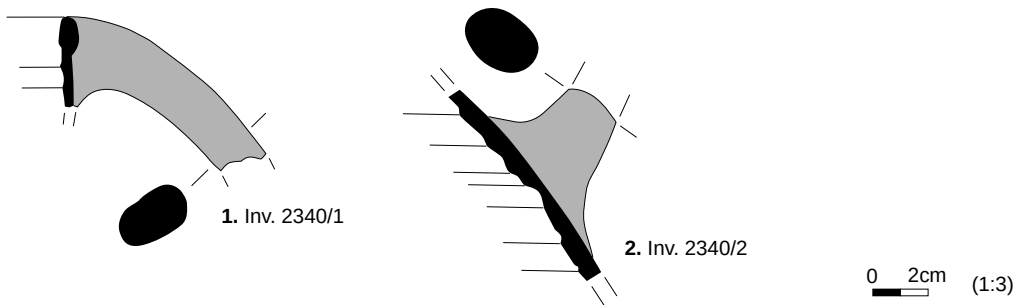


Figure 7. Red/Black Slip Wheelmade ware from Enkomi.

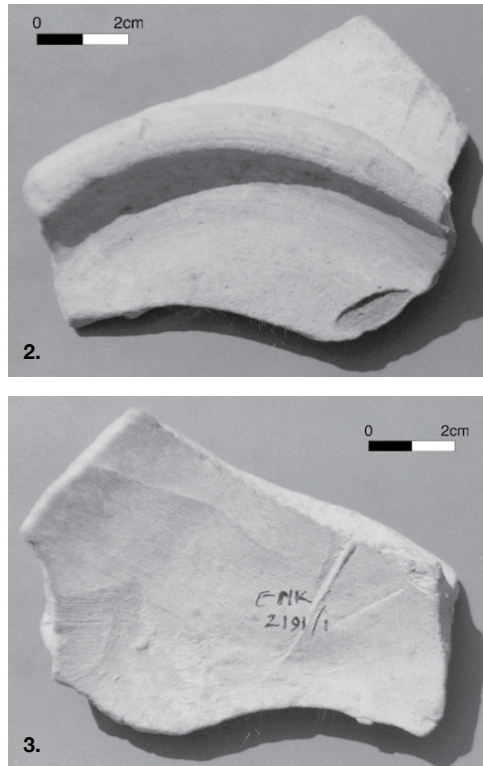
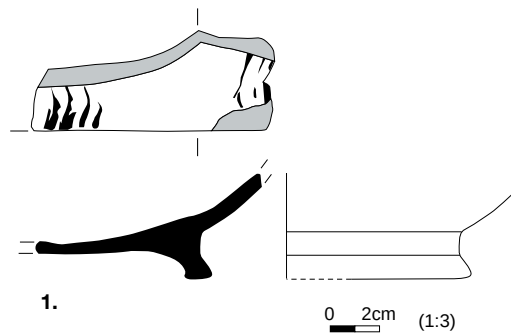


Figure 8. White Painted Handmade ware with ring base from Enkomi (Inv. 2191/1, 1. profiles, 2. exterior and 3. interior view).

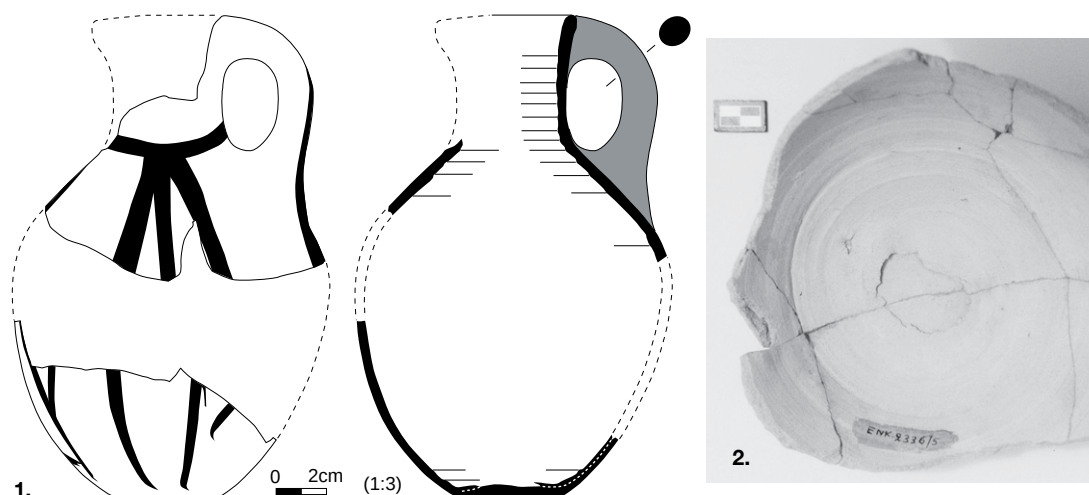


Figure 9. White Painted Wheelmade II ware from Enkomi (Inv. 2336/5, 1. profile and 2. interior view of base patch).

3. *The Painted group (White Painted Wheelmade and Bichrome Wheelmade)* (Figures 8–9). In addition to the plain wares, there were some less common painted wheelmade wares. White Painted Wheelmade I is a monochrome version of Bichrome Wheelmade ware; both are used for a range of vessel types, and are rare in the Enkomi settlement strata (not rising above 1% of the assemblage). White Painted Wheelmade II does not appear until LC IA2, but thereafter comprises a considerable component of the assemblage in Area III (see Figure 12). White Painted Wheelmade II is best viewed as a decorated subset of the Plain White and Red/Black Slip fabric group; it was manufactured almost solely in the form of large jugs (Figure 11), which probably began to replace the Red/Black Slip examples during LC IB. This extremely function-specific and homogeneous style was produced for at least 250 years and is rarely found at sites other than Enkomi. Discussion of the final painted category, the LC IIC–III White Painted Wheelmade III, is beyond the scope of this paper (but see Kling 1989; Sherratt 1991).

It is generally agreed that Bichrome Wheelmade ware, with red and black painted decoration, sometimes figurative, owes at least some

technological and stylistic features to external sources (Jones and Catling 1986: 589; Karageorghis 2001; Artzy 2001). It was exported to the surrounding east Mediterranean region and also manufactured simultaneously on the mainland, along with a group of 'Levantine painted wares'. All examples from Cyprus that have been analyzed are of Cypriot origin (Artzy 2001: 161). At least two production centres are attested for both White Painted Wheelmade I and Bichrome Wheelmade wares. Small amounts of the ware were manufactured in the local Enkomi fabric but the majority of the fabrics are distinct and the vessels typologically different from the local Enkomi styles.

Manufacturing Techniques. The entire Enkomi assemblage has been divided into three categories by manufacturing technique discussed above (see Crewe 2004: 176–78 for full definitions): handmade, wheelmade and uncertain (sherds too small or worn to establish technique).

Beyond these categories and considering only the three ware groups that were manufactured in both handmade and wheelmade versions, three different pottery-making traditions occur in the assemblage from Enkomi

(and almost certainly at the other settlements discussed below) during LC I:

1. continuation of MC handmade traditions in building technique (including handle attachment) with changes in superficial aspects of decoration, fabric and form, such as flat bases, to suit new tastes.

2. increasingly widespread use of slow rotation to finish vessel exteriors (Figure 5) and fashion ring bases (Figure 8), creating the appearance of wheelmade pottery.

3. evidence of potters trained in the specific skills of operating a rotational device with the ability to exploit RKE for the shaping, and possibly throwing, of vessels (Figures 4, 7 and 9).

Traditions 1 and 2 are easier to realize. The solely typological changes of tradition 1 particularly could result from viewing finished vessels, and did not necessarily require interaction between potters (Gosselain 2000: 191). Tradition 2, whilst requiring some investment in labour, probably required the potters to witness a turntable in action, to understand the principle involved, but not necessarily to be instructed in its use. Tradition 3 would have required intensive learning interactions between potters, most probably in the form of

a substantial apprenticeship, and would have necessitated a radical change in motor habits (Roux 2003: 18). In addition to the three traditions, there are also two opposing stylistic trajectories: Cypriot traditional form/finish (Red/Black Slip, White Painted) and 'foreign' form/finish (Plain White and Bichrome). These boundaries became increasingly blurred but by the end of LC I production of the hybrid of traditional finish with new technology had ceased, to leave only the manifestly 'foreign' Plain White ware (and the finer lustrous wares) of wheelmade type in opposition to the 'new traditional' fine handmade wares, primarily White Slip and Base-ring.

Summary of Wheelmade Wares at Enkomi

Wheelmade pottery (including examples of wheelmade appearance but uncertain technique) forms around 15% of LC IA deposits in Enkomi's Area I building, and by the slightly later Area III construction had doubled to around 35%. Wheelmade wares are evenly dispersed throughout rooms and buildings. Figure 10 illustrates the proportions of techniques across the entire Cypriot-produced assemblage, demonstrating vividly that handmade remained the most common technique

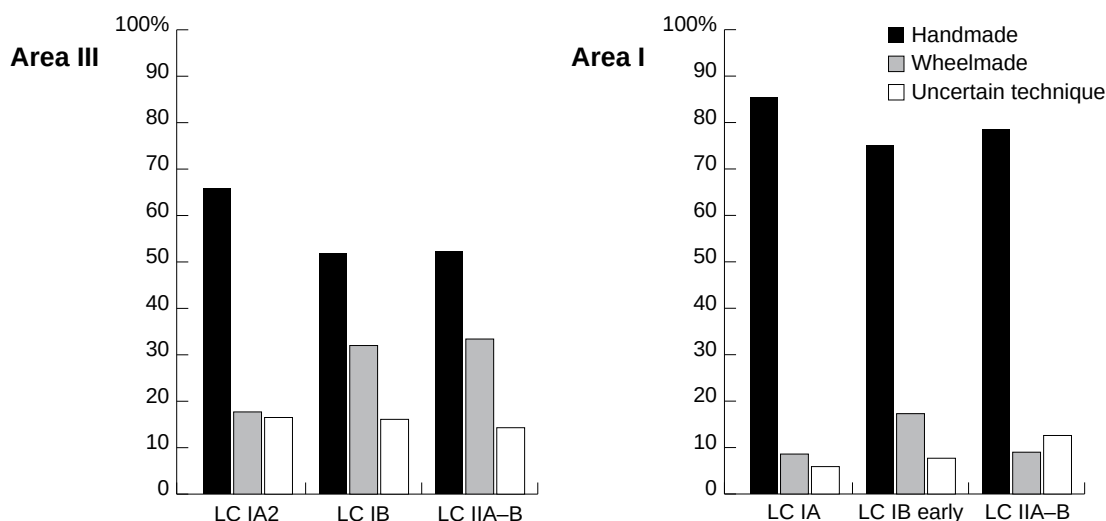


Figure 10. Manufacturing technique of entire Cypriot-produced assemblage at Enkomi through time.

through all phases. Wheelmade wares peak in both areas in LC IB, remaining fairly constant in Area III's LC IIA–B deposits (due to the greater amount of residual material) but decreasing dramatically in the Area I building, constructed in a previously unoccupied area of the site.

Figure 11 shows the proportions of handmade to wheelmade wares, including only the three groups discussed above. In Area III, the wheelmade variants outnumber the handmade by LC IB, particularly if vessels with the appearance of being wheelmade but of uncertain technique are included. In Area I, handmade wares are consistently more frequent than wheelmade throughout all phases, due to the earlier construction/abandonment of the building. Almost all local LC IIA–B wheelmade sherds found in Area I are Plain White and the greater number of handmade vessels is likely due to the probable special nature of the deposit with high numbers of handmade White Slip and Base-ring wares (27.8%), imported Mycenaean vessels (7%) and Canaanite jars (20.1%).

There is also variability in the proportions of each technique within the three ware groups. Plain White is more frequently of wheelmade

rather than handmade appearance from LC IA, with the exception of the LC IIA–B deposit in Area I (Table 3). Table 3 also shows that Red/Black Slip wares were more frequently handmade during LC IA but that wheelmade versions increased dramatically in LC IB. The painted wares are almost solely wheelmade by the end of LC IA. Plain White (and its subset White Painted Wheelmade II) is the only ware group that continued to be produced beyond LC I. In sum, LC IB is the phase during which the greatest variety and number of wheelmade vessels were produced, the significance of which I discuss below.

Wheelmade Pottery Island-wide

There are difficulties in drawing comparisons between pottery assemblages from other Cypriot sites due to the variable resolution of the published data (Table 3). Examination of the pots is required to establish whether the reported manufacturing technique exploited RKE or if the vessels were merely finished on a turntable. The excavators describe the wares as 'wheelmade' and, whatever the actual technology employed, it is clear that the potters

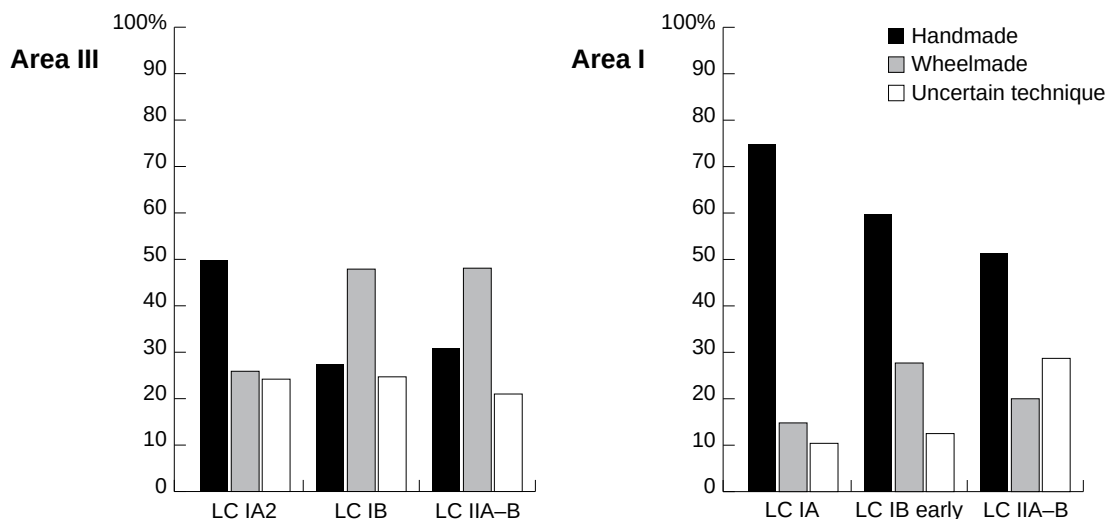


Figure 11. Manufacturing technique of wares occurring in handmade and wheelmade variants at Enkomi (Red/Black Slip, Plain White, White Painted and Bichrome) through time.

were attempting to create the *appearance* of wheelmade pottery.

A few additional points are necessary to supplement the regional and site-specific data presented in Table 3.

- *Eastern Mesaoria*: low numbers of wheelmade wares from Kalopsidha Trench 3 are indicative of very early LC IA abandonment but Trench 9 (a mixed deposit not included in Table 3) continued to demonstrate a strong handmade tradition until LC IIA, when the site was abandoned (Åström 1966: 40-44; 1972a: 170-71).

- *Northwest*: at Morphou *Toumba tou Skourou* Plain White and Red/Black Slip in both techniques were manufactured from the same fabric from LC I (Vermeule and Wolsky 1990: 379) but no decorated wheelmade wares were produced at the site, despite a strong handmade painted tradition. Wheelmade wares are rare at the inland settlement at Myrtou *Pigadhes* prior to LC IIA (Catling 1957: 29, 53).

- *Southwest*: The 'Wash Ware' category (correlated with Red/Black Slip by Åström 1972c: 675) at Episkopi *Bamboula* is described as more frequently wheelmade than handmade (Daniel 1941: 78) and was no longer manufactured during LC II, when Plain White Wheelmade ware first appeared.

- *Karpas Peninsula*: Phlamoudhi *Vounari* (Al-Radi 1983), recently re-interpreted as one of the fort-type sites (Webb 1999: 135-40; Horowitz 2007), has very few wheelmade wares. This contrasts with other sites in the region including the fort at Korovia *Nitovikla* and the deposit at Ayios Iakovos, which exhibit extremely strong wheelmade, and also Plain White, traditions.

In summary, LC I Enkomi has less Red/Black Slip Wheelmade wares than Episkopi *Bamboula* and sites in the Karpas region, but the amounts of Plain White Wheelmade are higher than the known percentages at other sites prior to LC IIA. Kalopsidha, however, and probably Korovia *Nitovikla* and Ayios Iakovos, have

higher proportions of Plain White Handmade at the beginning of LC IA. All sites, except for Myrtou *Pigadhes* and Phlamoudhi, have Red/Black Slip Wheelmade from LC IA, decreasing significantly by LC IIA. All sites, again with the exception of Myrtou *Pigadhes* and of Episkopi *Bamboula* and probably the inland site of Athienou (Merrillees 1983; not included in Table 3), also have Plain White Wheelmade during LC IA. It is only at sites in the eastern and Karpas regions that painted wheelmade wares were manufactured. The greatest quantities of wheelmade wares are associated with the coastal centres and the Karpas region (although the number of inland sites investigated remains extremely limited). Phlamoudhi remains the only site, both coastal and near the Karpas, with low numbers of wheelmade wares. Red/Black Slip Wheelmade was the most common wheelmade ware across the island at the beginning of LC I. Taken together, this evidence strongly suggests that it is not until the beginning of LC IIA that we see the final demise of the regional pottery traditions of the Early and Middle Cypriot periods.

Pottery Styles, Manufacturing Techniques and LC I Society

How Did the Transfer of Techniques Occur?

The appearance of new pottery shapes may indicate changes in foods prepared, or in ritual or cultural practices. The addition of new forming techniques may indicate the presence of people with new pottery-making practices or a new economic relationship with other populations (Arnold 1985: 234-36). Changes in technique may also occur when potters relocate, clay sources change, or when potters deliberately seek to make a new vessel type. As discussed earlier, the transmission of fast wheel technology cannot be explained by occurrences of imported vessels but must have occurred through the interactions of potters. It is likely that the technology was transmitted (often

imperfectly) to different regions of the island through the movement of potters, facilitated by opportunities inherent in the increasing growth of the coastal settlements. It has been suggested that, within the climate of second millennium BC maritime trade and military action, elite-sponsored exchange of artisans was a fairly common occurrence (Zaccagnini 1983: 258; Moorey 2001). Foreign potters working on Cyprus, perhaps in the context of gift-exchanges to Cypriot elites, may have led to greater competition, possibly attested in the rapidly changing styles at the end of the MC period. The possibility should not be discounted that Cypriot potters were also travelling abroad: at Tell ed D'aba in Egypt Cypriot handle attachment techniques on vessels of local fabrics have been interpreted as signalling the presence of Cypriot potters (Bietak 1996: 59).

A mixture of internal and external influences may explain why Red/Black Slip seems to have been the island-wide ware of choice for the first large-scale production of wheelmade pottery. As Red/Black Slip is one of the most popular styles prior to the appearance of wheelmade pottery, its use probably reflects an attempt to fit the new wheelmade wares into existing stylistic norms. Whilst it seems certain that wheelmade wares were desirable amongst at least some sectors of the population, a 'principle of least difference' requiring the artisan to make the smallest modification possible to an object to establish it as different (Gell 1998: 215, cited in Gosden 2005: 195) may have been a security measure to ensure a market for the goods. Conservatism during a time of instability, felt by consumer or producer or both, may have ensured that some aspects of tradition were retained. The process was two-way, with some stylistic changes effected due to the practical constraints of new forming techniques (such as handles remaining level with or below the rim in order to enable the upending of the vessel for attachment of a ring

base) applied to handmade vessels, again probably to come as close to a 'type' as possible.

Where Were These Ceramic Innovators Based?

Early appearances of wheelmade and Plain White Handmade wares are more extensive at sites in the eastern Mesaoria and the Karpas region, prior to or contemporary with the foundation of Enkomi. Therefore, it is difficult to assign a 'pioneering' role to Enkomi in terms of the changes occurring in the early LC or to assert that new ceramic technologies were disseminated from the site. Significantly, it would seem that the areas farthest from the copper sources, but closest to northern Syria, had the strongest wheelmade pottery tradition in LC IA, with the possible exception of Episkopi *Bamboula* on the southwest coast. MC III–LC I tombs in the Karpas (Korovia *Paleoskoutella*, Ayios Iakovos) have little in the way of metals or exotics (Keswani 2005: 380–81) but these areas have by far the highest percentages of wheelmade pottery and/or Plain White ware at the beginning of LC I (with the notable exception of Phlamoudhi). It is possible that the Karpas and eastern regions initially embraced Levantine-style pottery and wheel technology in an attempt to emulate foreign consumption practices, whilst communities nearer the copper sources in the centre and northwest of the island acquired prestige goods made from more valuable raw materials. The 'promiscuity of pottery' in its ability to mimic either itself or other media (Gosden 2005: 206), seen in the range of colours, textures, shapes and finishes that may be achieved, makes it an easy medium within which to effect changes, and especially in assigning ascribed values, either in its own right or as a substitute for more valuable materials. This flexibility also has the effect of making pottery a poor choice of material for use in the manufacture of goods intended for restricted use or whose function is to confer status on the user (Sherratt 1999: 178, 185), demonstrated by the widespread LC

I manufacture of easily imitated vessel types but using different technologies.

Based upon diversity in styles of mortuary construction and the mixed Karpas-eastern nature of the LC I pottery assemblages, it seems evident that Enkomi was founded by a mixture of people from the two regions (Keswani 2004: 140; Crewe 2004: 271-72), most probably as a gateway community to facilitate pre-existing trade contacts. As Keswani (2004: 140) has noted, it is likely that contacts between members of the social groups who remained in the villages would have been maintained with those who moved to the coastal centres, fostering further exchange of ideas, and even technologies. It was noted above that pottery production remained largely village-based in the earlier LC period and this dispersal of manufacturing localities is reflected in the assemblages at the settlements.

Although sufficient information on typological developments is unavailable from the majority of sites, it would appear that the broadly concurrent developments occurring in the pottery repertoire at eastern and north-western sites (increased preference for flat bases, the appearance of wheelmade wares, an increase in ware-specific forms) were developed within the specific ceramic tradition of the region. The manufacturers of northwestern Red/Black Slip Wheelmade wares at *Morphou Toumba tou Skourou* continued to construct large closed vessels with round mouths and handles attached from the neck, whereas potters at eastern sites produced vessels primarily with trefoil mouths and handles attached from the rim. Korovia *Nitovikla* was the only settlement where Bichrome Wheelmade ware had a significant domestic presence and the majority of examples are associated with the first occupation of the fortress there (Hult 2001: 204-205). This does not suggest the imposition of an externally regulated 'ideal' of a wheelmade vessel but may be compared to the situation attested in the Late Bronze Age southern

Levant, where potters imitating Cypriot wares adapted aspects of form to techniques with which they were already familiar (Prag 1985: 163). On Cyprus, the potters adapted technique to form but within the framework of the 'conceptual shape of the vessel' held by the potter (van der Leeuw 1993: 258). Despite a broad desire for foreign goods and styles that cut across social and geographical boundaries, there was considerable diversity in the creation of value systems during LC I, viewed here as the deliberate maintaining of regional identities.

The Role of Urban-style Pottery in Constructing Group Identity at Enkomi

Returning to the Enkomi assemblage, it seems apparent that economic reasons of greater output are not significant in the introduction of wheelmade pottery, especially considering that the modes of production were definitely not 'efficient'. This is best illustrated by base patching (Figures 4.1 and 9), a technique practiced on both wheelmade and handmade vessels from the Middle Bronze to Iron Ages in the Levant in order to compensate for uneven drying on bases that had been built too thickly (Franken 1971: 233). Some potters certainly invested considerable effort in mastering RKE techniques, others refined their skills in an attempt to create pottery with the appearance of being wheelmade. There was no standardization that would suggest mass production (Keswani 1991) but the use of visually identical fabrics and types for the handmade and wheelmade versions probably reflects attempts to achieve a superficial uniformity of the vessels. This suggests that pottery of plain, wheelmade appearance held a symbolic value, contained within the uses to which these vessels were put.

Aside from the radical new manufacturing techniques and style of the wheelmade wares, there is a profound transformation from round-based vessels (requiring pot stands or hanging)

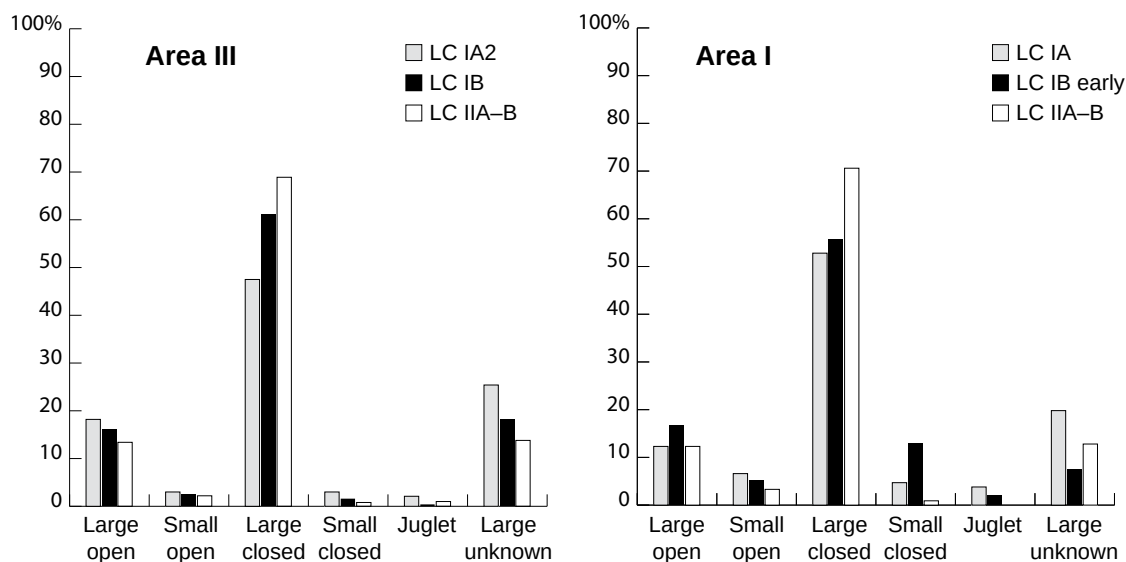


Figure 12. Types of vessels manufactured in Plain White ware (all techniques) at Enkomi through time.

to free-standing vessels of serving type, which began in the later Middle Cypriot period. This almost certainly reflects changes in behaviours centred on food and drink consumption. Increased competition between those who may have sought to gain control of local resources or trading connections and the greater need for affirmations of group or kin affiliation in a time of rapid change probably resulted in more frequent communal and public consumption events (Hamilakis 1999: 40-41). Intensification or introduction of new modes of social expression led to the adoption of new types of vessels with connections to Levantine 'urban' identity (Roux and Courty 1998: 761). Wattemaker (1998: 16-17) notes:

if standardisation in the appearance of goods was important to consumers (because of the information conveyed through the artefact), and if styles changed rapidly, then it may have been difficult for household producers to learn new styles quickly and produce goods that were sufficiently similar to the 'model' to convey the intended social information.

Cypriot potters faced the additional difficulty of having to learn new technologies *and* styles. As I explore further below, the considerable efforts undertaken were likely connected with a desire to participate in 'sophisticated' Levantine communal consumption practices.

Wheelmade Pottery and Feasting

Red/Black Slip and White Painted Wheelmade II wares were used almost exclusively at Enkomi to manufacture large jugs. In contrast, Plain White and the painted wheelmade styles seem to have been introduced as multi-purpose wares and initially included the full complement of storage and serving vessels. Figure 12 shows the range of vessel types in use in LC IA but by LC IIA-B the repertoire of Plain White vessels used in the settlement is almost entirely restricted to large storage or large open types. Certain forms, such as 'cups' with vertical handles (Figures 4.5 and 4.6), were only manufactured for a short time in LC IA. Some of the larger open vessels are basins but a significant number are kraters (Figure 3.2 and Åström 1972b: figs. LXII-LXVI for examples). The krater, typologically similar to Middle Bronze II Levantine examples (Amiran 1970: 99-101), is

a significant addition to the Cypriot repertoire and was manufactured in a range of handmade and wheelmade wares by LC II. The earliest examples occur only in wheelmade wares and there seems to have been a strong and deliberate association with this type of vessel and the new technology. Indeed, the overwhelming majority of all LC IA wheelmade types are communal (kraters and large jugs) and individual (small cups and bowls) serving vessels. Considered as a group, these types may comprise a 'drinking set'.

Although the krater was a new type in the LC, it may have had a functional antecedent. The increasing prominence during the MC of large flat-based Red Polished bowls, some depicting relief scenes interpreted as wine-making, may relate to the introduction of ritual wine drinking practices (Herscher 1997: 34; Karageorghis 2006: 6-13). Other scholars suggest that the introduction of a complex of vessels specifically for alcohol consumption occurred at the beginning of the Early Bronze Age (Manning 1993: 45) but whether the beverage was wine is uncertain. Whilst it is reasonable to conjecture that wine was produced on Cyprus prior to the LC, domestic grapes are not attested in Cypriot assemblages until this period and there is no unequivocal evidence for wine (noted with refs in Steel 2004: 170, 172).

Evidence for wine consumption (either newly introduced or with new associations) may be seen in the significant quantities of imported Canaanite jar sherds (up to 12% of the assemblage) in LC IA strata at Enkomi and other sites, and occasional jars in burials (Crewe 2004: 219-22). Although the contents are unknown, similar vessels analyzed in Egypt contained resin, wine and oil (Smith *et al.* 2000) and it is certainly possible that the Enkomi Canaanite jars contained imported wine, which may have been highly valued and particularly connected with the use of the new vessel types. A strikingly similar situation is attested in the communities of the Early Iron

Age Rhône basin where, alongside large quantities of imported Greek wine amphorae found in settlements, the potters' wheel was adopted solely for the manufacture of Greek-style wine drinking vessels (Dietler 1990: 388-89). Dietler interprets the trade in imported wine (importantly storable in contrast to beer), as leading to increased competition between individuals or groups who incorporated it into their own indigenous drinking rituals and probably also used it to mobilize labour in work-feasts, potentially leading to increased social inequality.

If the LC was the first time that wine was introduced to Cyprus (or if the imported wine was particularly valued), then it may feasibly have had a destabilizing effect on existing power balances, particularly if access to trade opportunities was unrestricted (Dietler 1990: 376, 388), as proposed for Cyprus by Manning and De Mita (1997: 107). Aggrandizers may have taken advantage of coastal positions as these were not part of the inland territories of the EC-MC agricultural communities. The ability to acquire not only the wine (whether local or imported), but also food consumed alongside it for feasting, required a considerable investment, unlikely to be achieved by all members of society (Jennings *et al.* 2005: 288). Signalling familiarity with Levantine modes of consumption by securing access to the new pottery vessels would have been part of this process.

The apparent failure to restrict access to 'elite' use may result from tensions between existing formal controls governing indigenous traditions (such as sumptuary laws) with the widespread appearance of newly introduced goods (Appadurai 1986: 38-39). The poor choice of pottery as a material for the manufacture of high status products, discussed above, may have also played a role. During LC II, equipment for use in feasting and funerary ritual was certainly appropriated for more exclusive use, when Mycenaean drinking sets were rapidly incorporated into Cypriot consumption

and ritual behaviours, including restricting distribution of kraters to the coastal centres (Steel 1998: 291-92). If, as seems likely, the introduction of wheelmade pottery, and particularly the Plain White ware, occurred due to emulation of Levantine feasting/drinking practices, then the popularity of Mycenaean styles was largely an aesthetic choice, possibly involving similar practices but certainly similar accoutrements.

Throughout the Late Cypriot period, the communal, and possibly more formal, feasting components of the drinking set—the kraters and jugs—continued to be manufactured in Plain White ware but the vessels used by individual participants were replaced during LC IIA–B by the more traditional styles of Base-ring and White Slip, along with the timely introduction of the painted Mycenaean wares. It would appear that tastes at Enkomi were momentarily overruled by the novelty of Levantine practices but the Cypriot preference for fine burnished or decorated thin-walled drinking vessels, and indeed vessels with round bases, soon reasserted itself. During LC II, the new *practices* associated with the plain wares were retained but the styles themselves seem to have lost some of their cachet, certainly in tombs by LC IIC (Keswani 1991: 113-14), and probably in settlement contexts during LC IIA–B, judging by the ceramic repertoire of Room 142 in Area I at Enkomi (discussed above). It is certainly significant that the first locally produced imitations of Mycenaean-style pottery in the late 13th century BC were also forms related to drinking equipment (Sherratt 1999:190).

Conclusions

On Late Bronze Age Cyprus, several factors facilitated change in pottery manufacturing technology. This included the movement to newly established coastal settlements, probably settled by people from diverse locations. Dislocated from traditional village groups, they may

have sought to find common ground in new communal behaviours. In addition, exposure to mainland people and patterns of consumption resulted in the introduction of Levantine social customs and technologies. The significance of the vessels lay in social display and probably consumption of alcoholic beverages, almost certainly wine. Whilst access to vessels may not have been restricted, it is likely that the ability to muster sufficient resources for the disposal of quantities of wine and food for feasting was, and that the adoption of this practice led to the rise of increasingly unequal power relations (Dietler and Herbich 2001: 246; Hamilakis 1999: 40-41).

Pottery of wheelmade appearance is certainly dispersed geographically, at least around the coast but the technology is not distributed island-wide, or even within one settlement, such as Enkomi, indicating a low level of knowledge sharing amongst LC I potters. If aggrandizers were attempting to control the fortresses as well as trade, then attempts also may have been made to control technological knowledge and to obtain individual links to secure production skills. As noted above, the introduction of wheelmade pottery requires a considerable investment on behalf of the potters and implies a ready market for their goods. Whilst it is possible that ‘elites’ were actively encouraging Cypriot potters to adopt the new technology (and therefore the potters should be seen as attached specialists), it is also feasible that access to imports was essentially unrestricted and contacts with foreigners widespread. A combination of both factors may be possible, with some patronization of potters, but it does not appear that the wheelmade pottery should be seen as an ‘elite’ product or that the handmade pottery should be seen as ‘non-elite’. Pottery with the *appearance* of being plain and/or mass produced, however, was linked to communal consumption behaviour and therefore to manifestations of group identity (Pollock 1983:

360), intentionally acquired and impacting on all sectors of society. It is likely that the symbolism contained within the wheelmade vessels arose as the 'consequence of technological activities—which are in turn, easily demonstrated to act as powerful progenitors of shared cultural meaning' (Pfaffenberger 2001: 78, author's emphasis).

Cypriot society during LC I may be described as 'urban-oriented' (Knapp 1993: 90), without any implication of an actual urban structure. Whether or not one of the coastal centres was attempting to exercise political control over the entire island during LC I, I would argue that the Cypriots did not view themselves as a single entity during this time. LC I Enkomi was one amongst several settlements where the inhabitants were attempting to take advantage of trade and other opportunities. Despite a rapidly expanding worldview, which included desire for foreign goods and symbols, regional identities were still important, culminating in LC IB as the phase during which the peak of signalling of differences occurred. It is likely that by LC IIA–B power inequalities had become institutionalized, reflected in the restriction of imported luxury goods to the coastal centres. It is during the latter period that the fortresses were finally abandoned or restructured and all the coastal settlements witnessed a new programme of building activity. It is also not until the LC IIA–B period that an island-wide complex of symbolically laden and utilitarian material culture developed: local production of seals; new ritual paraphernalia; and the widespread popularity of imported Mycenaean pottery. The decrease in both quantity and diversity of wheelmade wares by LC IIA would appear to indicate a decrease in status-related applications. This was concurrent with an increase in production of fine and decorated handmade wares for individual use, possibly reflecting resistance to the wholesale importation of a foreign aesthetic and a greater sense of self-assurance in Cypriot society. It

was not until the LC IIC urban phase that the first truly multi-purpose, standardized and mass-produced wares were developed, of types and styles imitating Mycenaean pottery, now integral and appropriate to Cypriot lifeways.

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About the Author

Lindy Crewe is currently British Academy Reckitt Postdoctoral Fellow in Archaeology at the University of Manchester. Her current research projects include investigating Levantine-Cypriot interactions at the end of the Middle Bronze Age through the origins of the Plain wares and excavation of an Early-Middle Bronze Age settlement, *Kissonerga Skalia*, in western Cyprus.

Notes

1. Whilst microscopic examination of archaeological pottery for particle alignment and also xero-radiography have proved to be helpful in determining certain techniques (Rye

1977; 1981), similarities in particle and void alignment between thrown and wheel-shaped vessels were not taken into account in earlier studies (Courty and Roux 1995: 42). Secondary finishing may also obliterate all evidence of hand-building techniques, such as coiling (Middleton 1997: 71). Attempts thus far to use radiographic techniques on Late Cypriot pottery have been unsuccessful as the fabrics under study here contain very few voids, organics or other elongated materials. As part of a research project by the present author to study the Plain White ware, further microscopic examination of fabrics is currently being undertaken in association with the Vienna Institute for Archaeological Science of the University of Vienna with Irmgard Hein and Cornelius Tschegg in cooperation with Theo Ntaflos of the Department of Lithospheric Studies.

2. Cypriot chronology and pottery typologies are unwieldy and extremely complex. Whilst every attempt has been made to avoid overly cumbersome terminology, the importance of regional differences and the current lack of archaeological knowledge on production zones and time frames make a 'lumping' approach inappropriate. Fine-grained subdivisions of the relative chronological phases (LC IA1 etc.) are based on the relative appearances of certain pottery wares (Åström 1972c: 700-701). Whilst applying absolute dates to these phases is clearly over-enthusiastic, Åström's and later research has supported a sequential development for these wares, with some time passing between the appearances of the 'proto' styles and the fully developed versions. Numerical subdivisions for the majority of the wares listed in Table 2 have not been used in the present study. Later research has shown that they often reflect regional rather than chronological differences, are incorrectly attributed in site reports, are difficult to identify in sherd form and often confuse rather than illuminate (Maguire 1991: 59; Vaughan 1991: 119-20

and Crewe 2004: 78-90 for further discussion).

3. The focus of this paper is on the wares manufactured in both handmade and wheelmade forms. I do not discuss the other minor fine wares manufactured solely using wheel-fashioning techniques: the Red Lustrous, Black Lustrous and White Lustrous Wheelmade wares (for which see Crewe 2007b).

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