

# ROMAN CRETE

NEW PERSPECTIVES

*Edited by*

Jane E. Francis and Anna Kouremenos



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Back cover: *View of Sphakia, SW Crete. Photograph by Jane Francis.*

CONTENTS

|  |     |
|--|-----|
| Acknowledgements .....   | vii |
| Abbreviations .....  | ix  |
| <br>   |     |
| 1. Foreword.....   | 1   |
| <i>L. H. Sackett</i>   |     |
| 2. Introduction.....   | 3   |
| <i>J. E. Francis</i>   |     |
| 3. From Cyrene to Gortyn. Notes on the relationship between Crete and Cyrenaica under Roman domination (1st century BC–4th century AD) ..... | 11  |
| <i>F. Chevroliier</i>  |     |
| 4. A context for Knossos: Italian Sigillata stamps and cultural identity across Crete.....   | 27  |
| <i>M. W. Baldwin Bowsky</i>  |     |
| 5. The double-axe (λάβρυς) in Roman Crete and beyond: the iconography of a multi-faceted symbol.....   | 43  |
| <i>A. Kouremenos</i>   |     |
| 6. The Roman climate in the southwest Aegean: was it really different?.....  | 59  |
| <i>J. Moody</i>  |     |
| 7. Apiculture in Roman Crete.....  | 83  |
| <i>J. E. Francis</i>   |     |
| 8. Roman imperial sculpture from Crete: a re-appraisal.....  | 101 |
| <i>P. Karanastasi</i>  |     |
| 9. An Attic marble table support (τραπεζοφόρον) in relief from Roman Kissamos: preliminary remarks.....                                      | 119 |
| <i>M. Milidakis and C. Papadaki</i>  |     |
| 10. The Roman theatre at Aptera: a preliminary report .....  | 127 |
| <i>V. Niniou-Kindeli and N. Chatzidakis</i>  |     |
| 11. Roman Gortyn: from Greek polis to provincial capital .....   | 155 |
| <i>E. Lippolis</i>   |     |
| 12. Crete’s economic transformation in the late Roman Empire .....   | 175 |
| <i>S. Gallimore</i>  |     |
| 13. Theatres, plays, and the ‘3rd century crisis’.....   | 189 |
| <i>G. W. M. Harrison</i>   |     |

14. Pottery of the 4th–early 9th centuries AD on Crete: the current state of research  
and new directions ..... 199  
*A. G. Yangaki*

15. Afterword: putting Crete on the Roman map..... 235  
*A. Kouremenos*

Index ..... 239

Plates ..... 247

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Last but not least, we would like to dedicate this volume to the memory of Ian F. Sanders, who was the first scholar to tackle the subject of Roman Crete.

## Pottery of the 4th–early 9th centuries AD on Crete: the current state of research and new directions

Anastasia G. Yangaki

*Dedicated to the memory of my grandmother, who taught me to care for small, everyday things*

### Introduction

Research on the pottery of Roman and Byzantine Crete has seen considerable progress in the decades since the studies by Ian Sanders, John Hayes and Paola Rendini in the 1980s (Sanders 1982; Hayes 1983, 97–169; Rendini 1988a, 221–8; 1988b, 229–51; 1988c, 253–61; 1988d, 263–77), particularly in comparison with studies of pottery from later periods in the island's history (Yangaki 2012a, 13–15). This is well illustrated by analytical studies in journals, the acts of congresses, collective volumes, and monographs published over the past decade (Yangaki 2012b, 17–28) and more recently by a conference held in 2009 in Milan entitled *La ceramica di Gortina (Creta): stato dell'arte e prospettive di ricerca*, followed by the subsequent publication of its proceedings (Bejor and Panero 2009), or by a two-day workshop organized by the University of Thessaloniki and the INSTAP Study Center for East Crete at Pachia Ammos, in September 2013. The conference in Milan, in particular, was dedicated to the pottery from the systematic excavations at Gortyn, which, as will be shown below, constitutes a fundamental resource for researchers working on pottery dating from these periods on Crete. It should be noted that the increasing interest in the study of such pottery coincides with a rising concern with various aspects of the material culture, with a particular focus on the study of the 'ceramic culture' expressed by the organization of regular international conferences dedicated to 'Late Roman Fine, Coarse and Cooking wares, and Amphorae in the Mediterranean,' or LRFW1 and LRCW1–4, respectively (Gurt i Esparraguera *et al.* 2005; Bonifay and Tréglia 2007; Menchelli *et al.* 2010; Cau *et al.* 2011; Poulou-Papadimitriou *et al.* 2014), or by the conference on 'Pottery of Late Antiquity from Greek Territory (3rd–7th century AD)' (*Κεραμική της*

*Υστερης Αρχαιότητας από τον ελληνικό χώρο (3ος–7ος αι. μ.Χ.)*) in Thessaloniki in 2006 (Papanikola-Bakirtzi and Kousoulakou 2010).

This paper reviews the evidence of pottery from Crete dating from the 4th to the 8th–9th centuries AD and assesses its present state of research some 30 years after the publication of the aforementioned pioneering works. Its aim is to attempt to present a concise presentation of current knowledge about the pottery used on the island during the period.

It should be noted that a standardized chronological scheme for the history of the island during the above period has not been adopted by researchers, and instead they have in many cases followed a varied periodization and/or terminology (e.g., Sweetman 2004a, 317, 319; 2004b, 481; Gallimore 2011, 6–7, 32–5, 36–41). From the end of the 3rd century AD, Crete constituted a province within the Diocese of Moesia until Constantine I made the island a senatorial province within the Diocese of Macedonia in the Prefecture of Illyricum during the 4th century. Later in the same century, Crete became politically and administratively attached to the jurisdiction of Constantinople following the partition of this Prefecture. The first Byzantine period ended with the Arab conquest of the island in the third decade of the 9th century (Sanders 1982, 6–7; Tsougarakis 1988, 19–20, 198; 1998, 339, 343; Tsougarakis and Angelomatis-Tsougarakis 2004, 362, 364). The ceramic material published so far from the 4th century indicates that it constitutes a period of transition during which old forms and types, common during the previous century, co-exist alongside new types that would become more common in the first Byzantine period. Similarly, the period from the mid-7th through to the 8th–early 9th centuries, which was considered Byzantium's 'Dark Ages' until recently (e.g., Tsougarakis



1988, 342), can now be seen as another transitional era far more illuminant than thought previously, especially on Crete. Substantial pottery contexts dating from the early 9th century are yet to be published analytically, with the exception of evidence from Pseira (Poulou-Papadimitriou 1995, 1119–31; Poulou-Papadimitriou and Nodarou 2007, 755–66), although recent research suggests that additional, analytical information is to be awaited from other Cretan sites, like Priniatikos Pyrgos (Poulou-Papadimitriou 2011, 384–5, 387; Hayden and Tsipopoulou 2012, 507–84; Klontza-Jaklova 2014, 799–803). Thus, given the present state of the evidence, the latest pottery incorporated into this study will be that of the 8th century, with remarks on pottery of the early 9th century AD.

### The current state of research

With its relatively large geographical size in relation to other islands of the Aegean and with its variety of countryside and microclimate, the island of Crete has been successfully compared to a continent (Tsigonaki 2007, 263). Given these characteristics, it must be stressed from the start that the research conducted thus far on pottery of the Roman and the first Byzantine period of the island is characterized by four major factors that impede a global, synthetic view, even though the information on this pottery is plentiful as a whole and encompasses every basic category of pottery – tablewares, plain wares for domestic or rural uses, cooking wares, amphorae, and lamps.

The first factor concerns the provenience of the available data, which come, at present, from a restricted number of sites (Fig. 14.1). Specifically, while rescue excavations across the island are quite numerous, related publications are limited to preliminary reports that do not present analytical data on the pottery for the latter periods (Yangaki 2005, 32–3; Gallimore 2011, 55–6). Furthermore, while the island of Crete has been intensively surveyed in recent decades (see Gkiasta 2008, 11–149; Gallimore 2011, 61, n. 83; 61–7) and while landscape archaeology is a tool in the study of regional histories, these surveys have tended to focus on earlier periods or, when they document sites of the Roman and the first Byzantine periods, to provide only a partial view of the associated pottery (e.g., Blackman and Branigan 1975, 31–2; Watrous 1982, 70, 82, nos 78–80; 83, nos 81–3; 84, nos 84–5; Branigan 1998, 45, fig. 12, K2–36, K65–31, K7–36, L38–32, L38–40). Even with such partial views, differences or variations in the survey methods and goals make it difficult to compare the evidence (Raab 2001, 22–44; Gkiasta 2008, 148). More analytical information is provided by survey investigations which target specific goals, an illustrative example being

those organized by the French Archaeological School in collaboration with the local ephorates (Empereur and Marangou 1990, 466; Empereur *et al.* 1991, 481–523; 1992, 633–48), which focused on amphora workshops and concluded with the analytical publication of A. Marangou-Lerat (1995). At present, however, these constitute isolated cases. Furthermore, while research such as the projects conducted at Knossos may offer information on pottery from the 4th–8th centuries AD, this data is restricted to specific sectors of the valley of the city of Knossos (Hood and Smyth 1981, 22–6; Sackett 1992a; Hayes 2001, 431–54; Forster 2004, 489–91; Sweetman 2004b, 481–7; Forster 2009); given the history of this site, these archaeological investigations have focused mainly on the prehistoric period and research has mainly consisted of rescue excavations. G. Forster, acknowledging this situation, attempts to offer a general overview of the pottery of the Roman and the first Byzantine periods from the site so far; his research encompasses both existing data and new groups of pottery (Forster 2009, 9–15, 226–36). The evidence recently published from Hierapytna (Gallimore 2011) offers a picture of the city's pottery based on material from rescue excavations in various locations. Roman pottery is more numerous at both these sites than material from later periods, with some 4th and 5th century evidence; ceramic information for the 6th and 7th centuries is much more restricted. Moreover, while publications on pottery from excavations like those in Aghia Galini (Vogt 1991–1993, 39–75) or at Vafes and Kefala Vrises (Fiolitaki 2011, 87–107; 2014, 469–76) offer interesting material, they constitute isolated deposits for the history of each site. Thus, given that substantial, analytically presented information so far derives from just two systematic excavations at specific sites, Gortyn (e.g., Di Vita 2001; 2004; Bejor and Panero 2009; Di Vita and Rizzo 2011) and Eleutherna (Vogt 2000, 39–199; Yangaki 2005; Baldwin Bowsky 2009a, 155–76; 2009b, 177–96) (Fig. 14.1), publications have inevitably been based mainly on these studies, even though additional important information could be provided by pottery from other sites, such as Kissamos (Gallimore 2011, 55–6) or Chersonisos (Sythiakakis and Vassilakis 2013, 54) (Fig. 14.1). Selective, additional information comes from other systematically excavated sites like Pseira (Poulou-Papadimitriou 1995, 1119–31; 2011, 387, 391–2, 394, 396, 404, 406; Poulou-Papadimitriou and Nodarou 2007, 755–66;) and Itanos (Xanthopoulou 2004, 1013–27; 2013, 43–4; Xanthopoulou *et al.* 2014, 811–7), but the pottery from these sites has yet to be published analytically. The pottery from other systematically excavated sites, like that of Priniatikos Pyrgos (Hayden and Tsipopoulou 2012, 507–84; Klontza-Jaklova 2014, 799–803), will further enrich the evidence.

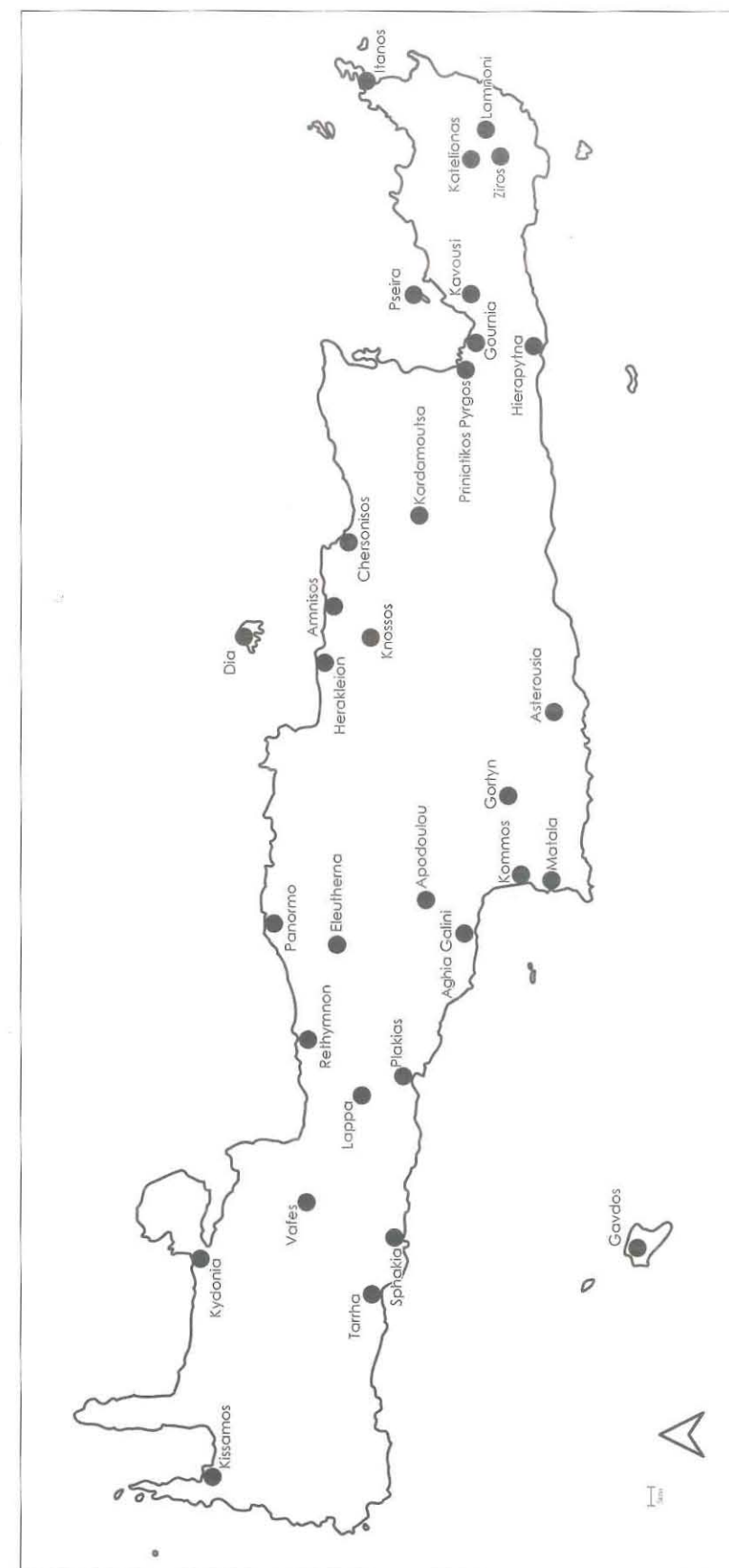


Figure 14.1 Map of Crete showing main sites mentioned in the text. Map: M. Remoundos.



The above outline makes clear something observed at the beginning of this study: the very limited number of sites from which the material under evaluation derives. If this picture is compared to the information provided by Professor D. Tsougarakis (1991, 591–2), compiled from a combination of the Cretan cities in Hierocles' *Synekdemos* with other written sources, according to which 34 cities were active on the island during the 5th and the 6th centuries together with numerous other sites (Tsigonaki 2007, 264, fig. 1), it becomes obvious that very limited evidence has been explored overall and especially in regard to the ceramic material. Thus, the data available can and should be further expanded with future research and publications.

A second factor is that the extant evidence derives from sites with different geographical, morphological, and administrative characteristics. For instance, Gortyn was the capital of the island and its main administrative centre; Eleutherna was a city in the interior of the island; Itanos and Hierapytna were both important Cretan city-ports, while Pseira was also a stopping-off point for ships. In addition to these sites, evidence from survey investigations points, for example, to the existence of villages such as Lamnoni and of various farmstead sites like that at Katelionas in eastern Crete (Branigan 1998, 74–7). Moreover, there were several small sites, probably farmsteads, in existence in the Lasithi and Vrokastro regions at this time alongside larger settlements like that at Kardamoutsia in Lasithi (Watrous 1982, 24; Hayden *et al.* 1992, 332–3). At other sites that have published selective ceramic material, the limited nature of the investigations prevents definite conclusions to be drawn about the nature of the sites which would contextualize the ceramic evidence. The differences between these sites are reflected in variations and differences in the categories and types of pottery encountered at them.

A third factor impeding a concise, global image of the pottery circulating on the island from the 4th until the 8th–early 9th centuries is methodological in nature and relates to the presentation of the material. The pottery published from most of the above-mentioned sites, sometimes shows an emphasis on the fine, red-slipped wares (e.g., Watrous 1982, 82–4), given that they are easier to identify and are considered as more accurate markers for dating a context. As a result, analytical data based on an in-depth study of each excavated unit or surveyed site and accompanied by a presentation of the related quantitative information is scarce; in fact, it is limited to the efforts at the cities of Gortyn (Di Vita 2001; 2004; Di Vita and Rizzo 2011) and Eleutherna (Vogt 2000, 39–199; Yangaki 2005). Even at these sites, however, the methods used to treat the material vary: in some cases they have been applied only to contexts from specific areas, while in other cases analytic quantitative

data could not be obtained for some contexts (e.g., Yangaki 2005, 30–2) or is still awaited. This is the case with the recent excavations conducted at Gortyn by several research groups since 2002 in sectors (Bejor and Panero 2009; De Aloe 2009, 38–43; Fabrini and Perna 2009, 121–38; Panero 2009, 16–32; 2010, 907–14; Zanini 2009, 44–72; Di Vita and Rizzo 2011; Zanini and Costa 2011, 33–44; Lippolis *et al.* 2012, 246–64; Zanini *et al.* 2013, 10–1) other than the 'Praetorium' complex, the source of the analytical evidence that has come to light thus far (Di Vita 2001; 2004). Pottery from all these sectors is currently being studied (Bejor 2009, 10), and it is anticipated that a synthetic view of the material from the whole settlement, which explores the fluctuations and variations in types of pottery relevant to the nature of each context and from one period to the other, will enable researchers to obtain a synthetic perspective of this aspect of the city's material culture. Computer software programs (Baldini and Baldassarri 2009, 73–86) and the possibilities of Web platforms (Zanini and Costa 2006, 241–64), already in use by various projects, offer further advantages for the more systematic management, archiving, and presentation of archaeological records, including pottery records.

A last obstacle impeding a better understanding of the circulation of pottery during the first Byzantine period on the island is our limited information for local wares. While Crete was home to an important pottery production, particularly from the Roman period onwards, concise evidence about local manufacture during the Roman and the first Byzantine periods, that is the identification of pottery workshops, is scarce, aside from the rare cases where pottery workshops have been identified based on the recognition of installations or on the existence of wasters (Marangou-Lerat 1995). Thus, local production at a site is generally suggested by a large number of pots/sherds bearing the same morphological characteristics and sharing common fabrics (Pl. 28). In the case of pottery of the first Byzantine period on Crete, the detailed macroscopic observation of the fabrics from a particular site or research area is still in its infancy, in contrast with prehistoric evidence (Moody *et al.* 2003, 39–43, table 2). For example, fabric analysis series based on macroscopic examination are now available from the Sphakia area in western Crete (Moody *et al.* 2003, 76–7, 84–6, 89–90, 97–100, pl. B, d, f), the Ziros region in eastern Crete (Branigan 1998, 38–41, 43), from Gortyn (Martin 1997b, 293–5; Panero 2010, 909), Knossos (Forster 2009, 72–6), Eleutherna (Yangaki 2005, 36–7), Hierapytna (Gallimore 2011, 225–6, 233–4, 290–2, 308–11) and Pseira (Poulou-Papadimitriou and Nodarou 2007, 757–8), but only rarely is this data combined with illustrations of each fabric through close-up photos, which would better enable researchers to

combine evidence from different sites (Pl. 28). In rare cases, macroscopic identification has been combined either with petrographic analysis, as in Sphakia (Moody *et al.* 2003, 54–8, 76–7, 84–6, 89–90, 97–100), at Pseira (Poulou-Papadimitriou and Nodarou 2007), and at Itanos (Xanthopoulou *et al.* 2014, 811–5), or with thin section petrography and/or chemical analysis, as at Eleutherna (Aloupi *et al.* 2000, 207–35; Yangaki 2005, 281–2; Yangaki *et al.* 2008, 313–25). This interdisciplinary research at the three last sites, which for the first time prioritized the identification of wares attributed to local production centres rather than vessels imported from elsewhere, has shown how our knowledge of regional resource exploitation and manufacturing trends may be expanded by means of similar techniques. It furthermore offers important information on the period of transition from the first Byzantine period into the period of Arab occupation on the island. Apart from these isolated cases, most hypotheses about local production are based, as previously said, on the occurrence of a large number of vessels bearing the same morphological characteristics and on a general description of ceramic fabrics. It has, in addition, long been acknowledged that other tablewares, cooking wares, vessels for various everyday uses, and amphorae also play an important role in reconstructing patterns of distribution and exchange among various sites, alongside the undisputed role of the red-slipped, fine wares. In specific cases, in fact, their role is much more important, as, for example, in the case of amphorae (Whitbread 1995, 27; Moody *et al.* 2003, 40; Karagiorgou 2009, 37–58; Yangaki 2014, 89–103). These last two groups of pottery constitute the majority of the ceramic material collected through excavations and surveys, and their precise archaeological identification in combination with the information from the use of analytical techniques shed a clear light on the cultural and economic history of each site. Thus, the research program focusing on the petrographic analysis of pottery from the first Byzantine period from multiple sites on the island, which aims to identify specific centres of production on the island and to recognize their products, offers enhanced evidence for local productions across Crete (Poulou-Papadimitriou and Nodarou 2014, 873–83). As J. Moody *et al.* have pointed out: "A further, and fundamental, goal of publication is to facilitate the comparison of fabrics and wares from different projects, so that archaeologists can be certain whether or not their fabric A is the same as someone else's fabric B" (Moody *et al.* 2003, 103). This is extremely relevant to research conducted on pottery from the Roman and the first Byzantine periods on Crete. In order for further inter-regional comparisons to be made, analytical fabric-type series for each surveyed or excavated site need to be made available to colleagues working in this field.

### The current state of evidence and new directions

It is evident that the material published from Cretan sites either represents mainly a particular category of pottery, or presents multiple categories of pottery but from geographically or chronologically limited contexts. Only the published material from Gortyn and Eleutherna stands apart, constituting the main pieces of evidence for researchers and providing the most analytical sample available to date and the one which includes pottery from the entire period (from the 4th until the 8th centuries). Because this pottery is derived from systematic excavations, it allows observations to be made on the differences between one period and another and comparisons to be made of the characteristics of the two sites. In reviewing the related evidence, additional reference will be made in the form of complementary information to pottery from Vafes, Aghia Galini, Panormo, Chersonisos, Amnisos, Pseira, Hierapytna, Itanos, and other minor sites, with a view to offering as complete a picture as possible, given the limitations described above. It thus becomes clear that most of the published evidence comes from sites in central and western Crete, with less information from sites in the eastern part of the island.

### Tablewares, plain wares for domestic or rural uses, cooking wares

#### Red-slipped pottery

There are three common categories of fine, red-slipped tablewares found on the island: African Red Slip, Late Roman C and Late Roman D wares (Hayes 1972; 1980; Bonifay 2004, 155–210). To these one can add Egyptian Red Slip Ware. Other fine wares occur very rarely, including Macedonia 'T.S. Grise,' found at Gortyn and Itanos (Rizzo 2001a, 40; Xanthopoulou 2004, 1016; Panero 2010, 908).

Not much has changed since the first effort to present a more synthetic image of the occurrence on the island of these three main categories of red-slipped wares by A. Dello Preite in the early 1980s (Dello Preite 1984, 177–98). Recent research has either added more information on sites included in her study or offered evidence on additional sites and areas, such as Knossos (Hayes 2001, 433–4; Forster 2009, 91–112), Gortyn (Rizzo 2001b, 40–54; 2001c, 55–65; 2001d, 65–6; 2004a, 184–98; 2004b, 326–36; 2011a, 83–9; Fabrini and Perna 2009, 127, 128, 130; Lippolis *et al.* 2009, 107–8; Panero 2009, 25–6; 2010, 908), Eleutherna (Vogt 2000, 73–5, 95; Yangaki 2005, 103–19), Hierapytna (Gallimore 2011, 267–89), Aghia Galini (Vogt 1991–1993, 43–7), Vafes Apokoronou (Fiolitaki 2011, 90; 2014, 469–70), Kefala Vrises (Fiolitaki 2014, 469–70), and sites from the

surveys made in the areas of Akrotiri (Kydonia) (Raab 2001, 88, 93–5, 102, 105–6, 114, 118, 121, 124, 130), Mesara (Watrous and Hadzi-Vallianou 2004b, 525–40), Lasithi (Watrous 1982, 70, 80–4), Pseira (Hope Simpson *et al.* 2005, 13, 18, 48, 89), Kavousi (Haggis 2005a, 58; 2005b, 93, 104, 118, 124, 142), Vrokastro (Harrison and Hayden 2005, 57–8), Gournia (Hayes and Kossyva 2012, 171–3), Priniatikos Pyrgos (Klontza-Jaklova 2014, 800), Itanos (Xanthopoulou 2004, 1016), Ziros (Branigan 1998, 46), Moni Odigitria (Francis 2010, 29), Sphakia (Nixon *et al.* 2000, 30/21.1:UncatG11, 30/21.4:UncatG24, 30/21.5:UncatG11, 30/21.1:UncatG10, 30/20.4:UncatG06, 29/22.1:UncatG06, 29/21.1:UncatG08). Additional evidence comes from the island of Gavdos (Kossyva *et al.* 2004, 405) (Fig. 14.1).

Interpreting pottery evidence from surveys is not easy, since there is usually no particular quantitative data and one also has to take into consideration the possibility that the samples of pottery collected do not always offer an objective representation of the pottery encountered during field research (e.g., Watrous 1982, 70, 82–4; also Gallimore 2011, 65–7); the use of different methodologies and variations in the scope of each survey does not always result in intensive artefact collection. This becomes particularly obvious when one turns to the study of fine pottery from Crete, since a quick glimpse at the related data makes it clear that in some surveys – mostly pioneering works for survey research on Crete dating from the middle and the last quarter of the 20th century and with an emphasis on periods prior to the first Byzantine period – the references to fine wares are far more numerous than those to cooking and coarse wares, which are considered less diagnostic. This, of course, is also due to the fact that red-slipped wares are much more easily observable in the field than undecorated, coarse wares (Harrison 2000, 545–6). These observations have much in common with D. Pettegrew's remarks on the apparent increase in information on pottery of the 3rd–7th centuries AD, compared to that of early Roman times (Pettegrew 2007, 743–4).

From the first decades of the 4th century, African Red Slip Ware (abbreviated as ARS) (Hayes 1972, 13–299), with examples of the production C, arrived on the island in more important numbers than during the 3rd century AD. In fact, it gradually replaced Çandarli Ware, which had been common on the island in previous centuries, and became, with the numerous examples of production D, one of the two more diffused categories of red-slipped ware pottery found on the island, the other being Late Roman C Ware. Of the various forms encountered on the island, forms 45, 50, 59B, 61A, 67, 73, 87, 90, 91, 99, 104, and 105 were the most common, among which forms 50, 67, 99, and 105 were quite numerous (Dello Preite 1984, 179–82; Yangaki 2005, 106, 108, 112–3; Forster 2009,

98; Francis 2010, 29) (Pl. 29). The 6th century showed more variability regarding the multiplicity of African Red Slip forms, since evidence for the 5th century was quite restricted and only a small, repetitive, number of forms occurred during the 7th century (Dello Preite 1984, 185, 189, 196; Shaw and Shaw 1995, 338, 354; Rizzo 2001b, 40–54; 2004a, 184–98; 2004b, 326–36; 2011a, 83–9; Yangaki 2005, 286–7; Forster 2009, 97–105; Lippolis *et al.* 2009, 107–8; Hayes and Kossyva 2012, 172–3). In fact, during the 7th century, form 105 occurred quite often at Cretan sites, implying the continuation of contacts with North Africa, which seem to have continued into the second half of the 7th century and even later at some sites, where form 109 is attested (Dello Preite 1984, 189, 195; Rizzo 2001b, 46; 2011a, 85; Yangaki 2005, 287; Forster 2009, 105; Fabrini and Perna 2009, 130). It has long been suggested that historical factors, namely the Vandal conquest of Africa, might explain the drop in African imports to the island during the 5th century, especially compared to the previous century (Dello Preite 1984, 197; Romeo and Portale 2004, 968–9). The data became more numerous from the second half of the 6th century on and also during the first half of the 7th century, showing that there had been a revitalization in contacts between Crete and North Africa during this period (Dello Preite 1984, 197–8; Yangaki 2005, 287).

The most common red-slipped ware encountered on Crete was Late Roman C (abbreviated as LRC), which is also known as Phocaean Red Slip Ware (Hayes 1972, 323–70). The earliest appearance of this category seems to be the late 4th or very early 5th century, as shown by examples from Gortyn and Eleutherna (Dello Preite 1984, 179; Forster 2009, 107–9; Yangaki 2005, 117). The entire range of the forms of this production has thus far only been encountered at Gortyn (Rizzo 2001c, 55; Fabrini and Perna 2009, 127–8), while at most Cretan sites forms 3 and 10 with their sub-types were more common (Fig. 14.2, a–d). Form 3 revealed considerable diffusion at numerous sites on the island, in particular its sub-types 3E and 3F (Watrous 1982, 70; Rizzo 2001c, 55; 2011a, 86–7; Xanthopoulou 2004, 1016; Yangaki 2005, 116, n. 360; Harrison and Hayden 2005, 57–8; Fabrini and Perna 2009, 127–8; Forster 2009, 108–9; Lippolis *et al.* 2009, 108; Panero 2009, 25–6; 2010, 908; Gallimore 2011, 280–1; Hayes and Kossyva 2012, 171–2; Fiolitaki 2014, 469–70). Together with form 10 (Fig. 14.2, e–f), these shapes seem to have become prevalent on the island in comparison with examples of other fine red-slipped wares, particularly during the 6th and the first half of the 7th centuries (Harrison and Hayden 2005, 57–8; Haggis 2005a, 58; Yangaki 2005, 286–7; Fabrini and Perna 2009, 128; Panero 2009, 25–6; Fiolitaki 2014, 469–70). This is based on quantitative data from Gortyn (Rizzo 2001c, 55; 2004a, 190–8; 2004b, 327–31; 2011a, 86–7; Dello

Preite 2004, 427–32; Fabrini and Perna 2009, 127–8; Panero 2009, 25–6;) and Eleutherna (Yangaki 2005, 116–8, 286–8) and is further enhanced by the frequency with which these forms occur at various surveyed or excavated areas in comparison with forms of ARS Ware. They have been found at Kissamos, Plakias, Sellia, Aghios Ioannis (Dello Preite 1984, 184–6), the Akrotiri peninsula (Raab 2001, 88, 93–5, 102, 105–6, 114, 118, 121, 124, 130), Vafes (Fiolitaki 2011, 90), Aghia Galini (Vogt 1991–1993, 43–7), Knossos (Hayes 2001, 438), Matala, Lasaia (Blackman and Branigan 1975, 31–2; Shaw and Shaw 1995, 338, 365), Dia, various sites from the region of Sphakia (Sanders 1982, 165; Nixon *et al.* 2000, 8.36:UncatG11, 8.39:UncatG24, 8.40:UncatG11, 8.36:UncatG10, 8.35:UncatG06, 8.22:UncatG06, 8.19:UncatG08), Pseira (Hope Simpson *et al.* 2005, 13, 18, 48, 89), the plain of Phaistos (Watrous and Hadzi-Vallianou 2004b, 528, pl. E.21), Lasithi (Watrous 1982, 70, 80–4), the Ziros region (Branigan 1998, 46), the Vrokastro (Harrison and Hayden 2005, 57–8), Gournia (Hayes and Kossyva 2012, 172) and Kavousi areas (Haggis 1992, 240, no. 250; 2005a, 58; 2005b, 93, 104, 118, 124, 142), and the Asterousia region (Blackman and Branigan 1977, 44, figs 1, 18; Francis 2010, 29) (Fig. 14.1). This data confirms that the island of Crete adheres to the trend identified for the eastern Mediterranean, where LRC prevails during the same period (Hayes 1992, 5, 7, n. 5; Yangaki 2005, 287).

In some areas, like Eleutherna, Gortyn, Itanos, and Pseira, alongside numerous examples that reveal the characteristics of the main production of LRC, as presented by J. Hayes, occur some other examples whose variable slip and fabric quality (as in Gortyn and Itanos) could suggest a provenience from other production centres as yet unlocated (Rizzo 2001c, 65; Xanthopoulou 2004, 1016; Hope Simpson *et al.* 2005, 97, L7.2; 104, L18.2; Yangaki 2005, 124; Lippolis *et al.* 2009, 108).

Quite rare on the island is the occurrence of Late Roman D (Hayes 1972, 371–86), which has thus far been noted only at Gortyn, Knossos, the Gournia area, Hierapytna, Itanos, Agios Savvas, and Kissamos (Dello Preite 1984, 185, 189; 2004, 432; Rizzo 2001c, 65; 2004b, 334; Xanthopoulou 2004, 1016; Gallimore 2011, 287–8; Hayes and Kossyva 2012, 173; Portale 2014, 480). While Hayes's forms 1 and 2 show that at some

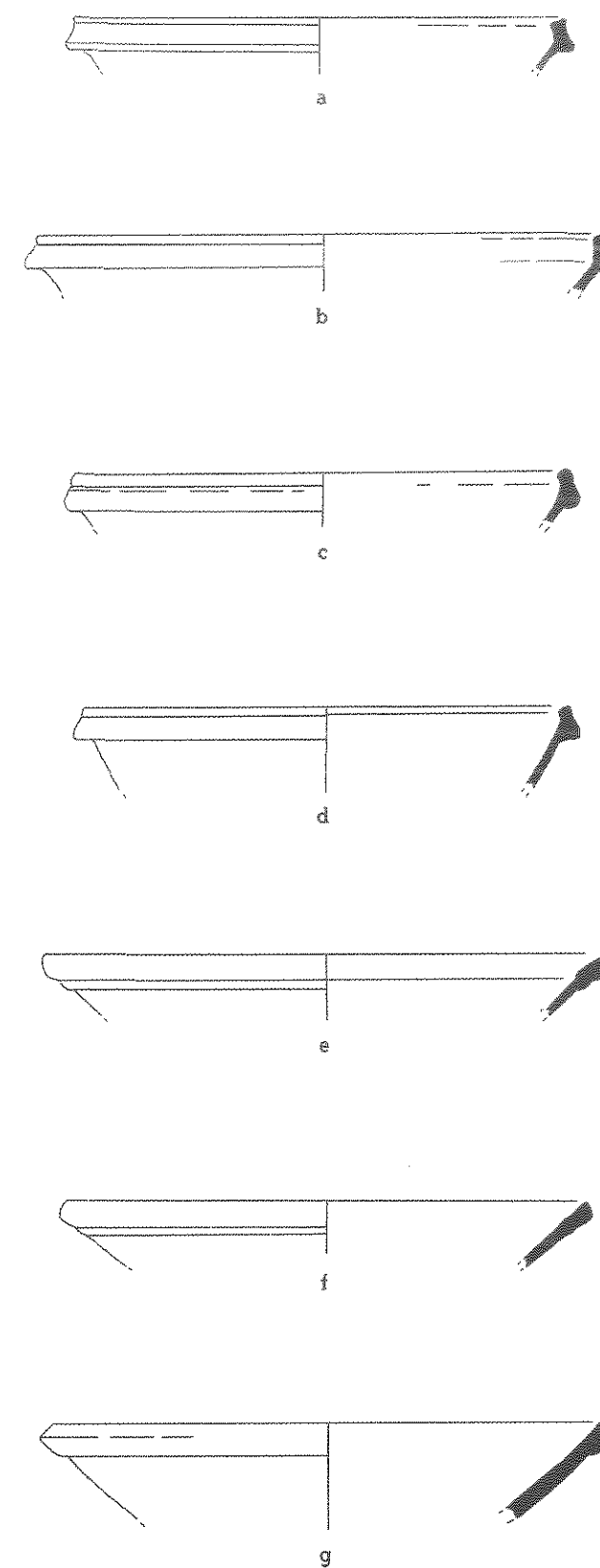


Figure 14.2 Examples of LRC ware, form 3, from Eleutherna (a–d); examples of LRC ware, form 10, from Eleutherna (e–f); fragment of an imitation of LRC, form 10, from Eleutherna (g). From Yangaki 2005, fig. 11 (scale 1:4).



sites LRD made its first appearance on the island during the 5th century, it became more frequent in its latest circulation, as demonstrated by the examples of Hayes form 9 found at Gortyn, Knossos, Kissamos, and Itanos (Dello Preite 1984, 185, 189; Hayes 2001, 443, 445, no. B 5; Xanthopoulou 2004, 1016). Our knowledge of LRD is becoming more and more complex. Recent studies have reworked or refined Hayes' typology (Meyza 2007; Reynolds 2011, 57–65) and chronology (Armstrong 2009, 158–70, 178). In particular, according to the revised chronology on Hayes' form 9 proposed by P. Armstrong (2009, 158–70, 178), this form, traditionally dated to the 7th century and circulating until the end of the century, continued to be distributed throughout the 8th century. In view of this opinion, the scrutinized publication of pottery assemblages from the above-mentioned Cretan sites – of which a deposit from Knossos has been published analytically (Hayes 2001, 443–54) – with an emphasis on the rigorous presentation of each archaeological context will contribute to a better understanding of the period of occupation in these areas, cross-checking and refining, comparatively, the evidence published to date (Hayes 2001, 443–54; Yangaki 2005, 43–100). Also, while it was believed that LRD (or Cypriot Red Slip Ware) was probably made in Cyprus (Hayes 1972, 371; Meyza 2007, 13; Armstrong 2009, 158–9), the number of tableware productions in southern Asia Minor which find morphological parallels has suggested to researchers that all the respective wares be linked under the same label (LRD) (Poblome and Firat 2011, 49–55). Moreover, the identification of numerous LRD production sites in Pamphylia and Pisidia in southwest Asia Minor has alerted researchers working in consumption areas such as Crete to the original provenience of the LRD examples (Jackson *et al.* 2012, 89–114). Consequently, areas in southwest Asia Minor are now considered as candidates for these imports, in addition to Cyprus.

Egyptian Red Slip Wares are rare on Crete (Hayes 1972, 387–401). A sole fragment published from Hierapytna from a context of the second half of the 4th century constitutes the earliest known occurrence (Gallimore 2011, 288–9). At Eleutherna, a single example has been dated to the second half of the 6th and the early 7th century (Vogt 2000, 64–5). To date, the only site where Egyptian Red Slip Wares seem to have had some diffusion is Gortyn, where a few fragments from contexts of the 6th, 7th, and the 8th centuries AD have been considered as examples of ERS A and C (Lippolis 2001a, 68; 2001b, 69–71; Fabrini and Perna 2009, 128–9). A single example was found during the survey in the Gournia area, but could constitute an imitation (Hayes and Kossyva 2012, 173–4). Perhaps the preferential occurrence of Egyptian Red Slip Ware in these late contexts can be connected to the continued import during this period of other products

from Egypt, such as wine, as demonstrated by a quantity (although modest) of Egyptian amphorae still circulating at the site of Gortyn at this time (Portale and Romeo 2001, 338–44).

Along with the above-mentioned imported red-slipped wares on Crete, information is gradually accumulating about the existence of fine-quality ceramics whose form and surface treatment imitate ARS and LRC (Figs 14.2, g, 14.3) (Bonifay 2004, 459–61; Yangaki 2005, 119–25, 288–93; 2009 204–7). These are characterized either by examples which show a close relation to their prototypes in terms of form, have fine to medium fabrics, and display a fine reddish/maroon slip, or by examples that could be considered derivatives of their prototypes in that they follow general forms but are made of coarser fabrics, have thicker walls, and either no slip or a poor-quality slip. Imitations of the first category can constitute either imports or local products, while imitations of the second category, sometimes considered part of the plain wares repertoire given the absence of slip, are usually attributed to the local production of specific areas based on the macroscopic characteristics of their fabrics. This tendency to copy forms of imported red-slipped wares is noted in Crete from the early Roman period, as demonstrated by examples from Knossos (Forster 2001, 153; 2009, 114–5) and Gortyn (Veronese 2002, 898; Yangaki 2005, 290). In the first Byzantine period, it seems to have become more intense from the mid-5th century onwards, and the imitations seem to have had a more prolonged life than their prototypes (Yangaki 2005, 288–90). Imitations of both categories have thus far been identified in Vafes (Fiolitaki 2011, 91), Eleutherna (Yangaki 2005, 119–25, 288–93), Gortyn (Albertocchi and Perna 2001, 418–35; Lippolis 2001b, 69–71; Veronese 2002, 898;

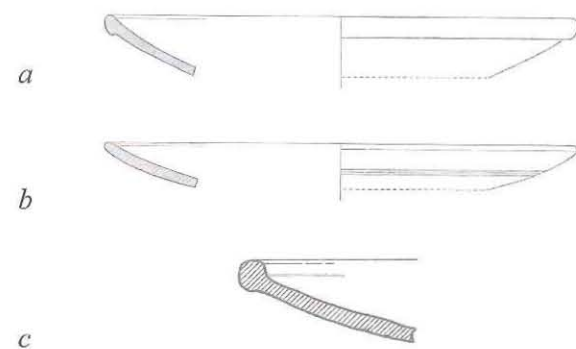


Figure 14.3 Examples of possible imitations of ARS ware, from Gortyn. From Lippolis 2001b, pl. xix, d, b, by permission of the Scuola Archeologica Italiana di Atene (a, b) (scale 1:6). Plate imitation ARS ware, form 104C, from Gortyn. From Albertocchi and Perna 2001, pl. lxxxiv, A III 3.1/1, by permission of the Scuola Archeologica Italiana di Atene (c).

Lippolis *et al.* 2009, 109–10), Knossos (Hayes 2001, 433–4; Forster 2009, 113), Hierapytna (Gallimore 2011, 283), and the Vrokastro (Harrison and Hayden 2005, 57–8, pl. 2.6) and Asterousia areas (Francis 2010, 29). Imitations of the second category, as shown by evidence from Gortyn and Eleutherna, were mainly the products of local workshops and were mainly restricted to the local market, as has been suggested in the case of other Red Slip Ware imitations in the eastern Mediterranean (Arthur 2007, 162). Their fabrics suggest that they were made in the same workshops as other plain wares. Of particular interest are examples of 'Local/Regional RS Ware' identified by J. Hayes at Knossos, which copies forms both of ARS and LRC (Hayes 2001, 433–4), since they bear a medium-quality slip and constitute somewhat finer versions in comparison with the imitations of the second category. The provenience of this 'Local/Regional RS Ware' is unknown, as is its possible distribution in other regions of Crete. Some fragments from Gortyn with particular characteristics could be related to this ware (Panero 2009, 26). However, its existence shows that a more specialized production of regional red-slip wares supplements the local market during the 6th and the 7th centuries and runs parallel with the above productions.

Imitations mostly copied the more commonly attested imported forms, like ARS forms 99, 104 and 105, and LRC forms 3 and 10 (Figs 14.2, g, 14.3). Even if their numbers are quite low compared to red-slipped wares in general, they witness their greatest diffusion from the middle of the 6th century and even during the 7th century; it is characteristic that they are more common than imported fine wares in a 7th century deposit from Knossos (Hayes 2001, 443, 445). Variations occur in the more common forms at each site. Imitations of fine pottery are also noted in other regions of the Mediterranean (Bonora *et al.* 1988, 345–6; Milanese 1991, 368–71; Rubinich 1991, 633; Fontana 1996, 83, 87, 95; Poulou-Papadimitriou 2001, 235; Ladstätter and Sauer 2002, 323–5; Yangaki 2005, 291–2; Arthur 2007, 162–3). Crete thus accords well with this phenomenon in being alert to the trends of the day. If the 'local' provenience of 'Local/Regional RS Ware' can be verified, then both categories of imported red-slipped wares will have been reproduced on the island contemporaneously along with lower-quality, local imitations. Given that they could have been more easily acquired than their finer, imported prototypes, these products would have offered a supplementary cover to the need for finer vessels with similar characteristics.

Thus, it emerges that red-slipped wares are generally better represented than other categories of ceramic material from surveys, since they are far more easily recognized. Other categories, such as amphorae, are also quite prominent in publications, but in many cases their attribution to a specific type is not certain. Material from

excavated sites, however, provides more detailed evidence and a far greater variety of forms of a particular fine red-slipped ware production, thus leading to better knowledge of the chronological range of this ware at a given place. In particular, the forms of ARS and LRC wares found at Gortyn and, to a lesser degree, at Knossos, Hierapytna, and Eleutherna, are much more varied than those from surveyed areas, where there is a marked tendency towards an over-representation of later forms, such as ARS forms 99 and 105, or LRC forms 3 and 10, with sub-types. This could be explained by the characteristics of survey research in Crete, as outlined above, by the nature of the surveyed sites, or by the nature of the systematically excavated sites, all of which were important settlements, each with its individual characteristics and some with a much stronger rural aspect (i.e. Eleutherna) than others. This image finds a distant but useful parallel in the remarks on red-slipped wares from the Segermes region in northern Tunisia, where J. Lund has noted that the excavated red-slipped pottery provides more information on the earlier material and total chronological range at each site than sherds collected from the surface (Lund 1995, 454–7). Nevertheless, data from surveys in areas like Kavousi (Haggis 2005a, 58; 2005b, 118, no. 37.4), Vrokastro (Harrison and Hayden 2005, 75–6), Asterousia (Francis 2010, 29–30), Lasithi (Watrous 1982, 82–3) and Akrotiri (Raab 2001, 93, 95, 97, 106) show that a variety of forms characterizes some specific sites. This, together with the abundance of specific forms of fine, red-slipped wares – among which LRC 3 and 10 prevail, which seem to be found all over Crete, both at inland and coastal sites, and with a high concentration on the neighboring island of Gavdos, as well (Kossyva *et al.* 2004, 405) – implies the wide penetration of fine pottery to the population and elicits some thoughts on the users of these vessels and their social position. It has long been suggested that tablewares with a fine slip and elegant decoration were more costly than other categories of pottery (Peña 2007, 29–31, 58). In fact, for the Roman period, the use and important diffusion of terra sigillata as an expression of contemporary material culture has been understood to reflect its users' new Roman identities and has thus taken its place in the long debated 'Romanization' process, that is, the complex ways in which Roman institutions and culture influenced and were absorbed by local Mediterranean populations (Hingley 2005, 100–2; Wallace-Hadrill 2008, 436–40; Baldwin Bowsky, this volume). Various aspects of this process have been explored in regard to Crete with the aim of assessing the possible impact of Roman influence on the island (Harrison 2000, 545–52; Watrous and Hadzi-Vallianou 2004a, 357–8; Sweetman 2006, 421–31; Gallimore 2011, 13–6, 23–4). The role of fine pottery in the 'Romanization' process was used quite recently to stimulate discussion



among researchers about the role of LRD and other fine, red-slipped wares of the 4th through the 7th centuries AD as markers of different choices, and thus as manifestations of socio-cultural differences (Poblome and Firat 2011, 54). Nevertheless, future research might seek to explain this extremely abundant diffusion of fine, red-slipped pottery and its wide penetration into the population both in terms of consumer tastes and at a cost lower than was once believed rather than focusing on the notion of 'Romanization' – especially, in the case of Crete, because different historical conditions arise during the period under study here. G. Harrison has suggested, with respect to the evidence from the Vrokastro survey (2000, 548–9), that imported tablewares must have been less expensive than was previously believed. Further research is needed in order to interpret more clearly the variations in consumer preferences over time in the search for the social and cultural conditions which might have generated different attitudes.

#### Painted and/or glazed pottery

Two distinct categories of painted pottery have so far been identified on the island. These are mainly vessels of medium and small size and they occur in contexts dating from the end of the 6th century and mostly into the 7th and 8th centuries AD. The first category is known as 'ceramica sovradipinta' (Di Vita 1996, 47–53; Vitale 2001, 86–113; 2008; Rizzotto 2009, 32–7; Rizzo 2011b, 95–103) and is characterized by a brownish-reddish slip used to create various patterns, mostly geometrical and vegetal and occasionally stylized figures, on top of a surface covered with a light-brownish, fine slip (Pl. 30, a). The existence of numerous examples of this category in Gortyn, together with the excavation of a kiln destined for their firing (Di Vita 1996, 47–53; Vitale 2001, 86–113; 2008, 21), has led to their attribution to a local production with examples of similar characteristics. Based on the nature of their fabric, form, and decoration, objects attributed to this production have been published from Pseira (Poulou-Papadimitriou 1995, 1122), Herakleion (Poulou-Papadimitriou 2001, 236, fig. 5, a–b; 2008, 153–4), Apodoulou (Vitale 2001, 86, n. 5), Eleutherna (Yangaki 2005, 127), and Gavdos (Kossyva *et al.* 2004, 406, fig. 11; Yangaki 2005, 127, n. 450).

The second category of painted pottery is characterized by the use of white slip, usually in the form of thick bands applied directly to the surface of clay objects, or as a homogeneous layer covering the whole exterior surface (Fig. 14.4, a–b) (Vogt 2000, 69, fig. 17.4; Poulou-Papadimitriou 2004, 209–26; Yangaki 2005, 127–30). This pottery has been found at Eleutherna in a quantity that varies from 3% to 10% of total pottery in the respective contexts; as shown by an analytical study of contexts from Sectors I and II of the site, it dates between

the 7th and the very early 8th century (Yangaki 2005, 89, 97–9, 129) and, given the morphological features of the vessels and above all their fabric, has been attributed to a local production (Yangaki 2005, 128–9). Part of a flagon bearing white slip on its surface found in Aghia Galini in a complex where coins of Constans II offer a *terminus post quem* (for details: Yangaki 2005, 130, n. 471) shows that Eleutherna is not the only site where vessels having white, rather than brownish-reddish, slip were in use.

Both these categories of painted pottery have in common a preference for closed forms – mainly small to medium sized jugs, mugs, and flagons with various morphological variations – and for rather stylized motifs. Open forms are less common and are usually bowls or plates. Most of the forms find parallels with those of plain pottery from the same sites. These painted wares do not constitute isolated cases in the Mediterranean, but rather, as researchers have pointed out (Vitale 2001, 97–101; Yangaki 2005, 126–7, 130), are part of a general trend for painted wares already documented in central Greece, Italy, North Africa, and the Near East (Vitale 2001, 97–100; 2008, 183–6; Yangaki 2005, 126–7). In some of these areas, red-painted wares, mostly with geometric or abstract designs, appear as early as the 4th century (Greece and Italy), while they witness their largest diffusion during the 6th and 7th centuries. Cretan products, however, have their own characteristics, not only in the prevalence of specific forms, but also in their decorative themes. In the case of the production of Eleutherna, white rather than brownish slip was used. If it is considered that white slip was used as a base for polychrome, painted designs at Kellia (Egypt) (Egloff 1977, 48, pls 1–3, pl. 25), or that at Thasos (Abadie-Reynal and Sodini 1992, fig. 20, CC115, pl. iv.e), bands of white slip decorate a pot, then the use of light-coloured slip on the Cretan vessels does not constitute an isolated case. In addition, given the chronological framework attributed to these wares, it can be noted that their production started somewhat later than on mainland Greece and lasted longer. The continuation of the production of 'ceramica sovradipinta' during the 8th century has analogies with other sites from Italy (Ricci 1998, 377), Albania (Hoti 2003, 237–9) and Egypt (Egloff 1977, 48–51). Thus far, 'ceramica sovradipinta' seems to have had an inter-regional diffusion (see above and Vitale 2001, 101), while the white-painted pottery from Eleutherna seems to have responded solely to local needs.

The appearance of white-painted pottery at Eleutherna is tightly connected with the glazed pottery from the site (Fig. 14.4, c). In particular, numerous vessels from graves (Poulou-Papadimitriou 2001, 209–26; 2004, 209–26; Yangaki 2004a, 139–42) and one example from an excavated unit (Yangaki 2005, 132) bear traces of glaze, mostly transparent to yellow but also brownish, in the rare cases where this has been more densely preserved

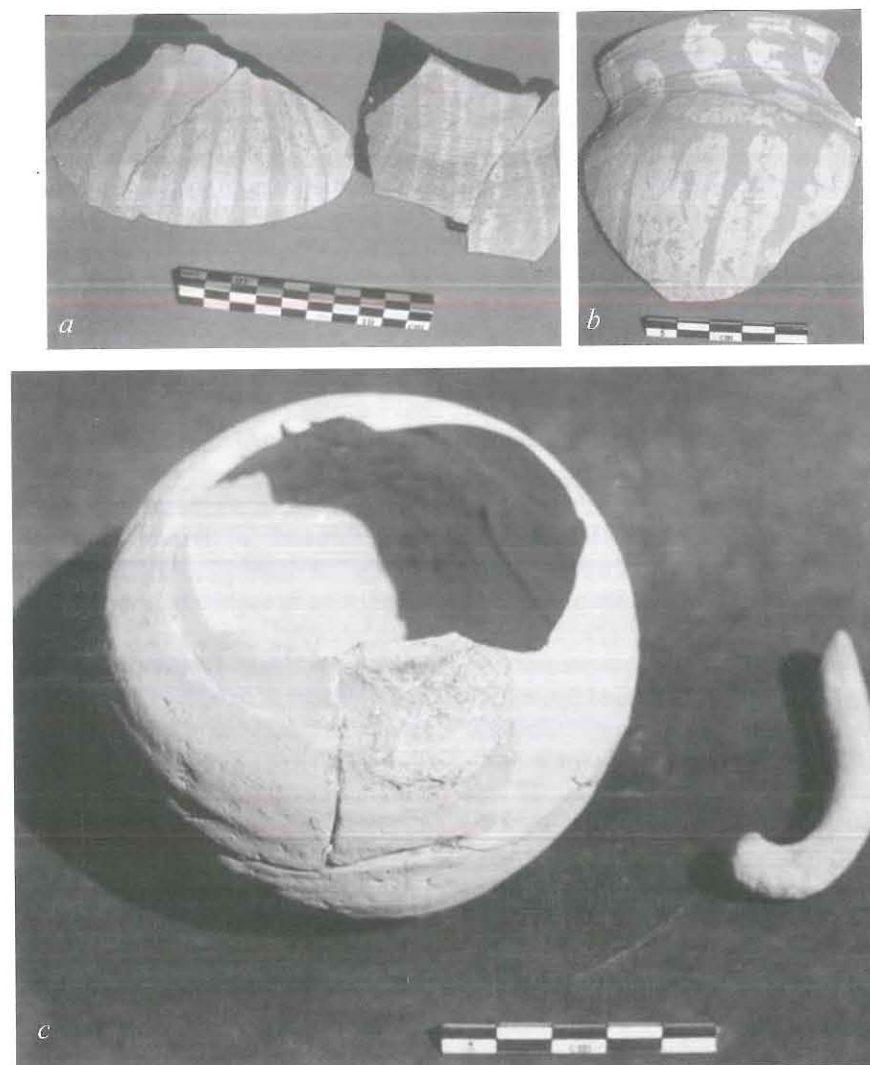


Figure 14.4 Fragments of white painted pottery from Eleutherna, Sector I. Photo by author, from Yangaki 2005, 130, pl. xxiv, 6–8) (a, b). Mug with traces of white slip and glaze, from a grave at Eleutherna, Sector I. Photo by author, from Yangaki 2005, 86, no. 467, pl. xx, 5 (c).

(Poulou-Papadimitriou 2001, 209–26; Yangaki 2005, 131–3, 295). In the majority of cases, this glaze was applied to the surface of pots decorated with white slip, but in rare cases it was applied directly to the bare surface (Yangaki 2004b, 299–300). Given the date ascribed to the graves that held the glazed pots (Poulou-Papadimitriou 2001, 239–40; 2004, 207–26; 2005, 687–704; Yangaki 2004a, 142–3) and to the white-painted pottery (see above), it has been suggested that the production of glaze started at Eleutherna around the middle of the century and continued throughout its course (Poulou-Papadimitriou 2004, 214–5; 2011, 390; Yangaki 2005, 295). Since its production is connected with the painted pottery, which has only rarely been found in contexts of the very early 8th century, it has also been suggested that this glazed pottery production did not last very long

(Yangaki 2005, 295). It is clear, however, that a Cretan site must be added to sites like Constantinople (Hayes 1992, 13), Samos (Gerousi 1992–1993, fig. 7), Thasos (Blondé *et al.* 2003, 773–4; Petridis 2013, 16, n. 2; 187, fig. 3), Amathus (Touma 2001, 270–1), Crypta Balbi in Rome (Paroli 1992, 352), and the Yassi Ada I shipwreck (Bass 1982, 165–6), where glazed pottery has also been found dating from the 7th century.

Since the rare occurrence of glaze on pottery found in some parts of the Byzantine Empire from the 4th century onwards (Trivizadaki 2008, 30–5; Politis 2010, 157–8, fig. 5), the above data shows that more concrete evidence on this matter is available only during the course of the 7th century. It furthermore emphasizes the technical skills of these regional potters (Poulou-Papadimitriou 2004, 214), since, in the case of Eleutherna, they were not only



capable of producing the – albeit poor quality – glaze, but they also combined it with painted decoration. Additional information on glazed pottery products attributed to local production comes from Pseira, since a chafing-dish from this site, dated to the late 8th to early 9th century, is suggested to have been made locally in the area of Kalo Chorio (Poulou-Papadimitriou 1995, 1121–2; 2011, 391–2, fig. 8).

Imported glazed pottery also occurred on the island from the end of the 7th century onwards, forming part of the large category of ‘Glazed White Wares’; this ware has been attributed to the area of Constantinople (Hayes 1992, 12–34). Examples comprise fragments recognized as early variants of ‘Glazed White Wares’ from sites at Kalorouma and Kalathas Bay on the Akrotiri peninsula (Raab 2001, 101, no. 113; 104, no. 138), a fragment published from Aghia Galini (Vogt 1991–1993, 68) attributed to ‘Glazed White Ware I’ (GWWI) (Poulou-Papadimitriou 2011, 394–5), few fragments of ‘Glazed White Wares’ from Herakleion (Poulou-Papadimitriou 2011, 394, n. 28) and Gortyn (Di Vita 1988–1989, 351–5; Belli-Pasqua and La Torre 1994–1995, 198, fig. 27; Rendini 2004f, 419, no. 93; Zanini 2011–2012) (Pl. 30b), and fragments of ‘Glazed White Ware I’ (late 7th to early 8th century) from Pseira (Poulou-Papadimitriou 1995, 1121–2; 2001, 238–9; 2011, 394), while early examples of ‘Glazed White Wares’ are mentioned from Itanos as well, with their detailed publication anticipated (Poulou-Papadimitriou 2011, 395; Xanthopoulou 2013, 43–4). These examples further enhance the evidence for the island’s contacts with other areas in the eastern Mediterranean during the late 7th and the 8th centuries. Next to these, Cretan sites like Eleutherna provide information on the local production of glazed pottery. In this last case, in particular, the glaze was applied to enhance the painted decoration of the vessels rather to make the vessels impermeable (Poulou-Papadimitriou 2004, 213–5; Yangaki 2005, 133, n. 488). This decorative use of glaze, in contrast with its use for practical, utilitarian reasons, has much in common with glazed vessels found at Philippoi and dated to the middle of the 5th and the 6th centuries AD (Trivizadaki 2008, 22, 30, 37).

These three categories of pottery (Pl. 30, a, Fig. 14.4), two of them tightly interconnected, indicate in the most eloquent way not only that Cretan pottery production follows trends noted in numerous sites in the eastern Mediterranean, but also that these new productions, which require specific technological skills, occurred during a period of change on the island, the latter caused by catastrophic earthquakes, the Arab expansion, or other factors (Tsougarakis and Angelomatis-Tsougarakis 2004, 362). The ongoing production of ‘ceramica sovradipinta,’ as indicated by the reconstruction of the kiln in Gortyn after the destruction attributed to the earthquake of AD

670, represents the Cretans’ ability to adjust to various circumstances without abandoning quality production that must have offered some profit, judging by the variety of forms encountered at Gortyn and their diffusion, although limited, in other regions of the island. Broader-ranging information on the inter-regional diffusion of this pottery, as well as on the possible distribution of the painted pottery from Eleutherna, may in the future offer insights about possible trade contacts between sites on the island even during this troubled period. In addition, one should not underestimate the possibility that more than two centres of painted pottery production could have existed on Crete.

#### *Plain wares for domestic or rural uses*

Vessels used for the preparation and the serving or storage of liquid, semi-liquid, or solid food or other substances are quite numerous on Crete: bowls, plates, cups, goblets, mugs, and jugs, pitchers, basins, tubs (Fig. 14.5, a–b), baskets and beehives (Pls 31–32). Most of the published data for this material, however, comes from Gortyn (Martin 1997b, 291–345; Albertocchi and Perna 2001, 411–536; Fabrini and Perna 2009, 132–3; Albertocchi 2010, 923–6; 2011a, 183–213; Perna 2010, 915–8; Bonetto *et al.* 2010, 900), Knossos (Hayes 1983, 97–159; 2001, 436, 438, 441–2, 445, 447; Forster 2009, 151–2), and Eleutherna (Vogt 2000, 66–75; Yangaki 2005, 126–65, 296–302), while information from other sites tends to focus on other categories of pottery thought to constitute better chronological ‘markers’ for each site or on well-diffused productions; our image of pottery related to domestic or rural activities is thus mainly derived from these three sites.

Several general remarks can be made about this pottery from Gortyn, Eleutherna, and Knossos. First, the majority of the aforementioned categories of wares are attributed to the local production of each site. Imported types are quite rare (Vogt 2000, 66; Albertocchi and Perna 2001, 414–5). At Gortyn, researchers have attributed one ceramic fabric to local production, but there are other fabrics for which, given their macroscopic characteristics, a possible local production can also be suggested (Albertocchi and Perna 2001, 414–5; Bonetto *et al.* 2010, 899–900). At Eleutherna, the attribution of certain fabrics of wares to local production has been reinforced by the results of chemical analysis (Yangaki 2005, 281–2; Yangaki *et al.* 2008, 313–25). The identification of the majority of wares to local production, with each category showing a variety of forms over a long period of time, implies that the production centres were active somewhere in the vicinity, offering ceramics in response to the needs of the inhabitants, and that there were no particular fluctuations in these productions

over these five centuries. In fact, as a comparison of the pottery from these three sites reveals (Yangaki 2005, 296–302), this active production is either characterized (in each category of vessel) by a persistence of some particular forms over a long period of time at the same time that new forms emerged or by the appearance over the course of time of completely new shapes that supersede earlier ones. For example, a characteristic of the first case is the persistence at Eleutherna of ‘tubs’ of the same general form – a flat base, straight obliquely sloping sides and mostly flat rims – from the 4th until the late 7th century (Fig. 14.5, a) (Yangaki 2005, 157, 300). Minor differences in the formation of the rims, the substitution of vertical for horizontal handles, and the ample use of dense incisions distinguish earlier from later examples; Roman examples of this shape from Knossos are particularly eloquent (Hayes 1983, 109, 132; Forster 2009, 146–7). Similar observations can be made for basins from Gortyn (Albertocchi and Perna 2001, 441; Perna 2010, 916; Albertocchi 2010, 924–5), and Roman basins from Knossos (Hayes 1983, 109, 132), Lappa (Gavrilaki-Nikoloudaki 1988, 48–50), and Gournia (Hayes and Kossyva 2012, 167) offer characteristic early versions of the same, general form.

Cups and mugs offer a contrasting situation: there is either a development within the existing form or completely new forms appear during the 6th and 7th centuries (Yangaki 2005, 136–40). However, the scarcity of evidence from the 5th century, in particular from Knossos and Eleutherna, hinders a better understanding of the abandonment of earlier forms and the appearance of new ones. In general, analogous forms of ceramic types occur at these three Cretan sites, parallels for which can be found at other sites in the eastern Mediterranean and, above all, the Aegean (Yangaki 2005, 296–302). Some forms appear more often at one site than at others, however, or characterize the production of only one site. The first case is represented by type B basins, which were quite numerous in 7th century contexts in Gortyn (Fig. 14.5, b) (Albertocchi and Perna 2001, 442–3; Albertocchi 2011a, 190). In the second case, one can cite, for example, the characteristic ceramic baskets with a high loop handle attached to the inner rim found at Eleutherna (Vogt 2000, 75).

The closed forms of pottery are in general much more numerous than the open forms (Martin 1997b, 296; Albertocchi and Perna 2001, 418; Yangaki 2005, 135–6; Albertocchi 2010, 924–5; 2011a, 183–4) (Pl. 31). Only at Gortyn is the proportion of open forms higher than elsewhere; even there, though, plates are quite restricted in number compared to other forms (Albertocchi and Perna 2001, 418–36). In some cases, the preponderance of closed forms can be explained by their characteristic archaeological contexts, as is the case, for example,

with the numerous flagons mainly connected to a re-use of the Roman baths, or with the small amphorae destined for funerary use (Yangaki 2005, 141–2, 296). The existence of numerous examples of fine pottery, mostly ARS and LRC wares, together with their various imitations, seems to offer another logical explanation for the limited presence of plain open forms, since the fine, red-slipped pottery could respond to occasional demand. There may be other probable explanations for the limited general evidence for open, plain clay vessels, including the possible use of open forms made of other materials, such as wood, which is perishable (Albertocchi and Perna 2001, 424), a suggestion strengthened by recent findings of wooden vessels from the Yenikapı excavations (Polat 2013, 189, no. 206). Although, according to researchers, the dining habits of the 4th–8th centuries AD indicate that individual plates were generally not in use and that food was served from a communal dish (Vroom 2003, 312–3, 331–2; 2008, 313–56 and particularly 356; Papanikola-Bakirtzi 2005, 117–9), it has been suggested in the case of the evidence from Gortyn that the various forms of open vessels served multiple uses for the preparation and serving of food, including the individual serving of portions at the table (Albertocchi and Perna 2001, 419, 424). Since these forms occur more frequently in Gortyn and not in other Cretan sites, these remarks stimulate the need for further research on the dining habits of the period.

While these numerous forms of plain pottery served different functions – sometimes simultaneously – for

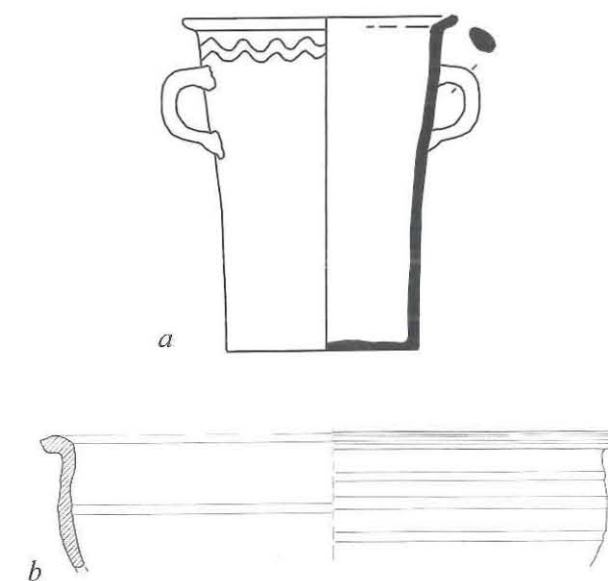


Figure 14.5 Tub, from Eleutherna, Sector I. From Yangaki 2005, fig. 57, c (a). (scale 1:6). Basin of type B, from Gortyn. From Albertocchi and Perna 2001, pl. cxlviii, B V 1.4/1, by permission of the Scuola Archeologica Italiana di Atene (b) (scale 1:6).



preparing, serving, and/or stocking foodstuffs, there is little data relating to the particular use of each form. There are rare cases of vessels for which a specific use is or could be assigned (Xanthopoulou 2004, 1020; Yangaki 2005, 162–3); the more obvious examples are beehives and baskets, respectively (Pl. 32). Apiculture seems to have had a long tradition on the island of Crete (Yangaki 2005, 162) and, based on archaeological evidence, namely ceramic beehives, it appears to have been quite developed from Roman times on (Francis 2006, 384; Francis, this volume). Of the two types common in the Greek territory, the horizontal type characterized by a long, tubular body with simple rims and one closed end was used on Crete. These tubular objects were laid on their sides (Hayes 1983, 110; Yangaki 2005, 162–3; Francis 2006, 380–1; 2012, 151–2). Since not many complete vessels have come to light, the existence on the interior surface of combing or scoring facilitates the identification of sherds (Yangaki 2005, 162–3; Francis 2006, 380; 2012, 152). However, since the internal scoring sometimes only covers one part of the body, it becomes evident that their number could well be much greater (Francis 2012, 152); it should be noted, nevertheless, that Crete preserves complete examples of beehives with combing over all their interiors (Yangaki 2005, 450, fig. 61, a). Used alongside this type of beehive are cylindrical extension rings that were added to the tubular hives in order to increase their size and thus the production of honey and wax, as well as to detach some of the combs selectively (Francis 2012, 151). The existence of domed-ended hives instead of the flat ones known from central Greece (Francis 2006, 380), at Gortyn (Martin 1997b, 340, fig. 126), Knossos (Hayes 1983, 110, n. 39), and Eleutherna (Yangaki 2005, 450, fig. 61, a) could indicate that this form of beehive is a Cretan variant (Hayes 1983, 110, n. 39; Yangaki, 2005, 162; Francis, this volume). Further elements, like the forms and the direction of scoring, also back this up (Francis 2006, 387). It has been noted that there was no major development in the typology of these beehives, given that the basic aim of these vessels – beekeeping – remained unchanged over long periods of time (Francis 2006, 385; 2012, 151; Rotroff 2006, 124–31). Nevertheless, a careful examination of rim forms, the exterior decoration of beehives, and the extension rings from different chronological contexts at Gortyn and Eleutherna shows that small variations do exist, with later examples dating from the 6th and 7th centuries adopting specific rim forms and bearing rich, incised decoration on their exterior, which enables them to be distinguished from earlier examples (Albertocchi and Perna 2001, pl. clxxxv, V 2.4/3; Yangaki 2005, 450, fig. 61, b–d). Similar form of rims and incised decoration characterize contemporary tubs and basins from Gortyn (Martin

1997b, 344, fig. 127; 345, figs 128–9; Albertocchi and Perna 2001, pl. clix, C V 1.1/1, pl. clxii, c V 2.1/4, pl. clxiv, C VI 2.2/3) and Eleutherna (Vogt 2000, 155, fig. 27, 1; Yangaki 2005, 447, fig. 58, b, d). Given the general form of ceramic beehives, which resemble tubs, these vessels could have been manufactured in the same workshops as other plain wares (Francis 2006, 384; 2010, 42). Furthermore, at Eleutherna most of the examples are made with the same fabric as other plain wares, such as basins, jugs, or goblets, which are attributed to local production of the area of Mylopotamos (Yangaki 2005, 281–2), thus implying their parallel production in the same workshops. However, at Gortyn, examples whose fabrics assign them to local workshops (Albertocchi and Perna 2001, 534) have been identified alongside non-local fabrics (Martin 1997b, 340–1). Beehives of the above form, together with extensions rings, are found at Eleutherna (Vogt 2000, 95; Yangaki 2005, 162–3) and Knossos (Hayes 1983, fig. 15, 177; 2001, 440–1, 451; Sackett 1992b, 254, pl. 134, 96; Forster 2009, 146–7) and date to the Roman and the first Byzantine periods. In Eleutherna, they account for a stable percentage of the plain pottery between the 4th and 7th centuries, varying between 1% and 5% (Yangaki 2005, 163). They occur also at Panormo (Kalokyris 1955, 325, pl. 123, b) and Aghia Galini (Vogt 1991–1993, 70). They appear frequently at sites in the Sphakia survey (Francis 2006, 380–8), in the Akrotiri areas (Raab 2001, 96, nos 79–80; 97, no. 85; 125), and in the Asterousia survey (Francis 2010, 42–4), where they cover a long period of time from the Roman into the first Byzantine period, although a more precise date for the various sherds is difficult to assign. It is to be noted, however, that the number of beehives from Gortyn is quite small and these, besides some Roman examples, date mainly from the 7th and 8th centuries (Martin 1997b, 339–41; Albertocchi and Perna 2001, 533–4; Albertocchi 2011a, 211). From the above evidence, it can be suggested that in sites like Eleutherna, Knossos, or other inland sites like those from the regions of Sphakia and the Asterousia, which are characterized mainly by a rural economy, the occurrence of beehives offers important information on the role of apiculture in the local economies, providing additional insights into their various characteristics. The evidence from Eleutherna suggests that apiculture was one of the permanent occupations of the inhabitants, and the geographical characteristics of the area certainly would have encouraged its practice. The late evidence on apiculture in Gortyn has been taken to be indicative of a transformation of the general characteristics of the area during the 7th and 8th centuries, which probably experienced a shift in local production, with the inhabitants turning to the production of other kind of goods, including honey and wax (Albertocchi and

Perna 2001, 526, 533–4). This seems possible in the light of the limited evidence for earlier beehives at this site during the first Byzantine period and what has been mentioned previously in relation to other Cretan sites with stronger beekeeping traditions. Nevertheless, the related evidence is still quite scarce in number, and hives could have served other purposes, as well (Rotroff 2006, 130–1), which, according to the interpretation of specific archaeological contexts, could sometimes be quite different from their 'prime use' (Germanidou 2013, 91–104). Given that there is evidence for the export of Cretan wax and honey after the Arab conquest of the island (Tsougarakis 1998, 385–6) and that written sources refer to the import of Cretan honey in Egypt during the Hellenistic period (Hanson 1972, 164–5), it would be of interest in the future to trace the possibility of similar exports during the period in between as well.

Some of the ceramic baskets from Eleutherna are quite distinct in form, with either straight or flaring walls, simple or slightly everted rims, one or several high loop handles, and incised decoration (Vogt 2000, 75). Similar vessels have yet to be published from other areas of Crete, and at Eleutherna this form derives from contexts of the second half of the 7th century (Vogt 2000, 75; Yangaki 2005, 300). These baskets, which were small to medium-sized with rim diameters ranging from 12 cm to 22 cm, were quite practical for transporting semi-liquid or solid substances. Their handles allowed them to be carried in the arms or even attached securely to animals. Given the limited nature of the evidence, however, there is as yet no clear-cut explanation for their use, but given the rural character of the economy of the site during the first Byzantine period (Yangaki 2005, 285, 304, 307–8, 310–3) as well as the specific morphological characteristics of these vessels, it would not be going too far to suggest that they could have been used by the local inhabitants to transport food for immediate consumption in individual or larger quantities on their everyday journey to their fields and animals.

#### *Cooking wares*

Three basic categories of cooking wares are particularly common among the material to date: cooking pots, cooking dishes, and frying pans, with their associated lids. While various forms of cooking pots and casseroles are common between the 4th and 8th centuries, cooking dishes and frying pans are characteristic mainly of the 1st centuries AD up until the 4th or 5th centuries. Given what has been previously presented about plain wares, the picture of the cooking wares of the island presents some affinities in that we have much more information to date on wares attributed to local production in specific areas than on imported ones.

More specifically, evidence from sites like Gortyn (Rendini 1988c, 253–61; Martin 1997c, 346–65; Sirano 2001, 537–61; Veronese 2002, 898; Albertocchi 2011a, 215–26), Eleutherna (Vogt 2000, 76–80; Yangaki 2005, 165–80, 301–2), Knossos (Hayes 1983, 105–6; 2001, 441, 449; Forster 2009, 132–9), Itanos (Xanthopoulou 2004, 1020, 1022; Xanthopoulou *et al.* 2014, 810–3), Agioi Asomatoi Vafes and Kefala Vrises (Fiolitaki 2014, 469–76) provides the most analytical sample for this period and shows that various forms of cooking wares are connected to the local production of the island or of each area (Fig. 14.6), based either on their macroscopic fabric typology (Martin 1997c, 346–9; Fiolitaki 2014, 469) or on petrographic (Xanthopoulou *et al.* 2014, 812–3) or chemical analysis (Yangaki 2005, 281–2). The information on various cooking pots whose form and/or fabric do not suggest specific provenience, however, is not very conclusive (Hayes 2001, 440, A34; 441, A46–A47; 442, A56; 449, B53–B55; Gallimore 2011, 309–10) or is only very general (Hayes 2001, 440, A35; Yangaki 2005, 166, 168, 172–3, n. 841; Gallimore 2011, 308–9). While at these sites a distinction is made between local and imported forms, given the generally limited information on the provenience of specific forms of cooking wares (Gallimore 2011, 306–7) circulating in the eastern Mediterranean during the Roman and the first Byzantine period, only general remarks can be made on their provenience based on forms and fabrics.

The evidence to date for imported cooking-ware shows that some imported cooking pots with characteristic forms and fabrics do occur in contexts from between the 3rd and early 5th centuries AD, such as those from Knossos (Hayes 1983, 126, nos 94, 98; Sackett 1992b, pl. 194, 77; Forster 2009, 132–4, nos 188–90; 136–9, 203), Gortyn (Martin 1997c, 347, 352, no. 14, pl. cxxiii, 2, pl. cxxvii, 1; Sirano 2001, 552, pl. cxcv, C VII 3.2/1), Eleutherna (Fig. 14.7) (Yangaki 2005, 166, 168–9), or Gournia (Hayes and Kossyva 2012, 169), for which an Aegean (Hayes 1992, 53–4, 93, deposit 8, no. 2) or Asia Minor provenience is ascribed (Istenci and Schneider 2000, 341–8; Doksanalti 2010, 770, 775, fig. 9; Waksman and Lemaître 2010, 783, fig. 5), but there is little information for the imports of later centuries. For example, the evidence for cooking pots from the Near East, the Aegean, Asia Minor, and Constantinople is limited to Eleutherna (Vogt 2000, 77, fig. 29, 2), Gortyn (Rendini 1988c, 256–7; Martin 1997c, 346–9; Sirano 2001, 545, type c I 1.1/4; Panero 2010, 909; Albertocchi 2011a, 215–7), Knossos (Frend and Johnston 1962, 224, fig. 17, 65; 226, no. 65; Hayes 2001, 434, 440, A35), Vafes and Kefala Vrises (Fiolitaki 2014, 470–1). At Gortyn, where the evidence for imports is more numerous, it has been suggested that some cooking pots were imported from the Aegean region during the 6th and 7th centuries (Rendini 1988c, 257–9, no. 257;



Martin 1997c, 355, no. 38, pl. cxxvii, 6; Panero 2010, 909), and recent research using chemical analysis on similar vessels from other parts of the Mediterranean seems to verify this attribution (Waksman and Trégia 2007, 646–51, figs 1, 5, 8).

There is also a small amount of evidence for the importation of a few cooking pots during the 7th and 8th centuries, since examples from Gortyn (Fig. 14.8), namely those made in A. Martin's fabric 8 (Martin 1997c, 356, pl. cxxviii, 4), find their equivalent in cooking pots considered to be products of Constantinople (Hayes 1992, 54–5), the so-called 'grey-gritty ware' (Hayes 1992, 54–5; Bien 2007, 264, 270, fig. 3, 47–48). Examples of this

ware have also been identified from the survey at Akrotiri (Chania) (Raab 2001, 94, no. 66; 117, no. 225), together with a fragment of J. Hayes's 'micaceous brown ware' of a similar date and likely of Asia Minor provenience (Hayes 1992, 55, 57). At Itanos, some examples of the middle or the second half of the 7th century also suggest a Constantinopolitan origin (Xanthopoulou 2004, 1022, pl. 10, 6–7; Poulou-Papadimitriou 2011, 396), while a cooking vessel of the 8th century from Pseira constitutes an imported product from the Cyclades (Poulou-Papadimitriou 2011, 396, fig. 12). In most cases, while similarities in form are noticed among sites inside and outside Crete (Yangaki 2005, 166, 168; Gallimore 2011, 312, 315, nos 366–9; Fiolitaki 2014, 470–71), and while some fabrics are considered to correspond to Cretan productions of known or unknown sources (Martin 1997c, 347; Poulou-Papadimitriou and Nodarou 2007, 757–8; Fiolitaki 2014, 470–1) – thus implying that not only extra-regional but also intra-regional contacts could have taken place on the island – and given that in most cases it is difficult also to compare fabric descriptions, further remarks about possible common provenience cannot be made with certainty.

The evidence from Gortyn and Eleutherna also shows that, besides these rare imports, there are numerous examples of cooking pots that can be considered as local 'imitations' of imported types since they share similarities in form but have fabrics attributed to the local production (Martin 1997c, 352, nos 18–9; 354, nos 33–4; Yangaki

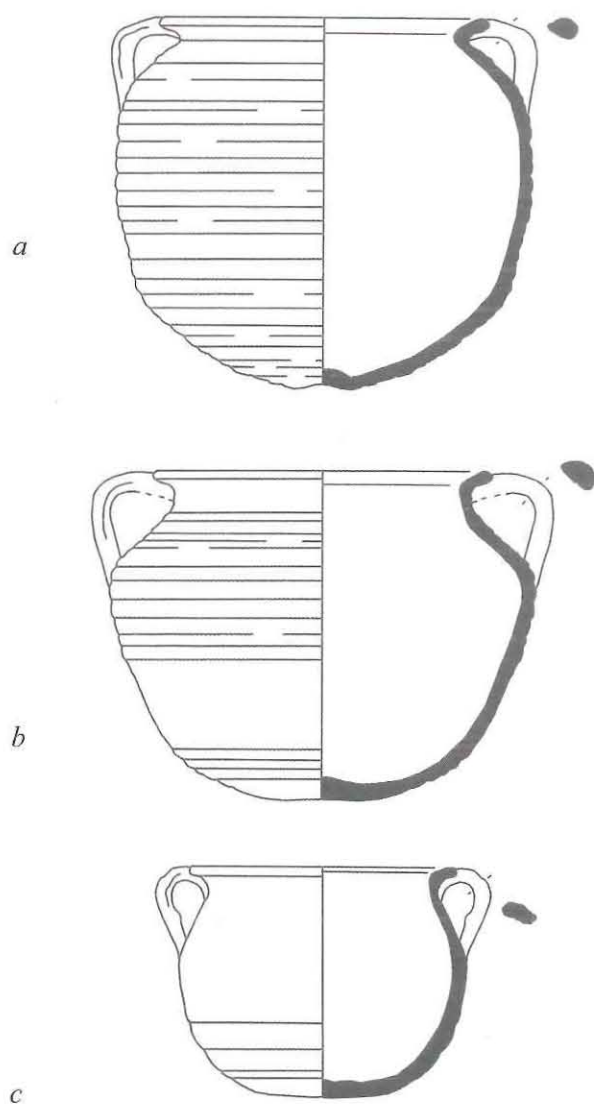


Figure 14.6 Cooking pots with horizontal rim, from Eleutherna, Sector I. From Yangaki 2005, fig. 35, a–c (scale 1:4).

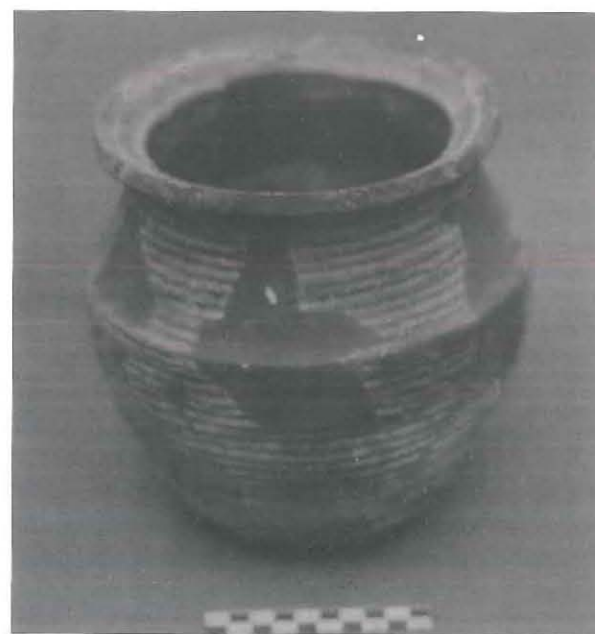


Figure 14.7 Cooking pot, from Eleutherna, Sector I. Photo by author, from Yangaki 2005, 59–60, no. 155, 172–3, pl. xiii, 2.

2005, 167–8). In addition, the local production of various forms without parallels at other sites is quite frequent and encompasses numerous forms, particularly during the 6th and 7th centuries (Yangaki 2005, 301). The existence of these different forms during the same period seems to imply that they could have been intended for different, possibly new, specific culinary purposes (Bakirtzis 2005, 113–4), but this has yet to be properly demonstrated.

Cooking dishes and frying pans are mostly attributed to non-local productions; these occur mainly in contexts of the 1st centuries AD, with some occurring into 4th and 5th centuries AD (Hayes 1983, fig. 9, 99, 106, 109; Gavrilaki-Nikoloudaki 1988, 55, no. Π4347; Sackett 1992b, pl. 137, 24, pl. 193, 64; Martin 1997c, 359, pl. cxxxiii, 3–5; Sirano 2001, 554–7; Yangaki 2005, 179–80; Gallimore 2011, 316–8). Frying pans seem to appear in later centuries but irregularly, as indicated by examples from Knossos (Hayes 2001, 447, B27), Gortyn (Sirano 2001, 558, pl. cxcviii, C XII 1.1; Panero 2010, 917) and Vafes (Fiolitaki 2014, 471). At Itanos, however, they seem to have been in more continuous use through the centuries (Xanthopoulou 2004, 1022). For the time being, the occurrence at Eleutherna of a grill, probably used mainly for meat (Gouin and Vogt 1998, 294–5), during the 7th century is exceptional (Gouin and Vogt 1998, 287–8; Vogt 2000, 80). It follows, however, an old tradition, as is shown by an analogous clay object from ancient Olympia dated to the 4th century BC (Kunze and Schleif 1944, 103, figs 47–48, 104).

We cannot be certain whether the increase in the number of cooking pot forms during the 6th and 7th centuries compared to the scarcity of other cooking wares, like cooking dishes and frying pans, indicates some shift in dietary preferences and in the methods of processing raw foodstuffs at specific sites; more evidence is needed, although this is quite a feasible hypothesis. Cooking pots appearing from the second half of the 7th century and into the 8th century, like those mentioned above, or those characterized by brownish or silvery mica-rich fabrics found at Akrotiri (Raab 2001, 94, no. 66; 117, no. 225), Eleutherna (Fig. 14.9) (Yangaki 2005, 175–6), and

Pseira (Poulou-Papadimitriou 1995, 1123, 1125; Hope Simpson *et al.* 2005, 218, M 94.2; Poulou-Papadimitriou and Nodarou 2007, 757–9), together with the appearance of locally made, coarse cooking pots with thick walls that sometimes seem to have been made on low-speed potter's wheels and display general morphological similarities to the previous form (Yangaki 2005, 177–8, 302), show that new shapes appeared during this period. The coarsely made cooking pots suggesting the occasional use of the wheel indicate the different conditions emerging during a period of transition for the Byzantine Empire, to which inhabitants tried to adjust (Poulou-Papadimitriou 2001, 240–1). The cooking pots with a fabric rich in mica testify to contacts either with areas like Constantinople, Asia Minor, the Cyclades, or, also possibly, with other parts of Crete (Yangaki 2005, 176, 281; Poulou-Papadimitriou and Nodarou 2007, 757; Poulou-Papadimitriou 2011, 396). One can note, for example, that a similar micaceous fabric characterized by frequent silver mica schists that produce a glittery appearance has been identified from the survey of the Mirabello region (Mook 2005, 171–2, type XVI, pl. 33, A–B). The coarsely made cooking pot marks a turning point in the local organization of pottery production (Yangaki 2005, 285), whose previously organized form seems to give way to a much less-developed scheme not yet properly known. The few, for the moment, imported cooking pots of the 7th and mostly the 8th century further emphasize the commercial relations of the island with outland areas in the course of these transitional centuries, especially since cooking pots were in the main imported for their own, specialized properties, in contrast, for example, with amphorae, which constituted packages imported for their contents. The nature of these contacts as well as of local productions both need to be better understood before advances can be made in this until recently neglected category of pottery.

It should nevertheless be noted here that colleagues working on late-Byzantine material from sites on mainland Greece with different historical circumstances have suggested that variations in the forms and fabrics of cooking

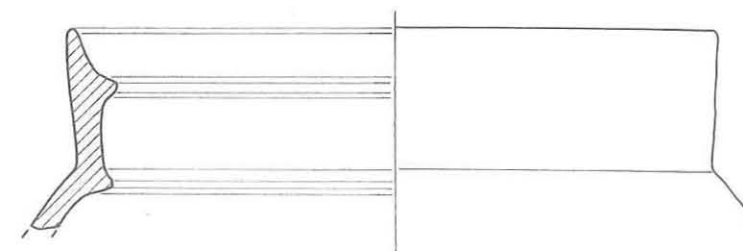


Figure 14.8 Fragment of a cooking pot, from Gortyn. From Martin 1997c, pl. cxxviii, 4, by permission of the Scuola Archeologica Italiana di Atene.



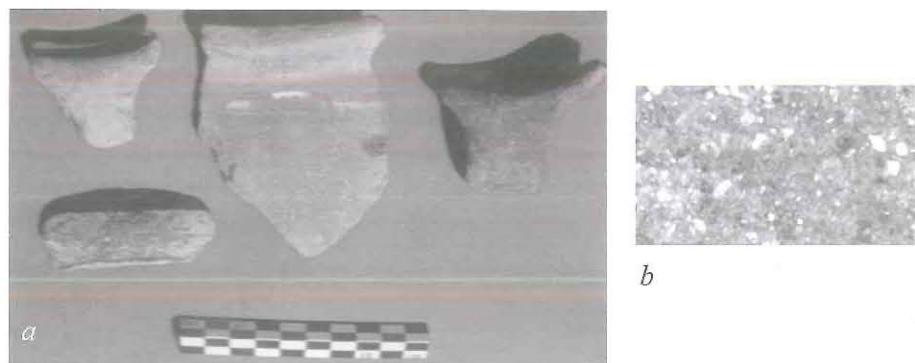


Figure 14.9 Fragments of micaceous cooking pots, from Eleutherna. Photo by author (a). Fabric of micaceous cooking pot, from Eleutherna. Photo by author (b).

pots may reflect variations in diet and subsequently differences in cultural identities (Vroom 2003, 233, 329; Joyner 2007, 189–90, 204–5; Vroom 2011, 421–5). There may be an interconnection between the numerous forms of cooking pots, the limited evidence for frying pans, and a consequent fluctuation in diet at specific Cretan sites from the 6th century onwards. Additionally, one should perhaps also wonder if the introduction of new forms during the course of the 7th century, such as the micaceous cooking-pots (Fig. 14.9, a), which, given their distinct fabrics and thin walls, would have particular physical properties (Joyner 2007, 189), does not also mark a shift in dietary preferences and cooking techniques. The existence of a chafing dish from Pseira dating from the late-8th to early 9th century supports this view (Poulou-Papadimitriou 1995, 1121–2; 2001, 239; 2011, 392), constituting as it does an early example of this type of vessel. Even if this remains an isolated case for the time being, sites like Eleutherna and Pseira, which offer similar evidence on cooking pots of the advanced 7th and the 8th centuries, do imply that a transition touching on multiple aspects of everyday life took place on the island during this period and may express new social conditions.

### Amphorae

Most of the evidence for amphora imports in Crete during the first Byzantine period comes from the excavations at Gortyn (Rendini 1988d, 268–75; 1997, 371–89; 2004a, 241–53; 2004b, 349–59; Portale and Romeo 2001, 313–59, 407–9; De Aloe 2009, 38–43; Zanini 2009, 53–4; Portale 2010, 931–4; 2014, 478–82), Knossos (Forster 2009, 156–61), Eleutherna (Vogt 2000, 81–93, figs 39–43; Yangaki 2005, 197–213), Hierapytna (Gallimore 2011, 337–52), and Itanos (Xanthopoulou 2004, 1022). However, only some of the relevant publications offer a

more synthetic and detailed presentation of the imported amphorae (Gortyn, Eleutherna, Hierapytna), with others offering general evidence on the types occurring (at Itanos) or evidence limited to a particular excavated area. Additional evidence is available from surveys like those on the Akrotiri peninsula, Gournia, Pseira, or the Asterousia (see below), but this situation makes it both difficult and also somewhat unrealistic to proceed with a detailed, comparative, concise, and comprehensive presentation of the existing evidence.

What can be put forward in this general *état de lieu* on the island's pottery of the first Byzantine period, however, is that at first glance all the standard forms of eastern Mediterranean amphorae (types LRA1–7) appear to have arrived on the island together with other amphorae of Aegean, Asia Minor, or African provenience. The percentages of each vary considerably from site to site and from sub-period to sub-period, and to date our secure information for these types comes mainly from Gortyn, Eleutherna, and Hierapytna. Also, amphorae from the Iberian and Italian peninsulas occasionally occur in contexts of the first Byzantine period (Portale and Romeo 2001, 374–5, 407–9; Romeo and Portale 2004, 969; Yangaki 2005, 197–213; De Aloe 2009, 41; Portale 2010, 933; 2011, 147; Gallimore 2011, 337–52). More specifically, while types LRA1, LRA2, LRA4, LRA5/6, and LRA8 appear at minor inland sites, as demonstrated by evidence from Eleutherna (Vogt 2000, 81–8; Yangaki 2005, 305), these are considerably more restricted in number than they are at prominent coastal or inland sites such as Hierapytna, Itanos, and Gortyn. Also, from the 4th and 5th centuries onwards, types like LRA2, LRA3 or Agora M273 show that Aegean/Asia Minor products were imported into Gortyn, Eleutherna, and Hierapytna, but also to other sites on the island like Kydonia (Chania) (Yangaki and Gratsiou 2012, 40–1, nos 3–4 [E. Charitopoulos]), the Akrotiri peninsula (Raab 2001, 89, 90, 93, 95), the region of Sphakia

(Nixon *et al.* 2000, 8.07:UncatG02–G03, 8.22:UncatG04, 8.39:UncatG20), Aghia Galini (Vogt 1991–1993, 61–2), the plain of Phaistos (Watrous and Hadzi-Vallianou 2004b, pl. E.22), Priniatikos Pyrgos (Klontza-Jaklova 2014, 801), the Gournia (Hayes and Kossyva 2012, 169) and the Asterousia surveys (Francis 2010, 40–1, PR136), and Itanos (Poulou-Papadimitriou and Nodarou 2014, 877), while quantitative data from the first three sites imply that Near Eastern types (see below) generally become more prevalent from the 6th century onwards (Portale and Romeo 2001, 295, 344–54, 394–7, 407–8; Rendini 2004a, 250–1; 2004b, 353–5; Romeo and Portale 2004, 971; Yangaki 2005, 305–6; De Aloe 2009, 41; Gallimore 2011, 338–9, 570–2). Moreover, the percentage of these former forms varies from site to site; LRA2 amphorae for example, are more common at Hierapytna than at Eleutherna. Among Near Eastern types, amphorae LRA1, LRA4 and LRA5/6 are quite common in Gortyn from the 5th century onwards, with LRA1 reaching high numbers during the first half of the 7th century (Belli-Pasqua and La Torre 1994–1995, 216–7; Portale and Romeo 2001, 398; Romeo and Portale 2004, 971; De Aloe 2009, 41; Portale 2011, 147, 176; 2014, 478–9, 481); they also appear to be frequent at Hierapytna (Gallimore 2011, 339, 351–2) and Itanos (Poulou-Papadimitriou and Nodarou 2014, 877). While LRA1 also occurs at Eleutherna, although not in high numbers, the other two types are quite rare (Vogt 2000, 84–6, 100). In fact, information from Gortyn, Hierakleion, and Pseira shows that during the course of the 7th and the 8th centuries – and, in rare instances, during the period of the Arab conquest – amphorae of Palestinian provenience continued to arrive in Crete (Poulou-Papadimitriou 2001, 242, 244; 2003, 211–2, fig. 3; Romeo and Portale 2004, 971–2; Portale 2011, 148–51; 2014, 480–1; Poulou-Papadimitriou and Nodarou 2014, 876), which could perhaps be related to the occurrence of several Syro-Palestinian lamps of the same period found at various Cretan sites. Trade connections with sites in the Near East continued to be vigorous during this period. Nevertheless, a fall in Near Eastern imports has been noted during the course of the 7th century and possibly earlier, with 'Aegean' products becoming more common once more and prevailing, imported inside new packages known as globular amphorae (Portale and Romeo 2001, 395–7, 408–9; Romeo and Portale 2004, 968; Yangaki 2005, 305–6; Fabrini and Perna 2009, 131; Portale 2014, 481), the so-called Byzantine globular amphorae, with globular or globular/ovoid body (Poulou-Papadimitriou 2001, 245–7; Poulou-Papadimitriou and Nodarou 2014, 874). The ample numbers of these forms in Gortyn during the later 7th and the 8th centuries compared to their rare presence in Eleutherna is indicative of the distinct character of these sites (Pl. 33): one was a prominent Cretan centre, and the other an inland site of rural character. Moreover,

data relating to the arrival of amphorae of possible Samian provenience during the 7th century at Gortyn and the 8th century on Pseira adds further information on the Aegean contacts of the region (Portale and Romeo 2001, 350–1; Poulou-Papadimitriou 2001, 242, 244; Poulou-Papadimitriou and Nodarou 2007, 758–9; Portale 2011, 161). The presence of these types implies that some sort of exchange and contact existed with the Aegean region whose nature and characteristics have yet to be explored. Egyptian amphorae have been noted at Gortyn and Hierapytna, albeit in low quantities, while they have been found during the whole period in Gortyn, where they even occur, as they do at Hierapytna, during the 7th century; the comparable evidence from Eleutherna is quite scarce (Vogt 2000, 89–90; Portale and Romeo 2001, 397–8, 405; Rendini 2004a, 251–2; 2004b, 356–7; Yangaki 2005, 306; De Aloe 2009, 41; Gallimore 2011, 346–7; Portale 2011, 152–4, 177–8; 2014, 481). Their presence could be connected to the distribution of *annona* towards Constantinople (Romeo and Portale 2004, 970; Gallimore, in this volume).

As for the North African amphorae, among Keay XXV, VIIa–b, LXII and LRA8a–b types, the LRA8b is the more common amphora at Gortyn; in fact, African amphorae are present from the 5th century onwards at that site, with *spatheia* (LRA8a) still reaching the site during the late-7th century (Fig. 14.10) (Portale and Romeo 2001, 313–23, 397; Rendini 2004b, 357–8; 2004c, 975–88; De Aloe 2009, 40–1; Portale 2011, 143–4; 2014, 480). *Spatheia* of the second half of the 7th and the early 8th century have also been found in Pseira (Poulou-Papadimitriou and Nodarou 2014, 876). There is no similar evidence from Eleutherna, but data from Hierapytna (Gallimore 2011, 342–3, 570–2), sites of the Gournia Survey (Hayes and Kossyva 2012, 168–9), Knossos (Hayes 2001, 449), and Pseira (Hope Simpson *et al.* 2005, 48, 55, 80, 123, 137) show that the arrival of African amphorae seems to have been quite constant during the first Byzantine period in sites, mainly coastal, in central and eastern Crete, although the amphorae occur in low quantities and with no such preponderance of *spatheia*. Their presence further enhances the suggestion regarding the material from Gortyn (Romeo and Portale 2004, 968–9) that the island of Crete played an important intermediate role in the redistribution of African products towards the Aegean. For the 8th and 9th century, the data presented little by little from sites like Pseira (Poulou-Papadimitriou and Nodarou 2007, 758, figs 4e, 6, 13; 2014, 876, fig. 9), or Vafes (Fiolitaki 2011, 94) seem to be quite promising in offering up the future possibility of exploring exchanges between Crete and other regions, such as the Argolid, and thus adding to the data from Gortyn and Eleutherna. Additionally, research at Priniatikos Pyrgos seems to offer important evidence about the amphorae circulating



in Crete during the transition from the first Byzantine period into the Arab conquest and beyond, since various fabrics characterize the ovoid/globular amphorae found at the site (Hayden and Tsipopoulou 2012, 557, n. 157; Klontza-Jaklova 2014, 801–2).

Besides the numerous imported amphora types that testify to the importation of various products onto Crete during the first Byzantine period, amphorae attributed to local production bear witness to a continuous, local agricultural production from the Roman period onwards for which products these vessels were intended; these constitute by far the most numerous group of packaging vessels at each Cretan site for which there is quantitative data. More specifically, since the first identification of Roman (Hayes 1983, 141–5) and late-Roman (Rendini 1990, 234–40; 1997, 374–5) types of amphorae attributed to local production, written evidence combined with archaeological research has brought to light the main forms of local amphorae dating from the Hellenistic and mostly the Roman periods (Marangou-Lerat 1995). Since then, thanks to the analytical evidence provided by the excavations at Gortyn (Portale and Romeo 2001, 417–26; 2001, 260–410; Portale 2010, 933–4; 2011, 127–42) and Eleutherna (Yangaki 2004–2005, 503–23; 2005, 181–97), a detailed typology of Cretan amphorae of the first Byzantine period has been taking shape, with several forms dating even from the 7th until the early 9th centuries. This ongoing procedure, which will certainly be supplemented with further evidence from other Cretan sites, enables us to enumerate up to 20 amphora types, some of which constitute groups of types and include numerous sub-types. We are also now better informed as to the date range of each and, above all, about the various forms of amphorae circulating on the island during the 7th, 8th and 9th centuries. These typologies indicate that new types appeared during the late 3rd and the 4th centuries AD that are clearly distinguishable from earlier, Roman forms; these adopt an ovoid rather than cylindrical body, a characteristic common in other ceramic forms of the same period (Portale and Romeo 2001, 276–7). In fact, a general overview of the existing data reveals that Cretan amphorae can be grouped on the one hand into forms of an indigenous inspiration and on the other into forms that imitate well-diffused amphorae of varied provenience – this is true of Roman types ARC2 and ARC4, which imitate amphorae from the islands of Rhodes and Kos respectively. The phenomenon becomes more intense during the course of the first Byzantine period, and particularly from the 7th century onwards, since types TRC9 and TRC10 are morphologically inspired by imported types LRA1 and LRA2, respectively (Yangaki 2007, 768) (Pl. 34). As for the suggested Cretan provenience of the type TRC11, inspired by LRA8a, this needs to be verified (Portale and Romeo 2001, 311–2; Portale 2014, 480).

In addition, two basic shapes characterize the local production: oblong and cylindrical/ovoid, and large and globular. During the course of the first Byzantine period, the cylindrical, oblong forms of the Roman period (ARC1–2, ARC4, MRC1–3) began to be supplanted by more ovoid, larger types (MRC4, TRC1, TRC2) (Pl. 35, a, Fig. 14.11, a); from the 7th century, in particular, onwards globular forms (TRC7, TRC10, TRC12–16), larger and shorter than earlier examples, and with a round or concave base, come to dominate, becoming

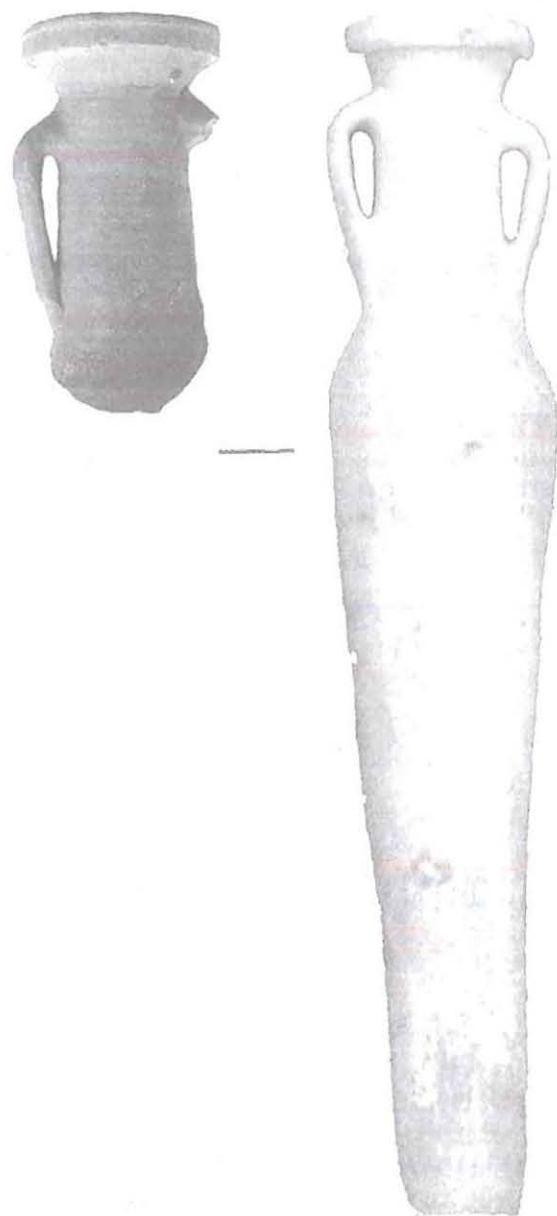


Figure 14.10 North African amphorae ('Spatheia'), from Gortyn. From Rendini 2004c, 978, fig. 3, by permission of the Scuola Archeologica Italiana di Atene.

predominant during the 8th and probably the 9th centuries (Pl. 35, b). Alongside these, local oblong, cylindrical/ovoid amphorae continue to be produced, as demonstrated by amphora TRC4 (Fig. 14.11, b) (Portale and Romeo 2001, 422) and by later amphorae from Herakleion (Poulou-Papadimitriou 2011, 400–1, fig. 21), Moires (Sythiakakis and Vassilakis 2012, 313, 322, fig. 3), and Pseira (Poulou-Papadimitriou and Nodarou 2007, 758, 766, fig. 6, 14; Poulou-Papadimitriou 2011, 401, fig. 18), for example, but the majority of the production is characterized by globular forms, like those encountered at Gortyn, Knossos, Eleutherna, Vafes, Pseira, and Petras (Hayes 2001, 441, fig. 5, A58; 442; Portale and Romeo 2001, 303–13; Yangaki 2005, 189–97; Fiolitaki 2011, 92–3; Poulou-Papadimitriou 2011, 400, 402; 2012, 317). The various forms of globular amphorae well diffused in the Mediterranean from the 7th century onwards surely influenced the Cretan types, and local types of the first Byzantine period are more numerous than Roman ones. It seems that most local amphorae circulated simultaneously and that some were more common than others, as indicated, for instance, by examples of type TRC2 (Fig. 14.11, a), which is the most common type at Gortyn and Hierapytna during the 5th and the 6th centuries (Portale and Romeo 2001, 302–4; De Aloe 2009, 40; Gallimore 2011, 485, 491; Portale 2011, 134), although TRC4 (Fig. 14.11, b) also seems to appear frequently in some contexts (Fabrini and Perna 2009, 129; Bonetto *et al.* 2010, 900; Portale 2011, 136). Furthermore, some types seem to have come to light at specific sites, as is the case with TRC13–16 found in Eleutherna (Yangaki 2005, 196–7). This could imply that some forms were produced to respond to individual, local needs, but we should also bear in mind that local amphorae of the 7th and 8th centuries have not yet been fully explored, and further examples and forms should be expected; these could add further evidence to the 'isolated' forms that have come to light thus far. Nevertheless, these many diverse forms seem to indicate that from the 6th century onwards, in particular, together with more diffused and standardized types like TRC2, TRC4, TRC10, and TRC12 (Portale and Romeo 2001, 302; Fabrini and Perna 2009, 129; Bonetto *et al.* 2010, 900; Portale 2014, 478–9), Cretan production centres display more independence than they did in Roman times and were also producing other variants destined for local consumption (Yangaki 2007, 770–1; Gallimore 2001, 474, 485). This active production during the 6th, 7th, 8th, and even 9th centuries reflects a rather flourishing economy at specific sites such as Eleutherna, Gortyn, and Pseira (Yangaki 2005, 522–3; 2007, 770), even though a similar view cannot be expressed for sites like Hierapytna, which, given the evidence to date, seems to have been in decline from the 6th century AD (Gallimore 2011, 481, 485–6).

This ample information for local forms is not, however, combined with commensurate evidence about the centres where they were produced. In contrast to our information relating to Cretan amphora workshops of the Roman period (Marangou-Lerat 1995, 35–64 and, in addition, remarks in Hayes and Kossyva 2012, 174), local workshops of the first Byzantine period were active in the regions of Mesara and Mylopotamos, as is

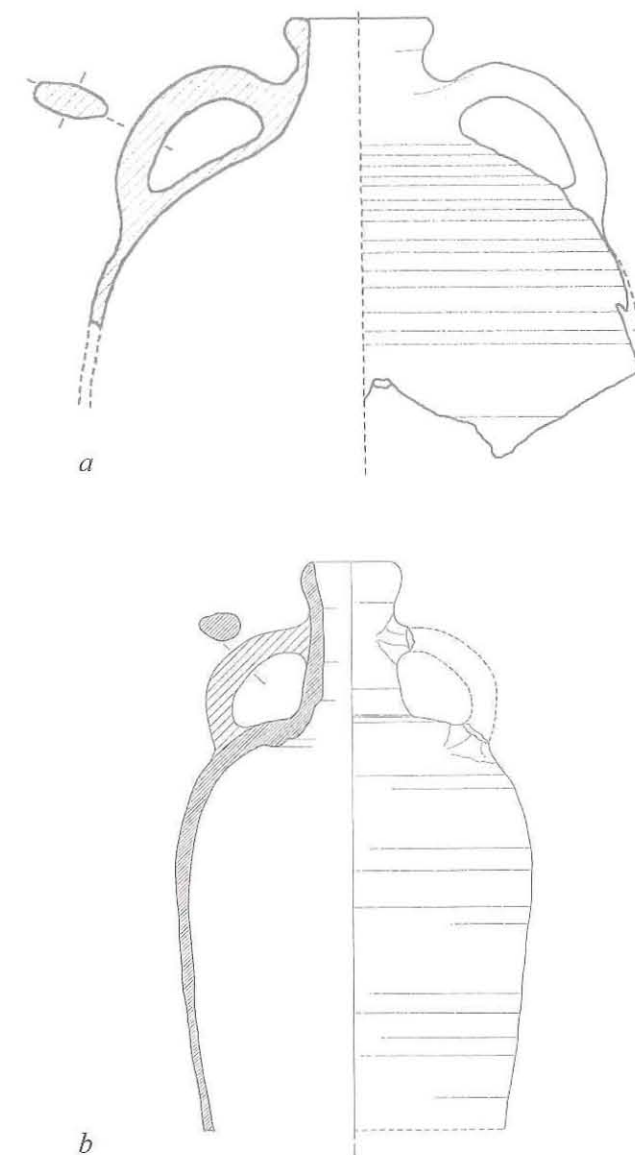


Figure 14.11 Cretan amphora TRC2 type, from Gortyn. From Portale and Romeo 2001, pl. xlv, a, by permission from the Scuola Archeologica Italiana di Atene (a) (scale 1:4). Cretan amphora TRC4 type, from Gortyn. From Portale and Romeo 2001, pl. xlv, e, by permission from the Scuola Archeologica Italiana di Atene (b) (scale 1:4).



suggested by the study of pottery from Gortyn (Portale and Romeo 2001, 390–1; Poulou-Papadimitriou and Nodarou 2014, 876) and Eleutherna (Yangaki 2005, 281–5, appendix I, table II). In the last case, chemical analysis of samples of plain, cooking wares and amphorae strengthens this conclusion, even though no installations for such a pottery production have been published. Local production of amphorae of the late-7th to early 9th century has also been identified in the area of Mochlos (Poulou-Papadimitriou 2011, 402, 404, 408–9; Poulou-Papadimitriou and Nodarou 2014, 875) and of Kalo Chorio-Istron (Klontza-Jaklova 2014, 802, figs 14–15). The only concrete evidence for a workshop is at Chersonisos (Marangou-Lerat 1995, 45, 63, 160; Portale and Romeo 2001, 307, 389, n. 110), which seems to have remained in use even during the first Byzantine period. One wonders whether more pottery workshops remain to be found for this period in the interior of the island rather than in coastal areas, as was the case in Roman times (Yangaki 2007, 771).

What about the diffusion of all these ceramic types inland as well as beyond the island? Most of these types witnessed an inland distribution, but aside from examples connected with the local production of each site, there is as yet no concrete information for inter-regional contact between one area and another, apart from limited evidence from Pseira (Poulou-Papadimitriou and Nodarou 2007, 758). Given the scarcity of available data for the export of Cretan amphorae during the first Byzantine period until recently, it has been suggested that the export of Cretan wine did not continue on the same scale as during the Roman period (Marangou 1999, 278; Portale and Romeo 2001, 379–80, 389–90). This misleading image was mainly derived from the fact that researchers working on material from other Mediterranean regions only recently became familiar with Cretan forms of the first Byzantine period (Gallimore 2011, 478–9), and thus, during this last decade, data has begun to accumulate for a diffusion of Cretan amphorae, mostly in eastern Mediterranean areas such as the Aegean, but also in the Black Sea (for a collection of the references: Gallimore 2011, 485–91, 664, fig. 6.13; 667, fig. 6.16; also, additionally, Dafi 2010, 153–68; Reynolds 2010, 94–9, 113–4). In some cases, the evidence is still sporadic (Romeo and Portale 2004, 965), and it thus seems that Cretan amphorae continued to be exported during the 4th and 5th centuries but on a limited scale only, reflecting a possible reduction in exports (Gallimore 2011, 478). However, data accumulated from the 6th and 7th centuries reveal an overall change in Crete's role, given that Cretan amphorae had circulated mostly in the western Mediterranean during Roman times (Marangou 1994, 142, fig. 1; Marangou-Lerat 1995, pls xli, xliii, xlv, xlvii, xlix), while from the 4th century onwards, probably under the influence of new historical

conditions, Cretan products were mainly oriented towards the eastern Mediterranean and witnessed a significant diffusion at Black Sea sites (Gallimore 2011, 479; 667, fig. 6.16; Gallimore, this volume).

Most amphorae found in the Aegean region belong to MRC2, TRC1, and TRC2 types (Portale and Romeo 2001, 390, n. 111; Gallimore 2011, 490–1, n. 426), while those found further north mainly constitute the TRC4 type (Fig. 14.11, b) (Sazanov 2007, 807–8; Gallimore 2011, 488–9; Sazanov 2011, 95–6; Sazanov 2014, 399, 401–2). Gallimore has recently put forward the idea that, while the export of the first types probably represents private mercantile activity, the mass arrival of TRC4 in Black Sea sites, some of which were military installations, should be interpreted as evidence for the participation of Crete in the *annona militaris* (Gallimore 2011, 487–91; Gallimore, this volume). Indeed, quite recently, the production of amphora workshops on Cyprus and Kos dating from the late 6th and the 7th centuries has been related to the mechanism put in place by Justinian to provision northern regions with products from southern provinces (Demesticha 2002, 119; Moniaros 2009a, 145–58; Diamanti 2010, 166–8; Poulou-Papadimitriou and Didioumi 2010, 744). That the island of Crete directly participated in the so-called *Quaestura Iustiniana Exercitus*, which comprised Moesia Secunda, Scythia Minor, Caria, Cyprus, and the Islands (Jones 1964, 280), needs further elaboration, however, and additional research into other aspects of the island economy that could reinforce this view is needed, since even a recent, analytical study dedicated to the *Quaestura* implies no such possibility (Moniaros 2009b, 93–9).

With regard to the administration of Crete, it needs to be pointed out that the island belonged to the Illyrian Prefecture and was characterized by an 'autonomy,' even during the 7th and the 8th centuries, while the provinces of the *Quaestura* initially belonged entirely to the prefecture of the East (Ragia 2011, 105–6, 108). Of course, the numerous examples of TRC4 amphorae found around the Black Sea and their common occurrence at sites like Gortyn and Itanos (Portale and Romeo 2001, 306–7, 391; Gallimore 2011, 489, n. 422; 490), together with minimal evidence for their presence in sites like Eleutherna and Hierapytna (Yangaki 2005, 191–2; Gallimore 2011, 489), implies that this type constitutes a container that was basically used for extra-regional diffusion and possibly from northern Cretan sites towards the north, but this issue needs further research. First of all, the characteristics of the numerous sites in the Black Sea need to be clearly documented, allowing us to better compare the nature of each site (military installation, settlement of urban character) with the amphorae attested there, since their arrival may correspond also to private mercantile activity (Diamanti 2010, 167). Furthermore, examples of TRC4

amphorae found at Black Sea sites present several morphological variations, suggesting different sub-types with a date range spanning from the second quarter of the 6th until after the second half of the 7th century AD (Sazanov 2007, 815, fig. 7; 2014, 401–2, 407–8, figs 6–8), while other types of Cretan amphorae, such as TRC5 and TRC9, do frequently occur in the same contexts, thus reflecting a much more complex image (Portale and Romeo 2001, pl. xlv, f–g, pl. liii, f; Sazanov 2007, figs 7, 8, 20; 2014, 403–4). A refining of the data could thus reshape the state of this evidence, while one could also consider the possibility of an indirect involvement of the island in the aforementioned mechanism, with the Aegean islands acting as intermediate stations, as places of transshipment, for the transport of Cretan amphorae towards northern areas.

Even if our information on the export of Cretan amphorae in the first Byzantine period is now much more ample, significant progress has yet to be made in allowing examples of Cretan amphorae from various sites to be identified with specific areas of production and thus to illustrate inter-regional and extra-regional contacts. An important obstacle to this is the scarcity of fabric descriptions either from settlements considered to have a local production of pottery or from areas where amphora workshops have been identified, like those published by A. Marangou (Marangou-Lerat 1995; Gallimore 2011, 328). In some cases, like Gortyn, fabric descriptions do exist (Portale and Romeo 2001, 269, 302), and recently a petrographic description has been made for the main local fabric (Poulou-Papadimitriou and Nodarou 2014, 876, 882 fig. 14). At Eleutherna, the more common fabrics, beside analytical description, have been documented photographically (Yangaki 2005, 36–7). Material from Pseira has been examined using petrographic analysis, which also allows specific fabrics to be recognized (Poulou-Papadimitriou and Nodarou 2007, 755–66; 2014, 875–6). Through this research a database is gradually being produced that will enable these fabrics to be identified at other sites (Poulou-Papadimitriou and Nodarou 2014, 876–7). Future work at these and other sites, together with the aforementioned research program aimed at identifying local fabrics through a petrographic analysis, has much to offer in this respect and could shed light on the scale and frequency of the regional and intra-regional traffic of packaging containers. In this manner, Cretan fabrics recognized from sites like Hierapytna (Gallimore 2011, 324–5) could be matched to specific areas of production.

Another aspect that needs to be emphasized is that Cretan amphorae of the first Byzantine period were not limited to the transportation of local wine, as was the case with their Roman predecessors, which transported the famous *passum* (Marangou-Lerat 1995, 13–24, 151–2). Given the adoption of globular/ovoid forms, particularly

in the course of the 7th and 8th centuries AD, coupled with the diversion of types circulating simultaneously and a diminution in the dimensions and the capacities of these amphorae, it has been posited that these regional containers were destined to carry other products and could possibly have served interregionally even for various domestic uses (Portale and Romeo 2001, 390, 393; Yangaki 2005, 303–4; 2007, 770; Fabrin and Perna 2009, 132; Portale 2010, 932; 2014, 478, 480). This suggestion is strengthened if we consider that the bag-shaped Palestinian amphorae or Egyptian containers, which were the products of areas showing a long tradition in amphora production, are considered primarily but not exclusively as wine containers (for details, Pieri 2007, 303; Williams and Tomber 2007, 643). Given the diffusion of some Cretan types extra-regionally, it could also be suggested that wine was not the only product they carried to other regions of the eastern Mediterranean (Gallimore 2011, 478, 486–7). In fact, progress in the definition of the content/s of much more diffused types, like research already undertaken into the products packaged in LRA1 and LRA2 amphorae, is an issue which researchers are currently examining (Yangaki 2014, 89–103), and these results could in the future aid us in better understanding the mechanisms of exchange and the needs to which trade responded; it is intriguing, for example, that wine seems to have been the product *par excellence* transported in imported amphorae, given the principal content of local Cretan containers, which was also wine.

In conclusion, there is ample evidence pointing to Crete's participation in the vast and complicated network of Mediterranean trade contacts. From the 4th century onwards, this evidence reveals a shift towards the Aegean and the eastern Mediterranean rather than towards western areas, as in the earlier period, with each Cretan site having its own position in this network. Simultaneously, the production of local types flourished throughout the period in question. Nevertheless, further work needs to be done in order to understand better the variations from period to period, from site to site, and of imports compared to local products. Further publication of stratified archaeological contexts from Cretan sites is also required, together with a seriation of the existing data, in order to obtain a more refined image of Crete's economic role during the first Byzantine period. A better definition of the later types of the local production, mainly those from the 8th and the 9th centuries, and concrete information on the production centres of the Cretan amphorae and their diffusion are of vital importance.

### Lamps

Thorough research on the types of lamps occurring on the island from the 4th century onwards (Kalokyris



1955, 324; Martin 1997a, 264–90; Sapouna 1998; Poulou-Papadimitriou 2000, 214–27; Vogt 2000, 94; Baldini and Parello 2001, 114–89; Hayes 2001, 452–3; Rendini 2004d, 199–208; 2004e, 336–40; Yangaki 2005, 219–41; Poulou-Papadimitriou 2008, 154; Francis 2010, 45; Albertocchi 2011b, 105–12; Gallimore 2011, 357–9) leads to two particular observations: the scarcity of imported lamps, and the abundance of information for the 6th, 7th, and 8th centuries compared with earlier periods. More in detail besides limited examples of lamps of the North African, Asia Minor (Fig. 14.12), and Syro-Palestinian types, which are mould-made, most of the lamps found on Crete are examples of local workshops and are wheel-made. In particular, data from Gortyn and Eleutherna show a percentage of around 5% for imported lamps compared to a high percentage of up to 95% for local products (Baldini and Parello 2001, 162; Yangaki 2005, 233; Albertocchi 2011b, 111). Of the imported types, a few North African lamps of forms *Atlante* VIII and *Atlante* X (Bonifay 2004, 358–416) have been found in Gortyn, the first dated from between the second half of the 4th and the end of the 5th century AD, and the second from the mid-5th until the mid-6th century (Baldini and Parello 2001, 164–5; Rendini 2004e, 339). Two fragments of North African lamps have been published from Moni Odigitria (Francis 2010, 45, RP183) and from the Gournia area (Hayes and Kossyva 2012, 170).

'Asia Minor' type lamps occur occasionally in Eleutherna during the 7th century (Vogt 2000, 94, fig. 45, 1), in Gortyn during the 6th century (Belli-Pasqua and La Torre 1994–1995, 195, 198–9; Albertocchi 2011b, 109, fig. 30, a), and at Knossos in a deposit of the 7th century (Hayes 2001, 452–3, B70–B72). More common are Syro-Palestinian lamps, which present numerous variations. They are found at Gortyn (Baldini and Parello 2001, 166–7; Rendini 2004d, 206; Albertocchi 2011b, 109–10), where they have been dated from the 4th to the 6th centuries (Baldini and Parello 2001, 166–7), but they also date from the 6th–7th centuries (Albertocchi 2011b, 109–10), while those found in the cave of Amnisos have been dated to between the mid-7th and early 9th centuries (Poulou-Papadimitriou 2000, 222; 2003, 211–2). Of particular interest are rare examples of lamps from Gortyn dating from the 7th century, which resemble Hayes's lamp type 15 (Hayes 1992, 80, fig. 29, 15; Martin 1997a, 281, nos 44–5). A few lamps of the North African type are considered to be imitations of the original products and may be Cretan made, as shown by examples from Gortyn and Amnisos (Poulou-Papadimitriou 2000, 223; Baldini and Parello 2001, 164).

It should be noted that the island of Crete is characterized by an important production of lamps during the Roman period, as indicated by numerous examples of mould-made ivy-leaf type lamps dating from between the

1st and 3rd centuries AD, and well-known from Knossos (Catling and Catling 1992, 265–6), Gortyn (Baldini and Parello 2001, 115–8; Bonetto *et al.* 2010, 902, fig. 3), and Eleutherna (Spanou 2004, 203–4; 2012, 444–52). Furthermore, a flourishing Cretan production is implied for some of the numerous examples of mould-made lamps of the Broneer types XXV and XXVII (Baldini and Parello 2001, 144–60; Yangaki 2005, 219–21, 231–2; Gallimore 2011, 357–9), which were so common between the 1st and 3rd centuries.

During the first Byzantine period, however, the production of wheel-made lamps emerges little by little in forms both with and without a neck (Yangaki 2005, 232–5); in view of the scarce evidence for imported, mould-made lamps, these were the main objects used for lighting, along with other lamps made of glass or metal or also with candles. These wheel-made lamps witness their largest diffusion between the second half of the 6th and during the 7th centuries. In fact, a careful observation of the data shows that this revival of wheel-made lamps, which were common during the Hellenistic period, could have started during the 4th century AD, i.e., after the end of the production of Cretan ivy-leaf lamps, as indicated by two wheel-made lamps from Eleutherna that have analogies with other lamps outside Crete (Yangaki 2005, 236–8) (Pl. 36).

Small, round-bodied lamps with or without a disc with a large filling hole, no neck and, usually, a horizontal strip or punched knob handle or no handle at all have been found at Eleutherna (Vogt 2000, 94; Yangaki 2005, 236–8), Amnisos (Poulou-Papadimitriou 2000, 225–7, fig. 21), and Herakleion (Poulou-Papadimitriou 2008, 154, fig. 3), as well as at Panormo and Aghia Galini (Kalokyris 1955, 324, pl. 123, a; Yangaki 2005, 236, n. 1482); they seem to constitute the intermediate link towards the much more diffused wheel-made lamps that were larger, had an oval-elongated body, and a high neck

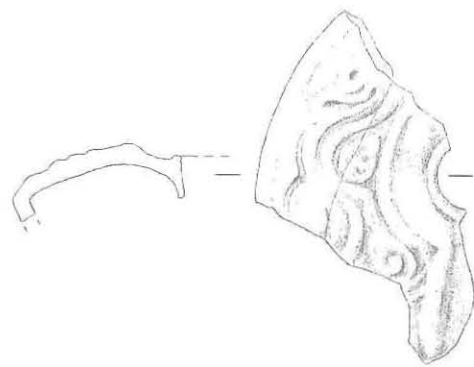


Figure 14.12 Fragment of 'Asia-Minor' type of lamp, from Gortyn. From Belli Pasqua and La Torre 1994–1995, 199, fig. 28, 566, by permission from the Scuola Archeologica Italiana di Atene.

that is either cylindrical or gives the impression of a funnel around the central filling hole ('a fiaschetta' types, with several sub-forms, and 'ad alto collo') (Baldini and Parello 2001, 167–85; Yangaki 2005, 239–41; Bonetto *et al.* 2010, 902, fig. 3) (Fig. 14.13).

The chronology of the small lamps fluctuates between the 4th and 6th centuries AD, with those from Herakleion dated to the end of the 6th–7th centuries (Poulou-Papadimitriou 2008, 154), and encompasses lamps with morphological variations (Poulou-Papadimitriou 2000, 227; Yangaki 2005, 238). The first of the two later, larger, wheel-made types is common from the second half of the 6th century and during the 7th century, while its presence in 8th century layers seems to reflect a continuation of production even into this period, although the possibility of residuality should also be considered (Baldini and Parello 2001, 169–70, 182).

The production of the second type seems to be limited between the second half of the 6th and the last years of the 7th century (Baldini and Parello 2001, 182; Albertocchi 2011b, 111), which makes it contemporary with the first type. The first of these two types was well diffused across the island (Yangaki 2005, 239–41, with references; forthcoming, fig. 4) and constitutes the most common type of lamp for the 6th and 7th centuries. Among 'a fiaschetta' lamps, those with an incised star on their shoulder are considered to be products of a Cretan workshop (Baldini and Parello 2001, 168; Fiolitaki 2011, 100–1). A lamp found in Kenchreai bearing the same motif (Williams 1981, 87, no. 466, pl. 21, 24; Baldini and Parello 2001, 168 n. 65) could also have a Cretan provenience, while a less-refined version of a similar motif comes from a lamp found on the island of Thera (Gerousi 2010, 231 fig. 34). These wheel-made lamps, and in particular the 'ad alto collo' type, reveal analogies with M. Xanthopoulou's type-3 copper or copper-alloy metal lamps, which were very common among other types of metal lamps circulating in the eastern Mediterranean, and which date from between the 5th and probably even the 7th century AD (Xanthopoulou 2010, 6–14, 100–62). Small, closed vessels in both glass and clay from the same period encountered on Crete and sites in mainland Greece share with 'a fiaschetta' lamps the tall, narrow neck with variations in the form of its rim (Yangaki, forthcoming). Thus, metal prototypes and other objects with a similar morphology must have played a role in the occurrence of these forms. Practical reasons like the storing of a larger quantity of fuel inside these lamps compared with other forms or earlier examples of wheel-made lamps, or the existence of the cylindrical neck to facilitate the filling of the lamp could offer possible explanations for the adoption of these forms (Yangaki 2005, 238).

The ample diffusion of these lamps on the island is not an isolated phenomenon, but represents a common

occurrence of the group of wheel-made lamps with closed forms found in the Aegean region and the adjacent areas in Asia Minor during the 6th and, mainly, the 7th century (Yangaki, forthcoming). Nevertheless, the recognition of all these forms of wheel-made lamps, some of which have further sub-forms, that cover the period from the 4th until the 7th–8th centuries AD and in some cases are present in different chronological contexts at the same site, constitutes a unique case thus far, and an important case study that adds to and deepens our knowledge of wheel-made lamps, which were once considered to be isolated examples within a ceramic reality dominated by mould-made lamps. While the occurrence of wheel-made lamps on Crete either alongside imported lamp forms or as a substitute for them is paralleled in other parts of the eastern Mediterranean during the 6th–7th centuries, there is little evidence from other sites for the previous centuries. It is hoped that future research in the Aegean or on mainland Greece will reveal additional material that proves that Crete does not constitute an isolated example in this respect.

A second characteristic is the dissimilarity of the evidence, since only a very small number of lamps, particularly mould-made examples, date from the 4th through to the 6th centuries, while there are numerous local examples of mould-made lamps from the 2nd and the 3rd centuries in addition to imported examples (Catling and Catling 1992, 302–3, L638–L649; Sapouna 1998, 108–16). No closed contexts of the 5th century



Figure 14.13 Wheel-made lamp (type 'a fiaschetta') of the 7th century AD, from Eleutherna, Sector I. Photo by author.



containing an important quantity of clay lamps have to our knowledge been published, and it has thus not been possible to explore the types of lamps in use during that period, but one would expect to find some of these examples in later, better-illustrated contexts as indicators of residuality if there had been considerable imports of various types of mould-made lamps from this period. This is, however, not the case in the material published to date from Gortyn and Eleutherna, and one notices a lack of evidence in regard to the 4th and the 5th centuries in particular. Unpublished material from Sector II of Eleutherna further verifies the lack, or rarity, of lamp imports. Closed deposits from Eleutherna dating from the third quarter of the 4th century show that one mould-made type (Loeschcke's type VIIIA), to which a much earlier date is usually attributed, circulated on the island during this later period (Yangaki 2005, 225–7), continuing the long production of local examples of imported prototypes. Perhaps this element shows that, in specific cases, some forms of mould-made lamps could have circulated and been used much longer than previously believed. In the future, it would be of interest to test this hypothesis, particularly in relation to the lifespan of Cretan products of mould-made lamps of the Broneer types XXV and XXVII based on material from selected contexts.

What happens later on? It seems that, as Baldini has noted, the role of Crete is marginal with respect of the lamp trade (Baldini and Parelo 2001, 162). Even during the 6th, 7th, and 8th centuries, when the evidence for lamps is ample, the limited information on imports comprises only a few examples of North African and mostly Syro-Palestinian lamps. The occurrence of these latter lamps should probably be connected with important imports of 'bag-shaped' amphorae during the 7th century and later on. Apart from this case, however, the rest of the evidence offers very limited data about imports, particularly during the 5th and 6th centuries. A possible explanation for this lack of evidence may derive from the data provided by another material for lamps, namely glass. It may be that glass lamps catered to the needs of the inhabitants for illumination. Evidence of glass lamps from Gortyn does not contradict such a hypothesis, since these are quite common during this period (De Matteis and De Tommaso 2001, 198–203, 234–6). Together with the small wheel-made lamps, they could have catered to the demand for lighting devices. Glass lamps continued to be used even later on, in parallel with the more diffused, larger wheel-made lamps of the 6th and 7th centuries AD.

## Conclusions

Data from both urban and rural sites are starting to accumulate and now permit major advances to be made

in our knowledge of the types of wares used on the island between the 4th and 8th centuries AD (Fig. 14.1). Moreover, analytical techniques and inter-disciplinary studies have begun to give us more precise knowledge about the provenience of some of these wares. As a result, we are now in a position to state with certainty in various cases whether pottery is imported or a local product. Under the influence of current trends in ceramic studies, scholars have now begun to study the pottery of Byzantine Crete not only to date archaeological contexts and to determine cultural and economic interactions, but also to define how people lived (Zanini 2009, 44–61; Zanini and Costa 2011, 40–3).

What is undisputable is that the amount and importance of the data, particularly for the 7th and 8th centuries, reveals a promising picture of trade networks and makes the island a fundamental reference point for anyone wishing to penetrate deeper into this transitional period in Byzantine history. A continuous ceramic sequence shows that there is no gap at the end of the 7th century; on the contrary, much of the evidence dates from this period, even though it reflects a gradual change in the pottery produced and used during this period compared with previous centuries.

In fact, during the first three centuries under examination here, the characteristics of the ceramic products (good quality, carefully worked, standardized vessels) imply large-scale manufacturing by well-organized workshops either in the island's interior or on its coasts. During the course of the 6th and mainly the 7th centuries, there was a renewal of preferences and technology on the island, as expressed by the production of painted and glazed pottery, respectively. The first category ('ceramica sovradiipinta') witnessed a prolonged period of production, even during the course of the 8th century, with a multitude of forms and decorations. This observation, in fact, together with the continuous production of amphorae, which now adopt a globular/ovoid form and show traces of standardization under types like TRC12 (Pl. 35, b), supports the maintenance of some form of organized pottery production at sites, including Gortyn, where painted pottery was manufactured. However, a lack in standardization is evident at minor sites like Eleutherna from the last quarter of the 7th century onwards, with the manufacture of amphora-type vessels with variations in details of their form – they were destined for domestic use and not only for the transportation of goods – with a reduction in the diversification of the forms circulating at the same time, and the manufacture of more coarsely-made vessels with a different technique, namely the cooking wares produced with the slow-turned wheel (Yangaki 2005, 284–5). These are markers of a gradual change that possibly characterizes various parts of the island and should be connected with the emergence of household production, either in the form of purely domestic

production or of a 'household industry' (Peacock 1982, 17–23) that replaced larger specialized workshops and did not function on a permanent basis (Yangaki 2005, 284–5). This phenomenon has been interpreted as an expression of a further ruralization of communities, which were characterized by a higher degree for self-sufficiency (Yangaki 2005, 285). Similar phenomena occur in Cyprus (Rautman 1998, 81–104) and other areas of the Mediterranean (Arthur 2007), although it has been suggested that this could in some cases reflect a change in taste in regard to well-made pottery (Arthur 2007, 166).

In the case of Crete, it seems more probable that this is a marker of a transition towards the changed social conditions of the early Middle Ages, which still have to be better defined. Changes in ceramic assemblages are undeniably connected with transformations in the living conditions, and the reasons behind the appearance and co-existence of the different pottery trends on Crete from the middle of the 7th century should be sought in the historical, social and cultural transformations occurring on the island (Tsougarakis 1988, 22–9; 1998, 342; Tsougarakis and Angelomatis-Tsougarakis 2004, 362), which did not leave unaffected the urban settlements of the islands, although these have retained their urban character, albeit transformed, longer than previously supposed (Tsigonaki 2007, 263–97; 2012, 73–100). It is of importance that the advances in the study of the island's pottery dating from this transitional period and deriving from various settlements work in a complementary way to the interpretation of other sources (historical or other archaeological evidence) so as to offer, in the future, a better evaluation and understanding of these settlements' characteristics and the emerging urban character of some of them.

This evidence seems to align Crete with other regions of the eastern Mediterranean, where similar changes were taking place around the same period (Arthur 2007, 171, 173, 178, 180). At the dawn of the 21st century, given the accumulation of such data, an insider may start to wonder whether there is much more light shed on what were called until so recently the 'Dark Ages' of Byzantium than on the ceramic material of 5th century Crete, which still remains in the shadows, besides some evidence on contexts from Gortyn, presented in summary (Albertocchi and Rizzo 2000, sporadically) – of numerous, specific, well-dated, and analytically published and discussed deposits, with the exception, for example, of a well-preserved deposit of the last quarter of the 5th century from Knossos (Forster 2009, 202–9, 234).

The above analysis shows that Crete is certainly no *terra ignota* in terms of the ceramic material culture from the first Byzantine period. From the same analysis, Gortyn seems, even from a ceramological point of view, to have been the primary Cretan city in the Aegean and eastern Mediterranean exchange network. Other inland sites with

a rural character, like Eleutherna, seem to have developed characteristics of their own and reveal a significant degree of self-sufficiency, as demonstrated by the numerous local ceramic products that follow the 'Cretan' tradition of ceramic wares and/or adjust some of their products to imported forms and/or produce completely new and 'fashionable' ceramics, such as glazed pottery. Perhaps the key to a better understanding of how Cretan sites interacted with inland but also outland areas lies in the publication of pottery from Cretan coastal sites; in this respect, the information derived so far from Hierapytna, Pseira, and Itanos would seem to be quite encouraging.

Nevertheless, as we hope the above analysis has made clear, the data that are available or are being amassed need to be further refined, by mapping the function and character of different sites over time, by comparing specific contexts of one site with contemporary contexts from the same or another site (Zanini 2009, 49–62; Panero 2010, 912, figs 2–4), by acquiring sophisticated stratigraphic sequences and a better knowledge of the character of excavated deposits (Peña 2007, 337–9), and by further establishing the provenience of specific wares. Special interest should be given to the publication of closed deposits, such as those related to the earthquake of AD 365 (Stiros 2001, 545–62; Yangaki 2005, 43–9, 253–67), since they offer well-dated and important material, as is shown by the evidence from Eleutherna, which could be used as a solid basis for further comparison with earlier or later contexts. Only in this way can a more thorough interpretation of Crete's position and role in international and regional trade, but also of the character of specific Cretan sites and their degree of self-sufficiency or interdependence in terms of particular goods be possible.

To this end, one aspect which should be taken into consideration is that some of the ceramic vessels could have had a much more complicated 'use-life,' which may also have been longer, at least in their consumption sites, and which makes it harder to date these objects (Peña 2007, 6–11, 61–119, 209); such concerns have been expressed in the case of material from the so-called Byzantine Quarter in Gortyn (Zanini and Costa 2011, 36–43). It has also been noted that Kapitän II amphorae exist at Gortyn in significant numbers in contexts of the 5th and even of the 6th centuries and later (Romeo and Portale 2004, 967), which is to say some centuries later than the range of circulation generally ascribed to the type. Although it has been recently suggested that their high percentage in these centuries can be explained in terms of residuality, it has also been proposed that this type could have continued to circulate even during the first years of the 5th century AD (Portale 2010, 932; 2011, 156). In such cases, the possibility of a re-use of amphorae as storage containers for various products (Type B re-use: Peña 2007, 124–5) could offer an explanation as to the continuation of



their 'use-life' (Lawall 2011, 45). Similarly, at Eleutherna, some examples of this type must have circulated during the 5th century (Yangaki 2005, 198). Outside Crete, the material from Ostia evokes similar remarks (Panella 1986, 627).

Furthermore, some dishes of Çandarlı form 4 found in Eleutherna (Yangaki 2005, 103–4) and Mytilene (Charitonidis 1961, 209–10) come from contexts of the third and second quarter of the 4th century, respectively, when the date generally ascribed to this form is the 3rd century (Hayes 1972, 322). Researchers usually interpret similar data as evidence of residuality, but it may be that the 'use-life' of some objects could have been somewhat longer in specific cases. This seems to be the case for the examples of Çandarlı ware, since they belong to complete or almost complete vessels and not to small-sized sherds, and thus do not constitute isolated examples. In the future, a much more detailed typo-chronological seriation of ceramic wares will permit a better definition of what we might term the 'active' and 'passive' life of each category of pottery, meaning the life span of its commercialization/circulation and that of its use/non-use ('non-use' denotes the disuse of an artefact that continues, however, to be part of the household artefacts of an excavated unit, not having been deliberately discarded by its final owner) (Zanini and Costa 2011, 37).

While the classification of pottery from Crete has been achieved to a satisfactory degree, work is still required in the spheres of methodology and interpretation, if the study of pottery is to offer a subtle and more detailed and realistic understanding of the island's society.

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## Afterword: putting Crete on the Roman map

Anna Kouremenos

Thirty-two years have passed since the publication on Ian Sanders' *Roman Crete: An Archaeological Survey and Gazetteer of late Hellenistic, Roman and early Byzantine Crete*. During this time, research on Roman Crete has increased dramatically and, judging by current trends, the field looks to expand even further. This edited volume presented only a fraction of the exciting research currently being carried out by international scholars, but we published it with the aim of putting Crete on the map of scholarship dealing with the Roman Empire and to give an impetus for further research. The breadth of the papers in this volume is an indication not only of Crete's increasing popularity among Romanists but also of the island's vast archaeological potential, supported by a great number of excavations and surveys as well as by the re-evaluation of older material during the past three decades.

François Chevreliier looked at the relationship between the two halves of the province of *Creta et Cyrene*, drawing together material from historical, numismatic, and epigraphic sources to discern why and when the two regions were united into one province. He suggested that during the last century BC, Crete and Cyrenaica were united into a single province because each area was too small and perhaps too poor to be economically viable on its own. Another reason may have been Rome's desire to control the Libyan Sea against pirates that had made Crete a base for their activities. Furthermore, while epigraphy shows that there were Cretans attested in Cyrenaica and Cyrenaicans known on Crete, it appears that the two halves of the province seem to have functioned as separate entities during imperial times rather than as one united province.

Martha Bowsky explored the subject of Italian Sigillata stamps as an indicator of cultural identity. Italian Sigillata appears on Crete not only at major centers from west to east, at Aptera, Eleutherna, and Hierapytna, but also at minor sites such as Hamalevri, Kommos, Lato pros

Kamara, and Viannos and has been found in field surveys across the island. Bowsky argued that the island-wide distribution of this ceramic type is not necessarily indicative of cultural diffusion or colonial domination but of 'self-Romanization,' as local elite tastes converged with Roman ones and brought about an integration into a Roman cultural *koine*.

Anna Kouremenos traced the development of the *labrys* motif from the Minoan–Mycenaean period to Roman times, with special attention given to four categories of media depicting the double axe during the Roman period. While the *labrys* was an old Cretan symbol and has long been associated with the island, I argued that, in the Roman period, its appearance in Cretan contexts was a result of a shifting perception of the double axe as a symbol of good fortune rather than an attempt to re-establish an old religious symbol in Crete.

Jennifer Moody discussed the changing climate in the eastern Mediterranean region in antiquity and showed that Crete under Roman rule was hotter and wetter than it is today. By analyzing lake and cave deposits as well as marine and terrestrial cores, she argued that there was a striking aridity event that began in the 2nd century AD and peaked in the 3rd and early 4th centuries, which had significant ramifications for agriculture and productivity on Crete and elsewhere in the eastern Mediterranean region.

Jane E. Francis's paper demonstrated that apiculture played an important role in the Cretan economy. She focused on how ceramic beehives were produced at a large number of centres across the island and their movement from kiln sites to their places of use in urban centers and rural areas. Through an examination of elements like output, hive construction, and site type and location, Francis assessed the role of apiculture in Crete's local, regional, and island-wide commercial enterprises.