ΣΤΕΓΑ: THE ARCHAEOLOGY OF HOUSES AND HOUSEHOLDS IN ANCIENT CRETE



EDITED BY
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Library of Congress Cataloging-in-Publication Data

Stega: the archaeology of houses and households in ancient Crete / edited by Kevin T. Glowacki and Natalia Vogeikoff-Brogan.

p. cm. — (Hesperia supplement; 44)

Papers of an international colloquium held in Ierapetra in May 2005.

Includes bibliographical references and index.

ISBN 978-0-87661-544-7 (alk. paper)

1. Crete (Greece)—Antiquities—Congresses. 2. Historic buildings—Greece—Crete—Congresses. 3. Dwellings—Greece—Crete—History—To 1500—Congresses. 4. Architecture, Domestic—Greece—Crete—History—To 1500—Congresses. 5. Material culture—Greece—Crete—History—To 1500—Congresses. 6. Households—Greece—Crete—History—To 1500—Congresses. 7. Crete (Greece)—Social life and customs—Congresses. 8. Social archaeology—Greece—Crete—Congresses. I. Glowacki, Kevin T. (Kevin Thomas), 1961—II. Vogeikoff-Brogan, Natalia.

DF221.C8S73 2011

939'.18-dc23

2011045748

PREFACE

This volume was inspired by a trip to Crete led by the editors as part of the Regular Program of the American School of Classical Studies at Athens (ASCSA) in 2003. As we visited numerous archaeological sites throughout the island, we gave special emphasis to the contextual evidence for domestic architecture, household activities, spatial organization, and social behavior. Somewhere along the north coast highway between Kavousi and Trypitos, it occurred to us both that a conference focusing specifically on the Cretan evidence—and from a diachronic perspective—would make an interesting and important contribution to the growing literature on household archaeology. The response to our call for papers exceeded our initial expectations, as the concept was enthusiastically embraced by colleagues working on Crete as well as by the municipality of Ierapetra, where we proposed to hold the gathering.

The editors would like to thank the numerous individuals and institutions who made the 2005 colloquium a success and the publication of the present volume possible. First and foremost, we offer our sincere thanks to the contributors for their hard work, cooperation, and patience through the long process of editing, peer review, revision, and publication. Their final manuscripts were submitted in 2008, and only a limited amount of updating has been possible since that time. We would also like to express our gratitude to the municipality of Ierapetra (especially to former Mayor Nikos Christofakakis and Vice-Mayor Maria Dimitromanolaki) for hosting the colloquium, and to the Institute for Aegean Prehistory (INSTAP), the ASCSA, and the Edward A. Schrader Endowed Fund for Classical Archaeology at Indiana University for financial support. The editors are particularly thankful for the assistance and logistical support offered by the director and staff of the INSTAP Study Center for East Crete, in particular Thomas Brogan, Melissa Eaby, Douglas Faulmann, Yuki Furuya, Eleanor Huffman, Vera Klontza-Jaklova, Matina Papadaki, and Chronis Papanikolopoulos. We are grateful to numerous colleagues who served as session chairs and discussants at the conference: Thomas Brogan, Gerald Cadogan, Leslie Day, Jan Driessen, Geraldine Gesell, Donald Haggis, Katerina Kopaka, Metaxia Tsipopoulou, Maria Vlazaki, and James Whitley.

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Our thanks are also extended to Stavroula Apostolakou, Director of the 24th Ephorate of Prehistoric and Classical Antiquities, for leading the colloquium participants on a tour of the newly renovated installations in the Ierapetra Museum.

In preparing this manuscript for publication, important editorial assistance was provided at different stages by Melissa Eaby, Stefanie Kennell, Nancy Klein, and Caitlin Verfenstein, to whom we are very grateful. We would also like to thank the College of Architecture and the Melbern G. Glasscock Center for Humanities Research at Texas A&M University for grants that allowed us to improve several of the illustrations reproduced here, and Ryan Collier, Douglas Faulmann, Yuki Furuya, Ellen Keil, and Matthew Miller for their artistic and technical expertise. Essential financial support for the publication was generously provided by the Institute for Aegean Prehistory.

Finally, we offer our thanks to the Publications Committee of the ASCSA for accepting this very large manuscript, the anonymous reviewers for their helpful insights and suggestions, and the ASCSA Publications Office for their invaluable assistance and guidance at every stage of production, in particular Michael Fitzgerald, Andrew Reinhard, Carol Stein, and Charles Watkinson.

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Introduction: Approaches to the Study of Houses and Households in Ancient Crete

by Kevin T. Glowacki and Natalia Vogeikoff-Brogan

This volume presents the papers of an international colloquium on the archaeology of houses and households in ancient Crete held in Ierapetra in May 2005. The name of the conference—and of the present volume—was inspired by the "Great Code" of Gortyn, where *stega* (literally, "roof") is used to refer to the "house" both as a building and as an important element of a citizen's "household." Indeed, understanding the relationship between "house" as physical structure and "household" as social unit remains among the fundamental goals and challenges of household archaeology in any time period or geographical location. Although several recent conferences and publications have concentrated on the study of ancient houses and households in the Mediterranean, relatively little work has emphasized household analysis on a regional level. This volume therefore aims to contribute to the discussion of housing in ancient Greece by focusing on one geographical region (Fig. 1.1) through many different chronological periods.³

In addition to the personal research interests of the editors of this volume, the clear-cut geographic boundaries, the manageable size, and the diachronic importance of the island were among the reasons that influenced the selection of Crete for a regional case study. Ancient Crete was home not

- 1. For the appearance of the word στέγα in the Great Code, as well as for recent bibliography on the Great Code, see Guizzi's paper in this volume (Chap. 33).
- 2. Recent conference volumes that have explored the role of houses and households for the study of settlements and societies in the ancient Mediterranean include Luce (2002) and Westgate, Fisher, and Whitley (2007). More wide-ranging geographically is the influential volume on household archaeology edited by P. Allison (1999a), which includes case studies from Greece, Italy, Britain, El Salvador, Mexico, and Australia. The collection of essays edited by Ault and Nevett (2005) focuses on the
- archaeological evidence for Archaic, Classical, and Hellenistic houses in Greece and Asia Minor. Neither of these last two volumes, however, includes examples from Crete or from any prehistoric sites in the Aegean.
- 3. In our description of Crete as a "region," we are referring to the entire island as a clearly defined geographic unit set apart from the neighboring islands of the Aegean and the mainland of Greece (see, e.g., Cherry 1986, p. 20). This does not imply, however, that the entire island was ever a unified or homogeneous entity in cultural, political, or ideological terms, or that the notion of "region"—at either the islandwide or local levels—was fixed and

unchanging over time. Several of the papers in this volume discuss aspects of houses and household activities in terms of different regions or territories within Crete itself, often demarcated by natural topographical features at various scales (e.g., East Crete, Lasithi, the Mesara). But as Relaki (2004) has recently pointed out, geography is only one dimension of the definition of an archaeological region; social, economic, and symbolic interaction are also important components of the "topography of communication" and "network of relevance" that can identify a region in different historical periods.



Figure 1.1. Map of Crete showing major sites mentioned in the text. Y. Furuya and K. T. Glowacki

—	Achladia Siteias	70	Choiromandres	39	Knossos	28	
7	Ayia Pelagia	21	Chondros Viannou	40	Kommos	29	Petsophas
3	Ayia Triada	22	Dreros	41	Kophinas	09	Petras
4	Ayios Charalambos	23	Eleutherna	45	Koumasa	61	Phaistos
ſΟ	Amnisos	24	Galatas Pediada	43	Kouses	62	Praisos
9	Apesokari	25	Gortyn	4	Lebena	63	Prinias
7	Aphrati	26	Goudouras Kastello	45	Lato	64	Pseira
8	Apodoulou	27	Gournes	46	Lyttos	9	Psychro Cave
6	Archanes	28	Gournia	47	Makrygialos	99	Rhithymna (Rethymnon)
10	Argyroupolis	29	Gouves	48	Malia	29	Sklavokampos
11	Arvi Fortetsa	30	Hierapytna (Ierapetra)	49	Mochlos	89	Smari
12	Axos	31	Idaion Antron	20	Myrtos Phournou Koryphi	69	Tourtouloi
13	Ayia Photia Siteias	32	Juktas	51	Myrtos Pyrgos	20	Trypiti
14	Azoria	33	Kamares	52	Nerokourou	71	Trypitos Siteias
15	Chalasmenos	34	Kamilari	53	Nirou Chani	72	Vasiliki
16	Chamaizi	35	Karphi	54	Oleros	73	Vrokastro
17	Chamalevri	36	Katalimata	55	Onythe Goulediana	74	Zakros
18	Chania	37	Kato Symi	99	Pacheia Ammos	75	Zominthos
19	Chochlakies	38	Kavousi Vronda	22	Palaikastro	92	Zon

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only to one of the earliest state-level societies in the Aegean, it also gave rise to numerous independent city-states in later periods and, during the Roman empire, included examples of both colony and provincial capital. By bringing together scholars working in prehistoric as well as historical periods of Crete, the conference provided a forum in which to examine the potential of "household archaeology" for understanding the changing social dynamics of households and communities over long periods of time and in different political and economic environments.

The thirty-eight papers in this volume are presented, as far as possible, in chronological order, and they range from a discussion of household activities at Final Neolithic Phaistos to the domestic correlates of "globalization" during the early Roman empire. These studies demonstrate a variety of methodological approaches currently employed for understanding houses and household activities from archaeological remains: architectural analysis and reconstruction, artifact distribution and spatial patterning, ceramic analysis, organic residue analysis, faunal and botanical analysis, space syntax analysis, regional analysis, mortuary analysis, and iconography. The majority of the papers, in fact, have employed a multifaceted approach by examining both the architectural and artifactual assemblages while acknowledging the site formation (and excavation) processes that have affected the preservation of archaeological data. Approaches that incorporate documentary evidence also add valuable perspectives on the social and economic roles of houses, households, and family members that are not easily inferred from the archaeological record alone.

From its inception, archaeological fieldwork on Crete has traditionally had a palace-oriented focus that has tended to overshadow other studies, resulting in the neglect of periods other than those connected with the rise and fall of the Minoan civilization. During the past two decades, however, there has been a significant effort to explore later periods, notably the transition from the Late Bronze to the Early Iron Age (Chaps. 22–30). It is no surprise, then, that these periods are well represented both by studies that focus on the results from new investigations and those that reexamine material from older excavations. While ongoing research at sites such as Azoria (Chap. 31) is providing valuable insight into the organization of both domestic and public space in the Cretan polis, the readers of this volume will realize that the study of the historical periods on Crete still remains somewhat limited, and the contributions that deal with houses and household activities in these later periods (Chaps. 31–38) therefore have a seminal character.

While each of the papers in this volume can be treated as a separate case study, it is also possible to discern certain key themes that cut across the diverse methodological approaches and chronological periods. On the one hand, these themes reflect the current research of the archaeologists who "dig houses" on Crete. On the other, they also highlight common ground for productive dialogue, on such topics as understanding the built environment in all of its manifestations, the variability of domestic organization, the role of houses and households in mediating social (and perhaps even ethnic) identity within a community or region, household composition, and, of course, household activities of all types, ranging from basic subsistence needs to production and consumption at a suprahousehold level.

4. For surveys of contemporary archaeological research on Crete in both prehistoric and historical times, see Andreadaki-Vlazaki and Platon 2006; Brogan and Vogeikoff-Brogan 2006.

THE HOUSE AS BUILT ENVIRONMENT

Since archaeologists do not actually excavate "households" directly, but rather infer household activities from the spatial and temporal patterning of artifacts, the physical structure of the house (that is, the built environment in which ancient peoples lived, worked, and interacted on a daily basis) is one of the most fundamental levels of archaeological analysis. For example, the papers by Bradfer-Burdet and Pomadère (Chap. 9), Schmid (Chap. 10), and Lloyd (Chap. 15) focus on elite Neopalatial houses in close proximity to a "palace." Since the buildings they study were originally uncovered in older excavations, these authors generally do not have the type of data available to them that allows for functional analysis based on a full inventory of room contents. Instead, their interpretations concerning the use of space are based primarily on detailed examination of architectural features. Bradfer-Burdet and Pomadère reexamine an elite structure at Malia (House $\Delta\beta$) and reinterpret it as a large unified complex with an official east wing dedicated to ceremonial receptions combined with a more private residential wing. Focusing on formal elements of architectural design, Schmid proposes that another house $(\Delta \alpha)$ at Malia was destined for an important person who required formal spaces for ceremonies and receptions in one part of the house, while spaces for domestic/residential activities were located primarily in other areas, including the upper floor. Lloyd focuses on the South House at Knossos and proposes a new reconstruction of the facade and an interpretation of the building not as a year-round residence but as a structure dedicated to the accommodation of royal guests.

Another approach to architectural analysis is taken by Hitchcock (Chap. 21), who discusses the use of the "square within a square" form (also known as the "vernacular hall") on Bronze Age Crete, Thera, and Cyprus. According to Hitchcock, the "square within a square" was a feature of vernacular architecture that came to be used as a module in the more elaborate designs of the Minoan elite villas, such as House $\Delta\alpha$ at Malia and Tylissos A. The form has a long history in the Bronze Age Aegean with a possible Anatolian origin. The study of its use and significance by Hitchcock may encourage future studies concerning its multifunctionality and role in shaping the daily routines of people who dwelled in this type of structure.

The analysis of domestic architecture within the Archaic Cretan community at Azoria provides Haggis and Mook (Chap. 31) the opportunity to discuss not only architectural forms and activity areas, but also the sociopolitical role of households as reflected in the archaeological record. Haggis and Mook distinguish two basic typological categories among five recently excavated houses at the site: an axially-aligned building type that owes its form largely to the steeply terraced terrain, and a roughly square building that seems to represent an early form of the "corridor" or "pastas" house attested elsewhere on Crete and in the Aegean. The different types—and their modifications over time—may reflect different social and economic concerns about the organization of space, including access to and interaction between functionally distinct areas (e.g., entrance, hall, storeroom, kitchen). Particularly intriguing is the discussion of storage facilities and large decorated pithoi as elements of status display within

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the house—that is, as important social symbols of agricultural production and landed wealth visible to guests. In this way, the architectural form of the house and its internal patterns of access serve to mediate the social identity of the household.

Kopaka's study (Chap. 24) of "της Ουρανιάς το Φρούδι" cave in the area of Zakros approaches domestic space and the built environment in a completely different way and challenges the current belief that caves were used only for ritual and funerary activities in the Bronze Age. Her analysis of the architecture and contents at this cave site has identified a number of activities (e.g., storage, preservation, food processing, honey-making) suggestive of periodic habitation. Although for reasons of space Kopaka does not elaborate on the reasons that led such a household to find its *stega* among the steep rocks of Ourania, and not in the more traditional and convenient domestic environment of a settlement, it is obvious that the cave served as a refuge in times of threat and social instability.

HOUSE, HOUSEHOLD, AND SOCIAL IDENTITY

Several papers discuss the social identity of those who dwelled in houses surrounding a Minoan palace and look for evidence of an elite class that either supported or competed with the palatial authorities, especially during stressful periods (e.g., Chaps. 7, 8, and 23). Caloi's paper (Chap. 7) presents new evidence for complex and well-organized houses at Phaistos during the early phases of the Protopalatial period (Middle Minoan [MM] IB). While the poor state of preservation does not allow for a detailed functional analysis in most cases, an important exception can be found in a house in the Ayia Photeini quarter, where the contents of room β suggest functions and activities that were also shared with the Palace. Caloi proposes that the inhabitants of the Ayia Photeini house were somehow dependent on the central complex, since they shared the same pottery workshops and imitated techniques that can also be noted in the Palace, such as the adaptive reuse of complete vessels to create new architectural features.

Girella's paper (Chap. 8) discusses the role of the houses at the same site after the destruction of the Old Palace in MM IIB and proposes two models for understanding the social significance of ceremonial activities. According to Girella, several elite groups were scattered around the Palace during the MM IIIA period, and the houses now assumed a multifunctional character where both domestic and ritual actions took place. The "household ideology" of this emerging elite class replicated the palatial symbols as the main instruments of private ritual, which may have involved feasting and gift-giving among groups that were interested in maintaining or creating new alliances. In MM IIIB, on the other hand, the Palace seems to have reestablished a "palatial ideology," as this can be inferred from the functions of several rooms in the northeast part of the complex, which included a new reception hall, an archive room, storage areas, and evidence for ritual activities (drinking cups, bull rhyta, and bull miniatures).

Privitera's paper (Chap. 23) explores the social status of the inhabitants of a substantial building of the Final Palatial period (Late Minoan

[LM] IIIA-B) at Ayia Triada. By tracing the architectural history of the building, plotting its key location in the settlement, and using contemporary Linear B evidence from Knossos, Privitera convincingly argues for the high social status of its residents.

THE HOUSE/HOUSEHOLD AS SYMBOL

In addition to exploring the architecture and household assemblages of both elite and non-elite houses on Crete, several papers address the symbolic aspects of the built house in a variety of ways. For example, Hatzaki (Chap. 22) and Haggis and Mook (Chap. 31) call attention to the important symbolic aspects of storage facilities and vessels. Driessen and Fiasse (Chap. 25, p. 288, Fig. 25.2) illustrate a very large house model with windows, gabled roof, and chimney from LM III Quartier Nu at Malia, and they suggest that it played some role in ritual activity, "perhaps representing the unity of the family group living under a single roof."

The symbolic meaning of house/household is also discussed in Cadogan's paper (Chap. 4) on Prepalatial Myrtos, where a monumental "house tomb" was built in Early Minoan (EM) III. According to Cadogan, the reproduction of local domestic architectural forms on a monumental scale for the purpose of housing the dead is a truly special characteristic of early East Crete. The fact that the house tomb was built on and within the ruined EM II settlement also alludes to the symbolic and manipulative motives of the Pyrgos elites. Most remarkably, the house tomb continued to house the dead over the next 500 years, despite any possible changes in the ideology of the local elites. In striking contrast, Murphy's analysis (Chap. 5) of the burial customs of the Prepalatial and Protopalatial societies in South-Central Crete suggests that the individual household was not preserved or commemorated in the afterlife arrangements of these societies, who chose to bury more than one household in their tholos tombs. In this sense, the early societies of south-central Crete seem to have negated the identity of both the individual and the household in favor of a larger corporate identity among the ancestors of the extended family or clan.

Surveying the epigraphic evidence for the role of houses and the definition of the household in historical sources, Guizzi (Chap. 33) makes clear that the physical structure of the house (stega) had legal, economic, and symbolic significance for the members of a household in Archaic and Classical Gortyn. On the one hand, the stega can be seen as a piece of property, a basic element of a citizen's estate that can be passed on to one's heirs. On the other hand, the ownership of a stega represented important social rights in the community, such as a claim on any child born after a divorce. The symbolic value of the house within the structure of the household or family is also revealed in other ways, such as in the case of adultery: the crime was fined in different ways, depending on whether it took place inside the father's or brother's or husband's stega, or on someone else's property. While a citizen might own more than one house (e.g., in the city, in the countryside), the house/dwelling seems to have been a vital part of the very concept of "household" as recognized by the larger

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community. Comparing and contrasting the Cretan evidence with Athenian attitudes toward "house," "household," and family identity, Ferrucci (Chap. 34) finds similarities in certain social patterns and legal stipulations, but also nuanced differences in the economic and symbolic values attached to the physical residence.

HOUSEHOLD RITUAL

Closely related to the symbolic value of the house is the evidence for household cult and ritual. In a paper exploring household religious activities during the Neopalatial period, Sikla (Chap. 20) attempts to shift the focus of research from the demarcation of sacred spaces within houses to the identification of cult activities that may have occurred within or outside domestic units, on the assumption that religion can be embedded in practices of daily life, such as food preparation and consumption. Instead, she proposes to concentrate on elements that bespeak of the ritualization of domestic life, using vessels with bull representations as a case study. Likewise, the presence of rhyta and other cultic equipment (including bull rhyta) in MM IIIA domestic assemblages at Phaistos, following the destruction of the Old Palace, leads Girella (Chap. 8) to propose that they were used as symbols of power by emerging elites.

HOUSEHOLD COMPOSITION

While the "household" can be viewed as a fundamental social and economic unit of a community, the size and composition of the coresidential group sharing a dwelling (or complex of dwellings) remain among the most difficult and problematic issues facing archaeologists of all periods. Previous attempts to estimate the number of individuals living in a house have included historical and ethnographic analogies, the size and architectural uniformity of the preserved houses at a specific site, and the repetition of features and artifacts indicating a duplication of household activities. As several papers make clear (e.g., Chaps. 19 and 22), archaeological interpretation is complicated by site formation processes (including data recorded or lost during excavation), the existence of upper floors, as well as cultural conceptions (and preconceptions) of the use of space. In an innovative approach based on the detailed study of the storage capacities of food containers, supplemented by organic residue analysis, Christakis and Rethemiotakis (Chap. 16) argue that the food stored at House 2 in Galatas Pediada (destroyed by fire in LM IB) could provide subsistence support for a household of five adults for 13 months. This small number of individuals is suggestive of the "nuclear" family that has been inferred as the basic social and economic unit for other Minoan and post-Minoan period sites.

On the other hand, several authors in this volume present arguments for extended families (or clans) sharing the same large house or household complex. For example, Platon (Chap. 14) argues that the architectural plan and movable finds of the Neopalatial "Strong Building" at Zakros,

which indicate three independent apartments with repeated functions but with only one area devoted to the preparation of food, is evidence for a coresidential group larger than the nuclear household. The same scholar also sees evidence for an extended family in Building B at Zakros, where he postulates that the initial structure was expanded to incorporate new cells by intermarriage. Although the new cells would have used separate upper-floor apartments for living, they would have met each other in areas designated for household social activities. It seems likely that the ground floor would have been used for working, as well as a place of residence for some service staff, who would be charged with the upkeep and running of the whole building.

Likewise, Driessen and Fiasse (Chap. 25) suggest that Quartier Nu at Malia functioned as a single unit in the LM III A–B rather than as a cluster of individual households. Although there was a duplication of functions between the east and west wings, which could suggest separate households, the existence of a single kitchen and a central court in the structure may reflect a clan consisting of two to three families. The authors even take a step further to suggest that the communal meals taken by the inhabitants of Quartier Nu at the central court of the building announce the institution of the andreion attested in later sources.

In many recent studies of ancient Greek households, an emphasis has been placed on the differential use of domestic space according to gender. In part, this emphasis may reflect the fact that most work on Mediterranean household archaeology has focused on the historical periods, for which ancient sources (primarily Athenian) speak of a distinction between men's quarters (andronitis) and women's quarters (gunaikonitis), even if such a distinction is difficult to recognize architecturally or archaeologically. In contrast, there has been very little overt reference to separation of space by gender or gender-related activities when discussing the household organization of Minoan or Early Iron Age Crete. In order to explain the placement of kitchens and pantries in isolated rooms without any direct access to the rest of the house, Brogan and Barnard (Chap. 17) suggest that the outdoor kitchens of the LM IB houses at Mochlos may signal exclusion and an attempt to keep individuals, activities, or the contents of the kitchens (traditionally considered the domain of women and/or servants) separate from the other areas of the house. Driessen and Fiasse (Chap. 25) are also concerned with gender in their study of Quartier Nu at Malia. The fact that kylikes only occur in the west and south wings of the complex, whereas champagne cups are well represented in all wings, might indicate a gender distinction in the use of the space. The authors also explore the possibility that the champagne cups could have been used both by men of lower status and women, whereas kylikes were exclusively used by important males.

Gender, however, is not emphasized in the rest of the papers of the volume, except for one study that deals with the historical period. Vogeikoff-Brogan (Chap. 35) argues that the small size of the dwellings with their communicating rooms at Trypitos and other Hellenistic sites, such as Lato, suggests that the Cretan household remained mostly a female environment,

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while the men participated in the more public life and institutions of the city. In another paper presented at the conference, but published in more detail elsewhere, Westgate also pointed out the different architecture of the Cretan houses of this period compared to contemporary houses on mainland Greece, suggesting different patterns of social relations within the household and between the household and the community.⁵

HOUSEHOLD ACTIVITIES AND INDUSTRIES

The recognition of domestic activities and activity areas in the archaeological record is fundamental to understanding the material, social, and behavioral aspects of households, particularly in distinguishing between small-scale (household) production and large-scale (suprahousehold) production. For example, the presence of three winepresses, a grinding installation, a potter's wheel, and many loomweights at the Minoan villa at Prophitis Ilias Praisou, interpreted here by Mantzourani and Vavouranakis (Chap. 12) as a single household, may be a reflection of large-scale production. The archaeological record of Petras House II, presented here in a preliminary fashion by Mavroudi (Chap. 11), shows the presence of a large number of ground stone tools, basins, and loomweights from many parts of the house, in addition to drains and pits.

Watrous and Heimroth (Chap. 18) reevaluate the household industries at the town of Gournia during the LM IB period. The lack of storage capacities in a large number of houses where industrial activity has been preserved leads Watrous and Heimroth to suggest that these households were not producing goods (e.g., bronze tools, stone vases) for personal consumption, but for the ruling elite, in exchange for food. This pattern of social and economic organization fits well with the LM IB centralization recently recognized at various centers in Crete. Watrous and Heimroth go one step further to propose that some of the Gournia houses were so destitute and dependent on the ruling elite that their occupants left very few datable items when the houses were abandoned and destroyed in LM IB, thus their presence at Gournia might be, to a large extent, archaeologically invisible.

Sofianou (Chap. 36) examines the important household activity of weaving by focusing on the large number of loomweights found in Cluster A at the Hellenistic site of Trypitos in East Crete. Based on their distribution, Sofianou argues that the majority of the loomweights were probably being stored and not in use on a loom when the house was destroyed. While a comparison of the weights suggests that different types of fabrics could have been woven in a single residence at different times, the archaeological evidence is inconclusive as to the simultaneous operation of more than one loom in the house. In another paper presented at the colloquium, but not included in the current publication, I. Tzachili discussed a rich deposit of similarly shaped and weighted loomweights found at a Hellenistic house at Panormos in West Crete, with evidence for organized household weaving production.⁷

5. Westgate 2007.

7. Tzachili 2008.

6. *Mochlos* IA, pp. 91–100; for a recent and full discussion of storage and sociopolitical dynamics in Neopalatial Crete, see Christakis 2008.

HOUSE, HOUSEHOLD, AND COMMUNITY

According to Wallace (Chap. 28), the large houses and extended households that are encountered in LM IB and LM IIIA-B settlements probably housed regional elites and operated beyond the remit of a simple domestic structure. Wallace, however, argues that this hierarchical structure shows signs of social flattening in the LM IIIC settlements founded after the collapse of Minoan palatial civilization. Examining houses at Kavousi Vronda, Monastiraki Chalasmenos, and Karphi, Wallace draws attention to the presence of a central multifunctional room and the lack of a completely separate kitchen area. Her observation is further supported by Day's functional analysis (Chap. 27) of the household assemblages from Karphi, which shows that the majority of the buildings were more or less uniform in content at the time of abandonment, another sign of social flattening. At the same time, the existence in these settlements of large "megaron" type structures with hearths and zoned areas for cooking or dining constitutes evidence for collective dining and, in some cases, probably feasting. In addition, Day's analysis argues that the greater proportion of kylikes in the larger buildings in Karphi suggests elite drinking rituals. The connection between "megaron" type buildings and drinking is especially evident at Chalasmenos, where Tsipopoulou (Chap. 29) has convincingly argued that while certain buildings were involved with food preparation at a suprahousehold scale, the "megara" specialized in food and drink consumption.

In the same line of thought, but concerning an earlier period, Di Tonto's (Chap. 2) discussion of Neolithic households at Phaistos suggests that the exclusive presence of fine wares and decorated pottery at Phaistos and Knossos, as well as their absence from other contemporary settlements, may indicate communal practices of consumption used to strengthen alliances between larger settlements and smaller neighboring communities. Knossos and Phaistos, therefore, could represent regional foci for certain suprahousehold ceremonies that reinforced ties inside and outside the immediate community. In contrast, Brogan and Barnard's thorough study (Chap. 17) of the cooking facilities in the Neopalatial town of Mochlos indicate that for the majority of the houses, neither the size of the rooms nor the equipment found in them point to food preparation in excess of an individual household. This non-elite behavioral mode comes into sharp contrast with the large-scale cooking and feasting that took place in House D.1 at Mochlos, a large and finely furnished house with many elite architectural refinements more commonly seen in Minoan villas.

The search for the *andreion* as a building occupies a significant number of papers, with attempts to locate the origins of the institution as early as the LM IIIA–B period (Chap. 25). In arguing for the public character of the "megaron" in the LM IIIC settlements of Karphi and Chalasmenos and its association with communal meals, both Wallace (Chap. 28) and Tsipopoulou (Chap. 29) also allude to early manifestations of the institution. Erickson's paper (Chap. 32) reviews all literary and archaeo-

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logical evidence about the *andreion*, and he argues that public feasting in Crete—with its horizontal hierarchy—may not have excluded elite private dining in the way it seems to have in other parts of Greece. In the same vein, Vogeikoff-Brogan (Chap. 35) wonders whether the dining activities attested in Building A in Cluster B2 at Hellenistic Trypitos were associated with state-controlled dining or might be witness to a different trend encouraging an increased sense of private life.

HOUSE, HOUSEHOLD, AND ETHNIC/CULTURAL IDENTITY

The introduction of collective dining may be related to the presence of a new ethnic group in Crete from the LM IIIA-B periods. Although some scholars also see "Mycenaeanizing" elements in the adoption of the "megaron" as an architectural form (Chap. 29), its presence in Crete can also be interpreted as evidence more for the creation of extended kin groups and brotherhoods in the fragile post-collapse communities and less for the presence of new ethnic groups (Chap. 28). In contrast, Hatzaki (Chap. 22) alludes to the presence of a new ethnic group in Postpalatial Knossos. In addition to changing the location of the home, the most startling change in household behavior can be observed in the food preparation and the disposal of waste. New types of cooking vessels, especially the jug in a fabric identical to that used for tripod cooking pots, clearly suggest different ways of preparing food. Furthermore, the old Minoan "obsession" with clean interior and exterior surfaces seems to have changed in the Postpalatial period. At the Little Palace North site, the amounts of faunal material inside and outside houses increased dramatically, as did the number of pits and layers of ash and charcoal. The reoccupation of the elite buildings in the LM IIIC period is characterized by a sharp reduction of the usable space and emphasis on consumption (rather than storage and food preparation); both features suggest a behavioral change that may not be unrelated to new collective dining and feasting habits, similar to those observed at Karphi and Chalasmenos.

The issue of ethnic and cultural identity is the focus of another paper (Chap. 26), which explores the relationship between household activities and funerary rituals and the extent to which practices surrounding death reflect behavior during life. Smith compares the contents of the LM IIIA tombs at Mochlos with the contents of their contemporary households. The limited (and selected) presence of the kylikes and kraters in a few of the Mochlos burials is contrasted with their appearance in every Mochlos household. As with the "megaron" type of building, the kylix seems to be another mainland shape introduced to Crete with the advent of the Mycenaeans to the island. While the drinking customs associated with the kylix seem to have been accessible to all living members of the LM IIIA community of Mochlos, these customs were restricted to a very small number of dead individuals, an elite of Mycenaean origin or with "Mycenaeanizing" aspirations.

HOUSE, HOUSEHOLD, AND REGION

Finally, a few papers consider the relationship of houses and households to their wider territories. Vokotopoulos (Chap. 13) looks at the settlement pattern and social organization of the countryside in the easternmost part of Crete and compares different types of dwellings (farmhouses, country villas, and guardhouses) from the early to the late phases of the Neopalatial period. He argues that the pattern of nonhierarchic farmsteads of the early Neopalatial period gradually gave way to a new pattern of hierarchy in the late Neopalatial, with the country villas on the top and the farmsteads at the bottom, although the system was still not rigidly defined. In a related paper, Mantzourani and Vavouranakis (Chap. 12) also explore the countryside in East Crete during the same period, focusing on the country villas and studying the degree of labor investment and elaboration that these buildings betray through their architectural design, building materials and techniques, circulation systems, and use of space. The lack of palatial-style features in the architectural design and the contents of the villa at Prophitis Ilias Praisou, in conjunction with its agglutinative manner of construction, suggest that the power of its inhabitants did not derive from the display of prestige insignia but from the direct management of economic processes, particularly the control of wine production. Moreover, the authors of this essay strongly believe in the individual character of these country villas as this is determined by the surrounding landscape, and argue against the lumping of the country building under certain categories.

Among its many important roles, the house may also function as a refuge in times of danger and social transition. Indeed, regional patterns of settlement change and relocation to the remote highlands during stressful periods can be noted in Crete as early as the Neolithic period. Nowicki's survey (Chap. 30) of this phenomenon is extremely valuable in tracing certain patterns that, on the one hand, were probably associated with important historical events, and on the other, reflect the changing social dynamics of each period. The comparison between defensive sites of the MM I and LM IIIC periods is most enlightening. The small, fortified, and sophisticated strongholds of the MM period, like Chamaizi, Myrtos Pyrgos, and Katalimata, which could provide shelter to a small number of families, were entirely different from the defensible villages of the LM IIIC period, reflecting different social and political systems.

Complimentary to Nowicki's diachronic analysis is Lenuzza's reevaluation (Chap. 6) of the Chamaizi house. Through the detailed study of its architecture and artifactual contents, Lenuzza also argues that the defensive character of the building could be connected to the process of social disruption that affected Crete at the beginning of MM I, offering shelter to a high-ranking group of people (a clan?). With the emergence of a major regional power at Petras in MM IIA, the residential group at Chamaizi was probably absorbed into the palatial territory and the occupation of the hill inevitably came to an end.

At the other end of the chronological spectrum, Sweetman (Chap. 38) discusses the urban and rural landscape of Crete in the aftermath of the Roman conquest of the island in 67 B.C. Her work, based mostly on

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the results of surveys and rescue excavations, discerns two patterns of local reaction to the Roman conquest: (a) the north coast pattern, which was slow to change and preserved old forms and customs, as can be seen at Knossos where there was very little construction or adoption of new house plans until the middle of the 1st century A.D.; and (b) the south coast pattern, in which—in places like Gortyn—the effects of becoming a Roman province were immediately visible in architecture, pottery, mosaics, and other aspects of material culture, as well as in the presence of villas and farmsteads in the country. Sweetman introduces the concept of "globalization" in the study of Roman Crete, a concept that allows for flexibility and dialogue in the behavior of the conquered, as opposed to the concept of "Romanization," which implies enforced procedures and passive attitudes.

Baldwin Bowsky (Chap. 37) studies households in Roman Crete from a different approach, that of the epigraphist. Having at her disposal a large number of inscriptions with prosopographic information, Baldwin Bowsky attempts first to restore familial relationships between those named in the inscriptions and then to explore the creation of island-wide social and economic networks based on households, thus shedding light on the social composition of Roman Crete. This approach allows her to identify families who first came to Crete as traders and stayed to become landowners, as well as Romans resident at Gortyn who appeared to have become part of the colonial elite at Knossos. Furthermore, the prosopographic studies show that these families and their individual but connected members constituted the critical core of the social and political elite of the island and of the personnel involved in various sectors of the Cretan economy.

CONCLUSIONS

In this volume an international team of archaeologists and historians have offered a wide-ranging sample of contemporary approaches to the study of ancient houses and households on the island of Crete from the 4th millennium B.C. to the 1st century A.D. While there are gaps in the chronological coverage, it is important to note the many different—yet complementary—ways in which the authors have addressed key material, behavioral, and social aspects of ancient households. By generously allowing us "into their houses," these scholars have provided both fresh insights on familiar material and new challenges for future investigations. How we think about the material, behavioral, and social dimensions of ancient houses, households, and communities clearly influences how we recover, analyze, and interpret the archaeological remains of all periods. The conclusions that emerge from each paper in this volume can—and should—be tested against new data and theoretical frameworks. It is our hope that $\Sigma TE\Gamma A$ will contribute to the opening of a dialogue not only between archaeologists on Crete, but with scholars working on houses and households in many other regions as well.

EVIDENCE FOR DOMESTIC ACTIVITIES IN THE FINAL NEOLITHIC PERIOD AT PHAISTOS

by Serena Di Tonto

Household archaeology has as its goal an understanding of the complex relationship between the house as a physical unit (i.e., the architectural structure and associated artifacts) and the household as a social unit (e.g., a group of people) that apart from blood or kinship ties, lives together, shares various activities, and makes mutual decisions. Household analysis is particularly effective for understanding the social changes and the socioeconomic and ideological traits of a community, since the study of the dwellings and domestic artifacts help us to draw a picture of the activities and behavior of the inhabitants through the spatial distribution of the artifacts in the associated structures. In the archaeological record, some distinctive features that permit the individuation of a house/household are: ovens or hearths for cooking food, cooking pots, fine tablewares for consumption of food but also for the display of status, storerooms and storage vessels for solid and liquid foodstuffs, and tools for various domestic activities.

Several recent studies focusing on the Cretan Neolithic have shown an interest in distinguishing houses and households both in the excavated settlements and in other sites discovered through survey work. Their interest has been centered on the definition of the household as the primary social and economic unit, responsible for the maintenance of community values and for the creation of new links with other communities.³ This

1. Recent discussions of household archaeology and its goals (with relevant bibliography) include Allison 1999a and Glowacki 2004. For a good review of household archaeology focusing specifically on Neolithic Greece, see Souvatzi 2000. See Blanton (1994) for the definition of the household as a social unit mentioned here.

My warmest thanks go to Vincenzo La Rosa, who gave me the opportunity to study the Neolithic material from the most recent excavations at Phaistos, and to Emanuele Greco, the Director of the Scuola archeologica italiana di Atene, for giving me access to the archives of the School. I also wish to thank Simona Todaro for discussing various aspects of this paper with me, and the anonymous readers for their useful comments. I accept responsibility for the ideas expressed here and, of course, for any errors that may remain.

2. It is useful to bear in mind, however, that the study of a house does not always allow us to determine who built it or who lived in it. Furthermore, it is often difficult to reconstruct the function of an area through artifacts alone,

since there is not necessarily a direct correlation between the artifacts found in one house and the activities carried out there. As LaMotta and Schiffer (1999) have noted, close attention must be paid to the site formation processes and the entire life history of a house. Since artifacts are not always found where they were used (and vice versa), we should not assume a priori that they were used in the place where they were found.

3. Manteli 1989, 2001; Nowicki 2002a; Tomkins 2004.

paper focuses on some newly discovered remains of Final Neolithic (FN) structures and associated materials from Phaistos in order to shed light on the domestic activities of these fundamental social groups. In addition to the storage, preparation, and consumption of food at the household level, evidence also exists for the processing of agricultural produce, animal husbandry, and manufacturing. The high percentage of fine wares in the ceramic assemblage, noted at Phaistos and Knossos but absent at other sites, may also suggest ceremonies of consumption and display at the suprahousehold and even regional levels.

THE FINAL NEOLITHIC SETTLEMENT AND ARCHITECTURE AT PHAISTOS

Phaistos, at least for the moment, is the best-known FN site of any great size on Crete, in terms of both the quantity and quality of its remains. Several occupational levels datable to the FN period have been recognized, suggesting that it was not only a transitional phase to Early Minoan (EM), but a real and well-structured period. From the time of its earliest occupational levels, the settlement at Phaistos seems to have been very extensive. Neolithic remains have been found almost everywhere beneath the Minoan palace, on the western part of the hill (Fig. 2.1), and in the Chalara quarter on the southwest slope. Some walls of great extent have been found both in the central plateau area and in the western part of the hill. The congruent orientation of the structures and the substantial uniformity in the architectural features throughout the two chronological phases of FN so far identified at Phaistos allow us to infer an occupational continuity by the same community.

Some general features about Neolithic architecture have been extrapolated thanks to the past and present excavations at Phaistos. House walls were built with stones packed together with mud and clay and were sometimes plastered and occasionally even painted. The roofs were most likely flat, and they seem to have been constructed with perishable materials. The floors were of beaten earth on a preparation of pure clay. It is not yet clear if the rough pebble paving associated with some of the walls was internal or external. One of the distinctive features of the Phaistian Neolithic is the presence of fixed hearths, surrounded by a circle of stones bordering a burnt area. These hearths were probably located in the interior of the houses, but sometimes they may have been outside.

To judge from the preserved walls, most of the houses seem to have been square or rectangular in plan. It should be noted that the only exception is still the so-called circular hut, a small freestanding structure located at the southern end of the later Central Court (Fig. 2.1, trench V).⁶ This hut has been considered a dwelling place in previous publications on the basis of the various ceramic vessels and stone tools (a millstone, a grinder, and polishers) found in association with it. If this is the case, the coexistence of quadrangular and circular houses could suggest the presence of different social groups and architectural traditions at FN Phaistos. Alternatively, the hut could be interpreted as a storage room on account

- 4. We can mention a huge northsouth wall under room 25 (ca. 0.90 m wide), linked with an east—west wall, which probably belonged to a dwelling consisting of more than one room (Vagnetti 1972–1973, pp. 22–25). Other big walls have been isolated under room 29 and under Propileo II (Vagnetti 1972–1973, pp. 31–34). In the West Court, two perpendicular walls formed two rooms (Vagnetti 1972–1973, p. 37).
- 5. Vagnetti 1972–1973, p. 95; Vagnetti and Belli 1978, p. 128.
- 6. The "circular hut" (ca. 2.50 m in diameter) was partly cut into the bedrock and partly built with regular stones. Despite the lack of a hearth, this structure has been considered a dwelling because of the presence of a grindstone and some pestles, which are quite common finds on Neolithic floors.

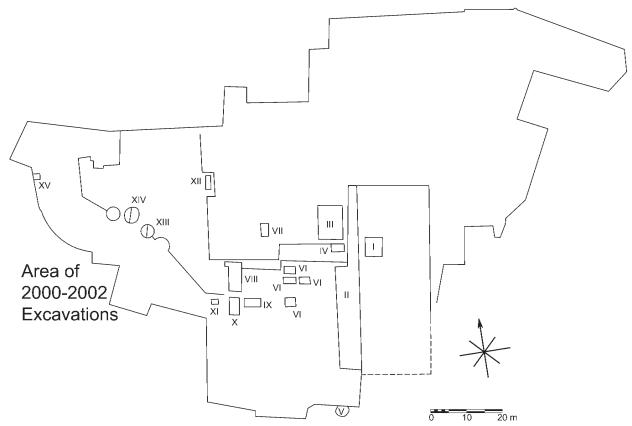


Figure 2.1. Schematic plan of the 2000–2002 excavation area of Phaistos showing trenches (I–XV) containing Neolithic remains.

Drawing E. Keil, after Vagnetti 1972–1973, fig. 1

of its small dimensions (Diam. 2.5 m), the thinness of its wall (ca. 0.10 m, which is insufficient to support even a light superstructure), and its unusual shape—unique at Phaistos.⁷

The scant FN architectural remains and the disturbances caused by later building activities on the site do not allow us to understand the early house plans completely. It is possible, however, to note the presence of structures of different sizes that likely consist of a variable number of rooms. For example, recent excavations on the western part of the hill of Phaistos have brought to light a huge wall (M/7; L. 8.50; W. 0.75; H. 1.54 m), oriented east—west and covered on both sides with red plaster made of clay, straw, and calcareous materials (Fig. 2.2).8 This wall has been interpreted by the excavator as the central spine wall of a house (Building zeta).

7. The Phaistian "circular hut" has been considered the model for the circular tombs spread throughout the Mesara beginning in the EM period. It has also been considered a communal building in which the Neolithic inhabitants of Phaistos could store objects used during communal ceremonies that involved the consumption of food and drink (Cultraro 2001, pp. 88–90). The "circular hut" could be, in my opinion, a silo in which grain was stored, like the

Late Neolithic examples found at Saliagos in the Cyclades (Evans and Renfrew 1968, pp. 17, 20, 26, 81, figs. 7, 8, 12, pls. VII:g, VIII:b, XIII). If this is the case, we may have evidence for the existence of a communal organization involved in the pooling and sharing of foodstuffs, as has been recently argued for Neolithic Knossos (Tomkins 2004, pp. 42–43, 50, 53–55).

The recent discovery at Kephala Petras of circular buildings, probably

dated to FN or FN-EM, will provide new data on the presence of circular houses in Neolithic Crete (Papadatos and Tsipopoulou 2005). This discovery will make possible the in-depth analysis of buildings of various forms reflecting different patterns of spatial organization. Nevertheless, it must be stressed that the "circular hut" at Phaistos is much smaller than the Kephala buildings.

8. La Rosa 2002a, p. 818, fig. 615, pl. I.

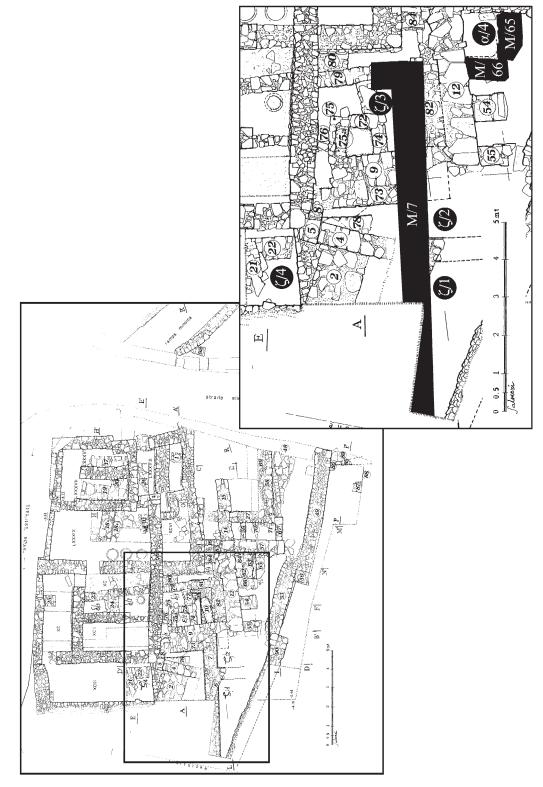


Figure 2.2. Phaistos, detail from the 2000–2002 excavation plan indicating the locations of Buildings zeta (wall M/7) and alpha (walls M/65, M/66). After La Rosa 2002a, pl. 1; courtesy Scuola archeologica italiana di Atene

Thanks to two additional walls linked perpendicularly to the central one, V. La Rosa hypothesized the presence of at least three rooms: two of these (ζ /1 and ζ /2) were on the south side of the building, while the third (ζ /3) was located on the north. The total number of rooms in this house, however, cannot be assessed with certainty. Wall M/7 was originally dated to the FN period on account of the material retrieved from a floor surface discovered at its base. While the original excavator considered the wall to be contemporary with the floor, S. Todaro has more recently noted that the red plaster on wall M/7 does not cover its entire height but begins about 0.55 m from the base, leading him to propose a somewhat later date (EM IA), at least for the plastering. Accordingly, wall M/7 was either built directly on bedrock in the FN and reused in EM IA with a much higher floor surface and the addition of plaster, or it was built in EM IA with deep foundations that cut into an earlier FN floor, as required by the steep slope on which it was constructed.

Other walls of smaller dimensions are found all over the settlement and may reflect the existence of houses of smaller size—if we consider the thickness of these walls inadequate to support the roof of a large room. Also during the most recent excavations in the western part of the settlement, two such walls (M/65 and M/66) have been identified not too far from the other above-mentioned buildings (Fig. 2.2).¹⁰

The quadrangular house plans suggested by the currently available evidence fit well within the Cretan architectural tradition, where the but-and-ben type plan is both common and widespread. For comparison, we can mention structures at Knossos, Magasa, Katsambas, and also at Kala Selia and Nerokourou.¹¹ The Neolithic houses, with two or three rooms entering one from another, had areas that were used as refuge for animals or as workplaces, as indicated by the number of tools and implements found. Domestic activities were carried out both indoors and outdoors. Another constant feature in Cretan Neolithic architecture is the construction of freestanding buildings, which have been noted in the settlements at Knossos and at Phaistos, as well as in different parts of the island where the scattered remains could suggest the presence of isolated farmsteads.¹²

In his studies on the Greek Neolithic, particularly on Sesklo and Dimini in northern Greece, P. Halstead has considered freestanding houses and small clusters of adjoining rooms as household residences. While noting the different forms of buildings within the same settlement—probably reflecting specific choices by the respective communities—Halstead calls attention to common features such as the presence of tool kits for various activities and the existence of storage pottery and food-processing

9. Todaro has underlined that the red plaster was physically associated with a level that consisted of *astraki* (i.e., the debris of the destruction of the house) and EM IA pottery; see Todaro 2005a, fig. 5.

10. La Rosa 2002a, pp. 686–691, p. 803, fig. 485, pl. I. These two walls were probably used in the FN period,

as shown by the materials retrieved from the stamped-earth floor associated with them. They were probably reused in EM I.

11. Knossos: Evans 1994, pp. 11, 14–16; Magasa: Dawkins 1904–1905, pp. 263–264; Katsambas: Alexiou 1954, pp. 369–374; Kala Selia: Vasilakis 1987, p. 47; Nerokourou: Vagnetti, Christopoulou, and Tzedakis 1989, pp. 57–58; Manteli 2001.

12. E.g., the presence of scattered remains at Katsambas among the Minoan tombs (Alexiou 1954, pp. 369–370), at Magasa (Dawkins 1904–1905, p. 268), and in the area of Kala Selia in the Asterousia Mountains (Vasilakis 1989–1990a, pp. 70–71).

facilities.¹³ Although Halstead admits that a Neolithic "household" is a difficult concept to define, he argues that the size of the houses (between 20 m² and 70 m²) suggests occupation by a family group rather than by one or two individuals. By analogy, the inferred heterogeneity in size and finishing of the Neolithic buildings at Phaistos could be considered as the will of the community members to construct differentiated houses, perhaps to emphasize their status or to indicate the group to which they belong. In any case, the size of these buildings could indirectly argue for the existence of family groups, as suggested by Halstead.

However, two important considerations recommend caution when discussing the plan of these houses or inferring the number of the persons who lived within them and their kinship ties. First, the poor preservation of the Neolithic architecture—caused by the rather flimsy construction of the walls and the leveling and building operations of the Minoan period—makes it impossible to restore the ground plan of any house with confidence. Second, the difficulty in identifying the floor levels clearly associated with these poorly preserved walls hinders the analysis of household activities within specific rooms. Yet by looking closer at the material culture as a whole, I believe that it is indeed possible to make some meaningful observations about the nature of houses and household behavior within the FN settlement at Phaistos.

DOMESTIC ASSEMBLAGES AS REFLECTIONS OF HOUSEHOLD ACTIVITIES

After reviewing the general features of Neolithic structures possibly belonging to houses, it is useful to examine the artifacts and assemblages that provide evidence for domestic activities. In a few cases, especially from the earlier excavations, intact vessels and various implements were retrieved from the earthen house floors sometimes associated with walls. In all probability, these remains represent the defacto floor assemblage left by the inhabitants before the desertion and/or the destruction of the house. In most cases, however, the fragmentary character of the materials and the absence of clearly distinguished floors may indicate successive episodes of refuse deposition.

The presence of hearths may indicate the existence of habitation surfaces associated with houses, but, as previously mentioned, the scarcity of preserved walls does not always allow us to determine if these hearths were located in interior or exterior spaces. For example, D. Levi discovered a hearth encircled by stones and associated with a well-preserved floor assemblage in a sounding beneath the Central Court of the Palace. ¹⁵ Owing

13. Halstead 1999, pp. 79–80. House models found in Neolithic settlements may suggest that the inhabitants recognized the social and symbolic significance of the buildings (Halstead 1999, p. 79). Moreover, it has been argued that the house model found at Platia Magoula Zarkou, with eight figurines and

domestic tools inside, depicts a LN household unit (Gallis 1985).

14. Vagnetti 1972–1973, pp. 25, 37.

15. Levi 1957–1958, p. 338, fig. 191; Vagnetti 1972–1973, p. 19, fig. 12. In the upper Neolithic level, only a small wall was identified in front of room 25.

In the remaining part of the excavations, some hearths were also associated with ancient floor surfaces. The wellpreserved hearth discussed here was located between the seventh and the eighth column bases of the later Minoan Central Court.

to the small size of the excavated area, the remains were not extensive and no associated walls were preserved. Eleven complete vases, found on the floor around the hearth, consist of coarse wares for storage and food processing as well as fine ware for consumption of food and liquids. The coarse wares (Vagnetti's class A) include three large storage jars/amphoras (with a high cylindrical neck, globular body, and two vertical strap handles) and one shallow bowl (with a flaring profile and one handle under the rim), roughly burnished for food preparation. 16 The fine wares (Vagnetti's classes C [burnished] and F [red slipped] include four wide-mouth jugs (with a conical or semicircular knob on the handle) to pour liquids, and little hemispherical bowls (with curving sides or with rounded profile and everted rim) for drinking.¹⁷ Two long-necked amphoras, with cylindrical neck and globular body, constructed from a semicoarse fabric that was covered with a thick coating of crushed stones and then slipped with a red paint (Vagnetti's class F, also known as "granulata ware") were also found. 18 Although the evidence does not allow us to determine with certainty if we are dealing with an inside or outside space, the limited number of vessels in the assemblage found around the hearth points to a restricted number of persons involved in the preparation and consumption of food and drink. In other trenches opened by Levi in the Central Court, a variety of artifacts were found that point to domestic activities in this area, including oval querns and grinders for the processing of food, and a great number of spindle whorls, loomweights, obsidian knives and blades, and bone tools, such as spatulas and awls, most likely used for activities such as weaving, leather manufacturing, and other tasks.¹⁹

Two additional Neolithic floors were discovered in the more recent excavations on the western part of the Phaistian hill, but because these surfaces were cleaned before the abandonment and destruction of the building, it was not possible to recognize a substantial de facto deposit. Nevertheless, the fragmentary pottery from the fills is instructive in terms of understanding the range of activities that took place in this area. While we must admit that it is not correct to consider this material as a complete and accurate household inventory, we can also note that the pottery is quite unvarying, in terms of wares and shapes, and that all of the FN wares identified elsewhere at Phaistos are also present here. 21

Among the material found, several coarse sherds belonging to large vessels (Diam. 0.26–0.44 m) with straight or slightly splayed walls, both with and without handles, were clearly used for food storage (Fig. 2.3). One large fragment with a vertical row of three strap handles could belong to a very

^{16.} Vagnetti (1972–1973, pp. 53–86) subdivided the Neolithic pottery from Phaistos into seven classes (A–G). For the coarse wares discussed here, see Vagnetti 1972–1973, pp. 43–44, 55, 59, figs. 34, 36, 57:22, 59:1, 2, 4.

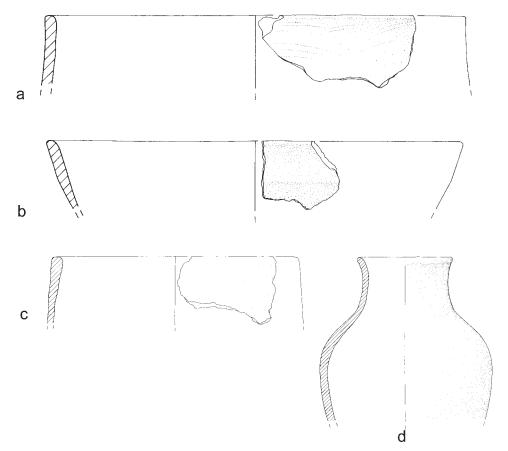
^{17.} Vagnetti 1972–1973, pp. 44, 72, 85, figs. 39–40, 67:18, 75:3, 5, 11.

^{18.} Vagnetti 1972–1973, pp. 45, 87, figs. 42, 76:1, 2. For "granulata ware," see Tomkins 2007, p. 45.

^{19.} Vagnetti 1972–1973, pp. 114–116, figs. 125, 127, 128.

^{20.} La Rosa (2002a, pp. 689–699) identified at least two floors during the 2000–2002 excavations: one associated with Building *zeta* (US 1235) and the other (α /4) related to wall M/65.

^{21.} For the classification of the Neolithic pottery retrieved in the new excavations at Phaistos, see Di Tonto 2004.



large vessel, similar to a pithos. Fragments of vessels for food preparation or consumption (e.g., bowls of different types) are also present. Cookingware fragments and a clay slab (Fig. 2.4)—probably embedded in the floor—were also recovered from the Neolithic floor fill. The upper surface of the slab is smoothed and shows traces of burning that may indicate it was used for cooking. The fine pottery (burnished or slipped and burnished or pink-scribble burnished) was abundant and belongs to vessels used for food consumption or display and for pouring liquids (Figs. 2.5, 2.6). There are small bowls with a rounded or flaring profile and an offset rim (S-shaped), carinated or rounded bowls with a wide everted rim, and some deep vessels with straight walls. Some strap handles with conical protuberances, characteristic of jugs, testify to the presence of this form (e.g., Fig. 2.6:a).

Fragments of long-necked amphoras in fine slipped and burnished ware with the body coated with crushed stone have also been found, similar to the example found by Levi discussed above. A high-necked jar has also been retrieved, but from a context that seems to have been disturbed during the successive reconstructions in this area. This jar is unique at Phaistos and is very similar in shape to those found at Kastelli Phournis,²² but in fine burnished ware, and was used to contain and probably to pour liquids (Fig. 2.6:c). Other material also suggests that these fills contain the refuse from Neolithic houses (e.g., a large oval quern, lithic and bone tools, and one spindle whorl), which provides evidence of various domestic activities (Figs. 2.7, 2.8).

Figure 2.3. Examples of FN coarse ware from Phaistos: (a–c) large storage vessels with straight or slightly splayed walls; (d) cylindrical-necked jar without handles. Scale 1:4. Drawing G. Merlatti, courtesy Archivio Scuola archeologica italiana di Atene



Figure 2.4. Clay slab from Phaistos. Scale 1:3. Drawing G. Merlatti, courtesy Archivio Scuola archeologica italiana di Atene

22. Manteli 1992, p. 113, figs. 1, 2.

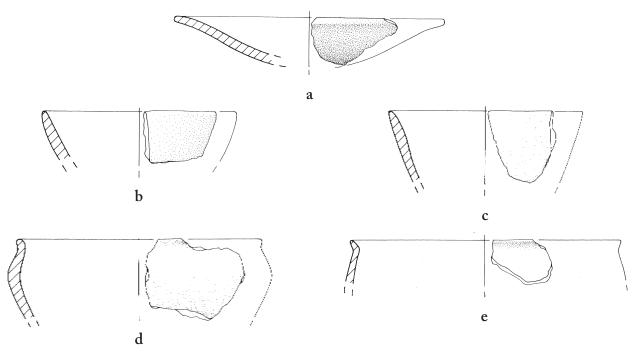
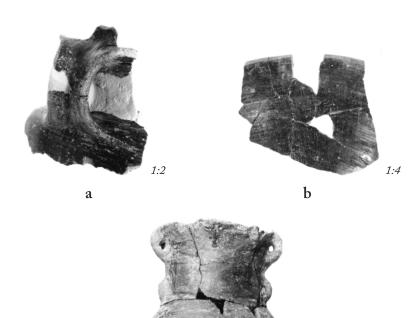


Figure 2.5. Examples of FN fine ware from Phaistos: (a) small dish; (b) bowl with rounded profile; (c) bowl with flaring profile; (d, e) bowls with offset rim. Scale 1:2. Drawing G. Merlatti, courtesy Archivio Scuola archeologica italiana di Atene



c

1:3

Figure 2.6. FN pottery in fine burnished ware from Phaistos: (a) jug; (b) deep vessel; (c) high-necked jar. Scale as indicated. Courtesy Scuola archeologica italiana di Atene



Figure 2.7. FN spindle whorl (left) and FN bone tool (right) from Phaistos. Scale 3:4. Courtesy Scuola archeologica italiana di Atene

Figure 2.8. FN stone tools from Phaistos. Scale 1:3. Courtesy Scuola archeologica italiana di Atene

DISCUSSION

The poor state of preservation of the walls, surfaces, and pavements clearly associated with domestic architecture necessitates the use of other aspects of material culture to illuminate the range of household activities at Phaistos in the Neolithic period. Nevertheless, the nature of the fill found in most deposits suggests that this indirect evidence can be used effectively in making inferences about domestic life. Several ceramic shapes recurrent in the examined Neolithic strata can be properly linked to a common domestic activity (e.g., storage, preparation, consumption of food). The coarse wares with straight or flaring walls and burnished interiors were the most widespread, and they were useful for storing solids or liquids. We do not yet have reliable evidence for the existence of large pithoi, a type of vessel apparently absent on the island in this period. Since the preserved coarse vessels are too small to contain the food supply that would have been required by a family/household for a year, other methods—such as containers made of perishable material or excavated pits—were probably used for storage as well. At Knossos, for example, it has been recently suggested that in some periods (from stratum V onward) the surplus necessary for the survival of the households could have been kept in pits at a communal level.²³

Fine ware vessels used for the consumption of food and drink at Phaistos consisted of bowls or cups of different sizes, bowls with flaring

23. Tomkins 2004, p. 43.

lips, and jugs. Vessels with cylindrical necks and globular bodies decorated with crushed stones may have been used for the short-term storage of some particular foodstuff or drink. It is possible that some fine wares (sometimes decorated with an incrustation of red ochre), such as deep bowls with upright profile, jugs, and bottles, may have been used for the display of status and/or for the communal consumption of food and drink in some special circumstances that may have involved the members of one or more households (Figs. 2.6:a, b).

In addition to storage and consumption, other indirect evidence confirms different activities by members of the settlement, such as the processing of agricultural produce (stone querns, mortars, pestles), animal husbandry (domestic animal bones),²⁴ pottery production (burnishers), spinning and weaving (spindle whorls and loomweights), and leather and other manufacturing (various bone implements).

In conclusion, I would like to comment briefly on the different percentages of fine and coarse wares found at Neolithic sites in Crete. With the exception of Knossos and Phaistos, all other sites have primarily produced coarse wares. This probably is because the inhabitants of these Neolithic farmsteads and small settlements, to satisfy their needs, created vessels related to the activities carried out in their respective houses. 25 In contrast, the fine wares and the decorated pottery, noted almost exclusively at Phaistos and Knossos, could suggest that in these much larger settlements—in addition to concerns for basic subsistence and domestic activities at the level of the individual household—there was also a desire to satisfy other needs, such as the display of status through table decoration. As recently suggested, it is possible that in these long-lived and ceramic-rich settlements, communal practices of consumption may have been carried out in order to strengthen alliances between the households within the community.²⁶ The absence of such assemblages in other localities suggests that these larger settlements may have also functioned as meeting places for the neighboring communities. Knossos and Phaistos, therefore, could represent regional foci for certain suprahousehold ceremonies that reinforced ties both inside and outside the immediate community.

24. The bones of domesticated animals found at Phaistos represent caprovines, pigs, and cattle. Bones of *agrimi* (wild goat) are also present. For a discussion of these faunal remains, see Wilkens 1996, pp. 241–246.

25. Manteli 2000, pp. 235–236.

26. Relaki 2004, pp. 176-177.

A SMALL-SCALE RECONSTRUCTION OF THE SETTLEMENT AT MYRTOS PHOURNOU KORYPHI

by John Atkinson

Ever since Sir Arthur Evans's extensive reconstructions at Knossos fell out of favor with the archaeological community, accurate recreations of the ancient world have become rare. It would be unethical to destroy the past by rebuilding it in our own image, but it is only by recreating the world of the past that we can come to understand it in terms of real flesh and blood rather than cold facts and figures. While it is easy to hypothesize about the past, any conclusions drawn in this manner can rarely proceed beyond the status of mere theories, many of which cannot even find their foundations in simple common sense. However, by attempting to recreate accurately the physical world of the past to the best of our ability, we become able to envisage ourselves among the people who lived in it. It was with this goal in mind that the small-scale reconstruction of Phournou Koryphi was planned (Fig. 3.1).

The thought of walking among the people who had lived at the site was a very attractive one, especially to archaeologist Katerina Aspradaki-Skaramagas, who cares for the small museum at Myrtos. It was she who had the initial idea of the reconstruction—and also that it should be small enough to fit into the local museum where it could be immediately available to anyone who wanted to study the site, which is only three quarters of a kilometer to the east of the modern village, above the main road to Ierapetra. There were, however, to be certain criteria that the reconstruction had to meet: (1) The accuracy and precision had to match that of the original report by the excavator, Peter Warren. (2) The project had to be treated as a real building project. The design would have to take into account the topography, the weight of the walls in relation to their height, width, and materials used, and the effects of the local climate—factors that affected the original builder's design and construction. That is, it was not to be treated simply as a "model-making" project. (3) The walls would initially be built one-story high on a plan of the foundations, and copies of the vases, where possible, would be placed exactly where they had been found. (4) Where necessary, the walls or roofs would be cut away to show the pottery inside. (5) The goal of the reconstruction would be to take the findings from the excavation one step further toward a complete understanding by presenting them in three dimensions. (6) At no time during the reconstruction

1. Warren 1972. Other important studies of the settlement include Warren 1983, 1992; Whitelaw 1983. For more extensive bibliography and comparison with nearby Pyrgos Myrtos, see also the contribution by G. Cadogan in this volume (Chap. 4).



would the word "Minoan" influence the conceptualization of the design. This decision to build the reconstruction without conscious reference to existing conceptions and scholarly tradition of what Minoan buildings looked like was made to ensure that any and all decisions of construction were based solely upon the extant evidence. All choices had to come from real evidence and not a sense of what the buildings should look like.

Figure 3.1. Small-scale (1 in = 1 m) recreation of the EBA settlement at Phournou Koryphi, Myrtos. View from the west. Photo J. Atkinson

CONSTRUCTION

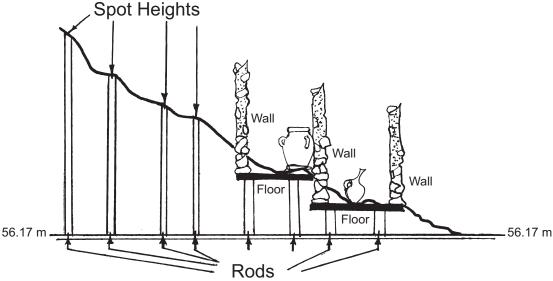
Prior to the construction, the site was studied every day for a six-month period in 2002, and again every day for a six-month period in 2003. Every room and area was measured and checked against the original site plan produced by P. Warren (Fig. 3.2), and his comments on the findings in each area were given serious consideration. Special attention was paid to the elevations recorded on the site plan, because the topographic contours of the hill also had to be reconstructed. By the beginning of May 2004, it was felt that enough information had been gathered to make a start on the project, although regular visits to the site continued throughout the production process.

The scale used for the reconstruction was 1 inch to 1 meter. Construction started at the southern tip of the bastion, which is the lowest-known point of the site (56.17 masl). This height was used as the base level from which all the contours of the hill were created by raising the spot elevations on wooden rods (Fig. 3.3). Floors were first cut to fit on to the plan of the site and then raised on rods to their correct heights.



Figure 3.2. Schematic plan of the settlement at Phournou Koryphi. Drawing K. T. Glowacki and E. Keil, after Warren 1972, opp. p. 11

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THE ARCHITECTURE

Warren identified two main phases of habitation and building in the settlement at Phournou Koryphi, which he designated as Period I (Early Minoan [EM] IIA) and Period II (EM IIB).² In order to make the recreated Period I buildings easy to recognize, it was decided to present them as overgrown ruins (Fig. 3.4). These are brown in color and without plastered surfaces, a sharp contrast to the white plastered buildings of Period II. Several of these Period II houses have been restored to the level of their flat roofs, but in other cases they are shown in cutaway views so as to reveal the domestic assemblages found within them. Only the outline and lower courses of the walls have been indicated in the heavily eroded southwestern portion of site (Figs. 3.1, 3.5). As noted by the excavator, the lack of preserved doorways in several rooms may indicate that they were entered from above through some type of trapdoor and ladder (e.g., rooms 62 and 87 in the reconstruction).

The reconstruction made apparent several important aspects of the architecture. For example, Warren called attention to the fact that the south and west sides of the settlement, where preserved, were marked by a continuous exterior wall that had only two entrances, one at the southeast (South Entrance 64) and one at the northwest (West Entrance 15).³ These two entrances open into narrow, twisting passages (64–65–44–32 and 14–13, respectively) that provide communication within the settlement and serve to restrict access. The significance of these narrow passages is not immediately obvious at ground level. Only when the passage was built in three dimensions was it clear that this was a very sophisticated defense system that ensured only one person at a time could pass through the narrow gaps. By means of this design, unwanted visitors could easily be prevented from passing through the settlement.

2. For the chronology of the site, see Warren 1972, pp. 269–272; 1992, pp. 200–201. For the architecture, see Warren 1972, pp. 11–22 (Period I) and

22–87 (Period II). 3. Warren 1972, pp. 11, 29–30, 57–60.

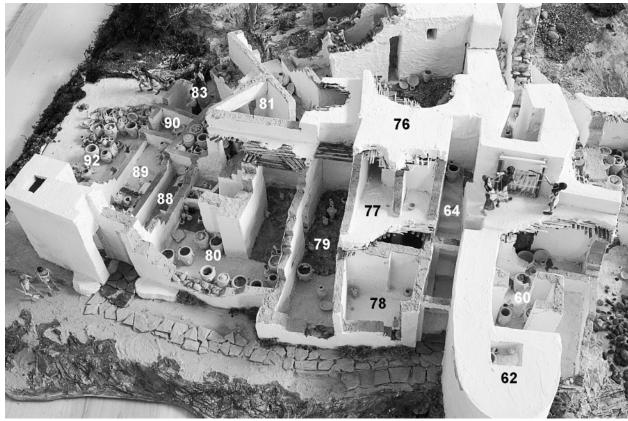
Figure 3.3 (above). Section diagram illustrating the use of rods to recreate the topographic contours of the site as they correlated to the spot heights recorded on Warren's site plan.

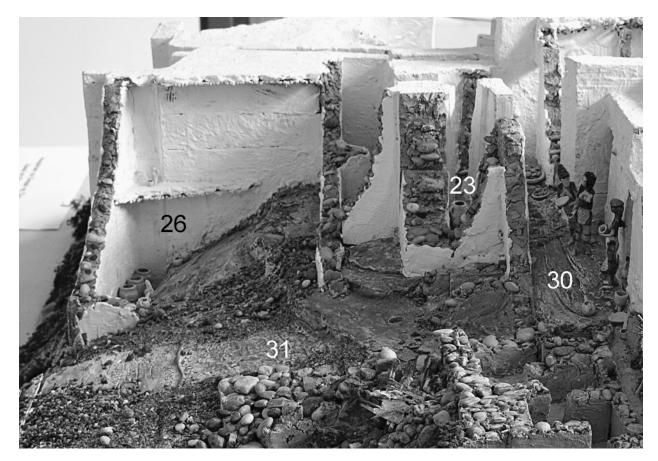
Drawing J. Atkinson

Figure 3.4 (opposite, top). Reconstruction showing Period I remains. View from the west. Note that narrow passage 67 (Warren's East-West Way) on the south (right) climbs eastward between room 51 of Period I and room 68 of Period II, suggesting that the Period I wall was in existence during Period II. If this was so, it is possible that other Period I rooms were still standing even if they were not in use. It could be that the stairway between Period I rooms 42 and 43, which runs almost parallel to the East-West Way, was also a main route to and from buildings on the west side of the settlement. Photo J. Atkinson

Figure 3.5 (opposite, bottom). Reconstruction showing rooms and entrance system on the south side of the site. View from the south. Photo C. Papanikolopoulos







More problematic is the question of the possible existence of upper floors above some of the rooms. While Warren argued that the flat roofs of the houses could have been used for various household activities, and that some rooms may have opened out onto the roofs of rooms on the slope below, he also stated that no archaeological evidence (e.g., traces of upperfloor deposits, additional levels of roof plaster, etc.) survived to indicate a built second story.4 During the process of creating the reconstruction, however, it became clear that the topographic contours of the site, especially on the west and south, would allow for the hypothetical restoration of upper floors in some instances. A good example is the badly eroded room 26 south of the West Entrance (14), where three nearly complete pithoi were found in a "trench" along the inner (east) face of the western settlement wall. When the walls of room 26 were recreated and the pithoi returned to their places in the trench, there was little doubt that this was originally a basement storeroom (Fig. 3.6). Since Warren observed that the maximum length of timber available for spanning roofs or floors was a little over 2.5 m, some type of central pillar (no longer preserved) would have been necessary to support the floor above. This type of construction—with upper floors level with the major slope of the hill—may also have been used in a badly eroded area between room 26 and room 84. The outer wall of the restored basement storeroom was level with the base of the cliff, making a very effective defensive barrier.

Figure 3.6. Hypothetical restoration of room 26 (at left) as a basement storeroom. View from the south. Photo C. Papanikolopoulos

^{4.} Warren 1972, p. 259, and pp. 70–72 (discussion of room 79).

^{5.} Warren 1972, pp. 38-39.

^{6.} For the size of the rooms and spans necessary, see Warren 1972, p. 259.

THE POTTERY

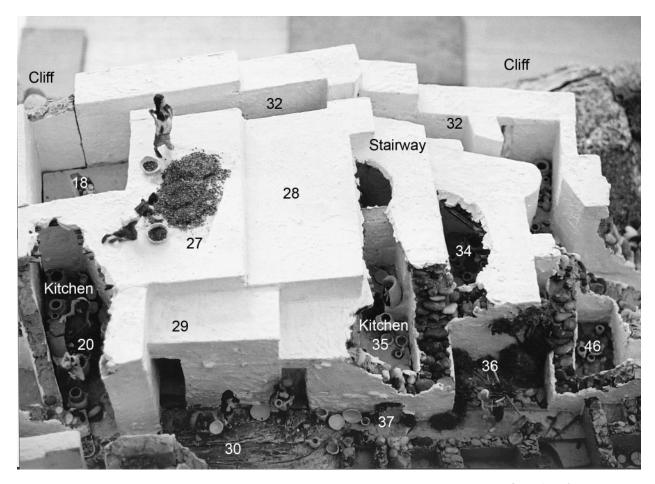
The pottery for the reconstruction was made from clay similar to that used at Phournou Koryphi itself, and it was fired to the same temperature as ancient vessels. Oxidizing conditions were used to make the pottery lighter in color so that it would be easier to see when placed in the reconstruction; reducing conditions would have made it gray in color and more difficult to see. Manufacturing pottery on such a small scale created many problems. Some of the small bowls, jugs, and cups were less than two millimeters in diameter and required handles. Loomweights were about half this size. In order to be sure that they would be the correct size after shrinking during firing, they had to be made by hand in batches of 50 for each one; pithoi and amphoras were made using a potter's wheel. In areas like the "Pot Hole" (east of area 33) and room 82, where many pots had to fit into a very small space (sometimes touching each other) and still be placed accurately, there had to be many to choose from in order to arrange them correctly. To any potter who makes kitchen and oven ware, the variety and diversity of the pottery from Phournou Koryphi is truly amazing.

It would seem, from published studies, that many archaeologists and historians consider the pithos and the amphora to be containers used primarily (if not exclusively) for the storage of liquids or granular foods. For example, Warren calculated the storage capacity of the pithoi and amphoras at Phournou Koryphi in liters and stated: "since the only likely contents of the vessels are oil, stored olives, wine and cereals, and wine, being unsealed, was unlikely to keep for long, we can infer quite considerable storage capacity for oil, olives and cereals."

To a potter, however, the use of such a vessel for only one purpose is a very strange concept; a pithos is simply a large, round container. Its use, like many other containers that he makes, is dependent on the needs and the imagination of the owner. These needs can change from week to week or year to year. For example, Phournou Koryphi was also a weaving community. When a piece of weaving came from the loom it had to be stored somewhere. It could not be left out in the open because of the rats and mice—a problem that Cretan farmers still face today, despite our modern means of pest control. Without such means the inhabitants of the site would have had huge problems. In order to keep the weaving safe, they could have stored it in a pithos or amphora with a stone or clay lid, as some people in the mountain villages of Crete still do today for the same reason (i.e., rats cannot eat through ceramic pots). The number of pithoi and amphoras containing cloth must, therefore, be subtracted from the calculation. If storage capacity is going to be calculated in this manner, it is necessary to know how many blankets, shirts, skirts, and pieces of cloth that have not yet been tailored (to name but a few) can be stored in a pithos or amphora.

Most of the large pots on the site would have had lids of some kind to keep out the multitude of tiny insects, which, to this day, invade anything and everything they can eat. Pithoi containing wine would have had lids that were sealed with clay and, possibly, as is still done today, the wine would have had a small quantity of olive oil poured on top (half a centimeter

- 7. Some of the cooking pots were also made life-size and used for cooking with excellent results—but this is a discussion for another time.
 - 8. Warren 1972, p. 145.
- 9. For the diverse uses of pithoi attested in the archaeological and ethnohistorical record, see Christakis 2005, pp. 45–69.



thick) so that any air rising from the hole in the base when the stopper was removed would pass up through the wine and then the oil. Using this method, the wine remained sealed and would keep longer.

Figure 3.7. Complex of rooms around rooms 27 and 28 on the eastern side of the summit. View from the west. Photo J. Atkinson

HOUSEHOLD ACTIVITIES

As detailed by Warren and others, the archaeological finds from Phournou Koryphi provide ample evidence for the day-to-day household activities of the inhabitants (e.g., grinding grain, cooking, eating, and perhaps even religious ritual). ¹⁰ The small-scale reconstruction helps us to visualize these important aspects of daily life in ways that plans and drawings cannot. Two examples will suffice here: food preparation and the production of olive oil.

FOOD PREPARATION IN KITCHENS 20 AND 35

Two kitchens, one on each side of rooms 27 and 28 (Fig. 3.7), were large and impressive when compared with the cooking facilities of other rooms on the site. Of the two, kitchen 20 was the best preserved at the time of the excavation, with most of its pots and furnishings in situ. 11 Kitchen 35

^{10.} Warren 1972, pp. 255-268.

^{11.} Warren 1972, pp. 34-36.



Figure 3.8. Reconstruction of kitchen 20. View from the northwest. Photo K. T. Glowacki

was not so well preserved, but the sherds taken from it showed that its assemblage of vessels was similar to that of kitchen 20.12 When the pots were placed in their original locations in the reconstruction of kitchen 20, the room (Fig. 3.8) was found to be amazingly well organized and efficient. To the left (west) of the oven, a small pithos on a stand had been placed out from the north wall in order to be on a level with the left hand of the person cooking in front of the oven (i.e., to the left of the man who is drinking in Fig. 3.8). This pithos may have held olive oil or water. Immediately inside the doorway to the left, a quern and grinding stone had been left on the floor so as if to be on hand for grinding flour.

OLIVE OIL PRODUCTION IN ROOM 8

Room 8 is quite well preserved on the south side, but is badly eroded in the north and west.¹³ As a result, it was only possible to reconstruct the lekane on its stand in the southeast corner, with the hole and channel running through the west wall toward room 10. In Figure 3.9, a woman pours hot water from the fire into the lekane while her partner crushes and stirs the olives within. The resultant mixture trickles into the pithos, where it will be allowed to stand until the olive oil has floated to the top. The stopper will then be removed from a hole near the base of the pithos and the unwanted water will run away down the channel. When oil appears at the hole, the stopper will be replaced.

12. Warren 1972, p. 45.

13. Warren 1972, pp. 25–27, figs. 15, 16. Warren also discusses other possibilities for this installation, including wine pressing and washing, and he considers the washing of wool or the separation of olive oil to be the most likely activities.

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Figure 3.9. Reconstruction of olive oil production in room 8. View from the northeast. Photo K. T. Glowacki

THE PEOPLE

The original intention of adding people to the reconstruction was to give an idea of the height of the rooms and the size of the settlement in relation to human beings. The model people were made from matchsticks and clay. Before they could be added, however, a decision had to be taken as to what acts they could be performing that are "timeless"—such as gossiping (Fig. 3.10), or perhaps weaving (Fig. 3.11), cooking, working in the storerooms (Fig. 3.12), or repairing a torn skirt (Fig. 3.13). There is one character, however, who is truly timeless (Fig. 3.14)—he was there in the Stone Age, Bronze Age, and all the ages since; he can be seen today and every day in the villages around Crete. On his back he carries a huge load

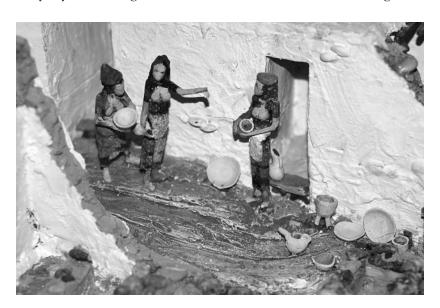


Figure 3.10. Reconstruction of daily life at Phournou Koryphi: gossiping. Photo C. Papanikolopoulos



Figure 3.11. Reconstruction of daily life at Phournou Koryphi: weaving. Photo C. Papanikolopoulos



Figure 3.12. Reconstruction of daily life at Phournou Koryphi: working in storerooms. Photo C. Papanikolopoulos



Figure 3.13. Reconstruction of daily life at Phournou Koryphi: mending a skirt. Photo C. Papanikolopoulos



Figure 3.14. Reconstruction of daily life at Phournou Koryphi: carrying sticks for firewood and other uses. Photo J. Atkinson

of sticks, some of which he unknowingly deposits from time to time on the path behind him as he walks, so that as his journey becomes longer his load becomes easier. One wonders how many sticks will be left when he reaches his destination and where he will put his unruly tangle to keep it in check—in an empty pithos perhaps?

DISCUSSION

The purpose of a reconstruction is to see things that could not be seen before in order to gain a better understanding. A reconstruction is a living thing. From the new understanding gained from studying it, changes can be made, and it can be considered anew. It already has been discovered that some small changes can be made to the Phournou Koryphi reconstruction. For example, the identification of a defensive system on top of the hill suggests that the bastion wall at the bottom of the hill needs to be higher, since otherwise there would be a weak point in the defensive system. Making this one wall higher will change the heights of other rooms, and so on.

This small-scale reconstruction of the Early Bronze Age settlement of Phournou Koryphi was donated to the people of Myrtos, and it is now housed in the local museum. It conforms to the original six criteria established at the outset of the project, and, as much as is possible, it is accurate in every detail. With only a little imagination, the modern visitor can now walk among the houses and people of this ancient—yet timeless—community.