

Aphrodite's Kephali

An Early Minoan I Defensive Site in Eastern Crete





Frontispiece. Pithos 77 (AK 9) from Aphrodite's Kephali. Photo P. Betancourt.

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by

Philip P. Betancourt

with contributions by

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Preface

The conclusions based on the evidence published in this volume challenge some of the commonly held views about Crete in the third millennium B.C. This period is often called the Prepalatial period, a nomenclature based on assumptions about its character and its role in a future history of Minoan Bronze Age politics. A number of writers have suggested that Crete was populated at this time by villages with an egalitarian social structure with little social ranking and that they mainly existed at a subsistence level economically, with social stratification developing gradually during the course of the millennium (Cherry 1983, 40; Whitelaw 1983, 333–334; Branigan 1995, 39). In response to these opinions, recent research has shown that, in fact, considerable social differentiation already existed at the beginning of the third millennium B.C., and craft specialization and trade were already well advanced (Wilson and Day 1994; Day, Wilson, and Kiriati 1997; Day and Wilson 2002).

This volume goes further, suggesting that rather than being a precursor to a socially complex state that would arise later, early polities involving several communities probably already existed in the isthmus of Ierapetra during Early Minoan I. Advances in technology had already led to craft specialization in the production of metals, ceramics, and stone tools, and in some cases entire sites specialized, which can only be an indication of decisions that were based on regional goals. Recent excavations and studies have identified long-distance trade involving the Cyclades during the Neolithic (Zachos 2007). By Early Minoan I trade was routine, and in Crete products traveled for substantial distances and included both pottery up to the size of pithoi and also the commodities transported in ceramic

vessels. Social and economic differentiation existed on a regional, not just a local level, and decisions for mutual defense could involve collaboration by groups of workers, including the building of the watchtower that is the focus of this volume.

No evidence suggests that this situation was necessarily replicated throughout Crete. On the contrary, evidence for differences throughout the island can be found in many characteristics of the material record, including aspects of culture like burial customs that are often important social markers. Like the isthmus of Ierapetra, other regions in Crete must be considered on their own evidence.

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The staff of the Institute for Aegean Prehistory (INSTAP) Study Center for East Crete in Pacheia Ammos made many contributions to this project. Director Thomas M. Brogan and Assistant to the Director Eleanor J. Huffman offered help in numerous ways. Stephania N. Chlouveraki provided important work with conservation, ably assisted by Matina Tzari. The long and patient work of Chlouveraki and Tzari in restoring the earliest Minoan pithos makes a lasting contribution to the history of this class of storage container. Doug Faulmann drew pottery profiles, and he helped sort out the minimum number of pithoi represented by the sherds from scattered locations. Eleni Nodarou conducted the petrographic analysis at the William A. McDonald Petrographic Laboratory at the INSTAP Study Center, and she offered many valuable insights into the pottery production. Chronis Papanikolopoulos provided photographic support. Beginning

in 2006, Andrew Koh, Chlouveraki, Kathy Hall, and Michel Roggenbucke established a program for sampling pottery for organic residue analysis in the William D.E. Coulson Conservation Laboratory at the Study Center in collaboration with: Archaeochemistry Research in the Eastern Mediterranean (ARCHEM); the Museum of Cretan Ethnology Research Centre in Vori, Crete; the Department of Art History, Temple University, Philadelphia; the Foundation for Research and Technology-Hellas (FORTH), Heraklion, Crete; and the University of California, Los Angeles (UCLA). This program successfully analyzed samples from Aphrodite's Kephali, with results from 100% of the samples from this site that were tested.

Study and mapping in the field was accomplished with the contributions of: Floyd W. McCoy, Professor of Geology at the University of Hawaii; Susan C. Ferrence, Director of Publications for INSTAP Academic Press; and Stephania N. Chlouveraki, Chief Conservator for the INSTAP Study Center. Graduate students from Temple University (Judith Papit, Ariel Pearce, and Heather Hicks) and the University of Pennsylvania (Andrew Insua and Miriam Clinton) provided important assistance with documentation of the cleaning by the 24th Ephorate personnel and assisted with drawing and measuring the architecture. Andrew Insua measured the topography and the architecture for mapping purposes using a Topcon Total Station.

As always, substantial work was necessary in cataloging and studying the finds and in writing reports. The work was accomplished between 2006 and 2009. Mary A. Betancourt developed the database system used for the organization of the cataloged finds, and she and her assistants cataloged the objects with advice from Heidi M.C. Dierckx on stone implements. Susan C. Ferrence and Floyd W. McCoy helped supervise some of this work in preparation for publication. David S. Reese studied the faunal remains. Heidi M.C. Dierckx studied the stone implements and drew them. Graduate students from Temple University included Lily A. Bonga, Jeannine A. Beckman, Rachael Fowler, Whitney Krukenberg, Allyson McCreary, Judith Papit, Ariel Pearce, and Sarah Peterson. Graduate students from the University of Pennsylvania included Miriam Clinton, Nurith Goshen, and Andrew Insua. Rebecca Mullin was a graduate student from University College Dublin.

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List of Abbreviations

AK	excavation accession number	kg	kilogram(s)
AKE	petrography sample number	km	kilometer(s)
cc	counterclockwise	kPa	kilopascal
cm	centimeters	kV	kilovolt
d.	diameter	LM	Late Minoan period
DCM	dichloromethane	m	meter(s)
dim.	dimension	M	maximum earthquake magnitude (Richter)
E	ethanol	Ma	million years before present
EB	Early Bronze	m asl	meters above sea level
EC	Early Cycladic period	max.	maximum
EH	Early Helladic period	min	minute(s)
EM	Early Minoan period	ml	milliliter(s)
FN	Final Neolithic period	mm	millimeter
GC-MS	gas chromatography and mass spectrometry	MM	Middle Minoan period
gm	gram(s)	M_w	movement magnitude
h.	height	μ l	microliter(s)
IGME	Institute of Geology and Mineral Exploration	μ m	micrometer(s)

NAFZ	North Anatolian Fault Zone	sp.	species
pers. comm.	personal communication	TCF	textural concentration feature
pers. obs.	personal observation	th.	thickness
pres.	preserved	wt.	weight
sec	second	yr(s)	year(s)