This pdf of your paper in *Roman Crete: New Perspectives* belongs to the publishers Oxbow Books and it is their copyright.

As author you are licenced to make up to 50 offprints from it, but beyond that you may not publish it on the World Wide Web until three years from publication (March 2019), unless the site is a limited access intranet (password protected). If you have queries about this please contact the editorial department at Oxbow Books (editorial@oxbowbooks.com).

AN OFFPRINT FROM

ROMAN CRETE

NEW PERSPECTIVES

Hardcover Edition: ISBN 978-1-78570-095-8 Digital Edition: ISBN 978-1-78570-096-5

Edited by

Jane E. Francis and Anna Kouremenos



Published in the United Kingdom in 2016 by OXBOW BOOKS
10 Hythe Bridge Street, Oxford OX1 2EW

and in the United States by
OXBOW BOOKS
1950 Lawrence Road. Havertown. PA 19083

© Oxbow Books and the individual authors 2016

Hardcover Edition: ISBN 978-1-78570-095-8 Digital Edition: ISBN 978-1-78570-096-5

A CIP record for this book is available from the British Library

Library of Congress Cataloging-in-Publication Data

Names: Francis, Jane E., 1962- editor. | Kouremenos, Anna, editor.

Title: Roman Crete: new perspectives / edited by Jane E. Francis and Anna

Kouremenos.

Description: Philadelphia: Oxbow Books, 2016. | Includes bibliographical

references and index.

Identifiers: LCCN 2015046548 (print) | LCCN 2015047776 (ebook) | ISBN

9781785700958 (hardback) | ISBN 9781785700965 (digital) | ISBN

9781785700965 (epub) | ISBN 9781785700972 (mobi) | ISBN 9781785700989 (

pdf)

Subjects: LCSH: Crete (Greece)--History--67 B.C.-826 A.D.

Romans--Greece--Crete.

Classification: LCC DF261.C8 R64 2016 (print) | LCC DF261.C8 (ebook) | DDC

939/.1809--dc23

LC record available at http://lccn.loc.gov/2015046548

All rights reserved. No part of this book may be reproduced or transmitted in any form or by any means, electronic or mechanical including photocopying, recording or by any information storage and retrieval system, without permission from the publisher in writing.

Printed in Malta by Melita Press Ltd

For a complete list of Oxbow titles, please contact:

UNITED KINGDOM

Oxbow Books

Telephone (01865) 241249, Fax (01865) 794449

Email: oxbow@oxbowbooks.com

www.oxbowbooks.com

UNITED STATES OF AMERICA

Oxbow Books

Telephone (800) 791-9354, Fax (610) 853-9146

Email: queries@casemateacademic.com www.casemateacademic.com/oxbow

Oxbow Books is part of the Casemate Group

Front cover: Fragment of a Neo-Attic calyx krater, from Eleutherna (Archaeological Museum of

Rethymnon). Photo by E. Moraitaki, by permission of N. Fiolitaki, 28 Ephorate of Byzantine Antiquities.

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

CONTENTS

Acl	knowledgements	vii
Abl	breviations	ix
1.	Foreword	1
2.	Introduction	3
3.	From Cyrene to Gortyn. Notes on the relationship between Crete and Cyrenaica under Roman domination (1st century BC–4th century AD)	11
4.	A context for Knossos: Italian Sigillata stamps and cultural identity across Crete	27
5.	The double-axe (λάβρυς) in Roman Crete and beyond: the iconography of a multi-faceted symbol	43
6.	The Roman climate in the southwest Aegean: was it really different?	59
7.	Apiculture in Roman Crete	83
8.	Roman imperial sculpture from Crete: a re-appraisal	101
9.	An Attic marble table support (τραπεζοφόρον) in relief from Roman Kissamos: preliminary remarks M. Milidakis and C. Papadaki	119
10.	The Roman theatre at Aptera: a preliminary report	127
	Roman Gortyn: from Greek polis to provincial capital	155
12.	Crete's economic transformation in the late Roman Empire S. Gallimore	175
13.	Theatres, plays, and the '3rd century crisis'	189

Contents v

14.	Pottery of the 4th–early 9th centuries AD on Crete: the current state of research and new directions	199
	A. G. Yangaki	
	Afterword: putting Crete on the Roman map	235
Ind	ex	239
Plat	tes	247

ACKNOWLEDGEMENTS

The editors would like to thank the organizers of the Roman Archaeology Conference in Frankfurt (2012), which provided the impetus for this volume. We also extend our gratitude to the enthusiastic audience members at RAC 2012 who encouraged us to publish our research. Academic support was provided by the British School at Athens, the American School of Classical Studies at Athens, the Canadian Institute in Greece, and the Scuola Archeologica Italiana di Atene. We are also grateful to our colleagues in Crete, especially Athanasia Kanta (23rd Ephorate, Herakleion), Xrysa Sofianou (24th Ephorate, Agios Nikolaos), and Anastasia Tzigounaki (25th Ephorate, Chania and Rethymnon), and also to Stavroula Markoulaki, Vanna Niniou-Kindeli, and Maria Andreadaki-Vlazaki at the Greek Ministry of Culture. The editors at Oxbow, especially Julie Gardiner and Clare Litt, provided much-needed assistance and helpful comments throughout.

The papers benefited greatly from comments by Andrew Wilson, Victoria Leitch, Justin Dombrowski, Tyler Franconi, Michael Vickers, and Sujatha Chandrasekaran. The help of Concordia University student Victoria Eke was invaluable for checking citations, general proofreading, and compiling the index, while Dario Brancato cheerfully came to our rescue with Italian translations. We would also like to acknowledge the help of the librarians at the Sackler Library in Oxford and the Blegen Library at the American School of Classical Studies at Athens, whose aid in tracking down (and sometimes purchasing) material has been invaluable.

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

ABBREVIATIONS

Abbreviations for ancient authors and texts are from The Oxford Classical Dictionary.

ABSA AE AJA AR	Annual of the British School at Athens. L'année épigraphique. American Journal of Archaeology. Archaeological Reports.	LIMC	Kahil, L. (ed.) (1981–2009) <i>Lexicon Iconographicum Mythologiae Classicae</i> . Zurich.
ASAtene	Annuario della Scuola archeologica di Atene e delle missioni italiana in	MAAR	Memoirs of the American Academy in Rome.
Atlante I	Oriente. Carandini, A. (ed.) (1981) Atlante delle forme ceramiche, I. Ceramica fine	MdI	Mitteilungen des Deutschen Archäologischen Instituts.
	romana nel Bacino mediterraneo (medio e tardo impero), Enciclopedia dell'arte antica, classica e orientale. Rome.	OC	Oxé, A. and Comfort, H. (1968) Corpus Vasorum Arretinorum: A Catalogue of the Signatures, Shapes and Chronology of Italian Sigillata.
BAR	British Archaeological Reports.		Bonn.
ВСН	Bulletin de correspondance hellénique.	OCK	Oxé, A., Comfort, H. and Kenrick, P. (2000) <i>Corpus Vasorum Arretinorum:</i>
CIL Conspectus	Corpus inscriptionum latinarum. Ettlinger, E., Hedinger, B., Hoffmann, B., Kenrick, P. M., Pucci, G.,		A Catalogue of the Signatures, Shapes and Chronology of Italian Sigillata (2nd edn). Bonn.
	Roth-Rubi, K., Schneider, G., von Schnurbein, S., Wells, C. M. and	ÖJh	Jahreshefte des Österreichischen archäologischen Instituts in Wien.
	Zabehlicky-Scheffenegger, S. (eds) (2000) Conspectus formarum terrae	OJA	Oxford Journal of Archaeology.
	sigillatae italico modo confectae. Bonn.	RCRFActa	Rei Cretariae Romanae Fautores Acta.
CP	Classical Philology.	RE	Cancik, H. and Schneider, H. (eds) (1999) <i>Der Neue Pauly. Enzyklopädie</i>
IC	Guarducci, M. (1935–1950) <i>Inscriptiones Creticae I–IV</i> . Rome.		der Antike, Band 6 (IUL-LEE). Stuttgart.
IJO	Noy, D., Panayotov, A. and Bloedhorn,		
	H. (eds) (2004) <i>Inscriptiones Judaicae Orientis I: Eastern Europe</i> . Tübingen.	SEG	Roussel, P., Salač, A., Tod, M. N. and Ziebarth, E. (1920–) <i>Supplementum epigraphicum graecum</i> . Amsterdam.
JdI	Jahrbuch des Deutschen		
TT.4	Archäologischen Instituts.	TAPA	Transactions of the American
JFA	Journal of Field Archaeology.		Philological Association.
JHS JMA	Journal of Hellenic Studies. Journal of Mediterranean Archaeology.	ZPE	Zeitschrift für Papyrologie und
JRA	Journal of Roman Archaeology.	ZI Ľ	Epigraphik.
JRS	Journal of Roman Studies.		~p.6. wp

The double axe (λάβρυς) in Roman Crete and beyond: the iconography of a multi-faceted symbol

Anna Kouremenos

The double axe in Crete, once the instrument of sacrifice ... has become the main religious symbol. (Sakellarakis 1993, 69)

The double axe would seem to be primarily a woodworking tool. (Northover and Evely 1996, 90)

With its distinctive symmetrical form, the double axe invited aesthetic elaboration and can, as no other type of metal artifact, embody proficiency in working with copper and bronze, and this must have had a continuing relevance to its symbolic significance. (Whittaker 2014, 77)

Introduction

Few scholars of antiquity have dealt with the iconography of the double axe in Roman art and architecture despite the fact that, during the Roman period, it participated in a variety of meanings, such as precision work, violence, and religion. As illustrated by the quotations above, scholars have varying opinions regarding the nature of the double axe from one period to the next. The chief aim of this paper is to trace the iconography and meaning(s) of the double axe in various media from the Roman period on Crete in order to discern what type of a symbol it was and how it functioned in various contexts. This study brings in non-Cretan material from different time periods and locations as comparanda, which will aid us in understanding its symbolic significance in the Roman period. By presenting evidence from non-Cretan contexts in addition to tracing the evolution of the double axe as a motif both within and outside the island, I aim to develop a hypothesis about its presence during the Roman period on Crete. Some of the questions to be addressed include: what were the various meanings of the double axe in antiquity? Is the presence of the labrys – the word commonly used for the double axe by ancient Greek authors - in Roman Crete a sign of the continuity of an old Cretan (Minoan) symbol or was it a more generic symbol that was used on Crete as elsewhere within the empire? To what other category of symbols does the double axe belong? Although this inquiry will uncover questions that cannot be fully answered, it will also point to hypotheses that might respond to archaeological investigation.

The Labrys in ancient literature

What is a *labrys* and why is it usually associated with Crete in modern scholarship? In order to answer this question, we need to mention briefly some literary sources that mention the double axe in antiquity and discuss the origin of the term labrys, which will provide the background for further inquiry. Homer's *Odyssey* presents the earliest literary evidence for the double axe. In Book 5.234, the nymph Calypso gives Odysseus a bronze double axe to fell trees on her island of Ogygia in order to build a boat to carry him home to Ithaca. Hesiod's *Theogony* 886 ff. describes how Athena was born from the head of Zeus: while the king of the gods was suffering from a severe headache, Hephaestus rushed to his aid by splitting open Zeus' head with a double axe, which resulted in the emergence of the fully grown Athena. In this story, which was frequently illustrated on Greek vases, we see the importance of the double axe not only as a tool but also as a divine attribute (Pl. 8). Greek sculpture and vase paintings usually depict the double axe as a tool, a weapon, or as an attribute of gods and heroes. In neither Homer's nor Hesiod's account, however, is the double axe explicitly associated with Crete. Indeed, the connection between the island and the double axe is absent even in the etymology of the word *labrys*, which is described in later literary sources.

The origin of the word *labrys* appears to have been highly debated even in antiquity. In *The Moralia*, Plutarch, writing in the late 1st century AD, attempts to answer how the *labrys* became the symbol of Zeus Labrandeus (Plutarch *Quaest. Graec.* 45, *Mor.* 301F–302A):

Why is it that the statue of the Labrandean Zeus in Caria is fashioned holding an axe, but not a scepter or a thunderbolt?

Because when Heracles had slain Hippolyte, together with her other arms he took her axe and gave it as a present to Omphale. The Lydian kings who succeeded Omphale used to carry it as a part of the sacred regalia, handing it down one to the other until it came to Candaules. He deemed it of little worth and gave it to one of his Companions to carry. But when Gyges revolted and was at war with Candaules, Arselis came from Mylasa with an army as an ally for Gyges and slew both Candaules and his Companion and brought the axe to Caria together with the other spoils. He therefore constructed a statue of Zeus and placed the axe in its hand, and called the god Labrandeus; or the Lydians call the axe labrys.

The above passage implies that the double axe, which Herakles took from Hippolyte and which was eventually passed down from generation to generation of Lydian rulers until it ended up in Caria as the symbol of Zeus Labrandeus, was of barbarian origin and was imbued with magical and protective powers. The passage also states that the word *labrys* is of Lydian origin, although the double axe is not otherwise known to have been explicitly associated with the material culture of this particular region in antiquity; Herodotus (1.171–173) also mentions a Lydian origin for the term.

Aelian, writing in the early 3rd century AD, gives a Greek meaning to the epithet Labrandeus and states that it derives from the adjective *labros*, which relates to Zeus Labrandeus' role as a weather god (Aelian *NA*, 12.30):

Tame fish which answer to a call and gladly accept food are to be found and are kept in many places, ... and at the shrine of Zeus Labrandeus in a spring of transparent water. And there the fish have golden necklaces and earrings, also of gold. The shrine of this Zeus is 70 stadia distant from the city of Mylasa. A sword is attached to the side of the statue ... and Zeus received the epithet of Labrandeus because he sent down furious ['labros' in Greek] and heavy rainstorms.

What is apparent in both passages is that the epithet Labrandeus is related to the noun *labrys*. As Evans concluded, it seems natural to interpret names of Carian sanctuaries like Labraunda in the most literal sense as the place of the sacred *labrys*, which was the Lydian (or Carian) name for the Greek $\pi \epsilon \lambda \epsilon \kappa \nu \zeta$, or double-edged axe (Evans 1901). Yet, the majority of ancient writers favored the use of the word *labrys* over the Greek word $\pi \epsilon \lambda \epsilon \kappa \nu \zeta$. But there is a further association that needs to be examined. The general scholarly consensus has been that the word labyrinth is etymologically related

to *labrys*; thus, the labyrinth is 'the place of the double axe' (Evans 1901; 1927). But, as with Homer and Hesiod, neither Plutarch nor Aelian explicitly state any Cretan connection for the word *labrys*, nor do they associate it in any way with the labyrinth; the former gives us the legend behind the double axe and emphasizes the Lydian origin of the word while the latter claims that the word is of Greek origin and is connected with Zeus Labrandeus as weather god.

Why, then, did the double axe come to be associated with Crete and to be regarded as the most sacred symbol of the Minoans? Since the discovery of the double axe at Knossos as mason's marks, on jewelry, votives, and other artefact types, various theories have been put forward to account for the importance and meaning of the *labrys* in Bronze Age Crete. While none of these theories is conclusive, they offer some background for interpreting the meaning of the *labrys* in the Roman period on Crete.

Below, I present some examples of the *labrys* in different contexts in pre-Roman Crete as well as in other areas of the Greek world in order to discern whether the iconography of the *labrys* in Roman contexts in Crete shows continuity, emulation, or a distinctive symbolic meaning.

The Labrys in Minoan-Mycenaean Crete

The double axe is one of the most prevalent symbols in art and architecture dated to the Minoan period on Crete. Its importance as a symbol is best summed up by Nilsson:

of all religious symbols and symbols that appear in the Minoan civilization, the double axe is the most conspicuous, the real sign of Minoan religion and as omnipresent as the cross in Christianity and the crescent in Islam. (Nilsson 1950, 194)

Its representation in several different contexts, from larnakes and mason's marks to pottery and miniature votives found in caves, among many others, is a testament to the pervasive appearance of the symbol all over the island (Figs 5.1 and 5.2, Pls 9 and 10). While the period that concerns us in this paper is not the Minoan, it might be useful to mention briefly some prevailing interpretations of the iconography of the double axe in the Aegean Bronze Age.

Although there are many depictions of the double axe as a symbol in its own right, some scholars have observed that the *labrys* often appears to be associated with a goddess or priestess in Minoan art (Briault 2007; Marinatos 2010; Haysom 2010). Indeed, even Plutarch's words cited above suggest that the original owner was female – the mythical Amazon queen Hippolyte. But what was the meaning of this purported 'feminine' attribute and, more importantly, how did it come to be

associated with female divinities? As Haysom states, even if the consensus view that the double axe was a religious symbol is accepted, there is still the question of what kind of religious symbol it was. Was it more like Athena's shield, or was it more like Pluto's cornucopia (Haysom 2010, 37)? For Briault, the labrys as represented in Minoan-Mycenaean iconography was a symbol that marked sacred space or an object that evoked memories of events where axes were carried, displayed or deposited (Briault 2007, 252-7). Recently, Marinatos has argued that the double axe was most likely an attribute of the Solar Goddess of the Minoans and represents the rising sun (Marinatos 2010, 129); it fits in the same 'family' of eastern Mediterranean symbols as the ankh, the lotus, and the ox head, and was one of a series of symbols that formed part of a wider Near Eastern koine. In different contexts but still retaining its symbolism as the rising sun, it might also represent a regenerative symbol akin to the Egyptian lotus (Marinatos 2010, 122). While it is difficult to envision an association between the double axe and the rising sun, and the presence of a so-called Solar Goddess in Minoan Crete cannot be defined at present, it is interesting to note Marinatos' observation, which was originally put forward by Evans in the early 20th century (Evans 1901), of the labrys' apotropaic symbolism and its inclusion in a category with other Mediterranean symbols. The double axe, however, was not limited to the Mediterranean region even as early as the Minoan period. Its presence in Neolithic and early Bronze Age Europe in farming communities such as the Vinča culture of the Balkans suggests not only obvious pre-Bronze Age origins and a wider geographical distribution but also that its original function was not as a symbol but rather as a tool (Jager 1999). The precise timing of the shift from tool to symbol is difficult to discern and falls outside the scope of this paper, but current evidence suggests that it is in the Minoan period when the double axe was imbued with symbolic meaning, and that its symbolism became even more multi-faceted in subsequent periods.

The *Labrys* in non-Cretan contexts in the Classical and Hellenistic periods

As already noted, ancient authors regarded the *labrys* as an attribute of the god of thunder and lightning. Indeed, areas other than Crete seem to have ascribed the double axe this meaning, especially when it appears as an attribute of male gods. In Caria, the *labrys* was the attribute of Zeus Labrandeus, as described by Plutarch and as depicted on coins from the region (Fig. 5.3). Coins minted during the reign of the Hecatomnid dynasty (391–326 BC) depict Zeus Labrandeus with the *labrys* and a lotus-tipped scepter, both attributes associated



Figure 5.1 Larnax from Aghia Triada, Crete, dated to the Late Minoan III period (Archaeological Museum of Herakleion). Photo by P. Miller.



Figure 5.2 Mason's marks from Minoan palace at Malia, dated to the Late Minoan I period. Photo by author.

with divine power (Head 1897; Howgego *et al.* 2005, 56; Konuk 2013, 110–12). The composition of the cult statue of Zeus Labrandeus wielding a double axe and standing inside a temple with Ionic capitals also appears on Roman imperial coins of Mylasa, the former capital of Caria, and seems to be tied to some form of religious continuity or reverence of older cults in the region during the *Pax Romana* (see e.g., Price 1984; Brody 2001).

Throughout the Classical and Hellenistic periods, the north Aegean island of Tenedos depicted the double axe on the reverse together with a Janus-like figure on the obverse of its coins (Rouse 1901, 270-2; Waites 1923; Georgoudi 2011, 51–9; Fig. 5.4). It was not only restricted to the coins of the island, however; two lead weights from Tenedos show a double axe accompanied by grapes while a bronze tablet found near the Temple of Zeus in the Altis at Olympia bears a decree of a Tenedian wrestler with two double axes (Georgoudi 2011, 58). So associated was the island with the double axe that Aristotle mentions the proverb 'Τενέδιος πέλεκυς' for a double axe associated with cruel actions (Aristotle, fr. 593). The philosopher states that the proverb arose when a king of Tenedos initiated a law whereby all adulterers would be slain with a double axe; the king's own son was found guilty of adultery and was executed according to the law. After this event, the coins of Tenedos bore the symbol of the labrys.

In Hellenistic Thrace, the double axe was an attribute of Zalmoxis, the god of thunder. It is also depicted

on coins of Thrace as the symbol of the kings of the Odrysae, who considered Zalmoxis the ancestor and protector of the royal house (Urukova 1976; Topalov 1994). On a wall painting from a tomb at Alexandrovo (Pl. 11), the double axe is used as a weapon by a male figure (Theodossiev 2005; Petrov 2007; Cohen 2010, 296), probably Zalmoxis, to kill a wild boar, as it also is in the Gnosis mosaic from Pella (Pl. 12) where a young Macedonian nobleman kills a stag with a double axe while his companion attacks it with his dagger (Petsas 1964, 2-25; Robertson 1967, 76-7; Yalouris 1982, 27). Also in Macedonia, it appears as a symbol on coins depicting a seated Zeus (Kremydi-Sicilianou 2005, 97-103; Touratsoglou 2012). Since Zeus was the mythical ancestor of the Macedonian royal family, the double axe as the god's attribute was associated with royalty; triple rows of the double axe have been discovered in the burial of the lady of Aegae as well as in sanctuaries (Kottaridi 2011; Kouremenos 2011; Fig. 5.5). The holes at the bottom of each row of the Aegae axes suggest that they likely accommodated wooden poles and may have been held



Figure 5.3 Silver tetradrachm of Mausolus of Caria, 377–353 BC. From Gorny and Mosch, Online Catalogue 199 (2011), by permission of M. Kaloshina.



Figure 5.4 Silver tetradrachm of Tenedos, 4th century BC (private collection). From Classical Numismatic Group, Inc., by permission of D. Tatro.

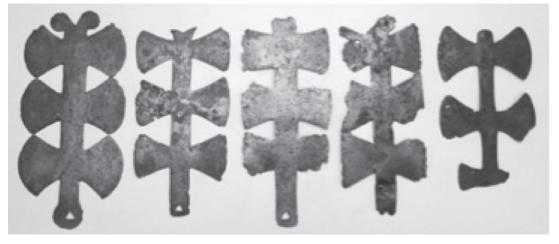


Figure 5.5 Triple rows of double axes from the burials of women at Aegae. Photo by A. Kottaridi.

as scepters by royal Macedonian women (Kottaridi 2011, 34). This type of double axe must have been limited to Macedonia, as other examples with triple rows are not known from elsewhere. If these were used as scepters, as seems likely, they are the only such examples from the Greek world and are a testament to the significance of the symbol in the life of Macedonian nobility.

The double axe in non-Cretan contexts during the Roman period

The *labrys* continued to be depicted in various media throughout the Roman period. It is during this time, in fact, that the double axe seems to have acquired a multitude of meanings, potentially leading to diverse interpretations. Like some Classical and Hellenistic rulers, Roman emperors also associated their images with the double axe on coins minted under their rule. The coins of some cities in the eastern provinces bore the images of individual emperors on the obverse and the double axe on the reverse, either as a lone symbol or as an attribute of a local divinity. Coins of the Julio-Claudian emperors minted at Hierapolis in Phrygia show the *labrys* on the reverse (Fig. 5.6), where it is carried by Apollo - the city's patron deity - on horseback. The labrys appears as the sole symbol on the obverse of a bronze coin of Hadrian from Oxyrrhynchus in Egypt (Fig. 5.7), now in a private collection. Its meaning in this context is unclear, as neither the city nor the emperor are known to have had any particular association with the double axe. It is possible that its appearance on Hadrianic coins may be a reference to the league of workmen in the city that used the double axe as their tool, thus associating the city with woodworking (H. Whitehouse, pers. comm.).

Why was the double axe not depicted on any of the coins of Cretan cities as well as those of the Cretan *Koinon* – the league of Cretan cities – during the Roman

period? This exclusion may seem odd as many cities on the island minted coins with native Cretan deities (e.g., Velchanos at Gortyn; Britomartis/Diktynna at Kydonia) or with mythological symbols associated with a particular city (Svoronos 1889; Sidiropoulos 1996; 2004; Stefanakis 2010). The obvious answer is that the *labrys* was not a symbol of any particular Cretan city as was, for example, the labyrinth at Knossos featured on the coins of the city even after it became a Roman colony. Also, coins minted in Cretan cities before the Roman period did not depict the labrys, which suggests that, in the post-Minoan period, the double axe had lost its meaning and importance as a symbol of divine power. So how then can the presence of double axes on various media in Crete be interpreted if the symbol was not associated with older Cretan symbolic meaning? In order to answer this question, we need to look outside Crete for evidence.

Roman art contains a multitude of examples featuring double axes. The labrys was the symbol of Jupiter Dolichenus, a god originally worshiped from the early Roman period in the town of Doliche in Commagene, but whose worship spread with the Roman army throughout the empire during the 2nd century AD (Collar 2013, 79–93), as an example of an altar from Vindolanda in Roman Britain bearing a depiction of the god indicates. (Fig. 5.8). While very little is known about this originally eastern deity from historical sources - the only written source that mentions Jupiter Dolichenus is Stephanus of Byzantium, who writes that the god came from Doliche, located in Commagene - his iconography bears a striking resemblance to the Hurrian sky and weather god Teshub, who was depicted wielding a double axe (Waites 1923, 29; Collar 2013, 84-5). Teshub's attributes were the thunderbolt and the axe, usually but not always, depicted as the double axe. Jupiter Dolichenus is easily identified by inscriptions found on various altars dedicated to him. The three attributes that usually appear in his iconographic



Figure 5.6 Silver sestertius of Nero from Hierapolis, Phrygia, AD 54–68 (private collection). Photo by D. Kurth.



Figure 5.7 Bronze dichalkon of Hadrian with double-axe on the reverse, from Oxyrrhynchus, Egypt, c. AD 128–130 (private collection). From Hobbyblog, by permission of E. Finn.

representation are the double axe, the thunderbolt, and the bull, all symbols of male power and virility that made him a fitting god for the Roman army.

The *labrys* was frequently depicted on mosaics in household contexts, most often in the Greek East, but also, although less frequently, in the west (see e.g., Levi 1947; Stern 1977; Campbell 1988; Dunbabin 1999; Cimok 2000). At least four houses in Antioch, dating from the 2nd to the 4th centuries AD, contain mosaics with depictions of double axes associated with geometric motifs; these are the 'House of Menander,' 'House of Served Meals,' 'House of the Evil Eye,' and the 'House of



Figure 5.8 Altar depicting Jupiter Dolichenus standing on a bull and holding a double axe, from Vindolanda, 2nd century AD. Photo by L. Spangenberg.

the Boat of Psyche.' At Palmyra, the 'House of Achilles' contains examples of a slightly different version of the double axe motif, namely the merging of the pelta – a protective symbol – with the double axe, which gives it a more elegant form (Stern 1977, 47). Stern believes that this variation in the double axe's iconography may be attributed to different 'schools' of mosaicists in Syria, with a particular school prefering to merge both motifs into one (Stern 1997, 9). Indeed, the latter version seems to have been rare in other parts of the empire, although a few examples of pelta-double axes appear on marble reliefs from other provinces.

At Zeugma, the *labrys* is depicted on a figural mosaic that has Crete as its setting (Pl. 13). The 'House of Poseidon,' dated to the late 2nd/3rd century AD, contains a mosaic floor with two panels arranged in a T-shape, indicating that the room was probably a triclinium. One of the panels illustrates a scene with Pasiphaë, Trophos, Daedalus and Icarus. The labelled figures show Daedalus and his son Icarus engaged in what appears to be woodworking (Abadie-Reynal 2002; Önal 2002; Barbet 2005; Şahin 2013). It is possible that the mosaic shows a scene from a play. In this composition, the double axe lies on the floor by Icarus' feet and is clearly meant to be seen as a woodworking tool; both Daedalus and Icarus are depicted holding worked wood, Daedalus clutching a saw and Icarus working a piece of wood with a hammer. Part of a treetrunk is depicted in front of the two figures, with the double axe to its right. It is apparent that the double axe in this composition is meant to be understood as the tool that felled the tree. The boukranion, another apotropaic symbol associated with Crete like the double axe, is shown by Pasiphaë's feet and in this context is a reference to the myth of the queen's mating with the bull. Another mosaic from a 2nd century AD house at Zeugma shows the rescue of Danae and the infant Perseus by Diktys (K. Görkay, pers. comm.). A double axe is depicted in front of a wooden chest, suggesting that Diktys may have used the double axe as a tool to open the chest.

The *labrys* often appears as an attribute of mythological figures, particularly Amazons. An example of a female figure wielding a double axe appears on a 3rd-century AD sarcophagus depicting an Amazonomachy, now in the Pio Clementino Museum, Vatican (Fig. 5.9). In this composition, the woman holds a *labrys* while tending to her horse. A pelta in the top right hand corner in conjunction with the double axe suggests that the Amazon is engaged in war. Similarly, an Amazon uses a double axe to fight off a Roman soldier in a mosaic from Antioch (Levi 1947, 46; Campbell 1988, 92); it is noteworthy that this configuration also contains two double axes that have fallen on the ground and which presumably belonged to other defeated Amazons (Fig. 5.10).



Figure 5.9 Right side panel of a sarcophagus with a composition depicting an Amazon holding a double axe, dated AD 230–250 (Rome, Pio Clementine Museum). Photo by J. Shauer.



Figure 5.10 Mosaic of Roman soldiers fighting Amazons; on the ground can be seen two double-headed axes, from Antioch, the 'House of the Amazons', 3rd century AD. From Levi 1947, pl. cxxiii.

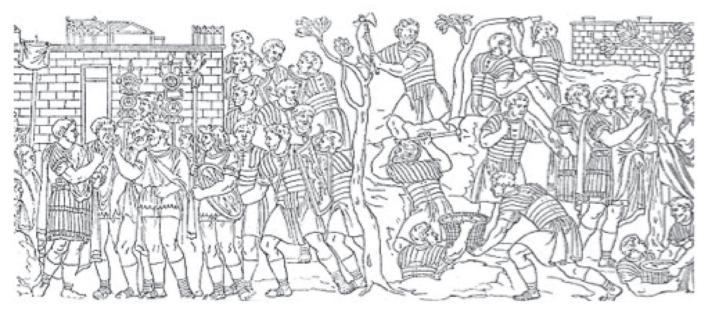


Figure 5.11 Sketch of an upper register of the Column of Trajan, Rome, showing a group scene with a soldier carrying a double axe, 2nd century AD. From http://schnucks0.free.fr/trajan.htm, by permission of O. Schneol.

Two of the top registers on Trajan's column in Rome feature the *labrys* as both a weapon and as a tool used by Roman legionaries to chop down trees and in battle with the Dacians (Jager 1999, 836; Fig. 5.11). Its presence on such a grand imperial monument is a clear indication that the Romans used the *labrys* – or *bipennis* as it was called in Latin – in war, one of the few representations of the double axe being used as a weapon by soldiers rather than by deities, mythological figures, or heroes.

There are many other depictions of the double axe from the Classical to the Roman period that suggest that the *labrys* appears either as the attribute of a deity or mythological person, as the symbol of a city, as a tool, or as a weapon. An examination of these goes beyond the scope of this paper.

The labrys in Roman Crete

I have already discussed briefly the evolution of the iconography of the *labrys* from the Minoan period onwards and its presence in both Greek and non-Greek contexts. In Roman Crete, it appears in various contexts, some of which are discussed below.

The double axe appears on a mosaic floor in the 'House of Phidias' at Kissamos in west Crete (Fig. 5.12); this part of the house is dated to the 2nd/3rd century AD based on its pottery (Markoulaki 2009, 362–3). The mosaic contains a *tabula ansata* on the far right with an inscription naming the owner of the house as Phidias (Markoulaki 2009, 363). It has a figural panel in the

center with a composition of a centaur attacking a panther. To the left of this panel is a pelta flanked by two small double axes situated on opposite ends of each other. As already noted, the pelta was a symbol of protection in Roman art, and the close proximity between it and the two small double axes in this composition suggests that both these motifs were considered in the same category of apotropaic symbols. The depiction of two double axes in a reception room raises the question of their meaning in a household context. Were they simply meant to be understood as apotropaic symbols or could they possibly signify a collective memory of an older Cretan motif? Comparisons with other mosaic floors that contain the *labrys* motif might provide the answer.

Could this symbol represent Phidias' desire to connect himself with the Cretan past? Certainly, the double axes do not seem to fit in with the rest of the composition, nor does it have any particular relation with the subjects depicted in the other mosaics of the house, most of which contain Dionysiac scenes (Markoulaki 2009, 365; Kouremenos 2013a, 158–60). What is evident, however, is that this is the only depiction of the symbol found in a Roman house on Crete (Kouremenos 2013a, 159).

A comparison with the mosaics found in non-Cretan contexts is important for understanding its presence in the house at Kissamos. The mosaic from the 'House of Phidias' preserves the last part of the artist's (or mosaicist's) signature:ΔAΦNHN EΠΟΙΕΙ (Markoulaki 2011, 363). Since no other town with the name of Daphne is known to have existed in the Greek East, it is obvious

that the Daphne in this instance is Antioch-Daphne. An artist from Antioch-Daphne also put his signature on one of the mosaics from a house in nearby Kydonia (Markoulaki 1990, 462). We know, then, that the artist who created the mosaic in the House of Phidias was not Cretan. An examination of mosaic floors from houses in Antioch offers further clues about the nature of the motif.

At Antioch, at least four mosaic floors contain double axe motifs (Levi 1947; Kondoleon 2000; Kouremenos 2013a). The 'House of the Boat of Psyches' has a mosaic floor featuring a circle inside a diamond with uneven edges inscribed inside a larger diamond. Four double axes, one on each side of the diamond, surround the composition. Perhaps the example that is closest to the pattern from the 'House of Phidias' at Kissamos is a fragment of a mosaic

floor in the 'House of the Evil Eye' (Fig. 5.13; Levi 1947, 34; Kouremenos 2013a, 156), which preserves both the geometric motif of a diamond inscribed inside a square with a rosette in the middle – which also appears on the east side of the room in the 'House of Phidias' – and two double axes flanking it. The depiction of the *labrys* on mosaic floors points to the motif's popularity in 2nd and 3rd century AD houses in Syria. Given the Antiochene origin of the artist who made the Kissamos mosaic, it is likely that he was copying a motif that the 'school of mosaicists' in Antioch had reproduced in other houses, both within and outside Syria (Fig. 5.14). Thus, the *labrys* motifs in the 'House of Phidias' at Kissamos should be understood as apotropaic symbols that formed part of the artistic repertoire of the Syrian artist who made the mosaic.

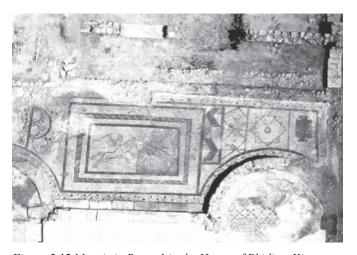


Figure 5.12 Mosaic in Room 1 in the House of Phidias, Kissamos. From Markoulaki 2009, 363, by permission of KA' Ephorate of Prehistoric and Classical Antiquities, Chania.

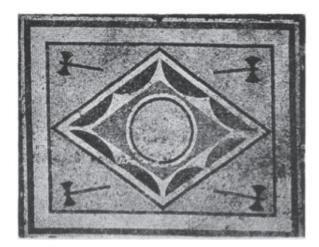


Figure 5.13 Mosaic in the 'House of the Evil Eye', Antioch, 2nd century AD. From Levi 1947, pl. cvii e.

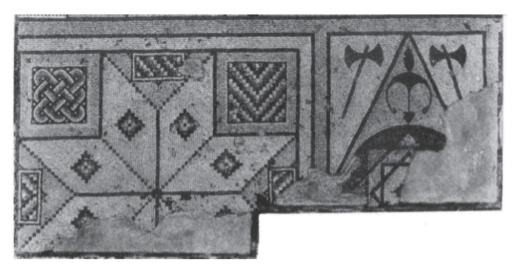


Figure 5.14 Mosaic in the 'House of the Buffet Supper', Antioch, 2nd century AD. From Levi 1947, pl. cvii a.

The *labrys* also appears on mosaics from houses at Pompeii (Blake 1930; Dunbabin 1999; Christensen 2006), indicating that the Romans in Italy also ascribed to it an analogous symbolic meaning. The mosaic in the fauces of the 'House of Pansa' shows a guard dog tied to one side of a double door. The left side of the double door

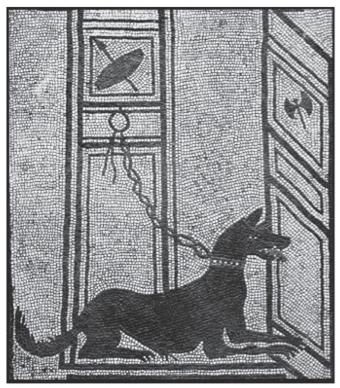


Figure 5.15 Mosaic in the fauces of the 'House of Pansa', Pompeii, 1st century AD. Photo by R. Jimenez.

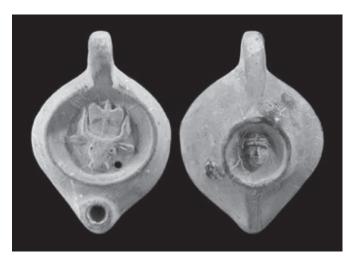


Figure 5.16 Lamp with bull and double axe with a Minoan-like(?) figure on the reverse, from Knossos, dated to the 2nd century AD (private collection). Photo by C. Moore.

depicts a spear and shield while the right side contains a double axe. It is clear from the juxtaposition of these images and the location of the mosaic at the entrance of the house that these symbols were meant for the protection of the house, its owner, and his family. The three symbols also suggest that the house was viewed as a sanctuary, a theme that was prevalent in Pompeiian houses (see e.g., Dwyer 1991; Dunbabin 1991; Bergmann 1994).

Lamps are another type of artefact on which the double axe motif was frequently depicted. A lamp from Kissamos found in an unspecified household context and dated to the 2nd century AD, is now displayed in the Archaeological Museum of Chania (A. Milona, pers. comm.). The lamp preserves an akanthos-shaped stamp on the bottom, indicating that it may have been manufactured in one of the local workshops in Crete, as lamps with the same motif have been found in both Chania and Knossos (author's observation). It depicts a portrait figure in profile with flowing hair, probably male, and holding the double axe. The juxtaposition of the male figure in profile and the double axe near his face suggests that it was meant to be interpreted as his attribute. But does the figure represent a deity or a mortal? Could he, perhaps, be Zeus (Labrandeus?) or Apollo? Or is he Daedalus holding the double axe as his tool of choice? Whoever this figure is meant to represent, it is obvious from the prominence of the double axe in the composition that the association between the *labrys* and the figure holding it would likely be understood by potential buyers of the lamp.

A lamp dated to the Roman period, of unknown provenience in Crete and now in a private collection, depicts a bull with a double axe over its head (Fig. 5.16). The underside of the lamp represents a male head with a head cover. The unknown provenience of the lamp cannot link it with a Cretan workshop, even though the legend it depicts is Cretan. Some scholars have suggested that the double axe was sacred in Minoan Crete because it was used as the tool to slay the sacred bull (Evans 1901; 1927; Nilsson 1927; Pendlebury 1939). In Pendlebury's opinion, the labrys in Minoan Crete was originally a sacrificial axe that, in the course of time, become both a cult symbol and a cult object (Pendelbury 1939, 274). To date, however, no iconographic portrayal of the double axe as a weapon to slay bulls has been found in the material culture of Minoan Crete (Marinatos 2010, 41; Whittaker 2014, 99). The lamp from Roman Crete appears to support Pendlebury's conclusion, but the question is, did the Cretans living under Roman rule attribute the same symbolic meaning to the double axe as the instrument used to slay the sacred bull or did the lamp maker simply put together three images that refer to the myth of Theseus and the Minotaur? Had the meaning of the double axe shifted significantly from the Minoan to the Roman period, whereby the Minoans attributed a religious function to it while the Romans saw it as a more multi-faceted symbol? No other lamp with these motifs has been found elsewhere in the empire, possibly indicating that it was made by a Cretan workshop specializing in figural lamps with themes from Cretan mythology.

Sapouna's extensive catalogue of lamps from the most important of Cretan sanctuaries, the cave of Zeus on Mt Ida, does not include a single example of a lamp with the double axe motif, although there are examples depicting bulls (Sapouna 1998). It does, however, appear on the body of several lamps in other parts of the empire, mainly as a symbol on the sides of the body in both otherwise plain as well as figural lamps (Figs 5.17 and 5.18). Lamps not only provided light but may have also served as good-luck charms for the house or for specific rooms within an enclosed space when symbols like the double axe were depicted on them.

Let us now look briefly at how the double axe was represented on jewelry. The *labrys* appears as a symbol on a carnelian intaglio in a single example of a group of rings from burials in the Selino province, southwest Crete, dated to the 2nd/3rd century AD. The intaglio's composition consists of one larger and one smaller double axe hovering beside the figure of a male head, perhaps a demon, which appears to stand on a bowl. The use of hovering double axes in this composition is somewhat similar to a LM II–III (1450–1350 BC) seal from Knossos that depicts a Minoan 'Mistress of Animals' with a double axe hovering above her head, a motif that also appears on Minoan gold rings (Haysom 2010, 40; Fig. 5.19).

While the example from the Selino province belongs to a different type of composition, the double axe's sacred connotation on rings and intaglios in both Minoan and Roman-period rings is unmistakable. It is unclear what meaning this composition held for the woman who owned the ring, but it is likely that the double axe in the composition might indicate the protection of progeny or even the protection of the woman's fertility from evil forces. Another carnelian ring dating to the Roman period found in a burial context, but without a secure provenience, also in the Selino province depicts a woman holding a cornucopia, a symbol of abundance. Although it is not known whether these carnelian rings date to the same time period, the apotropaic symbolism of both the cornucopia and the double axe on the ring intaglios suggests that both symbols were depicted in order to bring good luck to the wearers.

The last category of artefacts that will be discussed in this paper is funerary monuments. The first example was discovered in Tarrha in southwest Crete and is dated to the 1st–2nd century AD (Fig. 5.20). It bears the figure of a hand grasping a double axe on the left side with the fragmentary inscription of the name and patronymic of

This iconographic composition poses some important questions: why did the family of Ai[t]iros choose to depict a hand holding a *labrys* on his grave stele? What



Figure 5.17 Mold of a lamp with two double axes, 2nd or 3rd century AD (private collection). Photo by P. Williamson.



Figure 5.18 Lamp depicting a figural composition of Pan copulating with a goat, with two double axes framing the composition, 1st or 2nd century AD (private collection). Photo by P. Williamson.

significance did the double axe hold for the deceased during his lifetime? Given the prominent depiction of the double axe being held by a human in this composition, it was likely meant to be seen as a tool or a weapon in this instance. Are we to assume that Ai[t]iros was a farmer or a warrior and the double axe was his tool/weapon of choice? Or should the double axe be seen as a symbol of fortitude, a reminder of the deceased's courage during his lifetime?

The second is a sepulchral cippus, dated to the 2nd–3rd century AD, and also comes from Tarrha. It is preserved in a sketch published in *Iscriptiones Creticae* (Guarducci 1935, 308; Fig. 5.21). In this example, a small double axe is depicted under an inscription giving the name and patronymic of the deceased individual: Zώπυρος Φιλολάλου.

The free-floating double axe under the deceased's name suggests that, in this instance, the axe was most likely meant to be seen as an apotropaic symbol rather than as a tool. It seems reasonable to assume that the *labrys* was a symbol of good luck or eternal life for the deceased Zopiros. This argument finds close parallels in other parts of the Greek East, particularly in Caria where the double axe was depicted on grave stelai and marble altars (author's observation, Milas and Stratonikeia museums). At Roman Stratonikeia, an altar dedicated to Zeus Labrandeus contains a double axe above the inscription (*SEG* 55 1134), indicating that the use of the



Figure 5.19 Silicone impression of LM II–III seal, from Knossos. From Haysom 2010, 40.

labrys in both funerary and religious contexts was not limited to Crete but had other parallels, especially in the eastern provinces. (Fig. 5.22). Similarly, another marble altar from the same city was dedicated by a woman named Zopyra and contains a relief of a double axe in the center with the letters of the dedication surrounding it (Özhan 2005, 19).

It is clear from the examples discussed in this paper that the *labrys*' meaning in Roman Crete was dependent on its context and that its most prominent iconographic function was as an apotropaic symbol, which is in keeping with its depictions in other parts of the empire. Even in cases where the *labrys* appears as the attribute of a deity, as on the lamp from Kissamos, or as a tool or weapon held by a man, as on the grave stele from Tarrha, the apotropaic symbolism is not lost; its close association with a divinity



Figure 5.20 Funerary stele depicting a hand holding a double axe, from Tarrha, Crete, 1st–2nd century AD. From IC III, 307.

and a deceased individual suggests an otherworldly connotation for the double axe even in contexts where such a meaning may not have been explicitly intended.

Conclusion

This article attempted to determine if there was continuity in the meaning of the double axe – a symbol that has long been associated with Crete by archaeologists and art historians – from the Minoan to the Roman period. The rather eclectic mix of artefact categories depicting the double axe presented here probably raises more questions than it answers and conclusions are mostly speculative, but it also allows us to place the double axe in a wider category of symbols (e.g., the pelta, cornucopia, and boukranion) that prevailed in the material culture of the Roman Empire.

Ancient historians writing in the Greek and Roman periods held varying opinions about the origin of the *labrys*, both in terms of its etymology as well as its use. I have argued that while the Minoan origin of the *labrys* may have not been lost entirely by the Roman period as myths set in Minoan Crete - especially that of Theseus, who was often depicted using a double axe to slay the Minotaur in Greek and Roman art - are depicted on mosaics, lamps and other artefacts, the true meaning of the double axe as a motif was far more multi-faceted during Roman times than it was during the Bronze Age, when it was mostly a religious symbol. Many scholars of antiquity have long held the view that in Minoan Crete, the *labrys* was mostly associated with females, either goddesses or priestesses. In Roman Crete, however, the labrys does not appear to have been associated with a particular divinity or limited to only one gender and seems to have functioned as a symbol in its own right. But what kind of a symbol was it?

In the post-Minoan period, the double axe seems to have evolved into an apotropaic symbol that was not necessarily associated with specific gods. Having undergone centuries of shifts in its meaning and significance, the double axe may be described as a truly 'flexible' symbol in the Roman period, as can be seen from examples from Crete and elsewhere. The presence of the double axe in various contexts across the empire may have given it multiple meanings depending on the contexts in which it appeared, but the constant emulation of various apotropaic symbol including the labrys in material culture in different parts of the empire was probably a result of the cultural phenomenon which I call emulative acculturation (Kouremenos 2013a; forthcoming). This implies the continuous imitation of specific traits among the upper classes that were gradually transmitted to the lower classes through emulation. Symbols usually fall into such a category of imitated



Figure 5.21 Sketch of a sepulchral cippus with double axe, from Tarrha, Crete, probably 2nd–3rd century AD. From IC III, 308.



Figure 5.22 Marble altar dedicated to Zeus Labrandeus with relief of a double axe, from Stratonikeia, Caria, Roman imperial period. Photo by M. Güzel.

traits. The double axe, which was a symbol used in the material culture of several peoples before the Roman period, was one of the most likely candidate to participate in this emulative acculturation, as it not only appeared to have held multiple meanings both before and during the Roman period but was presumably also understood and replicated by a wide variety of the empire's population, both elite and, although lesser-known, non-elite. Thus, while one might argue that the *labrys* was a multi-faceted symbol long before the Roman period, it was only during the Roman period that we see it on a wider variety of artefacts and in a wider geographical space.

Acknowledgements

The idea for this paper came to me while working on my DPhil thesis about houses in Roman Crete at the Institute of Archaeology, University of Oxford. I would like to thank the Greek Ministry of Culture and the KΔ' Ephorate of Prehistoric and Classical Antiquities for providing information about the material in the Archaeological Museum of Chania and allowing me to publish images. Special thanks are also owed to Michael Vickers, Lisa Bendall, Ronald Jager, Kutalmi Görkay, and Helen Whitehouse for discussing the iconography of the double axe with me.

Bibliography

- Abadie-Reynal, C. (2002) Les maisons aux décors mosaïqués de Zeugma. Comptes rendus des séances de l'Académie des inscriptions et belles-lettres (Paris) 146, 743-71.
- Babbitt, F. C. (ed.) (1936) Plutarch, The Greek Questions. Cambridge. Barbet, A. (ed.) (2005) Zeugma II: Peintures murales romaines. Paris, Varia Anatolica 17.
- Becker, L. and Kondoleon, C. (eds) (2005) The Arts of Antioch: Art Historical and Scientific Approaches to Roman Mosaics and a Catalogue of the Worcester Art Museum Antioch Collection. Worcester.
- Bergmann, B. (1994) The Roman House as Memory Theater: The House of the Tragic Poet in Pompeii. Reconstructions by Victoria I. *Art Bulletin* 76, 225–56.
- Blake, M. E. (1930) The Pavements of the Roman Buildings of the Republic and early Empire. *Memoirs of the American Academy* in Rome 8, 7–159.
- Briault, C. (2007) High Fidelity or Chinese Whispers? Cult Symbols and Ritual Transmission in the Bronze Age Aegean. *JMA* 20, 239–65.
- Brody, L. R. (2001) The Cult of Aphrodite at Aphrodisias in Caria. Kernos 14, 93–109.
- Campbell, S. (1988) The Mosaics of Antioch. Toronto, Subsidia mediaevalia 15.
- Chaniotis, A., Corsten, T., Stroud, R. S. and Tybout, R. A. (2015) Supplementum Epigraphicum Graecum. Brill Online.
- Christensen, A. M. (2006) From Palaces to Pompeii: The Architectural and Social Context of Hellenistic Floor Mosaics in the House of the Faun. Unpublished dissertation, Florida State University.

- Cimok, F. (2000) Antioch Mosaics. Istanbul.
- Cohen, A. (2010) Art in the Era of Alexander the Great: Paradigms of Manhood and Their Cultural Traditions. Cambridge.
- Collar, A. C. F. (2013) Religious Networks in the Roman Empire: The Spread of New Ideas. Cambridge.
- Dunbabin, K. M. D. (1991) Triclinium and Stibadium. In W. J. Slater (ed.) Dining in a Classical Context, 124–48. Ann Arbor.
- Dunbabin, K. M. D. (1999) Mosaics of the Greek and Roman World. Cambridge.
- Dwyer, E. (1991) The Pompeian Atrium House in Theory and Practice. In E. Gazda (ed.) Roman Art in the Private Sphere: New Perspectives on the Architecture and Decor of the Domus Villa, and Insula, 25–48. Ann Arbor.
- Evans, A. (1901) The Tree and Pillar Cult and its Mediterranean Relations. *JHS* 21, 99–204.
- Evans, A. (1921–1935) The Palace of Minos at Knossos 1–5. London.Fri, M. K. (2007) The Double Axe in Minoan Crete: A Functional Analysis of Production and Use. Stockholm.
- Georgoudi, S. (2011) Sacrificing to Dionysus: Regular and Particular Rituals. In R. Schlesier (ed.) *A Different God? Dionysus and Ancient Polytheism*. Berlin.
- Guarducci, M. (1935) Inscriptiones Creticae opera et consilio Friderici Halbherr collectae. Rome.
- Haysom, M. (2010) The Double-Axe: A Contextual Approach to the Understanding of a Cretan Symbol in the Neopalatial Period. OJA 29, 35–55.
- Head, B. V. (1897) Catalogue of the Greek Coins of Caria, Cos, Rhodes, &c. London.
- Hodge, T. (1985) The *Labrys*: Why Was the Double Axe Double? *AJA* 89, 307–8.
- Howgego, C., Heuchert, V. and Burnett, A. (eds) (2005) *Coinage and Identity in the Roman Provinces*. Oxford.
- Jager, R. (1999) Tool and Symbol: The Success of the Double-Bitted Axe in North America. *Technology and Culture* 40, 833–60.
- Kondoleon, C. (2000) Antioch: The Lost Ancient City. Princeton.
- Konuk, K. (2013). Coinage and Identities Under the Hekatomnids. In O. Henry (ed.) 4th Century Karia: Defining a Karian Identity Under the Hekatomnids. Istanbul, Varia Anatolica 28.
- Kottaridi, A. (2011) From Herakles to Alexander the Great: Treasures from the Royal Capital of Macedon, an Hellenic Kingdom in the Age of Democracy. Oxford.
- Kouremenos, A. (2011) The Macedonians Conquer Oxford: Insights from the Exhibit 'Heracles to Alexander the Great'. Archaeologia Online
- Kouremenos, A. (2013a) Houses and Identity in Roman Knossos and Kissamos, Crete: A Study in Emulative Acculturation. Unpublished DPhil thesis, University of Oxford.
- Kouremenos, A. (2013b) A Tale of Two Cretan Cities: The Building of Roman Kissamos and the Persistence of Polyrrhenia in the Wake of Shifting Identities. In B. Alroth and S. Schaffer (eds) *Attitudes toward the Past in Antiquity: Creating Identities?*, 129–39. Stockholm.
- Kouremenos, A. (forthcoming) Cultural Identity and the Process of Emulative Acculturation: The View from the Domestic Realm in Roman Crete. *ABSA*.
- Kremydi-Sicilianou, S. (2005) 'Belonging' to Rome, 'Remaining'
 Greek: Coinage and Identity in Roman Macedonia. In C. Howgego,
 V. Heuchert and A. Burnett (eds) *Coinage and Identity in the Roman Provinces*, 95–106. Oxford.
- Levi, D. (1947) Antioch Mosaic Pavements 2. Princeton.

- Lydakis, S. (2004) Ancient Greek Painting and Its Echoes in Later Art. Los Angeles.
- Markoulaki, S. (1990) Ψηφιδωτά Οικίας Διονύσου στο Μουσείο Χανίων. In N. B. Tomadakis and I. Tzedakis (eds) Πεπραγμένα του ΣΤ΄ Διεθνούς Κρητολογικού Συνεδρίου (Χανιά, 24–30 Αυγούστου 1986) A1, 449–63. Chania.
- Markoulaki, S. (2009) 'Αριστοκρατικές' αστικές επαύλεις στην ελληνορωμαϊκή Κίσαμο. In C. Loukos, N. Xifaras and N. Pateraki (eds) Ubi Dubium Ibi Libertas, 337–80. Rethymnon.
- Markoulaki, S. (2011) Mosaïques romaines de Crète. Dossiers d'Archéologie 346, 54–9.
- Marinatos, N. (1993) Minoan Religion. Columbia.
- Marinatos, N. (2010) Minoan Kingship and the Solar Goddess: A Near Eastern Koine. Urbana.
- Nilsson, M. P. (1927) The Minoan-Mycenaean Religion and its Survival in Greek Religion. Oxford.
- Northover, P. and Evely, R. D. G (1996) Towards an Appreciation of Minoan Metallurgical Techniques. ABSA 90, 83–105.
- Önal, M. (2002) Mosaics of Zeugma. Istanbul.
- Özhan, T. (2005) New Inscriptions from the Museum Depot at Stratonikeia. *Epigraphica Anatolica* 38, 15–9.
- Pendelbury, J. (1939) *The Archaeology of Crete: An Introduction*. London.
- Petrov, I. (2007) The Thracian Tomb in Alexandrovo. Haskovo.
- Petsas, P. M. (1964) Ten Years at Pella. Archaeology 17, 74-84.
- Price, S. R. F. (1984) Ritual and Power: The Roman Imperial Cult in Asia Minor. Cambridge.
- Robertson, M. (1967) Greek Mosaics: A Postscript. *JHS* 87, 133–6. Rouse, W. H. D. (1901) The Double-Axe and the Labyrinth. *JHS* 21, 268–74
- Şahin, M. (2013) Pasiphae-Daidalos Mozaiği Üzerine Yeni Düşünceler/ New Assessment on the Mosaic of PASIPHAE. *Journal of Mosaic Research* 6, 33–44.
- Sakellarakis, Y. (1993) Heraklion Museum: Illustrated Guide. Athens.Sapouna, P. (1998) Die Bildlampen römischer Zeit aus der Idäischen Zeusgrotte auf Kreta. Oxford, BAR S696.

- Scholfield, A. F. (ed.) (1958–1959) *Aelian, On Animals.* Cambridge. Sidiropoulos, K. (2000) The Hoards of Roman Crete: A Preliminary Approach. In N. Panagiotakis and Th. Detorakis (eds) Πεπραγμένα του Η΄ Διεθνούς Κρητολογικού Συνεδρίου (Ηράκλειο, 9–14 Σεπτεμβρίου 1996) A3, 287–96. Herakleion.
- Sidiropoulos, K. (2004) The Numismatic History of Roman and Protobyzantine Crete: Testimonia et desiderata. In M. Livadiotti and I. Simiakaki (eds) (2004) *Creta Romana e Protobizantina*. *Atti del Congresso Internazionale (Iraklion, 23–30 settembre 2000) I–III*, 193–223. Padua.
- Sporn, K. (2012) Römische Grabreliefs auf Kreta. Alte Traditionen und neue Wege. In T. Stephanidou-Tiveriou, P. Karanastasi and D. Damaskos (eds) Κλασική παράδοση και νεωτερικά στοιγεία στην πλαστική της ρωμαϊκής Ελλάδας. Πρακτικά διευνούς συνεδρίου Θεσσαλονίκη, 7–9 Μαϊου 2009, 451–66. Thessaloniki.
- Stern, H. (1977) Les Mosaïques des Maisons D'Achille et de Cassiopée a Palmyre. Paris.
- Sweetman, R. (2013) *The Mosaics of Roman Crete: Art, Archaeology, and Social Change*. Cambridge.
- Theodossiev, N. (2005) The Tholos Tomb at Alexandrovo: Thracian Funerary Paintings in a Broader Context. Sophia.
- Topalov, S. (1994) The Odrysian Kingdom from the late 5th to the mid-4th c. BC: Contributions to the Study of its Coinage and History. Haskovo.
- Touratsoglou, I. (2012) Coin Production and Numismatic Circulation in the Macedonian Kingdom during the Hellenistic Period. In Drougou, S. and I. Touratsoglou (eds) Θέματα της ελληνιστικής κεραμικής στην αρχαία Μακεδονία. Athens.
- Waites, M. C. (1923) The Deities of the Sacred Axe. AJA 27, 25–56.
 Weber, C. and McBride, A. (2001) The Thracians, 700 BC–AD 46.
 Oxford.
- Whittaker, H. (2014) Religion and Society in Middle Bronze Age Greece. Cambridge.
- Yalouris, N. (1982) Painting in the Age of Alexander the Great and the Successors. *Studies in the History of Art* 10, 263–8.