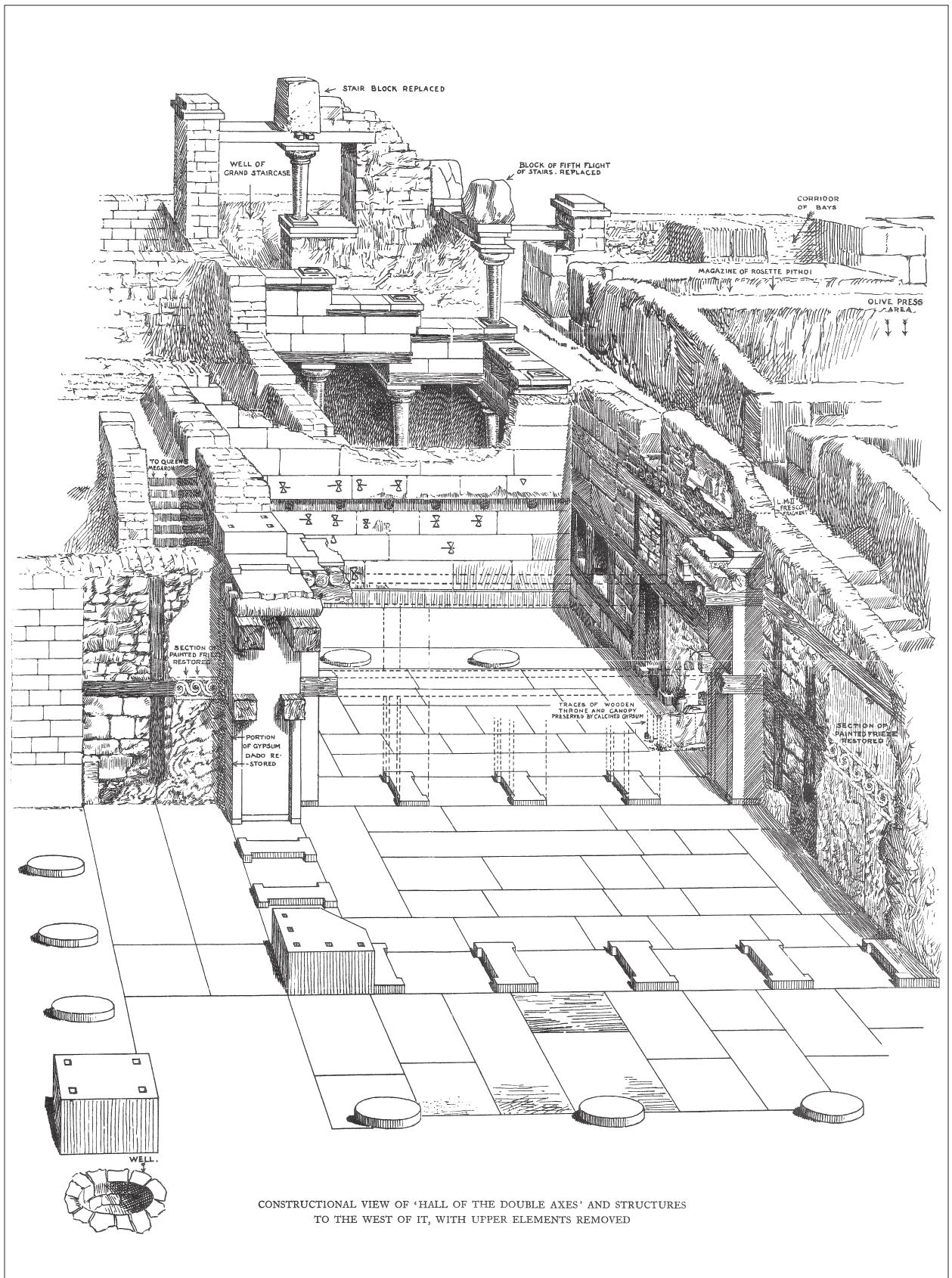


Elite Minoan Architecture

Its Development at Knossos, Phaistos, and Malia





Frontispiece. Knossos palace, Residential Quarters, looking west in the Hall of the Double Axes. Evans 1921-1935, III, plan G.

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by

Joseph W. Shaw



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*Dedicated to the pioneers
in Minoan archaeology*

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Introduction and Acknowledgments

When I wrote *Minoan Architecture: Materials and Techniques* (hereafter *MA:MAT*) in the late 1960s,¹ I had only five, fortunately rich, years of fieldwork in Crete, chiefly at the Kato Zakros excavations under the direction of Nicholas Platon. Although I had visited many sites and met many of the excavators, that first edition of *MA:MAT* was more a simple description of the basic ways and means of construction used by Minoan architects than an attempt to reveal the chronological relationships, differences, or similarities in construction within and between sites.

Years of teaching at the University of Toronto and, in particular, the process of excavating and publishing the site of Kommos from 1976 to 2011 exposed me to many aspects of the challenge of trying to interrelate sites and their surrounding areas during the Minoan floruit. These experiences aided the long process of revising *MA:MAT* after 2006, and it was published as a monograph (rather than a very long article) in 2009.² The book was brought up to date, often with the help of others, and a new chapter was added that deals with a few aspects of development, the work force for building, and the appearance of the Minoan architectural style abroad. In its new form I hoped it was an improvement.

That second edition also set the scene for this book, the aims of which differ substantially from its predecessor. Specifically, my goal here is to trace the development of elite Minoan architectural forms that arose during the late Protopalatial and early Neopalatial periods—Middle Minoan (MM) II and MM III—which come before and after, respectively, a destructive event. The event most likely was an earthquake, or a series of earthquakes, that occurred toward the end of MM II. Any attempt to study architectural developments chronologically automatically encounters problems because our dating is usually only an estimate based on incomplete evidence. With architecture, transitional

periods such as Early Minoan (EM) III–MM I, when the Minoan palaces were in the process of formation, or MM III, when Neopalatial architectural forms were being introduced, are of particular importance. Another, and perhaps inevitable, risk is that a sequence established on a single site may be upended due to reinterpretation by succeeding excavators, as happened recently in the cases of the Kato Zakros, Malia, and Phaistos palaces, which were assigned later dates.³

Especially helpful to my reassessment have been recent studies of old sites and discoveries at new sites. In the process of writing about them, it became clear to me that the best way to study the development of Minoan elite architectural forms was to concentrate on the older, larger sites of Knossos, Malia, and Phaistos in Central Crete, where those very forms seem to have originated. At the same time, I have attempted to refer when appropriate to other sites near Knossos (Archanes and Galatas), those not far from Malia (Vasiliki, Myrtos Phournou Koriphi, and Myrtos Pyrgos), or those near Phaistos in the Mesara (Hagia Triada and Kommos), as well as those in East Crete (Kato Zakros, Palaikastro, and Petras).⁴

In the present work I suggest more details about the circumstances that led to the creation of the new forms. Why, for instance, were mortised column bases or stone pillars not used more often, or what led to the development of more efficient roofing and ceiling structures? Why were some pier and pillar forms preferred above others? From another point of view, why did probable earlier forms (e.g., the pier-and-door partition with wooden base) coexist with the more developed jamb bases of stone on the site of Malia?

In the process of my research I have been helped by the scholarship of many colleagues, including the work of John McEnroe in his book *The Architecture of Minoan Crete: Constructing Identity in the Aegean Bronze Age*.⁵ Its chronological scope is broader than what I cover in this book, and it explores many aspects of Minoan society and architecture not investigated herein. The present monograph, as well as my earlier work concerning materials and techniques (*MA:MAT*), might be considered companion volumes that inform McEnroe's broader treatment.

Naturally, I am indebted to a number of other researchers. Regarding Knossos, an epicenter of development and change, Colin Macdonald and Peter Warren helped me navigate through parts of that labyrinthine site they know so well, while Vasso Fotou furnished copies of drawings by Theodore Fyfe and Christian Doll, now in the Ashmolean Museum, which helped me to learn more about the work of Arthur Evans's chief architects at Knossos. For Malia, a source of much Minoan architectural history, especially of MM I–II date, architect Martin Schmid (French School of Athens) answered my sometimes tedious inquiries. The late Olivier Pelon, whose reinvestigations and detailed publications revealed so much about the first and second palaces at Malia, helped as well. In the cases of Phaistos and Hagia Triada, the late Vincenzo La Rosa aided me through the maze of development and conflicting opinion, especially with respect to chronology. Luca Girella helped as well. Toronto artist Giuliana Bianco made many of the new drawings for the book, and I am thankful for her talent.

For assistance with the investigation into the nature of wood and its burning characteristics in Chapter 3, I am indebted to many colleagues. First, I thank Regis Miller and Robert H. White, both of the Forest Products Research Laboratory in Madison, Wisconsin, who provided me with Figure 3.21 and references to numerous publications. Furthermore, I am also indebted to André Denton, a firefighter of the Toronto Fire Department, who brought me into contact with Clifford G. Miller, Fire Investigator in the Office of the Fire Marshall, Midhurst, Ontario. Kathy Hall, conservator in the Coulson Conservation Laboratory at the Institute for Aegean Prehistory Study Center for East Crete (INSTAP-SCEC) in Pacheia Ammos, helped in preliminary investigations, as did George Poulos, an engineer

who explored some of the issues involved. Amy Miller of the University of Toronto contributed as well. For her thoughts about the interaction of burning wood and gypsum used in architecture, I am also indebted to Stephania Chlouveraki of the Coulson Conservation Laboratory, who is studying whether the gypsum actually cooled areas where it was used to sheath the walls.

Any errors and oversights that remain are mine alone.

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Joseph W. Shaw
Pitsidia, Crete
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Introduction and Acknowledgments Endnotes

1. Shaw 1971.
2. Shaw 2009b.
3. According to the discoverer of the palace of Kato Zakros, it dated to early LM I (Platon 1971b, 238, 325), but the palace was recently redated to LM IB (Platon 2002, 151–155; 2010, 516). The date of the Malia palace was lowered from MM IIIB to LM IA (Pelon 2006; Van de Moortel and Darcque 2006).
4. Pernier and Banti (1947, 7) thought that the second Phaistos palace should date to MM III, but its present excavator has suggested a date of LM IB (La Rosa 2002).
5. Architectural developments in western Crete, at Chania for instance, may remain little known until a palace is discovered (cf. Andreadaki-Vlasaki 2002).
5. McEnroe 2010.

List of Abbreviations

AM	Ashmolean Museum, Knossos Archive	LC	Late Cycladic
cm	centimeters(s)	LM	Late Minoan
DB	Duncan Mackenzie daybook	LN	Late Neolithic
EM	Early Minoan	m	meter(s)
esp.	especially	<i>MA:MAT</i>	<i>Minoan Architecture: Materials and Techniques</i> (Shaw 1971)
FN	Final Neolithic	MM	Middle Minoan
INSTAP-SCEC	Institute for Aegean Prehistory Study Center for East Crete	pers. comm.	personal communication
km	kilometer(s)		

