JAMES WALTER GRAHAM

The Palaces of Crete

PRINCETON LEGACY LIBRARY

THE PALACES OF CRETE

THE PALACES OF CRETE

BY

J. Walter Graham

REVISED EDITION

PRINCETON, NEW JERSEY

PRINCETON

UNIVERSITY PRESS

Published by Princeton University Press, 41 William Street,
Princeton, New Jersey 08540

In the United Kingdom: Princeton University Press,
Guildford, Surrey

First Princeton Paperback printing, with revisions, 1987

LCC 85-43376

ISBN 0-691-03585-7 ISBN 0-691-00216-9 (pbk.)

Clothbound editions of Princeton University Press books are
printed on acid-free paper, and binding materials are chosen for
strength and durability. Paperbacks, while satisfactory for personal
collections, are not usually suitable for library rebinding

Printed in the United States of America by
Princeton University Press, Princeton, New Jersey

Princeton Legacy Library edition 2017
Paperback ISBN: 978-0-691-60794-8
Hardcover ISBN: 978-0-691-62939-1

PREFACE

THE STORY OF Minoan Crete is as new as the twentieth century. Much of importance doubtless remains to be discovered, and much that archaeologists have unearthed they have as yet failed to publish fully in scientific reports. It is not surprising therefore that students of Minoan architecture have hesitated to attempt to present a comprehensive account of the dwellings of the Bronze Age Cretans.

Yet the attempt cannot be postponed indefinitely. And surely the efforts of two generations of such outstanding scholars as Evans, Pernier, Hazzidakis, Chapouthier, Mrs. Hawes, and their successors, should make it possible, by a careful comparison of similar features wherever they occur, to determine with considerable clarity what is truly typical in Minoan architecture. Likewise by combining every clue which the large number of excavated ruins now makes available, we may endeavor to go a little further in reconstructing in imagination even those important parts of the palaces of which there exist little or no actual remains; but we must constantly remember that for the stability even of "castles in the air," firm foundations are an essential requirement.

In this volume, which it is hoped will prove of interest to the layman and prospective visitor to Crete, as well as to the scholar, footnotes and other scholarly paraphernalia have been kept to a minimum. This has been facilitated by publishing the more complex problems in a series of fully detailed and documented discussions in the *American Journal of Archaeology* (which I have been permitted to draw upon freely) between 1956 and 1961 (see Bibliography), and to these the specialist reader is referred for further information.

The viewpoint of the study is architectural. The first chapter is intended as an introduction for the general reader, and whatever the individual specialist may think of the views of the chronology and history of the Minoan civilization there outlined (a very controversial subject at the moment), these have very little bearing on the conclusions reached in the following chapters. It is on the form of the houses and palaces presented in their final, pre-destruction, phase that I have concentrated; we are not, I think, ready at present to attempt to trace the evolution of Minoan architecture and to relate it closely to the political or social history of the period.[1] Nor are we yet in a position, I believe, to assess the influence of foreign architectures on the development of the Cretan palace, in spite of the confident assertions recently made by several distinguished archaeologists.

With but one or two exceptions all the photographs reproduced in this volume were taken by the author during visits to the island in 1955 and 1959. These trips were made possible by grants from the American Philosophical Society and the University of Toronto, together with a senior fellowship awarded by the Canada Council; to these institutions I express my sincere thanks.

The many individuals to whom I am grateful for assistance in various ways include Professors John L. Caskey and Henry Robinson, the former and the present director of the American School of Classical Studies at Athens, Eugene Vanderpool of the same institution, Nikolaos Platon, the ephor of Cretan Antiquities, and Stylianos Alexiou, now the ephor for Western Crete; and many others connected with the Cretan Antiquities Service, especially Emmanuelis Phigetakis of Siteia, Alexandros Venetikos at Phaistos, Manolis Katsoulis at Mallia, and Eleutherios Synadinakis at Arkhanes. Officials of the British, French, and Italian Schools have also been most helpful, particularly Misses Luisa Banti and Carla Gerra, and Messrs. Hood, Piet de Jong,

[1] Ludwika Press has shown what can be done along this line in two articles cited under his name in the Bibliography.

Levi, Courbin, Daux, Demargne, and Dessenne; and I am grateful for the permission to photograph and to measure freely at the various sites controlled by these Schools, and to draw on their published plans and illustrations for publication. My indebtedness for particular figures is listed at the end of the book, but I am especially glad to be able to reproduce, I believe for the first time, though unfortunately not in the original colors, two of the excellent restorations recently done by Piet de Jong in cooperation with Platon, and now exhibited in the Herakleion Museum (Figs. 44, 45). I am also greatly indebted to the interest of Prof. Hugo-Brunt of the Division of Town-Planning in the University of Toronto, which led him to make for me the axonometric restoration of the Palace of Phaistos, Fig. 55. Miss Frances Brittain, of the staff of the Royal Ontario Museum, has taken great pains in doing the final versions of three of the restored drawings: the perspective of the Palace of Mallia (Fig. 58), that of House Da at Mallia (Fig. 21), and the west entrance of the Palace of Phaistos (Fig. 48). I am likewise grateful to my wife, my daughter Margaret, and my son Robertson for their assistance during the six pleasant weeks we toured the far corners of Crete in our "Volvo" station-wagon in the spring of 1959, and especially to my wife for her criticisms and helpfulness at all stages of my work. The Princeton University Press and particularly Miss Harriet Anderson have always been most encouraging, and Mrs. E. B. Smith, through whose capable hands have passed first the *AJA* articles, and afterwards, as copy editor, the text of this book, has suggested many improvements in the style. To include all these in my thanks is not to incriminate them for the shortcomings that remain.

Prof. Spyridon Marinatos' recent book, *Crete and Mycenae*, with its magnificent plates by Prof. Max Hirmer, only became available to me in the last stages of my work. Most of the translations from Homer are from Lang, Leaf, and Myers' *Iliad*, and Butcher and Lang's *Odyssey*; a few (so marked) are from Rieu's translation in the Pelican Series.

L. R. Palmer's *Mycenaeans and Minoans*, so important for the history and chronology of the Late Bronze Age, appeared when my book was already in proof (Nov. 1961), and I have made no changes in the text of Chapter I. His views, which are based on first-hand knowledge only in the philological field (though he has been careful to consult archaeological authority), do not alter my conviction (1) that there is no significant relationship between the supposedly Luvian palace at Beycesultan and the Minoan palaces, and (2) that architecturally the Palace of Minos remained essentially Minoan (not Mycenaean) down to its last days. Whether there is any valid evidence for the presence of Greeks at Knossos in the half century before 1400—an idea largely (but not wholly) based on the assumption that the Linear B tablets found there were LM II—should be carefully reconsidered (see Chapter I, note 16); I agree with Prof. Palmer that historically it would be much simpler to suppose that the Greeks first invaded Crete about 1400 B.C.

For reasons largely of economy, references within the book are made by chapter and section rather than by page; more exact references can usually be found by consulting the full index. Except for a few well-Anglicized forms like Athens and Mycenae, Greek names have been transliterated directly; the *delta* of modern place-names has, however, been represented by "dh" (pronounced like "th" in "there").

It should be noted, especially by those who use the book at the sites, that detailed descriptions of special rooms or architectural features (such as the "Grand Staircase" at Knossos) may appear in chapters other than those presenting the general description of the building (Chs. II, III). Such descriptions can be located through the Index.

J.W.G.

University of Toronto

ADDENDUM TO THE PREFACE

WHILE the original edition of *The Palaces of Crete* was still in the press, a new palace was discovered by the then Director of Cretan Antiquities, Nikolaos Platon, at the extreme east end of the island near a tiny hamlet called Kato Zakro, in an area considered most unlikely for a palace in view of the very limited amount of arable land in that part of the island (below, p. 4).

The excavations, conducted with great care and skill, are still in progress, and apparently a considerable area of the palace remains to be uncovered. The palace was destroyed, according to Platon (*Ancient Crete*, p. 167), about 1450 B.C. as a result of the cataclysmic eruption of Thera (below, p. 11); and the destruction evidently came so rapidly that the inhabitants abandoned almost everything in their haste to escape, and never returned to reclaim their lost possessions. Platon has consequently discovered vast amounts of stone and clay vessels as well as many other objects of fine quality in various parts of the ruins, and these often provide valuable clues as to the original function of the rooms in which they were found. Some of the finest of these treasures have been put on display by Alexiou in one of the galleries of the great museum at Herakleion, and photos in color and in black and white have now been published in Platon's recent book, *Crete*, and in an even more recent volume, *Ancient Crete*, to which Platon has contributed a valuable chapter about Kato Zakro (see bibliography, p. 250, under Alexiou).

From the standpoint of the present volume it is the architecture of the new palace that offers the most interest, particularly because it affords an opportunity to check some of the theories put forward in the original edition of this book on the basis of the evidence then available at Knossos, Phaistos, Mallia, and Gournia.

Until Platon has finished the excavation and publication of the palace at Kato Zakro, any description must be very incomplete and entirely provisional. But certain features are already clear, as its excavator has pointed out. In size, the new palace,

when fully excavated, will probably be comparable to the palaces at Phaistos and Mallia (*Anc. Crete*, p. 164). The general layout would also appear to be very similar, for it is built around the four sides of a large oblong central court whose long axis lies a little more northeast to southwest than the fairly strictly north-south oriented courts of the other palaces. Similar also is the concentration of the main public rooms in the large block of rooms to the west (or southwest) of the court, but different is their location on the ground-floor level, just off the court, rather than in the Piano Nobile. This promises to be a very useful point of difference for it means that these important public halls will be, in comparison with the vanished halls of the Piano Nobile of the other palaces, well preserved both in form and in contents. Whether there was any important series of rooms on the upper storey to the west of the court at Zakro seems at present uncertain; we can only await Platon's further investigations.

One of these ground-floor rooms at Zakro (XXIX) at the southwest corner of the court, Platon has identified, on the strength of finding in it a number of wine jars and jugs, as a dining-room (*Anc. Crete*, p. 166 and plan p. 165). But the real Banquet Hall seems to have been situated, just as at Phaistos and Mallia, in the storey above a large ground-floor room (XXXII) at the northwest corner of the central court. The identification is suggested by the resemblance of XXXII to the similarly situated ground-floor rooms at Phaistos and Mallia in size and shape and in the rough bases which indicate the presence of two rows of (wooden?) pillars, three in each row, directly above which in the upper storey the presence of two rows of three columns each may fairly be postulated. The similarity with Mallia is especially close because, in each instance, access to the Banquet Hall was gained by way of a two-flight stairway leading up from the rear of a portico on the north side of the central court. But it is the nature of the contents of room XXXII and of the small rooms under and around the stairway that clinches the identification. In one corner of XXXII was found "an enor-

mous cooking-pot still standing in the ashes of the fireplace," while "two small adjoining rooms were full of cooking-pots and kitchen utensils" (*Anc. Crete*, pp. 166f).

Even more recently, the publication of the palace at Pylos on the Greek mainland, destroyed about 1200 B.C., has permitted the identification of a remarkably similar Banquet Hall. Its resemblance in plan to the one at Mallia is particularly close, while the discovery of masses of crockery and miscellaneous pieces of cooking apparatus in the adjacent rooms parallels the evidence of Kato Zakro. This new evidence has led me slightly to modify the suggested plan of the Banquet Halls in the second storey at Phaistos and Mallia, as explained in *AJA* 71 (1967), pp. 353-360.

Another new suggestion put forward in the original edition of *The Palaces of Crete* that has been confirmed by the evidence of the new palace, is the use of a foot as the unit of linear measurement, a foot with the approximate value of 30.36 cm. (below, pp. 222-229) and possibly divided into twelve parts (*Second International Cretological Conference* 1, pp. 157-165). At Phaistos and Mallia the central courts were both interpreted as having been laid out to be 170 Minoan feet long by 80 feet wide, but, especially in the former, there were slight uncertainties about these measurements, and the number 170 may also have seemed a somewhat odd choice. But about the Kato Zakro central court there can be no doubt whatever since it can be closely measured between well-preserved wall faces. The east to west dimension varies, according to my measurements (which Platon kindly allowed me to make), from 12.03 m. near the south end to 12.15 m. at the north end. Forty Minoan feet would be 12.14 m. The north to south length, also on my own measurement, is approximately 30.30 m.; 30.36 m. would be the theoretical value for 100 Minoan feet. Surely then the determination can no longer be in doubt and the result is of very considerable significance for our understanding of the way in which the palaces were planned (below, pp. 222-229). So long as there existed any reasonable doubt

regarding the unit of measurement used by the Minoan architects, my theories of palace-planning in terms of round numbers of feet could not fail to appear somewhat problematical; the new evidence puts the theory on a far sounder footing. It will be difficult, in the future, to maintain that the palaces of Crete were haphazard labyrinths; in fact such a view will run counter to the clear evidence of the ruins themselves.

In a recent article the present director of Cretan antiquities, Stylianos Alexiou (*Kret. Chron.* 17, 1963, pp. 339-351) identifies certain tall vertical architectural members seen on several stone vases, mural paintings, etc., and what I spoke of as an "odd form of capital" (below, p. 196), as masts or banner poles held in place against the walls by rectangular cleats or "tie-blocks" as I have suggested terming them in English. Alexiou's interpretation has much to recommend it and I have therefore suggested in an unpublished article a modification of my restoration of the north end of the central court at Phaistos (Fig. 50). Instead of two ranges of half columns on either side of the central doorway I would now propose to restore two banner poles held firmly against the wall, probably at the level of the bottom of the third storey, by a pair of large cleats or tie-blocks. Alexiou's idea about the banner poles was suggested by the form of the New Kingdom Egyptian temple pylons, and the general resemblance of the façade at Phaistos, if so restored, to such a pylon is obvious.

Finally, I should like to mention that the very competent young American architect-archaeologist, Joseph W. Shaw, who has worked with the University of Chicago expedition at Cenchraeae on the isthmus of Corinth and with Platon at Kato Zakro, for whom he has drawn the plans of that palace during several campaigns, has undertaken to study the materials and techniques used in Minoan architecture as the subject of a doctoral dissertation at the University of Pennsylvania. Such a study is badly needed, and Mr. Shaw seems admirably qualified for the task.

University of Toronto J.W.G.
October 1968

PREFACE TO 1987 EDITION

THE CONTINUED DEMAND for *Palaces of Crete* that has led to the preparation of this new edition (first edition, 1962) indicates a lively interest in these structures which mark the beginnings of monumental European architecture. Unfortunately even though nearly twenty years have passed the time still does not seem ripe to attempt to trace the chronological development of Minoan architecture inasmuch as what little is left of the early stages of the palaces still lies hidden beneath their later remains, and what has been brought to light is still woefully insufficient to produce a comprehensive and unambiguous account. To date, the most ambitious attempt to investigate the earlier phases of the palaces is that of the veteran Italian archaeologist, Professor Doro Levi; but even at Phaistos only a small part of the original building or buildings could be revealed and published.

I shall attempt, then, to describe the palaces as they appeared in the final and most splendid period of their existence, i.e. about 1700-1450 B.C., basing the account on the actual remains but not hesitating to endeavor to conjure up those parts of the buildings that formed part of the now missing upper storeys, especially if they seem to represent significant aspects of the palace functionally or architecturally.

So many new archaeological discoveries have been made, or older ones published during the last two decades, that many sections of this book might be the better for a complete rewriting. Since that has not been possible, we hope that the usefulness of the book may be recovered by incorporating in the text numerous major or minor corrections or amplifications; by bringing the Bibliography up to date; by revising the Analytical Index to include the new additions; and by improving and increasing the number of illlustrations to represent the recent discoveries. Where additions could not be introduced without disturbing the pagination, the material has been put in six Addenda at the end of the text.

One very important aspect of Minoan architecture and building which I have treated in a single chapter (VIII), has now been properly studied and published by my colleague, Professor J. W.

Shaw, in his *Minoan Architecture: Materials and Techniques*, Rome, 1973 (*Annuario della Scuola Archeologica di Atene* 33, 1971), abbreviated to *M. and T.* In a recent article (see Select Bibliography, 1980) Shaw has discussed the interesting topic of the orientation of the palaces. He suggests that the east-west axis might be the controlling factor in the planning of the palaces rather than the north-south. The most important piece of evidence favoring his view is offered by the remains of a four-legged table-altar(?) located in the exact center of the Central Court at Mallia, since an east-west line extended westward through this altar would exactly bisect the interval between two cult pillars—each bearing common Minoan cult symbols, especially the double-ax—on the long axis of a cult room that corresponds closely in its position with the East and West Pillar Crypts at Knossos.

My acknowledgments and thanks expressed in the Preface to the first edition still stand. In recent years I have profited particularly by discussions with Nikolaos Platon, Stylianos Alexiou, Sinclair Hood, Joseph Shaw, and my wife, with whom I have made many enjoyable journeys in the lovely island of Crete "in the midst of the wine-dark sea." I am particularly grateful to Mrs. Giuliana Bianco for her skill and patience in redrawing several of my figures (Figs. 3, 6, 50, 58, 87-88, 159). My thanks are also due to J. W. Shaw for his plan of the Northwest Entrance at Knossos (Fig. 158) and to Sinclair Hood and the British School for permission to use it.

Anyone using the book, especially at the sites, should bear it in mind that individual features at particular sites, such as the Grand Staircase at Knossos (Chapter II, Section 1), may be further described in the section dealing specifically with such features, in this instance with staircases in general (Chapter X, Section 1); the index should be consulted to bring together such related material. It is hardly necessary to point out that Chapter I is intended as an introduction for the general reader.

Toronto J.W.G.

CONTENTS

THE PALACES OF CRETE

CHAPTER I

THE LAND, THE PEOPLE, AND THE HISTORY OF MINOAN CRETE

There is a land called Crete in the midst of the wine-dark sea, a fair land and a rich, begirt with water, and therein are many men innumerable, and ninety cities.—(ODYSSEY, 19, 172-174)

SUCH was Crete when Homer sang, nearly three thousand years ago, when the island was still heavily forested with cypress, and when the fertile earth still supported a teeming population.

But even by Homer's day the memory had already grown dim of a time, little more than half a millennium earlier, when Crete had enjoyed a prosperity eclipsing anything in the Aegean area, and could boast a civilization rivaling that of its contemporary, New Kingdom Egypt. Today, the forests have vanished through most of the island, the fertility of the valleys has diminished, and the ninety "cities" have mostly shrunk to small towns.[1] Yet the island is still beautiful. Along its hundreds of miles of rocky shores and gleaming sand beaches the clear blue waters of the Mediterranean still break in white surf, and never is one far from sight or sound of the sea (Figs. 35, 63), for the island is nowhere more than thirty-six miles (58 km.) in width (Fig. 1).

Rugged mountains stretch almost continuously from east to west the entire 160 miles (250 km.) of its length, and allow no room even for a road along much of the nearly harborless south coast. The White Mountains in the west (Fig. 34), traversed by spectacular gorges, leave scant space for man except for a

[1] Paul Faure, "La Crète aux cent villes," *Kret. Chron.*, 13 (1959), pp. 171-217.

few small plains along the north coast where the present capital, Khanea, is located; and somewhere in its neighborhood, still undiscovered, lay the important Minoan city of Kydonia with its palace. The range of Ida reaches heights of over 8000 feet (2500 m.) in the center of the island (Fig. 51); but since Crete is wider here, room is left for a considerable plain on the north, where lies Herakleion (Fig. 36), the largest city, with a population of about 40,000, and for a much larger and more fertile valley in the south, the Messara (Fig. 46). It is no accident that in Minoan times Crete's greatest cities, Knossos and Phaistos, were situated in these two plains. East of Ida the range of Dikte, over 7000 feet (2150 m.), encloses the high plain of Lasithi, possibly the site, at Plati, of a Minoan palace (Fig. 30); today it is famous for its potatoes and for the ten thousand windmills that pump water to the thirsty fields in summer. In a coastal plain to the north lies the third largest known palace, that of Mallia (Fig. 56). Across the low isthmus of Hierapetra the mountains stage one final grand upheaval before they slip down steeply into the sea at the east end of the island. The coastal road from Hagios Nikolaos on the Gulf of Mirabello, at the north end of the isthmus, to Siteia near the northeast tip of the island, is one of the most spectacular in Crete. Far below, for much of the way, the two tiny islets of Mochlos and Pseira, where the American archaeologist Seager dug early in the century, rise from a sea of unbelievable blues and greens. Even in the very rugged eastern end of the island an important palace was discovered in the 1960s by Nikolaos Platon at the harborage of Kato Zakros.[2]

In addition to abundant timber—especially the cypress, highly valued in ancient days for building ships and palaces—the mountains furnished plenty of limestone of good quality and, while little of the fine marble for which the mainland of Greece is famous was available, gypsum quarries supplied a

[2] Wroncka, *BCH*, 83 (1959), p. 538. A bibliography of Cretan geography is given by Philippson, *Die griechischen Landschaften, IV, Das aegäische Meer und seine Inseln* (Frankfurt am Main, 1959), pp. 353-354; but unfortunately no account of Cretan geography is given in this otherwise comprehensive survey of Greece.

handsome and easily worked stone particularly prized for decorative purposes (Fig. 125).

On the highest mountains snow lingers through much of the year (Fig. 51), but in general it is rarely very cold in winter; the latitude, 35° north, is about that of Memphis, Tennessee. In summer the sun's blazing heat, felt especially on the south side facing Africa, is usually relieved by tempering breezes from the surrounding sea. In the west there is a fair annual rainfall, but this tapers off badly toward the east and, thanks to the progressive deforestation, there is little running water during the long summer months. Spring is the botanist's paradise; even the rocky hillsides are carpeted with an amazing variety of wildflowers, many of them of diminutive size.

Though less than half the size of Lake Ontario (Fig. 1, inset) and but two-thirds that of the state of Connecticut, Crete is much the largest of the hundreds of islands that compose the Aegean archipelago, and as the nearest considerable land-mass of Europe to the ancient civilizations of Egypt and the Near East—a half-way house, as it were, between three continents—it is not surprising that it cradled the first European civilization. This historical fact is mirrored mythologically in the quaint tale of the princess of Phoenicia, bearing the significant name of Europa, who was ferried in miraculous fashion from her Asiatic homeland on the back of a handsome white bull—Zeus in bovine disguise according to Greek legend—to Crete, where she became by courtesy of the god the mother of three famous Cretan dynasts, Minos, Rhadamanthys, and Sarpedon.[3]

As early as the Neolithic Period the island was inhabited by a scattered population living partly in caves, but also concentrated at Knossos in one of the largest Neolithic settlements in the eastern Mediterranean area. Little is known of the origins of these first settlers, but the associations suggested by the pottery and other artifacts are with Anatolia and possibly Egypt rather than with the Greek mainland; considerable reinforcements seem to have arrived perhaps from the same areas about

[3] Marinatos, *RA*, 34 (1949), pp. 5-18.

the beginning of the Bronze Age, that is sometime after 3000 B.C. A recent study of place-names suggests that a considerable element in the Cretan population may have been related to the Luvians who, in the Middle and Late Bronze Ages, were established in Asia Minor southwest of the Hittites. Luvian-speaking Beycesultan has recently been partially excavated by British archaeologists led by Seton Lloyd (Fig. 1, inset).[4]

Cultural development through the third millennium (3000-2000 B.C.) was "accelerando" and the population increased and spread throughout the island in this Early Bronze or Early "Minoan" period. Sir Arthur Evans, who more than anyone else is responsible for the recovery of this forgotten civilization, devised a system of chronology into which to fit his discoveries which is still generally followed, though many have grave doubts about certain details such as the date of the beginning of Early Minoan. Here in round numbers, adequate for our purposes, is the scheme, named of course from the famous legendary king of Knossos:

Early Minoan (E.M.)	3000-2000 B.C.
Middle Minoan (M.M.)	2000-1600 B.C.
Late Minoan (L.M.)	1600-1200 B.C.

These three divisions correspond roughly to, and in fact were suggested by, Old Kingdom, Middle Kingdom, and New Kingdom Egypt, and the tentative dates are largely dependent upon lists of pharaohs and their regnal years as recorded by the Egyptians.

Little is yet known of the architecture of Crete during the Early Minoan period (Fig. 33), still less of its history, government, and religion, matters which the material remains unearthed by the archaeologist can only dimly and very imperfectly illumine.[5] The consistent improvement of pottery in quality,

[4] Mellaart, *AJA*, 62 (1958), pp. 9-33; cf. Palmer, *Mycenaeans and Minoans* (London, 1961), chap. VII, 3.

[5] On 3rd millennium architecture see K. Branigan, *Foundations of Palatial Crete* (New York, 1970), *Tombs of Mesara* (London, 1970); also P. Warren, *Myrtos: An Early Bronze Age Settlement in Crete* (London, 1972).

shape, and decoration throughout the period, however, is an index of the general cultural progress. Quantities of handsome vessels in a variety of shapes were made from beautifully veined and colored stones—a craft long practised by the Egyptians; and gold jewelry and ornaments found in E.M. graves exhibit remarkably advanced craftsmanship both in design and execution.

The significant but unspectacular developments of this "prepalatial" period may be compared to the heat which builds up unseen within a great stack of hay until it explodes spontaneously into a brilliant burst of flame. About 2000 B.C. such a "cultural explosion"—not without parallel in the history of other civilizations—occurred. At the very beginning of the Middle Minoan period fairly large and substantial palaces spring into being, and a system of writing appears. No doubt the latter was triggered by developments in Egypt where an intricate system had been in use for a millennium; yet the Cretan shows little resemblance in the form of the characters to the Egyptian and develops quite on its own into a reasonably efficient syllabic method of writing known to the archaeologist as Linear A.

But nothing, so far as the available archaeological record goes, is so eloquent of the new progress as pottery. The most significant variety is called Kamares Ware, named from a cave sanctuary on the south slopes of Mt. Ida facing Phaistos (Fig. 51), where quantities of this pottery were dedicated. The love of color and movement, so characteristic of Cretan art, is brilliantly illustrated. A common shape is a bridge-spouted, two-handled jar with a strongly swelling profile, painted in white, red, and orange against a black background (Fig. 153, A). Though resembling vegetable or animal forms, often in swirling patterns which suggest the vitality of nature, the designs are strongly formalized and excellently suited to the shape of the vase. This happy union of nature and convention is typical of Cretan art at its best, though at times the feeling becomes much more informal, and architecture is always predominantly informal.

Our knowledge of the history of the Middle Minoan period is almost as meager as that of the preceding period. Of material and artistic progress and of the growth of population there can be no doubt, and the brilliant development of the palaces and the mansions of the rich by the end of the age bears witness to a level of civilization reached by the aristocracy comparable to that found in contemporary Egypt and Mesopotamia. Such finds as Kamares pottery discovered in association with the monuments of Middle Kingdom pharaohs, a statue of an Egyptian merchant[5a] of the twelfth or thirteenth dynasty found in the Palace of Minos, a Babylonian sealstone about the time of Hammurabi in a Cretan tomb, and objects of Cretan style in the Shaft Graves of Mycenae around 1600 B.C., show that Crete was in contact with her neighbors on all sides, and incidentally provide badly needed clues for dating the development of Minoan civilization.

Cretan ships were probably responsible for most of the transferal of such goods as these to and from Crete. The scarcity of identifiable fortifications or of other signs of martial activity on the island is usually interpreted, especially in the following period (L.M.), as meaning that Crete possessed a fleet of warships with which she fended off her enemies; yet this picture of Crete as the first Mediterranean sea power, supported though it is by ancient Greek historians, is far from proven.[6] In any case it may be doubted whether Egypt or any other of the Near Eastern nations during the period 2000 to 1400 B.C. ever had the power, the opportunity, and the incentive to mount an organized naval expedition against an island so well removed from their shores as Crete.

[5a] Hardly an official, as Evans thought; see Ward, *Orientalia*, 30 (1961), pp. 28-29. On the date of the statue see Pendlebury in *Studies presented to D. M. Robinson* (ed. G. E. Mylonas, St. Louis, 1951), I, p. 189.

[6] Starr, "The Myth of the Minoan Thalassocracy," *Historia*, 3 (1954-1955), pp. 282-291, and *Origins of Greek Civilization* (New York, 1961), p. 38. However, Lionel Casson holds to the traditional view, largely on the grounds of the lack of fortifications, *The Ancient Mariners* (New York, 1959), p. 31; he also reviews the general question of Cretan relations with her neighbors (pp. 21-24). Also R. J. Buck, "The Minoan Thalassocracy Re-examined," *Historia*, 11 (1962), pp. 129-137. That battle-fleets were possible in early Late Minoan is shown by the new Theran miniature fresco.

But another growing power was closer at hand. On a clear day the mountains of western Crete can actually be seen from the southeastern tip of the Greek mainland (Fig. 1, inset), and since about 2000 B.C. the dominant element of the mainland population had been a Greek speaking people. Their descendants, the Greeks of the Classical period (first millennium B.C.), however brilliant they may have been, can scarcely be accused of having been a peaceful folk. Nor were their Bronze Age ancestors, from the first bands who conquered new homes with fire and sword at the beginning of the Middle Bronze Age to those who toward the end of the Late Bronze (thirteenth century B.C.) sacked and burned the citadel of Troy.

It is therefore not an unlikely hypothesis that a destruction of the Palace of Minos which occurred toward the end of the M.M. period, that is sometime in the early seventeenth century, was due to a piratical, sea-borne raid by the "Mycenaean" Greeks of the mainland, or, since Crete was subject to periodic devastating earthquakes, that the Greek raiders followed in the track of a severe quake which had left the Cretan cities temporarily defenceless. On this hypothesis some of the masses of gold and other treasure found by Schliemann in the royal Shaft Graves inside the citadel of Mycenae, the leading city of the mainland, would represent part of the loot. Indeed a recent ingenious theory, for which there is some evidence at the Egyptian end, goes further and suggests that the temporary shift in the balance of power between Crete and the Greek mainland was partly responsible for the expulsion of the Asiatic Hyksos from Lower Egypt where they had ruled for a century, and for the consequent founding of a new Egyptian dynasty (the eighteenth) initiating the New Kingdom. According to this theory the Hyksos had been favored by Crete (the lid of an Egyptian alabaster vessel bearing the cartouche of the Hyksos king Khyan was discovered in the ruins of the Palace of Minos), whereas the native Egyptians were now aided by the Greeks who, like the Classical Greeks a millennium later, served as mercenaries

in the Egyptian army. This would also help to explain the numerous traces of Egyptian (as well as Cretan) influence in the Mycenaean Shaft Grave burials.[7]

The last and the most brilliant, if not the most prosperous, phase of the Minoan civilization is that of the Late Minoan period, about 1600-1200 B.C. Extensive excavations, thousands of inscribed tablets, and numerous traditions preserved by the Classical Greeks, combine to throw a flood of light (comparatively speaking) on this period. In spite of this it is impossible at the present time even to outline with any confidence the history of the final glory, decline, and fall of the Minoan civilization, for recent happenings have thrown all the ideas about this period that seemed to be safely established back into the melting pot for reinterpretation. The following sketch, therefore, is offered with the full realization that much of it may shortly be contradicted by evidence not yet available to the writer.

Expressive of the level of refinement and culture attained in the first century of the Late Minoan period, following the rebuilding of the palaces on lines more splendid than before and the appearance of many handsome new mansions throughout the island,[8] are the beautiful naturalistic pottery styles known as the Floral (L.M. Ia) and the Marine (L.M. Ib). A magnificent example of the latter is the Octopus Vase discovered in the ruins of the modest little town of Gournia (Fig. 153, B): the Cretan potter with his Midas touch has transformed the repulsive creature of the deep into a thing of beauty, into a living pattern whose eight tentacles surround and confine the globular vase as naturally as its skin envelopes an orange. A Mycenaean Greek rendering of the same subject already displays the Classical Greek preference for symmetry and geometric form (Fig. 153, C). Both representations are beautiful, but in quite different ways.

[7] Cf. Schachermeyr, *Archiv Orientální*, 17^2 (1949), pp. 331-350.

[8] Marinatos suggests that many of these mansions, often spaced 7 to 10 miles apart, were centers of local administration, *C. and M.*, pp. 18, 66.

For all its brilliance this first phase of the new epoch was also, for most of the important centers except Knossos, virtually their final stage as well. That these flourishing cities and towns were suddenly destroyed is clear from their remains, but the cause of such a general catastrophe is less obvious. The eminent Greek archaeologist and explorer of many Cretan sites, the late Professor Spyridon Marinatos, put forward the attractive hypothesis that it was the result of a violent explosion on the island of Thera (modern Santorini) in the Aegean Sea directly north of Crete.[9] The evidence for a cataclysmic eruption in which the major part of the island disappeared in one or more gigantic blasts is clear from the excavations on Thera made by the Germans in the 1890's, and has been dated to approximately 1500 B.C. Like the catastrophic eruption of Krakatoa in the Dutch East Indies in 1883 tremendous "tidal waves" must have been generated, which Marinatos believes would have been far greater in the case of the eruption of Thera. The entire north coast of Crete, hardly more than seventy miles away, was exposed to the full force of these titanic waves.

In the Villa at Amnisos, only a few yards from the sea (Fig. 76), massive blocks of the stone foundations were found by Marinatos to have been shifted out of place, and quantities of volcanic pumice, carried in by the flood, mantled the ruins. The waves must have traveled far inland over the lower parts of the island, overwhelming many other sites including Mallia, Gournia, Nirou Khani, and Palaikastro.

Such a terrific onslaught of nature would have at least temporarily crippled the social, economic, and political life of Crete. How many tens of thousands of its inhabitants may have perished we shall never know. Since coastal communities would have been the hardest hit we may suppose that for a time Cretan contacts with its neighbors were abruptly severed. Is this the long sought origin of the Lost Island of Atlantis? According to the tale told by the Egyptians a millennium later to the

[9] *Antiquity*, 13 (1939), pp. 425-439; *C. and M.*, pp. 20, 22; *Kret. Chron.*, 4 (1950), pp. 195-213.

Greek sage, Solon, Atlantis, though a large, populous, and powerful island, in the course of a single dreadful day and night and after a series of calamitous earthquakes and inundations, disappeared forever beneath the sea.[10]

But what of the fact that other Cretan sites, surely high above the reach of the ravaging waves, were also destroyed at a perhaps slightly later date or dates, including Sklavokambos, Tylissos, and Hagia Triadha. Even the great palace at Phaistos, on its hilltop site, was destroyed sometime in the fifteenth century and never rebuilt. Was this due to the earthquakes which often follow such eruptions? Or was it the result of the Mycenaean Greeks' seizing the opportunity to invade the island when Cretan defences were down, especially if, as ancient tradition claims,[6] she depended on a navy for her protection.

The Palace of Minos, too, three miles from the sea and enclosed by high hills, seems to have been seriously damaged somewhat later still, about the year 1400 B.C.[11] Perhaps the damage to the palace at this time was not nearly so extensive, however, as its excavators have thought, and Sir Arthur Evans himself was constrained to admit that the building had been reoccupied to some extent, though in his opinion this was but a degenerate "squatter" occupation. Professor L. R. Palmer of Oxford University has lately challenged this opinion.[12] He suggests that the palace was inhabited throughout the closing centuries of the Bronze Age by a dynasty of Mycenaean Greek rulers who adapted the Minoan system of writing to suit (rather badly) their own language, and continued to keep administrative

[10] The above account was written about 1960, for a more recent comprehensive survey of the problems of Atlantis, Thera, and the destruction of Crete see J. V. Luce, *The End of Atlantis* (1969).

[11] The relative dating of the destruction of the various sites is a much disputed point; see Levi, *Boll. d'Arte*, 44 (1959), pp. 253-264.

[12] Orally, in the public press, and in multigraphed statements circulated privately; a definitive expression of his views will perhaps not be published until certain manuscript notebooks of Sir Arthur Evans and possibly others, relative to the excavations at Knossos, are published; cf. Hood, *Antiquity*, 35 (1961), pp. 80-81, for a contrary view and for bibliography. See now Palmer, *Mycenaeans and Minoans*, especially chap. VI.

records as the native Cretan kings had done before them—a practice which spread to the Greek rulers of the mainland.

Signs of the inevitable change in spirit at Knossos, due to the installation of this foreign and warlike Mycenaean dynasty, did not go entirely unobserved by Evans and others, though they interpreted them differently. Pendlebury referred to the L.M. II "Palace Style" pottery, conspicuous for its grandiose character and pompous monumentality, as the "pottery of empire";[13] significantly, this pottery has rarely been found in Crete except at Knossos, though it is common on the Greek mainland. Evans noticed similar changes in the wall paintings of the L.M. II period, illustrated for example in the stiff, symmetrical composition of the Griffin Fresco in the Knossos Throne Room (Fig. 130), which has since been found at Pylos on the mainland. "As compared with the great artistic traditions, such as characterized the preceding Palace stage . . . ," he remarks, "the new work takes a severely regulated shape. Lost is the free spirit that had given birth to the finely modelled forms of the athletes in the East Hall groups and to the charging bull of the North Portico. Vanished is the power of individual characterization and of instantaneous portraiture that we recognize in the lively Miniature groups of the Court Ladies. Departed, too, is the strong sympathy with wild Nature. . . . A sacral and conventional style now prevails . . . grandiose conceptions . . . the wholesale adoption . . . of the processional scheme. . . ."[14] The aesthetic feeling in the murals and pottery is indeed so distinct that a close student of the development of Cretan pottery styles, Arne Furumark, commented on the "colossal change in mentality that had taken place during one or two generations."[15]

Recognized also was a *volte-face* in the previous peaceful character of the Minoan civilization. The appearance of "warrior tombs," of military elements in the wall paintings, of clay tablets recording military equipment, all sound a new militaristic note

[13] *A. of C.*, p. 208.
[14] *Knossos*, IV, p. 880.
[15] *Op. Arch.*, 6 (1950), p. 258.

which Evans sought to explain as due to a sudden wave of imperialism infecting the Lords of Knossos: the appearance of a new and aggressive dynasty which proceeded to conquer and destroy the other Minoan palaces and to develop a great maritime empire.[16]

The Greek historian, Thucydides, writing in the fifth century B.C., remarked that the navy of Minos was the first to control the seas.[17] But Thucydides is likely to have been wrong, unless we interpret this as meaning a Greek "Minos." At any rate the navy that dominated the East Mediterranean in the Late Bronze Age was surely that of the Mycenaean confederacy; and the discovery, thanks to Ventris' brilliant decipherment of "Linear B" in 1952,[18] that thousands of the tablets found at Knossos were written in Mycenaean Greek, makes it certain that the "new and aggressive dynasty" was not native Cretan but composed of invaders from the mainland—a conclusion diametrically opposed to Evans' tenaciously held conviction that the mainland had been colonized and ruled by the Minoans.

The picture, then, which seems to be emerging of Crete in the latter part of the Late Minoan period is that it was dominated by Greek-speaking rulers ruling from a single center, namely Knossos; and that there occurred a gradual spread of Mycenaean Greek influence throughout the island, accompanied by a weakening of the native Cretan culture. The loss of population from the tidal catastrophe of 1500 seems to have been more than made good.

It is not surprising, therefore, that when Agamemnon summoned his vassal kings to join him in the war against Troy,

[16] *Knossos*, IV, pp. 884-888. However, some of the signs of change I have mentioned above should perhaps be attributed to the LM III rather than to the LM II period; and if Palmer (*Mycenaeans and Minoans*, especially pp. 210-215) is correct the seizure of Knossos by the Greeks from the mainland occurred about 1400 (marked by a partial destruction of the palace) rather than about 1450. According to Palmer (p. 214), agreeing with Furumark, the "peaceful and fruitful coexistence (of Crete and the mainland) degenerated (about 1450) into rivalry and conflict, resulting in the victory of the mainland *c.* 1400" (the parentheses are mine). The more military aspect of Knossos during this half century could then be due to an attempt to prepare to meet the threat from the mainland.

[17] I, 4. [18] Ventris and Chadwick, *JHS*, 73 (1953), pp. 84-103.

sometime after the middle of the thirteenth century, Homer represents Idomeneus, "grandson of Minos," as joining him: "And of the Cretans Idomeneus the famous spearman was leader, even of them that possessed Knossos and Gortys of the great walls, Lyktos and Miletos and chalky Lykastos and Phaistos and Rhytion, stablished cities all; and of all others that dwelt in Crete of the hundred cities. . . . With these followed eighty black ships."[19]

Not many years after the return of the Greek leaders from Troy, that is about 1200 B.C., Knossos shared the fate of Mycenae, Tiryns, Pylos, and many another "stablished city": to be sacked and burned by the invading Dorian Greeks. But the blaze that destroyed the palaces at Knossos and Pylos also baked thousands of the clay tablets containing the records of royal administration, and so they were preserved for the archaeologist to find and painfully but eagerly decipher more than three thousand years later.

If this interpretation of Cretan history from about 1600-1200 B.C. proves to be near the truth it naturally follows that the architectural stage presented by the ruins of the Palace of Minos is not exactly comparable to that presented by the other palaces, since these were destroyed some two centuries earlier. Indeed we might expect to observe certain Mycenaean Greek architectural features in the ruins at Knossos, and something of a case could perhaps be made out in favor of such a view. Details which, in the present state of our knowledge (or ignorance), are common to Knossos and the mainland palaces, but are elsewhere unknown in Crete, include fluted column shafts and the triglyph half-rosette frieze (Fig. 136, A,B), as well as mural decorations such as the Shield Fresco, and the Griffin Fresco which "guards" the throne both at Knossos and Pylos. Some would even add the Knossos Throne Room plan as a whole. Surely, however, its resemblance to the Mycenaean "megaron" is very slight,[20] in spite of the fact that if the Mycenaean dynasts

[19] *Iliad*, 2, 645-652.

[20] Reusch in *Minoica*, pp. 334-358; but cf. Blegen, *ibid.*, p. 66.

of Knossos did any extensive remodeling or repairing of the Palace of Minos, as a result of a destruction about 1400, we might well expect them to have introduced the megaron, so indispensable a feature of their own palaces (Fig. 150).[21] Its conspicuous absence reassures us, in my opinion, that we are right in treating the Palace of Minos as essentially a Minoan palace; and I find it highly unlikely that even such features as the fluting of columns or the carving of the triglyph half-rosette frieze were introduced into Crete from Mycenaean architecture.

If we can accept the hypothesis of an occupation of Crete by Mycenaean Greeks for a period of more than two centuries during the Late Bronze Age this will have to be considered as a factor of considerable significance in the development of western civilization. Contact with Crete had undoubtedly been largely responsible for the first beginnings of culture amongst the rude Greek-speaking folk who began to enter the peninsula of Greece sometime about 2000 B.C., and for the development of a rudimentary civilization there by the end of the Middle Bronze Age, the time of the famous Shaft Graves of Mycenae. But the infinitely closer contacts arising from a prolonged residence of Mycenaeans of the ruling class in Crete itself would result in a far more intensive and extensive transference of Cretan ways of life to the less cultured Greeks. The more obvious effects of this would appear in architecture, wall painting, pottery, gem engraving, etc., and, we should add, in the art of writing. But in the less directly provable fields of thought and behavior, the influence is also likely to have been great: in religion and law, for example, and probably in oral (and written?) literature—how much may the Homeric epic owe to a succession of nameless Minoan predecessors?[22]

Something of the rich Minoan heritage perhaps continued to affect the development of Greek culture down to early Classical times; but eventually Crete became little more than a back-

[21] See Mylonas, *Ancient Mycenae*, pp. 51-59.

[22] Severyns, *Grèce et Proche-Orient avant Homère*, Brussels, 1960, pp. 99-100, 171, 204. On the date of the coming of the Greeks see Palmer, *Mycenaeans and Minoans*, chap. VII; he would put it about 1600 B.C.

water of Hellenism, though some of the "true" Cretans (the "Eteocretans") lived on in the eastern part of the island and continued to speak a non-Greek tongue. Through the Roman and later periods Crete in general shared the fate of the Greek mainland, though it was not until 1896 and after many bloody revolts that it was freed from foreign domination; in 1912 it finally became part of the modern Greek nation.

Today Greek archaeologists from both the mainland and from Crete itself are busily engaged in recovering the long and varied history of the island. British, French, and Italian excavators have resumed the investigations interrupted by the last war, and the magnificent treasures of Minoan art are worthily displayed in a new museum at Herakleion under the capable direction of Nikolaos Platon.

We have spoken of the land and the history of Crete, but what sort of people were the Minoan Cretans who dwelt in the palaces and houses we shall visit in the following pages? Perhaps this is a question which should not be asked in a book which seeks to maintain an architectural point of view and does not pretend to be a social study. Perhaps it is a question which should not be asked at all since the Minoans cannot speak directly to us through a written literature—if they produced one—and since even the Greeks of Pericles' day knew of the Minoan civilization only what a meager stream of oral tradition had passed on to them, for the art of writing was lost in the "Dark Ages" that separated the Bronze Age culture from the Classical. Yet to rebuild in imagination these homes of 3500 years ago, only to leave them desolate and deserted, seems so unsatisfying that we can scarcely do other than grasp at whatever clues may be available.

A Greek historian of the time of Julius Caesar, Diodorus Siculus, repeats the tradition that the days of Minos coincided with the Golden Age of Cronus, father of the sky-god Zeus (the Roman Jupiter) who, it was said, was born in Crete. And since Diodorus remarks that "all the subjects of the rule of

Cronus lived a life of blessedness, in the unhindered enjoyment of every pleasure," this has given rise to an impression that the Minoans were an enervated and decadent race of hedonists.[23] Yet their "life of pleasure" (a modern would consider it simple indeed) is pictured by Diodorus as a reward of virtue: "because of the exceptional obedience to laws no injustice was committed by any one at any time."[24] Surely the tradition is not to be interpreted as meaning that the Cretans because of their virtue were privileged henceforth to lead a life of depravity!

The law-abiding character of the Cretans is also attested by the tradition that Minos "established not a few laws for the Cretans, claiming (Moses-like) that he had received them from his father Zeus when conversing with him in a certain cave."[25] The probity of Minos and of his brother Rhadamanthys (king of Phaistos?)[26] was posthumously recognized by making them perpetual judges in the Greek afterworld. It is also significant that the earliest known Classical Greek law code (ca. 500 B.C.) was found at Gortyn, a site where a large Minoan farmhouse has recently been excavated.

It should also be set down to the credit of the Minoans that, in the words of Sir Arthur Evans, their ever valiant and doughty champion, "from the beginning to the end of Minoan Art (there is) . . . not one single example . . . of any subject of an indecorous nature."[27]

Whether or not the Cretans were a highly religious people is difficult to decide on material evidence alone. On the one hand the entire absence of temples and of statues of gods is strikingly at variance with the situation in contemporary Egypt and Mesopotamia; on the other hand we seem scarcely able to move in the Palace of Minos, at least under the guidance of Sir Arthur, without running into small shrines or small representations of deities or their symbols: lustral chambers, pillar crypts, columnar shrines, temple repositories, incurved altars, sacral horns, double-axes, libation tables, baetylic stones, sacral

[23] 5, 66, 6. [24] *loc. cit.* [25] Diod. Sic. 5, 78, 3.
[26] See note 3, above. [27] *Knossos*, II, p. 279.

knots, etc., not to mention representations of sacred birds, trees, bulls, and snakes. Religious scenes are common on gems and other forms of Minoan art (Figs. 100, 101). Possibly the fact that the Cretans built no great temples and carved no large statues of their deities merely indicates that they stood in no immoderate awe of the supernatural.

We have already referred to the fact that the Cretans seem to have been a remarkably peaceful people. The apparently exceptional change in spirit that took place in Late Minoan II or III merely proves the rule for, as we have seen, the military, imperialist character which Evans thought had led to a forceful conquest of the Greek mainland, was on the contrary apparently due to the Mycenaean invaders' having established themselves at Knossos.

This peaceful character is as strange in the world of the Bronze Age Egyptians, Babylonians, Assyrians, Mycenaean Greeks, Hittites, and, we may add, Hebrews, as in the world of the Classical Greeks and Romans, or in the distracted world of today—so strange indeed that it has encouraged the charge that the Minoans were decadent and enervated. Alas for more such "decadence"! Perhaps it was due in part to the isolated position of Crete and to the lack of any excessive pressure of population, but more I think to the homogeneity of the Minoan people. No doubt they came ultimately from a variety of racial stocks, but the continuity of the archaeological strata from earliest times suggests that the bulk of the population had lived on the island long enough to have become essentially homogeneous in language and in customs;[27a] one important illustration of this is the remarkable similarity in architectural forms throughout Crete but especially among the three major palaces. The peaceful co-existence of the two kingdoms of Phaistos and Knossos, hardly over twenty-five miles (40 km.) apart as the crow flies, may be compared to the century and a half of peaceful

[27a] A striking illustration of the close interconnections between the different Minoan centers is the finding of impressions from identical seal-stones at Sklavokambos, H. Triadha, Gournia, and Zakros (see Fig. 1), *DMG*, p. 110.

relations that have, for the same reasons, prevailed between Canada and its neighbor to the south.[28]

It is often possible to judge something of the character of an individual or of a people from their dress. The typical Cretan costume of the court class, an elaborately patterned short kilt for the men (Fig. 131, B), and a long elaborately flounced garment for the women which covered the legs entirely but left the breasts bare (Fig. 43), presents a rather odd medley of primitive and sophisticated elements, and this is probably also true of their general outlook, religious and social. They were obviously a brilliant, gifted people living in a physically beautiful and stimulating environment, but the transition from a condition of simple peasantry to a relatively complex urban society, at least in the upper levels of the social scale, was rapid and recent. The transformation was naturally not complete.

The considerable degree of urbane elegance reached by this society is revealed in their domestic architecture. From the spacious and commodious design of the living quarters of the palaces and better houses, often adorned with alabaster veneering and plaster walls painted with scenes from nature or court ceremonial (Figs. 131-134), provided with bathrooms and toilets and with ingenious devices to secure adequate lighting and ventilation, and looking out through columned porticoes upon terraced and beautiful landscapes, it is clear that the Cretans aimed at comfortable living. The great suites of state reception halls and banquet halls, which must be left largely to our imagination to picture, for they were on the lost upper floors,

[28] Yet A. W. Lawrence writes, "It is incredible that there can have been three separate independent states so close together in central Crete"; he suggests that Phaistos was the winter residence for the dynasty that reigned at Knossos in summer. (*Gk. Arch.*, pp. 24-25). To me it seems more incredible that the same dynasty should have possessed two or even three palaces, so similar in plan "that their functions must have been almost identical" (Lawrence). What a biennial moving day that must have been when the whole court transferred itself bag and baggage across the 2000 foot pass of Mt. Ida from Knossos to Phaistos and vice versa!—and when did they trek to Mallia? On the other hand the H. Triadha villa, so near Phaistos and surely of royal character, is a distinctly different type of structure and might well have served as a pleasant occasional retreat from the official residence.

would tell the same story. But this can hardly be called luxuriant debauchery.

They were not a soft, lazy people, however much they may contrast with the vigorous and bellicose Mycenaean Greeks. Fat bellies, as common in Egyptian officialdom, to judge from their art, as in America today, are rarely seen in Cretan art. Characteristically the Cretans are shown with shoulders carried far back, with slim limbs, and a waist so small that some suspect the Minoans of practising artificial constriction (Fig. 131, B). Boxing, dancing, acrobatics, and bull-leaping we know from direct representations were popular, while the traditions of the great athletic festivals of Classical Greek times perhaps point to Crete as their ultimate place of origin. Many think that Homer has the Cretans in mind when he draws his delightful picture of the mythical Phaeacians in the *Odyssey*. They boast that they "excel all men in boxing, and wrestling, and leaping, and speed of foot," though it is true that after viewing Odysseus' prowess they tone down their claims somewhat, "for we are no perfect boxers, nor wrestlers, but speedy runners, and the best of seamen; and dear to us ever is the banquet, and the harp, and the dance, and changes of raiment, and the warm bath, and love, and sleep."[29]

Finally it may be noted that women played an important part in Cretan society. Goddesses seem to have had the dominant role in Cretan religion, and their ministrants were as predominantly priestesses (Figs. 100, 101); female likewise were the sacred dancers. Even in the dangerous bull games lady toreadors took part, while in the audience women mingled with the men, and the special "boxes" were reserved for ladies of the court (Fig. 133). The elaborate costumes of the female aristocracy likewise indicate the importance of women (Figs. 100, 101, 131, A). The assured place which they held in Mycenaean society, to judge from the Homeric epics, probably owed much to the example of the polished culture of the Minoan courts.

[29] *Odyssey*, 8, 102-103, 246-249.