(all Christian). About £20,000 is granted annually by the state for the purposes of education.

Finance.—Owing to the havoc wrought during repeated insurrections, the impoverishment of the peasants, the desolation of the districts formerly inhabited by the Moslem agricultural population, and the drain of gold resulting from the sale of Moslem lands and emigration of the former proprietors, together with other causes, the financial situation has been unsatisfactory. Notwithstanding the advance of £160,000 made by the four protecting powers after the institution of autonomous government and the profits (£61,937) derived from the issue of a new currency in 1900, there was at the beginning of 1906 an accumulated deficit of £23,470, which represents the floating debt. In addition to the above-mentioned debt to the powers, the state contracted a loan of £60,000 in 1901 to acquire the rights and privileges of the Ottoman Debt, to which the salt monopoly has been conceded for 20 years. In the budgets for 1905 and 1906 considerable economies were effected by the curtailment of salaries, the abolition of various posts, and the reduction of the estimates for education and public works. The estimated revenue and expenditure for 1906 were as follows:—

Revenue.	Drachmae (gold).	Expenditure.	Drachmae (gold).
Direct taxes	1,494,000	High Commissioner	200,000
Indirect taxes	1,715,000	Financial administration	694,670
Stamp dues	351,700	Interior (including gendarmerie)	1,678,566
Other sources	780,967	Education and Justice	1,453,500
	4,341,667		4,026,736

The salary of the high commissioner was reduced in 1907 to 100,000 drachmae.

Improved communications are much needed for the transport of agricultural produce, but the state of the treasury does not admit of more than a nominal expenditure on road-making and other public works. On these the average yearly expenditure between 1898 and 1905 was £13,404. The prosperity of the island depends on the development of agriculture, the acquirement of industrious habits by the people, and the abandonment of political agitation. The Cretans were in 1906 more lightly taxed than any other people in Europe. The tithe had been replaced by an export tax on exported agricultural produce levied at the custom-houses, and the smaller peasant proprietors and shepherds of the mountainous districts were practically exempt from any contribution to the state. The communal tax did not exceed on the average two francs annually for each family. The poorer communes are aided by a state subvention. (J. D. B.)

Archaeology.

The recent exploration and excavation of early sites in Crete have entirely revolutionized our knowledge of its remote past, and afforded the most astonishing evidence of the existence of a highly advanced civilization going far back behind the historic period. Great "Minoan" palaces have been brought to light at Cnossus and Phaestus, together with a minor but highly interesting royal abode at Hagia Triada near Phaestus. "Minoan" towns, some of considerable extent, have been discovered at Cnossus itself, at Gournia, Palaikastro, and at Zakro. The cave sanctuary of the Dictaean Zeus has been explored, and throughout the whole length and breadth of the island a mass of early materials has now been collected. The comparative evidence afforded by the discovery of Egyptian relics shows that the Great Age of the Cretan palaces covers the close of the third and the first half of the second millennium before our era. But the contents of early tombs and dwellings and indications supplied by such objects as stone vases and seal-stones show that the Cretans had already attained to a considerable degree of culture, and had opened out communication with the Nile valley in the time of the earliest Egyptian dynasties. This more primitive phase of the indigenous culture, of which several distinct stages are traceable, is known as the Early Minoan, and roughly corresponds with the first half of the third millennium B.C. The succeeding period, to which the first palaces are due and to which the name of Middle Minoan is appropriately given, roughly coincides with the Middle Empire of Egypt. An extraordinary perfection was at this time attained in many branches of art, notably in the painted pottery, often with polychrome decoration, of a class known as "Kamares" from its first discovery in a cave of that name on Mount Ida. Imported specimens of this ware were found by Flinders Petrie among XIIth Dynasty remains at Kahun. The beginnings of a school of wall painting also go back to the Middle Minoan period, and metal technique and such arts as gem engraving show great advance. By the close of this period a manufactory of fine faience was attached to the palace of Cnossus. The succeeding Late Minoan period, best illustrated by the later palace at Cnossus and that at Hagia Triada, corresponds in Egypt with the Hyksos period and the earlier part of the New Empire. In the first phase of this the Minoan civilization attains its acme, and the succeeding style already shows much that may be described as rococo. The later phase, which follows on the destruction of the Cnossian palace, and corresponds with the diffused Mycenaean style of mainland Greece and elsewhere, is already partly decadent. Late Minoan art in its finest aspect is best illustrated by the animated ivory figures, wall paintings, and *gesso duro* reliefs at Cnossus, by the painted stucco designs at Hagia Triada, and the steatite vases found on the same site with zones in reliefs exhibiting life-like scenes of warriors, toreadors, gladiators, wrestlers and pugilists, and of a festal throng perhaps representing a kind of "harvest home." Of the more conventional side of Late Minoan life a graphic illustration is supplied by the remains of miniature wall paintings found in the palace of Cnossus, showing groups of court ladies in curiously modern costumes, seated on the terraces and balustrades of a sanctuary. A grand "palace style" of vase painting was at the same time evolved, in harmony with the general decoration of the royal halls.

Early, Middle and Late "Minoan" periods.

It had been held till lately that the great civilization of prehistoric Greece, as first revealed to us by Schliemann's discoveries at Mycenae, was not possessed of the art of writing. In 1893, however, Arthur Evans observed some signs on seal-stones from Crete which led him to believe that a hieroglyphic system of writing had existed in Minoan times. Explorations carried out by him in Crete from 1894 onwards, for the purpose of investigating the prehistoric civilization of the island, fully corroborated this belief, and showed that a linear as well as a semi-pictorial form of writing was diffused in the island at a very early period ("Cretan Pictographs and Prae-Phoenician Script," *Journ. of Hellenic Studies*, xiv. pt. 11). In 1895 he obtained a libation-table from the Dictaean cave with a linear dedication in the prehistoric writing ("Further Discoveries," &c., *J.H.S.* xvii.). Finally in 1900 all scepticism in the learned world was set at rest by his discovery in the palace of Cnossus of whole archives consisting of clay tablets inscribed both in the pictographic (hieroglyphic) and linear forms of the Minoan script (Evans, "Palace of Knossos," *Reports of Excavation, 1900–1905*; *Scripta Minoa*, vol. i., 1909). Supplementary finds of inscribed tablets have since been found at Hagia Triada (F. Halbherr, *Rapporto, &c., Monumenti antichi*, 1903) and elsewhere (Palaikastro, Zakro and Gournia). It thus appears that a highly developed system of writing existed in Minoan Crete some two thousand years earlier than the first introduction under Phoenician influence of Greek letters. In this, as in so many other respects, the old Cretan tradition receives striking confirmation. According to the Cretan version preserved by Diodorus (v. 74), the Phoenicians did not invent letters but simply altered their forms.

Minoan script.

There is evidence that the use in Crete of both linear and pictorial signs existed in the Early Minoan period, contemporary with the first Egyptian dynasties. It is, however, during the Middle Minoan age, the centre point of which corresponds with the XIIth Egyptian dynasty, according to the Sothic system of dating, c. 2000–1850 B.C., that a systematized pictographic or hieroglyphic script makes its appearance which is common both to signets and clay tablets. During the Third Middle Minoan period, the lower limits of which approach 1600 B.C., this pictographic script finally gives way to a still more developed linear system—which is itself divided into an earlier and a later class. The earlier class (A) is already found in the temple repositories of Cnossus belonging to the age immediately preceding the great remodelling of the

Earlier pictographic script.

palace, and this class is specially well represented in the tablets of Hagia Triada (M.M. iii. and L.M. i.). The later class (B) of the linear script is that used on the great bulk of the clay tablets of the Cnossian palace, amounting in number to nearly 2000.

These clay archives are almost exclusively inventories and business documents. Their general purport is shown in many cases by pictorial figures relating to various objects which appear on them—such as chariots and horses, ingots and metal vases, arms and implements, stores of corn, &c., flocks and herds. Many showing human figures apparently contain lists of personal names. A decimal system of numeration was used, with numbers going up to 10,000. But the script itself is as yet undeciphered, though it is clear that certain words have changing suffixes, and that there were many compound words. The script also recurs on walls in the shape of graffiti, and on vases, sometimes ink-written; and from the number of seals originally attached to perishable documents it is probable that parchment or some similar material was also used. In the easternmost district of Crete, where the aboriginal "Eteocretan" element survived to historic times (Praesus, Palaikastro), later inscriptions have been discovered belonging to the 5th and succeeding centuries B.C., written in Greek letters but in the indigenous language (Comparetti, *Mon. Ant.* iii. 451 sqq.; R. S. Conway, *British School Annual*, viii. 125 sqq. and *ib.* xl.). In 1908 a remarkable discovery was made by the Italian Mission at Phaestus of a clay disk with imprinted hieroglyphic characters belonging to a non-Cretan system and probably from W. Anatolia.

The remains of several shrines within the building, and the religious element perceptible in the frescoes, show that a considerable part of the Palace of Cnossus was devoted to purposes of cult. It is clear that the rulers, as so commonly in ancient states, fulfilled priestly as well as royal functions. The evidence supplied by this and other Cretan sites shows that the principal Minoan divinity was a kind of *Magna Mater*, a Great Mother or nature goddess, with whom was associated a male satellite. The cult in fact corresponds in its main outlines with the early religious conceptions of Syria and a large part of Anatolia—a correspondence probably explained by a considerable amount of ethnic affinity existing between a large section of the primitive Cretan population and that of southern Asia Minor. The Minoan goddess is sometimes seen in her chthonic form with serpents, sometimes in a more celestial aspect with doves, at times with lions. One part of her religious being survives in that of the later Rhea, another in that of Aphrodite, one of whose epithets, *Ariadne* (=the exceeding holy), takes us back to the earliest Cnossian tradition. Under her native name, Britomartis (=the sweet maiden) or Dictynna, she approaches Artemis and Leto, again associated with an infant god, and this Cretan virgin goddess was worshipped in Aegina under the name of Aphaea. It is noteworthy that whereas, in Greece proper, Zeus attains a supreme position, the old superiority of the Mother Goddess is still visible in the Cretan traditions of Rhea and Dictynna and the infant Zeus.

Character of Minoan religion.

Although images of the divinities were certainly known, the principal objects of cult in the Minoan age were of the aniconic class; in many cases these were natural objects, such as rocks and mountain peaks, with their cave sanctuaries, like those of Ida or of Dicte. Trees and curiously shaped stones were also worshipped, and artificial pillars of wood or stone. These latter, as in the well-known case of the Lion's Gate at Mycenae, often appear with guardian animals as their supporters. The essential feature of this cult is the bringing down of the celestial spirit by proper incantations and ritual into these fetish objects, the dove perched on a column sometimes indicating its descent. It is a primitive cult similar to that of Early Canaan, illustrated by the pillow stone set up by Jacob, which was literally "Bethel" or the "House of God." The story of the *baetylus*, or stone swallowed by Saturn under the belief that it was his son, the Cretan Zeus, seems to cover the same idea and has been derived from the same Semitic word.

A special form of this "baetylic" cult in Minoan Crete was the representation of the two principal divinities in their fetish form by double axes. Shrines of the Double Axes have been found in the palace of Cnossus itself, at Hagia Triada, and in a small palace at Gournia, and many specimens of the sacred emblem occurred in the Cave Sanctuary of Dicte, the mythical birthplace of the Cretan Zeus. Complete scenes of worship in which libations are poured before the Sacred Axes are, moreover, given on a fine painted sarcophagus found at Hagia Triada.

The same cult survived to later times in Caria in the case of Zeus Labrandeus, whose name is derived from *labrys*, the native name for the double axe, and it had already been suggested on philological grounds that the Cretan "labyrinthos" was formed from a kindred form of the same word. The discovery that the great Minoan foundation at Cnossus was at once a palace and a sanctuary of the Double Axe and its associated divinities has now supplied a striking and it may well be thought an overwhelming confirmation of this view. We can hardly any longer hesitate to recognize in this vast building, with its winding corridors and subterranean ducts, the Labyrinth of later tradition; and as a matter of fact a maze pattern recalling the conventional representation of the Labyrinth in Greek art actually formed the decoration of one of the corridors of the palace. It is difficult, moreover, not to connect the repeated wall-paintings and reliefs of the palace illustrating the cruel bull sports of the Minoan arena, in which girls as well as youths took part, with the legend of the Minotaur, or bull of Minos, for whose grisly meals Athens was forced to pay annual tribute of her sons and daughters. It appears certain from the associations in which they are found at Cnossus, that these Minoan bull sports formed part of a religious ceremony. Actual figures of a monster with a bull's head and man's body occurred on seals of Minoan fabric found on this and other Cretan sites.

Labyrinth and Minotaur.

It is abundantly evident that whatever mythic element may have been interwoven with the old traditions of the spot, they have a solid substratum of reality. With such remains before us it is no longer sufficient to relegate Minos to the regions of sun-myths. His legendary presentation as the "Friend of God," like Abraham, to whom as to Moses the law was revealed on the holy mountain, calls up indeed just such a priest-king of antiquity as the palace-sanctuary of Cnossus itself presupposes. It seems possible even that the ancient tradition which recorded an earlier or later king of the name of Minos may, as suggested above, cover a dynastic title. The earlier and later palaces at Cnossus and Phaestus, and the interrupted phases of each, seem to point to a succession of dynasties, to which, as to its civilization as a whole, it is certainly convenient to apply the name "Minoan." It is interesting, as bringing out the personal element in the traditional royal seat, that an inscribed sealing belonging to the earliest period of the later palace of Cnossus bears on it the impression of two official signets with portrait heads of a man and of a boy, recalling the "associations" on the coinage of imperial Rome. It is clear that the later traditions in many respects accurately summed up the performances of the "Minoan" dynast who carried out the great buildings now brought to light. The palace, with its wonderful works of art, executed for Minos by the craftsman Daedalus, has ceased to belong to the realms of fancy. The extraordinary architectural skill, the sanitary and hydraulic science revealed in details of the building, bring us at the same time face to face with the power of mechanical invention with which Daedalus was credited. The elaborate method and bureaucratic control visible in the clay documents of the palace point to a highly developed legal organization. The powerful fleet and maritime empire which Minos was said to have established will no doubt receive fuller illustration when the sea-town of Cnossus comes to be explored. The appearance of ships on some of the most important seal-impressions is not needed, however, to show how widely Minoan influence made itself felt in the neighbouring Mediterranean regions.

Historic substratum of Cretan myths.

The Nilotic influence visible in the vases, seals and other fabrics of the Early Minoan age, seems to imply a maritime

activity on the part of the islanders going back to the days of the first Egyptian dynasties. In a deposit at Kahun, belonging to the XIIth Dynasty, *c.* 2000 B.C., were already found imported polychrome vases of "Middle Minoan" fabric. In the same way the important part played by Cretan enterprise in the days of the New Egyptian empire is illustrated by repeated finds of Late Minoan pottery on Egyptian sites. A series of monuments, moreover, belonging to the early part of the XVIIIth Dynasty show the representatives of the Kefts or peoples of "The Ring" and of the "Lands to the West" in the fashionable costume of the Cnossian court, bearing precious vessels and other objects of typical Minoan forms. Farther to the east the recent excavations on the old Philistine sites like Gezer have brought to light swords and vases of Cretan manufacture in the later palace style. The principal Philistine tribe is indeed known in the biblical records as the Cherethims or Cretans, and the Minoan name and the cult of the Cretan Zeus were preserved at Gaza to the latest classical days. Similar evidence of Minoan contact, and indeed of wholesale colonization from the Aegean side, recurs in Cyprus. The culture of the more northerly Aegean islands, best revealed to us by the excavations of the British School at Phylakopi in Melos, also attest a growing influence from the Cretan side, which, about the time of the later palace at Cnossus, becomes finally predominant.

Early relations with Egypt.

The Kefts and Philistines.

Early relations with Cyprus and N. Aegean.

Turning to the mainland of Greece we see that the astonishing remains of a highly developed prehistoric civilization, which Schliemann first brought to light in 1876 at Mycenae, and which from those discoveries received the general name of "Mycenaean," in the main represent a transmarine offshoot from the Minoan stock. The earlier remains both at Mycenae and Tiryns, still imperfectly investigated, show that this Cretan influence goes back to the Middle Minoan age, with its characteristic style of polychrome vase decoration. The contents of the royal tombs, on the other hand, reveal a wholesale correspondence with the fabrics of the first, and, to a less degree, the second Late Minoan age, as illustrated by the relics belonging to the Middle Period of the later palace at Cnossus and by those of the royal villa at Hagia Triada. The chronological centre of the great beehive tombs seems to be slightly lower. The ceiling of that of Orchomenos, and the painted vases and gold cups from the Vaphio tomb by Sparta, with their marvellous reliefs showing scenes of bull-hunting, represent the late palace style at Cnossus in its final development.

Minoan influence on mainland of Greece.

The leading characteristics of this mainland civilization are thus indistinguishable from the Minoan. The funeral rites are similar, and the religious representations show an identical form of worship. At the same time the local traditions and conditions differentiate the continental from the insular branch. In Crete, in the later period, when the rulers could trust to the "wooden walls" of the Minoan navy, there is no parallel for the massive fortifications that we see at Tiryns or Mycenae. The colder winter climate of mainland Greece dictated the use of fixed hearths, whereas in the Cretan palaces these seem to have been of a portable kind, and the different usage in this respect again reacted on the respective forms of the principal hall or "Megaron."

Minoan culture under its mainland aspect left its traces on the Acropolis at Athens,—a corroboration of the tradition which made the Athenians send their tribute children to Minos. Similar traces extend through a large part of northern Greece from Cephallenia and Leucadia to Thessaly, and are specially well marked at Iolcus (near mod. Volo), the legendary embarking place of the Argonauts. This circumstance deserves attention owing to the special connexion traditionally existing between the Minyans of Iolcus and those of Orchomenus, the point of all others on this side where the early Cretan influence seems most to have taken root. The Minoan remains at Orchomenus which are traceable to the latest period go far to substantiate the philological comparison between the name of Minyan, the traditional ancestor of this ancient race, and that of Minos.

Minoan influences in N. Greece.

Still farther to the north-west a distinct Minoan influence is perceptible in the old Illyrian lands east of the Adriatic, and its traces reappear in the neighbourhood of Venice. It is well marked throughout southern Italy from Taranto to Naples. It was with Sicily, however, that the later history of Minos and his great craftsman Daedalus was in a special way connected by ancient tradition. Here, as in Crete, Daedalus executed great works like the temple of Eryx, and it was on Sicilian soil that Minos, engaged in a western campaign, was said to have met with a violent death at the hands of the native king Kokalos (Cocalus) and his daughters. His name is preserved in the Sicilian Minoa, and his tomb was pointed out in the neighbourhood of Agrigentum, with a shrine above dedicated to his native Aphrodite, the lady of the dove; and in this connexion it must be observed that the cult of Eryx perpetuates to much later times the characteristic features of the worship of the Cretan Nature goddess, as now revealed to us in the palace of Cnossus and elsewhere. These ancient indications of a Minoan connexion with Sicily have now received interesting confirmation in the numerous discoveries, principally due to the recent excavations of P. Orsi, of arms and painted vases of Late Minoan fabric in Bronze Age tombs of the provinces of Syracuse and Girgenti (Agrigentum) belonging to the late Bronze Age. Some of these objects, such as certain forms of swords and vases, seem to be of local fabric, but derived from originals going back to the beginning of the Late Minoan age.

Adriatic and Italian extension.

The abiding tradition of the Cretan aborigines, as preserved by Herodotus (vii. 171), ascribes the eventual settlement of the Greeks in Crete to a widespread desolation that had fallen on the central regions. It is certain that by the beginning of the 14th century B.C., when the signs of already decadent Minoan art are perceptible in the imported pottery found in the palace of Akhenaton at Tell el-Amarna, some heavy blows had fallen on the island power. Shortly before this date the palaces both of Cnossus and Phaestus had undergone a great destruction, and though during the ensuing period both these royal residences were partially reoccupied it was for the most part at any rate by poorer denizens, and their great days as palaces were over for ever. Elsewhere at Cnossus, in the smaller palace to the west, the royal villa and the town houses, we find the evidence of a similar catastrophe followed by an imperfect recovery, and the phenomenon meets us again at Palaikastro and other early settlements in the east of Crete. At the same time, to whatever cause this serious setback of Minoan civilization was owing, it would be very unsafe to infer as yet any large displacement of the original inhabitants by the invading swarms from the mainland or elsewhere. The evidence of a partial restoration of the domestic quarter of the palace of Cnossus tends to show a certain measure of dynastic continuity. There is evidence, moreover, that the script and with it the indigenous language did not die out during this period, and that therefore the days of Hellenic settlement at Cnossus were not yet. The recent exploration of a cemetery belonging to the close of the great palace period, and in a greater degree to the age succeeding the catastrophe, has now conclusively shown that there was no real break in the continuity of Minoan culture. This third Late Minoan period—the beginning of which may be fixed about 1400—is an age of stagnation and decline, but the point of departure continued to be the models supplied by the age that had preceded it. Art was still by no means extinct, and its forms and decorative elements are simply later derivatives of the great palace style. Not only the native form of writing, but the household arrangements, sepulchral usages, and religious rites remain substantially the same. The third Late Minoan age corresponds generally with the Late Mycenaean stage in the Aegean world (see AEGEAN CIVILIZATION). It is an age indeed in which the culture as a whole, though following a lower level, attains the greatest amount of uniformity. From Sicily and even the Spanish coast to the Troad, southern Asia Minor, Cyprus and Palestine,—from the Nile valley to the mouth of the Po, very similar forms were now diffused. Here and there, as in Cyprus, we watch the development of some local schools. How far Crete

Minoan crisis: c. 1400 B.C.

itself continued to preserve the hegemony which may reasonably be ascribed to it at an earlier age must remain doubtful. It is certain that towards the close of this third and concluding Late Minoan period in the island certain mainland types of swords and safety-pins make their appearance, which are symptomatic of the great invasion from that side that was now impending or had already begun.

Principal Minoan Sites.

It will be convenient here to give a general view of the more important Minoan remains recently excavated on various Cretan sites.

Cnossus.—The palace of Cnossus is on the hill of Kephala about 4 m. inland from Candia. As a scene of human settlement this site is of immense antiquity. The successive "Minoan" strata, which go well back into the fourth millennium B.C., reach down to a depth of about 17 ft. But below this again is a human deposit, from 20 to 26 ft. in thickness, representing a long and gradual course of Neolithic or Later Stone-Age development. Assuming that the lower strata were formed at approximately the same rate as the upper, we have an antiquity of from 12,000 to 14,000 years indicated for the first Neolithic settlement on this spot. The hill itself, like a Tell of Babylonia, is mainly formed of the debris of human settlements. The palace was approached from the west by a paved Minoan Way communicating with a considerable building on the opposite hill. This road was flanked by magazines, some belonging to the royal armoury, and abutted on a paved area with stepped seats on two sides (theatral area). The palace itself approximately formed a square with a large paved court in the centre. It had a N.S. orientation. The principal entrance was to the north, but what appears to have been the royal entrance opened on a paved court on the west side. This entrance communicated with a corridor showing frescoes of a processional character. The west side of the palace contained a series of 18 magazines with great store jars and cists and large hoards of clay documents. A remarkable feature of this quarter is a small council chamber with a gypsum throne of curiously Gothic aspect and lower stone benches round. The walls of the throne room show frescoes with sacred griffins confronting each other in a Nile landscape, and a small bath chamber—perhaps of ritual use—is attached. This quarter of the palace shows the double axe sign constantly repeated on its walls and pillars, and remains of miniature wall-paintings showing pillar shrines, in some cases with double axes stuck into the wooden columns. Here too were found the repositorics of an early shrine containing exquisite faience figures and reliefs, including a snake goddess—another aspect of the native divinity—and her votaries. The central object of cult in this shrine was apparently a marble cross. Near the north-west angle of the palace was a larger bath chamber, and by the N. entrance were remains of great reliefs of bull-hunting scenes in painted *gesso duro*. South of the central court were found parts of a relief in the same material, showing a personage with a fleur-de-lis crown and collar. The east wing of the palace was the really residential part. Here was what seems to have been the basement of a very large hall or "Megaron," approached directly from the central court, and near this were found further reliefs, fresco representations of scenes of the bull-ring with female as well as male toreadors, and remains of a magnificent gaming-board of gold-plated ivory with intarsia work of crystal plaques set on silver plates and blue enamel (*cyanus*). The true domestic quarter lay to the south of the great hall, and was approached from the central court by a descending staircase, of which three flights and traces of a fourth are preserved. This gives access to a whole series of halls and private rooms (halls "of the Colonnades," "of the Double Axes," "Queen's Megaron" with bath-room attached and remains of the fish fresco, "Treasury" with ivory figures and other objects of art), together with extensive remains of an upper storey. The drainage system here, including a water-closet, is of the most complete and modern kind. Near this domestic quarter was found a small shrine of the Double Axes, with cult objects and offertory vessels in their places. The traces of an earlier "Middle Minoan" palace beneath the later floor-levels are most visible on the east side, with splendid ceramic remains. Here also are early magazines with huge store jars. At the foot of the slope on this side, forming the eastern boundary of the palace, are massive supporting walls and a bastion with descending flights of steps, and a water-channel devised with extraordinary hydraulic science (Evans, "Palace of Knossos," "Reports of Excavations 1900-1905," in *Annual of British School at Athens*, vi. sqq.; *Journ. R.I.B.A.* (1902), pt. iv. For the palace pottery see D. Mackenzie, *Journ. of Hellenic Studies*, xxiii.). The palace site occupies nearly six acres. To the N.E. of it came to light a "royal villa" with staircase, and a basilica-like hall (Evans, *B.S. Annual*, ix. 130 seq.). To the N.W. was a dependency containing an important hoard of bronze vessels (*ib.* p. 112 sqq.). The building on the hill to the W. approached by the Minoan paved way has the appearance of a smaller palace (*B.S. Annual*, xii., 1906). Many remains of private houses belonging to the prehistoric town have also come to light (Hogarth, *B.S.A.* vi. [1900], p. 70 sqq.). A little N. of the town, at a spot called Zafer Papoura, an extensive Late Minoan cemetery was excavated in 1904 (Evans, *The Prehistoric Tombs of Knossus*, 1906), and on a height about 2 m. N. of this, a royal tomb consisting of a square chamber, which originally had a pointed vault of "Cyclopaean" structure approached by a forehall or rock-cut passage. This monumental work seems to date from the close of the Middle Minoan age, but has been re-used for interments at successive periods (Evans, *Archaeologia*, 1906, p. 136 sqq.). It is possibly the traditional tomb of Idomeneus. (For later discoveries see further CNOSSUS.)

Phaestus.—The acropolis of this historic city looks on the Libyan Sea and commands the extensive plain of Messara. On the eastern hill of the acropolis, excavations initiated by F. Halbherr on behalf of the Italian Archaeological Mission and subsequently carried out by L. Pernier have brought to light another Minoan palace, much resembling on a somewhat smaller scale that of Cnossus. The plan here too was roughly quadrangular with a central court, but owing to the erosion of the hillside a good deal of the eastern quarter has disappeared. The Phaestian palace belongs to two distinct periods, and the earlier or "Middle Minoan" part is better preserved than at Cnossus. The west court and entrance belonging to the earlier building show many analogies with those of Cnossus, and the court was commanded to the north by tiers of stone benches like those of the "theatral area" at Cnossus on a larger scale. Magazines with fine painted store jars came to light beneath the floor of the later "propylaeum." The most imposing block of the later building is formed by a group of structures rising from the terrace formed by the old west wall. A fine paved corridor running east from this gives access to a line of the later magazines, and through a columnar hall to the central court beyond, while to the left of this a broad and stately flight of steps leads up to a kind of entrance hall on an upper terrace. North of the central court is a domestic quarter presenting analogies with that of Cnossus, but throughout the later building there was a great dearth of the frescoes and other remains such as invest the Cnossian palace with so much interest. There are also few remaining traces here of upper storeys. It is evident that in this case also the palace was overtaken by a great catastrophe, followed by a partial reoccupation towards the close of the Late Minoan age (L. Pernier, *Scavi della missione italiana a Phaestos; Monumenti antichi*, xii. and xiv.).

About a kilometre distant from the palace of Phaestus near the village of Kalyvia a Late Minoan cemetery was brought to light in 1901, belonging to the same period as that of Cnossus (Savignoni, *Necropoli di Phaestos*, 1905).

Hagia Triada.—On a low hill crowned by a small church of the above name, about 3 m. nearer the Libyan Sea than Phaestus, a small palace or royal villa was discovered by Halbherr and excavated by the Italian Mission. In its structure and general arrangements it bears a general resemblance to the palace of Phaestus and Cnossus on a smaller scale. The buildings themselves, with the usual halls, bath-rooms and magazines, together with a shrine of the Mother Goddess, occupy two sides of a rectangle, enclosing a court at a higher level approached by flights of stairs. Repositories also came to light containing treasure in the shape of bronze ingots. In contrast to the palace of Phaestus, the contents of the royal villa proved exceptionally rich, and derive a special interest from the fact that the catastrophe which overwhelmed the building belongs to a somewhat earlier part of the Late Minoan age than that which overwhelmed Cnossus and Phaestus. Clay tablets were here found belonging to the earlier type of the linear script (Class A), together with a great number of clay sealings with religious and other devices and incised countermarks. Both the signet types and the other objects of art here discovered display the fresh naturalism that characterizes in a special way the first Late Minoan period. A remarkable wall-painting depicts a cat creeping over ivy-covered rocks and about to spring on a pheasant. The steatite vases with reliefs are of great importance. One of these shows a ritual procession, apparently of reapers singing and dancing to the sound of a sistrum. On another a Minoan warrior prince appears before his retainers. A tall funnel-shaped vase of this class, of which a considerable part has been preserved, is divided into zones showing bull-hunting scenes, wrestlers and pugilists in gladiatorial costume, the whole executed in a most masterly manner. The small palace was reconstructed at a later period, and at a somewhat higher level. To a period contemporary with the concluding age of the Cnossian palace must be referred a remarkable sarcophagus belonging to a neighbouring cemetery. The chest is of limestone coated with stucco, adorned with life-like paintings of offertory scenes in connexion with the sacred Double Axes of Minoan cult. There have also come to light remains of a great domed mortuary chamber of primitive construction containing relics of the Early Minoan period (Halbherr, *Monumenti Antichi*, xiii. (1903), p. 6 sqq., and *Memorie del instituto lombardo*, 1905; Paribeni, *Lavori eseguiti della missione italiana nel Palazzo e nella necropoli di Haghia Triada; Rendiconti*, &c., xi. and xii.; Savignoni, *Il Vaso di Haghia Triada*).

Palaikastro.—Near this village, lying on the easternmost coast of Crete, the British School at Athens has excavated a section of a considerable Minoan town. The buildings here show a stratification analogous to that of the palace of Cnossus. The town was traversed by a well-paved street with a stone sewer, and contained several important private houses and a larger one which seems to have been

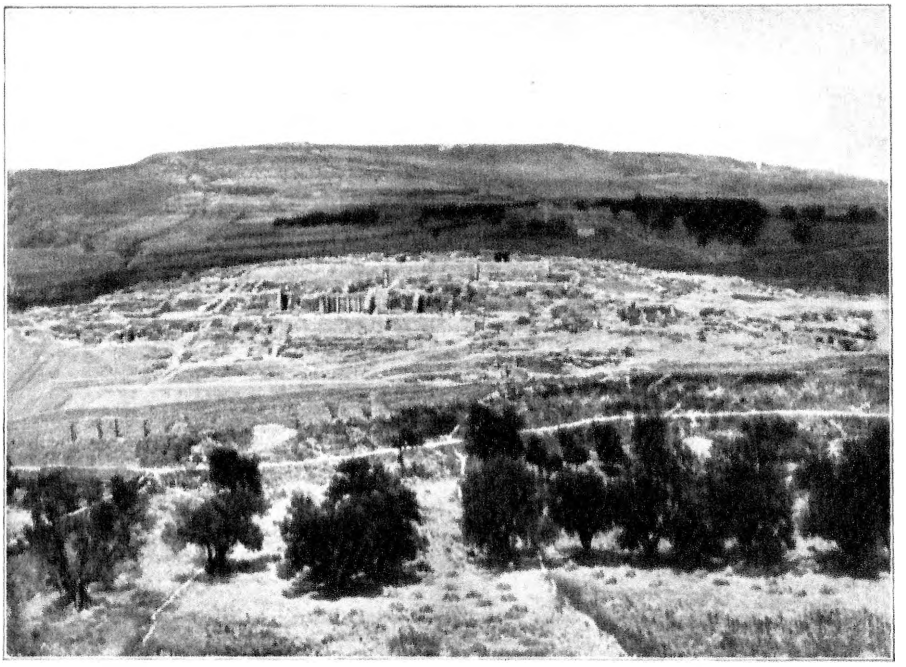

Fig. 1.—Palace of Cnossus. General View of the Site from the East.

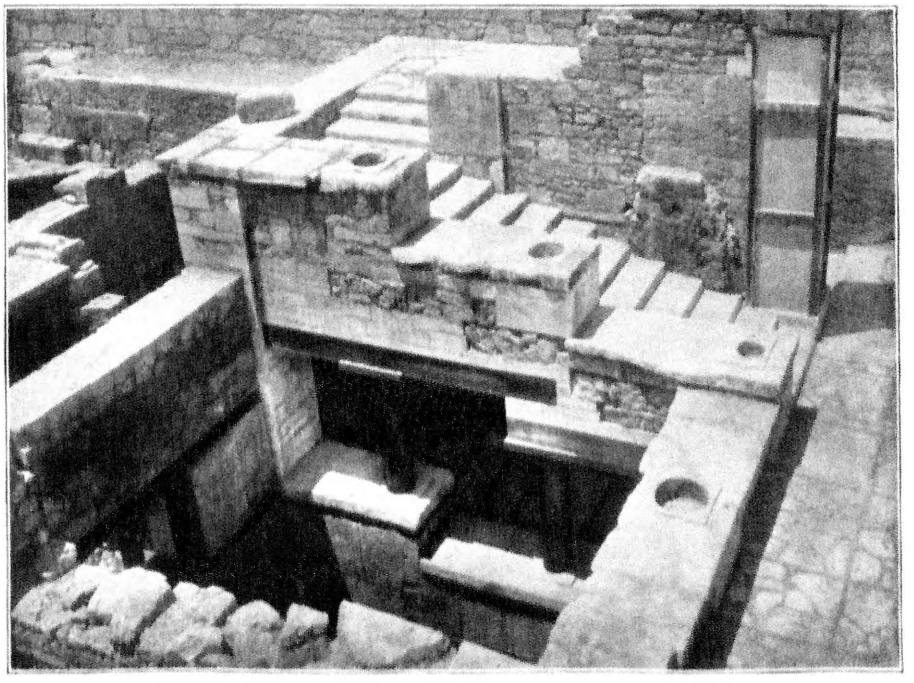

Fig. 2.—View of Part of Grand Staircase and Hall of Colonnades (Wooden Columns Restored) (Cnossus).

(By permission of Dr A. J. Evans.)

Fig. 3.—Large Oil-Jars in East Magazines (Cnossus).

Fig. 4.—Gypsum Throne (Fresco Painting Visible on Wall) (Cnossus).

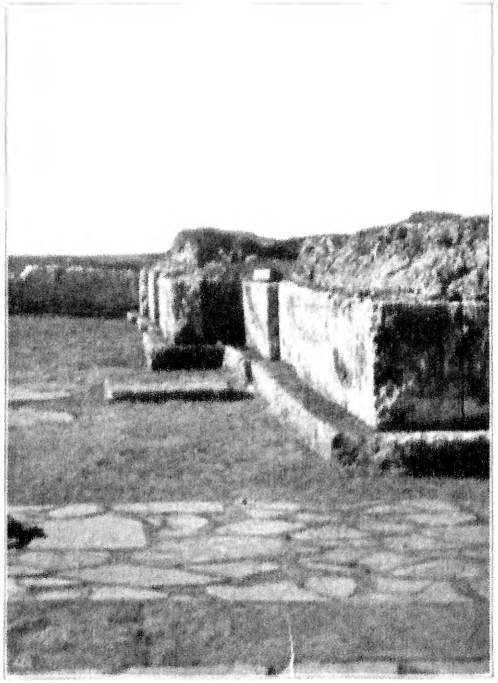

Fig. 5.—Base of West Wall Near Royal Entrance (Cnossus).

(By permission of Dr A. J. Evans.)

a small palace. Among the more interesting relics found were ivory figures of Egyptian or strongly Egyptianizing fabric. On an adjacent hill were the remains of what seems to have been in later times a temple of the Dictaean Zeus, and from the occurrence of rich deposits of Minoan vases and sacrificial remains at a lower level, the religious tradition represented by the later temple seems to go back to prehistoric times. On the neighbouring height of Petsofá, by a rock-shelter, remains of another interesting shrine were brought to light dating from the Middle Minoan period, and containing interesting votive offerings of terra-cotta, many of them apparently relating to cures or to the warding off of diseases (R. C. Bosanquet, *British School Annual*, viii. 286 sqq., ix. 274 sqq.; R. M. Dawkins, *ibid.* ix. 290 sqq., x.; J. L. Myres, *ibid.* ix. 356 sqq.).

Gournia.—Near this hamlet on the coast of the Gulf of Mirabello in east Crete, the American archaeologist Miss Harriet Boyd has excavated a great part of another Minoan town. It covers the sides of a long hill, its main avenue being a winding roadway leading to a small palace. It contained a shrine of the Cretan snake goddess, and was rich in minor relics, chiefly in the shape of bronze implements and pottery for household use. The bulk of the remains belong here, as at Hagia Triada, to the beginning of the Late Minoan period, but there are signs of reoccupation in the decadent Minoan age. The remains supply detailed information as to the everyday life of a Cretan country town about the middle of the second millennium B.C. (H. Boyd, *Excavations at Gournia*).

Zakro.—Near the lower hamlet of that name on the S.E. coast important remains of a settlement contemporary with that of Gournia were explored by D. G. Hogarth, consisting of houses and pits containing painted pottery of exceptional beauty and a great variety of seal impressions. The deep bay in which Zakro lies is a well-known port of call for the fishing fleets on their way to the sponge grounds of the Libyan coast, and doubtless stood in the same stead to the Minoan shipping (D.G.Hogarth, *Annual of the British School*, vii. 121 sqq., and *Journ. of Hellenic Studies*, xxii. 76 sqq. and 333 sqq.).

Dictaean Cave.—Near the village of Psychro on the Lassithi range, answering to the western Dicte, opens a large cave, identified with the legendary birthplace of the Cretan Zeus. This cavern also shared with that of Ida the claim to have been that in which Minos, Moses-like, received the law from Zeus. The exploration begun by the Italian Mission under Halbherr and continued by Evans, who found here the inscribed libation table (see above), was completed by Hogarth in 1900. Besides the great entrance hall of the cavern, which served as the upper shrine, were descending vaults forming a lower sanctuary going down deep into the bowels of the earth. Great quantities of votive figures and objects of cult, such as the fetish double axes and stone tables of offering, were found both above and below. In the lower sanctuary the natural pillars of stalagmite had been used as objects of worship, and bronze votive objects thrust into their crevices (Halbherr, *Museo di antichità classica*, ii. pp. 906-910; Evans, *Further Discoveries*, &c., p. 350 sqq., *Myc. Tree and Pillar Cult*, p. 14 sqq.; Hogarth, "The Dictaean Cave," *Annual of British School at Athens*, vi. 94 sqq.).

Pseira and Mochlos.—On these two islets on the northern coast of E. Crete, R. Seager, an American explorer, has found striking remains of flourishing Minoan settlements. The contents of a series of tombs at Mochlos throw an entirely new light on the civilization of the Early Minoan age.

The above summary gives, indeed, a very imperfect idea of the extent to which the remains of the great Minoan civilization are spread throughout the island. The "hundred cities" ascribed to Crete by Homer are in a fair way of becoming an ascertained reality. The great days of Crete lie thus beyond the historic period. The period of decline referred to above (Late Minoan III.), which begins about the beginning of the 14th century before our era, must, from the abundance of its remains, have been of considerable duration. As to the character of the invading elements that hastened its close, and the date of their incursions, contemporary Egyptian monuments afford the best clue. The Keftiu who represented Minoan culture in Egypt in the concluding period of the Cnossian palace (Late Minoan II.) cease to appear on Egyptian monuments towards the end of the XVIIIth Dynasty (*c.* 1350 B.C.), and their place is taken by the "Peoples of the Sea." The Achaeans, under the name *Akaiusha*, already appear among the piratical invaders of Egypt in the time of Rameses III. (*c.* 1200 B.C.) of the XXth Dynasty (see H. R. Hall, "Keftiu and the Peoples of the Sea," *Annual of British School at Athens*, viii. 157 sqq.).

Third Late Minoan period.

About the same time the evidences of imports of Late Minoan or "Mycenaean" fabrics in Egypt definitely cease. In the *Odyssey* we already find the Achaeans together with Dorians settled in central Crete. In the extreme east and west of the island the aboriginal "Eteocretan" element, however, as represented respectively by the Praesians or Cydonians, still held its own, and inscriptions written in Greek characters show that the old language survived to the centuries immediately preceding the Christian era.

Greek settlements in Crete

The mainland invasions which produced these great ethnic changes in Crete are marked archaeologically by signs of widespread destruction and by a considerable break in the continuity of the insular civilization. New burial customs, notably the rite of cremation in place of the older corpse-burial, are introduced, and in many cases the earlier tombs were pillaged and re-used by new comers. The use of iron for arms and implements now finally triumphed over bronze. Northern forms of swords and safety-pins are now found in general use. A new geometrical style of decoration like that of contemporary Greece largely supplants the Minoan models. The civic foundations which belong to this period, and which include the greater part of the massive ruins of Goulas and Anavlachos in the province of Mirabello and of Hyrtakina in the west, affect more or less precipitous sites and show a greater tendency to fortification. The old system of writing now dies out, and it is not till some three centuries later that the new alphabetic forms are introduced from a Semitic source. The whole course of the older Cretan civilization is awhile interrupted, and is separated from the new by the true dark ages of Greece.

The dark ages.

It is nevertheless certain that some of the old traditions were preserved by the remnants of the old population now reduced to a subject condition, and that these finally leavened the whole lump, so that once more—this time under a Hellenic guise—Crete was enabled to anticipate mainland Greece in nascent civilization. Already in 1883 A. Milchhöfer (*Anfänge der Kunst*) had called attention to certain remarkable examples of archaic Greek bronze-work, and the subsequent discovery of the votive bronzes in the cave of Zeus on Mount Ida, and notably the shields with their fine embossed designs, shows that by the 8th century B.C. Cretan technique in metal not only held its own beside imported Cypro-Phoenician work, but was distinctly ahead of that of the rest of Greece (Halbherr, *Bronzi del antro di Zeus Ideo*). The recent excavations by the British School on the site of the Dictaean temple at Palaikastro bear out this conclusion, and an archaic marble head of Apollo found at Eleutherna shows that classical tradition was not at fault in recording the existence of a very early school of Greek sculpture in the island, illustrated by the names of Dipoenos and Scyllis.

The Dorian dynasts in Crete seem in some sort to have claimed descent from Minos, and the Dorian legislators sought their sanction in the laws which Minos was said to have received from the hands of the Cretan Zeus. The great monument of Gortyna discovered by Halbherr and Fabricius (*Monumenti antichi*, iii.) is the most important monument of early law hitherto brought to light in any part of the Greek world.

Among other Greek remains in the island may be mentioned, besides the great inscription, the archaic temple of the Pythian Apollo at Gortyna, a plain square building with a *pronaos* added in later times, excavated by Halbherr, 1885 and 1887 (*Mon. Ant.* iii. 2 seqq.), the Hellenic bridge and the vast rock-cut reservoirs of Eleutherna, the city walls of Itanos, Aptera and Polyrrhenia, and at Phalasarna, the rock-cut throne of a divinity, the port, and the remains of a temple. The most interesting record, however, that has been preserved of later Hellenic civilization in the island is the coinage of the Cretan cities (J. N. Svoronos, *Numismatique de la Crète ancienne*; W. Wroth, *B. M. Coin Catalogue, Crete*, &c.; P. Gardner, *The Types of Greek Coins*), which during the good period display a peculiarly picturesque artistic style distinct from that of the rest of the Greek world, and sometimes indicative of a revival of Minoan types. But in every case these artistic efforts were followed at short intervals by gross relapses into barbarism which reflect the anarchy of the political conditions.

Greek remains.

Under the *Pax Romana* the Cretan cities again enjoyed a large measure of prosperity, illustrated by numerous edifices still existing at the time of the Venetian occupation. A good

account of these is preserved in a MS. description of the island drawn up under the Venetians about 1538, and existing in the library of St Mark (published by Falkener, *Museum of Classical Antiquities*, ii. pp. 263-303). Very little of all this, however, has escaped the Turkish conquest and the ravages caused by the incessant insurrections of the last two centuries. The ruin-field of Gortyna still evokes something of the importance that it possessed in Imperial days, and at Lebena on the south coast are remains of a temple of Aesculapius and its dependencies which stood in connexion with this city. At Cnossus, save some blocks of the amphitheatre, the Roman monuments visible in Venetian times have almost wholly disappeared. Among the early Christian remains of the island far and away the most important is the church of St Titus at Gortyna, which perhaps dates from the Constantinian age.

Roman remains.

LITERATURE.—See the authorities already quoted, for further details. Previous to the extensive excavations referred to above, Crete had been carefully examined and explored by Tournefort, Pococke, Olivier and other travellers, *e.g.* Pashley (*Travels in Crete*, 2 vols., London, 1837) and Captain Spratt (*Travels and Researches in Crete*, 2 vols., London, 1865). A survey sufficiently accurate as regards the maritime parts was also executed, under the orders of the British admiralty, by Captain Graves and Captain (afterwards Admiral) Spratt. Most that can be gathered from ancient authors concerning the mythology and early history of the island is brought together by Meursius (*Creta*, &c., in the 3rd vol. of his works) and Hoeck (*Kreta*, 3 vols., Göttingen, 1823–1829), but the latter work was published before the researches which have thrown so much light on the topography and antiquities of the island. Much new material, especially as to the western provinces of Crete, has been recently collected by members of the Italian Archaeological Mission (*Monumenti Antichi*, vol. vi. 154 seqq., ix. 286, 1899; xi. 286 seqq.). (A. J. E.)

History.

Ancient.—Lying midway between three continents, Crete was from the earliest period a natural stepping-stone for the passage of early culture from Egypt and the East to mainland Greece. On all this the recent archaeological discoveries (see the section on *Archaeology*) have thrown great light, but the earliest written history of Crete, like that of most parts of continental Greece, is mixed up with mythology and fable to so great an extent as to render it difficult to arrive at any clear conclusions concerning it. The Cretans themselves claimed for their island to be the birthplace of Zeus, as well as the parent of all the other divinities usually worshipped in Greece as the Olympian deities. But passing from this region of pure mythology to the semi-mythic or heroic age, we find almost all the early legends and traditions of the island grouped around the name of Minos. According to the received tradition, Minos was a king of Cnossus in Crete; he was a son of Zeus, and enjoyed through life the privilege of habitual intercourse with his divine father. It was from this source that he derived the wisdom which enabled him to give to the Cretans the excellent system of laws and governments that earned for him the reputation of being the greatest legislator of antiquity. At the same time he was reported to have been the first monarch who established a naval power, and acquired what was termed by the Greeks the *Thalassocracy*, or dominion of the sea.

This last tradition, which was received as an undoubted fact both by Thucydides and Aristotle, has during the last few years received striking confirmation. The remarkable remains recently brought to light on Cretan soil tend to show that already some 2000 years before the Dorian conquest the island was exercising a dominant influence in the Aegean world. The great palaces now excavated at Cnossus and Phaestus, as well as the royal villa of Hagia Triada, exhibit the successive phases of a brilliant primitive civilization which had already attained mature development by the date of the XIIth Egyptian dynasty. To this civilization as a whole it is convenient to give the name "Minoan," and the name of Minos itself may be reasonably thought to cover a dynastic even more than a personal significance in much the same way as such historic terms as "Pharaoh" or "Caesar."

The archaeological evidence outside Crete points to the actual existence of Minoan plantations as far afield on one side as Sicily and on the other as the coast of Canaan. The historic tradition which identifies with the Cretans the principal element of the Philistine confederation, and places the tomb of Minos himself in western Sicily, thus receives remarkable confirmation. Industrial relations with Egypt are also marked by the occurrence of a series of finds of pottery and other objects of Minoan fabric among the remains of the XVIIIth, XIIth and even earlier dynasties, while the same seafaring enterprise brought Egyptian fabrics to Crete from the times of the first Pharaohs. Even in the Homeric poems, which belong to an age when the great Minoan civilization was already decadent, the Cretans appear as the only Greek people who attempted to compete with the Phoenicians as bold and adventurous navigators. In the Homeric age the population of Crete was of a very mixed character, and we are told in the *Odyssey* (xix. 175) that besides the Eteocretes, who, as their name imports, must have been the original inhabitants, the island contained Achaeans, Pelasgians and Dorians. Subsequently the Dorian element became greatly strengthened by fresh immigrations from the Peloponnesus, and during the historical period all the principal cities of the island were either Dorian colonies, or had adopted the Dorian dialect and institutions. It is certain that at a very early period the Cretan cities were celebrated for their laws and system of government, and the most extensive monument of early Greek law is the great Gortyna inscription, discovered in 1884. The origin of the Cretan laws was of course attributed to Minos, but they had much in common with those of the other Dorian states, as well as with those of Lycurgus at Sparta, which were, indeed, according to one tradition, copied in great measure from those already existing in Crete.[1]

It is certain that whatever merits the Cretan laws may have possessed for the internal regulation of the different cities, they had the one glaring defect, that they made no provision for any federal bond or union among them, or for the government of the island as a whole. It was owing to the want of this that the Cretans scarcely figure in Greek history as a people, though the island, as observed by Aristotle, would seem from its natural position calculated to exercise a preponderating influence over Greek affairs. Thus they took no part either in the Persian or in the Peloponnesian War, or in any of the subsequent civil contests in which so many of the cities and islands of Greece were engaged. At the same time they were so far from enjoying tranquillity on this account that the few notices we find of them in history always represent them as engaged in local wars among one another; and Polybius tells us that the history of Crete was one continued series of civil wars, which were carried on with a bitter animosity exceeding all that was known in the rest of Greece.

In these domestic contests the three cities that generally took the lead, and claimed to exercise a kind of *hegemony* or supremacy over the whole island, were Cnossus, Gortyna and Cydonia. But besides these three, there were many other independent cities, which, though they generally followed the lead of one or other of these more powerful rivals, enjoyed complete autonomy, and were able to shift at will from one alliance to another. Among the most important of these were—Lyttus or Lyctus, in the interior, south-east of Cnossus; Rhaucus, between Cnossus and Gortyna; Phaestus, in the plain of Messara, between Gortyna and the sea; Polyrrhenia, near the north-west angle of the island; Aptera, a few miles inland from the Bay of Suda; Eleutherna and Axus, on the northern slopes of Mount Ida; and Lappa, between the White Mountains and the sea. Phalasarna on the west coast, and Chersonesus on the north, seem to have been dependencies, and served as the ports of Polyrrhenia and Lyttus. Elyrus stood at the foot of the White Mountains, just

[1] Among the features common to the two were the *syssitia*, or public tables, at which all the citizens dined in common. Indeed, the Cretan system, like that of Sparta, appears to have aimed at training up the young, and controlling them, as well as the citizens of more mature age, in all their habits and relations of life. The supreme governing authority was vested in magistrates called Cosmi, answering in some measure to the Spartan Ephori, but there was nothing corresponding to the two kings at Sparta. These Cretan institutions were much extolled by some writers of antiquity, but receive only qualified praise from the judicious criticisms of Aristotle (*Polit.* ii. 10).