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PALACE-CENTERED POLITIES IN EASTERN CRETE: NEOPALATIAL PETRAS AND ITS NEIGHBORS

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Topography is a constant determinative factor in the Cretan cultural landscape. Mountain ranges compartmentalize the island into semiautonomous units, their size proportional to the extent of fertile land shoe-horned between the foothills. The plains of central Crete, incomparably smaller than the huge Near Eastern expanses, led to a concentration of power and resources of the Minoan redistributive economy to a small number of major centers, commonly labelled 'palaces'. The term was coined by the father of Minoan archaeology, Sir Arthur Evans, in a decidedly Victorian spirit, at the beginning of this century while excavating a large architectural complex on the Kephala Hill at Knossos near Herakleion, in Central Crete: the 'Palace of Minos'. A few years later Italian archaeologists initiated work at the second major such structure, Phaistos in South-Central Crete, in the middle of the largest and most fertile plain of the island, the Mesara. The French School of Archaeology, at about the same time, began investigations at Malia, a site near the northern coast some 35 km east of Herakleion, and situated on the third large plain, that of Pediada.

The term 'palace' remains vaguely defined, yet the phenomenon dominates Minoan archaeology. If scholars are not preoccupied with analysing the palatial system, they seek signs of prepalatial fore-runners or attempt to reconstruct a politico–economic framework for life after the fall of the palaces. A Minoan palace is understood as a central administrative organism to which flows the produce of the surrounding lands for storage and redistribution. This requires substantial warehousing and detailed documentation by a bureaucratic system, expressed, in the Minoan case, by seals, sealings and various forms of texts on clay and perishable materials. In other words, similar to an Eastern palatial economy, but on a smaller scale, as dictated

by the topography and natural resources of a medium-sized island with an underdeveloped transportation system due to a rugged terrain.

A further legacy of the earliest phase of Minoan archaeology is constituted by its chronological system. Uncovering a hitherto unknown civilization, Evans, in his attempts to understand the sequence of the finds, looked to Egypt for a framework: the Old, Middle and New Kingdom became the Early, Middle and Late Minoan Periods. Today it is clear that the terminology, based on the pottery, is ill adapted both to the architectural phases (even at Knossos) and to the development of other Minoan arts, such as stone vases and seal stones, as well as being highly Knossocentric. An attempt by Nicolaos Platon to introduce a system based on the major construction phases of the palaces, Pre-, Proto-, Neo- and Post-palatial, has not gained universal approval. The present parallel use of both systems illustrates the problems faced by Minoan archaeology. In addition, the absolute chronology is challenged by scientific dating for the eruption that destroyed the site of Akrotiri on Thera, leading to a difference of almost 200 years with the subjective dates proposed by synchronisms with Egypt.

As the discipline developed, other categories of structures were uncovered, but the reference remained the palaces. These sites, termed 'villas' by Evans, and burdened with an equally vague definition, were found to share, with their larger counterparts, specific architectural features, and elements of an administrative function. In addition to the palaces of Knossos, Malia and Phaistos, as further palatial structures of varying sizes were excavated at Gournia and Zakros in Eastern Crete, and further 'villas' came to light, the basic relatedness remained evident, yet the differences were underlined to the extent of creating two mutually exclusive categories. All further finds were classified as either the one or the other, although the definitional aspects of the terminology had been ignored.

The most recent candidates for inclusion among the palaces, Khania, Arkhanes and Galatas, all three in Western and Central Crete, to which fieldwork conducted in 1984–95 added a further location, Petras near Siteia at the opposite end of the island, have pointed out the short-comings of the traditional framework, which consisted of the safety provided by four palaces, the initial three (Knossos, Phaistos and Malia) to which was added Zakros. The currently available database invites Minoan archaeologists to pursue a better

definition of the 'palace'/'villa' dichotomy, and thus an improved understanding of Minoan civilization.

Petras

Petras (fig. 1) is situated on the southern edge of a small plain formed by the recent silting in of a marine bay, a process aided by the tectonic shifting to which the island has been subjected. The northern edge is today dominated by the township of Siteia. The main Minoan settlement occupies a 50 m high hill behind the gaggle of holiday flats forming the present-day village. The three adjacent hills have seen Minoan activity at various periods. The site of Petras was first visited by Evans in 1896, while R.C. Bosanquet conducted excavations there in 1900 (Bosanquet 1900-1901: 282-85). Two days sufficed to convince him that further work was unpromising due to extensive damage. Bosanquet continued further east, where he excavated Palaikastro. Nonetheless the Siteia Bay was noted for its advantageous location as gateway towards the East, a view vaguely reiterated by Platon while investigating an important sanctuary at nearby Piskokephalo in the early 1950s. In the 1960s, Platon went on to discover the palace of Zakros. Petras remained outside the archaeological discourse until 1985.

The continuous work of 11 field seasons has uncovered an important Neopalatial administrative unit surrounded by a township, of which two large two-storey houses have been investigated. Traces of earlier occupation of the main hill, as well as continuity into the Postpalatial Period, underlines the importance of the location through time. Three surveys have offered an increased understanding of the human settlement patterns in the Siteia Bay area, leading to an extensive reconsideration of earlier research.

Archaeological evidence, along with geomorphological data, helps us to define a certain unified territory or sphere of influence, in which we believe Petras was the central settlement, with the other sites in some way subordinate to it and perhaps dependent on it, even if the probable inter-site relationships are as yet not completely clear. The geographic boundaries of this territory are: in the west the area of Chamaizi, in the south the region of Praisos, and in the east the mountains that divide the Siteia Bay from the area of Palaikastro (Tsipopoulou and Papacostopoulou in press).

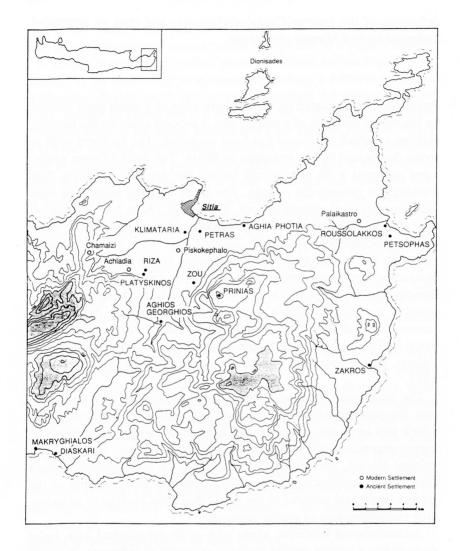


Figure 1. Map of eastern Crete showing the location of Petras and other ancient and modern settlements.

The Bay of Siteia was in Minoan times substantially larger, since the coastline cut far into the present plain: it met the Stomion river at the low hills of Anemomylia and Katrinia. Small plains exist between Trypitos and Analoukas around Ayia Photia, and between the foothills on either side of the Stomion, at Achladia–Riza, at Ayios Georgios and at Zou. The foothills themselves added olives, carobs and almonds

to the economic base. In addition, honey and wine have traditionally been produced in the area.

The region became archaeologically known through the work of Platon, who excavated a number of installations called 'villas', at Klimataria (Platon 1952a: 636-39, 1953: 288-91, 1954: 361-63), Zou (Platon 1955: 288-93, 1956: 232-39), Achladia-Riza (Platon 1952b: 646-48, 1959: 210-17), and Ayios Georgios (Platon 1960: 294-300), as well as the sanctuary at Piskokephalo (Platon 1952c: 631-36). Later, Costis Davaras investigated the peak sanctuary at Prinias (Davaras 1971: 197-200, 1977: 651, 1976: 246, 1988: 45-54). Additionally, the plain of Ayia Photia survey has revealed the existence of no less than six small isolated farmhouses, owing their location to the agricultural exploitation of the surrounding area (Tsipopoulou 1989: 27-31, 99). Such a settlement pattern is virtually identical or equivalent to the traditional system of metochia of Crete, the small isolated farmhouses built out among the fields as temporary living quarters and storage of tools and produce. The respective sizes and architectural elaboration of these three different types of installations, combined with simple geographical considerations, suggest a hierarchical relationship.

Several models concerning the political and administrative organization of Neopalatial Crete have been proposed, though there are two main models of interpretation: the first supporting the supremacy of Knossos over the whole island and the second, accepting the division of Crete into smaller or larger independent polities (Soles 1991: 73-76). The 'peer polities' theory proposed by John Cherry (1986: 21, fig. 2.2) is very useful, but the recent research at Petras and the area of the Siteia Bay has changed the general picture, and as far as Eastern Crete is concerned, further division is needed. Indeed it is difficult to visualize it as a unified area centered on the palace of Zakros. In accepting Cherry's suggestion that the Gulf of Mirabello formed part of the polity of Malia, the eastern end of the island could have been further subdivided into three more territories: (1) the Bay of Siteia with Petras as the center, (2) the far eastern Zakros-Palaikastro area centered on Zakros, (3) the southern coast with the central place situated at Makrygialos or Diaskari.

The houses of the settlement of Petras have been compared (Tsipopoulou and Papacostopoulou in press) to the so-called 'villas' of the Siteia hinterlands in order to gain an understanding of their function and relationship to Petras, as illustrated by the architectural features

and the objects uncovered in the various rooms and spaces. The formal comparison between the two houses excavated in the township and the 'villas' shows that the differences are neither many nor substantial in respect to architectural size, detail and artifact assemblages. One aspect which underlines the different purpose of these two categories of houses is the slightly larger storage capacity, and the attendant higher number of storage vessels (pithoi), exhibited by the 'villas'. Furthermore, except for Klimataria, which location suggests a special-purpose installation in connection with the main settlement, intensive survey activity in the immediate area indicates that the 'villas' are not isolated structures, but belong to larger settlement complexes. The 'villa' at Ayios Georgios is really three buildings and not, as originally thought, a single unit. They stand on a low hill surrounded by a settlement on the slopes. At Zou the situation is similar, with the 'villa', even though not at the summit of the hill for topographical reasons, raised above the settlement. Achladia–Riza presents a different pattern: the main structure is placed lower down on the slope, with traces of lesser buildings further up towards the plateau of a very large hill. Their prominent position within each habitation, and their architectural treatment, suggest that these 'villas' constitute the central entity in the intra-settlement hierarchy, thus enjoying a position comparable, although on a smaller scale, to that of the main unit at Petras, with the following caveat: Petras suggests an urban context not present at 'villa' sites.

The more recent campaigns at Petras have demonstrated that the large building on the middle plateau of Hill 1 should be termed a 'palace', despite the substantial difference in scale evidenced by a comparison with the better-known centers. The customary criteria for a designation as palace are (1) architectural: central court, storage space, stoa, drainage system, monumental staircase, light well, lustral basin, pier-and-door partition, plaster benches; (2) structural: ashlar masonry, orthostats, flagstone floors, plaster floors, painted plaster, mason's marks, mortises; (3) functional: administration, concentration and redistribution of produce, storage and transformation of raw materials, religious activities.

These features are present in the larger 'villas' of central Crete, yet always with significant gaps in the list, and never in a quality and size on par with the palaces. Petras offers evidence for all the above, except the lustral basin (with the light well uncertain or unnecessary),

and clearly documented cultic areas. The smaller scale alters the framework within which the palace phenomenon of Minoan Crete must be discussed: the situation is clearly more complex than what was previously believed.

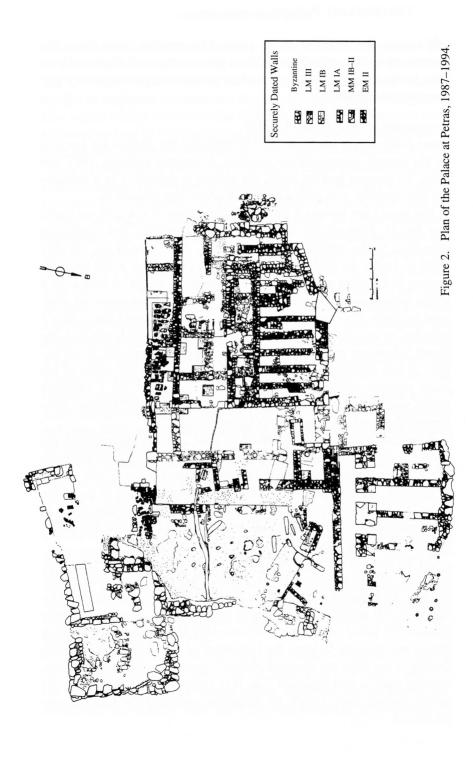
Description of the Palatial Building

Some 2000 square m of the 7000 constituting the plateau are covered by the central administrative building, excavated between 1987 and 1995. To the east and the north, the plateau is delimited by a substantial Protopalatial wall with a massive bastion-like projection.

The state plan reveals a four-part structuring of the built-up space (see fig. 2). Typically for a palace, the major feature, and organizing principle, is the central court, orientated, as it should be, roughly north to south. At 18×6.6 m in its earlier phase, it is small by comparison to the other palaces; nor is it enclosed by wings on each side: a single wing rises to the west, a (on the local scale) monumental staircase accesses the court from the north, and to the east there runs a corridor, or covered walkway. Slightly displaced towards the east, the North Magazines replaces a north wing, a solution imposed by the terrain, at this point one storey lower. The situation to the south of the court remains unclear, with no physical traces but for a staircase rising westward from a pier-and-door partition with flagstone floor beyond the southern limit, as it is known today.

A second phase, securely dated to Late Minoan IB, reduced the court to some 10×4.5 m through a single-course stoa foundation for alternating columns and pillars. The monumental stairway had ceased to function and was covered by an external court running in the shape of an 'L' along the east and north sides and above the older court. In this same phase, additional storage space was added at the foot of the stairway, forming an extension to the magazines.

On the basis of the excavated remains, it would appear that the eastern edge of the plateau was, in Neopalatial times, an open space, forming an external court contained only by the Protopalatial retaining wall. All activity in this area is either earlier, such as the Early Minoan IIB house cut into the northern edge and the scattered bedrock basins and mortars, or later, the Byzantine graves. The most imposing feature is the rock cut drainage channel, partially covered with slabs, running west to east for some 7 m. It is intimately associated with the earlier central court, which, by definition, antedates the Late Minoan IB Period.



The west wing is divided into two unequal halves by an east to west corridor, running 16 m to the west façade. The northern part is dominated by ten narrow parallel spaces, each 6×1.10 m behind the north façade. Since they are blind at both ends, their interpretation remains problematic. The entire area was covered by a thick Late Minoan IB destruction horizon, upon which there now stand remains of Late Minoan III buildings. The pattern of narrow dividing walls is broken by a short wall of double thickness between the sixth and seventh spaces. In the opening thus formed, we have slowly uncovered a thick Late Minoan IA destruction horizon, producing well over a thousand small finds from a 6 m square surface. A similar context was uncovered at the head of the monumental stairway leading to and from the central court.

The north façade and the south wall of the narrow parallel spaces form part of the backbone of the structure, a series of six east to west walls which divide the building into five separate areas: the narrow parallel spaces, a succession of Protopalatial units covered by the Late Minoan IB destruction level, the corridor and two series of rooms in the southern part. The first series was subjected to substantial change over time, with the final phase providing the only certain image: its use as a supplementary storage area is illustrative of a general increase in the need for magazine space in the Late Minoan IB Period. This phenomenon may be connected to the destruction of the 'villas', which Platon dated to the end of the Late Minoa IA period. Pithoi were also placed in the reduced central court. Again, a IB destruction horizon was excavated, characterized by impressive traces of fire.

The second series of rooms forming the southern edge on the plan is among the most carefully built of the palace. Access is gained through ashlar door jambs from the east, leading onto a floor paved with stone slabs set in a red clay bed. Although devoid of finds in situ, this room exhibited emphatic signs of burning. The fill contained numerous fragments of ashlar blocks, many with mason's marks, fallen from the upper floor. The west wall was built on top of the paved floor which continued into the gypsum-and-plaster paving of the adjacent room. An 'L'-shaped plaster bench, the greater part along the south orthostat wall, constitutes a unique feature at Petras. The

^{1.} Although this room exhibits clear traces of a violent fire, the red color of the clay bed is not due to rubification since it is uniform over the full thickness of the floor.

orthostats continue into the third room, in which was found remnants of a plaster offering table. Again, an earlier state is modified by a later wall. In the final phase the room with the plaster bench, that is, the area between the two later walls, was filled in, while the eastern room with ashlar door jambs and the corner room remained in use.

At the opposite end of the eastern side of the plateau lie the North Magazines. They form a separate unit, 20×13 m, some 3 m lower than the central court. They consist of five separate rectangular rooms, the western-most serving as entrance and stairwell for the staircase leading to the upper floor, as well as access to a 15 m long corridor running east to west. The latter communicates with the other four rooms. Each doorway is formed by massive piers, each of which contains an $86 \times 86 \times 80$ cm ashlar block, sufficient to carry one or two upper storeys. The north wall follows the terrain, arching southwards along the edge of the plateau. The magazines were found with 36 shattered pithoi on the rock cut floor. Total capacity at ground floor level would have attained some 60 pithoi.

Connected to the palatial building is an industrial area on a higher plateau to the south of the main complex. The finds included half-finished stone vases, raw material and a fragment of a potter's wheel. The some 40 m of terrain between the palace and the workshop appear to have constituted a garden as no architectural remains were uncovered (cf. Shaw 1993, who argues for a garden at Phaistos).

Finally, there are administrative data. A diskoid label, inscribed on both sides with the Hieroglyphic Script, came to light in the North Magazines, the sole instance known to date of this writing system in an archival context contemporaneous with a Late Minoan IB destruction. The surface level above the narrow parallel spaces in the north-western part of the complex produced two Linear A tablets. In addition, 12 Linear A signs were incised on a pithos rim found in the central court. House 2 in the township contained a clay lump with three incised signs and a sherd with two painted signs of Linear A. However, it must be stressed that these documents do not prove, in the absence of concrete evidence, that is, of roundels and seal-impressions, that a permanent archive existed at Petras (Tsipopoulou and Hallager 1996).

Petras as a Palatial Center

The architectural plan, the details in the construction and the find contexts argue in favor of reading Petras as a palatial center, despite

the lack of strong evidence for archiving. The existence of such a complex here finds its raison d'être in its geographical location. Petras overlooks a large maritime bay, offering safe anchorage not far from the mouth of a river that, although not navigable, would have provided a natural transport axis along its banks. The presence of three so-called 'villas' with surrounding settlement (Ayios Georgios, Zou, Achladia-Riza), one isolated 'villa' (Klimataria) at the river mouth, one sanctuary (Piskokephalo) in its immediate vicinity and thereby very close to Petras, a peak sanctuary (Prinias) and several farmsteads or small agglomerations (Analoukas, Avia Photia plain, Siteia Airport, Achladia-Platyskoinos), all within a clearly circumscribed geographical region, offers a natural and cultural mise en scène for the following hypothetical reconstruction: (1) Petras constituted the main administrative unit, centered on a small palace and surrounded by a substantial settlement: (2) the so-called 'villas' functioned as subordinate entities, the functional extension of the palace into the outlying settlements of the hinterland, channelling produce towards the center and distributing the goods filtering down through the system; (3) the farmsteads or minor agglomerations housed the population closer to the fields and orchards, or to economic niches; and (4) the two sanctuaries formed part of the religious network covering the territory.

Conclusion

The spectrum of architectural forms offered by the various excavated 'palaces' and 'villas' indicates that neither building type can be defined by reference to a single archetypical site. Each site constitutes an individual solution to a specific context and to regional requirements and possibilities. Nonetheless, there clearly exists a 'palace model', respected to a substantial degree (despite differences of scale) by each structure that functions as an administrative center within a given geographical region. The designs of the 'villas', on the other hand, do not adhere to a 'villa model', but rather mimic aspects of the 'palace model', each in its own manner according to its topographical and systemic position. A 'villa model' does not appear to have ever existed, not withstanding the 'villa' typology generated by John McEnroe (1982: 18-19). This would reflect a less strict functional definition of the 'villa' in relationship to the 'palace', the architectural expression of each 'villa' being conditioned by the function the

structure is to serve according to its position within the hierarchy. A 'palace' serves a global purpose within the administrative system, whereas a 'villa' is tailored to an economic niche.

Platon initially suggested that the 'villas' of Eastern Crete answered directly to Knossos as the seats of local chieftains, although it should be noted that he conceived of them as isolated structures, despite evidence to the contrary uncovered by his own excavations (Platon 1970: 186). At this time no known palatial center existed east of Gournia. The discovery of Zakros provided such an administrative focus, to which Platon naturally attached the East Cretan 'villas'.

By assigning, as is done here, the 'villas' and farmsteads around the Bay of Siteia to the control of Petras, Zakros is by no means diminished. Sites such as Ano Zakros (Platon 1971) and Chiromandres (Tzedakis et al. 1990) represent the second, 'villa' level of the hierarchy, while Azokeramos, Xirokampos-Katsounaki and Sfaka constitute smaller agglomerations. At Traostalos, Anthropolithous, Vigla and Sfaka there are peak sanctuaries (cf. Rutkowski 1986: 8, 73, 93, 95, 98, 245). Thus, Zakros is surrounded by the same subordinate entities as Petras, again clearly circumscribed by natural boundaries. Two dissimilarities must be noted: the difference in size and relevant database, and the presence of Palaikastro. Architecturally, Zakros forms a larger unit than Petras, although the agricultural base is smaller. The higher profit margin which enabled the construction of a larger palace must have been generated by the geographical position, the main exit towards the Middle East, a role amply documented by exotic, non-Cretan finds.

Until Palaikastro produces palatial architecture, it must be seen as subordinate to Zakros (within the present model). Yet, an unpublished 'villa' near Vaï (cf. Tiré and van Effenterre 1978: 105; de Santerre 1951: 143-46), and peak sanctuaries at Petsophas (Rutkowski 1991, with bibliography) and Modi (cf. Rutkowski 1986: 11, 80, 93, 95, 97) could go some way to reconstruct a palatial center at Palaikastro. The present framework would prefer to see the site as an important town. In the Late Minoan III Period, when the palaces at Zakros and Petras had come to an abrupt end, Palaikastro became the most significant settlement in all Eastern Crete. The phenomenon of non-palatial centers in Postpalatial Eastern Crete is not restricted to Palaikastro: a similar situation may be observed in the Mochlos–Myrsini–Tourloti area, where Mochlos constitutes the sole East Cretan site other than

Palaikastro to produce Late Minoan II pottery (in very small amounts), a sign of continuity after the destruction, followed by a Late Minoan IIIA1 reoccupation (Tsipopoulou 1995).

A further administrative unit is postulated for the Makrygialos-Diaskari region, but the area is not well investigated and the finds hitherto made have not seen their final publications. Davaras (1985) excavated a 'villa' at Makrygialos that he believes exhibits palatial architectural features and indications of a cultic function. It is surrounded by a settlement that remains uninvestigated. Nearby Diaskari, a major coastal site, was largely destroyed by developers. Eastward from Diaskari the author discovered in the 1986 survey that there are a number of small installations, always in connection with agricultural niches of restricted extent. Data relative to settlement patterns in Neopalatial Eastern Crete would then suggest the existence of three economic and political units centered on Petras, Zakros and Makrygialos-Diaskari, comprising a palatial unit, settlements headed by a 'villa', small outlying agglomerations, or even isolated farmsteads, and one or more sanctuaries, often near a mountain peak. It remains to be determined what relationships these centers entertained with each other, and the role of the major central Cretan palaces in the eastern province of the island, particularly Knossos, to which one hypothesis would assign supremacy over the whole of Crete.

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