

Stable Places and Changing Perceptions: Cave Archaeology in Greece

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The Uses Of Caves In Minoan Crete: A Diachronic Analysis*Lefteris Platon***Introduction**

The great number and the topographical and morphological variety of caves and rockshelters in Crete constituted the basic reasons for the various uses made of them by the inhabitants of the island, and this as early as the Neolithic period (for a good overview of the archaeological data up to the beginning of the 1960s, see Faure 1964). The purely archaeological data illustrate over their long existence, how caves often have more than one use that is in harmony with the needs on the practical and the ideological level of each set of users. Caves employed at one time for burials, in and to a greater or lesser extent organized fashion, appear to have been used, at some other point in time, as shelters or cult places (Faure 1964, 46, n. 7; Tyree 1974, 8, 26-27, 53-54). In other cases, caves or rockshelters, which originally had been used as seasonal habitations, were transformed into cult places or burial grounds (Pendlebury, Pendlebury and Money-Coutts 1935-1936, 23; Nilsson 1950, 56, 60; Faure 1964, 52-53; Tyree 1974, 10; Sakellarakis 1985, 16; Guest-Papamanoli and Lambraki 1976, 211-212; Tzedakis and Gavrilaki 1995, 893; Faure 1996, 38). It appears probable that the use of caves was not fixed, but in a state of long term transformation in relationship to changing needs of the communities that resorted to their use.

It is generally known that caves and karstic formations were used from the most distant Antiquity until our times for various human activities. However, the character and temporal span of specific past activities inside these natural shelters are particularly difficult to trace today. The main difficulty stems from the diachronic nature of cave use. Due to their almost unchanging shape (as far as the Human Era is concerned), caves offered to large and small communities stable and safe space with an "architectural" function that were ready to answer various needs according to circumstance.

To this same characteristic, the lack of physical change to the shape of caves is partially due to the absence, in the majority of cases, of substantial archaeological stratification. Human intervention on interior space, regardless of period, and season, is either nonexistent or negligible. It is likewise known that the archaeological stratification is created chiefly through the alteration to or recreation of human structures, usually preceded by a rearrangement of the traces of previous uses of the space. Exceptions include some layers identifiable by excavation, which have been conserved through geological changes; these, however, due to the limited scope of human life, constitute a rather unusual phenomenon. A case of stratigraphic distinction between two successive, and probably different,

uses is provided by the small Miamou Cave (see Taramelli 1897, 291-296, figs. 5-6; Nilsson 1950, 53-54; Faure 1964, 52-53). The collapse of the ceiling at the Arkalochori Cave, probably at the end of Late Minoan IA period, constitutes an unforeseen change to the morphology in connection with the use of the space, brought about by geological causes (see Marinatos 1935a, 218).

The Study Of Cretan Caves

The above observations may to a certain extent explain the perplexity of most scholars when confronted with the question of function - and more generally the meaning - of Cretan caves, at least during Prehistoric times, when philological testimony is almost totally absent, with the exception of the probable identification of the "Cave of the Nymphs" with the sanctuary of the birth goddess Eileithyia at Amnissos [Amnissos Cave (Cave of Eileithyia)]. The latter is referred to on Linear B tablets at Knossos (see Tyree 1974, 108 and n. 26; Rutkowski 1986, 64; Faure 1996, 59), while for the possible identification of this cave with the "Σπέος της Ειλειθυίας" ("Cave of Eileithyia") in Homer (see also Nilsson 1950, 58)]. Later factors introduced by the activities of contemporary humans aggravate the situation. One such activity is the renewed disturbance, mainly during the past century, of old caves, either intentionally through occasional or systematic looting (for a characteristic case of systematic looting of caves in a wider area, see Platon 1961, 224), or unintentionally during a final use that is usually quite temporary. Additional problems were caused during the same time period by the absence of proper excavation inside a number of caves. This was almost always accompanied by inadequate archaeological publication of their contents (concerning this topic, see also Rutkowski 1986, 11). Today, apart from a detailed account of the excavation data, competent scientific publication would in principle presuppose the complete description not only of the geomorphology of the interior of the particular karstic formation, but also of its wider geological context as well as the indispensable archaeological and environmental studies of the finds. Finally, the picture should be complemented by archaeological - at least surface - studies of the immediate environment of the caves, and of the wider cultural context within which these sites functioned in Antiquity. Such studies could provide answers to questions concerning the accessibility of the caves, but also yield answers to their likely proximity to burial grounds, settlements, agricultural/livestock-rearing zones, or even areas for other types of economic exploitation. The traditional archaeological study of Cretan caves has mainly focused on one very particular use and therefore particularly difficult in terms of its theoretical approach - use: a rather small number of caves functioned as cult places [see the chief overviews by Faure 1964, 81-197, 1985, 1996; Tyree 1974; 2001; Watrous 1996; Rutkowski and Nowicki 1996, while significant chapters on cave cults have been included in more general works concerning Minoan religion, see Nilsson 1950, 53-68; Rutkowski 1986, 46-71, 200-201; Marinatos 1993, 123-126, as well as the older studies by Nikolaos Platon (1930) and Spyridon Marinatos (1941)].

This use was connected to mythological and contemporary folk traditions, for which there also exists, apart from the archaeological data, epigraphic, and other philological testimonies. However, the “transportation” of the religious significance which some of the caves have undergone, mainly during the Historical period, back to functions dating to previous phases, even if probable, remains in quite a few cases to this day unsubstantiated (characteristic cases include Faure 1996, 21-22, 39-41, 75-77, 109-110, 124-125, 131-134). Characteristic are the efforts of scholars to determine some criteria, which would allow recognizing cult caves (Faure 1985, 13; 1996, 16). However, the systematic study of specific instances showed that these criteria are not generally valid, all the more so when the character of the cult itself differs over time and by geographical unit. Given the fact that the number of certain Minoan cult caves available for examination is exceptionally small [out of a total of 3320 caves and related karstic formations in Crete (Platakis 1975), Loeta Tyree (1974, 167) classifies only 19 as cult caves, while Bogdan Rutkowski (1986, 47-50) arrives at 16 and Paul Faure (1996, 21-154) catalogues as ritual 53 Cretan caves, most of which provide adequate evidence for cult only in the Historical period], every attempt to create a hypothetical model remains statistically arbitrary.

The Uses Of Cretan Caves

Even if the today prevalent opinion regarding the use of caves in Crete during the Neolithic period states that they were sometimes employed for habitation, sometimes for burial (Watrous 1994, 700-701, 703, 734 and n. 298), a parallel function for some of them as sites of limited ritual activity should not be excluded (Tyree 1974, 65; 2001, 39-40; van Leuven 1981, 13; Rutkowski 1986, 65-67; Zois 1991, 37, for the opposite view see Faure 1996, 207-208). Moreover, burial ritual is closely related to the religious conceptions of a community. Therefore, habitation sites were among others employed in Prehistoric times for the celebration of cults to supernatural forces. Despite the fact that some scholars have ventured to see in these early uses for burial or habitation of the Cretan caves, the birth of the cave cult (Marinatos 1941, 130; Nilsson 1950, 56-57; Tyree 1974, 114; Zois 1973, 125), the consolidation as a systematically organized activity appears to be connected to a greater extent with the development of a specific theological system, which was completed with the creation of the first city states. Livingstone Vance Watrous (1996, 75-81) is more or less of the same opinion. He believes, however, that the systematization of cult in extra urban sanctuaries is one of the factors leading to state formation. It has been correctly noted that a systematic ritual use of Cretan caves is encountered for the first time at the beginning of the Middle Minoan period in, for example, the Kamares Cave, the Psychro Cave, the Skoteino Cave and the Stravomyti Cave. At approximately the same time that these sanctuaries were established another type of sanctuaries were founded on the peaks of mountains. These were probably for a cult of a different character, but certainly, nevertheless, as a complement to

the cave cult. Even if Watrous claims that cult in caves and in peak sanctuaries present similar characteristics, the totally different topographical position of the two types of sanctuaries cannot be studied as anything but the result of a conscious choice on the part of the worshippers in connection with the type of cult or the character of the worshipped deity (see Watrous 1996, 92-96). There is no doubt about the chthonic nature of the latter. The ritual placing of offerings in the cracks of stalagmites, in crevices in the rock, and in physical depressions and niches in the walls of Minoan caves (Tyree 1974, 91-92, 180-182), and the observed isolation of dark and inaccessible areas in view of their probable use as holiest-of-holies (Platon 1930, 164-165; Tyree 2001, 42-43). All these points are elements that simply confirm this logical hypothesis. The great significance of the chthonic dimension in Minoan cult is supported by both the performing of libations, and the deposition of offerings in wells, or in sources at the boundaries of cemeteries and settlements, and finally by the probable imitation of similar features in architectonic form within the palatial complexes that especially can be observed during the Neo-Palatial period (Marinatos 1941, 130). One step further is taken by Thodoris Iliopoulos (1988-1989), who basically equates the chthonic dimension of cult with the cult of the dead.

The morphological variety of caves employed for cult in Palatial times does not permit the formulation of criteria relative to the choices already made (Tyree 1974, 6-7, 169). It may simply be suggested that in some cases features such as the presence of stalagmites [Platon 1930, 165-166; 1970, 96-98; Rutkowski 1986, 47, on the contrary, Martin P. Nilsson (Nilsson 1950, 56-57) does not accept that geomorphological criteria played a significant role in the choice of cult caves], a labyrinthine layout or in particular during Palatial times the visibility of the cave entrance over long distance, or from some particular point within the urban agglomeration, played a role (Evans 1921-1935, I, 1921, 163; Tyree 2001, 40-41).

A far more difficult task involves an attempt to identify the specific deities or their particular aspects of worship in caves during Minoan times (for a good overview of the range of opinions, see Watrous 1996, 23-25). This issue is connected with the very nature of the cult. We have only sparse indications available to base a more accurate reconstruction of these issues. The main issue is the nature of the offerings (Tyree 1974, 169-178). The most recent analysis of the types and character of the offerings in Cretan peak sanctuaries, open-air sanctuaries, and caves are provided by Watrous (1996, 81-92), since the ritual equipment proper (sacred symbols such as horns of consecration and double axes, and probable bases, or altars, offering tables and libation vases, lamps, and vessels for solid offerings) is common to all categories of Minoan sanctuaries. Among the categories of offerings the bronze figurines depicting votaries stand apart since they are rather unusual in other types of sanctuaries, and it is necessary to note that the large concentrations of dedicated double axes are only confined to two caves: the Arkalochori Cave and the Psychro Cave. Concerning the former,

the particular character is related to a greater degree to the material than to the type of offering. This is something that could only lead to one hypothesis concerning a differentiated social status of the dedicator (Watrous 1996, 80; Tyree 2001, 42). On the other hand, the concentrations of metal imitations of symbols and weapons confirms the mass deposition of precious offerings that were, most probably by groups, commissioned by specific centers of politico economic power. In Palatial Crete this can only be the palaces themselves. Nannó Marinatos (1993, 125) believes that the Arkalochori Cave was patronized by a corporate group of warriors or priests, for whom the specific offerings constituted a type of *insignia dignitatis*.

Even if the mass deposition of weapons has led some scholars to postulate the occupation of these caves by a specific deity with warrior attributes (Marinatos 1935a, 219-220; 1941, 134; Tyree 1974, 91, 97, 182; Rutkowski 1986, 65, contra Nilsson 1950, 74), it seems more likely that this ritual practice is connected with some particular circumstances or events and less with an entrenched character of the cult in these sites. Concerning the Arkalochori Cave in particular, it has been suggested that the deposits are connected to intense seismic activity or to a political crisis (see Marinatos 1935a, 219; 1935b, 254; Platon 1973, 253; Rethemiotakis 1999, 105-107).

There are no clear archaeological indications concerning the modalities of the ritual ceremony and of its purpose inside caves. The absence of cult statues may be explained by a probable replacement by stalagmites and other physical formations (Platon 1930, 166-168; Rutkowski 1986, 50-52). Tyree, drawn in another direction, expresses the opinion that this fact suggests different means of communication between worshippers and divinities to that operating in the constructed sanctuaries. She proposes that, at least during the Palatial period (Middle Minoan II-Late Minoan I), one mode of communication with the divine was provided by ritual ecstasy (Tyree 2001, 42-44). This approach was aided by the dark isolated places considered by the same scholar to be "holiest-of holies" and hypothetically, by repetitious sounds, probable percussive. At any rate, the other ways of conducting cult in caves do not appear to differ from those that characterize cult in open-air sanctuaries. These probably include blood sacrifice, ritual meals, libations, and, of course, the ritual deposition of offerings (Tyree 2001, 45-46). Concerning the purposes of cult within caves, some hypotheses have been formulated, which are exclusively based on ethnographic parallels and lack, in the opinion of the present author, sufficient archaeological documentation (Watrous 1996, 89-92, 95-96).

Even scarcer are the indications of an evolution in cave cults during Minoan times (good overviews of the evolution of cave cults during the Minoan period are provided by Watrous 1996, 73-78, 97-100 and Tyree 2001, 40-49). For the Palatial period, observations have been made that has recognized a progressive tendency towards improved organisation of and greater formality in the rites that culminated in the Neo-Palatial phase (Watrous 1996, 97; Tyree 2001, 46). Concerning the earlier palaces in par-

ticular, and based mainly on the finds from the Kamares Cave, it has been suggested that the cult in caves had the main purpose of invoking the deity to protect and enhance the livestock raising and agricultural productivity (Tyree 1974, 70, 180; Rutkowski 1986, 63). For the Post-Palatial period a change has been noted regarding preferences in terms of place and type of new cult caves. In this period it appears that a proclivity for shallow open caves exists, which are usually characterized as "rockshelters", and no attention is paid to the visibility factor over large distances (Tyree 2001, 48-49). Finally, a reduction is noted in the level of formality of the cult in comparison with the Neo-Palatial period, and a greater variety in the types of offerings, particularly in bronze (Tyree 2001, 48-49). The find's fragmentary conditions, frequently generates uncertainties regarding their ritual use during Prehistoric times. In the case of the celebrated "Idaeon Antron", it has not to date been possible to determine with certainty the beginnings of the cult. Faure (1996, 95), Watrous (1996, 58 and n. 8), and Tyree (2001, 40 and n. 10), in their most recent works, place the beginnings of the cult in the Idaeon Cave at 2000 B.C., following the opinion of Antonis Vasilakis (1990, 15-17). The last excavator of the cave, however, Yannis Sakellarakis, acknowledged that the oldest archaeological remains attesting to a use of the cave as a sanctuary belong to the Middle Minoan III (see also Watrous 1994, 734, n. 298).

Doubts have recently been also expressed in the bibliography for the well known "cultic" caves of Kamares and Arkalochori. In the first case (Dawkins and Laistner 1912-1913), several scholars note the difficulties involved in distinguishing ritual implements from offerings among the greater majority ceramic remains, part of which exhibit a clear connection with storage (Nilsson 1950, 66; Rutkowski 1986, 63). Indirect allusions to a probable alternative use of the Kamares Cave are made in a very recent forthcoming work concerning the caves in the region of Zakros, specifically the sites "Tis Ouranias to Froudi" and "Mavro Avlaki" (see Kopaka forthcoming; Manteli and Philippa forthcoming). Particularly in the first instance, the movable finds lead to an interpretation as non religious site, but their almost complete identity with those from the Kamares Cave generate justifiable doubts (see Kopaka 2003, 54-55, 58-64; 2011, 283-284). The inaccessible position of the Kamares cave, however, at the foot of Mount Ida, far from every significant country settlement, the quality of some of the finds, and the fact that for the better part of the year it would have been impossible to live there since the site is snowed in, are all indicators, albeit with some reserve, in favor of a ritual use. Thus, the almost total absence of recognizable ritual equipment has been ascribed to the particular nature of the cave cult during the first period of its function (Middle Minoan) (Nilsson 1950, 66-67; Tyree 1974, 70-71, 169, 180).

Even more interesting is the case of the Arkalochori Cave, where the finds are more numerous than at any other Cretan cave (Hazzidakis 1912-1913; Marinatos 1934; 1935a; 1935b; 1962). The finds have been assigned to two different periods of use, which, given the chrono-

logical gap between the two, could lead to supposing the absence of all connection. To the first belong mainly ceramic finds from the Early Minoan period and some stone tools and obsidians (Hazzidakis 1912-1913, 37-46; Marinatos 1935a, 218; 1935b, 251; 1962, 89). In the opinion of the first excavator, Joseph Hazzidakis, the cult in the cave had already begun in this period. This view has since been vigorously disputed (Hazzidakis 1912-1913, 46; Marinatos 1935b, 251; 1962, 89; Tyree 1974, 29; Rutkowski 1986, 66 and n. 108; Faure 1964, 52-53; 1996, 73; Rutkowski and Nowicki 1996, 25, for a probable cultic use of the cave in Early Minoan times, see Platon 1970, 100; Watrous 1996, 57, n. 2). For the sacred character of the far more numerous and richer finds of the second period of use, dated by the excavators Spyridon Marinatos and Nikolaos Platon to the Middle Minoan III-Late Minoan I period (Marinatos 1935a, 218; Platon 1973, 273), there can be no doubts. The morphology of the cave, however, as well as the manner in which the offerings had been deposited - almost in masses, the one in close proximity to the next - led some scholars to propose alternative interpretations regarding the significance of the find. According to the first, proposed by Marinatos (1962), the cave was used for the cult of a Minoan deity with war like attributes and at the same time housed a metalworking installation for the purpose of producing offerings for the sanctuary [for an overview of these activities, see also Platon 1988, 320-321; this reading is rejected by Nanno Marinatos (1993, 125)]. This interpretation considers as given that the cave was, in reality, much more open, more akin to a rockshelter. The chief deposits were two, the one a small distance from the other, the first approximately in the middle of the cave, perhaps within an architectonically delineated space (altar?), which left, however, no traces. The second lies further north on the rock floor and close to the walls (Marinatos 1935a, 214-215; 1935b, 249-251; 1962, 89). Other finds are not mentioned with the exception of some Middle Minoan III sherds from common, unpainted vases, which were interpreted as vessels for the use of the personnel (priests?) and some Early Minoan sherds of Pyrgos and Vassiliki wares (Marinatos 1935a, 218; 1935b, 251; 1962, 89).

A second alternative interpretation of the find was recently proposed by Giorgos Rethemiotakis (1999, 105-107; 2002, 64-65). He associates the "treasury" of metal objects with the recently nearby excavated Palace of Galatas, of which it is conjectured to be the property. According to this interpretation, the objects came from open-air sanctuaries and their concentration was due to a massive transfer to the palatial workshops with the purpose of recycling the materials of which they were made. Their discovery in the Arkalochori Cave is considered a more or less fortuitous fact that probably was the result of some political convulsion. This might have forced the local priesthood to hide precipitously this precious treasure in a safe hiding place until the crisis had passed. In this intelligent interpretation there exists, nonetheless, an arbitrary confession: that the only objects in the cave were the metal offerings, deposited all together in more or less the same moment. However, serious attention was not

paid to an observation made by one of the excavators, Nikolaos Platon. He saw that on the stepped path that led up the side of the hill to the cave, hundreds of deposited conical cups were found - offerings of the faithful in the Late Minoan I period, that is, after the collapse of the ceiling of the cave (Platon 1970, 100; 1973, 253).

The study of an unpublished typewritten paper by Platon, who kept the note books during the 1934 excavation (from 4 June to 7 July and from 31 October to 3 November 1934, when the main deposits were discovered), offer additional information on the excavation worthy of appraisal prior to formulating a definite answer to the question regarding the true meaning of the find. The more significant elements may be summarized as follows:

1. The main deposits of metal offerings were not two but four. One was placed in a small chamber with a low ceiling accessed by a steep path with stone steps beginning on the southwestern side of the hill. The path must have been somewhat posterior to the use of the deposit since stones in the upper part partly closed the mouth. In front of the entrance to the chamber was a rock, which supported the ceiling and a built wall, probably filling a similar supportive function.
2. The deposit of bronzes in this chamber had the same characteristics as the others and consisted of a 10 cm thick layer. At the entrance four Early Minoan vases without stratigraphical context and a small two handled spherical cup (Early Minoan IIA?) were discovered as well as many pieces of obsidian. A microscopic one handled Early Minoan vase was found in a hole at the back of the chamber. Moreover, beyond bronze offerings of the usual type, which also included disc shaped pieces of bronze that was identified by Marinatos as standardized units of raw material for the metal working "workshop" ("σόλοι") (Marinatos 1934, 253; 1962, 89, 91-92), the chamber contained pottery characteristic of the Middle Minoan III-Late Minoan IA period, represented by two single spouted lamps, one handled cups of the "Vaphio" type and shallow cups with broad outward turned rim.
3. Outside the entrance of this deposit and on the access path thousands of conical cups were discovered, which compare with those from the house on Gypsades Hill at Knossos. They date to the Late Minoan I period. The same date can be applied to fragments of pithoi and other vases.
4. There is no evidence in the excavation for an altar, or another built structure at the center of the cave (Marinatos 1935a, 215; 1935b, 250; 1962, 89; Rutkowski and Nowicki 1996, 25). In addition it appears that this deposit has suffered great disturbance, if possible, pillagers had removed the valuable objects before the excavation of 1934, and since fragments of Early Minoan vases were found among the bronze finds.

On the basis of the above four points, the ritual use of the Arkalochori Cave cannot be doubted. It appears that the depositions of bronzes in four or more places took place in a ritual manner accompanied by ceramics but also by other objects (according to the 1934 excavation note books of Platon, inside the chamber, to which the ascent led, were found the terracotta head of an animal and a

stone rubber, in the deposit with the small gold and silver axes a small faience vase, while along the steps of the ascent towards the small chamber, part of a terracotta animal and a fragment of a potter's wheel). The continuation of cult in front of the (already collapsed?) cave in the years following immediately upon the depositions, now proven beyond a shadow of doubt by the dedication of thousands of conical cups, would make no sense, at least in the consciousness of the believers, if the area had not constituted a shrine in the past. Finally, the type and the find spot of some ceramic objects belonging to Early Minoan I and II strongly support the probability that the same space had been employed for cult in the Early Bronze Age.

Despite the fact that of all the documented uses of caves in the Early Minoan period it is burial that tops the list in terms of absolute numbers, few in depth studies have appeared to date on this particular topic. In the main study Faure catalogues some 90 burial caves (Faure 1964, 66-80, see also Nilsson 1950, 53-56 where the majority is located in eastern Crete). He defines the end of the 3rd and of the 2nd millennium B.C. as the highpoints in the funerary use of caves. These periods were characterized by social transformation and instability, and, of course, the absence of a strong central administration (Faure 1964, 72-73). The interments in caves appear chiefly to depend on the existence in the immediate neighbourhood of open-air settlements or on the attempt of certain social groups to bury their dead in a more economic way (Faure 1964, 73-76). Regarding the character of these groups, little can be said with certainty without reference to comparative data relative to the wider cultural domain to which these would have belonged (Faure 1964, 73). For Zakros, for example, it has been suggested that the burials in caves during the Middle Minoan period are characteristic of some conservative or economically disadvantaged social groups (Manteli and Philippa forthcoming; Dawkins and Laistner 1912-1913). Something along those lines may, in the present case, be proposed on the basis of a comparison of the grave gifts with those of contemporary interments in open-air built tombs (on the built enclosures at Pezoules Kephala, see Platon 1967, 190-194; Platon, forthcoming). The finds, on the other hand, from the burial caves, Pyrgos Anopolis Cave (Xanthoudides 1918, 140-168) and Trapeza Lasithiou Cave (Pendlebury et al. 1935-1936, 25-128), are so impressive that it is difficult to claim that they represent groups of an analogous social position. In these cases, however, there is no comparative material in the wider area, while for the choice of the Trapeza Lasithiou Cave it cannot be excluded that other parameters played a role such as a tradition connected with some deeply rooted religious beliefs of the inhabitants.

The burial of the dead in caves was effected either in simple pits - in rare cases in cists constructed from rough stones (such a case is mentioned for Zakros, see Hogarth 1900-1901, 143) - or in burial pithoi and clay larnakes. The hypothetical, yet probable, existence of wooden larnakes, but also the general disturbance of caves due to the factors examined above, does not at present allow us to

draw conclusions regarding a probable social differentiation of the dead by grave type.

The quality of publications and the state of conservation of the anthropological remains deter, likewise, from an even rudimentary description of the funerary rites employed for burials in caves. Antonis Zois has affirmed that during the Neolithic period burial was effected in the back and along the walls of caves (Zois 1991, 37). The more than a hundred skulls that were found during excavation of the best studied and published burial cave, Trapeza Lasithiou Cave, declare the usual practice to remove relics belonging to earlier burials, also encountered in graves in organized open-air cemeteries (Pendlebury, Pendlebury and Money-Coutts 1935-1936, 18). Certainly, for the Hagios Haralambos Cave (Gerontomouri Cave) it has been affirmed that it was employed exclusively for secondary interment of skeletal remains and funerary gifts. These were brought there from their original, for the moment unidentified, place of open-air burial (Betancourt 2005, 449). Finally, regarding the criteria governing the choice of burial caves there does appear to have been a rule, even if shallow and low ceilinged cavities, unsuitable for any other use, are the most common found.

A much more disputed use of Cretan caves during Prehistoric times is that of simple habitation. Zois rejects emphatically the probability that caves were used for permanent habitation, even in the Neolithic period (Zois 1973, 83, 119, 187, 225-226). He also appears largely to be followed by Adamantios Sampson in a more general overview of caves in Greece (Sampson 1985, 42-43). Yet both admit a periodic - more episodically than regularly repeated - use of caves by shepherds, hunters, or fugitives. Faure that accepts the periodic nature as chief characteristics of cave use as habitations in times of peace (Faure 1964, 46-49) distinguishes six different circumstances (Faure 1964, 46, 59-66):

1. As temporary housing for squatters
2. For stabling of animals
3. For collecting water
4. As temporary accommodation for shepherds
5. For storage of various agricultural products
6. As shelter for refugees (this final use was the most common from Antiquity to the present, see Faure 1964, 59-66; 1969).

A more permanent, but of supplementary character, habitation use of some caves is suggested by Zois for the Magasas Cave, Sphoungaras Cave, Katsambas Cave, and Miamou Cave from the Neolithic period (Zois 1973, 88, 106-107, 132, 182). In these cases, however, the caves are in direct connection with open-air habitations and appear to have had auxiliary uses either as storage for produce or as housing for special activities such as food production, or, finally, as stabling of domestic animals belonging to the inhabitants of the adjoining houses. Sampson (1985, 44) adds yet another probable, entirely occasional, use of caves: as refuge for neighboring inhabitants of these areas in times of calamity, epidemics, or invasions. It is worthy of note that analogous uses of Cretan caves have been observed for later periods, lasting

to the present day.

The interventions of architectural character by man at the cave entrances and within such caves are restricted to the construction of low protective walls for the enclosure of livestock (Sampson 1985, 44), of supporting walls for leveling of the surface in view of manufacturing, or storage activities, to the configuration of accesses, and interior pebble or earth covered floors for similar purposes, and to the construction of fireplaces for food preparation. The minimal and temporary natures of these interventions are elements that underline the seasonal character of the use of caves as habitations, at least during the Bronze Age.

The innate difficulties involved in the functional determination of Minoan caves, as described above, are further compounded by an additional factor: the insufficiency of archaeological research. It is a question of the possibilities for a basic functional differentiation in connection with the varying chronological or geographical distribution of examples available for analysis. The ongoing systematic study of excavation findings made by Nikolaos Platon in caves within the wider Zakros area (the study of the research by Platon in caves, deposits, and open-air built tombs in the wider area of the Minoan settlement at Zakros is included in the first volume of the final publication of the site, forthcoming in the series of publications of the Archaeological Society of Athens) offers the opportunity for an all embracing examination of a geographically - and in part chronologically - well defined example of cave use in Minoan times.

At present time, ritual use has only been suggested for two caves of all the caves in the Zakros area (concerning the Pelekita Cave, between the Bays of Zakros and Karoumes, see Rutkowski and Nowicki 1996, 33-34). The first, in the location "Riza" on the abrupt slope that closes off at the northern end of Kato Zakros Valley where the Minoan settlement was built consists of one imposing but in reality shallow, vaulted concavity also known as "Spiliara". Its identification as cult cave - a type of temple (?) - on a purely morphological and topographical basis remains to this day entirely hypothetical (Faure 1996, 163-164). The second is the narrow and dark Mavro Avlaki Cave, named after a small fjord located immediately to the south of the Bay of Zakros (Platon 1962, 167-168; 1970, 98). The finds of the cave indicate, as we shall see, beyond a shadow of doubt, that it was employed primarily for burials, and a synchronous ritual use has to be considered rather irreconcilable.

In his first exploration of the Zakros area, Platon noted that a large number of caves both on the abrupt rocky slopes which enclose the bay, and inside the gorge that unites the coastal zone with the interior, had been used for burial (Platon 1961, 224). The first excavator of the site, David George Hogarth, had already examined two of them, but today their identification remains difficult (Hogarth 1900-1901, 142-144).

Marilena Kanetaki (forthcoming) believes that one of them may be identified with "Burial Cave A", re-examined by Platon, east of "Spiliara". The British scholar, however, refers to a small hollow cavity, while the particular cave resembles more a long and narrow tunnel. The one cave excavated by Hogarth, on the north slope of the Minoan settlement, must, on the basis of its shape and of the few ceramics it contained, have been employed for burials, even if no traces of human bones came to light. The second, inside the gorge, ca. three miles from its southern (coastal) entrance was quite larger and contained five disturbed burials in cists built of rough stones. The illustrated pottery from both caves falls easily into the Early Minoan IIA period (Hogarth 1900-1901, fig. 52).

Of the caves examined by Platon only one produced undisturbed burials of the Early Minoan period. This cave, called Dog Cave, is situated low down on the eastern rock face and some 300 m from the southern entrance of the gorge (Platon 1963, 187-188; Zois 1991, 39-40, further, unpublished, data derive from information contained in the excavation note books). It is a small uphill cavity with two entrances and narrow branched off passage ways (Fig. 8.1). The six burials that came to light had been placed close to each other at various points along the length of the two passage ways of the cave, and had been covered with earth and mounds of large and small stones. In one case, two burials had been placed in the same spot, one on top of the other. The finds, almost exclusively ceramics represent characteristic styles of the Early Bronze Age dated to Early Minoan IIA and IIB. The contents of the graves betray a somewhat differentiated approach to the burial rites. Three graves had received 1-2 vases, where one was unaccompanied, while the richest contained the well known magnificent schist pyxis with the handle of the lid in the shape of a dog and four vases decorated in the incised gray ware style of eastern Crete and in the Vasiliki ware style. Finally, a surface find of one fragment of a pithos with rope decoration indicates perhaps use of the site for a pithos burial at a later date (Middle Minoan?).

The graves in shallow and rather small cavities in the gorge continued into the Middle Minoan period (Platon 1963, 187; 1964, 167). At a small distance from the Dog Cave, but at a much greater height on the western rock face, a small burial cave was examined and found to have been substantially disturbed at an early date (Platon 1972, 190-192, information not published in the preliminary report derives from the excavation note books). One of the latest graves in a decorated Late Minoan I pithamphora had been placed on a small constructed terrace in front of the entrance to the cavity. The other chronologically earlier graves had been thoroughly disturbed and were no longer in their original position. The scattered bones were abundant, while a large concentration of human teeth was noted at one point near the entrance. The gifts attest to a rather extensive period of use and included a number of stone vases, copious amounts of sherds from small vases of the Middle Minoan period, some with decoration, fragments of tripod cooking pots, carbon, and cores and

blades of obsidian. A small pithamphora, probably of Middle Minoan III date, found on the entrance terrace, did not contain a burial.

The study of the material from the Mavro Avlaki Cave (Manteli and Philippa forthcoming) showed that the excavator had, in his preliminary report, incorrectly placed the period of use in one phase only (Early Minoan III-Middle Minoan IA) (Platon 1962, 167). This narrow cave - like a dark tunnel - had been used at two different times, Final Neolithic and Middle Minoan IB-Middle Minoan IIIA (Platon 1999, 674-675; Manteli and Philippa forthcoming). An even occasional use of this cave as a habitation (Zois 1991, 37), at least in the second phase, which coincides with the period of the first palaces in Crete, appears improbable due to its entirely unsuitable morphology (narrowness, particularly high humidity level, difficult access), as well as its position. The small fjord above this stony cavity (Mavro Avlaki) is known for the dangerous sea currents created within it. These currents prohibit not only its use as an anchorage but also the mere approach by any vessel (Fig. 8.2). A strong megalithic wall of unknown date, which appears to close off the ascent from the area of the cave up to the plateau above it (Platon 1962, 168; Zois 1991, 40-41) (Fig. 8.3) does not appear to belong to any building since it stretched out along the right hand side of the small bay (Nakasis and Tagonidou 1993, 23). Its use remains uncertain as a fortification for reasons already described above. A use of the cave for burials in the Middle Minoan period is documented in any case by the presence of scattered human bones and fragments of pithoi and larnakes (Platon 1962, 167). The interments, close to the entrance, were made either in pits or were simply covered with soil or finally, were placed in clay (or also wooden?) coffins (Manteli and Philippa forthcoming). The ceramic finds were chiefly funerary in nature, but indicate, as in open-air cemeteries, some manner of mortuary drinking ceremonies, or even grave-side meals. The presence of a large number of seashells inside the cave, (Platon 1962, 167; Zois 1991, 37) although it is possible to connect them with the burials, cannot be evaluated in absolute terms because they may be connected to a much later, even modern, use which left no other traces.

Two of the caves in the Zakros area offer some indications that would rather place them in the category of occasional habitations than in the category of cult sites or burials. The first is named Cave A at Riza, east of "Spiliara" (Platon 1961, 224; 1962, 165; Kanetaki forthcoming). It is a long, narrow cave with a length of ca. 18 m. It has a double entrance and almost level floor. The sole finds from inside the cave are three pithoi and a few vases, probably of Middle Minoan III-Late Minoan I date. Among them were a small basin and a "milk jug". In the 1962 preliminary report, Platon (1962, 165) places five burials(?) inside the cave, which according to the note books were, in fact, discovered on the terraces to its northwest, some 25 m lower than the entrance. The absence of human bones, the character of the ceramic finds and the position of some building remains on the terrace immediately below that of the entrance (inspection by the

present author and Kanetaki, see also Platon 1961, 224) (Fig. 8.4) in connection with the rather appropriate formation for a habitation use (Fig. 8.5), render it likely that Cave A at Riza east of "Spiliara" was used as an auxiliary (storage?) space for some neighboring houses (a use such as this appears rather more common in the much earlier Neolithic period, Zois 1973, 88, 106-107, 132, 182; Faure 1964, 53).

More problematic is the case of the Ourania Cave at the site "Tis Ouranias to Froudi" inside the Zakros Gorge (Platon 1962, 165-166; Kopaka 2003; Kopaka 2011). Here, in the front part, near the entrance, a low cross wall of rough stones had been built, while a supporting wall created something like a terrace. Most finds from the cave date to the Middle Minoan III-Late Minoan I period and consist of domestic pottery with an accent on storage, although stone and bronze tools are not lacking. A significant find is the discovery of a quantity of salt and grain as well as a number of horns of wild goat bearing clear marks of fire, which makes their use as torches likely. The absence of human bones and distinctively ritual objects (Kopaka 2011, 279) in connection with the existence of constructions, though rudimentary, makes it probable that the cave was employed as temporary accommodation - in all likelihood by men working in the region (Kopaka 2003, 55; 2011, 280). The site is, however, difficult of access and precipitous, features that do not favor the existence of a very well organized installation (Fig. 8.6). The most logical explanation is that it was for shepherds, who have used the cave until the present day as a stable for their herds (Faure 1964, 53; Kopaka 2003, 53, n. 1). A similar use, dated to the Final Neolithic, has been suggested for the "Spiliara" in the neighboring Bay of Karoumes (see Vokotopoulos 2000, 135). The discovery, however, in the immediate vicinity, on an artificial terrace, of a peculiar clay object, most probably employed in bee keeping [Davaras 1989, 2-4, Platon (1962, 166) believes it was used as a bellow, while Faure (1964, 78 and n. 2) interprets it as a utensil employed in funerary rituals], raises the probability that the Ourania Cave was used as seasonal accommodation for beekeepers (Kopaka forthcoming; 2011, 280). This would be in accordance with the vegetation in the area, since to this day the gorge is overgrown with thyme, which is a very good sustenance for bees.

Conclusions

The sample from the Zakros region succinctly examined above confirms that while the uses of caves in the broader area of a Minoan urban agglomeration may have been diverse, they are almost always supplementary or auxiliary in character. With the exception of the Neo-Palatial period, in all other phases some of the caves were selected for burial grounds for some social groups, the composition and their social position of which it is not possible to determine with certainty on the basis of the available data. A much smaller number of caves, chiefly during the acme of urbanization (Late Minoan I), appear to have been employed occasionally to cover secondary needs that were connected more with life than with death.

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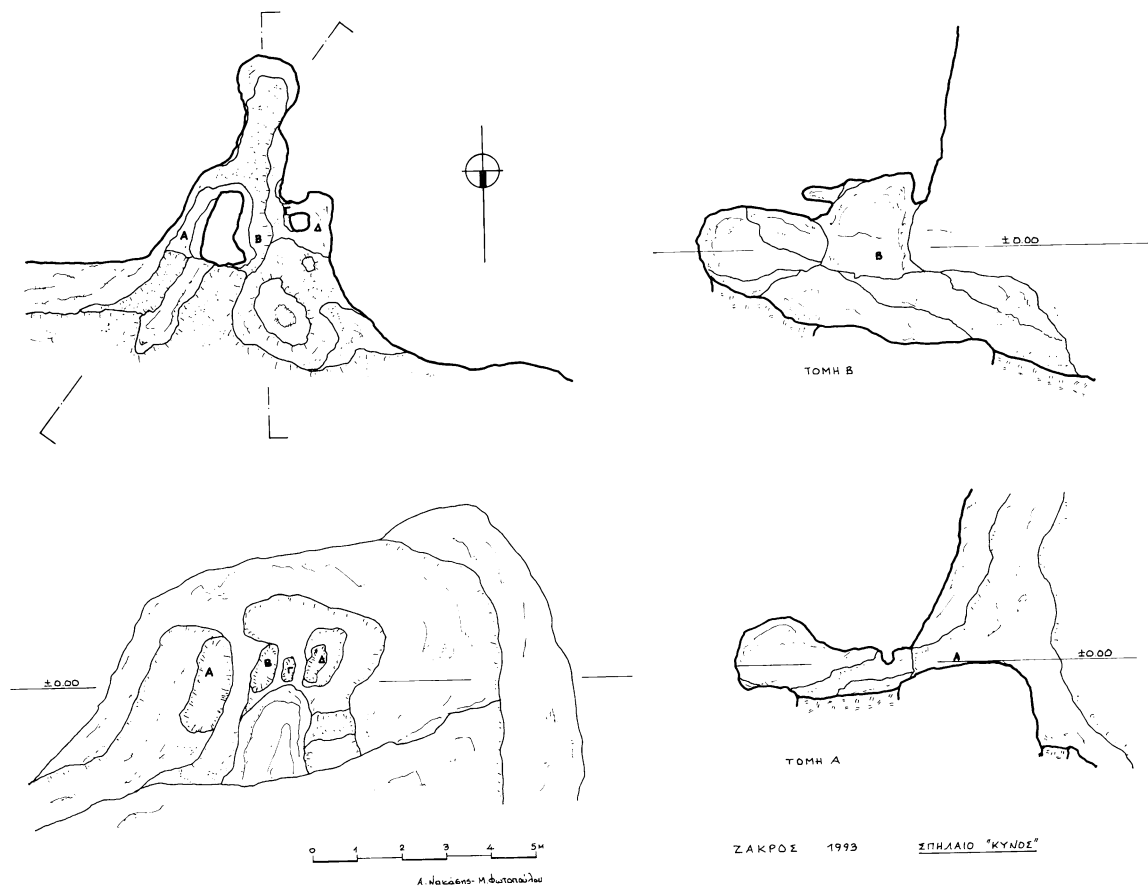


Figure 8.1. Top plan and sections of the "Dog Cave" in the Zakros Gorge (Zakros excavation archive).

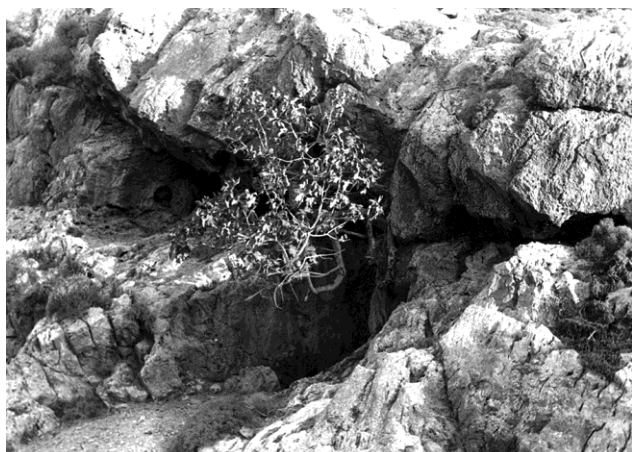


Figure 8.2. The entrance of the cave in the small fjord to the south of the Zakros bay, called by the locals 'Mavro Avlaki' (Zakros excavation archive).



Figure 8.5. View from the interior of Cave A at Riza Spiliara (Zakros excavation archive).



Figure 8.3. Megalithic wall in Mavro Avlaki closing the ascent from the cave up to the plateau above it (Zakros excavation archive).



Figure 8.4. Building remains on a terrace immediately below the entrance of Cave A at Riza Spiliara Zakrou (Zakros excavation archive).



Figure 8.6. The mouth of the cave at the precipitous site "Tis Ouranias to Froudi", in the Zakros Gorge (Zakros excavation archive).