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Minoan Zominthos

THE DISCOVERY of an enormous Minoan building in the northern foothills of Mount Ida (Psiloritis) in the early 1980's attracted the interest of the archaeological community for several reasons. The mere existence of a massive Minoan structure at a place which lies considerably above the altitudinal limit of modern Cretan settlements was a surprise in itself. The structure's unusually large size and careful construction, incorporating some features pertinent only to palatial architecture, increased the significance of the find. Though five seasons of field excavation from 1983 to 1990 have unearthed only a small part of the well-preserved building, they allow us to define its size, length of occupation as well as date and cause of destruction. The main scope of the present article, which has been motivated by the planned resumption of systematic archaeological work at the site in 2005, fifteen years after the last field campaign, is to summarize the results of the former excavations, to present some preliminary information about the size, construction and date of this structure, to pose some crucial questions about its historical significance, and finally to explain the main objectives of the future research at Minoan Zominthos¹.

* This contribution was not presented during the Conference, but, because of its intrinsic value for the region, it is included in the Proceedings by kind permission of the editors.

1. The Zominthos Project, the first stage of which is scheduled to last five years (2004-2008), is carried out under the auspices of the Archaeological Society of Athens and with the collaboration of the Institute of Archaeology, University of Heidelberg. The project is directed by Yannis Sakellarakis (Athens) and Diamantis Panagiotopoulos (Heidelberg). The first season in March 2004 was dedicated to the study of the material from the old excavations at the site, especially to the pottery from the area of the ceramic workshop. Some preliminary results of this study are presented here. The first year of research was made possible through a generous financial support from the Institute for Aegean

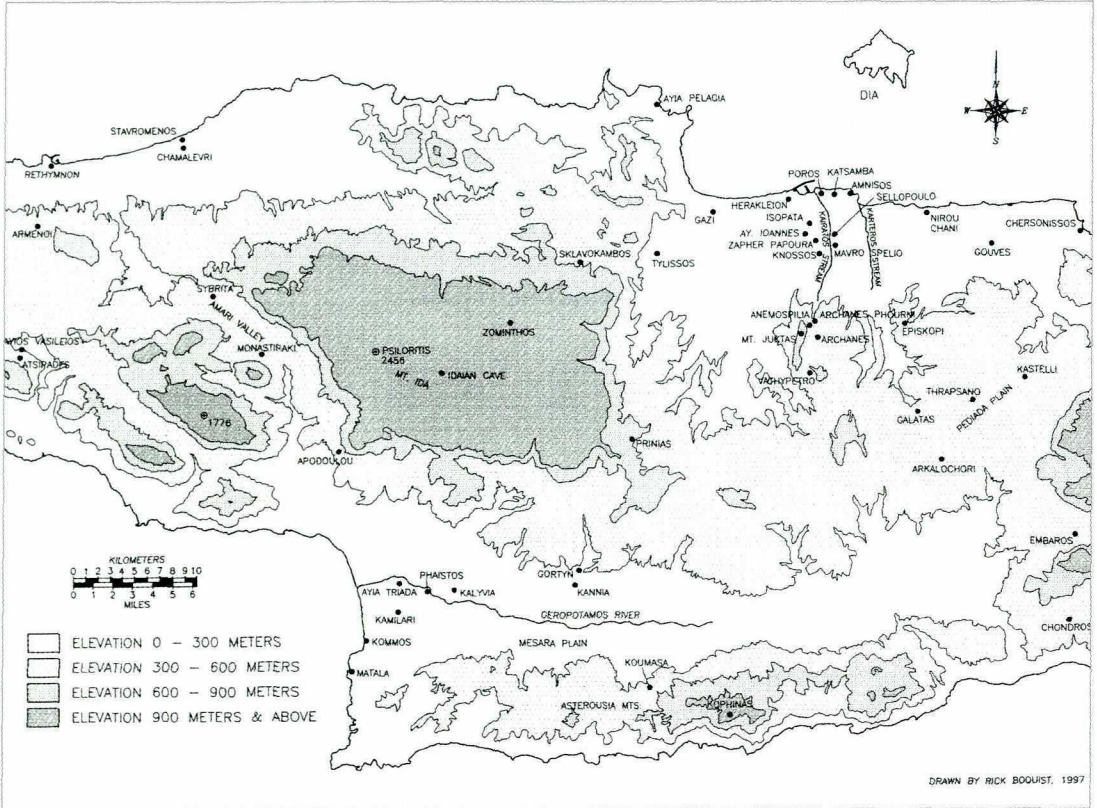


Fig. 1.

INTRODUCTORY REMARKS

The Minoan site of Zominthos lies about half-way between the modern village of Anogheia and the Idaean Cave dominating a small upland plain in the northern foothills of Ida, 1187 m. above sea level (fig. 1)².

Prehistory and the devoted work of the archaeologists Yannis Georgiou, Giorgos Tzorakis and Panagiotis Dovas as well as the students Sebastian Zöller (Institute of Archaeology, University of Heidelberg) and Loukia Flevari (Department of History and Archaeology, University of Rethymnon). The authors wish to thank cordially Nota Demopoulou, Giorgos Rethemiotakis and Giorgos Tzorakis for providing valuable information on Minoan sites in the district Maleviziou, Philip Kiernan for improving the English text, and last but not least Irene Gavrilaki for her invitation and patience.

2. The probably Prehellenic name of the site was first noticed by the late Spyridon Marinatos who conducted a small-scale excavation in the Idaean Cave, one of the most important sanctuaries of ancient Greece, see MARINATOS 1956/1957, 241. On the place-name Zominthos (or Zomithos) see further ΜΑΝΟΥΡΑΕ 1979, 33-34. RACKHAM AND MOODY 1996, 104. The root Zo- which is common among Cretan toponyms may have designated a water source, see FAURE 1972, 181. For Zominthos' water supply see below n. 17.

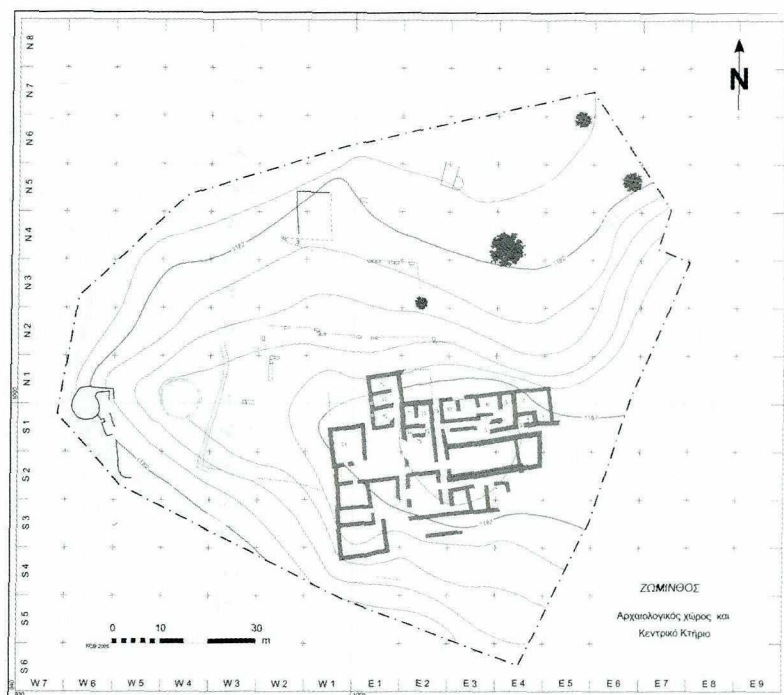


Fig. 2.

The resumption of archaeological work in the Idaean Cave by Yannis Sakellarakis in 1982 led to the discovery of the Minoan ruins at Zominthos³. During an archaeological survey in the region Sakellarakis located the Minoan site and initiated its first systematic excavation⁴. Five years of small-scale field research (1983, 1986, 1988, 1989 and 1990) gradually revealed a massive building conventionally referred to as the *Central Building* (fig. 2), which still stands to a considerable height, and the remains of the surrounding settlement⁵. Disturbance by modern looters was concentrated on two areas at the north-eastern wall and in the western wing of the building. According to reliable information provided by the inhabitants of Anogheia, illicit excavation on the second area (room 9) took place during the 1960's and produced, among other finds, a male and a female bronze statuette which were later sold to antiquity traders in Herakleion⁶.

3. For a summary of the archaeological research at the Idaean Cave see ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 1987.
4. ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 443.
5. ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 488-98. ΜΥΛΩΝΑΣ 1986, 139-141. ΠΕΤΡΑΚΟΣ 1988, 165-172; CATLING 1988/1989, 101-2. TOUCHAIS 1989, 690-692. ΣΑΚΕΛΛΑΡΑΚΗΣ 1996, 205. A sixth season of field research in 1994 was limited on a part of the settlement northeast of the *Central Building* in the location *Mnemata*, see below.
6. See ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 444.

GEOGRAPHIC LOCATION AND MINOAN REMAINS

Zominthos is situated on the ancient cross roads leading from the east and the northeast to the Idaean Cave and eventually connecting the site with important Minoan centres such as Tylissos, Sklavokampos and Knossos⁷. The north-eastern route which must have followed approximately the line of the modern road provided access to Sklavokampos and further northeast to Tylissos⁸. The eastern route connected Zominthos with Knossos via Kroussonas and Aghios Myron. Across both routes there is rich evidence of Minoan occupation. Besides the well-known Tylissos and Sklavokampos, the existence of the following sites should be mentioned: across the eastern route a small cave with traces of Minoan occupation in the location *Kylistria* ca. 1.5 km. east of Zominthos⁹, Neopalatial houses¹⁰ and at least one peak sanctuary¹¹ in the region of Kroussonas, a cemetery and further sporadic finds in the region of Aghios Myron¹², and across the north-eastern route Kavousi about 1.5 south of Sisarcha¹³, the well-known peak sanctuary above Gonies¹⁴ and the peak sanctuary of Pyrgos probably connected with Tylissos¹⁵. Finally between both Minoan roads, above the upland plain Pentacheri, lies the peak sanctuary of Keria¹⁶.

The harmonious landscape of Zominthos, a pasture with low hills, small plateaus and scattered trees, is an ideal place to stop on the way up the mountain (**fig. 3**). The geographical importance of the site is further

7. See WARREN 1994, 208.

8. REHAK AND YOUNGER 2001, 397.

9. The cave in the location *Kylistria*, produced a few Minoan sherds, see ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 498-499.

10. At *Rizoplagies* and *Kokkiniako*, see ΔΗΜΟΠΟΥΛΟΥ 1985, 297. ΔΗΜΟΠΟΥΛΟΥ-ΡΕΘΕΜΙΟΤΑΚΗ 1987, 531. DRIESSEN AND MACDONALD 1997, 132. Further excavations on the Koupos hill, around 2 km. northeast of *Rizoplagies* revealed the remains of LM III C, Geometric, and Archaic occupation see ΔΗΜΟΠΟΥΛΟΥ-ΡΕΘΕΜΙΟΤΑΚΗ 1987, 530-531. Moreover a great amount of Hellenistic animal figurines were found in *Kynegotafkos* on Mount Voskero northwest of Kroussonas (Giorgos Rethemiotakis, personal communication). The finds from later periods as well as the longevity of cult in the Idaean Cave imply that this route never faded in importance during antiquity.

11. The peak sanctuary lies on Mount Gournos above the location *Rizoplagies* southwest of Kroussonas (Giorgos Rethemiotakis, personal communication). To the north of Gournos on a hill summit (*tou Petrogianni to Mouri*) 3.4 km. southwest of the village Minoan finds indicate the existence of a second peak sanctuary see RUTKOWSKI 1988, 93. Another Minoan cult place is located in *tou Papa to Spiti* where a number of clay figurines came to light (Giorgos Rethemiotakis, personal communication).

12. See ΧΑΝΙΩΤΗΣ 1988-1989, 58-62.

13. ΣΑΚΕΛΛΑΡΑΚΗΣ 1984, 593-596.

14. RUTKOWSKI 1988, 79-81.

15. RUTKOWSKI 1988, 87-88.

16. RUTKOWSKI 1988, 93.



Fig. 3.

emphasized by the fact that the *Central Building* and settlement are situated near a rich source of water which made the Zominthos plain a favourable pastureland from antiquity up to the present¹⁷.

The Minoan site of Zominthos embraces the LM I A *Central Building*, the surrounding settlement and a cemetery. The *Central Building* on which earlier archaeological research was concentrated lies in *Alones* at the southwest edge of the Zominthos plain west of the modern road leading from Anogheia to the Nida plateau and the Idaean Cave. Judging by surface finds and by tests made around the building, the settlement had a considerable size (extending over one acre) and at least two occupational phases dating in the LM I A and LM III periods. Finally, a rock shelter on the summit of the low hill *Spiliari* around 500 m. south of

17. The Zominthos plain has three sources of water, the largest of which bears the name Zominthos and is still nowadays one of the main water reservoirs for the modern village of Anogheia. Its significance in the past is indicated in the folk song *το τραγούδι του Μανουρά (Manouras' song)* which recounts the killing of a terrible dragon in Zominthos by Vasilis Manouras, the bravest man of Anogheia, see ΜΑΝΟΥΡΑΣ 1979. For this deed Manouras and his family received the right to water their animals in Zominthos first, before all the other shepherds. At this point myth mingles with reality since up to the 1950's the Manouras family really had held this privilege.



Fig. 4.

the *Central Building* produced human bones, fragments of burial containers (pithoi and larnakes), pottery and other small finds indicating the location of the settlement's cemetery¹⁸.

THE CENTRAL BUILDING

The *Central Building* was founded on the west edge of a low hill that rises smoothly combining easy access and a prominent view over a large part of the surrounding plain (fig. 4). Given its rather *peripheral* geographic position, the building has a surprisingly large size covering a surface of approximately 1,600 sq. m. (max. length: 54 m., max. width 37 m.) and consisting in its ground level of more than 40 rooms. Zominthos' central structure is thus by far the largest Minoan *rural villa*¹⁹. It is built of large roughly-hewn blocks of local limestone incorporating *palatial* architectural features, such as the proper orientation to the north-south axis and the shallow recesses which occur on the western outer wall of the building, imitating the architectural arrangement of the façades with recesses or indentation on the west court of the palaces of Knossos, Phaistos, Malia, Zakros as well as in the *palace* at Gournia and the villa at Makrygialos²⁰.

18. ΣΑΚΕΛΛΑΡΑΚΗΣ 1983, 445.

19. For the term *rural villa* see below.

20. GRAHAM 1987, 162-164; DAVARAS 1997, 121, plan 1.

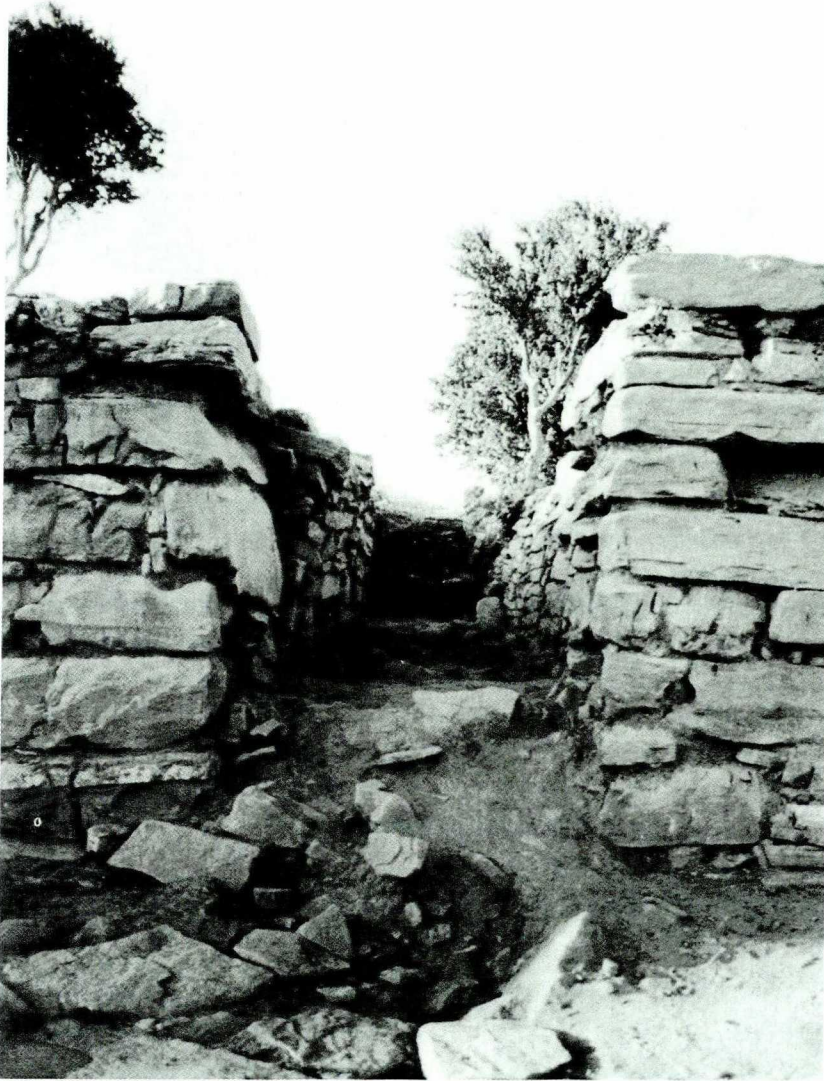


Fig. 5.

In the partly unearthed northern part of the building there are two entrances. The easternmost entrance, the massive lintel which lay almost *in situ* broken in three parts, opens to Room 2. The westernmost entrance is set in the western part of the northern façade and leads to a long corridor which transverses the building's northern half (fig. 5)²¹.

21. An entry leading to a long corridor which provides access to the core of the building and at the same time divides it into two separate units seems to have been a common element in Neopalatial architectural design. Compare for instance the corridor of Nerokourou Building I, CHRYSSOULAKI 1997, figs. 1-2. See also the corridor of the Nirou Khani *megaron* (Room 23), FOTOU 1997, fig. 3.

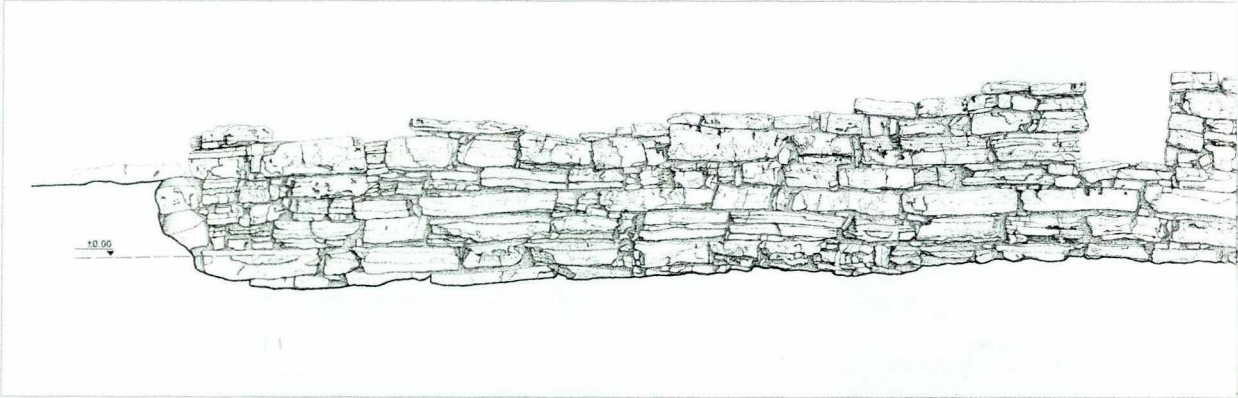


Fig. 7.

The *Central Building* is very well preserved. The massive walls, up to one m. thick, reach a height of approximately 2.50 m. above foundations in some sections (fig. 6). The above mentioned northern outer wall, set upon a *krepidoma*, is up to 2.20 m. high, has one door and two windows, and represents one of the best preserved Minoan façades (fig. 7)²². It extends to a length of 18 m. and a width of 0.95 m. built on its outer face by massive roughly hewn, limestone blocks in false isodomic masonry. The inner face of the façade consists of smaller slabs of platey limestone set horizontally. In both cases as in the whole building the masonry was



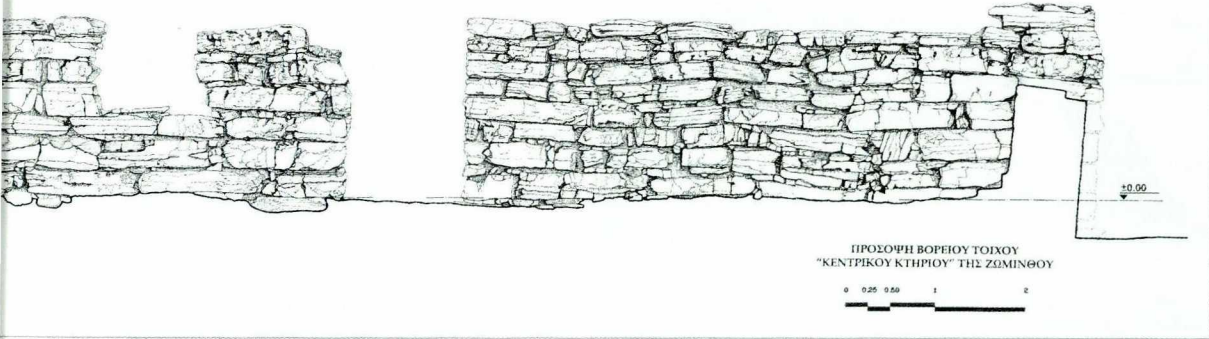
Fig. 6.

mortared with mud. Given the numerous fragments of lime plasters found just in front of the outer face of the façade, it is legitimate to assume that this side of the wall was originally plastered. Numerous schist slabs of medium and large size were revealed on the upper part of the filling and must have been used originally for the flooring of the upper storey²³. Fragments of lime plaster came to light in rooms 3, 6 and 8 showing mostly white—but in some cases also red—background. A number of the white lime plasters preserved traces of red and light blue colour indicating that

some rooms of the building may have been decorated with frescoes. In room 6 several parts of lime plaster still lie *in situ* on the southern, northern and western wall. Finally the floor of room 3 was covered on its southern part with a mixture of clay, lime and crushed fieldstones.

22. The eastern window has a width of 1 m., the western one of 1.20 m. and the door of 1.30 m.

23. SHAW 1971, 25.



As indicated by its conventional name, the *Central Building* was not an isolated structure but the dominant edifice of a settlement extending to an area of at least one acre as it can be deduced by remains of walls and Minoan pottery scattered to the north and northeast. A limited excavation in the location *Mnemata* east of the *Central Building* on the eastern side of the modern road which transverses Minoan Zominthos connecting Anogheia with the Nida plateau and the Idaean Cave revealed the remains of LM III structures²⁴. The settlement of Zominthos had thus at least two occupational phases (LM I A and LM III).

PREVIOUS RESEARCH

During the first period of systematic archaeological work at Zominthos (1983, 1986, 1988-1990 and 1994 field campaigns) only a small part of the *Central Building* was excavated. The main objective of field research was to reveal the plan of the central structure and to define its occupational history and date. The excavation concentrated on the northern / north-eastern sector of the building which is better preserved. Only six of the approximately forty rooms of the ground floor had been partly or fully explored (rooms 3, 4, 12, 13, 15 and 17). The main results of these field campaigns can be summarized as follows:

The *Central Building* was erected in the Neopalatial Period (LM IA) on the ruins of an earlier structure, the poorly preserved remains of which were detected in the north-western wing²⁵. The massive walls sustained an upper storey which had a floor made of schist slabs. The excavated part of

24. The excavated area lies between the ruins of two old dairies.

25. A sounding in the corridor (Room 13) revealed a wall running below floor level and



Fig. 8.



Fig. 9.

the building shows two architectural phases. The core of the building belongs to the first phase. At a later stage, small annexes were added to the original core in the north-western part of the structure²⁶. The *Central Building* was destroyed by an earthquake when LM IA pottery styles were still in use. The devastating effect of this event left its traces on nearly every single wall of the building, but particularly in Room 11 a wall of which collapsed in three directions after it had been severely shaken by the seismic waves. After the earthquake destruction the *Central Building* and obviously the surrounding settlement were abandoned. As already mentioned, signs of a limited(?) re-occupation of the settlement in LM III were detected only in the excavated area east of the *Central Building* in the location *Mnemata* between the ruins of two old dairies²⁷.

The few rooms which have been partly or fully excavated produced pottery, masses of animal bones, numerous fragments of carbonized wood and several small objects. The vast majority of the pottery belongs to conical cups, cooking pots and pithoi. As in every Neopalatial site of the island the conical cups outnumber by far any other vessel shape. The excavation of room 1 brought to light a group of ca. 135 conical cups in layers

showing roughly the same orientation as the walls of the LM IA building. It may also have belonged to an earlier structure the date of which cannot be determined yet.

26. This is clearly visible in the area of the ceramic workshop which is as a whole a later addition. Its east wall ends on the northern façade hiding its northwest corner. Furthermore, the walling technique is of inferior quality when compared with that of the original building. Several rural villas show signs of rebuilding activities, see WESTERBURG-EBERL 2000, 93.
27. The older one is called by the locals *Venetian* and is of uncertain date. The later dairy was erected in the 19th century.

in its north-eastern corner. Obviously they had been originally deposited on a *higher spot* (maybe the upper floor). Similar concentrations of conical cups were discovered in other rooms of the building as well as outside the northern façade.

Worth mentioning among the architectural features of the excavated rooms are the niches in the northern walls of Rooms 17 and 15. In Room 15 the niche was plastered and contained a clay bull rhyton and three small clay vases (**fig. 8**). A clay animal rhyton came in the niche of Room 17 to light. This room proved to have been a storeroom containing among other finds two pithoi and two clay vessels recalling the shape of the lavishly decorated *kymbai* from Akrotiri which were found *in situ* placed upright on the northern wall to the right of the one pithos (**fig. 9**).

CERAMIC WORKSHOP

The most important find of the earlier excavations at Zominthos is undoubtedly a potters' workshop (Rooms 10-12) located in an annex added at a later date to the core of the Central Building at its north-western corner (**fig. 10**)²⁸. Its arrangement, contents and excellent state of preservation are unique in Minoan Crete. The most significant structural element of the workshop is a permanent installation for the purification

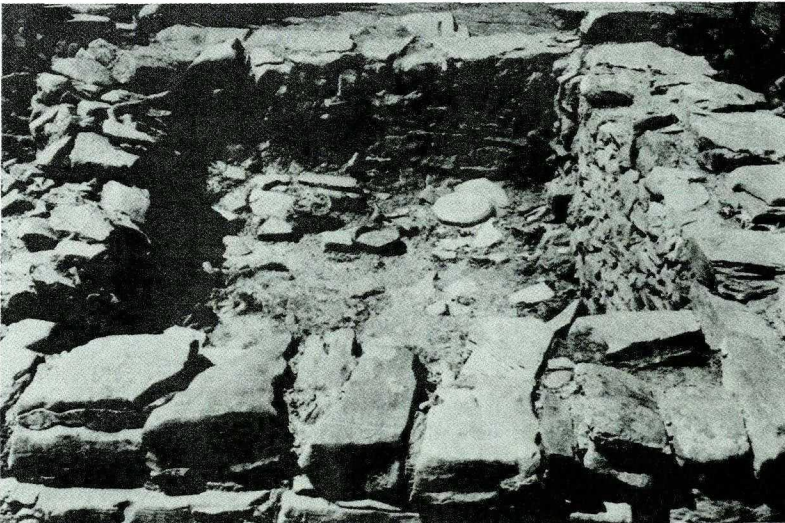


Fig. 10.

28. See MICHAELIDIS 1993, 17-20.



Fig. 11.

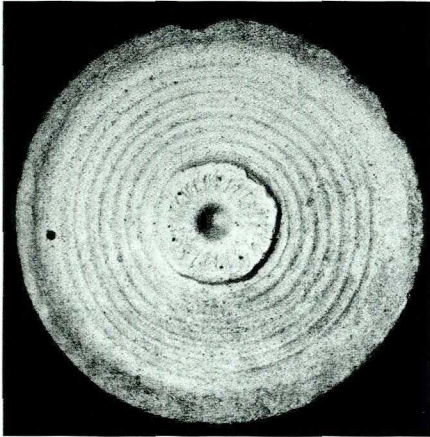


Fig. 12.

of clay consisting of two circular basins (fig. 11). On its discovery the lowest basin was still filled with pure, strained clay. The potters' wheel and equipment consisting of small bronze tools²⁹ were found near the western part of the room. The wheel with a plain level top, heavy projecting rim and an underside equipped with concentric ridges and grooves resembles a common type of the Neopalatial period (fig. 12)³⁰.

Vases had been placed on two benches running along the northern and southern wall of the workshop some of which were found *in situ* (fig. 13). The vast majority of the approximately 250 pots—among them at least twelve decorated pieces—that were found in this room once

29. Cf. the coexistence of a potter's wheel disc and bronze implements in Nerokourou Building I, TZEDAKIS AND SACCONI 1989, 285-287, 327-328.

30. See EVELY 1988, 90-94, 100-106, figs. 5-9, pls. 14-19: Type 3C, *Flywheel*. Compare *ibid.* 90, fig. 5, pl. 16 (Aghia Triadha). Further ELIOPOULOS 2000, 107, pls. 1-2 (Skhinias, Mirabello district). GEORGIU 1986, 38, no. 152, pl. 10, 19 (Aghia Eirene, Kea). The Zominthos piece shows on the underside a conical socket surrounded by a collar, pierced with holes, and decorated with random scratches. Similar incised patterns appear on the collar top of several potters' wheel of this type, for which see the above mentioned comparanda.

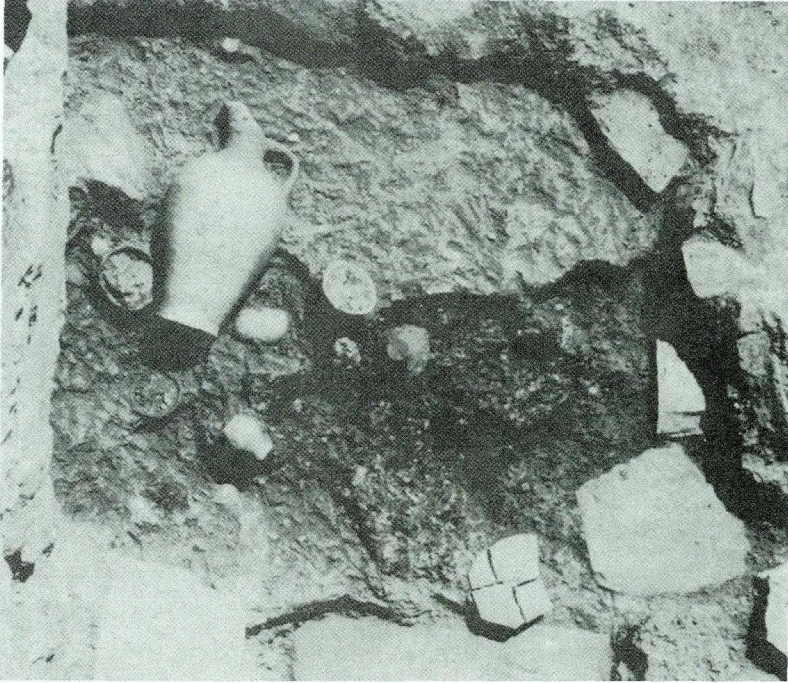


Fig. 13.

stood on wooden shelves on the walls, probably arranged by shape. The existence of such shelves is indicated by numerous fragments of carbonized wood scattered in this area.

An elliptical structure next to the northern wall of the ceramic workshop has been only partly unearthed but can be identified as a pottery kiln³¹. The excavation of the filling between the workshop's northern façade and the kiln brought to light approximately 90 conical cups, a bowl, a clay lamp, parts of a cooking pot, a bronze pin, a whetstone and numerous fragments of lime plaster.

Most, if not all, of the clay vases found in the workshop area represent the last production series of Zominthian potters. They belong to relatively few shapes which occur in several types and show as a rule a soft, pale fabric. The vast majority are conical cups (**fig. 14**) and *kalathoi* / flaring

31. There are two further cases of a rural villa with a potters' workshop and kiln: Vathypetro and Zou (see for both MICHAELIDIS 1993, 13-7, pls. 4-5). Vathypetro produced moreover three potters' wheels, see EVELY 1988, 91, nos. 50-2, fig. 7, pl. 17. Besides Vathypetro potters' wheels, yet without any clear traces of other permanent installations for pottery production are known from Aghios Georghios-Tourtouloi (EVELY 1988, 91-2, no. 54, fig. 7, pl. 18) and Myrtos-Pyrgos (EVELY 1988, 89, no. 34, pl. 13 and 93, no. 77). Lastly, rooms that have been identified as pottery workshops occur in the rural villa of Pitsidia see XATZH-BAAΛIANOY 1997, 489-492.

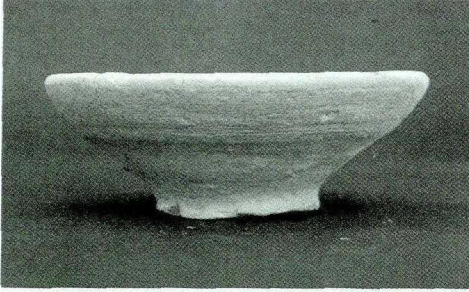


Fig. 14.



Fig. 16.

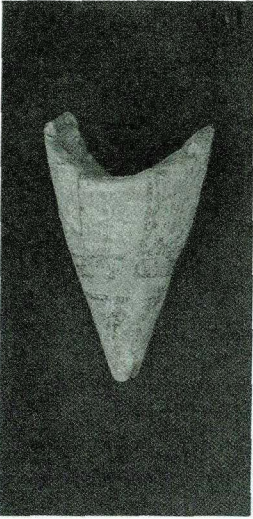


Fig. 18.

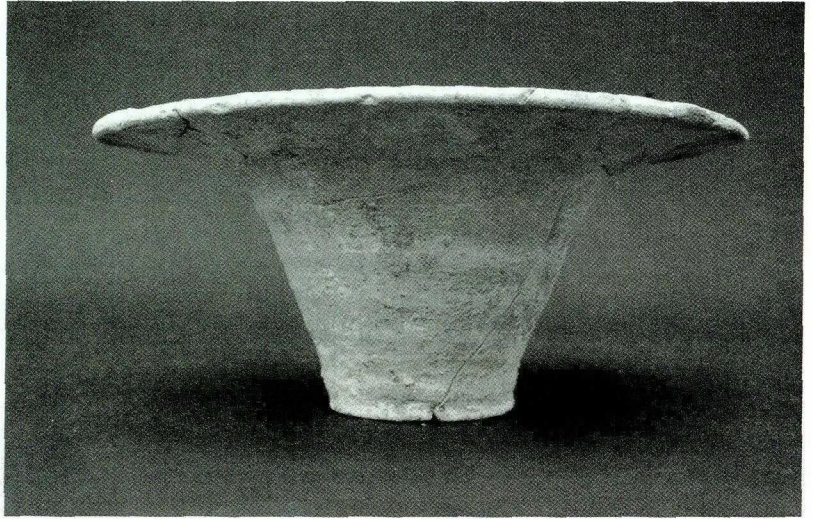


Fig. 15.

bowls (fig. 15)³². The rest consists predominantly of beaked jugs, ewers, collar-necked jugs, bowls, scuttles (*incense burners*)³³, straight-sided, rounded, ogival and bell cups (fig. 16), small unpainted handmade juglets (*milk jugs*) as well as minute conical cups. To the highlights of this group belong a ewer with neck ring (fig. 17) and a fragmentarily preserved rhyton (fig. 18), both decorated with tortoise-shell ripple³⁴, one fine bridge-spouted jar with reed motif (fig. 19) and a beaked jug with a zone of linked, running solid-centre spirals (fig. 20)³⁵. The majority of the pottery shows a good quality of manufacture. Shapes and decoration may not be comparable with the finest vases of this period, yet they betray an expertise in ceramic production.

32. Compare the predominance of conical cups and *kalathoi* in the LM IA Kommos kiln dump, VAN DE MOORTELE 2001, 72, table 4.

33. On the term *scuttle* see GEORGIU 1986, 28.

34. For comparanda see MOUNTJOY 2003, 57, no. 23, fig. 4.2.

35. Cf. MUHLY 1992, 84, no. 221, fig. 18, pl. 21.

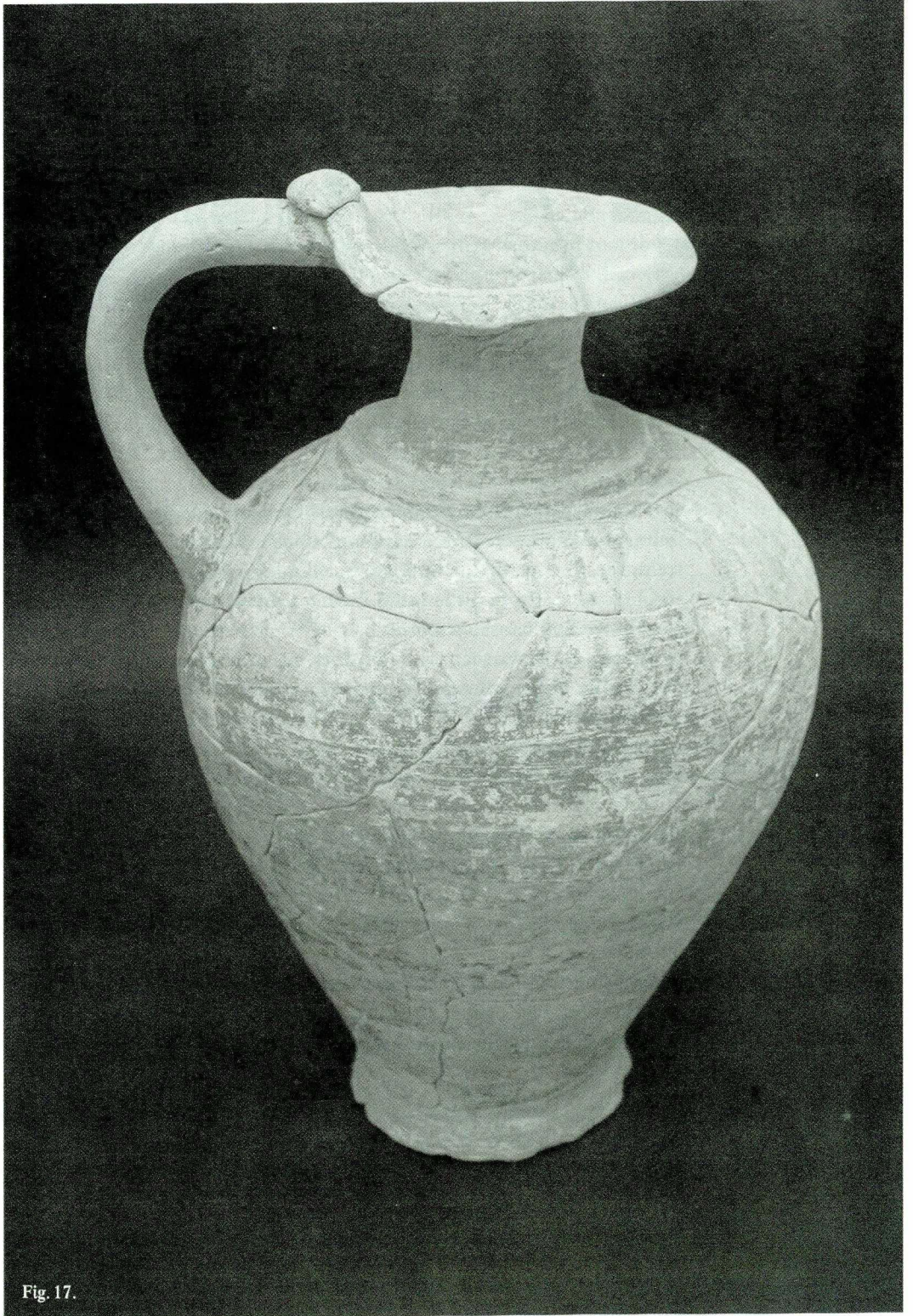
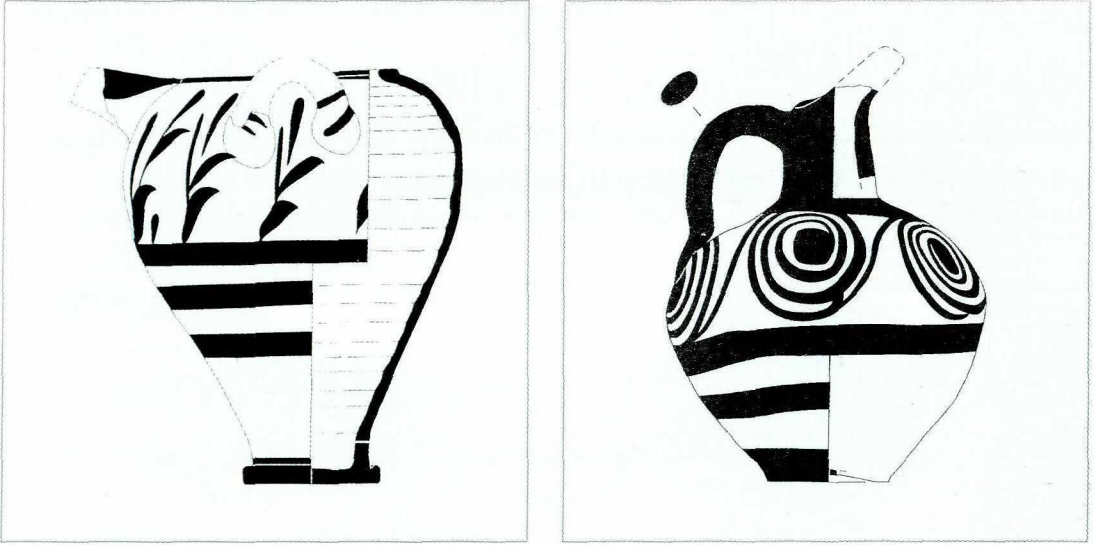


Fig. 17.



This assemblage of *fresh* pottery found in a sealed deposit is of paramount chronological importance since it facilitates an exact dating of the destruction of Zominthos' *Central Building*. Diagnostic shapes and decorative motifs point to a LM IA date. This group can be linked more precisely with Knossian *mature LM IA*³⁶ and both the *advanced LM IA* and *final LM IA* at Kommos³⁷. More specific information about the dating, as well as the range and percentages of the shapes from the Zominthos ceramic workshop will be available after the exhaustive study of the entire assemblage.

PLACING MINOAN ZOMINTHOS INTO CONTEXT

Terminology

Zominthos' *Central Building* belongs to a distinctive Minoan architectural type conventionally designated as *villa* or *rural villa* which has attracted much scientific interest in recent years³⁸. The term refers to

36. See recently WARREN 1999, 895-6, 898. MOUNTJOY 2003, 56. Further WARREN AND HANKEY 1989, 72-8. MACDONALD 1996. DRIESSEN AND MACDONALD 1997, 19-21.

37. VAN DE MOORTELE 2001, 91-93.

38. On the history and random application of the word in Minoan archaeology see VAN EFFENTERRE 1997, 9-10; Cadogan's contribution in the same volume towards a precise definition of the term is very helpful, see CADOGAN 1997, 99-100 and below. Consult also REHAK AND YOUNGER 2001, 396-398, 468.

extensive free-standing buildings founded in strategic locations of the Cretan hinterland with the purpose to control a micro-region of special political, administrative or economic interest. These rural establishments stood either in isolation or, more commonly, served as the central structure of a settlement. Their size, architecture and movable finds make it obvious that they exceeded the limits of a private *oikos* serving as edifices of an *authority* which possessed political and / or economic power. It is the same features that clearly differentiate such structures from the Minoan palaces indicating that the first belonged to a lower hierarchical level. The emergence of these agricultural estates dispersed throughout the countryside was obviously dictated by the fragmentation of the Cretan landscape into numerous separate territories clearly defined by natural borders. Furthermore, the fact that the rural villas represent a primarily if not exclusively Neopalatial phenomenon suggests that their inter-regional dispersal responded not only to a geographical but also to a socio-political necessity³⁹.

The Minoan name of these buildings —if indeed there ever was one— remains, of course, unknown. The embedding of this architectural type into a specific geographical and historical context makes it apparent that no term rooted in a different cultural sphere can ever provide a perfect semantic match. Our inability to define the character and function of this building type with certainty makes the problem of terminology even more complicated. The only way to overcome this obstacle is to choose an architectural term with a broad semantic range. The word 'villa' has a long history ranging from the Roman Period to modern times in the course of which it was filled with several semantic meanings, and for that reason provides for the Minoan building type in question the only acceptable solution. Though the Latin and Venetian term *villa* referred to a country seat or estate, its modern use for describing suburban edifices⁴⁰ makes the specification *rural villa* or *country villa* indispensable⁴¹. It helps us furthermore to sharply differentiate these rural establishments from *urban villas*, i.e. luxury houses which were located in an *urban*⁴² settlement. It goes without saying these two types of buildings responded to different socioeconomic needs⁴³. The hitherto inconsistent use of the

39. On this issue see below.

40. See CADOGAN 1997, 99.

41. Decisive for the naming of these buildings must be firstly location and then architecture, see also ΜΠΟΝΙΑΣ 1979, 45-46. Since terminology should always be nothing more than an assisting instrument, the acceptance of the term *rural villa* implies in no way a similar function with the Roman *villa rustica*.

42. For recent attempts to explore the meaning of Minoan *urban landscape* from several perspectives see the contributions of Todd Whitelaw, Keith Branigan, Jan Driessen, Tim Cunningham, and Ilse Schoep in BRANIGAN 2001, 15-102.

43. The same distinction has been put forward by two recent classifications. S.

term *villa* for both⁴⁴ must be avoided in the future. The suggested alternatives to *rural* or *country villa* such as *country-house*, *mansion*, *manor* or equivalent terms in other languages are less satisfactory, since they refer to more particular cultural phenomena which cannot be easily adopted for interpreting Minoan institutions⁴⁵.

The use of one and the same term for denoting a large group of rural establishments widely distributed over Crete implies that all these buildings shared the same political, administrative or economic function⁴⁶. How legitimate is this assumption? Most of the rural villas show similarities in their strategic location (by proximity to and thus control of important routes and vital natural sources), size, construction, evidence of storage and workshop activities and to some extent movable finds. Yet these implications of a similar function cannot overshadow some clear differences in the architectural plan which varies considerably from building to building. The hypothesis that all or at least most of the rural villas fulfilled the same purpose is reasonable, but for the moment it is far from being proved⁴⁷. One should therefore keep in mind that the term refers to the architectural type and is no designation of the actual function of every single building which remains of course an open question⁴⁸. Let us suppose though that most if not all of these buildings correspond to the same concept of political or administrative organization —as the majority

WESTERBURG-EBERL 2000, 87-95 splits Minoan *villas* into three categories (palatial, urban and rural) according to their location and dependence from a palace or urban settlement. Philip Betancourt and Nanno Marinatos (BETANCOURT AND MARINATOS 1997, 91-92) suggest a division into three types: 1) country villas (isolated rural establishments), 2) manorial villas (central buildings of a rural settlement or town) and 3) urban villas (houses located in the suburbs of a city with a palace). The differentiation between country and manorial villa seems yet to be less sound. On this matter see also the critical statement of Cadogan (CADOGAN 1997, 102). Our knowledge of the surroundings of such structures is very scanty since only in a few cases systematic archaeological work has expanded beyond the area of the buildings, see REHAK AND YOUNGER 2001, 396.

44. The term has been actually used in the past decades for almost every high-profile building which was not a palace.

45. See VAN EFFENTERRE 1997, 9.

46. More likely to be considered as *rural villas* are besides Zominthos the large buildings at Nerokourou, Sklavokampos, Vathypetro, Achladia, Zou, Piskokephalo, Siteia-Klimataria, Aghios Georghios (Tourtouloi) and Epano Zakros. The coastal *villas* of Amnissos, Nirou Khani and Makrygiallos seem to have fulfilled a different purpose.

47. As Todd Whitelaw rightly pointed out the functional coherence of the group as a whole is not documented yet, see HAGG 1997, 230-231.

48. It is highly improbable that one could ever answer the question of function on the basis of the architectural evidence, see PALLYVOU 1997, 156: "We can analyse how they operate—in terms of sizes, shapes, light, drainage, ventilation, texture, colours, circulation, etc.— but *what they actually serve for is a matter of how people choose to use these operational features at a specific moment*" (author's emphasis). The same applies also to a certain extent to the movable finds.

of archaeologists do— and put the question of the authority that stood behind their foundation and brief career.

Patterns of exploitation and dominance

Opinions about the *raison d'être* of the Minoan *rural villa* differ. Yet the majority of scholars favour a centralised view according to which these edifices functioned as secondary administrative centres subdued to one or more large palaces⁴⁹. According to this opinion they controlled the rich resources of the open countryside and acted as intermediary institutions in the taxation system of the palace(s). A minority regards them as the residences of a wealthy landed aristocracy which had only loose bounds to the palatial institutions⁵⁰. It seems hardly possible to solve this problem without the assistance of written sources⁵¹. Yet there are several indications that the birth and short life of the Minoan rural villa reflects a particular socio-economic system for controlling and exploiting the Cretan territory. Recently Henri and Micheline van Effenterre, focusing on some really decisive arguments, assumed that the Minoan rural villas emerged not independently from each other as centres of local power, but on the contrary as units of a well thought-out administrative network inspired by a centralistic authority⁵². Their convincing line of thought rests on the fact that most of the Minoan villas seem to have no occupational tradition. They seem to have been founded upon a virgin terrain and not within an already existing settlement. They represent a short-lived phenomenon, which suggests that they were created in response to a certain need, obviously the political control and economic exploitation of the territory by a palace⁵³. The complete abandonment of the Minoan rural villas and their surrounding settlements until the end of LM IB seems to confirm this hypothesis. If we accept that these buildings were created in order to serve the interests of an expanding palatial institution, aiming at closer control and intensified exploitation of 'distant' regions within the island, it is very likely that after the collapse

49. See for instance ΜΙΟΝΙΑΣ 1979, 49. WATROUS 1984, 133-134. BENNET 1990, 197-198. BETANCOURT AND MARINATOS 1997, 92. WALBERG 1994, 52-53.

50. CADOGAN 1971, 145-148, esp. 148. In the same vein, Ilse Schoep claims that regional centres in LM IB enjoyed a considerable degree of political and economical self-sufficiency, see SCHOEP 1996, 84-85. SCHOEP 1999, 220-221.

51. On the problems of reconstructing Crete's political landscape during LM I see recently DRIESSEN 2001 (with further references).

52. VAN EFFENTERRE 1997, 11-2.

53. VAN EFFENTERRE 1997, 12: *It looks as if the system was inscribed in the landscape*. The ephemeral character of the Minoan *rural villas* was first emphatically stressed by NIXON 1987, 96-97.

of the palatial system the rural villas, which represented a control system imposed on a territory from *above*, were abandoned or destroyed by the local inhabitants. This plausible scenario leaves of course one crucial question unanswered, namely whether the rural villas were controlled by one or more palaces. The range of Knossos' political power in the Neopalatial period remains a matter of fierce debate and forces us to regard both suggestions as open possibilities. Since the socio-political background of the Minoan rural villa is very obscure we must either concentrate on the hard facts or create new ones.

How Zominthos comes into play

Zominthos is in many ways an atypical Minoan villa. The most alien feature is its location in a mountainous region ca. 1200 m. above sea level, in a considerable distance from the great lowland centres of Neopalatial culture. The foundation of a Minoan building in this altitude needs an explanation given the fact that the modern upper limit of permanent habitation is 800 to 900 m.⁵⁴ The situation becomes even more perplexed if we take into consideration that the building erected in this *unlikely place*⁵⁵ is the largest Minoan rural villa known so far, comparable only to the dimensions of the 'palaces' of Petras and Gournia.

One further atypical feature of Zominthos' *Central Building* relates to the economic potential of the surrounding area. The wealth of nearly all Minoan country houses was based most likely on farming. Yet Zominthos does not seem to correspond to this pattern of economic exploitation. Even though farming was in ancient and modern times possible in Zominthos and the nearby Nida plateau, as well as in many other Cretan upland plains⁵⁶, it is highly improbable that this has been a stable economic factor or the main source of economic wealth for the Minoan inhabitants of Zominthos. A mixed mode of subsistence based on agriculture, horticulture and animal husbandry with an emphasis on the latter seems more probable. Yet the existence of a huge building in this area forces us to think not just in terms of raising the livestock for supporting their own subsistence needs, but of a specialized pastoralism aimed at the intensification of the production of animal products such as meat, milk, cheese, wool and skin. Zominthos may prove to have been the first known case of a Minoan rural

54. RACKHAM AND MOODY 1996, 93.

55. RACKHAM AND MOODY 1996, 104.

56. See CHANIOTIS 1999, 186-188, esp. 187 with n. 8. Due to the island's limited altitudinal zonation, vegetation up to 1,400 m. can be similar to that at sea-level, see RACKHAM AND MOODY 1996, 115. The highest evidence of cultivation in modern Crete ranges to an elevation of 1,940 m., RACKHAM AND MOODY 1996, 191.

establishment whose economic purpose was the control of stock breeding. This consideration unavoidably leads us to further assumptions on the degree of organisation as well as the dimensions of pastoral activity which might help us to better comprehend the economic significance of Minoan Zominthos. Animal husbandry was a major branch of Minoan economy⁵⁷. The fact that nearly one third of the Linear B tablets from Knossos refer to sheep breeding or textiles made from wool reveals the importance of specialized pastoralism. This sort of farming would presuppose large flocks bred by professional shepherds and seasonal movements in search of adequate pasture land⁵⁸. From antiquity until today, transhumance as a risk-reducing economic option has been of vital importance on Crete⁵⁹. There is no reason to doubt that also in Minoan times herdsmen routinely moved with their herds between winter settlements in the lowlands and upland pastures in seasonal transhumance. The assumption of a Minoan specialized pastoralism with the periodic mobility of large flocks may have serious implications for the reconstruction of the political organisation in Neopalatial Crete. As we learn by later historical examples in Cretan history, transhumance requires stable political structures and especially political unity. In a state of political fragmentation, where control of land and pasture land in particular was dispersed onto several independent political centres, the *constant crossing of innumerable borderlines*⁶⁰ was a potential source of conflict. The likely existence of highly specialised pastoral activities at Zominthos can provide a strong indication for the control of the wider area of Mount Ida by a powerful palatial centre.

Today, the upland region of Zominthos still offers an excellent pasture, yet it is unsuited for habitation and pastoral or agricultural activity in the winter. Therefore future archaeological research at the site has to answer the question whether the *Central Building* served as a permanent residence, or was the summer base of a semi-nomadic group of shepherds. According to the evidence at hand and particularly the size and massive construction of the building, it is difficult to accept that such a large structure and the surrounding settlement were inhabited only during the summer. On the contrary, we have to assume that Minoan Zominthos was founded within the limits of all-year habitation in Minoan times⁶¹. The

57. KILLEN 1964, HALSTEAD 1993. According to the Linear B evidence the palace of Knossos controlled in Mycenaean times more than 80,000 sheep. The vital importance of animal husbandry for the island's economy is a diachronic phenomenon, see CHANIOTIS 1995.

58. CHANIOTIS 1999, 188-190.

59. See RACKHAM AND MOODY 1996, 159-160. CHANIOTIS 1995, 54.

60. CHANIOTIS 1999, 192. See further RACKHAM AND MOODY 1996, 161.

61. See note 56 above. One of the highest Minoan sites lies in Madares (White Mountains), at 1,810-1,840 m., see French 1992-1993, 81. The location and architectural remains suggest seasonal occupation by shepherds.

recognition of the Minoan site as a permanent residence would imply for this altitude a milder climate than in modern times⁶².

Whether the supply of timber and wood has been a further source of economic wealth for the ruler(s) of Zominthos cannot be argued with certainty. Despite a traditional belief that Minoan and more generally ancient Crete was thickly forested, there is no reliable information about the amount of woodland on the island prior to the Venetian period⁶³. To the rich resources of Mount Ida which must have attracted the interest of the lowlands through the ages belong also herbs or even snow⁶⁴.

Finally, the religious nexus of the building must not be underestimated. The Idaean Cave could have been already in Minoan times an important sanctuary. The Zominthos plain is, as already mentioned, an ideal place to stop and rest on the way to the cave. For this reason the foundation of an enormous building here may also have been related with the pilgrimage of worshippers to this cult centre.

The multi-layered significance of Minoan Zominthos raises a series of questions with wider relevance for the reconstruction of Neopalatial socioeconomic structures. The crucial question is undoubtedly which people decided to found a massive structure and a settlement in the wilderness of Mount Ida. The size of the building and its careful construction can hardly be associated with a community of local shepherds. On the contrary, they provide a strong hint of intervention by a central authority which intended to control the flocks and pasture land of the Ida region⁶⁵. Even if the area and the kind of exploitable resources differ when compared with those of other rural villas, the general pattern of control and economic exploitation remains the same. The foundation of this structure on a plot of special significance is commonplace for the Minoan rural villas. The building occupied a position of strategic quality and was integrated into a settlement as its dominant structure. If this structure belonged to a *network of local collecting units*⁶⁶ serving the needs of a palatial centre, this centre could have been Knossos. The very probable existence of a Minoan road connecting Zominthos with Knossos implies a kind of political or economic relationship with this centre⁶⁷.

62. See RACKHAM AND MOODY 1996, 39.

63. For a thorough discussion of the matter see RACKHAM AND MOODY 1996, 109-139, esp. 125-128.

64. MCNEILL 1992, 124 with n. 63: *Before refrigeration snow and ice had real value.*

65. The geographic importance of this area for the control of the mountain is indicated by the fact that the modern village Anogheia the nearest inhabited place to Zominthos enjoys nowadays the rights over the largest parcel of pasture land in Ida, see RACKHAM AND MOODY 1996, 162, fig. 14.2.

66. VAN EFFENTERRE 1997, 12.

67. For the wide range of potential Knossian interests in the region of Zominthos see also WARREN 1994, 209: *The mountain zone is likely to have provided the capital with timber, cereals (grown around Zominthos earlier this century), aromatic herbs, sheep,*

Was Zominthos founded by Knossian rulers in order to administer the economic wealth of this mountainous region on their own? Did the massiveness of the *Central Building* serve only practical reasons or was it also meant to impress palatial domination in the wilderness of Mount Ida, an area which throughout its history from ancient times up to the present has been well-known for the rebellious idiosyncrasy of its inhabitants? These are some of the questions which make the importance of Zominthos for Minoan archaeology apparent.

ZOMINTHOS AS A SCIENTIFIC CHALLENGE

Viewing Zominthos in its proper setting, it becomes clear that the systematic archaeological work and parallel study of the site will be a serious contribution on the *Problematik* of the Minoan villa and the political organization of Neopalatial Crete. Yet the significance of Zominthos goes beyond the questions of Minoan politics and settlement hierarchy. The uncovered Minoan ruins lie today in one of the few unspoiled regions of Crete and allow the excavators the possibility of reconstructing not just a Minoan site, but a Minoan landscape. For more than three and a half millennia human activity in this area has been limited. In fact the Minoan settlement represents the gravest human intervention in this long span of time⁶⁸. It is in such areas which have not yet suffered the disastrous impact of modern civilization where one can not only regain a Minoan landscape, but also study the slow processes of the island's climatic and environmental change.

The main objective of the new interdisciplinary research program at Zominthos will be the reconstruction of a coherent archaeological landscape⁶⁹ by compiling archaeological, architectural, zooarchaeological, environmental, botanical, geological, and seismological evidence. Problems related to Neopalatial society, economy, and politics will be combined with questions on ancient life, physical environment and their interaction in order to provide a rigid record of this rural microcosm. The research project will also focus on the major seismic event which destroyed the *Central Building*, and on the prospects of determining its scale, exact date in terms of absolute chronology, and finally its economic and social effects for the local population.

and spirituality. If the Knossian palace really laid claim to this region then it needed undoubtedly a satellite on the mountain to control its significant resources.

68. From the diachronic perspective the episodic use of a massive building in this mountain region marks undoubtedly an exceptional phenomenon.

69. On landscape archaeology see recently WILKINSON 2003, 3-14.

A further principal aim of the fieldwork will be the reconstruction and long-term preservation of the unearthed Minoan remains. The very good preservation of the architectural core of the *Central Building* is a mixed blessing. The largest part of the structure stands up to 2 m. in height, or even more, and offers a unique opportunity for the study of Minoan architecture. At the same time, the excavation team is confronted with an immense conservation and restoration problem⁷⁰. Since the building remained undisturbed after its destruction, a large amount of the fallen upper floor still lies in the rooms of the ground floor. With an exhaustive documentation and study of the fallen building material and with the aid of digital media an attempt will be made to establish the original state of the structure.

To conclude, the exceptional preservation of the *Central Building* in combination with the unspoiled natural environment of the Zominthos plain provides an excellent opportunity for an all-embracing study of a Minoan landscape. For the adequate treatment of this important site the archaeological excavation of the building and settlement has to be supplemented by a wider interdisciplinary study of their physical environment. We hope that this multi-layered approach will shed some sidelights on ancient life in a remote part of the island and contribute to a better understanding of the Neopalatial buildings that dominated the physical and social landscape of the Cretan countryside.

70. The dramatic fluctuation of temperature between winter and summer increases these difficulties.

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