Palaeolithic and Mesolithic Sailors in the Aegean and the Near East

Palaeolithic and Mesolithic Sailors in the Aegean and the Near East

By

Adamantios Sampson

Cambridge
Scholars
Publishing

Palaeolithic and Mesolithic Sailors in the Aegean and the Near East

By Adamantios Sampson

This book first published 2019

Cambridge Scholars Publishing

Lady Stephenson Library, Newcastle upon Tyne, NE6 2PA, UK

British Library Cataloguing in Publication Data
A catalogue record for this book is available from the British Library

ISBN (10): 1-5275-3635-1
ISBN (13): 978-1-5275-3635-7

CONTENTS

PREFACE

When we started the excavation of the Cyclops Cave in 1992, we did not expect that the prehistory of the Aegean would go back a few millennia. Until then, the only Mesolithic site was the Franchthi cave in the eastern Peloponnese excavated in the 1960s. Being aware of the existence of the cave from an early age, due to my origins from the region of Northern Sporades, in particular from the island of Skopelos, and being a descendant of an old naval family, I was travelling to the complex of deserted islands and especially to Youra island from Skopelos with fishing boats because the area had always been famous for its important fishing grounds.

Knowing that the cave had been inhabited, except in later times (classical, Hellenistic, Roman), mainly in the Neolithic period, I began the excavation as soon as I was placed at the Ephorate of Spelaeology as a director. It was surprising that from the first year of the excavation, Mesolithic layers were revealed presenting huge amounts of fish bones and many bone hooks.

The expedition on the island of Youra was a challenge since the island was deserted without facilities and water springs while it was 20 miles from the nearest residential area (Alonessos). It was a risky project since, during the research period, communication was impossible while at the same time powerful northern winds («meltemia») were blowing in the area.

Concurrently, a survey began on the neighbouring island of Alonessos by colleagues from the Ephorate of Spelaeology which attributed Palaeolithic remains of habitation and some uncertain Mesolithic (Panagopoulou et al., 2001). Some, also uncertain Mesolithic, artefacts had been reported from Skyros by Theocharis (1959). During the same period, at the end of the excavation at the Cyclops Cave (1996), I decided to start a rescue excavation at Maroulas on Kythnos Island, a controversial site, for which I was sure that it was pre-Neolithic; the excavation had been systematic (2001-2005) yielding much more than expected.

Believing that the Mesolithic cultural stage expanded to other parts of the Aegean Sea, I began in 2004 a systematic surface survey with students from the University of the Aegean on the island of Ikaria, near the Asia Minor coasts, and the result was the identification of Mesolithic sites at the northeastern part of the island. The excavation that followed at the main site (Kerame 1) proved that in the Lower Mesolithic, a forager-fishermen's culture extended to the eastern Aegean with the exact same characteristics as in Maroulas of Kythnos.

While the great research in the Aegean including three systematic excavations and several surveys has greatly clarified the cultural stage of the Mesolithic, there were a few Greek and foreign archaeologists wondering about the chronology of the Mesolithic lithic industries of Cyclops Cave or Maroulas of Kythnos, even though the archaeological material is published and dozens of absolute dates are available.

Some other scholars carried a strong criticism bearing a negative attitude from the beginning of the new discoveries in the Aegean while also making various unsubstantiated reasonings with the tendency towards reducing the importance of Aegean Mesolithic culture (Efstratiou, 2001; Efstratiou, et al., 2013; Galanidou and Perlès, 2003).

Perlès in a book, published in 2001, in a chapter dealing with the Mesolithic period (2001, 36) suggested that Mesolithic hunter-gatherers of Greece were "able seafarers having technical traditions that seem to have been cut off from the widespread Mesolithic trends of the rest of Europe, but may present some relations with the Mesolithic of southern Anatolia". In the same publication, she failed to mention the Cyclops Cave and Maroulas of Kythnos while relevant articles (Sampson, 1996, Sampson, 1998, Sampson et al., 1998) were already issued.

In another article, Perlès and Galanidou (2003) tend to challenge the nautical character of the Greek Mesolithic highlighting the fact that Theopetra and Klissoura are not seaside locations, while they fall silent about the existence of the Aegean sites. In fact, Theopetra is located deep in the continent, but rockshelter 1 at Klissoura (Koumouzelis et al., 2003) lies not far from the sea and even has visual contact with it. So far, great activity is observed close to the shore or at a short distance from it (Sporades, Ikaria, Preveza, Franchthi Cave, Candia, Cyclades and Dodecanese). Galanidou many years later (2011) had changed her views and recognised the significance of the Aegean Mesolithic (Cyclops Cave and Maroulas) giving a great presentation of all the Mesolithic sites in

Greece. The problem is that most scientists need too much time to consolidate the results of new research and maybe that justifies for a while their initial negative attitudes.

Also noted in recent articles, concerning the issue of Neolithisation, is an ignorance of the recent literature on the Aegean. For example, the paper of a Turkish zooarchaeologist, Çakirlar (2012), concerning the domestication of animals at Ulucak in western Anatolia, does not include any reference to the Mesolithic Aegean, and in the article by Horejs et al. (2015) only an old preliminary article of 2002 is mentioned while on a map the sites of Cyclops Cave, Kerame 1 and Maroulas are reported! However, in the previous article is recognised "*the high mobility of the Mesolithic groups exploring the Aegean and east Mediterranean seas*" who passed on, through "*social memory*", the know-how to the early Neolithic communities.

Çilingiroğlu (2016) in a more recent article on the same issue recognises the importance of the Aegean Mesolithic but her bibliography is incomplete and she selectively mentions some articles, while avoiding referring to the final publications of Youra, Maroulas and Kerame 1 on Ikaria (2008, 2010, 2011, 2012). It seems that we are living in a paper and pdf period where the books (final publications) are of minor reputation! Although the article, concerning the early domestication in Cyclops Cave (2011), is mentioned in the references, it seems that she may not have understood well or even read the results of the study or she is deliberately silent about them. It is also a common tactic of some people to take from an article only what is in their interest, forgetting about the rest. Many Turkish and other scholars seem to be interested only in presenting their views, mainly concerning the export of "Neolithisation" from Turkey to southeastern Europe. They appear not to take into consideration other parameters or read articles concerning the same issues and as a result they end up uninformed about the new research in the Aegean area.

The challenge to write this book was initiated by the recent articles by Cherry and Leppard (2017) and Braje et al. (2017). J. Cherry who continues to repeat what he was writing more than 35 years ago (1981, 58-59), returning to his favourite theme of the colonisation of the Mediterranean islands, as co-author he is trying to diminish the significance of the pre-Neolithic occupation on the islands "*being relatively small, dry, and biologically depauvrerate"*.

Wishing to restore the truth and dispel the misconceptions created by incorrect knowledge or information in the last two decades, I proceeded in summarising the archaeological record that has come to light from the 25 years of research so that all the parameters concerning the Greek Mesolithic can be examined such as the contact networks in the Aegean, the food resources, the seaways and the geographic and meteorological data. The book also refers to the contribution of the Mesolithic inhabitants of the Aegean to the Neolithisation that began in the 9th millennium and continued for two millennia until it was consolidated throughout the Aegean and Mainland Greece at the end of the 8th millennium BC.

As seen, many foreigners and Greek colleagues are not up to date with the literature. In 1996, C. Perlès, admittedly experienced in the stone industries, had a look at the stone industry of the Cyclops Cave, at the time when it was being studied by Kozlowski and Kaczanowska for the final publication, and had concluded it was not Mesolithic! All the above researchers, even after the final publications, appeared not to have been convinced of the temporal placement of the finds and the importance of the pre-Neolithic stage in the Aegean, constantly changing views on the same subject, while they finally turned out to be irrelevant with the stone industries! If the cause of that was ignorance due to the rare and hitherto unknown lithic material in the Greek area, we could justify them.

When prof. N. Efstratiou decided to publish his excavation results from Knossos he submitted the text for publication to INSTAP, which appointed the author of this book as one of the referees! Then, I had the opportunity through reading the text to note his arbitrary conclusions about the Mesolithic habitation in the Aegean and insist on correcting his extreme positions, otherwise the book could not be issued. In that publication (2013), he actually changed most of his statements and seemed to recognise the importance of the pre-Neolithic stage in the Aegean, but avoided mentioning the final publications of Youra (2008, 2011), Maroulas (2010) and Ikaria (2012) while he only referred to an old preliminary article (Sampson et al., 2002) creating controversies around the issue and implying that the Maroulas chronology reached the Neolithic period! However, he was already aware of the publication for the Cyclops Cave (2008) after he had reviewed it for the *American Journal of Archaeology* (2010)!

It is also characteristic that while we have invested labour, time and money over many years in the excavations of the Mesolithic Aegean and also in publications, some colleagues, based on our own publications, have

published papers referenced by Greek and foreign scholars who are ignorant of or fail to report the detailed original books. It is apparent again that we live in the age of papers and pdfs and people prefer to read short texts rather than entire volumes in which, however, there is all the necessary information.

I initially intended to publish an extensive article on the subject of the Aegean Mesolithic, but then it was decided it should become a monograph because new elements are constantly coming to light as the excavation of the Sarakenos Cave in Boeotia continues and new findings of the Mesolithic are constantly revealed, while new Mesolithic sites are located in the Aegean by our own investigations or by other colleagues.

This publication examines the Mesolithic period in Greece as well as the Palaeolithic background which in the last stages of the glacial period played an important role and contributed to the subsequent evolution of the economy and navigation by the Mesolithic users of the Aegean. Emphasis is placed on the particular conditions of navigation in the Aegean Sea by examining the sea currents, winds at different times of the year as well as the possible means of navigation, and on the basis of the contact networks, the possible sea routes connecting the four points of the Aegean Sea and extending out of it, in the Mediterranean Sea.

INTRODUCTION

The excavations in the Aegean since the 1990s onwards have revealed a new cultural stage, unknown till then, starting from the beginning of the 9th millennium down to the end of the 8th. A network of sites extends from the northern to the southern Aegean Sea and from the west to the east, having as reference points the obsidian sources of Melos and Yali, Nissiros. In recent years, we have had an increase of Mesolithic sites in the insular Aegean, in mainland Greece as well as on the western Asian coast, Cyprus and Knossos (Crete).

It has been twenty-seven years since the excavation of the Cyclops Cave revealed undisturbed Mesolithic layers hitherto unknown in the Aegean islands. Then, by revealing a real Mesolithic settlement on Kythnos my expectations were confirmed. The excavation in Ikaria of an extensive Mesolithic site and the location on the islands of Cyclades, in the Dodecanese and Crete of other sites of the same period, showed that in the beginning of the 9th millennium there was a wide network of sites in six different territories of the Aegean **(Fig. 1)**:

1. Northern Sporades including Youra, Alonnessos and Skyros, 2. Cyclades, 3. Western Aegean including the Mesolithic Franchthi, the rockshelter 1 at Prosymna and littoral sites in the Argolid, 4. Eastern Aegean, including Ikaria, Fournoi and the site of Mordogan on the coast of Asia Minor, 5. Dodecanese including the Yali obsidian source, Areta on Chalki and Kirmeler on the Asian coast, and 6. Crete including Livari, Knossos and possibly Plakias.

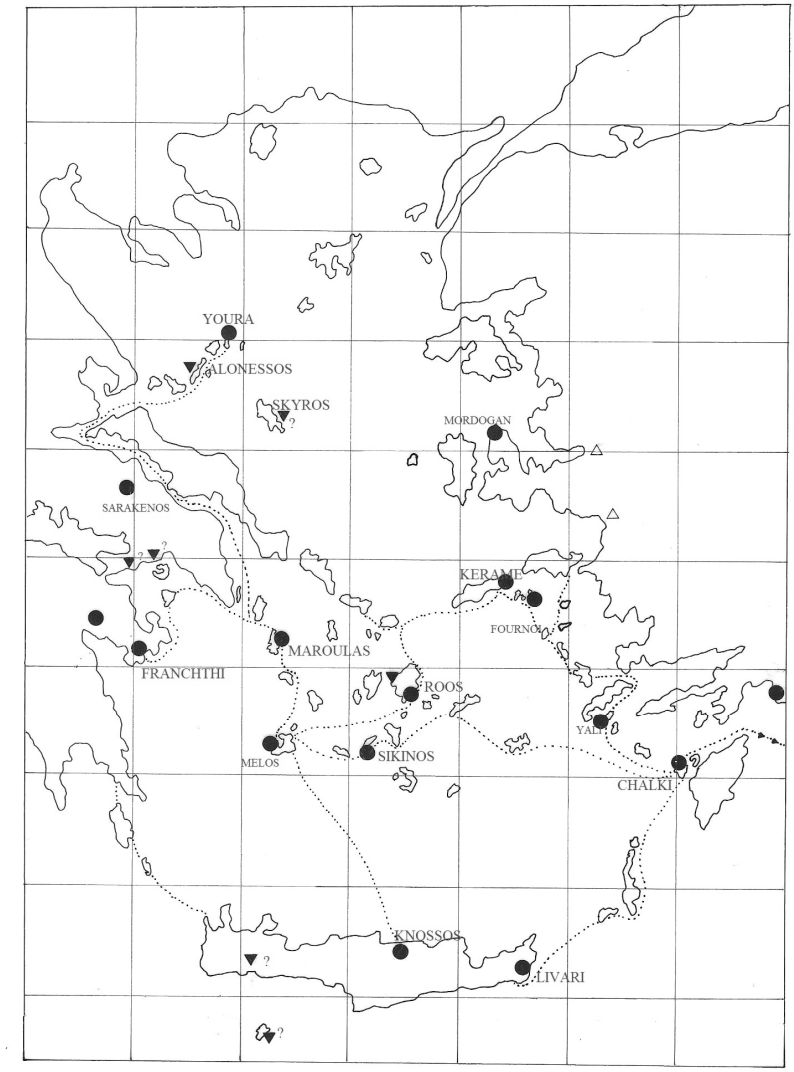

Fig. 1 Mesolithic sites in the Aegean

At the same time in the late 1990s, a Mesolithic layer was being excavated at Theopetra Cave in Thessaly, while the excavation of the Sarakenos Cave yielded an undisturbed layer of the Mesolithic, between the Upper Palaeolithic and Early Neolithic. Also, surface surveys in Argolid and Epirus showed intense activities of Mesolithic hunter-gatherers.

Recent research changes the data and shows that, along with the navigation capability and the specialisation in fishing, an early Neolithisation in the Aegean started in the 9th millennium BC. It means that active Mesolithic groups could have been able to travel to the East, interact with local populations of the PPNA and PPNB and transfer plants and animals, domesticated or not.

CHAPTER I

THE PALAEOLITHIC BACKGROUND

Meanwhile, significant advances have been achieved during the last twenty years and the record has been enriched with material, collected mostly in the framework of regional surveys **(Fig. 2)**. Surface surveys were conducted in Western Macedonia (Efstratiou et al., 2006) and especially at the Grevena area (Chang et Tourtellote, 1993; Biagi et al., 2016). In eastern Macedonia, the excavation in Maara Cave revealed MP occupation and a rich fauna of this period (Trantalidou and Darlas, 1996). Epirus and western Greece, in general, had the luck to be researched and excavated more in the past (Bailey, 1997; Bailey et al., 1993; Runnels, 2003; Galanidou, 2011). Old excavations in Ioannina region revealed MP sites in Asprochaliko and Kokkinopilos, while Final Palaeolithic rockshelters were excavated in Vikos Gorge (Ntinou and Kotjabopoulou, 2002). Recent research revealed Middle Palaeolithic sites in Thesprotia region (Galanidou et al., 2016).

In the Ionian Islands, surveys have revealed sites of the Middle and Upper Palaeolithic on Lefkas (Douzougli, 1999) and on small islands around it (Galanidou, 2010, 2016), while Upper Palaeolithic occupation was found on Corfu at Grava Cave (Sordinas, 1969**,** 2). A larger island, Kefalonia presented several MP sites (Kavvadias, 1984; Foss, 2002), while on the southern island of Zakynthos were located MP sites (Kourtessi-Philippaki and Sorel, 1996**).** These two islands were never connected with the mainland (Ferentinos et al., 2010).

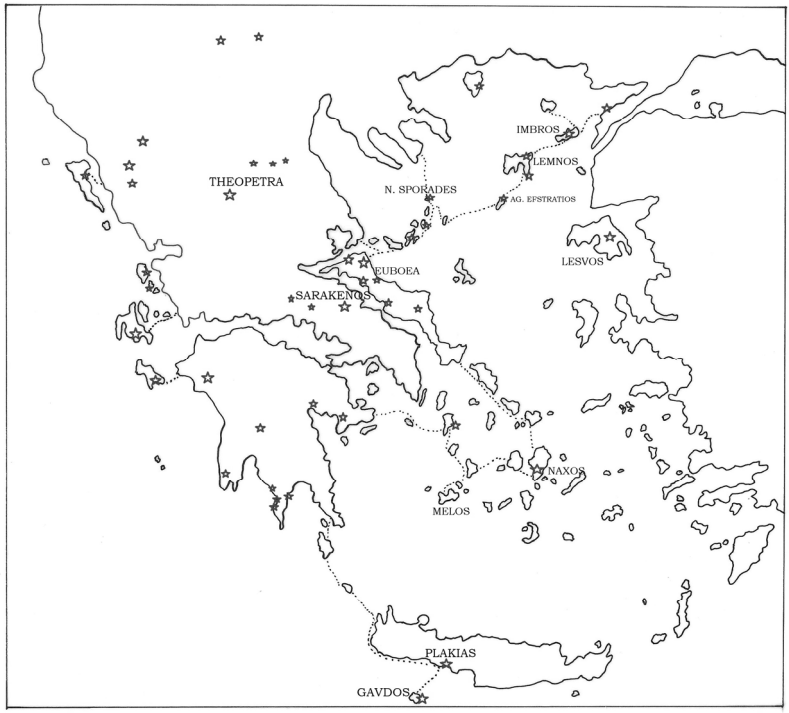

Fig. 2 Palaeolithic sites in the Aegean and the Greek continent

Middle and Upper Palaeolithic layers were excavated in Thessaly (Theopetra Cave, Kyparissi-Apostolika, 2000**)** and surveys along the Peneios River pointed out abundant open-air sites of the Middle Palaeolithic (Runnels, 1998; Runnels and Van Andel, 1993).

In Central Greece, excavations at Sarakenos Cave revealed layers dated in the Middle and Upper Palaeolithic (Sampson, 2008; Sampson et al., 2009; Kaczanowska et al., 2016) **(Fig. 3)**. There is a long sequence of layers starting from the Middle Palaeolithic with a thickness that exceeds 10 metres in depth. The earliest layer is that of the Middle Palaeolithic (Sarakenos I) that has so far been found in three trenches and is in contact with the bedrock. In trench B, this layer yielded typical Levallois stone tools, while in trench A, it was thick and consisted of successive layers of burning. Although carbon samples were taken, no dates came due to the inability of radioactive carbon. After a gap of many millennia, habitation

in the cave begins at 16–13 kyr BP and lasts for three millennia. This is a final phase of the Upper Palaeolithic (Sarakenos II). The habitation is continuous and evidenced by many stone tools and animal bones. Floors and hearths have been observed, and in one case (trench F), a huge bone assemblage of wild horses and bovines that has been used for food, while a strontium analysis has shown a different origin of these species (Wang et al., 2019).

Surface surveys by Canadian archaeologists (Roland, 1980) pointed to several Middle Palaeolithic sites in Boeotia. In the same area, excavations were conducted in Seidi Cave (Stampfuss, 1942; Schmidt, 1965) revealing layers of the Early Upper Palaeolithic. Uncertain and not dated are the findings from a small cave in Keratsini of Attica (Mavrides and Kormazopoulou, 2009, 21) and also from caves and rockshelters along the National Road from Athens to Korinthos.

Fig. 3 Sarakenos Cave. A Palaeolithic gathering of animal bones

Several Palaeolithic sites have been located in Euboea during surveys, although no systematic excavation has been carried out until today (Sackett-Popham, 1966; Sampson, 1980, 1996, 2019**)**; most of them lie in the northern and central parts of the island. Especially the northern part, being more forested with more running waters, seems to have served in a

better way the human preservation needs of that period. The Palaeolithic hunters probably moved to the highlands in the summer, where the grass would suffice to feed the wild animals. Middle Palaeolithic tools of the Levallois type have been collected from Limni, Prokopi, Agia Anna, Tharrounia, Kerasia and Rovies. Sites such as Kotsikia and Agia Anna, being close to the sea, can be considered as winter camp sites. Northern Euboea at times was united with Fthiotida and Thessaly and possibly also with the islands of the Northern Sporades while in the Straits of Euripus, in periods of low-lying sea level, it would constitute an easy way for communication with Central Greece.

A very important area which presents caves and rockshelters with intense Palaeolithic occupation is the western part of Mani peninsula, where excavations since the 1980s have revealed skeletal remains of *Homo Neandertaliensis* as well as older remains of pre-Neanderthal date (Pitsios, 2000). In the same area, I conducted in 1991 and 1992 a survey with a team of scientists of the Spelaeology department and located numerous caves and rockshelters with Palaeolithic deposits, among them Kalamakia, a rockshelter excavated later by Darlas and de Lumley (1999).New Palaeolithic sites were excavated in the same area (Harvati et al., 2013; Tourloukis et al., 2015) as well as in the eastern side of Mani peninsula (Laconis 1 Cave, Elefanti et al., 2008). An important open-air site of the Middle Pleistocene is Marathousa in Megalopolis, excavated by a team from the Spelaeology department (Panagopoulou et al., 2015; Field et al., 2018). In 1992 and 1993, as head of a team from the Spelaeology department, we surveyed in the Navarino area (Southeastern Peloponnese) small rockshelters along the coast facing the Ionian Sea. In most of them, Palaeolithic petrified deposits were found containing lithics and bones similar to those at the rockshelters of Mani Peninsula. In the Northwestern Peloponnese (Matzanas, 1998), the area of Ileia was surveyed and Palaeolithic sites were located completing previous surveys of French archaeologists.

A Middle Palaeolithic site was located a few years ago on the northern coast of the island of Agios Efstratios **(Fig. 43)** which, in OIS 6 and 4, was not connected with the mainland (Sampson, 2014; Kaczanowska and Kozlowski, 2014; Sampson et al., 2018). The site is situated about 30 m above the present sandy beach, in the zone where the Palaeo-beach and the sediments at the mouth of a stream overlap. An extensive archaeological and geological survey of the island has taken place over the last few years and a detailed publication of the site is forthcoming soon. The problem is that, as the detailed geological survey has shown in the area, the seismicity

of the island and the Northern Aegean region in general due to the "Anatolian fault", has created multiple damages on the island. In terms of eustatic changes, the location of the site – providing no isostatic disturbances that occurred during the sea level changes – points to occupation, probably in OIS 5e or possibly OIS 5a or even 5c (Kaczanowska and Kozlowski, 2014; Sampson et al., 2018). The industry at the site represents the Mousterian period with denticulated tools, the double-platform, and less often with Levalloisian preferential core techniques; flint, siliceous hydrothermal rocks, radiolarite, andesite and quartz were exploited.

However, the MP site of Alonisi is not the only one in the Northeastern Aegean. A survey conducted by the author, Kozlowski and Kaczanowska in the northern part of Lemnos (Sampson et al., 2018) revealed tools of the Middle Palaeolithic, while recently, a Middle Palaeolithic site was located on the neighbouring island of Imbros and another one in Kallipolis peninsula (Özbek and Erdoğu, 2017) suggesting a very early network of contacts in this area.

A surprise was the finds from the Rodafnidia of Lesvos site, where traces of habitation of the Lower Palaeolithic were unearthed during surface survey and excavation (Galanidou, 2013; Galanidou et al., 2016). Rodafnidia is an Acheulian site on Lesbos Island, in the northeastern Aegean Sea. The typology and technology of lithic artefacts from the surface survey and the uppermost Unit 1, as well as the first cluster of luminescence dates, firmly place the early composition of the site in the Middle Pleistocene. The Acheulian industry derives from fluvio-lacustrine deposits at a location with abundant fresh water and lithic resources. Situated in the northeastern Mediterranean Basin, an area where research on early hominin prehistory is intensifying, Rodafnidia holds the potential to contribute to Eurasian Lower Palaeolithic archaeology and fill the gap in our understanding of early hominin presence and activity where Asia meets Europe.

In the southern part of Lemnos, facing the northern part of Agios Efstratios, is the Middle Palaeolithic site of Alonitsi, the site Ouriakos excavated by N. Efstratiou et al. (2014) providing a sequence of assemblages with microblade technology based on subdiscoidal, single-platform and on double-platform cores, dated during an advanced period of the Younger Dryas cold oscillation (ca. 10900-10000 uncal. BP). The excavators advertised the discovery in the press with great exaggeration, claiming it to be the oldest site indicating navigation in the Aegean and

trying to downplay the importance of the Mesolithic presence in the same area.

The most characteristic tools are microliths, dominated by segments and bladelets with an angulated back, shaped by steep retouch, often bipolar, but without the use of the microburin technique. Other tools are end-scrapers, mostly short, and atypical burins. The main tool of Ouriakos is the *lunate* that has been matched with similar tools from Öküzini Cave near Antalya (Yalcinkaya et al., 2002), where similar industries occur in the Late Pleistocene between layer VI (XIIth mill. cal. BC) and layer Ia1 (X–IXth mill. cal. BC).

The continuation of this technological tradition in the Early Holocene is evidenced in the sequence from the Beldibi Cave where geometric microliths, but made using the microburin technique, occur in the Early Holocene layer C, and even co-occur with ceramics in layer B (Bostanci, 1965). A possibility that in Dryas III the island of Lemnos was still connected with Anatolia cannot be excluded (Perissoratis and Conispoliatis, 2003).

The site of Stelida on Naxos that was identified by Seferiades (1983) and Sampson (2006), while recently excavated by Carter (2014), has attributed tools of the Upper and probably the Middle Palaeolithic. The tools of the Lower Palaeolithic that have been reported are doubtful because they cannot be dated in a stratigraphic way. Until now, several researchers have been called to this excavation and everybody is trying to identify stone tools that show an early seafaring of early *Homo sapiens*!! However, there could have been a primitive form of the early man who lived in the central Aegean before or during the sinking of Aegais.

Much has been noticed in recent years about the discovery of the Acheulean industry in western Crete. As Kaczanowska and Kozlowski state (2014a) "*the presence of supposedly – Acheulean industries on Crete, as Strasser claims* (Strasser et al., 2010; Strasser et al., 2011; Runnels et al., 2014) *on the basis of surface finds of bifacial artefacts from the sea terrace and dated to 107 kyr BP, is questionable. In view of the fact that the Acheulean is absent in Greece and south-western Anatolia, Strasser's interpretation should be approached with caution. Moreover, the – alleged – bifacial artefacts that Strasser published represent, in fact, an initial phase of shaping with no Acheulean characteristics*".

So far, evidence shows that Palaeolithic research in Greece has expanded its focus not only geographically but also temporally. In our opinion, the present overview and critical review open also another chapter in the SE Mediterranean region, concerning the potential role of the Aegean as a glacial shelter, and the contribution of the Aegean record to our information of early hominid mobility patterns (Tourloukis and Harvati, 2017; Elefanti and Marshall, 2018). This mobility, for covering short or long distances at least from the Middle Palaeolithic due to various reasons (climatic, regional affairs, exploitation of raw materials), has been an earlier practice in the wider periphery of the Aegean Archipelago. Maritime activities have been ascertained in mainland Greece as well in the Aegean and Ionian Sea.

However, our knowledge so far of the Palaeolithic period in the Aegean islands and the continent is quite insufficient, despite the intense research carried out in the past twenty years by Greek scientists and fewer from abroad. The outdoor sites, because of the advanced state of corrosion, pose great difficulty in the determination of the stratigraphy and the accurate dating of them. More efficient has been the study of caves or rockshelters which were popular for habitation during the Palaeolithic. Nevertheless, stone tools of the Middle Palaeolithic are found, more or less, almost everywhere in Greece (Plate 1). Upper Palaeolithic sites are not so frequent, while the Lower Palaeolithic is a period hardly known to us, unless we take into consideration Petralona in Chalkidiki, and Mani peninsula.

PERIOD	PELOPONNESE	CENTRAL GREECE-THESSALY	AEGEAN	MACEDONIA	EPIRUS-IONIAN ISLANDS
Upper Palaeolithic	Elis and Achaia regions	Seidi Cave Sarakenos Theopetra	Stelida Kythnos Lemnos Thassos		Klidi Boila Corfu
Middle Palaeolithic	Mani peninsula Argolid	Peneios river sites Sarakenos Theopetra	N. Sporades Euboea Ag. Efstratios Ouriakos	Grevena Maara	Asprochaliko Kokkinopilos Kephalonia Lefkas Thesprotia
Lower Palaeolithic			Stelida? Plakias?		Zakynthos?
Middle Pleistocene	Marathoussa		Lisvori on Lesvos	Petralona	

Table 1. The main Palaeolithic sites in Greece

CHAPTER II

THE MESOLITHIC IN THE AEGEAN AND THE GREEK CONTINENT

The excavated Mesolithic sites

Cyclops Cave on Youra

Research in the pre-Neolithic Aegean began at the Cyclops Cave, on the islet of Youra, Northern Sporades **(Fig. 4),** lasting from 1992 to 1996. The C14 dates assigned the material to the Early Holocene, more specifically to the 9th-8th mill. BC, placing Youra at a contemporary stage to that of Franchthi (Early Holocene levels); however, the activities of an Aegean Mesolithic culture were revealed in full stratigraphy **(Fig. 5)** for the first time (Sampson et al., 1998, 2003; Sampson, 2008, 2011). At Youra, concerning the chipped stone industry (**Fig. 29**, chapter IV), local flint was used in the Lower Mesolithic. Long sea journeys were regularly undertaken to transport obsidian from Melos to the Northern Aegean (Cyclops Cave), in the Upper Mesolithic as early as the 8th mill. BC. This course possibly followed specific sea or land routes through the southern and northern Euboean Gulf (Sampson, 2008).

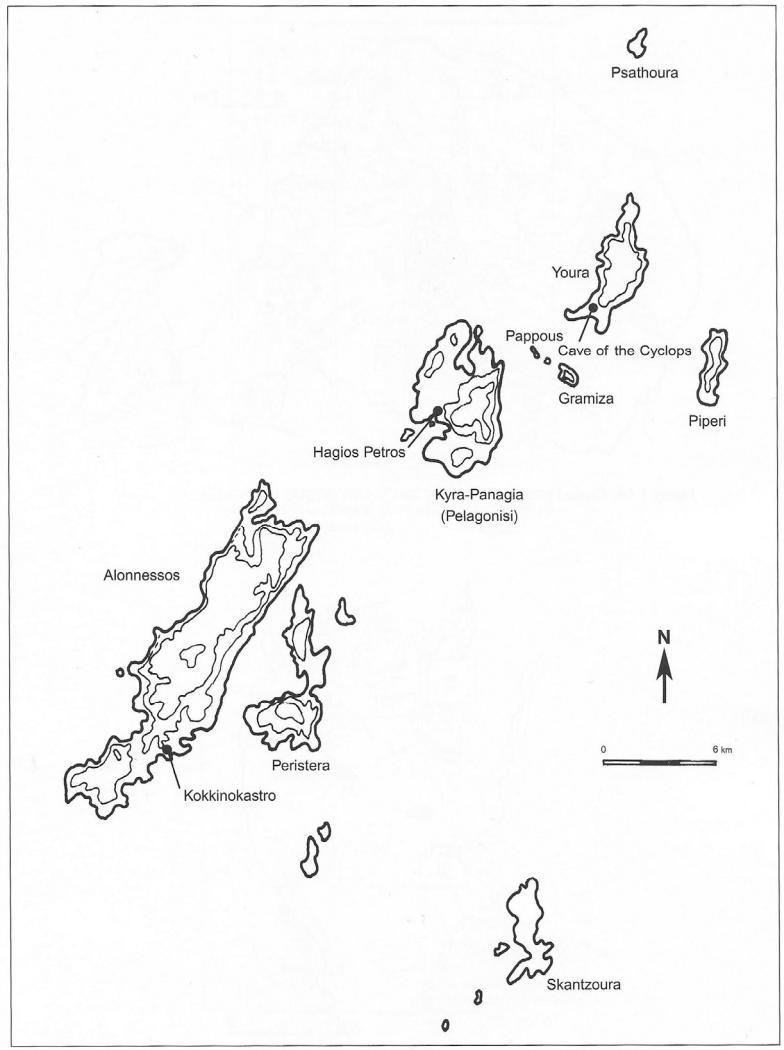

Fig. 4 The Northern Sporades complex in the NW Aegean

During the Early Holocene, microliths from Youra (trapezoidal, semi-crescents) bear resemblances only to those of southern Antalya caves in Turkey (Sampson et al., 1998; Kaczanowska and Kozlowski, 2008). The Greek mainland shares no relevant evidence, since the Argolid material,

for example (e.g. Franchthi Cave, Klissoura rockshelter 1), which has been meticulously studied, is far more different (Koumouzelis et al., 2004). Evidence of diversity between Youra and mainland Greece is also supported by the cranial remains of a *homo* found in the lowest layer of the Cyclops Cave, named "Aegean Mesolithic homo" (Poulianos, 2008); the Mesolithic human skulls from Theopetra Cave bear striking anatomical differences, suggesting probably the co-existence of a "mainland homo type".

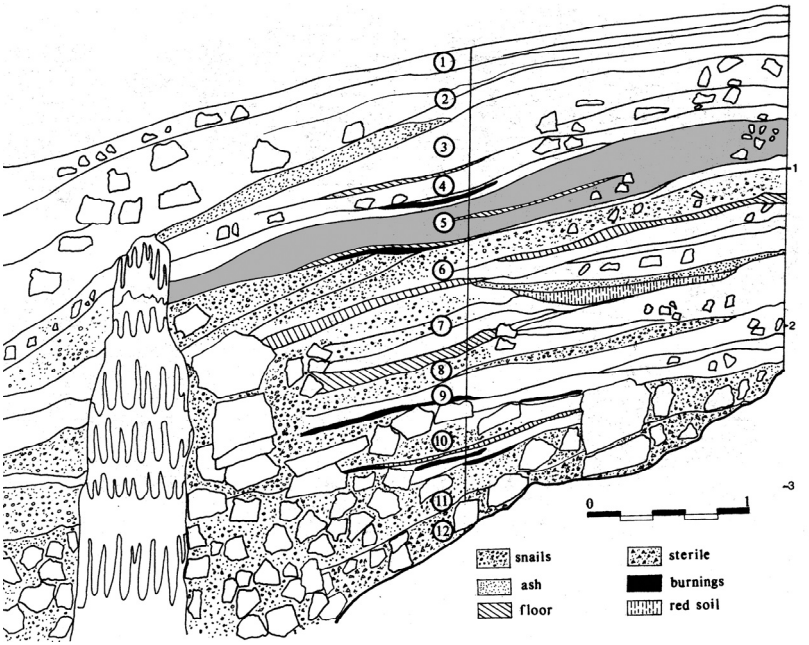

Fig. 5 Cyclops Cave. The stratigraphy. The layers 6-12 are dated to the Mesolithic

A massive gathering of fish bones, sea shells, land snails, mammal bones and bird remains implies that Youra was occupied on a seasonal basis by hunter-gatherers specialised in fishing and bird hunting. The moving populations seem to have developed high skills in both tasks; it is likely that the people of that time followed the movements of birds and fish, while at the same time they enriched their diet with mollusks and land snails. The correlation between their temporary occupation of the cave and the itineraries of the migratory birds and fish also implies advanced

seafaring activity and good awareness of the winds and climatic conditions in order for their voyages to be secured.

Nevertheless, the study of the faunal material from the Cyclops Cave showed the occurrence of *Capra aegagrus* at a transitional stage of domestication in the Lower Mesolithic (8600-7500 cal. BC). The island culture of Youra can be viewed as an important stage in the transition from fishing, hunting and gathering to animal domestication in the Balkans (Trantalidou, 2011, 27; Kaczanowska et al., 2008, 95).

Some scholars had disputed the existence of an early "Neolithic package" in Cyclops Cave and tried to find ways to challenge the stratigraphy in the early Mesolithic period assuming that the layers of the cave were disturbed. Instead, the succession of the strata was normal, and more than once, bones of animals were dated showing ages of the Mesolithic. Suids (*Sus scrofa*) appear in the lowest stratum of LM; an early domestication of this species is possible due to their small size (Trantalidou, 2011). The only region where mainland counterparts for the domesticated pigs can be found is Central Anatolia, where sites such as Çayönü, Cafer Hüyük and Hallan Çemi have developed pig domestication since the early PPNA. Sheep reached the island at the beginning of the 8th millennium BC.

Fig. 6 Cyclops Cave. Mesolithic bone hooks

The Cyclops Cave deposits presented a rich collection of worked bone tools, such as fish hooks of various sizes and shapes **(Fig. 6)**, ranging from the U-shaped hook type to the bi-pointed implement, which probably was

used for the catching of big fish or octopus. The fish hooks range in size from very small (5 mm in length) to very large (7 cm), indicating that fish hooks were used for both large and small fish. Net and trap fishing can be practised with tools made exclusively from organic materials, which might not leave any archaeological traces.

Mesolithic settlement at Maroulas on Kythnos

The excavation at Maroulas on Kythnos, an island of the western Cyclades, began in 1996 after the completion of the excavation at Youra. The site identified in the 1970s by the anthropologist K. Honea (1975; 1976), challenged many foreign archaeologists while some others were discouraged to start research there believing that the lithics belonged to the Neolithic or Bronze Age.

Although Cherry had visited the site in 1977 (Cherry, 1980, 22) with Robin Torrence, a specialist in lithic industries, and although they searched the area thoroughly ("*eight man-hours of careful surface collection over the site produced only 70 lithic artifacts implying either that the site is very sparse indeed, or that it was already been exhaustively collected*"), they did not realise its importance and observed only that the lithic industry "*was not incompatible with a Neolithic or Early Bronze Age date*"!! And in another point of this paper Cherry argues: "*Given the ambiguities about the nature and affinities of the site, and the great rarity of such early sites in Mediterranean island settings, it is probably advisable to set aside this evidence until substantiated in detail and for the present at least retain the null hypothesis: that there are no settlements of Mesolithic age in Cyclades"*!!

These views of both researchers affected Greek and foreign archaeologists in the following decades while prevailed the opinion that there were no Mesolithic sites in the Aegean and especially in the Cyclades! It is certain that after the first publication of Honea (1975), several prehistoric archaeologists visited the Maroulas site and collected lithic material, but no one seemed to understand its importance by not writing anything, leaving the Maroulas issue forgotten. In 1996, when I visited the site for the first time with my colleague Stella Katsarou, the flat area of 3,000 sq. metres was filled with hundreds of artefacts, there were no ceramics at all, while there were remnants of constructions and burial remains (cranial and long bones); everything showed that this place had been inhabited in pre-Neolithic times. In the same year, I decided to start a rescue excavation that yielded buildings and burials.

The rescue excavation at the site started in 1996 and after an interval of several years, systematic research began under the auspices of the Aegean University from 2001 till 2005 (Sampson, 2008b; Sampson et al., 2010). Currently, Maroulas is the only example of a large-open site **(Fig. 7)**, a real settlement with dozens of structures in round plan **(Fig. 8)** and 26 primary and secondary burials under the floors **(Fig. 9)**. Several dates (Facorelis et al., 2010) between 9440and 9350 BP (8770–8564 cal. BC) show that the settlement was inhabited in the first half of the 9th millennium, while for the moment it is the oldest Mesolithic site of the Lower Mesolithic in the Aegean.

Fig. 7 The site of Maroulas in Kythnos

Some similarities can be found in the oval semi-dug structures of the early phase of Lepenski Vir culture (e.g. Vlasac, layer I, house no 2a), which are mainly over-ground constructions with a circular base and a rectangular hearth inside (Srejovic, 1969; Radovanovic, 1996). The seasonality of fishing, e.g. at Maroulas, may possibly indicate spring or early summer occupation (Trantalidou, 2010), but the other periods of the year are also likely.

The uniqueness of the Maroulas settlement till nowadays and its consideration by Runnels (1995) as a special case of a colony of eastern Mediterranean immigrants today seem obsolete. However, today the case of Maroulas in the Aegean does not seem to be unique at all, if we consider the great extent of insular Mesolithic sites such as Kerame 1 on Ikaria, the site of Roos on Naxos, Kara Pounta on Sikinos and Areta on Chalki which either were not excavated in a large extent (Kerame 1) or they have not yet been excavated. Especially, the site of Kara Pounta on Sikinos is probably an important settlement since there are indications of ruins of circular buildings, similar to those at Maroulas, but these are not yet excavated.

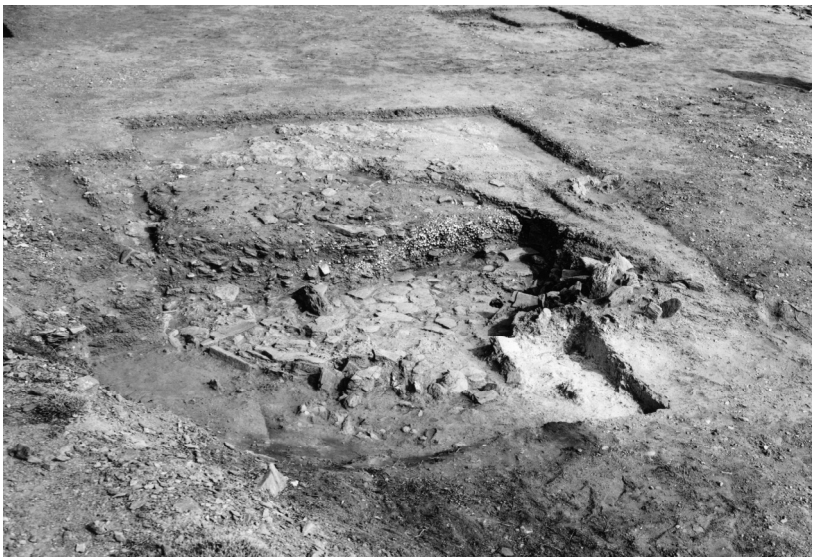

Fig. 8 Maroulas in Kythnos. Semi-subterranean structure

Van Andel and Runnels' (1988) opinion that the Mesolithic inhabitants of Greece may not have been indigenous, but were immigrants from Anatolia or from places farther east must be rejected. This assertion was based only on the stratigraphical gaps of the coastal Franchthi Cave. It is also worth mentioning the case of Runnels (1995) who argued that Maroulas was the result of colonization from the East. Runnels' assertion (2004) that "*the rarity of Mesolithic sites is not the accident of archaeological fieldwork. Systematic surveys in the Peloponnese, the islands, and central and northern Greece in the last decade have produced no Mesolithic sites*" is