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THESPROTIA EXPEDITION III
LANDSCAPES OF NOMADISM AND SEDENTISM

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Cover: The Bronze Age site of Goutsoura seen from the south. Photo: Björn Forsén

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Reading the Human Imprint on the Thesprotian Landscape: A Diachronic Perspective

Björn Forsén and Nena Galanidou

Some 50 years ago Thesprotia, the northwesternmost regional unit of Epirus bordered by the Ionian Sea and Albania, was one of the least studied parts of Greece. This was in many respects still the case when the Thesprotia Expedition was launched as a new project of the Finnish Institute at Athens in 2004.[1] The aim of this interdisciplinary project was to write the diachronic history of the fertile Kokytos valley from prehistoric until modern times. However, the aim was from the very beginning also to include studies placing the study area within the larger context of Thesprotia, or studies concerning Thesprotia in its entirety, whenever this seemed helpful for understanding the history of human settlement in the Kokytos valley.

Thesprotia Expedition was thus designed as a larger umbrella project, in which everybody working in the region could take part. Thanks to EU-sponsored enhancement programmes, the four largest acropoleis of Thesprotia, i.e., Elea, Gitana, Dymokastro and Phanote (Doliani), have been extensively excavated by the Greek Archaeological Service.[2] The construction of the Via Egnatia highway, as well as agricultural improvements, have revealed many new archaeological sites, some of which have and will be published by the Thesprotia Expedition as part of our ongoing collaboration with the Greek Archaeological Service.[3] Our own work in the field has encompassed, apart from an intensive archaeological and geological survey, also trial excavations in a number of locations, as well as palynological work in the neighbouring Chotkova, Prontani and Morphi lakes in order to establish the history of vegetation and environmental change. Efforts have also been put into restudying previously found inscriptions and collecting archival sources concerning Thesprotia in Istanbul and Venice.

The first volume of the final publication series of the Thesprotia Expedition was published in 2009.[4] The aim was to create a general basis on which to build a regional history in the following volumes of the project. The contributions throw light on periods previously considered "Dark Ages" in Thesprotia, add new information on periods previously well attested in the region and set the findings from the Kokytos valley into

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[1] During the early 2000s the best overviews of the region's past were still offered by Dakaris 1972 and Hammond 1967, whereas Sakellariou's 1997 more recent overview, although stretching right up to modern times, was more general in character. Apart from these diachronic overviews there existed also particular studies of different aspects of the Epirote past, such as Dakaris *et al.* 1964; Papagianni 2000; Soueref 2001; Cabanes 1976; Franke 1961, Bowden 2003; Nicol 1984; Soustal 1981; Psimouli 1998 or Kokolakis 2003, just to mention some of the most important.

[2] The enhancement programme has led to the publication of a handful of archaeological guide books on these four acropoleis: Riginos and Lazari 2007 (Elea); Kanta-Kitsou 2008 (Gitana); Lazari *et al.* 2008 (Dymokastro); Kanta-Kitsou and Lambrou 2008 (Phanote).

[3] Very useful new publications summarising the main results of the recent archaeological work of the Greek Archaeological Service are, e.g., *HGAtlas* 2008, Kanta-Kitsou *et al.* 2008 or Ligkovanlis 2014.

[4] Forsén 2009.

a broader context. The second volume of the Thesprotia Expedition which appeared in 2011 addresses the environment and the settlement patterns, and includes a catalogue of all known sites of the central Kokytos valley, as well as detailed reports on specific sites, find groups or historical sources.[5] Last but not least, it includes the first description of the settlement patterns and regional history through time beginning from the Palaeolithic period all the way until the end of Ottoman rule in 1913.[6]

This third and present volume is devoted to specific and more detailed studies of sites and find groups beginning in the Middle Palaeolithic and continuing all the way until the advent of urbanisation during the fourth century BC, although the focus is above all on the prehistoric periods. A fourth and final volume will include all remaining studies, mainly focusing on the time period from the Early Hellenistic until the Early Modern period. The contributions of the third volume are divided into three thematic groups. The first part, consisting of three chapters, addresses the knapped stone finds recovered during our survey. The second part of the volume, comprising nine chapters, is devoted to the Bronze Age site of Goutsoura discovered in connection with the field survey and further explored by means of excavation by our team. Finally, there are two chapters on the Late Classical to Early Hellenistic period.

The articulation of the content of this book was guided by the long time span of our findings and the interdisciplinary character of our research, which brought together archaeologists of different specialisations, as well as historians, geoarchaeologists and palynologists. Through the dialogue and communication of the different contributors a more nuanced picture of the human imprint on the landscape and its change through time emerges. The purpose of this introductory chapter is twofold. First we summarise the most important conclusions reached and how the studies published here change or add to the overview of the settlement patterns and regional history of the Kokytos valley published in *Thesprotia Expedition* II. We also examine the implications of these new findings for our picture of Thesprotia, Epirus and northwestern Greece. Secondly, while contextualising the results we want especially to do so with reference to the notions of nomadism and sedentism, a topic which we only have touched upon in the previous volumes of Thesprotia Expedition. The subtitle of this volume highlights the importance of nomadic and mobile lifestyles in the long-term history of Thesprotia and Epirus.

Geographical setting and research background

The Kokytos valley is, next to the Kalamas river basin, the most fertile part of Thesprotia. The valley follows the course of the Kokytos river which originates somewhat to the north of the modern town of Paramythia, thereafter flowing southwards for some 20 km until it reaches the Acheron river. In the north the valley is connected via Neochori to the Kalamas river, Thesprotia's second largest river after the Acheron. In the east the valley is demarcated by the dramatic Paramythia mountain range, rising abruptly like a wall to a height well over 1000 masl (the highest summit to the east of Paramythia reaching 1658 masl). In the west the valley is again separated from the valley of Margariti and the coast

[5] Forsén and Tikkala 2011.
[6] Forsén 2011.

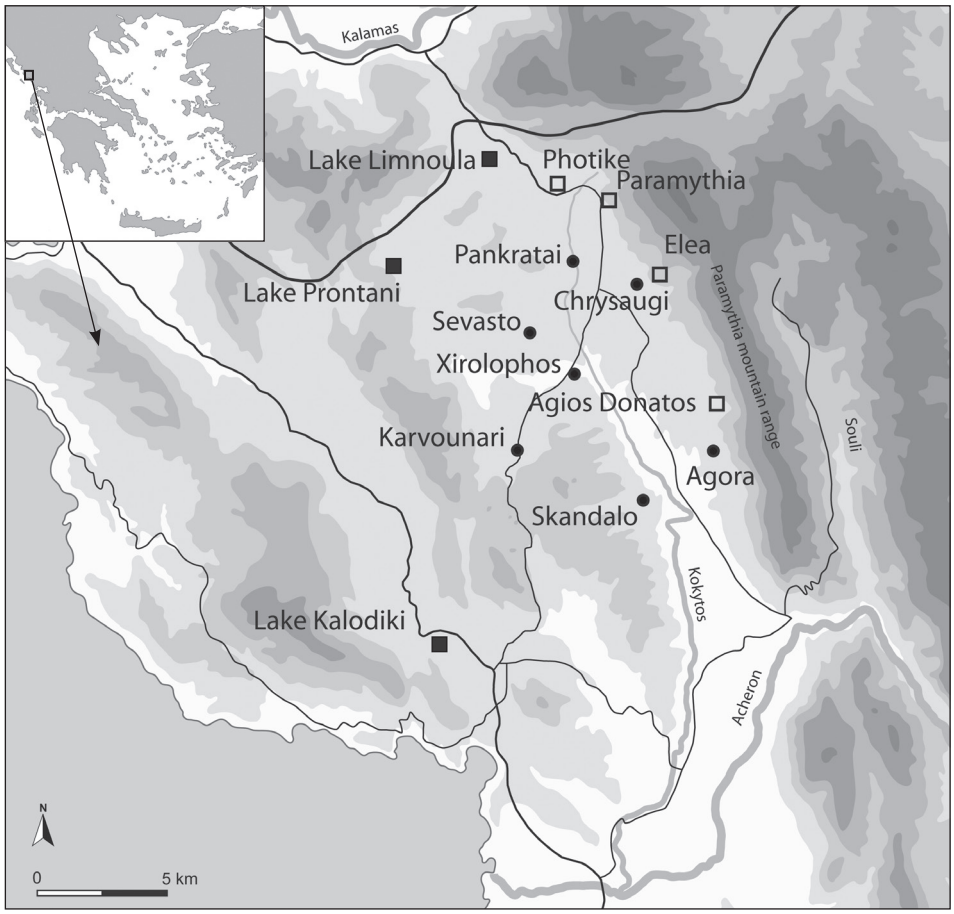

Fig. 1. General map of the Kokytos valley.

by a row of lower hills with a height around 400-500 masl (the highest summit to the west of Karvounari reaching 745 masl).

The archaeological work of the Thesprotia Expedition was limited to the central Kokytos valley. The northern limit of the study area was drawn at a line between the modern villages of Chrysaugi and Pankratai, whereas the southern limit roughly corresponds to a line between the villages of Agora and Skandalo (Fig. 1). Between the villages of Sevasto and Xirolophos the study area protrudes like an appendix towards the west all the way until the Karvounari redbeds. It covers altogether ca. seven km in a north to south direction and four km in a west to east direction, to which the ca. 2x3 km large appendix protruding towards Karvounari should be added. Most of the study area consists of the valley bottom. It falls slightly off from ca. 160 masl in the east at the foot of the Paramythia mountain range to ca. 90 masl to the hills in the west, next to which the Kokytos flows.

When the field work of the Thesprotia Expedition after seven years came to an end in 2010, a total of 72 sites, ranging in date from the Middle Palaeolithic until the Early Modern period, had been documented within the study area. Of these sites 27 were

known from excavations conducted by the Greek Archaeological Service, whereas the other 45 had been studied by us through intensive surface survey as well as geophysical and geoarchaeological work.[7] Trial excavations were conducted at five sites: Goutsoura or PS 12 (Bronze Age), Mavromandilia or PS 36 (mainly Early Iron Age), Gouriza or PS 29 (Late Classical and Hellenistic), Agios Donatos of Zervochori or PS 25 (Hellenistic and Early Roman) and Kioteza or PS 34 (mainly Hellenistic, shortly resettled during the Late Roman period). Gouriza, Agios Donatos and Goutsoura were finally excavated for several years, resulting in a lot of new information.[8]

Our on-site and off-site work in the Kokytos valley brings back the highly topical notions of nomadism, transhumance and sedentism in the interpretation of the Thesprotian archaeological record. The raising and herding of animals, predominantly sheep and goats, was during the Early Modern period a characteristic feature of Epirus, where the herds were moved between winter and summer, sometimes only between hills and the neighbouring valleys, sometimes, as by the Vlachs and Sarakatsani, over longer distances (Fig. 2), e.g. from the Thesprotian lowlands in the winter up to the mountains around

Fig. 2. Vlach family in 1913 on their way to summer pastures. In the background the Liminari hill and the Bronze Age site of Goutsoura (arrow).

[7] For a catalogue of the 72 sites, see Forsén *et al.* 2011.

[8] For Gouriza, see Forsén *et al.* 2011, 79-82 and the contributions in this volume; for Mavromandilia, see Forsén *et al.* 2011, 99-100, with further references; for Agios Donatos, see Forsén *et al*. 2011, 109-113, with further references; for Gouriza, see Forsén *et al.* 2011, 116-119 and Turmo, this volume; for Kioteza, see Forsén *et al.* 2011, 114, with further references. Goutsoura was excavated over 2007-2010, Agios Donatos 2006-2009 and Gouriza 2007-2008 and finally again 2015.

Metsovo or Pogoni.[9] Many scholars have used the seasonal movements of the Vlachs and the Sarakatsani as a model for interpreting prehistoric and ancient societies in Epirus,[10] seemingly assuming that this way of living was dependent on the local geomorphology and thus remained constant throughout time.

The view according to which transhumant or nomadic pastoralism would always have prevailed in Epirus has been challenged on the basis of the danger in interpreting prehistoric occupation of mountainous areas as an indication of long-distance transhumance.[11] Recent research has on the other hand observed that prehistoric artefact scatters in the mountainous Grevena region to the northeast of Epirus correspond to the location of modern transhumant pastoralist's summer huts and probably indicate that high altitudes were used by pastoralists from the turn of the Neolithic period to the Bronze Age.[12] It is also well documented by Bronze Age ceramic finds and radiocarbon dating.[13] This is as a matter of fact in line with recent zooarchaeological data which suggest that transhumant pastoralism developed in the Central Balkans at the advent of the Eneolithic or Early Bronze Age.[14] There are also plenty of written sources proving the existence of transhumance over shorter distances with smaller flocks in Classical and Hellenistic Greece.[15]

Nomads are people who live without a fixed dwelling place subsisting either by means of hunting and gathering, agriculture, or animal husbandry. Transhumance is a mode of subsistence based on pastoralism combined with agriculture, where a sedentary group moves its livestock seasonally to another region. In the context of nomadism the whole population unit moves to hunt or collect the seasonally available wild resources or moves together with herds of domesticated animals, whereas in the context of transhumance only part of the population moves together with the flocks, the rest of the population being permanently settled in order to tend to the crops or those animals not being moved.[16] Many authors claim that nomadism leaves only faint imprints in the landscape,[17] whereas the imprints of transhumant societies do not necessarily differ profoundly from those

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[9] In general, see, e.g., van der Leeuw 2004 or also Halstead 1990, 62-64.

[10] Wace and Thompson 1914; Higgs and Vita-Finzi 1966; Hammond 1967; Vokotopoulou 1986.

[11] E.g. Bailey *et al.* 1983; Bailey 1997; Cherry 1988; Green 1997; Halstead 1987; Halstead 1990, Halstead 1996, arguing that long-distance transhumance requires certain ecological, political and economic conditions which did not exist during prehistory, nor Antiquity. However, this does not rule out the existence of local, specialized pastoralism. For a criticism of analogical reasoning in archaeology, see also Murray and Walker 1988.

[12] Chang and Tourtellotte 1992; Chang 1992; Chang 1993. See more recently also Eftstratiou *et al.* 2006.

[13] Efstratiou 2008.

[14] Arnold and Greenfield 2006. It has also been suggested that the famous Chalcolithic South Tyrolean Iceman Ötzi (late fourth millennium BC), found mummified at the highest point of an Alpine pass together with e.g. an axe, bow and arrows, and birch-bark containers instead of pottery, would have been involved in local vertical transhumance (Oeggl *et al.* 2000). However, according to recent research, palaeobotanical evidence for transhumance does not occur in the region until the Middle Bronze Age (ca. 1700-1350 BC). Before that, i.e., also at Ötzi's time, humans were attracted to the high alpine landscape mainly by the availability of faunal species for hunting (Putzer *et al.* 2016)

[15] E.g. Georgoudi 1974; Skydsgaard 1988 or the excellent overview of all epigraphical evidence by Chandezon 2003. Isager and Skydsgaard 1992, 100, summarize the state of research well, thus: "The question is not whether transhumance existed in ancient Greece; the question is, exclusively, of its extent and importance."

[16] E.g. Wainwright and Thornes 2004, 268-269.

[17] See Rosen 1987; Finkelstein and Pervolotsky 1990; Rosen 1992; Finkelstein 1992 for a debate on nomad invisibility in the landscape. See Rosen 2008 and references therein for patterns of transhumant pastoralism around the world.

of early farmers. This all makes it challenging to distinguish nomadism on the basis of archaeological remains;[18] some general conclusions can be drawn on the basis of settlement locations, finds categories and zooarchaeological data (if such is available).

The mosaic of different prehistoric communities, Palaeolithic and Mesolithic hunter/gatherers and Neolithic, Bronze Age or later agropastoralists, whose material culture is present on the same geographic locale, the Kokytos valley, raises the issue of the particular attraction of the valley to the different groups in the passage of time. We assume that the attractions were not the same to all of them but relate to their economy, territorial extension and habitual use of the landscape. The archaeological picture obtained is also a response to the changes this landscape has undergone through time. Climatic oscillations[19] and tectonic activity[20] from the Upper Pleistocene to the Late Holocene set the big picture in western Greece. The essentials of this picture can be further considered in terms of four palaeogeographical categories: the position of coastline and of winter and summer snowlines, edaphic conditions based on nutrient properties of bedrock and soils, terrain, and water retentiveness of land surfaces.[21] These four categories, originally proposed to map wild animal distributions and seasonal movements over the Epirotic landscape, also offer a frame for considering domesticated animal movements. The archaeology of the prehistoric groups of Epirus cannot be discussed only within the geographical limits of the area surveyed by the Thesprotia Expedition but also needs to take into account the resources available in the broader landscape of Thesprotia, both in the mountainous uplands and in the now submerged, yet available to many Palaeolithic groups, coastal lowlands.[22]

Prehistoric hunter-gatherers in landscapes of habit

The earliest archaeological evidence at Kokytos dates to the Middle Palaeolithic and its greatest sample originates from Mikro Karvounari (PS 23) and Megalo Karvounari (PS 24) (Fig. 3).[23] These twin *terra rossa* sites are situated in the western part of our study area at higher elevations (between 140 and 220 masl) compared to other later prehistoric sites which are clustered in the valley bottom. In southern Greece Middle Palaeolithic archaeology is associated with palaeoanthropological remains of *Homo neanderthalensis*[24] and to date there is no reason to assume that this would not have been the case also for western Greece.[25] Neanderthal presence is also attested in the third major redbed site near Kokytos, Morphi,[26] in PS 43 and PS 4 in the valley bottom,[27] and throughout the valley by a smaller number of stray finds identified in tracts.[28]

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[18] Ingold 1980; Khazanov 1984; Cribb 1991.
[19] Tzedakis 2007; Tzedakis *et al.* 2003.
[20] Bailey *et al.* 1993; King *et al.* 1994.
[21] Sturdy *et al.* 1997, 591-598.
[22] Sakellariou and Galanidou 2014.
[23] Ligkovanlis 2011; Papoulia 2011.
[24] Darlas 2007; Harvati *et al.* 2003; Harvati *et al.* 2010; Harvati *et al.* 2013.
[25] Galanidou and Efstratiou 2014.
[26] This is a raised dissected polje discovered by Higgs *et al.* 1967; Papaconstantinou and Vassilopoulou 1997; Papagianni 2000.
[27] Galanidou and Papoulia, this volume.
[28] Forsén *et al.*, this volume.

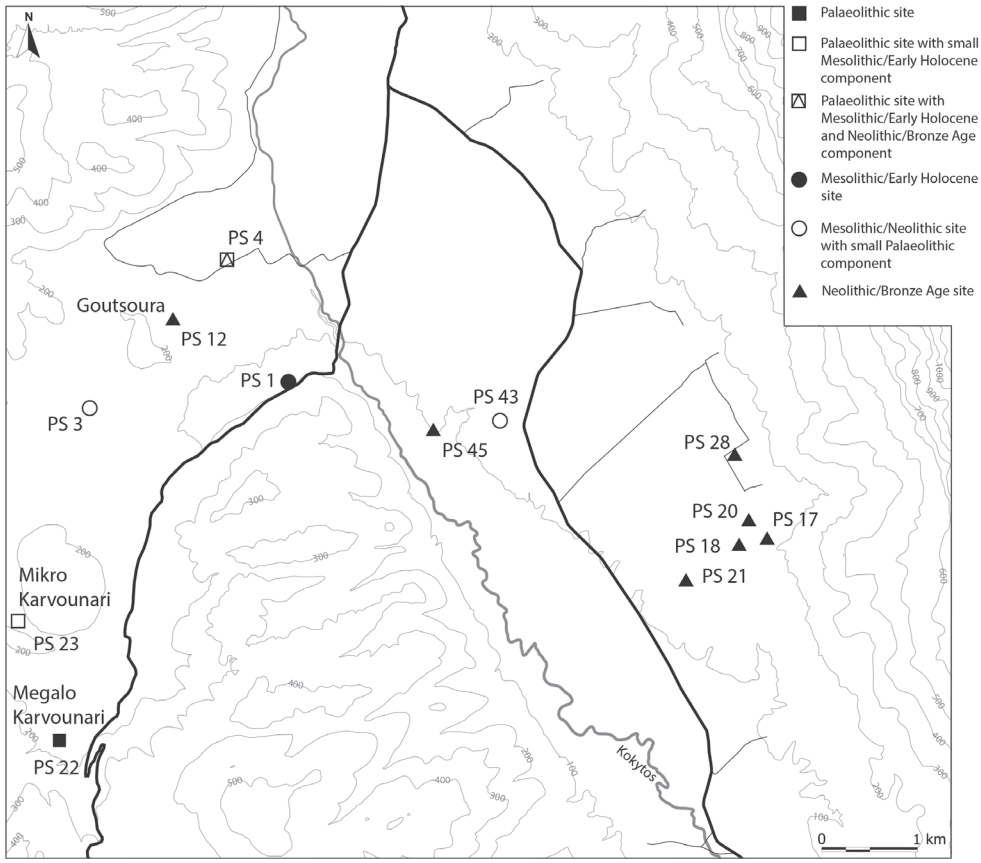

Fig. 3. Map with prehistoric sites of the Kokytos valley.

If Neanderthals were the first people to live in the Kokytos valley, at some point during the early Upper Palaeolithic *Homo sapiens*, our species, took over from them. Megalo Karvounari, a polje deeply dissected by recent erosional gullies,[29] is the only site at Kokytos which returned evidence for a presence of hunter-gatherers using Aurignacian tools.[30] It clusters with two more terra rossa sites from Thesprotia, Eleftherochori (Site 7) and Molondra,[31] with the open-air site at Spilaion near Preveza[32] and with surface finds collected west of Narta Lagoon in the Albanian coastal plain,[33] in yielding Aurignacian archaeology. All five sites make a strong case for early penetration of anatomically modern human groups in western Greece and southern Albania whose chronological details cannot yet be established.

After the Aurignacian follows a hiatus in the Upper Palaeolithic record of Thesprotia which may reflect a shift of foraging activity to other parts of Epirus or

[29] Papagianni 2000, 47.
[30] Ligkovanlis 2011.
[31] Ligkovanlis 2014.
[32] Runnels *et al.* 2003.
[33] Ruka *et al.* 2014.

Albania. To judge by the wealth of evidence and dates reported from the rockshelter sites of Klithi, Megalakkos and Boila in the Voidomatis river valley, Kastritsa on the shore of the Lake Ioannina (Pamvotis), and Asprochaliko by the Louros river, it was the complex topography of the hinterland of Epirus that attracted the attention of the Upper Palaeolithic groups from approx. 26 kyr onwards.[34] Their sites are strategically placed in the margins of a large inland basin, produced by uplift and subsidence, within which animals could be circumscribed and hunted.[35] Back in the region of the Kokytos, Mikro Karvounari hosts some late Upper Palaeolithic to early Mesolithic hunter-gatherer activity,[36] as does PS 43 likewise, in the valley bottom.[37] Beyond these two sites where the transition to the Holocene does not leave an archaeologically clear mark – very much like other parts of Epirus and mainland Greece[38] – the presence of Mesolithic groups has been claimed at PS 3 and possibly also at PS 1 (Fig. 3).[39] Overall, the Mesolithic evidence from the Kokytos is sparse and inconclusive and may be contrasted with the increasing number of Mesolithic sites that have been reported from Albania in recent years.[40]

Mikro and Megalo Karvounari are undoubtedly the key sources of Palaeolithic finds in our study area. Their discovery by E. Higgs and his team[41] over half a century ago was only the beginning of a still on-going study and debate about their origin, formation and chronology by four generations of archaeologists and earth scientists.[42] The lithic assemblages recovered from the redbeds provide one of the two major foundations upon which the Palaeolithic archaeology of western Greece stands today – the second being the archaeology of caves and rockshelters, as we have already seen. The karstic wetlands of the coastal zone of Epirus distributed to the west of the Ioannina tectonic trough[43] have yielded a wealth of lithic evidence and the longest chronological span covering the archaeology of the Lower, the Middle and the Upper Palaeolithic in Epirus. This is something that the second foundation of Palaeolithic archaeology in the region has not as yet provided, though it is the source of more diverse archaeological inventories comprising organic artefacts, faunal remains and habitation structures (e.g. hearths and post-holes).

In this volume we complete the array of studies dedicated to the new material recovered by our team at Mikro[44] and Megalo Karvounari[45] by a study of the bifacially worked elements and other Middle Palaeolithic tools recovered from Megalo Karvounari.[46] Two new elements thereby emerge: the presence of *Keilmesser* and *Quina* tools in the Palaeolithic record of the Kokytos. Though the sample is small, these observations lead to a number of possible links – with finds discovered at Kokkinopilos and at sites to the north

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[34] Bailey 1997.
[35] Bailey *et al.* 1993.
[36] Papoulia 2011.
[37] Galanidou and Papoulia, this volume.
[38] Galanidou 2011; a similar picture is also reported from the highland zone of Pindus around Samarina by Biagi *et al.* 2015a.
[39] Tourloukis and Palli 2009 (PS 3); Forsén *et al.* 2011, 85-86 (PS 1).
[40] Gjipali 2006; Runnels *et al.* 2009.
[41] Dakaris *et al.* 1964, Higgs and Vita Finzi 1966.
[42] Galanidou 2014 with further references.
[43] van Andel and Runnels 2005, fig. 1.
[44] Papoulia 2011.
[45] Ligkovanlis 2011.
[46] Galanidou *et al.*, this volume.

of Thesprotia – and renew the research agenda on tool variability and networks of sites employed by Neanderthals.

The distribution of Middle Palaeolithic sites in west Epirus is "governed by the geography of poljes, loutses and to a lesser degree, redeposited terra rossas or paleosols in other locations such as alluvial fans".[47] During the earliest phase of settlement the archaeology of the Kokytos area is in tune with the record of other parts of Epirus, the Ionian Sea islands and southern Albania where the strongest signal comes from open-air sites associated with seasonal or perennial water bodies in semi-enclosed karstic basins or smaller depressions. This type of early site, today visible in the landscape of western Greece as eroding badlands of notoriously low agricultural fertility, has produced the most diverse tool types, ranging from large or smaller bifaces[48] to classic Levallois products of debitage and tools, as well as industries of transitional character. Neanderthal groups were frequenting their margins to stalk and hunt at points where birds, larger and smaller mammals would come to drink, as well as to provision turtles, snakes, reeds, aquatic plants and water for themselves. The three studies published in *Thesprotia Expedition* II and here[49] confirm such a hypothesis, with the large numbers of Levallois points, parts of hunting tools, reported at Mikro and Megalo Karvounari being archaeological testimony of this activity.

Over time these wetlands and their environs around the Kokytos became a context of interaction, a node in the 'landscape of habit' of the Middle Palaeolithic groups. This is a term proposed by Chris Gosden[50] and adapted to Palaeolithic archaeology by Clive Gamble[51] in his *Palaeolithic Societies of Europe* to describe the spatial network for the negotiation and reproduction of hominid social life that occurs at the locales of a wider region where Palaeolithic activity occurrs. According to Gamble, "The wider region, traversed by the individual and all those with whom he or she interacts, forms a spatial network of intersecting paths. …a local hominid network encompasses both subsistence and social behaviour. The network contains other hominids, non-hominid competitors and resources. It is centred on the individual and the decision he or she must make."[52]

The spatial association of surface collections of Palaeolithic artifacts with a good number of, yet not all, redbeds has been a robust pattern, of western Greece's regional settlement. It is thus no surprise that an array of approaches – from purely cultural historical, to economic, chronological or geoarchaeological – have been employed in their study. We interpret these sites as nodes in the Neanderthal landscapes of habit repeatedly attracting the groups of western Greece. Our work in the Kokytos area has shown that Middle Palaeolithic finds were also present in smaller or larger numbers in other parts of the valley, yet were always associated with commanding views of the landscape, passageways, sources of fresh water, or flint to make tools.[53] This brings us to the second notion that our research on the Kokytos opens windows to: the archaeology of nomadism.

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[47] van Andel and Runnels 2005, 375.

[48] Papagianni 2000; see also Galanidou *et al.*, this volume, for an overview of the bifaces recovered from such sites.

[49] Papoulia 2011; Ligkovanlis 2011; Galanidou *et al.*, this volume.

[50] Gosden 1994, 118-119.

[51] Gamble 1999, 87.

[52] Gamble 1997, 87.

[53] A pattern that is also seen in the high altitudes of Pindus in western Macedonia by Efstratiou *et al.* 2011; Biagi *et al.* 2015b.

The Concise Oxford Dictionary defines a nomad as "(a member of a tribe) roaming from place to place for pasture; wanderer; wandering".[54] As we saw earlier, nomadism is a concept that refers to the physical impermanence of settlement. Yet as Ingold suggests an analytical distinction needs to be made between "residential flux and the physical impermanence of settlement; between changing company and changing places. The concept of nomadism of most hunter-gatherers is of fairly restricted kind, very often tied to sites that are more or less continually occupied, even though the list of inhabitants of each may change almost from day to day."[55] By drawing our attention to this distinction Ingold highlights a widespread and striking feature of hunter-gatherer social arrangements, namely the flux in the composition of co-residential groups. Our working hypothesis for the Middle Palaeolithic settlement in the Thesprotia wetlands is that different Neanderthal groups came together around them and separated in an annual cycle of aggregation and dispersal in different combinations and probably under different leadership.

Fig. 4. Flint nodule from the quarry site PS 4 (Sternari).

This dynamic and repetitive pattern of presence of the Middle Palaeolithic groups by the karstic basins of internal drainage, the poljes, along with the upper parts of the network of streams associated with the Paramythia drainage system, does not continue with the same intensity in the later Upper Palaeolithic and the Mesolithic. The archaeology from these periods is rather scarce and discontinuous in the Kokytos area, with the odd surface find probably in secondary deposition and a couple of Mesolithic sites that send a weak signal. Occasional visits to this area are still centred around Karvounari but also focus at other resources, mainly at PS 4 (Fig. 3), when looking for lithic raw materials (Fig. 4).[56] Further work in the field is needed to test the Upper Palaeolithic landscapes of habit. Two areas emerge as the most promising: the resource-rich coastal plains of the Ionian Sea which are now submerged and the Paramythia uplands.

Early pastoralists and farmers

The detailed studies published in this volume on the tract finds, the multi-period stone age site PS 43 and the Bronze Age site of Goutsoura (PS 12) improve our understanding of the Neolithic and Bronze Age life with respect to the views published in *Thesprotia Expedition* II in 2011. First of all, we have now clear evidence for human occupation also for the Early and Middle Neolithic period, above all from site PS 43, but also to some degree from sites PS 20, PS 18 and possibly also PS 28 (Fig. 3).[57] These sites are part of the two richest concentrations of lithic finds we have detected, i.e., PS 43 of Concentration III and the three other sites of Concentration I, both located on the valley bottom close to rich springs.[58] PS 43 is of special interest as it produced no pottery and

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[54] *COD*, 7th ed., s.v. nomadism.
[55] Ingold 1999, 403.
[56] Forsén *et al.* 2011, 84-85.
[57] Galanidou and Papoulia, this volume, for PS 43, and Forsén *et al.*, this volume, for PS 20, PS 18 and PS 28.
[58] Forsén *et al.*, this volume.

also no finds from the Bronze Age. PS 18, PS 20 and PS 28 on the other hand all include a Bronze Age component, although they all produced very little prehistoric pottery.[59]

Neolithic pottery is absent from the Thesprotia Expedition find category, whereas the only two sites that produced Bronze Age pottery to any large extent during the survey were PS 12 and PS 17 (Fig. 3).[60] PS 12 was later extensively excavated and an Early Bronze Age settlement along with a Middle to Late Bronze Age cemetery were unveiled. PS 17 belongs to the same concentration of lithic finds as the predominantly Neolithic sites PS 18 and PS 20 and is actually located so close to them (distance ca. 140-200 m) that we cannot exclude a certain mixture of finds.[61] The only Middle Neolithic find from PS 17, an arrowhead of orthogonal triangular shape,[62] could, for example, be equally connected to either one of the neighbouring sites PS 18 or PS 20 and in the same way some of the Bronze Age finds from PS 18 and PS 20 could in reality be connected to the Bronze Age site PS 17.

A comparison of the find categories from PS 43, PS 18 and PS 20 on the one hand and Goutsoura (PS 12) and PS 17 on the other hand reveals interesting patterns (Fig. 5),

Find context	Description	Date	Reference
PS 43	5 transverse a.	MNeo	Galanidou and Papoulia, Fig. 25
PS 20	2 lunates with abrupt retouch	ENeo	Forsén *et al.* Figs. 6d-e
B 44 (PS 20)	1 transverse a.	MNeo	Forsén *et al.* Fig. 6i
PS 20	1 tanged a.	Neo	Forsén *et al.* Fig. 6l
PS 20	3 fragmentary a. – either transverse a. or unfinished hollow-based a.	MNeo or EBA/MBA	Forsén *et al.* Figs. 7g, i and j
PS 20	1 unfinished bifacially worked a.	BA	Forsén *et al.* Fig. 7k
PS 20	1 hollow-based a.	EBA/MBA	Forsén *et al.* Fig. 7h
PS 18	1 transverse a.	MNeo	Forsén *et al.* Fig. 6j
PS 18	1 tanged a.	Neo	Forsén *et al.* Fig. 6k
PS 18	1 poss. a. with bifacial, invasive, pressure retouch	Neo	Forsén *et al.* Fig. 7a
PS 28	3 transverse a.	MNeo or EBA	Forsén *et al.* Figs. 7b, d-e
B 22 (PS 17)	1 transverse a.	MNeo	Forsén *et al.* Fig. 6g
B 34 (Conc. I)	1 transverse a.	MNeo	Forsén *et al.* Fig. 6h
PS 32	2 transverse a., one of which fragmentary	MNeo	Not ill., Forsén *et al.* p. 76
B 41 (Conc. I)	1 broken transverse a.	MNeo	Forsén *et al.* Fig. 9a
C 23	1 broken transverse a.	MNeo	Forsén *et al.* Fig. 9b
D 74 (Conc. I)	1 amygdaloid p.	BA	Forsén *et al.* Fig. 10a
D 61 (PS 45)	1 unfinished leaf-shaped p.	BA	Forsén *et al.* Fig. 10b
A 108 (Conc. V)	1 hollow-based a.	EBA/MBA	Forsén *et al.* Fig. 23c

Fig. 5. Neolithic and Bronze Age arrowheads (a.) and points (p.) found during the intensive field survey in the Kokytos valley, with references to the illustrations in Galanidou and Papoulia, this volume, and Forsén *et al.*, this volume.

[59] PS 18 produced one possible BA sherd, PS 20 a handful of prehistoric sherds, including one of MBA date, and PS 28 three possible MBA sherds (Forsén *et al.* 2011, 106-108).

[60] For PS 12, see the contributions by Forsén, Lavento and Kouki, Lima, J. Forsén, Doulkeridou, Papayiannis, Niskanen, Deckwirth and Macheridis in this volume; for PS 17, see Forsén *et al.* 2011, 108-109. Single Bronze Age sherds were also collected at PS 18, PS 20, PS 21, PS 28, PS 36 and PS 46 (Forsén *et al.* 2011, 99-100, 102-103, 106-108).

[61] Cf. the map published as Forsén *et al.*, this volume, Fig. 3.

[62] Forsén *et al.*, this volume, Fig. 6g.

although we cannot make a full comparison of the lithic finds, as those originating from PS 12 and PS 17 have not yet been fully studied. First, we have the arrowheads, which above all point towards hunting. PS 43 produced five transverse arrowheads, PS 18 three Neolithic arrowheads and PS 20 a total of nine arrowheads (of which four clearly are Neolithic and two Bronze Age, whereas three could be either Middle Neolithic or Early to Middle Bronze Age in date). Goutsoura and PS 17 here differ completely in that the former produced no arrowheads, whereas the latter only one, which was of Middle Neolithic date, thus not fitting into the site context.

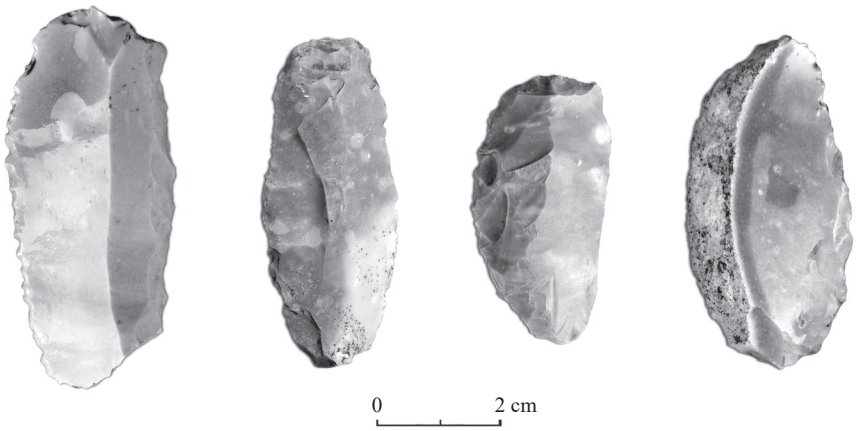

Fig. 6. Some sickle elements from Goutsoura.

During the survey far fewer sickle elements (six) than arrowheads (27) and points (2) were collected. Here an interesting pattern is revealed, which is even further enhanced if we include the finds from the Goutsoura excavation: sickle elements with silica gloss do occur both in Goutsoura (Fig. 5)[63] and PS 17, but not at all in PS 43, PS 18 or PS 20 (Figs. 5, 7). Discussions about this tool type are centred around its potential to signal the transition from the mere grass reaping activities of Mesolithic or early Neolithic groups to the harvesting activities of fully fledged agricultural groups.[64] The presence of sickles in a lithic assemblage does not automatically point to cultivation. There is a wide consensus

Find context	Description	Date	Reference
PS 17	2 s.e. on backed laminar flakes, with silica gloss	BA	Forsén *et al.* Figs. 8a-b
B 31 Conc. I	1 geometric s.e. of quadrilateral shape	MBA/LBA	Forsén *et al.* Fig. 7l
D 74	1 s.e. on blade, with silica gloss	BA	Forsén *et al.* Fig. 7m
PS 35	1 broken s.e. on flake, with silica gloss	Neo *terminus post quem*	Forsén *et al.* Fig. 16b
D 41 (PS 45)	1 geometric s.e. (?)	EBA/MBA	Forsén *et al.* Fig. 16e

Fig. 7. Sickle elements (s.e.) found during the intensive field survey in the Kokytos valley, with references to the illustrations in Forsén *et al.,* this volume.

[63] For sickle elements from Goustoura, see Doulkeridou, this volume (only including part of the sickle elements).
[64] Unger-Hamilton 1989; Unger-Hamilton 1991.

that sickle gloss also may arise from the reaping of grasses, from the cutting of canes and reeds, from woodworking and occasionally from hoeing or digging.[65]

There is no indication of any sickle element predating the Bronze Age whereas the majority of the arrowheads and points date to the Neolithic period (only five could with certainty be dated to the Bronze Age) (Figs. 5, 7).[66] The clear difference regarding arrowheads and sickle elements between PS 43, PS 18 and PS 20 on the one hand and Goutsoura and PS 17 on the other hand may indicate a difference in function between the sites. The first of these were more focused on hunting whereas agricultural activity (cereal harvesting) or merely provisioning of wild plants (such as grasses or reeds) played a more important role for the second group. Could this difference be due to a wider change in life style from the Neolithic period to the Bronze Age?

The lower Acheron valley, located only about 10 km to the south of our study area, was surveyed by the Nikopolis Project between 1991 and 1995. A total of 26 late prehistoric sites were discovered, out of which only one dates to the late Neolithic and the rest to the Bronze Age and above all to the Late Bronze Age.[67] Especially interesting is the fact that the Nikopolis project reached a result concerning arrowheads and sickle elements that closely resembles what we have recorded in the Kokytos valley. Out of a total of seven arrowheads four seem to date to the Late to Final Neolithic period and only one is a Bronze Age hollow-based arrowhead, whereas all except one of the eight sickle elements date to the Bronze Age (the eighth one dating to between the Late Neolithic and EBA II).[68]

Our knowledge of the Neolithic period in Thesprotia is in general extremely poor, with the only known sites being located in caves, such as the caves of Sideri or Psaka, both probably representing the later part of the Neolithic.[69] A similar picture is also reported in other parts of Epirus and in the Albanian coastal plains. Neolithic sites here are few and typically located in caves, something which strongly differs from the rich Neolithic archaeology with typical mound settlements that is found in Macedonia,[70] or settlements centred around the large inland lakes of Ohrid, Prespa and Orestias (Kastoria).[71]

The situation in eastern Epirus is rather similar to that in Thesprotia, with a surprisingly poor Neolithic record, although influences from the east are easier to identify here. Only three sites have been systematically explored. The most important is the Final Neolithic or Chalcolithic Doliana, which in many ways resembles the Early Bronze Age site of Goutsoura. Here a wattle-and-daub hut with two different phases of floors and

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[65] Rosen 1997, 55-58 and references therein.

[66] See Staikou 2013 for an overview of the chipped stone point typology and technology in prehistoric Greece.

[67] Tartaron 2004, 189-197.

[68] Tartaron 2004, 118-126. Tartaron dates the hollow-based arrowhead to the MBA-LBA, thus following a slightly different chronology than ours.

[69] The finds from these caves have unfortunately never been published in detail. See e.g. Dakaris 1972, 46-47; Douzougli and Zachos 2002, 142-143; Palli 2006, 32-33. Douzougli and Zachos date Sideri to the Chalcolithic, i.e., to the Final Neolithic period.

[70] Kotsakis 2014 and references therein.

[71] The general picture given by Andreou *et al.* 1996 is still to a large degree correct. For the rich lakeside settlement of Dispilio at Kastoria which belongs to the Macedonian Neolithic tradition, see contributions to Hourmouziadis 2002 and studies in the online journal *Ανάσκαμμα* https://anaskamma.wordpress.com/. For its chronology see Facorellis *et al.* 2014. For the general picture in Albania, see the e.g. Korkuti 1995 or more recently Bunguri 2014, with further references.

hearths was found. The majority of the faunal remains represent domesticated species. There are also some rare carbonized grains of einkorn wheat and a sickle element on a blade with silica gloss.[72] The sites of Gouves and the cave of Kastritsa have by Douzougli and Zachos been explained as a small seasonal pastoralist site (Gouves) and a storage place for food products (Kastritsa) respectively, belonging to a still not found main settlement located in a more advantageous location. Gouves and the cave of Kastritsa both date to the Late and Final Neolithic period, although Early Neolithic pottery also was found near the entrance to the cave of Kastritsa.[73]

The paucity of Neolithic finds and sites from Epirus may of course partly be due to poor archaeological visibility associated with geomorphological changes, where strong later erosional processes would have covered sites located on the plains and valley bottoms. Even if taking such possibilities into account,[74] we still cannot ignore the fact that the evidence in the Kokytos valley for most of the Neolithic period indicates a surprisingly low population density and a mobile economy mainly based on hunting and pastoralism performed by mobile, probably transhumant groups. These groups visited Kokytos either during special-hunting expeditions, or hunting was embedded in the longer course of other activities such as animal tending. The Kokytos valley appears to have been peripheral to the Neolithic settlement whose nodes perhaps are to be found elsewhere in the plains and lakes to the north and east of Thesprotia. Because of the special needs emerging from such a mobile lifestyle during Neolithic times, carrying pottery would have been a burden to the groups visiting the valley. Containers may well have been either organic or then totally redundant since the locales of fresh water sources must have been known to these mobile groups on their expeditions to the Kokytos.

We have to move all the way to Final Neolithic/Chalcolithic Doliana and Early Bronze Age Goutsoura to find evidence for a more sedentary lifestyle where farming played a role next to pastoralism. Indeed Goutsoura is a source of important information in the overall poor Bronze Age record of Epirus.[75] Palynological studies made in Lake Kalodiki (ca. 15 km to the west of the Kokytos valley) indicate a degradation of the natural vegetation combined with a probable increase of open ground vegetation and cultivated plants beginning ca. 3250 cal. BC, whereas the forest vegetation on the basis of a similar study from Lake Ioannina can be shown to decrease between ca. 4500 and 2400 cal. BC.[76] These changes indicate an increased human presence and agricultural practices not until the later stages of the Neolithic period. Another factor that may speak for the late arrival of farming to Thesprotia is the extremely rare appearance of polished stone-axes: except for the example collected by the survey team of Thesprotia Expedition, similar ones have only been recorded in Psaka and Paramythia.[77]

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[72] Douzougli and Zachos 2002, 124-142.

[73] Douzougli and Zachos 2002, 117-124.

[74] Cf., e.g., the settlement of Asphaka at the margins of the now dried up Lake Lapsista (radiocarbon dated to 7380±240 BP) in the northeastern part of the plain of Ioannina, an Early Neolithic site totally covered by later deposits and only found by chance (Douzougli and Zachos 2002, 116). Pottery dating from the Early and the Middle Neolithic was also recovered from a drainage trench opened near the Kastritsa hill, on the shore of Lake Ioannina (Giouni 2010 with further references).

[75] Vasileiou 2010.

[76] Lelivelt 2011; Gerasimidis *et al.* 2009.

[77] Forsén *et al.*, this volume, Fig. 16; Douzougli and Zachos 2002, 138-142, figs. 14-15 (for Psaka and Paramythia).

The Early Bronze Age site of Goutsoura was settled between ca. 2900 and 2400 cal. BC, with the inhabitants living in huts made of wattle and daub. The economy was mainly based on domesticated species, with pigs being the most common, followed by ovicaprids. Hunting and fishing supplied extra food as evidenced by a fish-hook and the fact that ca. 10% of the animal bones belonged to wild species.[78] Sickle elements with silica gloss, as well as a few carbonized seeds of *Lathyrus sativus*/grass pea are indications for farming activity.[79] Terracotta spindle-whorls and spools as well as bone needles do also occur.[80] On the basis of the find composition the way of life must have been very similar to that of the inhabitants of Final Neolithic/Chalcolithic Doliana, radiocarbon dated to between 3770 and 2925 cal. BC.[81]

From the late Middle Bronze Age until the end of the Late Bronze Age Goutsoura was used as a cemetery. The grave constructions together with a retaining wall, probably built in order to create a thoroughfare, indicate intensified modification of the landscape and a community participating in a joint enterprise.[82] This points towards a settlement of a certain size, perhaps a village, whose location unfortunately remains unknown. There are also other indications of an intensification of human activity in the Kokytos valley towards the end of the Bronze Age. First of all, another Late Bronze Age cist grave was recently found in connection with a rescue excavation inside our survey area at Kyra Panagia.[83] Secondly, whereas Early Bronze Age pottery during the field survey was only found at one site (Goutsoura), Middle Bronze Age (PS 17, PS 20 and PS 28) and Late Bronze Age pottery (PS 17, PS 36 and PS 46) was found at three sites each.[84]

Tartaron documented a very strong Late Bronze Age presence at the neighbouring lower Acheron and explained it as the result of the establishment of a Mycenaean trade colony at Ephyra, which lead to intensification of production in the hinterland and an influx of population from elsewhere. Tartaron suggests a four-tier hierarchy of Late Bronze Age settlements in the lower Acheron valley, consisting of major settlements (only Ephyra), villages, farmsteads and rural, non-residential sites.[85] This same increase of wealth also reached further inland as witnessed not only by the grave constructions at Goutsoura and the site E 16 in the Kokytos valley, but also by the rich graves found a little further to the north in Tsardakia Paramythias and Stenes.[86] These graves included, for example, spear heads and a sword, all made of bronze, and even faunal remains of a horse, together indicating the existence of clear social stratification.

However, the settlement finds from the Kokytos valley do not give the same signs of population increase we find in the lower Acheron valley. It is difficult to say whether this difference is real or rather the result of different surveying strategies, with

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[78] For the stratigraphy and pottery of the site, see Forsén, this volume and J. Forsén, this volume; for the faunal remains, see Deckwirth, this volume; for the fish-hook, see Papayiannis, this volume, No. 7.
[79] Cf. M. Lempiäinen, *Thesprotia Expedition 2009-2010. Macrofossil analysis report*, unpubl. A few *Triticum dicoccum* (emmer wheat) seeds were also found, but from Late Bronze Age layers of the site.
[80] Papayiannis, this volume.
[81] Douzougli and Zachos 2002, 126.
[82] Lima, this volume.
[83] Forsén *et al.* 2011, 84, no. E 16.
[84] Forsén *et al.* 2011, 99-100, 102-103, 106-108.
[85] Tartaron 2004, 189-212.
[86] Dakaris 1972, 64-65; Soueref 1986, 57-58, 95-96, 164-165; Lazari 2006, 48-49 (for Tsardakia Paramythias) and Lazari 2006, 46-48; *HGAtlas* 2008, figs. 47-49 (for Stenes).

the Nikopolis Project more actively focusing on the foothills and hills than the Thesprotia Expedition did. The meagre settlement finds from the Middle and Late Bronze Age give little information concerning the degree of sedentism and agriculture, although the higher level of wealth and social stratification were probably built on a clear sedentary mixed farming with associated herding, where the near-by mountain slopes were used on a seasonal basis.[87]

From dispersed villages to fortified settlements

On the basis of the survey work conducted in the central Kokytos valley, we envisaged in *Thesprotia Expedition* II a rather stable settlement pattern originating during the Early Iron Age or the Archaic period and continuing at least until the Early Hellenistic period.[88] This settlement pattern was based upon clusters of small sites, which in the field were interpreted as farmsteads, hamlets, small villages, graves or, in one case, even a small rural sanctuary (Fig. 8). The average distance between the different clusters in the valley was estimated to be ca. 1.5-2 km. Each cluster covers an area of ca. 400-500x600-800 m, however with sterile soil between the single sites. The same pattern repeats itself within the villages, which consisted of several find concentrations interspersed from each other by zones with less finds. Farmsteads usually occur as part of the clusters and could perhaps be described as satellite farmsteads, whereas the, elsewhere in Greece common, isolated farmstead hardly seems to be prevalent.

The clusters we identified were interpreted as non-nucleated villages or dispersed villages inhabited by kinship groups who lived at the same spots of the valley over centuries. A similar settlement pattern, with a large part of the population of a *polis* living in second-order, politically subordinated villages/hamlets, seems to be typical also elsewhere in Greece, although these could be classified as nucleated villages.[89] This settlement pattern usually developed during the Geometric and Archaic periods and continued throughout the Hellenistic period, although some of the centres meanwhile developed into urban centres. This also seems to be the case in Thesprotia, where Elea, for example, clearly was settled before it developed into a fortified town during the second half of the fourth century BC. This clearly was not the result of a synoikism, with people moving from the other settlement centres of the valley to Elea, but rather a result of a strong population increase, as the other dispersed villages of the valley continued to thrive, concurrently with the process of urbanisation.

This volume contains two chapters dealing with the urbanisation phase during the second half of the fourth century BC. The population of the region grew strongly at this time and probably peaked during the third century BC.[90] This is also the period

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[87] Cf., e.g., Tartaron 2004, 13-14, who believes that short-distance, vertical transhumant pastoralism characterised all of Epirus because the environmentally diverse and vertically differentiated region provided mountain pasturage at a close distance from the plains.

[88] Forsén 2011, 8-15.

[89] Cf., e.g., Bintliff 1999a; Bintliff 1999b (Boiotia); Forsén and Forsén (Arcadia); Mee and Forbes 1997 (the Argolid); Hoepfner 1999, 132-133 (the Cyclades).

[90] This goes for both Epirus and Illyria. For a general overview, see Bintliff 1997; for more detailed studies, see, apart from Forsén 2011, also Stocker 2009, 866-867 (Apollonia), Pliakou 2007, 231-234, 250-258 (Molossia), or Giorgi and Bogdani 2012, 374-395 (Phoinike, probably continuing into the second century BC).

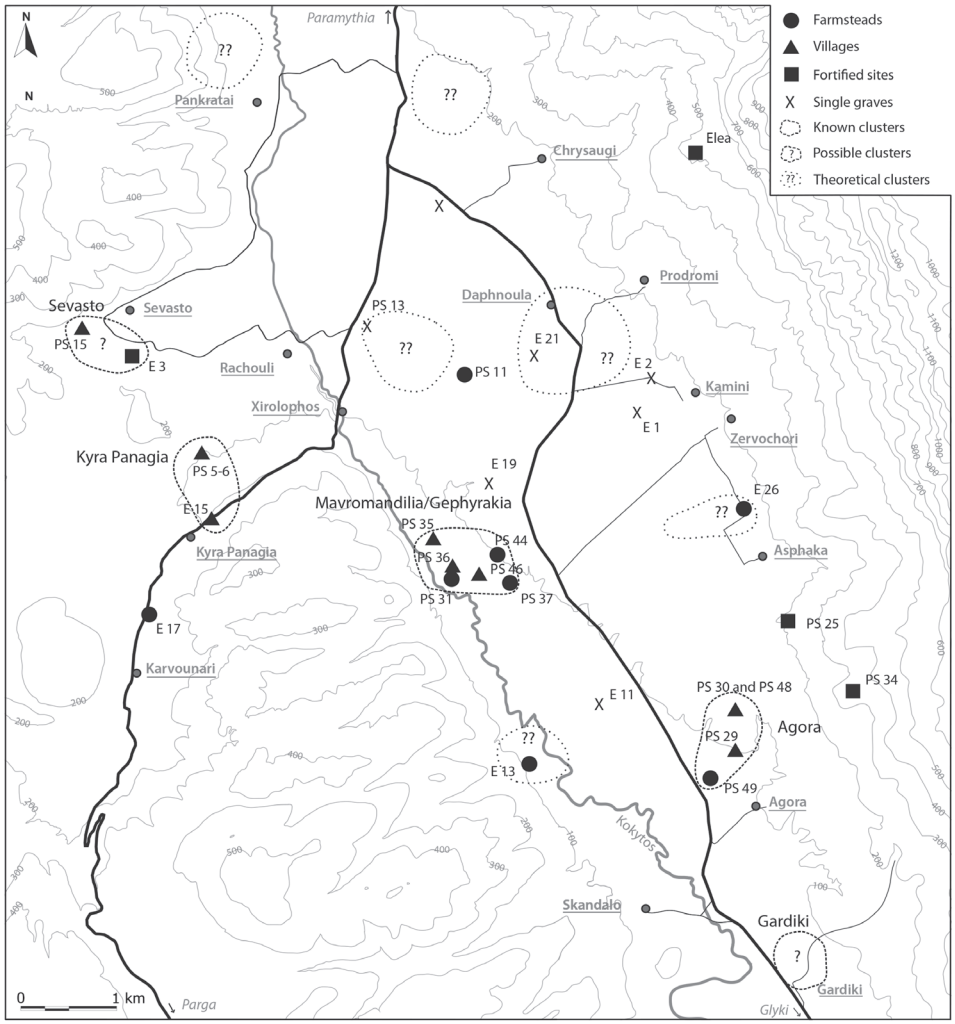

Fig. 8. Location of Late Archaic/Classical to Early Hellenistic sites and site clusters. Sites with only smaller components of Late Classical to Early Hellenistic finds are not included

when most of the fortified settlements of Epirus were constructed. The majority of these were refugee places or perhaps political centres or aristocratic seats, whereas only a few of them, all located close to the coast, developed into towns.[91] Of the fortified settlements in the Kokytos valley only Elea can be described as a town. We now know that its strong walls were built over a longer period of time during the second half of the fourth century and were apparently still modified towards the end of the third century BC.[92] Elea, together with the Early Hellenistic fortifications of Paramythia, Agios Donatos and Kioteza and a series of contemporaneous monumental

[91] Pliakou 2007, 250-258 with further discussion concerning Epirus.
[92] Suha, this volume.

graves,[93] not only witness a strong population increase, but also increased wealth, a developed political system and social stratification.

An increase of wealth can also be seen during the fourth and third centuries in the rural sites, i.e. in the dispersed villages. We now have the first evidence for manufacture, with the ceramic kiln in Gouriza (PS 29) as an example.[94] The first buildings with stone foundation also appear and tile roofs become more common.[95] In Gephyrakia (PS 35) there is even a building with a bathtub, to which water was brought along a channel from the nearby ravine,[96] something indicating social stratification also among the settlers of the dispersed villages. Earlier rural buildings were poorer and probably without stone foundations, something which could even be the case for buildings with tile roofs.[97]

The picture of the settlement pattern of the Kokytos valley that was drawn up in *Thesprotia Expedition* II can now be compared to recent studies concerning Molossia,[98] which is the next neighbour to the east of Thesprotia. First of all, we have the plain of Ioannina, where Georgia Pliakou in her important doctoral dissertation has noted a relatively stable settlement pattern established during the Early Iron Age and continuing into the Hellenistic period. This settlement pattern is characterised by villages located at a distance of ca. 2-3 km from each other. The buildings of the villages were typically constructed with plentiful free space between the single buildings, thus forming what could be described as dispersed villages. Building remains consisting of stone foundations do not generally appear until the fourth century BC (in some instances these occur already during the last decades of the fifth century BC).[99]

According to Pliakou the early villagers in the Ioannina basin would have lived on mixed agriculture with a large portion of pastoralism, including the movement of flocks over long distances, thereby not needing stable buildings. This all changed during the fourth century BC when the inhabitants shifted to an economy based mainly on agriculture and a sedentary lifestyle.[100] The peak of population was reached during the third century BC when a large number of sites were also fortified. However, it is notable that the unfortified villages continue to thrive, thus clearly contradicting the statement by Dakaris and Hammond according to which society would have developed from a stage based on villages to a higher level, characterised by fortified urban sites. Pliakou here adds that only very few of the fortified settlements can be described as towns and most probably were only places of refugee or political centres.[101]

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[93] Of these, the Prodromi grave (Choremis 1980) and the Marmara grave (Riginos 1999, 172-174; Pietilä-Castrén 2008) have been excavated. During the intensive field survey we found remains of another two possible monumental graves (PS 13 and PS 25, see Forsén *et al.* 2011, 86 and Tikkala 2009).

[94] The excavation of this kiln was begun by the Greek Archaeological Service 2007-2008 and was finished by the Thesprotia Expedition in 2015. The results will be published by Tommi Turmo in *Thesprotia Expedition* IV.

[95] The earliest datable rural buildings with stone foundation appear in Pano Pigadi of Sevasto (PS 15), Agia Paraskevi of Kyra Panagia (PS 5-6), Kyra Panagia (E 15), Gephyrakia (PS 35) and Gouriza (PS 29). Cf. Forsén *et al.* 2011, 77-78, 82-84, 97-99 and 116-119.

[96] Forsén *et al.* 2011, 97-99. The finds from this site will be studied by Tommi Turmo for his doctoral dissertation.

[97] Turmo, this volume.

[98] Pliakou 2007 and Douzougli and Papadopoulos 2010.

[99] Pliakou 2007, 226-235, 297-300.

[100] Pliakou 2007, 199-206, 297-300.

[101] Pliakou 2007, 231-234, 250-258, 297-300.

The publication of the Late Bronze Age to Classical village and cemetery of Liatovouni in the Konitsa valley, next to the Albanian border, appeared in 2010.[102] Apart from a thorough publication of the remains from Liatovouni, Angelika Douzougli and John K. Papadopoulos here also give a good overview of the general development in the Konitsa valley, comparing Liatovouni with, for example, Pogoni and Vitsa Zagoriou. They stress the fact that villages of this type characterised Molossia, beginning from the Late Bronze Age/Early Iron Age and continuing into the fourth century BC. The buildings, or perhaps rather huts, in Liatovouni were constructed on top of a stone foundation, the walls being made of mud-bricks held in place by a wooden framework. Remains of hearths, a water drainage channel and a more substantial wall, which appears to delimit the extent of the settlement and may have served as a retaining wall, were also found.

Liatovouni and Vitsa Zagoriou are according to Douzougli and Papadopoulos good examples of a stable settlement pattern based on small villages, whose inhabitants made their living on sedentary mixed farming and associated localized herding. This settlement pattern also included sites of special use that were connected to the localized herding and thus not occupied all year around. Douzougli and Papadopoulos believe that this settlement pattern came to an end in connection with the abandonment of Liatovouni and Vitsa Zagoriou during the fourth century BC, "at which time the previously scattered population was centralized within and around new fortified acropoleis". Pliakou, on the other hand, explains the abandonment of Liatovouni and Vitsa as a result of the Molossian movement from the north into the plain of Ioannina that originally had been controlled by the Thesprotians.[103]

On the basis of our present knowledge there is no sign in the Kokytos valley or the Ioannina plain that the settlement pattern based on villages would have come to an end in connection with the establishment of fortified acropoleis. The stable settlement pattern with sites being seemingly continuously settled from the Early Iron Age until the Hellenistic period does not, on the other hand, fit well together with Pliakou's suggestion that there would have been a change in the economy during the fourth century BC, from a more mobile one based mainly on pastoralism to a more sedentary one mainly based on agriculture. Without excavations of several sites and detailed osteological analyses it is difficult to tell whether part of the population was mobile, following the herds over longer distances, or not. The dispersed character of the villages, with long distances between single houses, do on the other hand point towards an economy in which pastoralism played an important role.[104]

The strong population increase which led to the urbanisation of Elea during the fourth century BC had without doubt a tremendous effect on the whole Kokytos valley. It brought with it an increase of wealth. The surrounding dispersed villages probably began to produce not only food, but also different products, such as roof tiles, pottery and iron objects, for the inhabitants of the town. There must also have been an increased demand for meat, cheese and other products from animals which probably encouraged

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[102] Douzougli and Papadopoulos 2010.

[103] Pliakou 2007, 277-282.

[104] Spinei 2009, 203 concerning the Medieval Balkans, with parallels drawn from ethnographic studies, according to which "villages with houses placed at a small distance from each other are typical for communities involved in mixed farming (intensive agriculture and stock breeding), while villages with dispersed houses set up at a greater distance from each other are of communities specializing in stock breeding."

some to specialize on pastoralism. Faunal material from sites excavated by the Thesprotia Expedition show a marked shift in subsistence practices between the Early Iron Age and the Hellenistic/Early Roman period. This shift from a society where cattle was the main supply of meat to a society dominated by ovicaprids may be the result of a strong population increase forcing the inhabitants to make use of ever more marginal grazing lands in the mountains that were suitable only for ovicaprids.[105] It most likely also brought along with it an increase of short-distance, vertical transhumant pastoralism.

Concluding remarks

Our knowledge of the early history of human presence in the Kokytos valley stretching from the Middle Palaeolithic period until the fourth century BC has, through the specific and more detailed studies of sites and find groups in this volume, taken a step forward, thereby adding new evidence and nuances to the broad overview of settlement patterns and regional history published in *Thesprotia Expedition* I and II. While summarising and contextualising the results of the single chapters in this volume we have put special emphasis on the notions of nomadism and sedentism, an important topic for understanding the past of the region which we had only touched upon in the previous volumes of the Thesprotia Expedition.

The conclusions drawn concerning the human imprint on the landscape in societies without written sources are based on our ability to identify, date and interpret the material remains. Our work stresses the need to incorporate into surface survey work small-scale excavations, a claim with repercussions for both field methodology and the Greek archaeological legislation. It also emphasizes the need for the detailed publication of specific find groups, not only from excavations and surveyed sites, but also from tracts (especially in societies experiencing a high degree of mobility).

Despite our close scrutiny much uncertainty still remains regarding the chronological and cultural affinities of a major part of the lithic finds, which by far outnumber other archaeological objects. The prehistoric archaeology of Epirus counts only a few stratified and well-dated sites that would offer comparanda for the surface finds examined. There is, finally, a clear need for more research into the traits of knapped stone deriving from historical periods. Although our knowledge of the Thesprotian past has moved tremendously forwards since the days of Hammond and Dakaris, more work is thus still needed.

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[105] Niskanen 2009; Deckwirth 2011.

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