LANDSCAPE MEMORY IN ARCADIA

THE INTERACTION OF RELIGIOUS MYTHOLOGY, SANCTUARIES, AND THE SETTLEMENT OF PEOPLE IN THE LANDSCAPE OF ANCIENT ARCADIA

Candidate Number: 1239696

Kellogg College

University of Oxford

A thesis presented for the degree of

Master of Science

Trinity Term 2021

Abstract

'Arcadian landscapes: Purpose of Sanctuaries. The religious topography of Arcadia, and the memory of the past use of landscapes.'

Kellogg College

Thesis submitted for the degree of Master of Science, Trinity Term 2021

This thesis examines the topographical relationship between religious sites and sanctuaries in rural areas of Arcadia following the bronze-age collapse, and their associated mythology, to ascertain if there is any possible evidence of why population settlement in the later geometric, archaic, and classical periods favoured more urban settlement away from the rural places mentioned in the mythology of Arcadia. It relies on the assumption commonly made that since ritual practice was of paramount importance for the Greeks, that sanctuaries in rural Arcadia must have a connection to the mythology of such characters as Herakles and Artemis, as these were among the characters of mythology written about in Classical period plays; and in descriptions of the landscape by ancient writers such as Pausanias.

But settlement in the countryside was after a time changed compared to the various *poleis* (Cities) that began construction from the geometric period onwards through the archaic and classical. Is there evidence to be found of a change in the landscape at some point in the past that meant certain groups of people had to move away from rural areas substituting the rural gods for the *polis's* protector gods, and leaving behind the traditional sites of worship and ritual memory? A natural cause perhaps such as prolonged drought, or through invasion or collapse of a dominant power? Or is the particularly Greek system of *synoecism* the root cause?

Crucial to unravelling the nexus of mythology, and to come to any conclusions about its relation to the everyday lives of people and how people related to the landscapes they lived in, requires careful and considered evaluation of the writings of ancient writers such as Polybius (c. 200 – c. 118 BCE) and Pausanias (c. 110 AD – c. 180 CE). It will also require reviewing archaeological theory, in particular the detailed work of academics such as Madeline Jost and François De Polignac, in the interpretation of the distribution of civic space and sanctuaries in Arcadia.

This paper aims to consider why then, in a landscape so woven with mythology and sanctuaries, did the relationship between *polis* settlement and rural sanctuaries become different over time? Why did the places of rural myth, and its associated religious and ritual practice, take on different meanings from where people chose to live in the geometric period onwards?

Acknowledgements

The landscapes of ancient Greece are a subject that have long inspired me. From Colin Renfrew's excavations on Keros and Dhaskalio, I was inspired to investigate myself the beginnings of ancient theology and ritual practice. Reading the classics, as I had the privilege to do while studying for my undergraduate degree with the Open University; brought me a whole new world of the ancient. From the battle landscape of Troy to the last desperate stand of the Byzantine empire there is so much to learn.

I must thank my supervisor, Dr David Griffiths, both for directing this fantastic degree and for opening my eyes to the landscapes that we all live in. How they became human places from the natural space, and the history of our interactions with space and place.

I thank the invaluable assistance of my thesis supervisor Dr Jane Harrison for keeping me on a straight course through some choppy waters.

My thanks also go to the course tutors and contributors, and my fellow students who have fostered a supportive and welcoming environment to this sometimes scared and over-wrought student.

Finally, to quote Virgil*:*

"…rura mihi et rigui placeant in vallibus amnes,
Flumina amem sylvasque inglorius."

"Let my delight be the country, and the running streams amid the dells—may I love the waters and the woods, though I be unknown to fame."

(*Georgics*, II. l. 485-486, tr. Fairclough)

Table of Contents

Table of Figures

Part One:

Introduction

Figure 1: : **The Greek Peloponnese and vicinity (Clendenon, C. 2009)**

The landscape of Arcadia is an interesting subject. As a whole it is mountainous, and it is pastoral. It has large areas of karst geology and hydrology. It is a landscape that invites myth and poetry and has itself become a synonym for a perceived state of heavenly grace. It is a landscape that inspired some of the labours of Herakles. It stakes a claim as the birthplace of Zeus, as well as being the land of the mortal Lycaon, who was transformed into a wolf by Zeus after attempting to trick the King of the Gods into consuming a mortal. It is a landscape part beautiful and part terrifying. It endures into the modern age because it continually inspires art. The mythology of the landscape is integral to understanding how it has been lived in and used by humans, and how they themselves understood their space.

The first part of this paper aims to describe in step the settlement history of the landscape in the central Peloponnese dating from the Early Helladic (EH) to the end of the Greek dark age period. This is a time frame encompassing c.3100 BCE until c.800-600 BCE. The reason for choosing this particular time period is that the Greek pantheon that arose in this time, by happenstance, included specific monument and temple buildings dedicated to Gods, Goddesses, Spiritual representations, and demi-God heroes that symbolised human belief in a higher power that controlled events around the theme of water, land management, and as analogues of real events such as migrations and war.

This section also aims to discuss the reasons why certain religious and culturally significant monuments were placed where they were in the landscape. Why did certain gods or heroes matter more significantly than others? Why place them in and around certain areas, and for what perceived benefit?

The second part of this paper aims to discuss the methodology and models used for research.

In the third part this paper aims to discuss the mythology and the typology of the sacred pantheon in the area. The gods and heroes associated with the *numen* of Arcadia include those associated with water and the availability of water such as Alpheus (*Paus*. 5.7.2), Ladon (*Hes. Theog*. 344), and Demeter Melaina (*Paus*. 8.6.5). Heracles was the demi-god hero associated with his labours for Eurystheus of Tiryns. Six of these labours were completed in the northern Peloponnese including that of killing the Stymphalian birds in Arcadia. Another Heraklion labour, although based in nearby Argos, included slaying the Lernaean Hydra. Here there are possible parallels between myth and reality in that these mythic tales may relate to actual events of land/water management and the association of a mythic character with a king or *basileis* chief who instigated changes in the landscape to benefit their people.

This section also takes heed of modern academic thinking on the subject of religious landscape memory and how people changed their spiritual concerns over time. It is a roundup of thematic opinion.

The fourth part of this paper aims to discuss what the ancient writers thought about the landscape and the association of myth and what they could actually see (or at least had learned through the writing of others). The main ancient writer who describes Greece in depth was Pausanias (c. 110 AD – c. 180 AD), who describes the things he sees, and attempts to make sense of the landscape and sanctuaries associated with that. It also looks at the process of *synoecism* in depth to see what effects this may have had on the settlement and religious practice of people.

Next, the paper aims to bring these various strands of investigation into a meaningful context. Researching any connection between myth and the landscape and the settlement of populations has to invariably include supposition and a reliance on unreliable conjecture made by ancient mythmakers. Having said that there are reliable and sourced facts such as the archaeological record of the landscape. It is through blending the applied archaeological record, and the fantastic world of myth that any conclusions will hopefully be gleamed.

Models and Approaches

Greek religion, the siting of monuments, and the settlement patterns of its people throughout history is an ongoing and dynamic field of research. It should be noted that ‘Greek’ and ‘Religion’ are in themselves very fluid terms comprising a complex phenomenon, and the possibility of understanding the ancient mind in comparison with modern thought is something that is debated many times. As discussed by Zaidman and Pantel (1989, p. 3) “The study of Greek religion requires a preliminary mental readjustment: we must temporarily abandon familiar cultural territory and radically question received intellectual categories.”

One thing that is generally agreed upon is that these subjects are highly complex, and our distance in time and space from the subject means that full understanding of the ancient landscape, and the thoughts and practices of ancient peoples, may never be understood. For the time being we have two main tools at our disposal for understanding the past. Material and cultural archaeological remains firstly leave an actual real record of the past that aides our understanding of how people once lived, worked, spent any leisure time, and ultimately how they died and if they were in some way remembered by their kith and kin.

Secondly, we are in possession of the mythological and oral histories of the past. These stories were eventually written down, and though subject to multiple revisions and editing and the vagaries of translation, they do leave us with some idea of how people thought and attempted to make some sense of the environment and landscapes around them, as well as the meaning of life love death and the supernatural world.

Landscape archaeology though proves useful in that it is a field of study that provides an overall nexus of the palimpsest of the landscape. This means that multiple viewpoints can be observed in studying place and space, and the relationship between humans and the landscape. As Hoskins (1955, p. 19) stated with remarkable foresight in the mid-20th c “One needs to be a botanist, a physical geographer, and a naturalist, as well as a historian, to be able to feel certain that one has all the facts right before allowing the imagination to play over the small details of a scene.”

Panhellenism and Regional Worship:

The study of Greek religion has until the present day been a diatribe between the 'Panhellenistic' and the 'local' debate. The panhellenistic school of thought approached the subject from a quasi-Marxist point of view. It suggested that all peoples across the Aegean World worshipped the entirety of the gods, goddesses, and demi-god personalities across the board in their own localities. There was little or no separation of the pan-godhead that favoured a particular spiritual singularity to reflect their individual identity with themselves or their lived space. Rather the entire mixture reflected the everyday experience of everyone. So, the father was Zeus and the mother Hera. Demeter tended the crops, and Poseidon was the lord of any seafaring group. Love and sexuality were the domain of Aphrodite and on and on. Each thing in itself had its own representative in the pantheon, and everyone thought and worshipped the same. This was the thinking promulgated by classical scholars such as Jean-Pierre Vernant in his landmark book 'Myth and Society in Ancient Greece' (Vernant, 1978).

The 'local' school of thought on the other hand, is a regional approach that looks at each settlement or landscape in isolation. It surveys what is particular to the lives of the people who lived in a certain place and studies the individual or family in greater depth. What was important to them, and what did they believe. Critics of this approach have noted that studying settlements and places in isolation risks severing them from the common bonds of *xenia* or 'guest hospitality'. This practice in Ancient Greece was the foundation of trade and diplomacy. The wars at Thebes and Troy were based upon this co-operation amongst Greek city states.

But it must be noted that the regional approach has evolved in recent years and centres far more upon the thought that while settlements of any kind have their individual identity, there is far more give and take with the larger world. An example of this is the relatively recent trend toward the 'polis religion' model. The 'polis religion' can be described as De Polignac states "This community was supposed to have absorbed all the pre-civic groups and institutions and, as it did so, reduced their political, juridical and even economic privileges, meanwhile maintaining their traditional cults but subordinating them to the communities' own cults, in particular that of the deity who was the protector of the city" (De Polignac, 1984, pp 1-2).

This approach does have its critics though as there is no room for the individual belief in cult practice, nor for the belief in the non-urban deity or religious symbology that is not of the *poleis.* Altogether the two main approaches to Greek religion that of the 'panhellenic' or the 'local', do not accurately illuminate the whole picture. This is partly because these models are based on the few remaining texts that have survived to this day through countless revisions and translation. What does survive is mainly from the classical period and they are mainly Athenian based. The Hellenic world was never politically unified, but there was certainly a Hellenic identity to which Herodotus stated as "Then again, there is the fact that we are all Greeks – one race speaking one language, with temples to the gods and religious rites in common, and with a common way of life" (*Herod*. 8. 144).

Approaches to Religious Topography:

Sites and landscapes with sacred power were carefully chosen by the community to reflect the sacred by the community, priests, or through the divinity through signs and symbols revealed. As Price notes (1999, p.49) "Greek sanctuaries were carefully placed, within an urban, suburban, or rural context". This matches the theory of de Polignac's in the founding of new sanctuaries through colonization "As in the Aegean world, the nonurban sanctuaries of the colonial cities were linked first and foremost with the definition of the territory and the political space, sometimes according to the modalities that were characteristic of the newly settled areas" (1984, p. 98).

A location could not though in itself be divine. It had to also have ritual to engender belief in the location as sacred. Ritual gave a site meaning that made it different from other places. The designation of a sacred place took part when there was a significant change in the lives of a group of people. Whether through colonization of a space, or the inverse an invasion that introduced new gods that had usurped the old. These models and approaches though must as always be treated with a certain suspicion. There is an inherent need for modern humans to transpose modern thinking on the ancient world and to try to find recognisable social patterns that just would not have occurred to anyone living in the past.

The Arcadians:

In the 18th and 19th c, the landscape of Arcadia began attracting several collectors and amateur archaeologists and those curious about how the mythology and the landscape intertwined. This was part of a process began in the early modern period of people visiting sites famous in literature. Beginning with the accidental discovery of archaeological remains at the site of Pompei, the architect Domenico Fontana while digging out an underground aqueduct found the remains of ancient walls covered with paintings and inscriptions (Morano, D. 1882). From this discovery came an influx of collectors and even royals interested in recovering items from classical antiquity to adorn their palaces in the hope that some of the prestige would rub off on them.

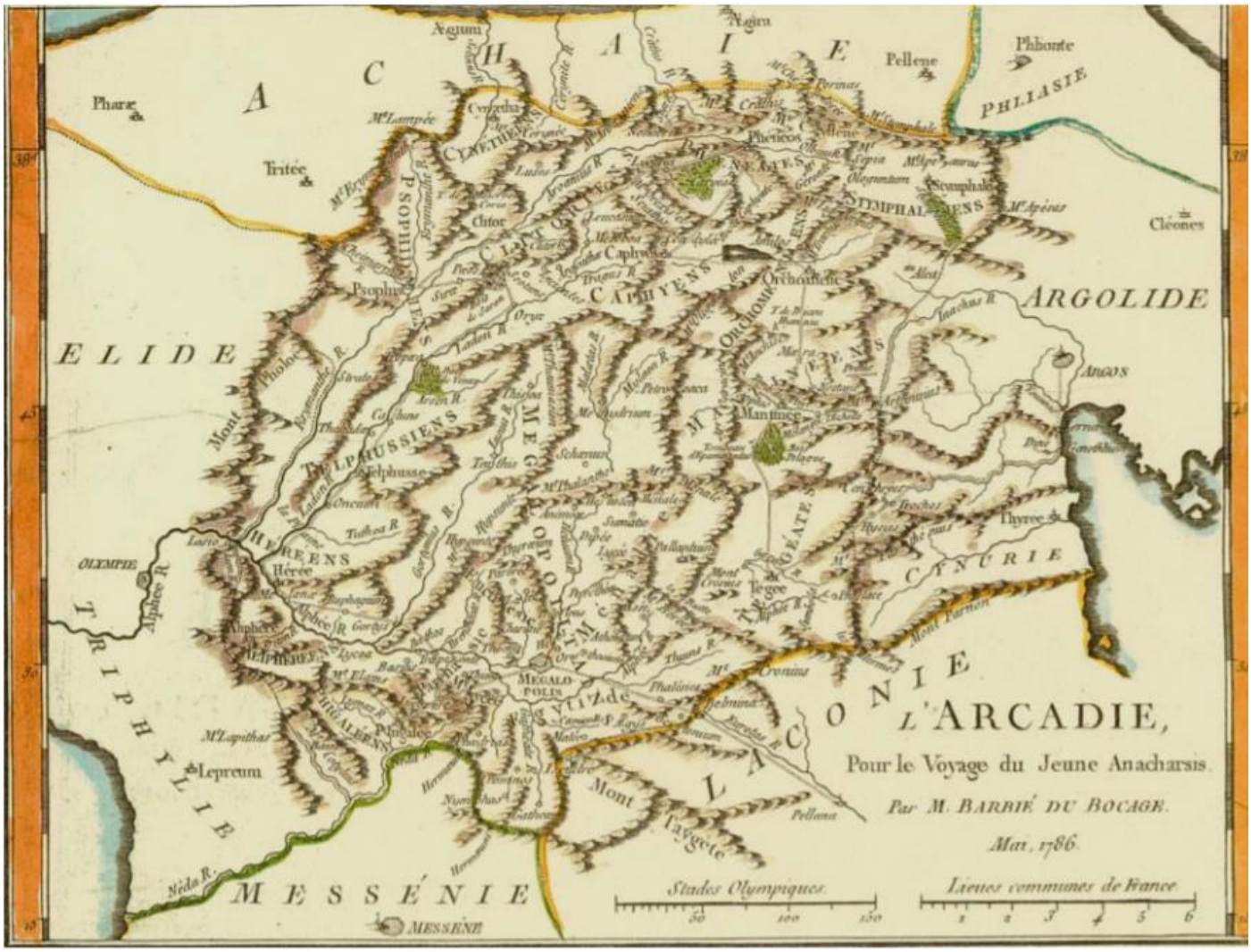

Figure 2: Abbè J. J. Barthelemy's map of Arcadia (1786).

Over the years the study of ancient places from classical literature would become more and more serious and scientifically refined. The excavations of Troy and Mycenae by Heinrich Schliemann in the late 19th c (Wood, 1985), as well as the work of Sir Arthur Evans at Knossos, meant that these past centres of myth were fast becoming an actual reality in the archaeological record.

The study of Arcadia itself was mostly conducted through the close study and commentaries on Pausanias' Book VIII of his travels throughout Greece. The religions and sanctuaries of Arcadia though have been the subject of several investigations including initially by Bérard and Fougères. Immerwahr's (1891) survey of sanctuaries has now though been superseded by Madeline Jost's (1985) extensive study. Arcadian dialect too has been the object of study as it is thought to proceed the supposed post bronze-age collapse Dorian invasion, most notably by Dubois (1988).

The history of ancient Arcadia has though been seen mainly through the lens of the classical period. The *koinon*, or ethnicity of the Arcadians has often proved the most popular subject (Larsen. 1968, pp 180 – 195). Other well researched aspects include the difficult construction of the first major *polis* in Arcadia, the city of Megalopolis (Moggi. 1974, pp 293 – 325). More recent investigations have expanded the knowledge of the area by delving into different time periods. This has included research of the area in the Greek bronze and archaic periods, as well as more interest shown in its political systems, its use of land, the ancient economy, as well as religious aspects.

The Arcadians themselves were the subject of much debate in the ancient Greek world. They were indeed very distinct in their appraisal by others including Homer, Herodotus, Thucydides, and Xenophon. From Hesiod to Pliny the Younger, all painted a common and specific *koine* of the Arcadians. Referred to in literature as *Ἀρκάδες,* they received their first known mention in literature as part of the catalogue of ships in the *Iliad* (*Hom*. 2.494 – 759). Although being a landlocked nation they were granted a fleet by Agamemnon. The first mention of a singularly ethnic Arcadian people in literature inhabiting the Peloponnese comes from Herodotus (*Herod*. 8.73) who lists them as one of seven indigenous ethne.

The Arcadians thought of themselves as the oldest ethnic group in the area autochthones of the Peloponnese, who were sired from a character called Pelasgos (*Paus*, 8.1.4). For them this Pelasgos was the first man. Born in Arcadia from Earth he taught humans how to protect themselves from nature. Other sources though place Pelasgos as originating from the Argos region just east of Arcadia, and that he was the brother of King Argos himself (*Akousilaos*, fr. 12).

Pelasgos' son, Lykaon, was said to have constructed the first *polis* Lykosoura, as well as instigating the cult of Zeus Lykaion, and the Lykaian games (Buckert.1983 , pp. 86 – 88). Arkas, who was the grandson of Lykaon, gave his name to the land. According to ancient writers, the Arcadians were never bothered by migrations of others. Indeed, both Herodotus and Thucydides both state they were spared by the Dorian invasion (*Herod*. 2.171, *Thuc*. 1.2.3). This state of untouched and unconquered being was widely understood in ancient times, and it was the basis of the pastoral and idyllic setting that inspired so much later writing of Arcadia as a place of serene and unviolated beauty. Indeed, even the Delphic oracle warned off a potential conqueror by saying "There are many men in Arcadia, toughened by a diet of acorns" (*Herod*. 1.66). This spoke of the rustic and rural toughness of the people of Arcadia.

The Arcadian religious pantheon included a mix of the panhellenic and the local. Zeus was depicted on 'ARKADIKON' coinage in the classical period (Walker. 2006, p. 1511 – 1516). In the sanctuary of Zeus Lykaios, the Arcadians promoted games that included competition with different Greek ethnos and *poleis.* These games were so important that Xenophon mentioned the Arcadian mercenaries on the rampage with Cyrus in Phrygia marked the date of the games by taking part in an improvised competition (*Xen.* An. 1.2.10).

Arcadian religion itself had its own distinctive gods. Some gods were said to have been born in the region. Pan, Despoina, Hermes and even Zeus were said to have originated there which caused some confusion to the Greek-Alexandrian poet Callimachus (*Call*. Hymn.1). Pan is almost entirely recognised as an Arcadian god (Nielsen. 2002, 76). Whereas in the rest of Greece Pan was worshipped in caves; in Arcadia he was worshipped in temples and could also protect cities (*Paus.* 8.26.2).

A Brief History of the Central Peloponnese:

A certain part of the central area of the Peloponnese was defined as the territory of Arcadia (Nielsen and Roy. 1999, pp 36 – 39). Its borders changed over time due to the nature of territorial conquests and land grabs. It's northern border with Achaea was relatively stable throughout antiquity. The border to the west was far more troublesome though. During the campaigning of Phillip V c.220 BCE. Polybius describes in detail the wars that involved most *poleis* of Arcadia (as a part of the second Achaean league they were duty bound to support the Macedonian king) against the region of Elis, and in particular against the Elian *poleis* of Triphylia and Lepreum (*Poly*. 77).

The border to the south with Laconia generally was respected apart from a few incursions by the Lacedaemonian's due to an ongoing spat between themselves and Argos (*Herod*. 6.83). To the east the border with the Argolis and Corinth to the north-west remained stable.

The Arcadians were members of the Peloponnesian league dominated by Sparta from the 6th to the 4th c BCE though they did not see much action until the defeat of Sparta by the Thebans in 371 BCE whereby the Arcadians, in league with others, promptly took the opportunity to throw off the yoke of Spartan hegemony and declared their own league to preserve their independence though eventually being brought to bear by Phillip the Second of Macedon formed the league of Corinth including the territory of Arcadia (Cartledge. 2002).

Part Two:

Methodology and Sources

Typology of Places:

The writers and poets of antiquity used various descriptions of place and what place meant to them. Therefore, it is useful to discuss the terminology and make some sense of the utilization of these descriptive terms to help visualise what they saw themselves day to day. Pausanias' own language of place and how he designated settlement types has been researched by Madeline Jost (Jost, M. 1985). Pausanias used the Greek terms *Chôrion*, *polis* and *kôme*. *Chôrion* meaning a site with a landmark such as a sacred grove or a crossroads, or it could also mean a built place such as a tomb or a border area. *Polis* or *Kôme* are terms that refer to lived settlements each with differing political motivations. Because of the timeframe of some 3,500 years encompassed by this thesis, the term 'polis' is to be used in a cautionary way. Because of certain political and nucleation differentials the term '*polis*' itself overpowers any other kind of large, settled habitation such as the pre or post city state.

Figure 3: Map of the Peloponnese by territory in Antiquity (Wikicommons, n.d.).

The gods had areas of land dedicated to them from the Greek bronze age onwards, c. 3200 BCE (Morris, 1987). The sites were carefully chosen as they represented the meeting of two worlds, the divine and the human. Or the sacred and the profane. Firstly, the *temenos* is a patch of land separated from mortal concerns and dedicated to a divinity or a hero (Hellman. 1992, 169). The land is identified as sacred and is usually then marked by some device; perhaps a monument marking an entrance or a border wall construction (*Paus.* 8.37.1). Sometimes there was no marker at all which is confusing as there were certain rules and rites that had to be respected when an individual entered a sacred space. An individual had to purify themselves before entering a sacred space otherwise they would be marked with a supernatural pollution, or *miasma* (Parker, 1983).

Another slightly confusing term is *hieron,* which is conventionally translated as 'sanctuary'. Thus, *temenos* describes the demarked land used for spiritual reasons while *hieron* describes the sacred space now enclosed. To the modern mind this may appear nonsensical. But, to those in the past this must have made sense perhaps when talking more forthrightly about *miasma,* and the importance of purifying before entering the space (Hellmann, 1992. 171). The temple in which the deity resides is called the *naos,* which in turn holds the *Xoanon* or cult statue.

Selection of Sites:

The specific sites in the landscape of Arcadia that are to be investigated in this thesis must match a certain criterion. This is to make sure there is enough usable archaeological material and information. That criterion is as follows:

1: Settlements in the landscape must be identifiable with certainty as having existed, and to be listed in the archaeological record.

2: Settlements must be mentioned in ancient literature, by Pausanias AND other contemporaneous writers.

3: Settlements in the landscape must have been occupied at some part of their history between the beginning of the Greek bronze age c. 3200 BCE, and by the acceptance of Christian worship in the Roman Empire c. 370 CE.

4: Sanctuaries and monuments must be identified in the landscape by archaeology.

5: Sanctuaries must be mentioned in ancient literature, by Pausanias or other contemporaneous writers.

Various methods have been utilised to gather information and data on Arcadian archaeological sites of interest. Historical maps, archaeological reports, and various sources of modern archaeological interpretation of these landscapes, monuments, and *poleis.* The main task of the research has been in synchronising those places mentioned by Pausanias and matching those with the archaeological record: and also attempting to source other ancient accounts of the same places, so there is a comprehensive account of the landscape and the people and places it has included throughout history.

Although Pausanias accounts of his travels through Greece are detailed and descriptive; he was writing in the 2nd c CE and therefore any account he has made of events in the landscape from earlier in its history must also therefore be sourced with earlier writers such as Hesiod, Pindar, Herodotus etc.

Sources:

The most comprehensive ancient source we have on Arcadia is Pausanias. But, using him is not without difficulty. The major problem is that he writes in the 2nd c CE, at a time of Roman control of the Greek mainland. He relies on his own opinion, and that of unsourced and unreliable accounts of the history of the area that could not be much better than myth and legend already even in his time. Attempting to identify sites of interest, and to work backwards from his writing can be problematic in that he sees the landscape of his own day which does not reflect the life of the landscape from earlier centuries.

But, in his descriptive and informative text, and thanks to his meandering narrative on various subjects he does provide valuable information of religious topography in the area. He gives detailed description of sites of spiritual significance and took the time to describe inscriptions found in sanctuaries or public spaces (Habicht, 1984). He was interested in natural features in the landscape, as well as civic communities and the monuments attached to them.

He was fully versed in the existing mythology and writing by the more famous classical period authors and poets, and also, he searched out local stories of attached gods and heroes of the places he visited. Combining the roles of historian, travel guide, and pilgrim he freely admits in his writing to wanting to see things that were older than his time rather than the more recent constructs of Roman occupation (Elsner. 1992). Although he is of a time of renewed interest in Hellenic culture in the Roman Empire. The influence Hadrian had had in bringing Greek culture to Rome, as well as the influence of the 'Second Sophistic' period in Greece, may have led to an undue bias, and in Pausanias a romanticised version of the Greek experience in the past.

Other ancient sources:

The other ancient sources useful in finding information about Arcadia, and some written/composed nearer to when the Arcadians themselves were in the process of leaving their traditional country settlements in favour of the newer *poleis*, include such literary greats as Thucydides, Herodotus, Polybius, Xenophon, and Diodorus Siculus. These authors described the political as well as warfare events that occurred both within Arcadia and where Arcadians were themselves involved. Also, they have the advantage of describing events in the greater Greek world as a whole to put the larger world in context. This also has an advantage of describing the spatial Greece and aiding the readers imagination of what the landscape of ancient Greece may have looked like in antiquity at different points in the past.

Arcadian myths and mythology that takes place in Arcadia are alluded to by poets as far back as Homer and Hesiod. Later poets like Callimachus and Theocritus. Playwrights such as Euripides, Sophocles, Aeschylus, and Aristophanes. Philosophers like Plato and Aristotle and the work of those who specialised in mythology such as Hyginus, Pindar and Bacchylides, all are important sources for the mythology of Arcadia and the early history of the peoples of Arcadia. They provide scarce hints of the state of pre-*poleis* Arcadia.

The geographer Strabo describes Arcadia under the late Roman Republic and early Roman Empire, as opposed to the middle Empire period of Pausanias' time. The large timeframe these writers describe allows for the palimpsest of Arcadian myth to breathe. From the archaic period to the Roman Empire what these authors were able to do was to discuss Arcadian myth and at the same time leave clues as to the Arcadia they could actually see themselves in their own time; or at least relate what they had been told themselves by their contemporaries.

As with Pausanias, the reliability of these ancient sources must always be questioned. The remoteness of these authors from the Arcadia they describe in time, as well as the geographical difference, is problematic. Only Polybius is an Arcadian himself, and all that these authors wrote about their first-hand experience of encountering Arcadians throughout time, does not necessarily mean they are being told a true story. Therefore, it makes sense for the modern reader to be aware of agendas and bias. Also, if possible, it is important to double source any information regarding local religion and the mention of natural features in the landscape and also to be aware that later writers often based their musings on the writing of earlier writers who themselves were dubious in their methods.

Archaeology:

The material evidence in the landscape of Arcadia is best surmised in the work of Madeline Jost (1985) who provides an amazing inventory of sites, although her work has more recently been challenged in its interpretation or updated by newer discoveries. In general, the larger scale identification of sites has been hampered by a lack of resources and therefore the full-scale excavation of sites of interest has been limited.

Of the sites of interest selected in this thesis evidence has been collected about the sacred sites, and the relationship to the rural Arcadian as well as the *poleis* Arcadian. Then the research questions were applied to those sites:

Why are sanctuaries located in a certain space?

How do those sanctuaries shed light on the communities that constructed and used them throughout their life cycle?

Where are the myths of Arcadia located in the landscape?

How do those myths relate to the topographic landscape?

What do the myths say about how Arcadians perceived the landscape?

By using the approaches mentioned above and concentrating on the 'panhellenic' and the 'local' overview of settlement in ancient Arcadia it is possible to identify settlement trends by clustering information from different sites both rural and urban.

Dates and Timeframes:

Dating the different eras and ages in Greek history can be confusing. There are many terms and subdivisions in use according to who is writing on the subject. Here I list those used in this paper:

- Neolithic Period (6000-2900 BCE) ...
- Early Bronze Age (2900 – 2000 BCE) ...
- Minoan Age (2000-1400 BCE) ...
- The Mycenae Age (1700 – 1100 BCE) ...
- Greek Dark Age (1100-750 BCE) …
- Geometric Period (900 – 700 BCE
- Archaic Period (750 – 500 BCE) ...
- Classical Period (500 – 336 BCE) ...
- Hellenistic Period (336 – 146 BCE) …

Part Two:

Religion and Memory

The Significance of Religion and Sacred Space in the Central Peloponnese:

Early Helladic to the Late Dark Age phase (c. 3200 BCE to 800 BCE)

The literature pertaining to the central Peloponnese claims that the Arcadians are "Older than the moon" (Buckert, 1983, p. 84). Evidence of prehistoric activity does exist in Arcadia, but our understanding of it remains very narrow to this day. Despite ongoing recent research into the early development of the landscape we are still relatively clueless regarding the pre-archaic period. Signs of activity relating from the Mycenae period do exist and have been recognised in the Arcadia region. The most significant of these being large scale drainage works around Phenos, Stymphalos, Tegea, Kaphyai, and Orchomenos. They did not survive the early Iron age (1100 BCE – 800 BCE), and yet the memory of them survived to be mentioned by Pausanias (Knauss, Heinrich and Kalcyk 1986, 604).

In terms of a religious site of significance the sanctuary of Athena Alea at Tegea has shown evidence of being used from c. 1000 BCE (Voyatzis 2002, 160). There is a good indication of worship in the Bronze age upon Mount Lykaion, and on mountains in southern Arcadia there are patches of burnt earth with offerings which promotes the idea of the existence of open-air altars. Little pottery fragments and material items dating from the Mycenae period and even earlier have been discovered all over the landscape including pre-Mycenae votive offerings (Reichel and Wilhelm 1901, 52 fig. 81), these were found near the later site of the sanctuary of Artemis Hemera.

The mountainous landscape the includes Mount Lykaion, forms the western edge of the Megalopolitan plain. There researchers discovered a large mound of ash and blackened earth at the peak of the mountain. Inside the pile of ash, they found different religious offerings including anthropomorphic figurines and pins etc. This suggests that the site was a cult site with an ash altar. Burnt sacrifices are also suggested by the presence of burnt animal bones mostly from pigs and cows (Romano and Voyatzis 2014, 631).

On the other side of the Megalopolitan plain in the east lies the Asea valley. It is enclosed by mountain ranges forming a buffer between the Megalopolitan and Tegean plains. At two mountain areas there were found similar ash altars as at Lykaion. At Aghios Elias Kandreva 2km north of the Acropolis of Asea which was found to contain similar items of burnt offerings and dedications (Morgan 1999, 400). It has been argued by some that the religious topography of pre-iron age Arcadia began as mountain-top cults dedicated to Zeus the 'Sky-God', although there is some debate as to whether this association was a later creation by the Arcadians to explain earlier Mycenae sites of worship. Pausanias mentions the worship (*Paus*. 8.38.2) and the birth of Zeus upon Lykaion, and yet there is no mention of this by Homer or Hesiod who both mention the birth site instead on Crete.

Dietrich (1962), argued for an assimilation of Minoan peak worship that may have spread to the Arcadian Mountain ranges, but De Polignac (1994, pps.3-18) rejects that possibility saying the development of religious worship in Arcadia was specific to the pre-Iron age peoples there. The concept though of a 'Sky-God' does invite debate. Homer (*Ill.* 10. 550-600) mentions the "cloud-gatherer" as a benevolent and caring god (as long as you were favoured by him). To Homer and Hesiod the chief god is a god of weather and meteorological phenomena. The mountainous worship sites in Arcadia from the late bronze-age show a relationship between Zeus and rainmaking.

Firstly. On Lykaion, Pausanias reports on a ritual that takes place just below the ash altar (*Paus*. 8.38.6). At this place the priest of Zeus would lower a sprig of oakleaf over a spring in the hope of making rainclouds form. A nearby fountain has been recognised halfway between the upper and lower sanctuary sites (Romano and Voyatzis 2014, 630).

There is no evidence unfortunately that this ritual took place any earlier than Pausanias' time as his is the only mention. A second site in nearby Hymettus though does bear fruit in that there is evidence of a relationship between Zeus worship and his hopeful input in rain production. Offerings engraved with the epithet '*Semios*' have been found there that Langdon (1976) has interpreted to mean Zeus 'Sign Giver', and later this epithet changed to '*Ombrios*' meaning in this interpretation 'Showery' providing a closer link between Zeus worship and his weather-related gifts.

Yet, as mentioned previously, it is difficult to ascertain absolutes regarding the development of cult worship in Arcadia. This also goes for determining even the sites of settlement in pre-dark age Arcadia, as there has been very little archaeology produced in the area. But there are exceptions to this rule. The Norwegian Archaeology Institute did report in 2003 (Forsén and Forsén 2003) an exhaustive survey of the Asea valley area. Pottery sherd evidence they discovered placed settlement in the area as far back as the late Neolithic, and the Acropolis area itself was observed to have been made use of since at least 1100 BCE. During the bronze-age the main site of activity was deemed to be in fact the acropolis area while there also appeared to be later Mycenae activity.

Following the collapse of the Mycenae, and of the Greek palace state culture c.1200 BCE onwards across the Hellenic world, the picture of religious activity in Arcadia appeared to become more pronounced. This is a period in which the Greek mainland is thought to have become less cohesive in terms of its general settlement patterns, and the loss of writing and general lack of researchable activity is well known in academia as the Greek 'Dark Age'. Various population denominations such as the Ionians are thought to have crossed from Greece over to the Anatolian region as refugees from the Dorian invasion and colonized several areas there, as well as the Cyclades and future major *poleis* such as Miletus sprang up. As well as Chios where Homer was thought to be born (Hornblower et al, 1998, p. 348) bringing an end to the dark age with the reintroduction of writing using his epic poetry amongst other sources.

Yet, in Arcadia there seems to have been something of a religious boom period. Several modern scholars have put this down to migrating groups; either northern Dorians moving into the region, or possibly the native Greek population finding shelter in the mountainous and wild region to escape the consequences of invasion. Walter Buckert (Buckert, 1983, p. 84) mentions that in later times several wild rumours of "Terrible, primitive activity especially surrounding the main Arcadian festival to Zeus. There were tales of human sacrifice, cannibalism, and werewolves".

Plato (*Rep*. 565) states of the worship upon mount Lykaion that still existed in his time "It is told of the sanctuary of Lykaoin Zeus in Arcadia, namely, that he who tastes of one bit of human entrails minced up with those of other victims is inevitably transformed into a wolf". Pausanias, who did not attend the "secret" festival, nonetheless remarked that "I could see no pleasure in delving into this sacrifice; let it be as it is and as it was from the beginning" (*Paus*. 8.38.6).

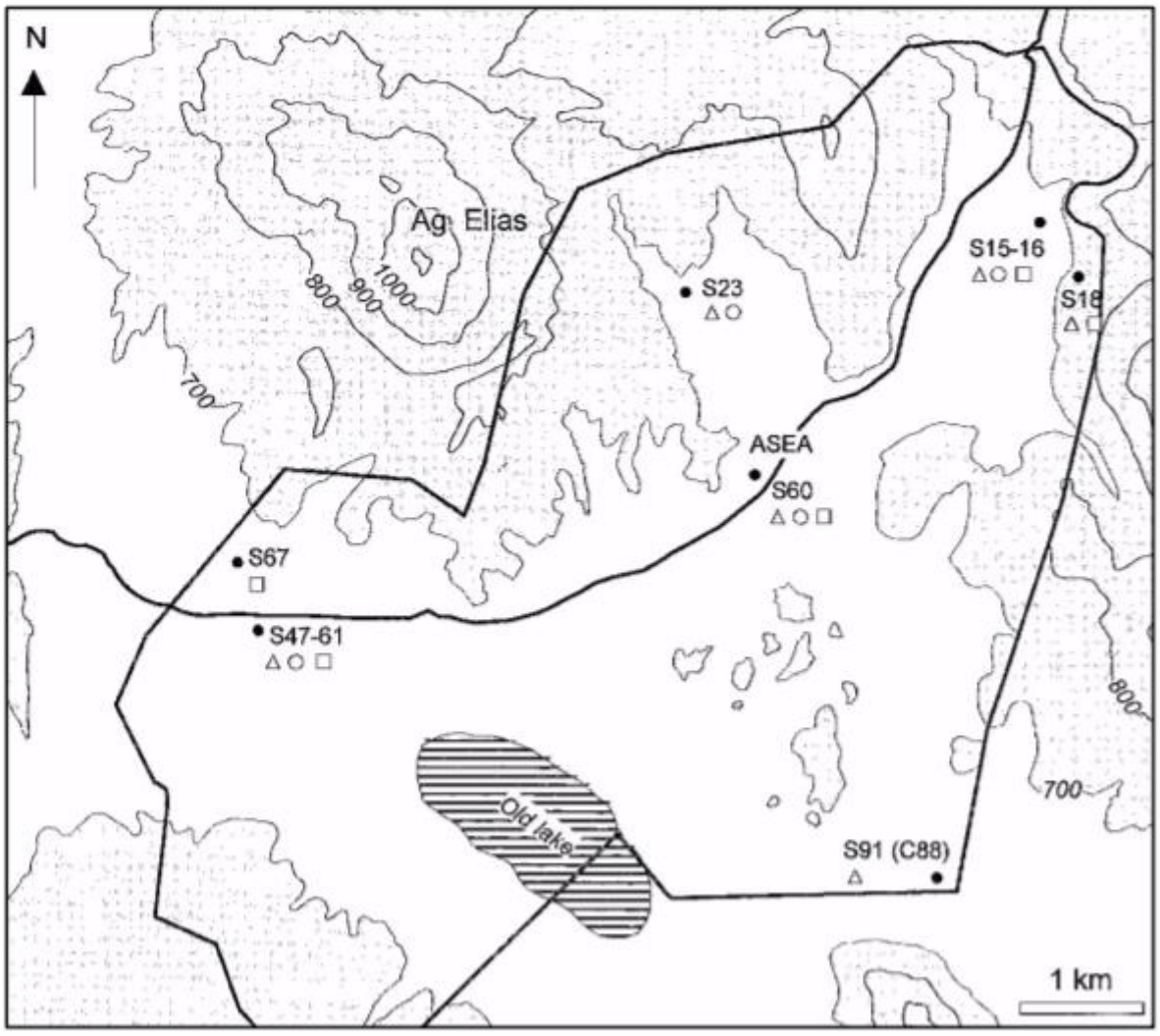

Figure 4: Asea Valley: Prehistoric sites (□) with Early Helladic (Δ) , Middle Helladic (O), and Late Helladic ( ) finds (Forsén and Forsén 2003, 197 fig. 132)

To conclude the pre-historic to the late geometric age period, it is difficult to ascertain with much certainty the overall picture of sanctuary sites and their relationship to early settlements in the area. There simply has not been enough archaeology or surveys conducted on the ground to convey a wider sense of the timeframe. Apart from a few detailed surveys of certain areas, there is just not enough information to make broader assumptions with either a localised or panhellenic approach at this time. Rather it seems trade may have been the more over-riding occupation of the native population of northern Arcadia and the Asea valley in particular. There is the possible evidence of a land route flowing from Dalmatia to the bay of Argos which cuts through this part of the central Peloponnese up to c. 2650 BCE (Rambach, 2004, pp. 1233-42).

The importance of mountain sanctuaries in a pastoral landscape must also be considered. These were places where the local inhabitants reared and herded livestock. Sanctuaries and altars, where favours were asked of the gods in return for votive and sacrificial offerings, were conducted in areas like Lykaion; and the area dedicated to worship was separate from the area dedicated to regular space. This shows that from an early phase in Arcadia's very existence as a habitable landscape for humans, the spiritual life was already a part of their everyday existence.

Geometric Period (c 800 – 600 BCE)

Mount Lykaion:

In the Mount Lykaion area, researchers have uncovered several items pointing to an increased presence of spirituality and cult activity. From early in the 20th c researchers have discovered an increased typology of votive offerings. These included *skyphoa* figurines with a solid black gloss, some terracotta lamp fragments, and even a late archaic bronze hand thought to belong to a statue of Zeus (Romano and Voyatzis 2014, 620-622).

Figure 5: Mount Lykaion: *Temenos,* column bases and ash altar mound, view from east. (Photo D.G. Romano in Romano and Voyatzis 2014, 577 fig. 4)

Some twenty-four meters below the ash altar lies the *temenos* of the site. In the area of the north column base Kourouniotes discovered several statuettes. Amongst these were a nude figure of Zeus holding a lightning bolt in his right hand, and with an eagle perched upon his left which dates from the 7th c BCE (Kourouniotes, 1904, 173). Finds within the *temenos* itself were sparse apart from a few tiles, but interestingly the majority of discoveries were made near the front of the *temenos* entrance. These included nine complete bronze statuettes, a bronze eagle, bronze jewellery, a double iron link, and many roof tiles. But no pottery items were found in this offering place.

This expansion of the role of the cult site shows that the area of Lykaion endured the end of the bronze age. It endured through the collapse of the Mycenae and through various population movements and onwards through to the reintroduction of writing and the beginning of the defining period of Greek culture that would crystallize in the coming classical period. Now here at this site worship had moved forward from simple ash altars to the marking out of *temenos* and defined areas with columns.

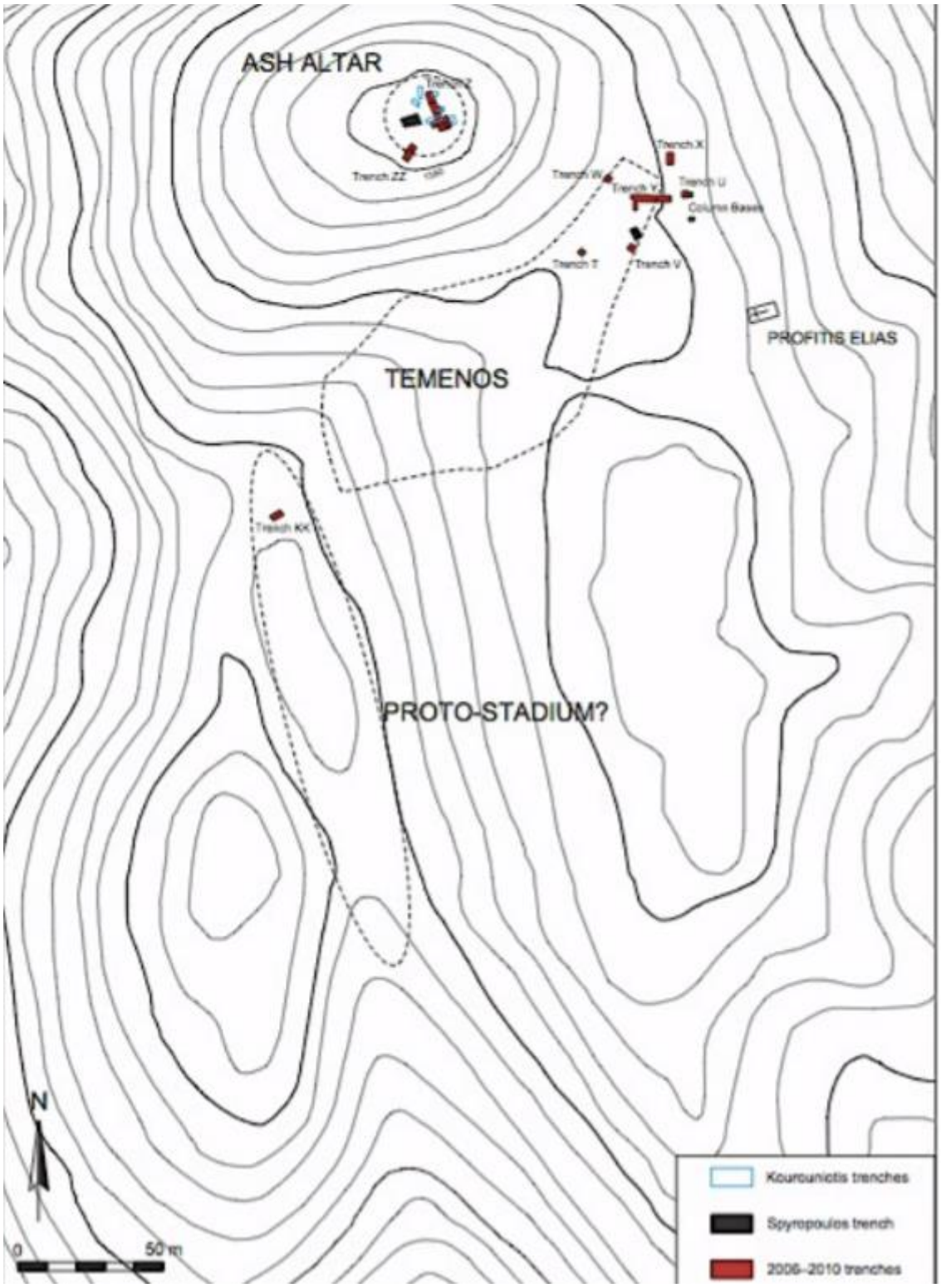

Figure 6: Mount Lykaion: map of the temenos, ash altar and proto stadium. (By A. Insua, M. Pihokker, E. Rodriguez-Alvarez, A. Mayer, in Romano and Voyatzis 2014, 627 fig. 33)

Tegea:

One of the most successful and popular sites of religious ritual in the 8th and 7th c BCE was at Tegea. Material culture found here dates back to the 10th c BCE. Dugas writing of his discoveries at a temple dedicated to Alea Athena noted geometric and early archaic period items were found (Dugas, 1921). These included a great deal of beauty products and accessories such as pins. There were also bronze statuettes but rather than the god figurines as at Lykaion, these were of mortal forms depicting different stages of life both male and female.

There were also animal figurines mainly depicting oxen. This, according to Dugas, was mainly due to the local agricultural economy and its rearing of cattle. There was evidence too of a metal working operation at the site of a later classical period temple on the site.

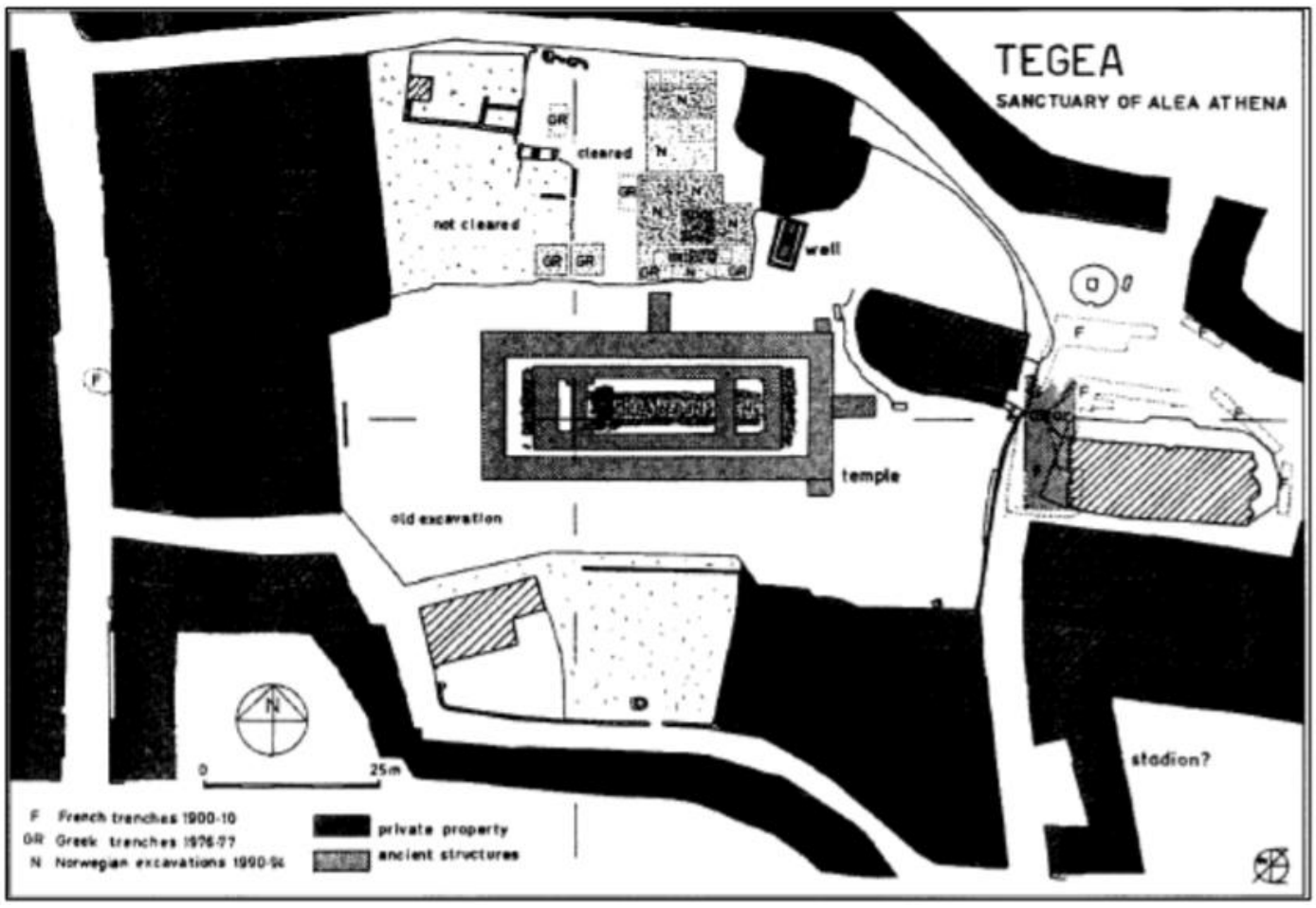

Figure 7: Map of the excavations at Tegea. (Tarditi 2005, fig. 1. Drawing by E. Østby)

At the northeast corner of the classical temple pictured above (Figure 5), there was found a huge votive deposit with Mycenae, proto-geometric, geometric, and 7th c bronzes. Mostly items such as statuettes, pins, and rings. Voyatis proposes that the offerings stopped at the point of the archaic temple that proceeded the building of the classical one on top of that (Voyatzis 1990, 26-27).

Evidence from these sites at Lykaion and Tegea point to the continuation of worship following the bronze-age to at least the end of the geometric period.

The eighth century BCE marked a change in worship across the entirety of the Greek mainland and beyond. Arcadia was no exception to this change. The increase in offering typology and their quality attests to this. There were changes in demography and the economic and social structures that indicate a difference to what had come before. There are various theories to explain the change in population density at this time. Some fantastic and some rather more ordinary. It had been thought that the increase in burial tombs and settlement sites at this time must have had a causal link to an expanded population.

This has though been questioned by several academics. Robin Osborne (Osborne, 1996, pps. 74-77) for instance argues that there is little evidence for a large sudden change in population size in Arcadia, or anywhere in the Greek mainland. Rather he proposes that population change was a part of a long process beginning around 1000 BCE. Perhaps in the centuries following the Mycenae collapse there had been a gradual return to some normalcy among the native population, as well as changes to how they lived and settled that invariably occur over time. It must be noted too that all the Olympian gods, apart from Aphrodite and Apollo, are all mentioned in Mycenae texts. This is an example of how resilient worship was, and the strength of the 'Greek' religious industry itself (Deger-Jalkotzy, 2008, p. 402).

What is clear in this timeframe is the change of location of sanctuaries and sacred places. The gods have slowly begun to descend from the mountain. Now sanctuaries are being constructed further and further down the mountainside and into the hills and valleys closer to areas of human settlement. There was a distinct typology of sanctuary in Arcadia. The mountain based *temenos* provided views of the surrounding countryside and inversely could be seen from various viewpoints.

The second type were constructed along routes of trade and important passage points in the landscape. The previously mentioned difficulties due to the limited survey and archaeology mean it is problematic to try and compare the number of each site, and which were more favoured, but as time went on the it was the latter type that begin to appear more and more in the archaeological record. This though does not discount the possibility that mountain-based sites of worship may lay undiscovered, and of which may date later than the beginning of the geometric period in Arcadia.

What is clear though is that in the geometric period gods were being appointed and worshipped at places that best represented their communication and involvement with mortals. Therefore, as Madeline Jost states:

"If some particular landscapes are responsible for sanctuaries being established, it is also the case that some particular divinities demand one sort of terrain rather than another. This is especially clearly marked in the case of plains liable to flooding: thus, the upland plains of eastern Arcadia have a calcareous soil covered with clay and alluvium; this does not drain at all, and agriculture is only possible if the *katavothra*, the fissures in the limestone which allow the rainwater to drain away and flooding to be avoided, are sedulously maintained. In these areas Artemis, the goddess associated with dampness, and Poseidon, the master of underground waters, are particularly often found." (Jost, M. 1994, pp. 219 – 220).

The religious landscape is now beginning to take shape in this period, and as in the rest of the Greek mainland the revival of spiritual fortunes is gathering following the Mycenae collapse. The native people are recognising that there are concepts beyond just hoping for rain from Zeus and offering him sacrifice and votive ornaments. Now there are concepts such as trade. There is competition between competing settlements for resources and space. There are through natural population growth more mouths to feed, and more worshippers to appease in the two-way act of giving and receiving from the gods. Sanctuaries must reflect the needs of people. This is why the altar came down from the mountain and began to be found at the trade route, the hills and valleys, and eventually once construction had begun, the future *poleis.* Arcadian cities needed their own protector gods.

Space to Settlement: Thematic Opinion on Sanctuary Placement and Locality to Settlement:

The following chapter discusses modern academia's take on the subject of monument and sanctuary placing in the landscape of Arcadia. François De Polignac discusses the evolution of rural sanctuaries in the geometric period. Madeline Jost argues about the distribution of sanctuaries in civic space. Mary Voyatzis also discusses sanctuaries in the geometric period. Zaidman and Pantel discuss religion in the ancient Greek city. While Ian Morris debates the early *polis.*

These themes will hopefully act as a guide to how modern archaeologists, and historians, are shaping the current thinking on the subject of the placing of monuments and sanctuaries in the Arcadian landscape, and their relationship to settlement.

François De Polignac:

In the essay 'Mediation, Competition, and Sovereignty: The Evolution of Rural Sanctuaries in Geometric Greece' (De Polignac, 1994, pps. 3 – 18), De Polignac argues that the development of sanctuaries and temples in Greece in the geometric period did not follow some arbitrary linear and homogenous template. Previously it had been the opinion of academia that following the bronze age collapse there was a pattern to be applied on the founding and construction of geometric period sanctuaries. That of the sealing off and scrubbing of the previous remains of what had come before and the replacement with a contemporary construction. This archaeological stratification theory may have been common in the early to mid-20th c and certainly it would have made conclusions about the development of sites a lot easier. But, as with most things in archaeology it is never that simple.

De Polignac instead argues that the use of sanctuaries and temples depended very much on the particular landscape of the site. What its original use was for and what was its context i.e., was the sanctuary constructed near a port? Would the deity represented have had to do with the safe passage of ships and sailors? Could it have been a sanctuary that was near or far from a local settlement? Was there even a pause between its use in the Mycenae period and how it was used some two or three hundred years later? The basic point that De Polignac is trying to convey is that there are so many variables. Especially in a timeframe when no single 'Greece' existed as a political or even psychological construct. Therefore, each site of a sanctuary or temple must be studied in its own context. It is imperative that any bias or assumption be at a minimum so the localised context of a site can be explored. Only then can parallels be studied between them in a wider context to explore general concepts of panhellenism.

As De Polignac states "Any general theory which seeks to account for phenomena previously considered separately runs the risk of producing an interpretive model which is too rigid, and which treats in an over-schematic way a reality which is rather more variable and nuanced than the explanations proposed for it".

Madeline Jost:

Madeline Jost, in her paper, 'The Distribution of Sanctuaries in Civic Space in Arkadia'(Jost, M. 1994, pps. 217 – 230), discusses that the placing of a sanctuary was often associated with nearby features in the landscape. These could include a spring and/or a cave. She mentions that Pausanias talks about the sanctuary dedicated to Demeter Melaina; south-west of Phigaleia. This consisted of an isolated mountain cave "…a sacred grove of oak trees surrounds the cave and cold-water springs from the soil". He mentions also that an altar was in front of the cave (*Paus.* 8.42).

This particular grove may allude to the myth of Demeter's rape by Poseidon while both were metamorphosed into the shape of horses, or as furies (*Callimachus.* F652. *Apollodorus*. Lib. P. 111) . Whereby the Pythian oracle scolded the Arcadians for being lax in their sacrifice and worship to Demeter by proclaiming:

"Arkadian, Azanian acorn-eaters,
people of Phigalia, O, People
of stallion-mated Deo's hidden cave,
you came for a cure of painful famine,
in exile twice, living wild twice,
no one but you: and Deo took you home,
made you sheaf carriers and oatcake eaters,
makes you live wild now because you stopped
your father's worship, her ancient honours.
You shall consume yourselves, be child-eaters
If your whole people will not soothe her spleen,
And dress the deep cave in divine honours"
(*Paus*. 8.42.6)

She goes on to mention that Arcadian Mountain peaks were particularly full of sanctuaries which were established not at the highest points, but generally a little lower down out of the high winds. There are of course exceptions to the rule and the one mountain peak sanctuary in Arcadia that provided the greatest view and prominence, was of course the previously mentioned altar of Zeus upon Mount Lykaion. She goes on to mention one of the chief landscape attributes of Arcadia, and the particular pantheon gods associated with those areas. In the east of Arcadia lie the floodplains. These areas typically have a calcareous soil covered with clay and alluvium.

She found, in her research of the area that agriculture is only possible if the *katavothra* the fissures in the limestone which allow drainage, are fastidiously maintained by clearing them of build-up and debris. Otherwise, the whole plain is liable to flood. In these areas, the gods worshipped there were those symbolising the management of water. Therefore, there were sanctuaries and monuments found to honour Artemis the goddess associated with dampness. Also, Poseidon the master of underground waters. Artemis in particular ruled at Lake Stymphalos as goddess of the marsh, as well as extending her influence further in the landscape. Poseidon Hippios, perhaps inherited from pre-bronze age collapse belief, was worshipped as the protector of the Mantinike which was the main *polis* in this region of Arcadia (Jost, M. 1994, pp. 219-220).

Jost remarks that at some population centres and *poleis*, such as at Phigaleia, the predominant deity worship conducted in the city were of those associated with urban life. Athena and Hermes, the protector of the gymnasium. Dionysos Akratophoros the god of the orgy. The sanctuary of Artemis Soteira "formed the place of departure for the processions" (*Paus*, 8.39.5). But, in the surrounding countryside the sanctuaries were dedicated to the countryside way of life. Particular mention is made by Pausanias of the area being dedicated to food production. He mentions the offering of "…the produce of cultivated trees, particularly raisins, honey, and wool" as part of the regular gifts to the goddess Demeter (*Paus*, 8.42.11).

This is what Jost refers to as the 'Network of Sanctuaries'. Here as a result of political power becoming centred in the *poleis*; meant that the focus of belief was becoming processional and conducted for the continued preservation of the countryside's agricultural output. This output in turn fed the city, which from the geometric period onwards was becoming more and more the centre of population growth and where the elite of society were gathering wealth and resources. Out in the fields, the population was declining and was more likely to be made up of the workmen and slaves who maintained the land for the landowners.

Mary Voyatzis:

In her essay, 'Geometric Arcadia' (Voyatzis, M. 1995), Mary Voyatzis discusses the predominance and numerical number of sanctuaries found in the eastern Arcadia region. Paying particular attention to the sites of Tegea, Mavriki, Gortsuli, and Orchomenos. Her report on the geometric and archaic finds at the temple of Athena Alea in Tegea are mentioned previously in this paper. On Mavriki she mentions that a small sanctuary was found following an archaeological survey in 1907. The site is located just south of Tegea and is placed just off the main route to Sparta.

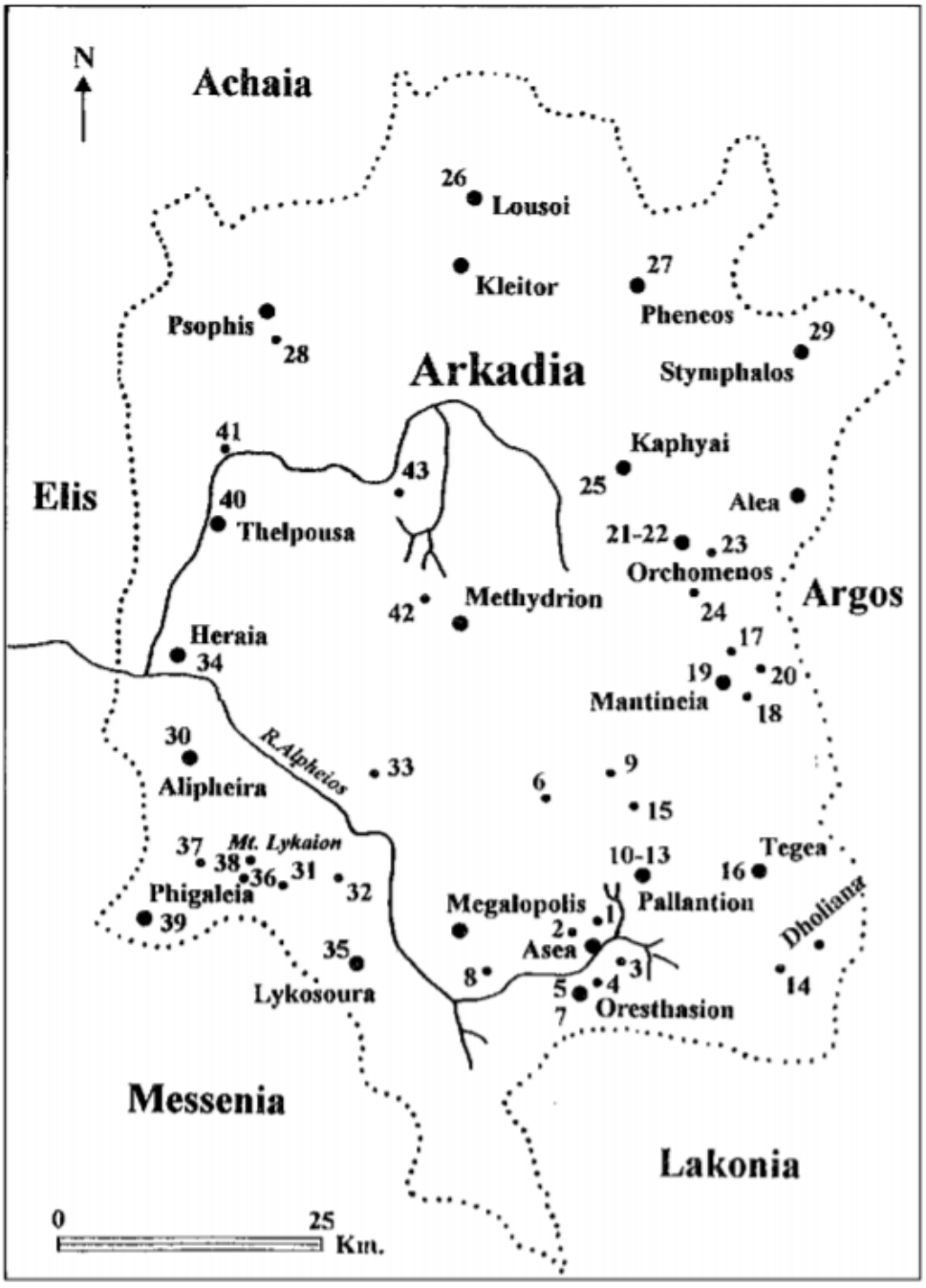

Figure 8: Distribution of Arcadian temples, 800-400 BCE. (Voyatzis 1999, 160)

No architectural evidence proceeding the 6th c BCE has been discovered in the area. The site offered a number of late geometric votives, bronzes, and pottery sherds pictured below.

Figure 9: Bronze monkey/man – Mavriki

Figure 10: Skyphos Sherd – Mavriki

Voyatzis notes that the later archaic evidence from the site indicates that was a sanctuary dedicated to Artemis but notes that vagueness in Pausanias writing of the area raises doubts that he actually visited the site (Voyatzis, M. 1995).

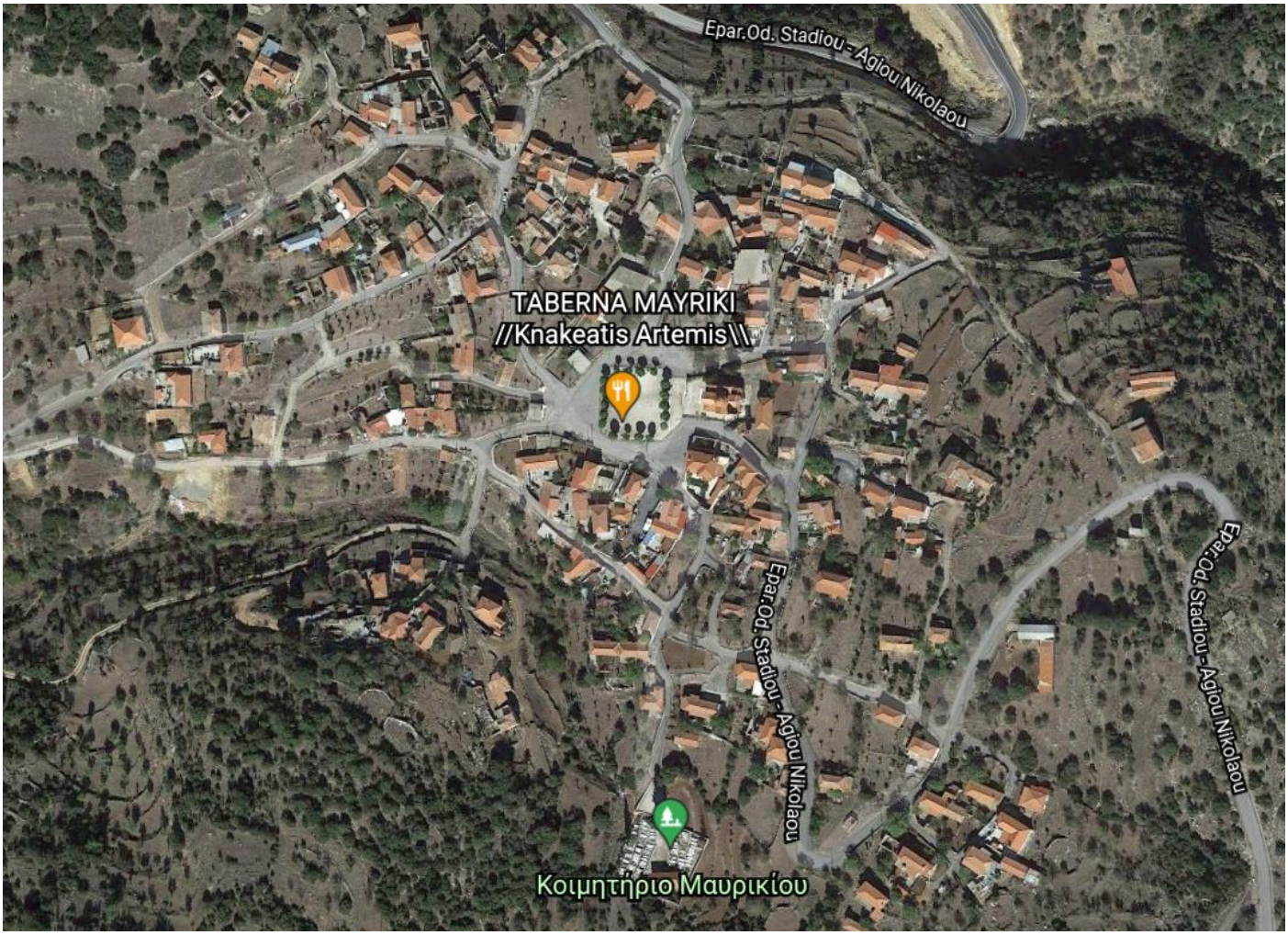

Figure 11: Present day Mavriki showing the site of the Sanctuary of Artemis, and the town that arose around it (Google Earth).

The town of Gortsuli, she notes, was situated on a hill to the north of Mantinea. It was excavated by the Greek Archaeological Service and published in 1963. There is evidence for a temple which was originally thought to be 8th c BCE, but which has now been revised to 7th c BCE. Finds include pre-Corinthian and some late geometric bronzes. It is suggested that Artemis was worshipped at this site.

Finally, Orchomenos was a small town situated north of Gortsuli on a flatter plain. Here there are the remains of a 6th c BCE temple dedicated to Aphrodite or Poseidon, pictured below.

Figure 12: Present day Orchomenos. Surrounded by several sites of archaeological interest (Google Earth).

Figure 13: Temple of Artemis or Poseidon at Orchomenos, Arcadia (Taken from the Pausanias Project).

Louise Bruit Zaidman and Pauline Schmitt Pantel:

Originally titled '*La Religion grecque'* and published in 1989, Zaidman and Pantel's book was translated into English by Paul Cartledge in 1992 as '*Religion in the Ancient Greek City*'. Their book is a highly influential treatise on how religion was an integral part of the life of ancient Greeks. They begin by making clear that all modern preconceptions of the relationship between the citizen and religion must not be applied as a template in studying the ancient world. People in the past didn't see their worship as a separate entity to their daily lives, rather the two were intertwined and one did not exist without the other. As they state in the first chapter titled 'The necessity of cultural estrangement', "The study of Greek religion requires a preliminary mental readjustment: we must temporarily abandon familiar cultural territory and radically question received intellectual categories" (Zaidman and Pantel, 1989, p.3).

The authors also raise two very important points when attempting to study the ancient Greek mind. Firstly, it is imperative that the old model of regarding places like Greece as the fertile soil from which Christianity would blossom is completely outdated. The Greek citizen in late Roman controlled Greece c. 350-400 CE would have had very little concept of the beliefs and cultural experience of the classical period Arcadian or Athenian. We have to put this belief in a linear progression of evolving religious concepts behind us. Change comes in its own context of the experience of events such as population movements. Natural environmental change and war etc all contribute to how we change as people and civilisations and imposing a structured one-size fits all model is inappropriate.

Likewise, it cannot be assumed that if a temple or sanctuary has existed in the past, in a place such as Arcadia in the later bronze-age and the site was still in use in the geometric or archaic periods; that the same space was used continuously for the same reason. Zaidman and Pantel make the point of realising that in order to study the pre and post Hellenic amalgam of Greek deities requires a "precise chronology for the history of cults and myths" (Zaidman and Pantel, 1989, p. 5). This is of course largely a matter of guess work. We cannot know how much of the pre-Hellenic interpretation of a deity such as Artemis survived the bronze-age collapse nor how different her role was in later periods from those pre-Hellenic worshippers.

Ian Morris:

Morris, in his paper '*The Early Polis as City and State*' sets out an argument that there is too much confusion regarding the modern understanding of the word *Polis.* It is generally regarded that the word is a poor translation, but as Morris states, "For most historians, the expression 'the rise of the city' and 'the rise of the state', and the sort of confusion Aristotle noted is deepened by the conventional translation of polis as 'city-state'" (Morris, I. 1991, p. 25).

Morris, like De Polignac, believes in a gradualist approach to the emergence of the *polis* following the late bronze-age collapse and the succeeding dark age period. He believes that rather than a sudden burst of population growth c. 800 BCE based on the prevailing theory of the increase in burial sites across the Greek mainland and Cyclades, that the existing structures of hierarchy simply maintained and evolved over time. This theory explains the shift in power from the Mycenae 'Palace culture' of the '*basileus'* or King ruling a fortified construction with power over the native economic structure, towards a model of the *polis* with a more devolved power structure under a '*demos'* of a ruling council, or a tyrant who has seized the reins of power.

The power structures had also changed remarkably. Previously in the Greek mainland the role of the palace culture model had seen religion as somewhat co-operative with the distribution of goods. The role of the King or chief was seen as a provider, as had been the case at Knossos in Crete or indeed the function of the Pharaohs in ancient Egypt. They received tribute and offerings of grain and other foodstuffs and they distributed these to the people under the aegis of divine providence. Now with power being devolved down to the less divine or anointed leaders of the urban *poleis* the role of religion became more urban based and processional. Rather than being the centre of distribution the temple and the procession to and from the urban and extra-urban sanctuary became the symbol of power in itself.

Conclusion:

These academics shed light on current archaeological thematic theory regarding sanctuary placement and the emergence of the *polis* following the end of the Mycenae period, and up to the end of the geometric period in Arcadia and mainland Greece in general. François De Polignac and Ian Morris share the view that strict overarching theories of linear and stratigraphic models are inappropriate in the study of how religion evolved in the lives of ancient peoples. They believe in studying peoples and places in themselves and how localised events and situations, as well as environmental concerns, all contribute to change. Then once these localised changes and unique places are understood in more depth, it is then appropriate to study the networks of economy and memory link these places to where they have come from and how they related to each other in a spiritual and economic way going forward.

Part Three:

Myth and the Landscape

Why did the Arcadians choose to settle in *poleis* and abandon rural settlement?

Tegea, in south-east Arcadia (See Fig. 1), was one of the most ancient and powerful settlements in ancient Arcadia. It was bordered by Cynuria and Argolis in the east. Separated by Mount Parthenium in the south from Laconia, and by Maenalia in the west. Finally, it was situated just south of Mantineia in the north. Its inhabitants were referred to as the Tegeatae deriving their name from the character of Tegeates, a son of Lycaon. Originally, and according to Pausanias they had settled in the area in nine separate *demoi* or townships. In the archaic period the separate townships were said to have formed together through the process of *synoecism* to become one city by Aleus, a king of Arcadia (*Paus,* 8.45.1).

Tegea went on to win further renown by being included in Homer's catalogue of ships that fought in the Trojan war (*Ill.* 2. 607). It also defeated and took prisoner an invading Spartan army, and also one of its citizens was said to have fought a son of Herakles and killed him (*Herod,* 9). Around 560 BCE it eventually was defeated by Sparta and was made to join the initial Peloponnesian league, but it did retain a large measure of independence except when Sparta called for its army.

It is the process of *synoecism* (the latinized spelling) though that is of particular interest. As defined by the Oxford Classical Dictionary it means:

"(*synoikismos*), in the Greek world, the combination of several smaller communities to form a single larger community. Sometimes the union was purely political and did not affect the pattern of settlement or the physical existence of the separate communities: this is what the Athenians supposed to have happened when they attributed a synoecism to Theseus, commemorated by a festival in classical times (the Synoecia). On other occasions it involved the migration of citizens to the new city, as in the case of Rhodes *c.*408/7 bc." (Oxford Classical Dictionary, n.d).

But what processes and motivations lie behind the practice itself? Political reasons and the gathering of power is an issue that has moved history through countless twists and turns. Athens became a democracy eventually through the process of the synoecism of its various warring tribes into a single polity and its division of power through kings, tyrants, *archons,* and eventually councils of various types where a one man one vote system was exercised. Although of course this opportunity was only available to men of a certain age and their circumstances; and was not a privilege of slaves or non-citizens.

But politics, and humanity's struggle for survival and the pursuit of power, happens for a reason. In reaction to events such as transhumance, war and invasion, famine, and economic surplus; the reality of existence means we as humans have a need to congregate and settle in groups for protection and for the economic benefits of sharing. The following parts discuss and debate how myth and landscape engineering, and its decline following the bronze-age collapse, may have factored as a determining factor in Arcadian *synoecism*. Or whether it was just a natural process of the progress of settlement.

Myth and Landscape Engineering:

Landscape disaster or catastrophe is a catch all for a multitude of possible events, situations, and causes that may or may not affect human populations and settlements in a defined space. In this case the area is Arcadia in the central Peloponnese, but throughout human history there are similar outcomes which vary only in typology and magnitude. Civil collapse, famine, Invasion and war, disease etc all have their effect on people and the landscape.

Following the bronze-age collapse and the fall of the Mycenae palace culture there were particular consequences for the people and the landscape of Arcadia. The area of the city of Stymphalus (Modern Stymphalia), and lake Stymphalus in northeast Arcadia (See Fig. 1 and 15), is a part of the Arcadian landscape that has seen little archaeological research or survey. What has been done relies mainly on research into water being taken from Lake Stymphalus into neighbouring regions via aqueducts in the roman period (Lolos, 1997), or from survey of classical period Stymphalus which has brought to light the material culture of Mycenae pottery sherds in the acropolis of the city suggesting an earlier occupation and settlement (Williams, 2010).

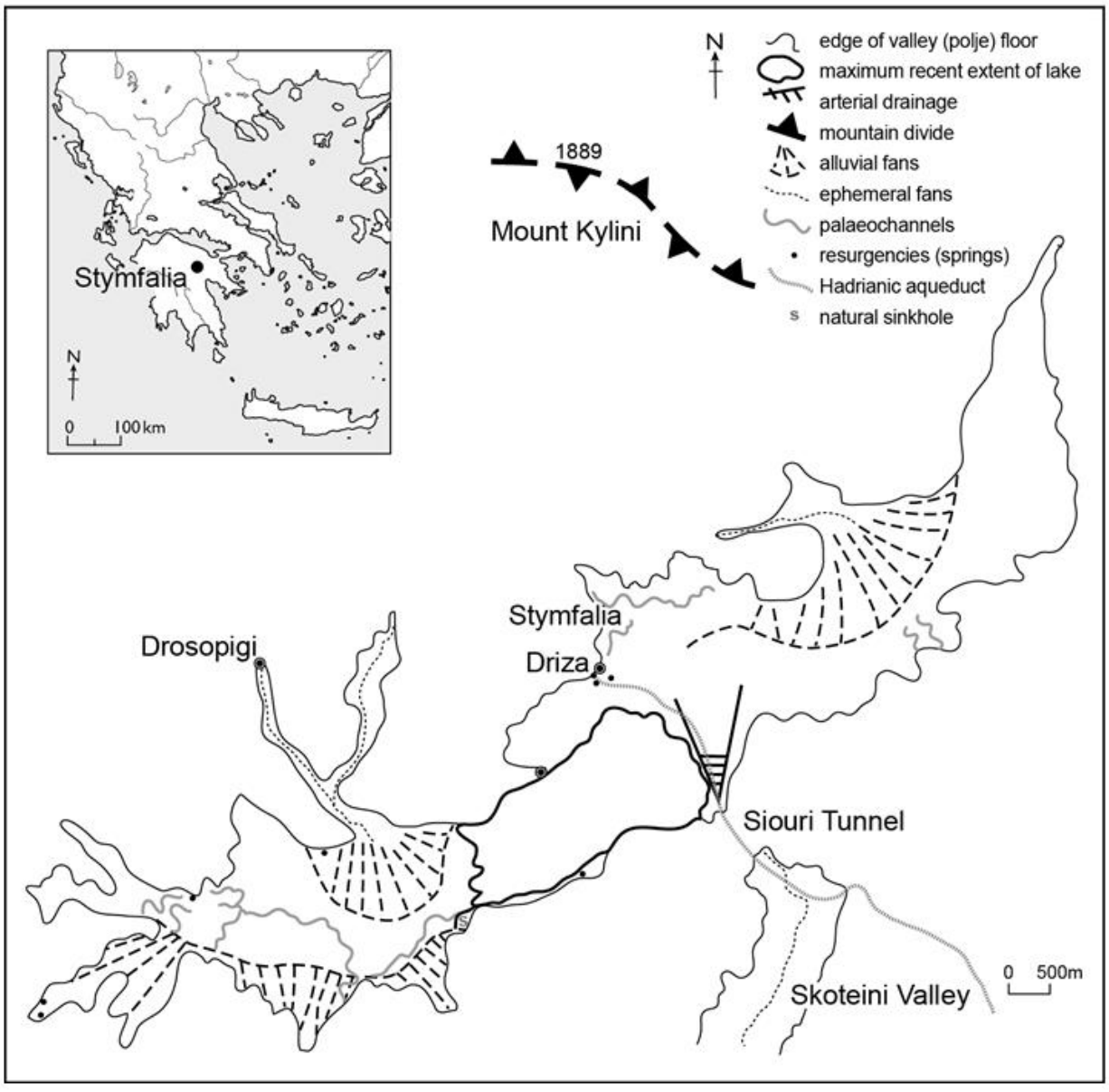

Figure 14: The area of Stymphalus in north-eastern Arcadia (Brown, 2007)

The effects of climate and hydraulic conditions are often an under researched aspect of Mediterranean archaeology and in particular the central Peloponnese (Butzer, 2011). Yet it from these aspects of the landscape that so much myth is created. Think Herakles and the Stymphallion birds, and the sanctuaries dedicated across the landscape to Artemis and Poseidon. Arcadia at first glance may seem a pastoral and, in some cases, problematic landscape of mountainous peaks and scrub settling down to a karstic floodplain. But it is in the management of water that the bronze-age peoples of Mycenae excelled, and which by the time of geometric and archaic Arcadia had been lost, or at least were in a bad state of repair.

Stymphalus lies in a structural basin on the south side of the Mount Kylinni limestone massif. It is a drainage basin ranging in altitude from 2257m ASL at Mount Kylinni to 600 ASL on the valley floor (Walsh et al, 2007). Hydrogeological analysis has proved the existence of karstic limestone pockets in the valley floor area. This includes under lake Stymphalos itself, which had formed as the result of being a natural sinkhole point that in time had coalesced into a lake through continual flooding and drainage (Walsh et al , 2007).

A karstic landscape is that which due to erosion in the limestone bedrock creates pockets of space that cause drainage and sinkholes in the landscape.

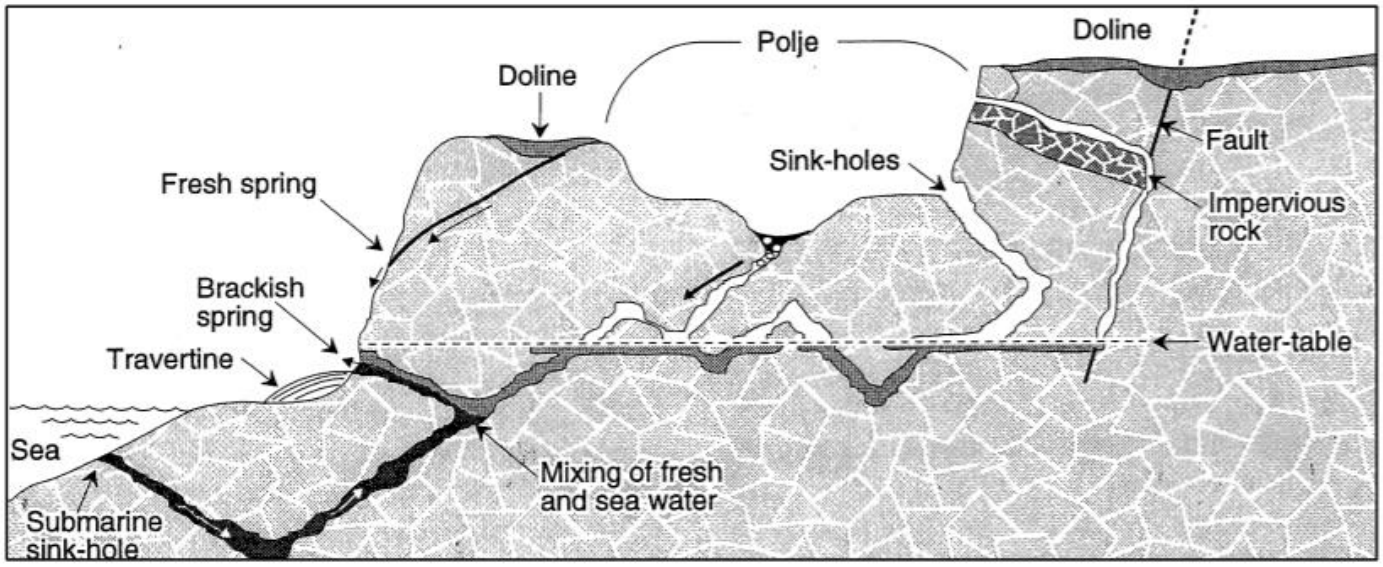

Figure 15: : **Karst features. Water from rain or snowmelt is drained into dolines or sinkholes then flows underground into caves. It reappears as a karst spring. (Higgins and Higgins 1996, fig. 1.10).**

Due to the nature of the movement of water, as well as sinkholes there are also the phenomenon of karst springs where water reappears at a lower sea-level point in the landscape from where it has drained into the karstic spaces and flowed above the water-table line (Ford and Williams, 1989, p.156).

Karstlands provided the environmental settings for an array of Greek myths, religious practices, and travelogues. The stories that ultimately were recorded by Greek mythographers and that survive today can provide insight into the hydro mythology and geomythology of the ancient Greek world. It is in the melding of myth, archaeology, and ancient and modern literature that it is possible to view how the landscape shaped the ancients understanding of the world around them and how they related to it. Geomythology was a field thoroughly investigated and indeed coined as a term of study by Dorothy B. Vitaliano in a geology lecture in 1967, that was later expanded on in a book (Vitaliano, 1973).

Mycenae construction of dams and waterworks in the bronze-age provided a level of water management in the location of where Arcadia would later appear. In the bronze-age the area of the southern Peloponnese was ruled from the city of Mycenae which lies in modern Argolis to the east of modern Arcadia (See Fig. 16).

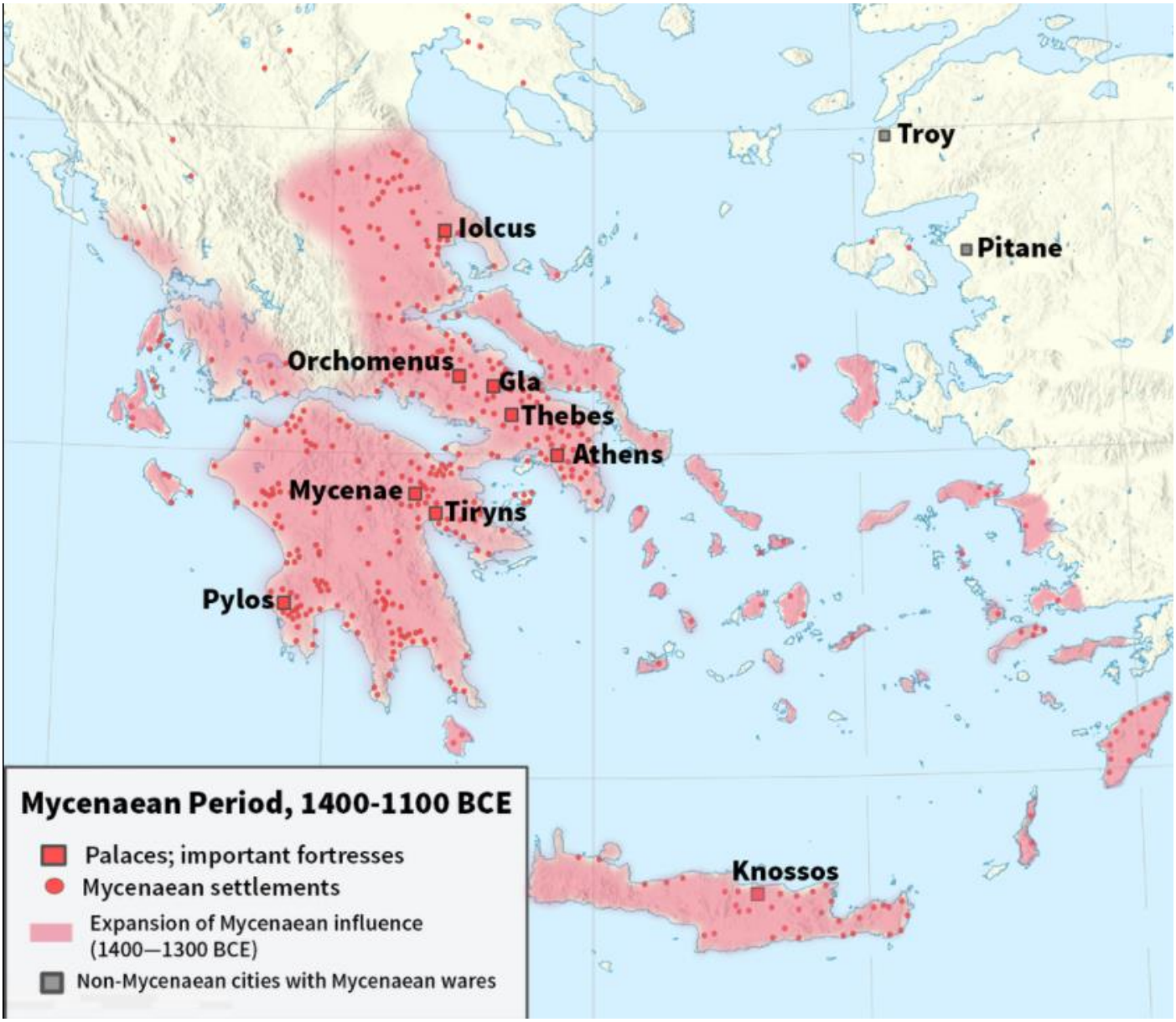

Figure 16: The Range of the Mycenae Empire in the late Bronze-Age Period (https://creativecommons.org/licenses/by-sa/3.0/deed.en).

The later city of Stymphalus, as Pausanias knew it in his time (2nd century CE), was different from the original geometric period settlement. He states that "The original settlement is said to have been elsewhere in the territory and not at the site of the modern city" (*Paus*. 8.22.1). The location of the first city of Stymphalus dated 700 – 375 BCE though is unknown (Gourley & Williams 2005).

Dating ancient work at Lake Stymphalos is problematic. Pausanias reports thus:

> "Even in our own day (*ἐφ' ἡμῶν*) the following miracle is said to have occurred. The festival of Stymphalian Artemis at Stymphalus was carelessly celebrated, and its established ritual in great part transgressed. Now a log fell into the mouth of the chasm into which the river descends, and so prevented the water from draining away, and (so it is said) the plain became a lake for a distance of four hundred *stades*. They also say that a hunter chased a deer, which fled and plunged into the marsh, followed by the hunter, who, in the excitement of the hunt, swam after the deer. So, the chasm swallowed up both the deer and her pursuer. They are said to have been followed by the water of the river, so that by the next day the whole of the water was dried up that flooded the Stymphalian plain. Hereafter they put greater zeal into the festival in honour of Artemis." (*Paus* 8.22.8-9).

Here we come across a major problem when using ancient sources. In translating the term *ἐφ' ἡμῶν* (Own day) we cannot accurately measure whether Pausanias was relating to his own time period, or if he meant the mythological age in general, or any particular time period. Artemis was a goddess attributed to the hunt and by Pausanias to swamps and brackish water areas in this area of Arcadia (*Paus* 8.22. 7).

Artemis was revered as 'Lady of the Lake' through her epithet *Limnaia* and was worshipped at many sites in the Peloponnese. She is mentioned as so in various ancient sources (*Paus* 2.76, 3.14.2, 3.2.6 *Euripides Hippolytus* 228 and 1133, *Polybius* 5.6.14) Her cult worship was set at many areas of marshy lowlands or near pools of water which often involved initiation ceremonies for young females. Her epithet refers to the word *λίμνη* (limne), meaning pools of water resulting from the retreat of a river, the sea, or can also mean lakes or swamps. Plato differentiated *λίμνη* from *ἕλος* (Helos), which he defined as a lowland or marsh (*Plato, Laws* 7.824a). By Pausanias' and Polybius' time this definition had shifted to *limna* designating non-foul but standing water as opposed to *helos* meaning stagnant and foul water.

Pausanias, on writing of the temple of Artemis at Stymphalus, notes that it was decorated with carvings of Stymphalian birds near to the roof, and at the rear with bird legged young girls. The whole edifice evokes one of Herakles labours in Stymphalus, that of the hunting of the Stymphalian birds. There is no particular reasoning in myth as to why these birds were of a concern to the local settlement. Nor why Eurystheus had set Herakles the challenge of destroying them (Grimal , p. 187). But, nevertheless the writer Diodorus (Dio Sic 4.13.2) was rather forced to assume that perhaps they were too numerous, or that they were indeed maneaters according to Pausanias (*Paus*. 8.22.4).

Most versions of the myth state that Herakles began by simply frightening the birds with a rattle, but then his actions got more intense, and he began shooting them with arrows (*Apollodorus*, *Bibl.* 2.93, *Peisandros*, *Fr*.4). One interpretation of this myth is that it represented the power of the lake itself. The birds being the representation of danger to the surrounding population, and the ability of the lake to destroy surrounding agricultural land (Aston, 2011, p. 486). Knauss (1990) surmises that the rattle used by Herakles was an analogy for the sound of water running down the *katavothra* (sink hole).

Another possibility is that the birds represent an anthropomorphic aetiology with malaria. This proposal has been argued for and against several times over. Ancient Greeks were well aware of the causality between polluted dank water and disease. But they would not have known of the connection between parasitic plasmodium microorganisms and the mosquito. Rather this seems to be a modern interpretation trying to fit the facts, and as explained above the deity associated with the lake was designated the purer *limna* rather than the stagnant *helos.*

Regarding Pausanias' claim that the neglect of worship at Artemis' cult site led to the goddess intervention in causing the clogged *katavothra* (sink hole) to suddenly unclog and swallow the hunter and the deer. The locality of the lake and the temple must have made the causal link possible that led to renewed worship of the deity after the event was witnessed. As mentioned previously we cannot tell if Pausanias is referring to an ancient mythical event, or of something he saw or heard tell of in his own time. But the story does speak directly of the management of a *katavothra* in the Stymphalus landscape. Pausanias in relating the tale of the Goddess being angry at the lack of worship to her, interspersed with her causing the death of a hunter and prey, may be analogous with the Arcadians having lost the art of properly maintaining the structures of water management that had been constructed in the bronze-age by the previous Mycenae civilisation in the area.

Figures 17 & 18: The ancient city of Stymphalus from Pausanias time, and the attached spring (Walsh, K. 2013).

The argument for coincidence:

People in the landscape of Arcadia had endured change and the effects of history. The Mycenae collapse and subsequent Greek dark-age would have been a time of tumultuous change. A system based on the belief of the God on the mountain, and the *basileus* in the palace distributing the goods of the surrounding agricultural offerings was in a relatively short space of time upended and in the preceding centuries replaced with a system of Pan-Hellenic trade and the beginning of city life for the elite landowners and well to do.

Thucydides made several references to the process of *synoecism* in his historical account of the Peloponnesian war. He described the time where the city of Heraclea was founded near Thermopylae (*Thucy*, 3.92-93). It was in that instance a political union of several settlements by the Spartans of three tribes, namely the Paralians, the Hierans, and the Trachinians. Following a war with a neighbouring tribe called the Oetaeans, the three tribes had initially approached the Athenians for help but were doubting of the Athenians ability to send protection. So, they approached the Spartans instead, who no doubt was delighted to have a strategic presence in a place that could be used to launch a fleet against Athenian Euboea.

Another example of *synoecism* mentioned by Thucydides concerned not the grouping together of small individual tribes into one settlement , but rather the grouping of three already established *poleis* into a larger political state. This occurred according to Thucydides on Lesbos (*Thucy*, 3.2) where the entire island declared independence from Athens under the possible direction and assistance of the Spartans. Athens was unable to do anything about it as it was in the midst of plague and the effects of the ongoing war with Sparta.

In comparison with other parts of Greece, Arcadia was relatively late in its progression to constructing towns and cities, and the process of *synoecism.* The first major conurbation in the region was the city of Megalopolis. The city is situated in a large open valley plain. It is almost completely surrounded by mountain ranges on all sides including the Taygetus to the south, the Mainalo to the north, the Tsemperou to the south-east , and finally the Lykaion range to the west. The ruins of the ancient town are to be found northwest of the modern city centre. The river Alfeios flows through the valley from the east to the north and passes south and west of the town.

It has large lignite deposits which are mined using open-cast methods. Indeed, these deposits are mentioned in its founding mythology. Herodotus refers to the site of the city as being a battleground of the *Titanomachy*, the great war between the first Titan gods and the victorious Olympian gods. The lignite deposits in the surrounding area sometimes catch fire in the open air, and this was mythologised as being the result of Zeus's thunderbolts striking the ground. These deposits can smoulder and scorch the earth for weeks. Along with the discovery of fossilised bones of prehistoric elephants and rhinos Herodotus stated that these were the remains of the "bones of the titans" and that they were exhibited in the area as relics at least until the 5th c BCE. Pausanias also mentions a battle between the gods and the giants, and that religious sacrifice is made at the town of Trapezous to honour the "lightning, the storms, and the thunder" (*Paus*. 8.29.1).

Both Pausanias and Diodorus Siculus talk about the origin of the *synoecism* of Megalopolis. Diodorus mentions that 20 conurbations came together to form the city (*Dio Sic*, 15.72), while Pausanias mentions forty (*Paus*, 8.27.3-4). The reason for this banding together of communities is given by Diodorus to be a bulwark against repeated invasion by the Lacedaemonians from the south. This was following a massacre in which he states victory for the Lacedaemonians meant "Indeed since the defeat at Leuctra this was their first stroke of good fortune, and it was a surprising one; for over ten thousand Arcadians fell and not one Lacedaemonian".

This appears to follow a similar pattern of social development that occurred across the Greek mainland. The classical period while it produced fantastic examples of poetry, plays, art and architecture perhaps experienced these things because of the state of near continuous warfare.

Both Persian invasion, and internal civil strife, necessitated the need for tribes and small settlements to band together in a political union that strengthened defence against enemies. *Synoecism* was by no means an invention of this period. Indeed, Renfrew and Wagstaff in their survey of the island of Melos point out that in the early Cycladic III period (ECIII) c. 2200 – 2000 BCE, there was a *synoecism* that gathered several settlements into the town of Phylakopi (Renfrew and Wagstaff, 1982).

The Athenian *synoecism* is perhaps the most famous example from antiquity. Thucydides puts the context of this move as a part of the Peloponnesian war and the need for Attic Greek tribes to re-settle, and retreat into the safety of Athens and its defensive walls. Indeed, as well as the movement of peoples behind safe defensive walls he also discusses the need the Athenians had for a constitutional change (*Thucy*, 2.15). The reality of archaeological investigation though has placed this movement of peoples long before the Athens vs Sparta conflict. Cavanagh rounds up the prevailing opinion that the proto-geometric or geometric periods are what has long been thought to be the date of this inward nucleation but goes further and states that "If we follow the archaeology of Attica through the Dark Age, we find the exact converse of the expected pattern of *synoecism".* Also "…I think the pattern of expansion from Athens, rather than a centralization into Athens, is real" (Cavanagh, 1991, p. 108). Therefore, what happened in Athens, as Cavanagh surmises, is a purely constitutional union of the tribes and settlements of Attica under the direction of Athens rather than a nucleation of settlements into one city. Aristotle claimed that it was Theseus who originally ordained the supremacy of the *polis* of Athens over the twelve tribes of Attica (*Arist*. The Athenian Constitution, A1).

This flexibility in the process of *synoecism,* that of an ebb and tide in the movement of people and the constitution and dissolution of settlements, concurs with Ian Morris' view as stated earlier that *synoecism* was a gradual process and not something that happened quickly.

Likewise at Megalopolis there were problems to be overcome. The Pan-Hellenic nature of worship meant that spiritual concerns, and the respect afforded to various deities and their sanctuaries, had to be taken into consideration. Madeline Jost provides a summary of these concerns. She points out that overall political events such as the reconstitution of ruling bodies rarely effect the religious and spiritual life of the citizens of a territory. The wholesale construction of a new theology by Henry VIII, for example, while destructive physically and spiritually in 16th Century England did not fully replace the continuing worship practiced by Catholics, or at least not for very long.

But still localised concerns had to be respected due to the nature of the construction of the city as a defensive site against Spartan aggression. Dating between 371 and 368 BCE, the *synoecism* of Megalopolis took place over a very large area that included some very ancient religious traditions (Jost, M. 1994, p. 225). Lykosura though was the exception to the pull of the new *polis.* It retained its position as a city "because of its sanctuary of Despoina" (*Paus*. 8.28.6), and a few settlements remained with the status of *komai* (villages). Those settlements also kept their sanctuaries both urban and extra-urban.

In the places that had been emptied of its citizens in the process of *synoecism* the towns sanctuaries often remained and were maintained by Megalopolis even to the point where the rest of the former settlement was falling into ruins (Jost, M. 1994, p. 226). While under management of the city they changed status becoming sanctuaries of the new city. The town of Trapezous though was stripped of its *xoana* (cult images and iconography) as it had rebelled against the *synoecism* (*Paus*. 8.31.5).

Figure 19: The Agora of Megalopolis (Greece.com, n.d.)

The only example of a former sanctuary that was completely deserted was that of one dedicated to Pan at Berekla. The archaeological record shows no use at the site beyond the 5th c BCE presumably because of its remoteness from Megalopolis.

Mainly though the old rural sanctuaries were honoured but the status of those sanctuaries were altered to reflect the new city's prominence in the area, and new sanctuaries were constructed in the city itself that honoured both the supernatural protectors of the city, and also the cults of the territory therefore respecting the Pan-Hellenic diverse nature of worship amongst its citizens and as Jost states a "…traditional ensemble of gods designed to arouse in the new citizens a consciousness of belonging to a community" (Jost, M. 1994, p. 226). Indeed, as she points out the territory Megalopolis itself featured a new phenomenon, that of the 'doublet' temple. Pausanias mentions a sanctuary dedicated to both Zeus Lykaion and Pan (*Paus*. 8.38.6-7). Formerly they both had their *temenos* sanctuaries on the mountain side of Lykaion. They were neighbours in fact on the mountain. Here in the landscape of Megalopolis, in the city that had replaced the former rural settlements of old, and in worship had evolved the space of worship from the mountain to the town there was a sanctuary that was also forbidden to outsiders. The *abaton* (innermost forbidden shrine) was a direct replica of that formerly on the mountain. Stone altars replaced the mound of ashes where votive offerings were left. As Jost states "The establishment of this cult doublet at the moment of *synoecism* does not imply transfer of cult; on the contrary it responds to a desire to respect the cradle of the cult of Zeus Lykaios.

Worship as well as settlement had evolved in Arcadia. But landscape memory endured.

Part Four:

Conclusion

The evolution and progression of the religious topography of mainland Greece, is of course no more special than that of any human landscape in the world. What does make a difference though, is that it's the most researched and picked over landscape in history. The classical landscapes of Greece and Italy have been of interest to inquiring minds since antiquity itself. Pausanias and Polybius wrote about the distant past of Greece while it was under Roman occupation. From the Middle Ages onwards the archaeology of these sites has been devoured since the remains of Pompei were discovered, and then the following refinement of archaeological practice through Schliemann and Sir Arthur Evans etc, to the modern day where thankfully more precise methodologies are used both in excavation and in the survey of these landscapes.

Arcadia is a place where myth and the landscape collided to create an incredible palimpsest of possibility. Mountainous and rugged. Prone to flooding and drought depending on the maintenance of ancient water works constructed in the bronze-age, and yet all but forgotten in the proceeding centuries into the geometric and archaic periods. It was a land that took religion so seriously that outsiders were banned from witnessing its most ancient rituals upon Mount Lykaion. It is a landscape that because of its remoteness and hard living led poets like Theocritus and Virgil to describe it in terms of bucolic pastoral poetry. It inspired the art of Poussin who painted its mythical landscape including the famous 'Et in Arcadia Ego' (Even in Arcadia I am).

Figure 20: Et in Arcadia Ego, by Nicolas Poussin (Wikicommons, n.d.).

The religious development of Arcadia saw the progress of worship upon the holy mountain possibly from before the Mycenae civilisation, to the temple sanctuaries of fledgling cities like Megalopolis in the classical period. But the memory of the landscape lived on through to this period whereby the very layout of the temples was analogous to that previously set out upon the holy mountain. In between the cogs of history turned. Various confederacies and alliances were made. Wars won and lost. People changed from being the receivers of distributed surplus by the *basileus* in his palace, to being citizens in a shared endeavour of prosperity and security. The future of world civilisation was birthed from these places. The memory of landscape, and their attempt to harness the wild space is why we in the developed world live in relative peace and security. We must not forget that memory, in how we approach those places still developing, and on their journey toward a brighter and safer world.

Word Count: 15,352

Bibliography:

Ancient Sources:

Akousilaos fr.12. '*Acusilai Fragmenta*'. [Online] Available from http://www.dfhg-project.org/DFHG/digger.php?what%5B%5D=author%7CACUSILAUS&onoffswitch=on, [Cited 2001 Sep. 16].

Apollodorus (trans. Hard, R. 1997) '*The Library of Greek Mythology*'. Oxford World's Classics, Oxford.

Aristotle (trans. Rhodes, P.J.) '*The Athenian Constitution*'. Penguin Classics, London.

Callimachus (trans. Mair, L.W. 1921) '*Hymns and Epigrams. Lycophron: Alexandra. Aratus: Phaenomena'*. Loeb Classical Library Volume 90. William Heinemann, London.

Euripides (trans. Davie, J. 1996) '*Medea and Other Plays'.* Penguin Classics, London.

Herodotus (trans. Waterfield, R. 1998) '*The Histories*'. Oxford World Classics, Oxford.

Hesiod (trans. Evelyn-White, H.G. 1914) '*Theogony, Homeric Hymns, Epic Cycle, Homerica*'. Loeb Classical Library Volume 57. William Heinemann, London.

Homer (trans. Rieu, E.V. 1950) '*The Iliad*'. Penguin Classics. London.

Pausanias (trans. Levi, P. 1971). '*Guide to Greece Volume 2: Southern Greece*'. Penguin Classics. London.

Peisandros *fr. 4* taken from G. Kinkel, '*Epicorum graecorum fragmenta'* (1878).

Plato (trans. Lee, H.D.P. 1959) '*The Republic*'. Penguin Classics, London.

Plato (trans. Bury, R.G. 1926) '*Laws, Volume II: Books 7-12'*. Loeb Classical Library 192. Harvard University Press, Cambridge MA.

Polybius (trans. Waterfield, R. 2010) '*The Histories*'. Oxford World's Classics, Oxford.

Thucydides (trans. Warner, R. 1954) '*History of the Peloponnesian War*'. Penguin Classics. London.

Siculus, Diodorus (trans. Oldfather, C.H. 1935). '*Library of History*'. Loeb Classical Library. Harvard University Press. Cambridge MA.

Xenophon (trans. Brownson, C.L. 1920) '*Anabasis*'. Loeb Classical Library Volume 90. William Heinemann, London.

Siculus, Diodorus (trans. Oldfather, C.H. 1935). '*Library of History*'. Loeb Classical Library. Harvard University Press. Cambridge MA.

Modern Scholarship:

Aston, E. (2011) '*Mixanthrôpoi: animal-human hybrid deities in Greek religion*'. Kernos, Liege.

Buckert, W. (1972, trans. Bing, P. 1983). '*Homo Necans: The Anthropology of Ancient Greek Sacrificial Ritual and Myth*'. University of California Press, California.

Butzer, K.W. (2011) '*Geoarchaeology, climate change, sustainability: a Mediterranean perspective. Geoarchaeology, climate change, and sustainability*'. Geol Soc Am Special Paper, 476, 1-14.

Cartledge, P. (2002) '*Sparta and Lakonia: A Regional History 1300–362 BC. 2nd edn*'. Taylor & Francis, London.

Cavanagh, W. G. (1991) '*Surveys, cities, and synoecism*'. In '*City and Country in the Ancient World*' (1991, Eds. Rich, J and Wallace-Hadrill). Routledge, London.

Deger-Jalkotzy, (2008) '*Decline, Destruction, Aftermath*'. In 'The Cambridge Companion to the Aegean Bronze Age' (Ed. Shelmerdine, C). Cambridge University Press, Cambridge.

Dietrich, B.C. (1962) '*Demeter, Erinys, Artemis'*. Hermes, 90(2), pp. 129-148.

De Polignac, F. (1984, trans. Lloyd, J. 1995) '*Cults, Territory, and the Origins of the Greek City-State*'. The University of Chicago Press, Chicago.

De Polignac, F. (1994) '*Mediation, Competition, and Sovereignty: The Evolution of Rural Sanctuaries in Geometric Greece*'. In '*Placing the Gods: Sanctuaries and Sacred Space in Ancient Greece*' (1994, Eds. Alcock, S and Osborne, R). Clarendon Paperbacks, Oxford.

Dubois, L. (1988) '*Recherches sur le dialecte arcadien*'. Peeters. Louvain.

Dugas, C. (1921) '*Le sanctuaire d'Aléa Athéna à Tégée avant le siècle*'. Bulletin de correspondance hellénique, 45(1), pp. 335-435.

Elsner, J. (1992) '*Pausanias: A Greek pilgrim in the Roman world*'. Past & present, 135(1), pp. 3-29.

Ford, D and Williams, P. (1989) '*Karst Geomorphology and Hydrology*'. Chapman and Hall, London.

FORSÉN, J. and FORSÉN, B. (2003) '*The Asea Valley survey: an Arcadian Mountain valley from the Palaeolithic Period until modern times*.' Svenska Institutet i Athen. Stockholm.

Gourley, B. and Williams, H. (2005) '*The fortifications of Ancient Stymphalos*'. Mouseion, 49, 213-259.

Grimal, P. (1951, trans. Maxwell-Hyslop, A. R. 1986) '*The Penguin Dictionary of Classical Mythology*'. Penguin Reference, London.

Habicht, C. (1984) '*Pausanias and the Evidence of Inscriptions*'. Classical Antiquity, 3(1), pp. 40-56.

Hellmann, M. (1992) '*Recherches sur le vocabulaire de l'architecture grecque, d'après les inscriptions de Délos*'. Ecole française d'Athènes, Athens.

Hornblower, S. and Spawforth, A (Eds.). (2003) '*The Oxford Companion to Classical Civilisation'.* Oxford University Press, Oxford.

Hoskins, W.G. (1955) '*The Making of the English Landscape*'. Penguin, London.

Immerwahr, W. (1891) '*Die Kulte und Mythen Arkadiens*'. Leipzig University Press, Leipzig.

Jost, M. (1985) '*Sanctuaries and cults of Arcadia*'. In '*Peloponnesian Studies Vol: 9*' [Online] Available from https://cefael.efa.gr/window.php?ce=ff5mr7o72c01m6ggpatnkfj9raac9smq&site_id=1&actionID=summary&serie_id=EtPelop&volume_number=9&new_lang=fr_FR. [Cited 2021 Sep. 17).

Jost, M. (1994) '*The Distribution of Sanctuaries in Civic Space in Arkadia*'. In '*Placing the Gods: Sanctuaries and Sacred Space in Ancient Greece*' (1994, Eds. Alcock, S and Osborne, R). Clarendon Paperbacks, Oxford.

Knauss, J., Heinrich, B. and Kalcyk, H. (1986) '*Der Damm bei Kaphyai und Orchomenos im Arkadien*'. Archaeologischer Anzeiger, pp. 538-611.

Knauss, J. (1990) '*Der Graben des Herakles im Becken von Pheneos und die Vertreibung der stymphalischen Vogel*'. Mitteilungen des Deutschen Archäologischen Instituts, 105, pp. 1-33.

Kourouniotes, K. (1904) '*Ἀνασκαφὴ Λυκαίου . Αρχαιολογική Εφημερίς'*, 43, pp. cols. 153-214.

Langdon, M.K. (1976) '*A Sanctuary of Zeus on Mount Hymettos*'. Hesperia Supplements, 16 (A Sanctuary of Zeus on Mount Hymettos), pps. 121-148.

Larsen, J. (1968) '*Greek federal states: their institutions and history*'. Clarendon Press, Oxford.

Lolos, Y. (1997) '*The Hadrianic Aqueduct of Corinth (with an Appendix on the Roman Aqueducts in Greece)'*. Hesperia, 271-314.

Moggi, M. (1974) '*I sinecismi interstatali greci*'. Marlin, Pisa.

Morano, D. (1882) '*Intorno alla dinamica delle acque della force ed al canale regolato di Sarno: studii*'. Gyan Books, India.

Morgan, C. (1999) 'Cultural subzones in early Iron Age and archaic Arkadia?'. In: T.H. Nielsen and J. Roy, eds, Defining ancient Arkadia: symposium, April 1-4, 1998. Copenhagen: pp. 382-456.

Morris, I. (1987) '*Burial and Ancient Society: The Rise of the Greek City-State'*. Cambridge University Press, Cambridge.

Morris, I. (1991) '*The Early Polis as City and State*'. In '*City and Country in the Ancient World*' (1991, Eds. Rich, J and Wallace-Hadrill). Routledge, London.

Nielsen, T. and Roy, J. (1999) '*Defining ancient Arkadia: symposium*', April 1- 4 1998. Copenhagen.

Nielsen, T.H. (2002) '*Arkadia and its Poleis in the Archaic and Classical Periods*'. Vandenhoeck & Ruprecht, Göttingen.

Osborne, R. (1996) '*Greece in the Making: 1200 – 479 BC*'. Routledge, London.

Parker, R. (1983) '*Miasma: pollution and purification in early Greek religion*'. Clarendon Press, Oxford.

Price, S. (1999) '*Religions of the Ancient Greeks*'. Cambridge University Press, Cambridge.

Rambach, J. (2004) '*Olympia im ausgehenden 3. Jahrtausend v. Chr.: Bindeglied zwischen zentralem und ostlichem Mittelmeerraum*'. In Die agaische Fruhzeit: Die Frubronzezeit in Griecchenland. (Ed. Eva Alram-Stern) pps. 1199-1254, Vienna.

Reichel, W. and Wilhelm, A. (1901) '*Das Heiligtum der Artemis zu Lousoi*'. Jahreshefte des Österreichischen Archäologischen Institutes in Wien, 4, pp. 1-89.

Renfrew, C. and Wagstaff, M. (1982) (eds) '*An island polity: the archaeology of exploitation in Melos'*. Cambridge University Press, Cambridge.

Romano, D.G. and Voyatzis, M. (2014) '*Mt. Lykaion Excavation and Survey Project, Part 1: The Upper Sanctuary*'. Hesperia: The Journal of the American School of Classical Studies at Athens, 83(4), pp. 569-652.

Vernant, J.P. (1978, trans. Lloyd, J. 1990) '*Myth and Society in Ancient Greece*'. Zone Books via Princeton University Press, New Jersey.
Wood, M. (1987) '*In Search of the Trojan War*'. New American Library, New York.

Vitaliano, D.B. (1973) '*Legends of the Earth: Their Geologic Origins*'. Indiana University Press, Indiana.

Voyatzis, M.E. (1990) '*The early sanctuary of Athena Alea at Tegea: and other archaic sanctuaries in Arcadia*'. P. Åströms förlog, Göteborg.

Voyatzis, M.E. (1995) '*Geometric Arcadia*'. Bulletin of the Institute of Classical Studies. Supplement , 1995, No. 63, KLADOS: ESSAYS IN HONOUR OF J.N. COLDSTREAM (1995), pp. 271-283

Voyatzis, M. (2002) '*An Analysis of votive types recently found at Tegea*'. In '*Peloponnesian sanctuaries and cults: proceedings of the ninth international symposium at the Swedish Institute at Athens*', 11-13 June 1994 (Ed. R. HÄGG). P. Åströms, pp. 159-168. Stockholm.

Walker, A. (2006) '*Coins of Peloponnesos: the BCD Collection*'. LHS Numismatics Ltd, Zurich.

Walsh, K. Brown, A.G. Gourley, B. Scaife, R. (2017) '*Archaeology, Hydrogeology and Geomythology in the Stymphalos Valley*'. Journal of Archaeological Science Reports, London.

Williams, H. (2010) '*Stymphalos, A City in Ancient Arcadia*'. University of British Colombia Press, Canada.

Zaidman, L. B, Pantel, P.S. (1989, trans. Cartledge, P. 1992) '*Religion in the Ancient Greek City*'. Cambridge University Press, Cambridge.