BEYOND THE ARGO-POLIS.
A SOCIAL ARCHAEOLOGY OF THE ARGOLID IN THE 6TH AND EARLY 5TH CENTURIES BCE

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A Thesis submitted in conformity with the requirements for the Degree of Doctor of Philosophy at the Institute of Archaeology, University College London

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Abstract

The focus of the present study is on the archaeological record of archaic (700-480 BCE) contexts found on mainland Greece in the region known as the Argolid. Its main concern is with interpreting the archaeological evidence in terms of human activities to arrive at a better understanding of the cultural and social developments of the archaic Argolid. From an archaeological perspective we can only speak of activities that leave some trace in the material record; here I examine writing, subsistence-related activities, and rituals.

The first chapter deals with inscriptional evidence, attempting to monitor, through the use of writing, the impact of literacy upon Argolic society. Part I shows how the use of perishables can influence our perceptions of the role of early writing in Greece. Parts II and III assess the kinds of literacy that existed, and the areas of society that were literate, within archaic society, particularly within Argolic society.

In the second chapter the survey evidence is given priority, since as many as three Argolic surveys have recently been published. The discussion centres on the exploitation of the landscape by means of agricultural, non-agricultural, and maritime activities, as a way of generating a clearer picture of the region’s social organisation.

The third chapter places emphasis on excavation material in an attempt to observe ritual activities in Argolic society. Part I concentrates on rituals of a communal nature, in honour of divinities; Part II deals with funerary rituals, mainly the burial evidence. Both aim to gain insight into the social structures that motivated the ritual system.

An index of sites (Appendix A) accompanies the main text, providing bibliographic and descriptive material for each individual site. Two more appendices (B and C) can be consulted for an overview of metal objects and the location of cults whose divinities are known.
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My first idea was to print only three copies:
one for myself, one for the British Museum, and one for Heaven.
I had some doubt about the British Museum
Oscar Wilde, In Memoriam

A topic involving another century, another culture, and another language could never have been attempted, nor completed, in a vacuum. Without the official and unofficial support and advice of scholars and friends, it could never have begun. I owe initial support to Dr. Anne Foley, my mentor and M.A. supervisor.

I am indebted to those who were involved in accepting my research proposal at the doctoral level, Prof. J. N. Coldstream and my Ph.D. supervisor, Dr. Alan Johnston. From the onset, Dr. Johnston gave me freedom to pursue my own interests and provided much assistance at every stage in my research. I am especially grateful to him, for, unlike many supervisors, he agreed to supervise a large part of this thesis from abroad. I am also indebted to those who examined my dissertation for the degree of Ph.D., Dr. Graham Shipley and Prof. Anthony Snodgrass, for their astute comments and expert editing. On a more personal note, I feel fortunate to have met Dr. Shipley while he was Visiting Fellow at the BSA, not only because I respect him enormously as a scholar but also because I (and others) thoroughly enjoy his company and appreciate his dedication to students.

Without the initial funding of ‘les Fonds FCAR (pour la formation de chercheurs et l’aide à la recherche)’ and the Overseas Research Studentship (CVCP), this thesis would have remained an idea, a dream. Two more grants, the first from the British School at Athens (BSA) and the second from the Canadian Archaeological Institute at Athens (CAIA), enabled me to complete my work in Greece.

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In Athens the staff at the BSA and CAIA provided various forms of assistance above and beyond the call of duty. The librarians of the BSA, Ms. Penny Wilson-Zarganis, Ms. Sandra Pepelasis, Ms. Margaret Cozell, and Ms. Anne Sackett, were always there to help me. I also thank Ms. Helen Fields, Ms. Helen Clark, and Ms. Maria Papaconstantinou, the Directors (now Mr. David Blackman, formerly Prof. Richard Tomlinson) and Assistant Director, Dr. Lesley Beaumont, and finally Dr. Ian Whitbread, Director of the Fitch Lab. At CAIA I worked with Dr. David Jordan, Director, and Ms. Katherine Alexander, former Assistant Director, who became ‘une grande amie’. These two friendly communities brightened up my life in Athens.

If I were to thank all my friends, the list would be endless. I limit myself here only to those people who put up with me on a daily basis: during my B.A. Keith Adams, during my M.A. Ian Crystal, José Sabourin, and Michael Beattie, in Athens Damla Demirözü, Michael Boyd, Rebecca Sweetman, Amanda Kelly, Angela Michaels, Roger Doonan, Pauline Gleeson, Koji Mikami, Andrea Nanetti, Leonora Neville, Vasiliki Konortou, ‘Stringy’ Carter, Graham Chandler, Malcolm Nicholson, Seáin Byrne, Marie-Claude Boileau, and Elina Stamatatou-Vossynioti. All have (often unknowingly) contributed to the completion of this research. Michael Boyd, Rebecca Sweetman, Damla Demirözü, and Amanda Kelly deserve especial praise here, for their staunch encouragement. I thoroughly appreciated Rebecca’s gracious offer to read through two chapters of this thesis.

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In the last few years of my research I have not been the easiest person with which to spend time, especially during those long hot summers in Athens. So, Dennis Papaioannou, who willingly and patiently stood by me even at my worst moments, deserves my most warm-hearted thank you. I just want him to know that, 'What seems to us bitter trials are often blessings in disguise.'

My most faithful companion in Greece was a stray dog named Méli. She sat by my side day in and day out as I was writing this thesis, and her wonderful spirit really enlivened my rather monotonous life. Her recent premature death is weighing heavily on my heart as I write this, and I so wish that she knew how much she really meant to me and how much she will be missed.

Finally, my family: Gram, Robert and Catherine, Shawn and Valerie, and Tracey Beaufils. I feel odd about simply thanking them, for they deserve much more. This thesis is dedicated to them.
Abbreviations

Museums

BM  British Museum, London
EM  Epigraphical Museum, Athens
MFA Museum of Fine Arts, Boston
Met. Metropolitan Museum of Art, New York
Mus. Museum
NAM National Archaeological Museum, Athens

Chronology

c.  circa

All dates I give are to some extent merely accepted conventions, and unless otherwise specified are all BCE (before the common era).

Pottery Decoration

bf  black figure
bg  black glaze or black-glazed
rf  red figure

The term glaze is used conventionally as in most publications dealing with black glaze pottery, although the word is inaccurately used. Black gloss would perhaps be more accurate, but so as not to confuse the reader, I retain the use of black glaze.

Epigraphic Notations

[ ]  missing letters, lost or illegible
[... ] three letters lost
[-[-] unknown number of letters lost
( ) not shown on artifact, but word is known from other inscriptions or writings and supplied
<-> letter omitted in error
In general, for persons I have tried to represent the Greek spelling by the usual conventions in preference to traditional Latinised forms. Thus, I write Herodotos for Herodutus, Diodoros for Diodorus, but there are certain names and abbreviations that remain in their well-accepted Latinised forms (for example, Thucydides, Plato, Strabo, Plutarch, etc.).

The names of works given are usually those in the Loeb Classical Library, whenever a translation in that series exists.

Diod.    Diodoros of Sicily
Hdt.     Herodotos
Paus.    Pausanias
Thuc.    Thucydides
### Abbreviations

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Description</th>
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<tbody>
<tr>
<td>AA</td>
<td>Archäologischer Anzeiger</td>
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<tr>
<td>AAA</td>
<td>Athens Annals of Archaeology</td>
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<tr>
<td>AΔ</td>
<td>Ἀρχαιολογικὸν Ἀλέτιον (Chr = Χροικά)</td>
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<tr>
<td>AE</td>
<td>Ἀρχαιολογικῆ Ἐφημερίς</td>
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<tr>
<td>AJA</td>
<td>American Journal of Archaeology</td>
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<tr>
<td>AM</td>
<td>Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung</td>
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<tr>
<td>AR</td>
<td>Archaeological Reports</td>
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<tr>
<td>BAR</td>
<td>British Archaeological Reports</td>
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<tr>
<td>BCH</td>
<td>Bulletin de correspondance hellénique</td>
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<td>BSA</td>
<td>Annual of the British School at Athens</td>
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<td>CAH</td>
<td>Cambridge Ancient History</td>
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<tr>
<td>CIG</td>
<td>Corpus Inscriptionum Graecarum</td>
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<tr>
<td>CNRS</td>
<td>Centre national de la recherche scientifique</td>
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<tr>
<td>CQ</td>
<td>Classical Quarterly</td>
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<tr>
<td>CRAI</td>
<td>Comptes rendus de l'Académie des Inscriptions et Belles-lettres</td>
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<tr>
<td>CVA</td>
<td>Corpus Vasorum Antiquorum</td>
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<td>Diss.</td>
<td>Dissertation</td>
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<td>É.</td>
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<td>EF</td>
<td>École française</td>
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<td>EFA</td>
<td>École française d'Athènes</td>
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<tr>
<td>To Εργον</td>
<td>To Εργον της Αρχαιολογικῆς Εταιρείας</td>
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<td>fc.</td>
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<td>IG</td>
<td>Inscriptiones Graecae, the corpus of Greek inscriptions published by the Deutsche Akademie der Wissenschaften in various editions (2nd ed. indicated by superscript 2; 3rd by superscript 3: Berlin, 1873-)</td>
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<tr>
<td>JDAI</td>
<td>Jahrbuch des Deutschen Archäologischen Instituts</td>
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<td>JFA</td>
<td>Journal of Field Archaeology</td>
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<tr>
<td>JHS</td>
<td>Journal of Hellenic Studies</td>
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<tr>
<td>JOAI</td>
<td>Jahreshefte des österreichischen archäologischen Instituts in Wien</td>
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<tr>
<td>LIMC</td>
<td>Lexicon Iconographicum Mythologiae Classicae (1981-).</td>
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<tr>
<td>MDAI</td>
<td>Mitteilungen des Deutschen Archäologischen Instituts. Athenische Abteilung</td>
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<td>OpAth</td>
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<td>op.cit.</td>
<td>opus citatum</td>
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<td>Πρακτικά</td>
<td>Πρακτικά της εν Αθήναις Αρχαιολογικῆς Εταιρείας</td>
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<td>RA</td>
<td>Revue archéologique</td>
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Abbreviations

Stuttgart: J. B. Metzlersche.
REA Revue des études anciennes
REG Revue des études grecques
SIMA Studies in Mediterranean Archaeology
SEG Supplementum Epigraphicum Graecum (Leiden, 1923-)
un unpublished notes
UP University Press

N.B. Throughout this study I shall use the term Greek and Greece, meaning ancient Greek and ancient Greece.
In general, I have tried to be consistent, but complete consistency in the transliteration of Greek into Latin letters is impossible. Except where Latin forms of Greek words, such as Athens, have been effectively assimilated into English, I have resisted the latinisation of Greek words. Thus, I write Korinthos and Kypros, not Corinth and Cyprus. Sometimes, however, there are neither ancient nor modern Greek equivalents, such as Laconian, Attic, and Corinthian, so I have preserved the familiar English forms.

In the text I have tried to use the name current in the historical periods (for example Hermione, not Kastri or Ermiōnī); however, when referring simply to the site or the area I use the modern Greek name with accents. Also if no ancient place-name exists for a given site or area, I use the modern Greek name.

Finally, the word mycenaean is reserved for the archaeological period (late helladic III) and its culture. Mykenai refers to the site, mykenaians to its occupants in the historical period.

For modern Greek personal names I have tried to keep as close as possible to the modern pronunciation, therefore Georgos Georgas will be Yeorgos Yeorgas.

I transliterate terms using the following conventions:

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<tr>
<th>Greek</th>
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s | t |
y or i | f |
| ψ | ps |
| ω | o |
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Introduction

It is because Humanity has never known where it was going that it has been able to find its way.

Oscar Wilde, The Critic as Artist.

‘The one duty we owe to history is to rewrite it’ (Oscar Wilde, The Critic as Artist). But it is not enough to simply rewrite history; we need to understand in some sense how it happened, how past social systems, institutions, and relations functioned (Renfrew 1984, 3). This approach to archaeology has been called ‘social archaeology’.

A study along these lines assumes from the start that the ancient Greeks, like all other humans, used material culture during the course of their activities to say things about themselves (Morris 1998, 4). There is of course a variety of levels on which one can approach the material culture of a society: for example, studies of the typology or the production of artifacts. My concern here is with contexts of human behaviour and activities.

The focus of this study is on the archaeological record of archaic (c. 700-480 BCE) contexts found on mainland Greece in a region now known as the Argolid (Figure 1). My work can be described as an archaeological investigation into past human activities, an attempt to study the effects these activities had on the cultural development and history of the archaic Argolid. Rather than being a strictly problem-oriented analysis, which may miss a great deal, this study takes a more sensitive approach to archaeological exploration and tries to recreate the history of human action. All humans create social structures, and have the capacity to transform them through their actions. My aim therefore is to examine the role played by human behaviour and activities in creating and transforming the social structures of the archaic Argolid.
The Regional Approach

Rarely have archaeologists approached archaic data in this way. There has been surprisingly little consciousness of a site- or even a region-oriented social archaeology in the sense Renfrew gives, although recent regional survey projects have tried to correct this situation. It has become normal for such studies to integrate socio-economic, political, geographical, and ecological variables, and to assume that an understanding of human behaviour can benefit from looking beyond individual settlements. Regional studies allow us to observe the wider context of many activities that affect land use and settlement (Wright et al. 1990, 581-582).

The time is right for a study of human patterns of activity in the Argolid, because as many as three systematic and intensive survey projects in this region have recently been published (Jameson, Runnels, and van Andel 1994; Wells [B.] 1996; Mee and Forbes [H.] 1997). The perspective that recent survey work has forced upon the archaeology of the Argolid (and elsewhere) means that we can now study human activities of a specific period in great detail. This is a boon for those studying the archaic Argolid, because reports of regular excavations, rescue excavations, and casual collection of surface remains are largely unpublished.

My analysis of the issues under consideration therefore builds upon a considerable amount of survey work done by others. There are, of course, drawbacks. Because the Argolid has been studied at different times by separate survey teams from different countries, one faces the problem of coping with the unevenness of their methodology and publications.

Geographical Considerations

The Argolid is not a discrete unit with physical landscape uniformity (Figure 2); the Argeia is hemmed in by the eastern mountain chain and thus isolated from the rest of the promontory, the Akte. The core of the Argeia, the Argive plain at the heart of the Argolic gulf, is a triangular area about 195 km² surrounded by mountains (Figure 3). Only a small part of this area, the Berbáti valley to the north of Argos, has been recently
surveyed by a Swedish team (Figure 4; Appendix A-19; Wells [B.] 1996). This small
plain served the region as a passageway of communication to the Isthmos at Korinthos.

By contrast, the Akte, rather like an isle linked to the mainland, has received more
attention from survey teams. Although the Epidauria, the largest and most northern
territory of the Akte, has not (yet) been intensively surveyed, a major part of the second
largest Aktean territory, the Troizenia, has; a British team recently conducted an intensive
survey of the peninsula of Methana (Figure 5; Mee and Forbes [H.] 1997).

At the southern end of the Akte is another peninsula, the southern Argolid, barred to the
north by a large mountainous region (the Dhdhyma and Adheres ranges) from the Argive
plain, the Saronic gulf, and the gulf of Korinthos (Figure 6). This area, with its three
different topographical regions (the upland country, the central zone, and the
southernmost part), is the largest part of the Argolid to have been intensively (and
extensively) surveyed. A team of Americans has been publishing the final results of this
massive undertaking since 1987 (Runnels and van Andel 1987; Jameson, Runnels, and
van Andel 1994; Runnels, Pullen, and Langdon 1996; Munn [forthcoming]).

An Historical Perspective

From a historical perspective, too, the Argolid was separate politically and culturally from
the adjacent Akte, at least in the archaic period. We gather that Argos was the largest and
most prosperous community of either the Argeia or the Akte in archaic times (Appendix
A-10). The texts are unequivocal about Argive hostility to Sparta, beginning no later than
the expulsion of the Asinaians around 700, and continuing with Argos' defeat of Sparta at
Hysiai near the Argive border in 669-668 BCE (Appendix A-3; Foley 1988, 31, 166).
The Argive king, Pheidon, may have been responsible for many of these activities, but the
extent of his domain and his exact dates are uncertain (see Tomlinson 1972, 81-84; Kelly

The conflict with Sparta ended in the fifth century with the massacre of the Argives at
Sepeia around 499-494 BCE. This defeat allegedly wiped out the city's male population
and encouraged the serf, slave, or perioikic (neighbouring) population of the plain to
marry the wives of the deceased. Regardless of whether any truth lies behind these stories, the battle itself has interesting repercussions for the history of Argos in the early fifth century. The Argives used the defeat as an excuse to remain neutral (or perhaps pro-Persian) during the Persian wars (Hdt. 7.150, cf. 7.61.3). Meanwhile the city recovered from its losses and regained the strength to destroy its neighbours, Mykenai, Tiryns, and Midea, in the 460s. These conquests brought about a redistribution of land, a re-division of the citizen body, and a new political establishment -- democracy.

By contrast, the Akte had never been a centre of political or economic power. The region’s ‘modest resources and, even more, its limited access to inland Peloponnese have given it only minor roles in the history of Greece’ (Jameson, Runnels, and van Andel 1994, 14-15).

Previous Studies

In her work on the eighth and seventh century Argolid, Foley (1988) clearly emphasises the dichotomy existing between the Argeia and the Akte. Unfortunately, the results of systematic surveys were not fully available to her then, and her discussion of the Akte was necessarily based on the uneven quality of previous scholarship. Despite these limitations, her book has become an important reference for any study of the Argolid. Divided thematically and topographically, it focuses on settlement patterns, graves, pottery, metalwork, terracottas, seals, inscriptions, and sanctuaries of the eighth and seventh century Argolid (for a review, see Munn 1994; for an introduction to earlier periods, see Courbin 1966; 1974, Deshayes 1966, Hägg 1974; Runnels, Pullen, and Langdon 1995). The index of sites from neolithic to Roman times offers the reader a short introduction to, and a full bibliography of, about one hundred and twenty sites in the Argolid.

An equally vital site index for the southern Argolid can be found in Jameson, Runnels, and van Andel’s A Greek Countryside (1994), thus complementing and updating Foley’s site register. This survey of the southern Argolid is much more than a catalogue of sites, however. It covers a broad range of individual studies geared to understanding the ‘pattern of human settlement’ over the past 20,000 years and to reconstructing the ‘human
ecology' and cultural environment of the region (Jameson, Runnels, and van Andel 1994, 214-215). Rightly acclaimed as one of the most thoroughly documented and comprehensive regional surveys in Greece, it can be used as a springboard for many other studies of the (southern) Argolid. This publication, together with the Methana (Mee and Forbes [H.] 1997) and Berbati-Limnes (Wells [B.] 1996) surveys and earlier geological work in the Argolid (Lehmann 1937; Zangger 1993), should help to change the pace and focus of Argolic studies in the years to come.

A recent book by J. Hall (1997a) also touches on aspects of Argolic culture from a more fluid, regional standpoint. He draws on archaeological, historical, linguistic, and mythological data from the Argolid in his discussion of ethnic identity in Greek antiquity.

More conservative approaches to material culture have been published in a series of papers delivered in two recent conferences on Argos and the Argolid. The first, held at Fribourg (Piérart 1992), focuses on the geometric period, though a few archaeological contributions by Pariente (1992, 195-230), Kritzas (1992, 231-240), and des Courtils (1992, 241-251) deal with later material. The second series of papers (Actes de la table ronde, Athènes-Argos), published jointly by the French School at Athens and the Greek Ministry of Culture, focuses on the topography and urbanism of Argos from neolithic to modern times (Pariente and Touchais 1998). The articles on archaic material, however, are rather brief and merely descriptive (see Barakari-Gleni and Pariente 1998, 165-176; Pariente, Piérart, and Thalmann 1998, 211-225; Barakari-Gleni 1998, 271-280). Another recent publication by the French School, Argos. Une ville grecque de 6000 ans, serves as a good guide to the city's architecture and archaeological remains, but little else (Piérart and Touchais 1996; on the architecture of Argos, see Vollgraff 1956; Moretti 1993 [J.-C.]; Bommelaer and des Courtils 1994).

Two major historical works on the Argolid were written in the 1970s by Kelly and Tomlinson (see also Wörle 1964 for fifth century Argos). Kelly's A History of Argos to 500 B.C. (1976) is overall well documented, using some archaeological evidence to support its arguments (for a review, see des Places 1978, 352-353; Tomlinson 1978, 194; Cartledge 1978, 89-91). Unfortunately, the author is preoccupied with the problem of dating the (mythical) figure of Pheidon and the whole question of Asine's destruction in the eighth century. Tomlinson's Argos and the Argolid (1972) is a handy general study of
Argolic, or rather Argive, history, but archaeological references are few and far apart. The archaic period is summarised in a mere twenty pages.

Another Study of the Argolid?

On the whole it seems that much ground has been covered by others interested in the history and archaeology of the Argolid. To a greater or lesser degree, however, these studies reflect the concepts or misconceptions of their own time. This study is no different, because understanding the past depends, in part, on 'the personal interests and prejudices, and the cultural and even socio-economic background of the archaeologist' (Dyson 1993, 202). This is especially true of archaeological studies, whose authors essentially strive to collect all the available data, interrogate them in their overall context, look for general patterns, and try to make sense of them. The difficult task of bringing into meaningful relationship the data from different categories of evidence remains solely within the hands of one individual.

To this day, however, few individuals have attempted to publish studies treating archaeology as a basic source for archaic cultural history (cf. Jeffery 1976; Snodgrass 1980a; Boardman 1980; Dougherty and Kurke 1993; Mitchell and Rhodes 1997; Fisher and van Wees 1998). It is fair to say that the field of archaic Greek studies, in the context of analysis of archaeological data, remains relatively untrodden. This is particularly obvious for regions on the mainland outside Attica (Athens) and Laconia (Sparta). Whether it is from a lack of interest or from an unwillingness to deal with the scattered archaeological record of the archaic period, our knowledge of regions such as the archaic Argolid lags far behind. Although certain scholars, particularly Foley and Hall, have done a lot to clarify our overall understanding of the region in the eighth and seventh centuries (both works end at 600 BCE), nothing comparable has been attempted for the remainder of the archaic period. What needs to be examined is the nature of the archaeological evidence in its entirety for the sixth and early fifth centuries, and how it relates to questions of present interest for the region's history.
Filling in the Gap

This gap in the archaeological record for the archaic Argolid may at first sight seem surprising, given the general importance of the region and the large amount of excavations undertaken there over the last century. Excavators, however, have been mainly interested in bronze age remains and have published little archaic material systematically. Past publications of sites in the Argolid are read as dissected entities. They provide only a selective coverage of the finds, governed largely by considerations of artistic quality rather than by concern for the assemblages as a whole. Usually excavation reports fail to provide any information whatsoever on archaic material, or if do, they leave out vital contextual and chronological information. Hence the number of objects that are out of context and simply labelled archaic.

Following such a catalogue of deficiencies, it might be questioned whether the published evidence can be used to any serious effect. I believe that much can be done through synthesis of extant data, even if it is old or of less than ideal quality. In any case, all archaeological studies must eventually face the problem of a flawed database, because the archaeological record represents only what time and climate have spared from destruction. So, a preliminary step is to bring some order to the haphazard state of the published evidence, currently scattered over numerous excavation reports, by compiling a systematic database of all the material culture (including architecture) mentioned in publications to date. The outcome of this exercise is set out in Appendix A.

Such a systematic investigation of the evidence in its context should then allow for the identification of patterns of human behaviour and activities. From an archaeological perspective, we can only legitimately speak of behaviour and activities that leave at least some discernible trace in the material record. Many do not, because the archaeological record is an imperfect residue left behind by these activities (Morris [I] 1998, 9). The activities that do, however, can be used to reconstruct vivid images of how the ancient Greeks lived.

Leaving aside eating, sleeping, and communicating verbally, perhaps the most important activities were related to subsistence, for example, farming, tending animals, or fishing.
The religious domain was no less important, however, and worshipping, burying the dead, or participating in festivals and games formed an essential part of ancient Greek life. Another activity that we only begin to trace archaeologically in the archaic period is writing. With the introduction of the alphabet in the eighth century, reading and writing were becoming, for some, routine activities.

This study of human activities is arranged in chapters, each devoted to a specific aspect of the archaeological record. The first is a study of the inscriptive evidence, attempting to monitor, through writing, the impact of literacy upon Argolic society. The second chapter deals primarily with survey evidence. Greeks exploited the natural landscape in a variety of ways, which invite discussions about settlement patterns, land-use, land ownership, systems of labour, status of workers, availability of land and sea resources, and the like. The third chapter on religion gives priority to excavation material, since most archaic artifacts come from religious contexts. Worshipping presents so many ambiguities and difficulties, however, that inscriptive evidence also needs to be considered in this discussion. Moreover, throughout this study the literary record is used 'to constrain the somewhat endless interpretative possibilities which the artefacts present' (Morris [I.] 1998, 6).
Chapter I

The Uses of Writing and Literacy

He would stab his best friend for the sake of writing an epigram on his tombstone.

Oscar Wilde, Vera or The Nihilists.

The social anthropologist begins by learning the language of the society that s/he is studying, trying to see the world as his or her informants perceive it, through direct verbal testimony (Renfrew 1984, 31). The social archaeologist, however, has no such recourse, and the closest one can come to this kind of study is by examining the small body of inscriptive evidence that has survived in the archaeological record. It provides the only direct evidence of ancient writing and language, and thus the first step toward perceiving the ancient world as it may have been perceived by its inhabitants. Here, I emphasise ‘first step’, because the extant inscriptions on stone, metal, and clay are only the exceptions that have survived almost infinitely better than other more perishable substances.

The ‘second step’, then, would be to recognise the potential use of perishable writing materials. Unfortunately, previous studies on the uses of the alphabet and, to some extent, on ancient literacy have ignored this approach, insisting that we cannot assess the quantitative importance of organic materials. Thus, the present view of early writing and ancient literacy is biased and has led to assumptions that writing in archaic Greece was mainly used for public, ceremonial display rather than for utilitarian purposes.

In an attempt to remedy this situation, I begin by asking how the use of perishable materials can influence our perceptions of the role of early writing. The first section of this chapter examines the indirect evidence for perishable materials, and the possibility that they were used extensively for early Greek writing. By showing how other, less permanent, vehicles for writing did exist in Greece, I shall be in a better position to
discuss the potential uses of perishable writing materials in utilitarian contexts. This has serious implications for the ideas presented in Part II of this chapter.

In this section I build on Whitley’s (Stoddart and Whitley 1988, 761-772; Whitley 1997, 635-661; 1998, 311-331) studies of regional variations in the uses of the Greek alphabet in Attica, Krete, and Sparta, for they comprise the main research dealing specifically with literacy in the archaic period. Unfortunately, however, his studies ignore the possibility that many texts were written on perishable materials and therefore they need to be re-evaluated according to the realities of archaeological preservation and survival.

When we ask what kinds of literacy existed in archaic Greece and what areas of society were literate within a single community, we are told that at least three distinct areas of Greek society practiced writing: scribes, artists, and (a few male) citizens. Whitley argues that in Attica ‘informal’ literacy was widespread among artists and citizens, but that in Krete few were literate because writing was in the hands of scribal class. Both arguments are extreme and misdirected.

I begin by challenging Whitley’s view that the invention of the alphabet placed writing firmly within reach of the common Greek (in Attica). Even reading was a highly valued skill in archaic Athens (Hedrick 1994, 162-164). Scholars find it hard to conceive of archaic Greece as an alphabetic culture that retained the need for ‘scribal’ literacy, but as Whitley has shown for Krete, ‘scribal’ literacy prevailed at this time. Krete, however, was far from being unique in having ‘scribal’ literacy. Scribes were at work in the wider world of archaic Greece, and Krete is where we find the best-preserved examples of these processes. Scribes all over Greece probably made extensive use of perishable materials in their daily writings, but of course no evidence of this survives in the archaeological record.

Some might say that a city such as Athens (or Sparta) was in many respects exceptional and that, taken in isolation, is unrepresentative of the cultural and historical environment of archaic Greece. In part this is why, in the last section of this chapter, I turn to the Argolid as another test case. By studying the inscriptions of the archaic Argolid in the light of what is known (and inferred) about Attica, Krete, and Sparta and about ancient
literacy in general, we learn a lot about the workings of a society whose members may have used writing in their private and public dealings with each other.
I.1. Direct and Indirect Evidence for the Early Uses of Writing

I.1.1. INTRODUCTION

In examining the uses of the Greek alphabet we are faced with icebergs: only one-eighth or less of this ice peak is visible to the sailor (Millard 1991, 110). The evidence we tend to recover from the archaeological record is what emerges on inscribed stone, metal, and clay. So it is easy to assume that what we find more or less corresponds to the situation in antiquity; yet inscriptions on stone, metal, or pottery are exceptions rather than the rule (Cornell 1991, 23; Millard 1991, 110). ‘Because of the differential preservation of writing media, ... texts written on [these] durable substances, dominate in the archaeological record, giving us a biased picture of the uses of early writing’ (Postgate [N.], Wang, and Wilkinson 1995, 479). This has led to assumptions that writing in archaic Greece was principally used for religious, ceremonial, and monumental display, and that the Greeks did not initially exploit the potential of writing for administrative and social purposes (Thomas [R.] 1994, 34; Steiner 1994, 76).

In examining the uses of the alphabet we need to consider what is absent (Millard 1991, 110). By looking at Greek literary and pictorial sources, we shall see that the Greeks also wrote on perishable materials such as papyrus, leather, wood, and particularly wax tablets in archaic times (Jeffery 1990, 51; Thomas [R.] 1992, 57). These materials (together with cloth, bark, and palm and other leaves) happened to be more convenient to store than were stone, metal, and clay (pots) and were reusable. Hence, we expect them to serve utilitarian purposes for writing everyday administrative and commercial documents (Postgate [N.], Wang, and Wilkinson 1995, 477-499).

If these ideas hold good for the role of early writing in Greece, they will have a significant impact on our understanding of the uses of writing and, to some extent, of literacy in the archaic period. I begin by looking at evidence from the predecessors of the alphabetic system, since the alphabet was most likely learnt from Phoenicians writing on
wax tablets (Jeffery 1982, 823). I shall then be in a better position to discuss the possibility of perishable materials being used extensively for early Greek writing. This information will serve as groundwork for the next section of this chapter, which deals with the subject of regional variations in the uses of the Greek alphabet. It is from this perspective that I intend to monitor the impact of writing upon Argolic society.

I.1.2. REVIEW OF PUBLISHED WORKS

A whole stream of research has been devoted to determining how, when, and to what degree writing became established in Greek culture (Svenbro 1988a, 1). Surprisingly, few works deal with the uses to which the alphabet was put in specific regions of Greece. I know of only three articles that have taken up the subject of regional variations in the uses of the Greek alphabet: Stoddart and Whitley’s ‘The Social Context of Literacy in Archaic Greece and Etruria.’ (1988); Palaima’s ‘The Advent of the Greek Alphabet on Cyprus: A Competition of Scripts.’ (1991); and more recently Whitley’s ‘Cretan Laws and Cretan Literacy’ (1997). Although R. Thomas’ books, Oral Tradition and Written Record in Classical Athens (1989) and Literacy and Orality in Ancient Greece (1992), also examine the uses of writing, they deal mainly with classical Athens. Other more general studies focusing on archaic literacy rather than on the uses of the alphabet include Cartledge’s (1978) article and Boring’s (1979) book on Sparta, and Harvey’s (1966) article on Athens.

Much more attention has been devoted to the earliest uses of the alphabet, and less to its later applications. For the early uses of writing in Greece one must read Johnston, ‘The Extent and Use of Literacy: The Archaeological Evidence’ (1983) and Lang, ‘The Alphabetic Impact on Archaic Greece’ (1991), who compares Greek to early Phoenician uses of writing. Useful for a consideration of the early uses of writing in the Near East is Millard’s article on ‘The Uses of the Early Alphabet’ (1991). Though it deals mainly with the alphabets of the Levant, it concludes with some relevant remarks about Phoenicians and Greeks. In addition to Millard’s work, Postgate [N.], Wang, and Wilkinson’s article, ‘The Evidence for Early Writing: Utilitarian or Ceremonial?’ (1995) provides a good overview of bronze age writing in Mesopotamia, Egypt, China, and
Mesoamerica and its role in utilitarian contexts. Some of their ideas, however, are challenged by Wilkins (1996b).

More general works on the subject of literacy include Havelock’s well known Preface to Plato (1963) and Prologue to Greek Literacy (1971), W. Harris’ Ancient Literacy (1989), Robb’s Literacy and the Paideia in Ancient Greece (1994), and of course Goody’s studies on literacy (1963; 1977; 1986; 1987). A different, more fluid approach to literacy is found in the works of Svenbro (1988a) and Steiner (1994), and in the papers found in Detienne’s, Les Savoirs de l’écriture. En Grèce ancienne (1988).

For the study of Argolic epigraphy, the following standard sources should be consulted: Supplementum Epigraphicum Graecum (hereafter SEG), L’Année philologique and L’Année épigraphique, and Jeffery’s The Local Scripts of Archaic Greece (1961), revised, with a supplement by Johnston, in 1990. Also Foley’s (1988) study of the Argolid and J. Hall’s Ethnic Identity in Greek Antiquity (1997a) further emphasise the dichotomy between the Argive plain and the Akte through inscriptions and script.

I.1.3. KNOWN USES OF THE GREEK ALPHABET. THE DURABLE MATERIALS

Since we can read Greek, we can come near to deciphering the meanings of inscriptions and some rules that standardise their use (Stoddart and Whitley 1988, 763). Studies in the uses of writing have grouped extant inscriptions by type according to their subject matter (Stoddart and Whitley 1988, 761-772; Palaima 1991, 455ff.; Whitley 1997, 635-661). Following by and large the descriptions in the standard publications, they came up with six different categories, which I define briefly as follows:

- legal texts, including law codes (sacred and secular), decrees, lists (of official names, casualties, finances, armour, etc.) records (of public works, treasure), boundary markers, and other public documents, carved on stone or engraved in metal by a professional mason or smith;
- inscribed gravestones, carved on stone probably by a professional mason (cf. Viviers 1992);
- dedicatory inscriptions, carved on stone or metal by a professional mason or smith;
- dipinti, painted on pottery by a professional pot painter before the pot was fired;
dedicatory graffiti, scratched on pottery, either by the dedicator or by a professional, to designate an object as a votive offering; onomastic graffiti, scratched on pottery (sometimes on stone) either by the person who wrote his/her own name or by a professional.

The earliest alphabetic inscriptions do not predate the eighth century. During the eighth and early seventh century some individuals wrote graffiti or dipinti on pottery. We find the names of owners' names scratched on pots and graffiti marking the contents of vessels (Johnston 1983, 65-67; Jeffery 1990, 427). From about 700 BCE we also find labelled offerings to the divinities, messages, abecedaria, love/hate names, and boasts that so-and-so could write. Some Greeks also chose to write longer inscriptions, as long as a few lines, usually in verse (Robb 1994, 44). Later on, vase painters also wrote names, often their own names as signatures or the names of mythological figures that were painted on pots before firing took place. These we call dipinti.

We know of a few early formal texts from Greece. Many of the early surviving formal inscriptions on stone include legal texts (especially sacred laws) and funerary monuments. The first appearance of public legal texts comes from seventh century Krete: the so-called laws on stone blocks from Dreros (Jeffery 1990, 315; Whitley 1997, 635-661; 1998, 311-331). A few marked tombstones appear in the first half of the seventh century (Thomas [R.] 1992, 59).

I.1.4. KNOWN USES OF PHOENICIAN AND KYPRIOT WRITING SYSTEMS. A COMPARISON

I.1.4.a. The Date and Place of Transmission of the Alphabet

Although considerable controversy exists over the exact place and date of transmission of the alphabet (for a detailed review of the contrasting position, see Bernal 1990, Iff.; Jeffery 1990, 1-42, 425-428; more recently, Woodard 1997), many scholars assume that at some point in the eighth century the Greeks learnt to write from the Phoenicians (the Osteria dell' Osa graffito is of c. 775; Hdt. 5.57-58.2; Jeffery 1982, 823; 1990, 3ff.; Thomas [R.] 1992, 54, 56). It is generally agreed that the alphabet was transmitted in one place only, though the place of transmission is disputed (Jeffery 1990, 6).

Guarducci (1987, 18) favours Krete, because its alphabet shows some similarities with the Phoenician script, because Krete had close links with Phoenicia, and because it had the
added advantage of being in a good position to transmit the alphabet to the rest of Greece. Jeffery (1990) disagrees with this theory and believes that Krete must have derived its alphabet from the commercial city of Al Mina in Syria. Alternatively, Johnston (1983, 63-68) suggests Kypros as a strong candidate for the place of transmission of the alphabet. A more recent study supports the idea that the Greek adapters of the Phoenician script must have been Kypriot scribes accustomed to writing with the syllabic Kypriot script (Woodard 1997).

If the adaptation of the Phoenician script for Greek use was the work of Kypriot scribes, it is inherently probable that the Greeks were influenced by both a Phoenician and a Kypriot tradition. This brings us to consider whether they used the alphabetic script 'for all of the various purposes for which the [Kypriot] syllabic ... [and Phoenician scripts were] used' (Woodard 1997, 256).

First we turn to Phoenicia.

### I.1.4.b. Known Uses of Writing in Phoenicia

Though royal and formal texts of various types have been found in Phoenicia between 1200 and 900 BCE, so far no ostraka, graffiti, or seals come from this period (Millard 1991, 106). After a gap of about one hundred years, inscriptions re-emerge, taking the form of graffiti, formal and 'occasional' inscriptions, and seals (Millard 1991, 106).

At this time it was common to write graffiti on pots, usually notes of content or of purpose, or owners' names. Lang (1991, 66ff.), who compares some of the early Greek graffiti with documents typical of what the Phoenicians were writing in the tenth and ninth centuries, maintains that the two societies share a similar assertiveness and interest in creating documents of permanence (Figure 7).

Although we find few monumental inscriptions in Phoenician from the homeland until Persian times, we know of some 'colonial' Phoenician inscriptions from the eighth century (Robb 1994, 282 n4; McCarter 1975). A similar concern with establishing a record of permanence appears in these short formal texts (Lang 1991, 7; Millard 1991, 105).
Seals with inscribed legends of owner's or maker's marks begin to be written in the eighth century. Almost all published Phoenician seals have motifs, which express identity (Millard 1991, 105-106). We find the same thing happening in Greece, where seal designs of the geometric and archaic periods usually appear without inscriptions but are nonetheless identifiable by their personal blazons (Boardman 1970, 158). One of the few inscribed examples that has survived from mainland Greece (Gythion ?) was cut about the mid-sixth century, declaring ownership; the name is set in two lines, as on the earlier Phoenician stones and in Aramaic and Hebrew glyptic (Figure 8; New York 32: Boardman 1970, 141; Millard 1991, 111). It seems likely that the Greeks learned the art of seal carving from the Kypriots (and the Ionians), who in turn were influenced by the Phoenicians (see Richter 1968, 45; Boardman 1970, 140-141; Reyes 1994).

I.1.4.c. Known Uses of Writing in Kypros

When we look at the inscriptional evidence from Kypros, a slightly different picture emerges. The earliest Kypriot syllabic text has been found on one of three inscribed obeloi (roasting spits) in an early Kypriot Geometric I (c. 1050-950 BCE) tomb at Palaepaphos-Skales; other written signs have been identified in the dromoi of two tombs and on a bronze cup (Masson [E.] and Masson [O.] 1983, 411-415; Palaima 1991, 451). As Palaima (1991, 452) points out, these finds substantiate the idea of a transitional stage between the bronze age Kypro-Minoan writing and the Kypriot syllabary. This material also indicates that a predecessor of the historical Kypriot syllabic may have been in use at an earlier date than the canonical date of about 825-775 for the introduction of the Greek alphabet.

The next relatively securely dated and identified inscriptions in Kypriot syllabic are vase inscriptions (graffiti and dipinti), dedications, funerary inscriptions, seals, and clay tablets of the eighth to sixth centuries. One of the earliest inscriptions is on jug (Kypriot Geometric III style) from Polis, with five (non-alphabetic) signs painted on it before it was fired (Karageorghis and Karageorghis 1965, 351-359). In the seventh century we find several graffiti, ownership inscriptions on metal vases, dipinti, and seals (Palaima 1991, 470-471).
The absence of public legal texts in archaic Kypros is odd when compared to the regular use of the Greek alphabet for such documents in Greece, especially in Krete, where the amount of legal texts is exceptional (Palaima 1991, 465).

The common use of Kypriot syllabic script on seals and rings also seems peculiar in comparison with the use of Greek alphabetic writing on archaic seals elsewhere in the east Mediterranean, and deserves further attention. According to Palaima (1991, 456-457), almost all the inscribed seals (seventh-fifth century) have Kypriot syllabic script, though one is Eteocypriot, two are Phoenician, and three are in Greek alphabetic script. In his view the high proportion of Kypriot syllabic texts indicates a clear penchant for the island's 'national' script by the Greek-speaking population of the archaic period.

Another oddity of Kypriot writing has been noted by Palaima (1991, 457-458). It concerns the use of clay tablets, restricted as far as we can tell to Kypriot syllabic writing. The three examples so far discovered deal with cult regulations and accounting. Another tablet, not of clay but of limestone, lists numerals.

1.1.5. THE USE OF PERISHABLE WRITING MATERIALS IN NON-GREEK SOCIETIES

If the Greeks used the alphabet to do what the Hebrews, the Phoenicians, and the Kypriots had done with their letters for generations, they perhaps also adopted some of the materials upon which these people wrote. Besides stone, metal, and clay, these cultures also used perishable materials for writing.

Some scholars believe that the (Kypriot) Greeks learned to write from Phoenicians writing on wax-tablets (Braun 1982, 28; Jeffery 1982, 823). Although we have no surviving wax-tablets from Phoenicia, the fact that they were repeatedly used among Aramaic scribes suggests that the Phoenicians had them too (Millard 1991, 112). Such writing-boards have a long tradition of use in the Near East (Shear [M. I.] 1998, 187-189). The late bronze age shipwreck at Ulu Burun, off the coast of Turkey, provides us with the earliest extant example (Bass 1986, 269-296; 1990, 169; Bass and Pulak 1987, 321; Bass et al. 1989, 10-11). The small, ivory-hinged, wooden board was instantly identified as a writing-board. Mention of the wooden writing-board is made in Babylonian tablets from the late third and early second millennia, indicating that it was a well-established writing material (Millard 1991, 113).
Another popular writing material was papyrus. We know from the literary sources and from seals or clay bullae (impressions made by seals, once attached to papyrus rolls) that the Phoenicians wrote on papyri (Millard 1991, 112). The first clear clue that the use of papyrus had stretched beyond the borders of Egypt appears in a text of c. 1100 BCE, generally known as ‘The Voyage of Wen-Amon’, who travelled from Egypt to Phoenicia taking with him, *inter alia*, five hundred rolls of fine papyrus (Driver 1965, 82; Lewis [N.] 1974, 84). The biblical texts (*Jeremiah* 36.29-32) are also revealing: they speak of written messages exchanged between kings, and from courts to local officials, thus implying the existence of writing on papyrus (Millard 1991, 110). Moreover, we have tangible witnesses to the papyri that have perished -- the clay bullae.

If the Phoenicians wrote on leather, the same argument applies. The Egyptians used leather scrolls on a daily basis; they were probably cleaned for repeated reuse (Millard 1991, 112). Undoubtedly, the Phoenicians used them as well.

Woodard (1997, 256) maintains that the Kypriot scribes had at different times written verses in syllabic script on perishable materials. They may have also recorded legal documents on less permanent materials such as wood, bronze, or even clay (Palaima 1991, 466).

**I.1.6. EVIDENCE FOR THE USE OF PERISHABLE WRITING MATERIALS IN GREECE**

From what we have seen of Phoenician (and Kypriot) writing habits, we gather that organic writing materials were readily and widely used in these lands. Now the question remains: did the Greeks adopt some of the materials upon which these people wrote? The answer is inevitably rather speculative, but the literary and pictorial sources, supplemented by archaeology, point a way forward.

**I.1.6.a. Writing-Tablets**

We first encounter the word for writing-tablets (*pinakes*) in Homer’s story (*II. 6.168-169*) of the letter that King Proitos, king of Tiryns, sent with Bellerophon, who carried to Lycia a coded message ordering the messenger’s death sentence (see Bellamy 1989, 289-307).
To slay him he [Proitos] forebore, for his soul had awe of that; but he sent him [Bellerophon] to Lycia, and gave him mournful signs, engraved in a folded tablet (grapsas en pinaki ptykto) many deadly things, and bade him show these to his own father-in-law [Iobates], that he might be slain (II. 6.168-169, adapted from the Loeb translation, Murray 1937; for the Greek, see Appendix D, Text 1).

The tablet (here a pinax, an equivalent to deltos) was folded and no doubt sealed, to prevent Bellerophon from deciphering its (non-alphabetic ?) signs (Schmidt 1920, 58; Einarson 1967, 13). It was probably made of wood or some other perishable material. Whether it was covered with wax, as in later examples (Hdt. 7.239, 8.135), remains open to question.

Another early clue to the use of writing-tablets in Greece comes from an archaeological context; it is the eighth or early seventh century ivory writing-board from a grave in Marsiliana d’Albegna in north Etruria (Figure 9; Florence, Museo Archeologico: Diringer 1963, 273; Jeffery 1984, 377-378; 1990, 236f.; Millard 1991, 112-113). This type of tablet was originally hollowed out in the centre and filled with wax, where letters were engraved in the wax with a stylus (of bone, metal, or wood). Although all the wax has vanished, some writing was incised retrograde on the ivory edge of the tablet. On it we can see twenty-two north-west Semitic letters together with the Greek letters Y, X, Φ, Ψ, supporting the view that the Etruscans adopted a Greek alphabet perhaps from Euboia, to judge from its letter-forms (Diringer 1963, 273; Jeffery 1984, 377). The implication is that the Greeks already used writing-tablets before the alphabet was passed on to Marsiliana sometime in the late eighth or early seventh century.

Apart from the Marsiliana tablet and the reference in Homer, I know of no other early evidence for the use of writing-tablets at a time when the Greeks were learning the alphabet. However, a careful inspection of some of those ‘items of unknown purpose’ from geometric and archaic sites in Greece may reveal some ivory, bone, or bronze pieces that will turn out to be either from writing-tablets, or even perhaps from styli (Postgate [N.], Wang, and Wilkinson 1995, 476). Such was the case after they found the Ulu Burun tablet; when additional hinges from the Near East and the Greek mainland, whose significance had previously mystified archaeologists, were identified as such, the
extensive use of writing-tablets was eventually acknowledged (Payton 1991, 99-106; Shear Mylonas 1998, 187).

The earliest representation of a writing-board known to me dates to the end of the sixth century (Figure 10; Belgium, Musées royaux d'art et d'histoire A1013A: Bioul 1989, no. 5). The scene, on a black figure fragment, depicts a boy, most likely a student, sitting on a stool with a wax-tablet on his lap and a stylus in his right hand. Another figure stands in front of him holding a baton; this must be the schoolmaster. The idea that students learned how to read and write with wax-tablets in the sixth century further supports the view that the writing-tablet was a medium used for teaching the alphabet, perhaps since the days of its Phoenician transmission.

Another early representation (c. 520 BCE) of writing-boards can be seen resting on the laps of seated marble scribes from the Athenian akropolis (Figure 11; Athens, Akropolis Mus. 114: Payne [H.] 1950, 47, 74; Trianti 1998, 29-33). A similar scribe appears in the form of a clay figurine (c. 500 BCE) from a tomb in Thebes (Figure 12; Paris, Louvre B114: Mollard-Besques 1954, 20, pl. 15). This so-called seated scribe holds a stylus and a red diptych tablet bordered in yellow. The letters engraved on the tablet remain impressed in the clay.

Writing-tablets continued to be used throughout the fifth century, for we find an increasing amount of pictorial and literary references to them (Immerwahr 1964, 18ff.). The theme of the seated student or trainer writing with stylus and tablet occasionally fills out the tondo of early fifth century red figure cups: for example, one from Italy by Onesimos depicts a trainer with stylus (Figure 13; Berlin, Staatliche Mus. inv. 3139: ARV 321 no. 23; Immerwahr 1964, 19; Boardman 1975, fig. 235), and another in the Philadelphia University Museum (4842) shows a seated young man with tablet and stylus (ARV 231; Immerwahr 1964, 17-48). One early fifth century red figure cup (by Douris) from Cerveteri depicts a young student holding a wax-tablet on one side and a bearded man (trainer ?) holding a papyrus roll on the reverse (Figure 14; Berlin, Staatliche Mus. inv. 2385: ARV 431 no. 48; Daremberg and Saglio 1892, 468; Immerwahr 1964, 19; Boardman 1975, fig. 289).
These scenes serve as a reminder that organic materials were used on an 'everyday' basis, in environments where the alphabet was being taught to young men (perhaps as many as one hundred and twenty per school, based on Herodotos' (6.27) story of the boys who escaped the collapsing roof in a Khiot school) at least as early as the fifth century. The alphabet was also taught to young women, as a fifth century female figurine holding a tablet on her lap testifies (Athens, NAM 12706). Immerwahr (1964, 27) believes that women may have learned how to write at home, since we have no direct evidence for girls' schools (see also Guettel Cole 1981, 219-245).

In the written sources of this period writing-tablets appear in the form of (military) messages and state records. Herodotos (7.239) uses the word ἄξιος when Demaratos (c. 515-491 BCE), Ariston's son, sends a message to the Spartans: he 'took a double tablet, scraped away the wax, and then wrote Xerxes' intention to march into Greece on the wood ...' (Adapted from Loeb translation, Godley 1928). Later on in his Histories Herodotos (8.135) refers to Thebans writing on tablets for the city.

When a man called Mys entered into the temple, three men of the town following him that were chosen on the state's behalf to write down the oracles that should be given (ἀπὸ τοῦ κοινοῦ ἡς ἀπογραψομένου τὰ ἀποσπεῖειν εἰμέλλει), straightaway the diviner prophesied in a foreign tongue. The Thebans that followed him were astonished to hear a strange language instead of Greek, and knew not what this present matter might be; but Mys of Europus snatched from them the tablet (δελτόν) that they carried and wrote on it that which was spoken by the prophet, saying that the words of the oracle were Carian; ... (Adapted from Loeb translation, Godley 1930; for the Greek, see Appendix D, Text 2).

I.1.6.b. Papyrus

In antiquity papyrus grew almost exclusively in Egypt. The early stages of the introduction of papyrus to the Greek world are inferred from depictions of papyrus plants on Minoan pots, although we have no evidence that Minoan Krete ever had papyrus, much less wrote on it.

From a reference to papyrus rope in Homer (Od. 21.390-391) we know that this world knew something of Egypt and had either seen or heard of papyrus (Lewis [N.] 1974, 85). 'Now there lay beneath the portico the cable of a curved ship, made of bublos [papyrus]
plant, wherewith he made fast the gates, and then he himself went within.' (Adapted from Loeb translation, Murray 1942; for the Greek, see Appendix D, Text 3). Papyrus rope is also mentioned by Herodotos (7.25): Xerxes charged both the Phoenicians and the Egyptians with the making of the ropes of papyrus and linen for his bridge over the Hellespont.

It is likely that papyrus products entered Greece early, perhaps in the bronze age, but it remains uncertain when the Greeks got to know papyrus as a writing material. Some maintain that the Greeks knew nothing of papyrus rolls until they set up trading contacts with Egypt, either during the rule of Psammetikhos I (c. 664-610 BCE), or when the Greek merchants were able to establish a commercial centre of their own in the Nile delta (c. 615-600 BCE), the city of Naukratis (Austin 1970, 20ff.).

Phoenician traders visited the settlements of Greek traders in the (papyrus-using) Levant from in the late ninth or early eighth century (Lewis [N.] 1974, 85). Therefore, some have maintained that the Greeks came into contact with papyrus through a Phoenician intermediary rather than through Egypt (Austin 1970, 36). Those who make this assumption support it with the Greek name for papyrus, bublos or bublion (biblion), also the Greek name for the Phoenician port of Gebal (Jeffery 1990, 56). As Jeffery concludes, the derivation of bublos from the city of Byblos points to Phoenicia as the original source for papyrus. Even though this view has been challenged on philological grounds, for possibly the Greeks actually gave Byblos its name from the material and not vice versa (Masson [E.] 1967), the likelihood of a Phoenician intermediary remains strong.

Certainly, the Phoenician scribes made use of papyrus rolls (see above), and we suppose that along with the alphabet the Greeks obtained from the Phoenicians the materials upon which to write (Austin 1970, 36; Jeffery 1990, 56; cf. Page 1964, 163). By the early sixth century, when clearly the Greeks began trading directly with Egypt, there is no doubt that papyrus was being used by the Greeks (Austin 1970, 36; Lewis [N.] 1974, 87; Jeffery 1990, 56). An interesting remark in support of a sixth century date is Herodotos' (5.58) declaration that during his time (i.e. early fifth century) the Ionians still called papyrus rolls 'skins'. Such a remark would be pointless, if papyrus had just then begun to be used for writing (Lewis [N.] 1974, 88).
We also have pictorial examples of papyrus rolls depicted on Greek vases and on figurines from the sixth century onwards (see Walters 1903, 51; Birt 1907, 158-159; Immerwahr 1964, 18ff.; Robb 1994, 186). For the most part they resemble the previous scenes with writing-tablets (for more examples, see Immerwahr 1964, 17-48). We see tutors using papyrus rolls for dictation (Immerwahr 1964, 20). One example of a school scene painted on a red figure sherd by Onesimos (Figure 15; ARV 222 no. 55; Oxford G 138, Immerwahr 1964, 19) actually shows boustrophedon writing on the papyrus roll. According to Jeffery (1990, 76), this style of writing was perhaps a deliberate attempt to show the antiquity of the roll.

The use of papyri in non-public contexts is known only from a late source (Athenaeus, Deipnosophistai 1.3a, AD 200). Athenaeus writes about the fashion of ‘sovereigns’ who collect books (and oracles on papyrus rolls), and traces it back to two tyrants of the sixth century, Polykrates of Samos and Peisistratos of Athens (Lewis [N.] 1974, 88). It is also said that Solon, a poet and a scholar himself, had collected a ‘library’. Although we imagine that it might be easy for a tyrant to found a ‘library’ in Samos, where contact with merchants who used papyrus was closer than it was on mainland Greece (Jeffery 1990, 331), we must beware of interpreting these late reports too literally. Unfortunately, the earliest known Greek papyrus that was probably used in a private context, because it was discovered along with personal goods in an Athenian tomb (dubbed the poet’s tomb), dates to no earlier than the (? second half of the) fifth century (Catling 1982, 11; Cockle 1983, 147; Immerwahr 1990, 171 n1; Parkinson and Quirke 1995, 65-66). We may never know its contents; the papyrus itself is badly preserved and remains unpublished.

I.1.6.c. Leather

The Greeks most likely derived the usage of leather for writing from the Phoenicians (Hdt. 5.58; Jeffery 1990, 58). ‘It cannot have been a cheap product, for ... the process of preparing it [the skin] ... was laborious, and the hides of sacrificed animals usually went to the temple officials, who were not to resell at a loss’ (Jeffery 1990, 58). A leather scroll was reusable, however; the ink just needed to be wiped off or perhaps ‘washed out’ (Jeffery 1990, 58).
Herodotos (5.58), in telling how the Ionian Greeks became acquainted with Phoenician writing and learning, remarks: ‘And so in the old days, for lack of papyrus, the Ionians called papyrus-sheets skins and used to employ the skins of goats and sheep; and even to this day there are many foreigners who write on such skins.’ (Adapted from Loeb translation, Godley 1928; for the Greek, see Appendix D, Text 4). He fails to suggest a date for the prevalence of this practice; but Jeffery (1990, 57) finds two clues in other sources that offer some help. The first has to do with the relation between leather and the character of eastern Ionic lettering in sixth century stone inscriptions from Samos, Miletos and Khios.

Compared with the contemporary lettering of mainland Greece it is small, hasty and often untidy ... The Ionic script approximates to a cursive script; and it may be inferred that this as not due to chance, but that in Ionia the practice of writing on διφύζεαι [skins] had become sufficiently common for the contemporary cursive hand to influence the formal lettering of the masons ... the practice of writing on διφύζεαι was well established by c. 575 (Jeffery 1990, 57).

The second clue appears in a fragment from Pindar (c. 518-434 BCE). In his Olympian Ode 6, 154 Pindar calls the leader of his chorus skytala Moisan (σκυταλή of the Muses). The use of skytale, best known as a method of sending dispatches within Spartan military ranks (Plutarch, Lycurgus 19; Aul. Gellius 17.9; cf. Thuc. 1.131.1; Xenophon, Hellenica 3.3.8; Diehl 1952, 36, F 81; Page 1964, 136; Jeffery 1990, 58), has been argued to be highly unlikely (Hornblower 1996, 1415).

When Euripides (c. 485-406 BCE) wants to make Apollo's oracles at Delphi seem older, from antiquity, he writes of 'ink-dripped skins' (διφύζεαι μελαγγαφέζε, Nauck 1964, 556, F 627), thus reflecting the primitive associations that the leather roll had for the Greeks of the classical age and indicating that it was used beyond Ionia (Jeffery 1990, 58). It is worth noting here that Amandry (1950, 149ff.) believes the Delphic oracles to have been recorded not on leather but on wax-tablets.

There is also reference to written διφύζεαι in a sixth century lead letter from Olbia (Vinogradov 1981).
I.1.6.d. Wood

Wood served the Mediterranean world for documents and letters from an early date. Pliny (NH 13.88) draws attention to the implication of its use in Homer's time (ll. 6.168f.--Proteus' letter to Bellerophon on a tablet no doubt made of wood).

In the early archaic period the Greeks used wood for 'their cult-statues and the structural parts of their buildings [see Paus. 2.19.3], before they mastered the art of carving in stone on a monumental scale ...' (Jeffery 1990, 51). For all we know, wood may have been used as extensively as stone for writing, since the literary sources (West 1972, 141-142, F 36.18-20; Paus. 1.18.3; Plutarch, Solon 25) inform us that Solon's laws were painted on a set of wooden axones, later to be replaced by stone or bronze (for a discussion of axones, see below; Thomas [R.] 1992, 83). Axones were probably squared wooden logs that were inscribed along their length (Jeffery 1990, 52).

Wood was used for many public documents of the archaic period (Jeffery 1990, 51). Painted wooden boards, called leukomata, occur in connection with the first Homeric hymns that were kept on Delos (Thomas [R.] 1992, 83). We find further evidence for the use of wood by the city-state in a late fifth-century (408-407 BCE) inscription recording expenditures for the construction of the Erechtheion on the Athenian akropolis (IG I3 476, line 291). It mentions the payment of four drachmas for four wooden tablets or boards (sanides), on which were written temporary, presumably daily records (Lewis [N.] 1974, 73). A late source (Diod. Sic. 9.27.4) informs us that painted wood was also used for the early laws of Mytilene. According to a saying by Pittakos (c. 560-570 BCE), 'the strongest rule was that of the 'painted wood', ... that is, the Laws' (Jeffery 1990, 52).

Some have even suggested that dipinti emerged from the earlier use of painted letters on wood and leather (Várhelyi 1996, 37).
1.1.7. POTENTIAL USES OF THE GREEK ALPHABET. THE PERISHABLE MATERIALS

1.1.7.a. What We Would Expect to Find on Perishable Materials

In all these ways we have seen that other, less permanent, vehicles for writing did exist in Greece. The literary and pictorial evidence provide us with some clues of what we would expect to find on organic writing materials in Athens, Mytilene, Thebes, Delphi, Sparta, Ionia, and Delos. We are told, for example, that Solon and perhaps Pittakos inscribed laws on wood, that the Athenians kept records of works done at the Erechtheion on wooden tablets, that the Thebans recorded oracles on writing-tablets, and that the priests at Delphi probably recorded Apollo's oracles on leather scrolls. These references support what we already know: that perishable materials were used for writing the same kinds of texts that we find on durable materials. The implication here is that the absence of one type of inscription (say, laws on stone) in a specific setting or region could just mean that an organic medium (such as wood) was used instead of a durable substance for the same purpose. I shall pursue this point in the next section of this chapter, where I examine regional variations in the uses of the Greek alphabet.

If the Greeks used perishable materials for writing the same kinds of texts (legal texts, records of work, oracles) that we find on durable materials, they used them instead of, or in conjunction with, stone, metal, and clay. This leads us to question whether stone and metal inscriptions were permanent copies of original documents (Immerwahr 1985, 129). If people felt a need to transcribe original documents in a permanent medium, this would entail that the originals be written on less permanent, more portable, substances, such as papyrus, leather, or some other organic substances (Boring 1979, 34 and n24). Thus, these originals could have acted as official texts, kept safely in some appropriate place (e.g. a temple, Hdt. 5.90) for future reference. Although I seriously doubt that for every permanent document there also existed an original on wood, papyrus, or leather, we may suppose that some original texts made of perishable materials were used to guide the cutter in the production of more permanent documents on stone and metal (see Nenci 1994, 459-466 on the Selinous law).
I.1.7.b. Perishables Used for School Exercises and for Relaying Messages

The literary and pictorial evidence further influences our perceptions about the use of writing on perishable materials: not only were such writing materials interchangeable with durable ones, but also more importantly they were used for different purposes. We have evidence on pottery for wax-tablets and papyrus rolls that were used for school exercises; we also hear of wax-tablets (Demaratos' message to the Spartans) and leather or papyrus rolls (Sparta's skytalai?) that were used for relaying messages of a military nature. Writing here is being used for social (educational) and bureaucratic purposes -- two contexts that merit more attention.

We expect that the process of education involved writing (cf. Hedrick 1994, 164), but we have no clear evidence of this in the surviving inscriptions. Though abecedaria testify that some Greeks knew their alphabet, pots and potsherds would hardly be suitable for school exercises; anything beyond learning letters, numbers, and a few words demanded larger, flatter surfaces than potsherds (note, however, that there are several Etruscan 'exercises' on pots).

Pots or potsherds were also hard to incise and impossible to reuse, unless one wrote on the reverse (inside) surface. Perhaps, if ink was used on potsherds after firing, they could be reused, but we have no archaeological evidence for this in the archaic period. In any case, the archaeological context of several inscriptions on pots (and perhaps potsherds, though see below) suggests that their primary function was dedicatory. Though it is possible that schooling took place in sanctuaries, it is unlikely that it made extensive use of pots and potsherds.

Rather, students were more likely to use wax-tablets, and tutors papyri. The former wrote out school exercises on the waxed surfaces of tablets; the latter used papyrus rolls as teaching devices, consulting them for lessons or assigning extracts from them to be copied out by students. After each lesson, students carried off their tablets, folded under the arm, and tutors carried off their papyri, rolled up under the arm. Both items, portable as they were, suited the school environment well.
Wax-tablets were also used for dispatching messages. Being small, foldable objects, their contents could be outwardly sealed or in extremis secretly hidden under the wax coating. The tablets were convenient for concealing messages, because they were easily destroyed by removing the waxed surface or by burning the board. Hence, we find literary references to their use in relaying messages of a military nature.

Another possible option for relaying messages was to use leather rolls. Though the system of the Spartan skytalai has been doubted, it is nonetheless possible that other methods of sending written messages were used in secretive military operations.

I.1.7.c. Other Potential Uses of Perishable Writing materials

So much for a bird's eye view of what we know from the surviving inscriptions and have learned from the literary and pictorial sources. What we need to remember is the possibility of keeping records of every kind on perishable materials: inventories, records of ownership, sales, debts and taxes, ritual manuals, almanacs, horoscopes, astronomical texts, private remarks, chronicles, literature, and various administrative or bureaucratic documents.

Inventories or lists of commodities were kept by palace administrations in bronze age Greece, but as yet no traces of such documents have been found for the archaic period. We have no records that show whether inventories were kept -- no records of one's property, animals, slaves, produce, and gifts (dedicatory or funerary). This is perhaps surprising, given the evidence we have for records of officials, of public works done on sacred sites or buildings (repairs, roads built), and of temple treasures (Jeffery 1990, 61).

The practice of marking property with boundary stones goes back to the archaic period, which suggests that property rights were protected. However, records of ownership, sales, debts, and taxes are almost unknown in archaic Greece, except for three archaic bronze plaques from Kroton and another from Lokroi Epizephyrioi dealing with the deposition of property (Jeffery 1990, 258-259, 285). It is possible that such transactions in Greece were simple unrecorded exchanges. Compared with cultures of the Levant, where written deeds of sales and tax collecting (cf. Egypt: Postgate [N.], Wang, and
Wilkinson 1995, 466) were apparently the norm (Millard 1991, 110), the absence of such documents in Greece is surprising.

The practice of inscribing lists of offerings, names of officials, sacred or secular, and victors in contests (at festivals that were themselves recorded chronologically) shows an interest in recording dates (Jeffery 1990, 60, 334). Yet, there is no early evidence for the use of ritual manuals (cf. China and Palestine: Millard 1991, 106), almanacs, horoscopes and astronomical texts (cf. Classical Maya: Postgate [N.], Wang, and Wilkinson 1995, 45).

We may never know whether the Greeks kept chronicles of political or historical events in the archaic period (cf. Spensithios decree below). The closest we come to learning of political and/or historical events at this time is through examining casualty lists, public memorials, legal codes, interstate treaties, and records of names or festivals.

Some scholars believe that writing was at a very early date used in the composition of poetry (Powell [B.] 1991a; Robb 1994, 8). Immerwahr (1990, 19) suggests that the graffito on the famous 'Cup of Nestor' was influenced by eighth century book script. I doubt that the early alphabet was used in this way, but it is possible that the more regular script of the seventh century onwards was influenced by an earlier style of writing (book script ?) practised on papyrus (Immerwahr 1990, 18-19).

The silence about these categories of texts is total. The potential for loss due to the use of perishable materials might account for this silence. But we must also consider the possibility that these forms of writing simply never existed. Writing had perhaps not yet come to serve these purposes. Surely, if such utilitarian documents coexisted with more formal, ceremonial ones, we might expect that some evidence would have survived.
1.1.8. UTILITARIAN VERSUS CEREMONIAL USES OF WRITING IN GREECE

1.1.8.a. Pots and Potsherds in Utilitarian Contexts

However unimpressive pots and potsherds might seem at first sight, they happen to give us first hand knowledge of utilitarian writing in the archaic period. When inscribed with possessive names, commercial notations, or the names of ostracised individuals, they function on a social, administrative, and commercial level.

One gets the impression from early graffiti bearing simple names that 'writing was seized on widely as a way for individuals to mark their possessions and keep interlopers away' (Thomas [R.] 1992, 59). These identification marks have also been interpreted on a symbolic or magical level as curses (Immerwahr 1990, 14; Thomas [R.] 1992, 60). Whatever their meaning, there was a definite practical aspect of attaching names to objects; throughout the archaic period names were inscribed on votive pottery, apparently because their owners wanted to be remembered (Goody and Watt 1968, 40; Johnston 1983, 67; Svenbro 1988a, 65; Thomas [R.] 1992, 61, 84-85). Clearly, these graffiti functioned on an everyday social level that was far removed from any form of ceremonial and monumental display.

The institution of ostracism, introduced in Athens at the beginning of the fifth century, gives us an idea of how utilitarian writing operated at an administrative level. So far thousands of Athenian ostraka have been found, and many, perhaps most, of the ancient deposits remain undiscovered, since the majority of ostraka were probably taken beyond the city walls and buried there (Lang 1990, 19ff.; Immerwahr 1990, 91; Brenne 1994, 13-24). The small size of the writing on the ostraka from the North Slope of the Akropolis imply that some of them were written by what we might call professional scribes (Broneer 1938, 228-243; Lang 1990, 142-158; Immerwahr 1990, 92; Brenne 1994, 16, 19). These ostraka were prepared in advance, but apparently dumped unused (Lang 1990, 19), suggesting that the whole affair was carried out in an effective bureaucratic manner.

The occasional inscribed weight, stamp on jar handle, coin legend, and pot mark, perhaps denoting the contents or capacity of vessels, also indicate that in the archaic period writing was probably involved in commerce (see below; Millard 1991, 105; cf. Johnston
Although these early commercial notations do not reflect a standardised system, they indicate that merchants benefited from the ability to record transactions at a private level.

I.1.8.b. Potsherds. Unique Survivors of a Whole Range of Materials Used in Utilitarian Contexts?

The evidence from potsherds brings us to consider whether their role resembled more closely that of organic writing materials than that of durable materials. On the one hand, clay was unfit for public display on the same scale as was stone and metal. On the other, clay, once fired, had the same advantages as stone and metal, and more -- it was readily available, easy to work with, and 'cheap'. In theory anybody could scratch letters into its surface (see below). Nevertheless, pots offered rather small rounded surfaces to write on; they were also impossible to re-use and inconvenient to store.

Long documents were obviously better kept on clay tablets, but as far as we know, the Greeks did not write on them. The reason for this neglect of a cheap and abundant medium is unknown, but Jeffery (1990, 51) believes that it may be 'due at least in part to the force of convention, since the Phoenicians ... did not use them either.' Although Kypriot scribes did use them (so far three archaic examples have been found in Kypros), their occurrence has been described as an oddity restricted to Kypriot syllabic writing (Palaima 1991, 457-458). It seems fair to suggest that the general availability of more convenient perishable materials in Greece as well as in Phoenicia removed any advantages the clay (tablets) might once have had (as they did in bronze age and Near Eastern societies other than Phoenician).

Contrary to this view, Havelock (1971, 14 n32) argues that the selection of potsherds for the institution of ostracism presumes the absence of any ready supply of suitable writing materials, i.e. perishable materials. Yet, the use of potsherds in ostrakophoria seems to have been a deliberate choice. Some voters seem to have placed a significant amount of attention on the appearance of their sherds or pots, as the many Athenian kylix bases and rim fragments testify (Lang 1990, 8; Immerwahr 1990, 92). Clay may have been chosen over other available materials, because it was 'cheap', readily available, and served its
purpose well on an ephemeral and utilitarian level. We can just as well imagine how easy it would be to scratch a few letters on a piece of wood, a length of bark, a leaf (as for petalism at Syracuse: Diod. Sic. 11.86-87; Wissowa 1937; Liddell, Scott, and Jones: πεταλισμός), or a lump of wax; it is entirely feasible that perishables were also used in ostrakophoria.

If this line of argument is acceptable, potsherds may well be the unique survivors of a whole range of materials that would have been available for utilitarian purposes but that has now perished.

I.1.9. SUMMARY

Taken as a whole, therefore, it is worth reiterating that ‘because of differential preservation of writing media, formal ceremonial texts, written on more durable substances, dominate in the archaeological record, giving us a biased picture of the uses of early writing’ in Greece (Postgate [N.], Wang, and Wilkinson 1995, 479). The occasional survival of utilitarian texts on clay (possessive names, commercial notations, ostraka), together with certain other evidence for the use of organic materials (school exercises, military messages), helps to correct this bias. We must be wary of assuming that writing was reserved for ceremonial purposes. If the inscriptive evidence appears to be limited to the ceremonial, monumental, and religious spheres, that is a comment on the evidence but not on the possible uses of writing in archaic Greece (Cornell 1991, 12).
I.2. Studies on Regional Variations in the Uses of the Greek Alphabet

1.2.1. Introduction

Some scholars maintain that to evaluate ancient literacy, we must recognise the patterns of use to which writing was put within a general historical framework and within varied regional, social, and political environments. Studies on the subject of regional variation in the uses of the Greek alphabet hold that 'statistically significant differences' in the uses of writing (that is, 'differences in the kinds and quantities of inscriptions that survive') reflect differences in the social and political systems of any particular society (quotation from Stoddart and Whitley 1988, 762; Palaima 1991, 449-471; Whitley 1997, 635-661; 1998, 311-331). Stoddart and Whitley put forth two different 'models' for the social context of literacy in archaic Greece, using Attica and Krete as test cases. In the first, the number of private or informal inscriptions prevails over the number of (later) public or official inscriptions such as laws. They thus conclude that literacy was relatively widespread in Attica. The Kretan 'model' is totally different, since the earliest inscriptions include many Kretan laws; conversely personal inscriptions are rare. The authors conclude that the uses of literacy were more restricted in Krete, because writing was in the hands of a scribal class.

The sceptical reader will immediately notice that the application of this 'model' disregards the possibility that many texts were written on perishable materials. Whitley (1997, 640) acknowledges that writing on perishable materials existed and may even have been widespread, but he refuses to acknowledge the affects of this tradition in his study. He writes, 'a lost tradition is, by definition, unknowable, and so immaterial to this argument.'

If I have insisted throughout on the idea that perishable materials were used in archaic Greece, it is because I feel that it can influence our perception of the role of writing in different regions of archaic Greece. Although we may regret their loss, we must not let this gap in our picture be an excuse to make assumptions based only on what is preserved.
on stone, metal, and clay. True, we shall never be able to assess the quantitative importance of organic writing materials; yet we cannot simply dismiss their existence as ‘a lost tradition.’ What if the absence of one type of inscription in a specific setting or region results from the use of a perishable material that has now vanished from the archaeological record? Such a gap in the record cannot be taken as proof that a particular society was illiterate or failed to put literacy to widespread official use (see Whitley 1997, 635-661).

To encourage further exploration on the subject of the uses of the Greek alphabet, I shall build on Whitley’s study, modifying, adjusting, or discarding his original hypothesis according to the realities of archaeological preservation and survival. In addition to the writing materials that have now perished, it hardly needs to be said that the available evidence is fragmentary, pre-selected, concentrated in certain categories (especially pottery), and unevenly distributed in time and space (Cornell 1991, 10). These are the identifiable realities and circumstances that we need to consider before we address the question of Argolic literacy.

1.2.2. CURRENT OPINIONS

1.2.2.a. Whitley’s Model

Much has been and can be said about the gross statistical differences presented in Table 1.1 below.

<table>
<thead>
<tr>
<th>Types of Inscriptions</th>
<th>Attica (Athens)</th>
<th>Krete</th>
<th>Laconia (Sparta)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Legal Texts</td>
<td>8</td>
<td>38</td>
<td>0</td>
</tr>
<tr>
<td>Gravestones</td>
<td>82</td>
<td>5</td>
<td>1</td>
</tr>
<tr>
<td>Dedications</td>
<td>395</td>
<td>21</td>
<td>79</td>
</tr>
<tr>
<td>Dipinti</td>
<td>758</td>
<td>0</td>
<td>7</td>
</tr>
<tr>
<td>Graffiti</td>
<td>273</td>
<td>13</td>
<td>0</td>
</tr>
</tbody>
</table>

Table 1.1. Attic, Kretan, and Spartan Inscriptions of Archaic Date


I outline here Whitley’s most recent conclusions.
Alphabetic or informal literacy was widespread in archaic Attica. The large number of graffiti indicates that many Athenians ‘found it a worthwhile exercise to practice the new found skills of writing’ (Stoddart and Whitley 1988, 764; Whitley 1997, 641).

In contrast with Athens, signs of informal literacy, such as personal names, owner’s names, jokes, abecedaria, and graffiti are rare in Krete and Sparta. Dedicatory inscriptions, dipinti, and tombstones inscribed with the name of the person commemorated are also uncommon (Stoddart and Whitley 1988, 766; Whitley 1997, 646-670).

The abundance of Kretan legal texts coincides with the virtual absence of all other forms of writing and ‘is exactly what we would expect in a situation where few were literate, perhaps because literacy was the preserve of a scribal class’ (Stoddart and Whitley 1988, 766; quotation from Whitley 1977, 655; my italics).

‘There is little contemporary epigraphic evidence to suggest that literacy was put to widespread official use in archaic …’ Athens and Sparta. Apart from the ‘dromos’ decrees, ‘there are no extant legal texts inscribed on either stone or bronze from Archaic Athens until about 520 B.C, and it is only after this time that other forms of public inscriptions … become common’ (Whitley 1997, 645).

These views have gained some support in recent studies (Palaima 1991, 449-471; Hall [J.] 1997a), though they are not universally shared (cf. Cornell 1991, 7-34). Although Whitley’s statistics are affected by the sixth century gap in Krete, he fails to mention this in his article (see, however, Prent 1996-97, 35-46; Whitley, Prent, and Thorne 1999, 215-264). I, for one, have problems accepting Whitley’s use of the word literacy.

I.2.2.b. Defining Literacy

The subject of ancient literacy is a complex one, and every scholar has his or her own particular definition of the word. Whitley (1997, 639) defines literacy ‘as the ability to read and write short texts.’ He specifically states that this required ‘more than the ability simply to sign one’s name’, yet he includes simple names in his calculations of Athenian graffiti. For my purposes, I shall re-define literacy as the basic ability to write one’s name, a few words, or short texts. ‘In general, it is assumed that the ability to write implied an ability to read, though it is recognized that this was not always the case’ (quotation from Boring 1979, 1; Thomas [R.] 1992, 10).
By modern standards literacy in the ancient world was therefore restricted. Just how restricted it was is impossible to tell. As Whitley (1997, 639) notes, 'questions about the rate of literacy in ancient Greece are secondary to the more general question of what kinds of literacy may have existed in different communities employing essentially the same 'technology of the intellect', and of what areas of society were literate within a single community.

In his conclusions Whitley (1997, 639) makes the distinction between three forms of literacy: 'informal' or 'alphabetic' literacy, 'craft' literacy, and 'scribal' literacy. 'Informal' literacy is the kind of literacy that today we might call survival skills or functional literacy; in antiquity it perhaps comprised the basic ability to read and write simple messages or names. The assumption is that anybody could learn these skills; presumably the Athenians did, but the Kretans and Spartans did not (Whitley 1997, 635-661). In a society where 'craft' literacy prevailed, we assume that much of the 'upper classes' and a large number of skilled artisans knew how to write (Whitley 1997, 639). Once again Whitley sees this as a product of Athenian society. Both these forms of literacy stand in contrast to 'scribal' or 'administrative' literacy, where writing was in the hands of a particular class of specialists or bureaucrats skilled in writing -- the scribes (Harris [W.] 1989, 7-8; Whitley 1997, 639). Scribes were a characteristic part of Near Eastern palace states, where literacy was used for largely administrative purposes, and Whitley sees a similar situation happening in Crete. But as we shall see, the Greek scribe of the archaic period was much more than was the typical palace scribe of the Near East.

Each definition of literacy presents its own problems of interpretation and therefore needs to be examined within its own epigraphical and archaeological context.

1.2.3. A CONTROVERSIAL VIEW. 'SCRIBAL' LITERACY IN GREECE

Who would be more likely to use a new writing system than professional scribes? Recall that the Greek acquisition of the Phoenician script probably occurred in Kypros, when, according to Woodard (1997), Kypriot scribes established there the beginnings of an
alphabetic scribal tradition. As Woodard (1997, 258) concludes, 'Such a continuation of tradition signals that the passage of the alphabet west from Cyprus was not simply a matter of passive transfer along trade routes at the hands of merchants. It was, at least in part, an active process effected by the movement of scribes out of Cyprus.'

We stray into treacherous areas if we suggest that Kypriot scribes are entirely responsible for the spread of the Greek alphabet; yet the idea that writing spread by means of 'scribal' literacy seems consistent with the picture of the place of writing in archaic Greece. We can assume that this scribal class did not disappear with the adoption of the alphabet. The question is: do we have evidence of its existence?

I.2.3.a. Signs of 'Scribal' Literacy in Krete

'The picture ... we see emerging is one of the conveying of Cypriot alphabetic traditions to Euboea, Crete, and Rhodes, and elsewhere as well' (Woodard 1997, 236). Krete was perhaps one of the earliest places to receive the alphabet (the 'green' script), together with other 'oriental ideas' (Woodard 1997, 236). As was mentioned previously, 'the letter-forms of the Cretan alphabet are those which are the closest to the Phoenician characters, [though] the alphabet-type which Crete displays is nonetheless an already slightly altered form of the [hypothesised] earliest version of Cypriot' (Woodard 1997, 236). If Kypriot scribes established themselves in Krete at the beginning of an alphabetic scribal tradition, they probably brought with them many features that we normally associate with the function of writing in Near Eastern societies. Consequently, we find that Kretan punctuation (e.g. by multiple dots) exhibits a formal scribal practice of North Semitic origin but uncommon elsewhere in Greece; that the Kretans inscriptions often begin from right to left as did the Phoenician ones; and that sometimes, like the Phoenicians, they invoked a deity at the beginning of a decree (Millard 1976, 140; Jeffery 1990, 310; Robb 1994, 94 n16; Whitley 1997, 659).

Whitley (1997, 658) argues that archaic Krete was exceptional in retaining many of these 'scribal' features, and in lacking those 'informal' signs of writing common in other parts of archaic Greece. Table I.1 (see above) shows that Kretan graffiti, dedicatory inscriptions, dipinti, and tombstones inscribed with the name of the person
commemorated are rare, but not lacking (Whitley 1997, 649ff.). Apparently, the
development in literacy that took place in other regions of archaic Greece, especially in
Athens, never took place in Kretet, because literacy was confined to a scribal class
(Whitley 1997, 659). If we believe the data, we should assume that this development
never took place in Sparta either, because as yet no graffito has turned up in the
archaeological record. Yet, no one has ever suggested that Spartans were illiterate
because writing was in the hands of a scribal class. The reason is that Sparta has no
extant epigraphic evidence for public legal texts until the late archaic period; whereas
Krete is an island where considerable epigraphical evidence for early written law seems
to have survived (see above, Table I.1).

Before examining further the question of ‘scribal’ literacy in Kretet, let us look more
closely at the evidence for public legal texts.

I.2.3.b. Public Legal Inscriptions in Kretet

As Table I.1 (above) shows, Kretet has produced a striking amount of archaic public and
legal texts on stone compared with private dedications or graffiti. Apparently, these
‘were no more intended to be read by the average ... [Kretan] than was the Code of
Hammurabi by the average Babylonian’ (Whitley 1997, 660). Why then go to great
trouble to carefully inscribe laws, to give them a material, epigraphic form, when few
could have derived any communicational benefit from this action?

Whitley believes that the purpose of writing down laws on stone was to preserve in a
permanent way ‘the customs and practices of the small communities of Archaic Crete’
(Stoddart and Whitley 1988, 766). In this way the contents of the texts were never
criticised. ‘The monumentality of such inscriptions would [then] appear all the more
imposing’ and symbolic (quotation from Stoddart and Whitley 1988, 766; Whitley 1997,
660). Writing down a law on stone was meant partly to stabilise it for evermore, that is, if
we assume that Kretans were relying on the written text alone for transmission of laws.
Clearly, ‘oral transmission continued to be fundamental even once laws were written
down’ (Thomas [R.] 1996, 15). There is even a surprising amount of evidence for early
laws being sung; according to a late source, free Kretan children had to sing the laws (Aelian, *Varia Historia* 2.29; Camassa 1988, 140f.; Thomas [R.] 1996, 14-19).

Thomas (1996, 31) maintains that 'the monumental inscription of law [on stone] was intended not only to fix it publicly in writing, but to confer divine protection and a monumental impressiveness on just those kinds of law which did not receive the time-honoured respect accorded the unwritten laws and customs' (Detienne 1988b, 51-53; Steiner 1994, 66). Most of the Kretan laws deal with 'specific regulations written down in response to a specific problem' (Whitley 1997, 655). It was such laws, about procedure and constitution, which required the added support of divine protection.

Where their contexts can be identified, the laws of Krete are often associated with temples, written up on the temple walls, or set in the precinct (Whitley 1997, 655). More than half (Dreros, Axos, Lyttos, Knossos and Gortyn) were actually inscribed on the temple walls themselves. On present evidence this practice is almost exclusive to Krete (except for three late examples), and it is on this island that the earliest (from Dreros c. 650-600 BCE) and best (from Gortyn) examples have been found (Jeffery 1990, 55). As Jeffery (1990, 59) explains, this practice accounts for the numerous legal texts that have survived from Krete: 'The laws of Krete survive [infinitely] because they were written on the walls of the temples; those of the same period at Athens were probably all, like Solon’s, written on wood, for no traces have been found.'

1.2.3.c. Public Legal Texts in Athens. A Question of Preservation

Apart from the various ‘*dromos*’ decrees, ‘there are no [extant] legal texts inscribed on either stone or bronze from Archaic Athens until about 520 B.C., and it is only after this time that other forms of public inscriptions ... become common (Stoddart and Whitley 1988, 763; Jeffery 1990, 68-78; quotation from Whitley 1997, 645; cf. Stroud 1978, 35). Hence, Whitley’s (1997, 645) comment that ‘there is little contemporary epigraphic evidence to suggest that literacy was put to widespread official use in the Archaic period’ in Athens (cf. Stroud 1978, 20-42). We should not, however, accept this as proof that official inscriptions were written only rarely and in later times, but merely as evidence that if they existed earlier they were not written on stone, metal, or clay. No great
surprise. It is tempting to re-write Whitley's words as 'there is little contemporary epigraphic evidence in stone or metal to suggest that literacy was put to widespread official use in the Archaic period'.

Yet, as he (Whitley 1997, 645) himself remarks, 'there is plenty of contemporary and later literary evidence to support the traditional view that both Drakon and Solon were responsible for the promulgation of written law in the period between 640 and 560'. Drakon wrote at least a law on involuntary homicide, and it may have set off the tradition of written laws in Athens (Meiggs and Lewis 1988, 264-267 no. 86; Robb 1994, 127; Thomas [R.] 1996, 26). We know of his laws from their later publication, which include archaisms probably derived from earlier originals (Stroud 1968; Whitley 1997, 645). 'By Solon's time the custom of written law was well-established ...' (Thomas [R.] 1996, 10). Undoubtedly, the series of laws that were publicly displayed on wooden *axones* or bronze *kyrbeis* were Solon's doing (Aristotle, *Ath. Pol.* 12.4). He himself writes about the abolition of mortgage markers and debt, even for those citizens exiled or enslaved by debt (Diehl 1954, 46, F 26.28-30; Robb 1994, 131). From the 'description of his accomplishments [it] sound[s] as though he addressed only, or at least mainly, those matters that were presently troubling and dividing the community' (Robb 1994, 131).

Though the wooden *axones* or bronze *kyrbeis* seem to have been real enough, the confusion over their use deserves further consideration. Stroud (1979) and others maintain that Solon published his laws on wooden *axones*. Contrary to current opinion, Immerwahr (1985, 129) suggests that Solon's laws were originally written on bronze *kyrbeis*, erected on the akropolis, and that they were later rewritten on wooden *axones*, set up in a stoa of the *agora* around 500 or 461 BCE. If we consider the evolution of legal texts, we might be tempted to assign *axones* to the post-Solonian period, because their sophisticated arrangement (apparently individual laws and *axones* were numbered) and uniqueness (they had neither forerunners nor successors) suit a later period better (Immerwahr 1985, 123-135).

This theory has important consequences for the way in which Whitley interprets the uses of law in archaic Athens. He (1997, 645) concludes: 'Law may have been made public in Archaic Athens, but there seems to have been no desire to make a law a *monumentum aere perennius*'. He opts to follow the ancient authors, who tell us that Solon's laws were
first written on wooden *axones*, which he believes were hardly 'monumental' in form. From an ancient’s point of view, the use of wooden boards, square in section and mounted horizontally, may have had the effect of being as monumental and as ceremonial as stone or metal inscriptions (Detienne 1988, 21). About their resistance to weathering — wood, when kept indoors, resisted the ravages of time very well; Pausanias (1.18.3) and Plutarch (*Solon* 25) both report seeing Solon’s *axones* in the Prytaneion (Jeffery 1990, 51; Osborne 1997, 76).

What if Solon’s laws were written on bronze *kyrbeis* that have now perished? These bronze inscriptions were just as much concrete, visible, and tangible monuments as were laws published on stone. We might wonder, however, why they have all perished, when some bronze inscriptions have survived from elsewhere in Greece. The bronzes could well have been damaged by the Persians during the attack on the Athenian akropolis — cf. in Nero’s time the 3000 bronze tablets burnt on the Capitoline hill (Suetonius, *Vespasian* 8.5; Immerwahr 1985, 134; Eder [W.] 1986, 267; Thomas [R.] 1994, 36). This presumed destruction poses one serious problem: how was the text preserved to be later transferred to wooden *axones* in the first half of the fifth century? I can think of two possible answers: either they were preserved on portable documentary originals (i.e. on perishable materials) that could be transported elsewhere, or more likely, the laws were preserved in the memory of *mnemones* (remembrancers) or scribes (see below).

### 1.2.3.d. Public Inscriptions in Sparta, or Lack Thereof

So far Sparta has yielded no public inscriptions until late in the fifth century and no epigraphic evidence for written law (see above, Table I.1). However, an early fifth century votive *stèle* from Thalamai, *IG* V 1.1316, was actually written by a Spartan (see also the sixth century votives from Sellasia, *IG* V 1.920 and *IG* V 1.919: *SEG* 11.889; Jeffery 1990 200 no. 24). There is therefore no reason to believe that written laws did not exist in Sparta in the archaic period, as is implied by some of our late literary sources (Whitley 1997, 648). These refer to the famous 'Lykourgan' *rhetra*, apparently 'prohibiting' the writing of laws in Sparta (Plutarch, *Lycurgus* 13.3–4). When Zeuxidamos was asked why the Spartans failed to write down their laws about valour and to let their young men read them, he replied: because it is better for them to become
accustomed to deeds of valour than to give their attention to writings (Plutarch, *Moralia* 221B).

The image of Sparta priding itself on living without written laws is, however, better suited to the classical period, because the Spartan *rhетra* was evidently a genuine written law dating to the seventh century or earlier (Cartledge 1978, 26; Jeffery 1990, 186; Thomas [R.] 1996, 18).

Despite this evidence, some scholars still maintain that 'in Sparta there was no overwhelming reason to make law into a public document' (Whitley 1997, 648). In Boring's (1979, 7) words,

> For the Spartans, state business was not necessarily public business, and there is little reason to think that the average citizen had a great need to keep up on current affairs by means of public notices. We must beware, however, of interpreting the small number of such [public] inscriptions in Sparta as strong evidence of the general prevalence of illiteracy.

For one thing, archaeological survey or excavation in an area of archaic and classical habitation might change this picture of Spartan literacy (Cartledge 1978, 32-33). Moreover, as in Athens, public inscriptions may well have been written on perishable materials.

Though rather paltry, the dedicatory material from Sparta implies that some Spartans were literate and corroborates the explicit statement of Plutarch (*Lycurgus* 16.10; *Moralia* 237A) that the Spartans, like the Kretans, learned as much reading and writing as was thought necessary (Cartledge 1978, 32; Whitley 1997, 648). On the one hand, Whitley (1997, 649) interprets Plutarch's statement to mean that 'literacy was restricted in its use for those purposes most necessary in archaic Greek aristocracies -- for the commemoration[s] ... of the actions and achievements of individuals' (Whitley 1997, 649). Cartledge (1978, 32-33), on the other hand, supposes that 'only public functionaries [or scribes] were called upon to perform routine acts of literacy on a day-to-day basis.' This brings us back to the idea of 'scribal' literacy in Kret and the 'Spensithios phenomenon'.
1.2.3.e. Spensithios, The Kretan Scribe

For evidence that a 'scribal' literacy prevailed in archaic Crete there exists a unique piece of evidence -- the Spensithios decree. It was written on a bronze abdominal guard (that was probably manufactured much earlier) around 500 BCE (Figure 16; London, BM inv. 1969.4-2.1: Jeffery and Morpurgo-Davies 1970; Edwards and Edwards 1977; Ruzé 1988, 82ff.; van Effenterre and Ruzé 1994, 120ff. no. 22; Robb 1994, 87-89; Whitley 1997, 656; Thomas [R.] 1997, 21). Spensithios, a Kretan scribe, was to inscribe and memorise the affairs of the city, both secular and divine; he probably also oversaw 'all past records of the city, written and unwritten, secular and divine' (Thomas [R.] 1996, 22). Moreover, he may have read aloud the texts that had been recorded in the past (Raubitschek 1970, 155). He received a salary, was immune from taxes, was present at and participated in sacred and secular affairs of the community, performed public sacrifices for certain cults, and handed down his privileges to his sons (Thomas [R.] 1997, 24). This seems astonishing, because it had long been thought that Greece, unlike the Near East, avoided 'scribal' literacy (Thomas [R.] 1996, 24).

1.2.3.f. Signs of ‘Scribal’ Literacy in Attica and Elsewhere

Crete was not the only region in Greece to use scribes. We know of scribes working in Athens and elsewhere in archaic Greece. ‘That Athens knew a period when the scribe was a revered figure, one closer to Spensithios in social and civic standing than to the humble street scribe [of the hellenistic period], is suggested by three …’ archaic marble statues of scribes from the Athenian akropolis (Figure 11: Payne [H.] 1950, 47, 74; Stoddart and Whitley 1988, 766; quotation from Robb 1994, 96 n27). Whether they were particular treasurers of Athena, secretaries (katalogeis), or members of the college of eight magistrates called hieropoioi (Aristotle, Ath. Pol. 54.3-5), these figures, even damaged, manage to look very professional and rather grand (Detienne 1988b, 65; Trianti 1998, 29-33).

Athenian scribes seem to have been responsible for the ‘dromos’ decrees (IG 13 508, 509; Whitley 1997, 657). Furthermore, we suspect that the Areopagus group of scribes wrote the ostraka of the Athenian Akropolis (North Slope) (Immerwahr 1990, 92). According
to Raubitschek (1970, 155), Athenian scribes were often asked to read aloud time-honoured laws and decrees.

Public scribes are also known from Elis and Samos. The inscription on a bronze plaque (early fifth century) from Olympia refers to a first-class scribe or secretary, Patrias, who seems concerned to protect his legal position within the community (SEG 29.402; van Effenterre 1979, 279-293; Jeffery 1990, 218 n5; Thomas [R.] 1996, 24). On Samos, one particular scribe, Maiandrios, seems to have been a person of some importance (Hdt. 3.123; Whitley 1997, 658). As Polykrates’ most trusted servant, he is chosen to go [to Sardis to] verify the report of Oroetes’ wealth, the lure designed to entice Polykrates to Sardis and to his death there, ... After the murder of his master, Maeandrius reappears ... as the ruler of Samos, the individual whom the tyrant has chosen to inherit his sceptre and power’ (Steiner 1994, 173).

Maiandrios was perhaps not a worthy man as far as many of his fellow citizens were concerned, but he does seem to be a person of high status.

If public writing was in the hands of scribes in various communities of archaic Greece, Krete was clearly not a unique society in this respect. Because of the differential preservation of writing media, Kretan legal texts written on stone walls dominate the archaeological record, giving us the impression that the situation in Krete differs significantly from that in other regions of Greece. If we realise the implications of these biases, however, we might assume that the Kretan material embodies in many respects processes at work elsewhere in archaic Greece (Gagarin 1986, 81-86, 127-128; Thomas [R.] 1996, 22ff.).

In light of this, I believe that Ruzé (1988, 82ff.) is right in regarding Spensithios as if he were typical of scribes as a class in archaic Greece as a whole. We should probably accept this view, even for Athens. Even if, as Whitley (1997, 658) maintains, none of the non-Kretan scribes had ‘a monopoly in public writing, nor were they officials as we would understand the term’ from the Spensithios decree, their power was nonetheless strong.
Some members of Greek poleis in the early stages of the public use of writing were acutely aware of the power of writing, the power of the scribe, and the power of anyone who had control of the written records' (Ruzé 1988; quotation from Thomas [R.] 1996, 24). It seems that the position of scribes was enhanced as texts became more numerous and difficult to keep track of (Ruzé 1988, 92). Here we must remember that scribes probably also wrote and kept track of documents on perishable writing materials, a subject to which I shall return later.

By controlling the written word, scribes would have reinforced their positions in society. Not surprisingly, then, the privileges of the scribe became so threatening for politically fragile communities, that some cities took measures to ensure that they did not abuse their (presumably superior) knowledge of writing (Detienne 1988b, 71; Thomas [R.] 1994, 39). We have an example of this happening in Erythrai, a city in Ionia that tried, probably in the fifth century, to curb the power of scribes in various ways, such as preventing secretaries from serving the same magistrate twice (Engelmann and Merkelbach 1972, nos. 1 [now lost], 2, 17; Thomas [R.] 1994, 93; Meiggs and Lewis 1988, 89-94 no. 40). Also, the famous Tean curses of c. 480-450 BCE carry a 'set of imprecations directed against certain officials (timocheon or tamieuron) who 'do not read out the writing on the stele to the best of their memory and power'" (SEG 31.985; Hermann 1981, 1-30; Meiggs and Lewis 1988, 62-66 no. 30; Detienne 1988b, 67; quotation from Thomas [R.] 1996, 23).

Despite this need to control the power of scribes, Greek cities could not do without them (Ruzé 1988, 93). 'Lurking amongst the inscriptions are hints that only officials could read anyway' (Thomas [R.] 1996, 25). If officials were forced to read aloud the inscriptions, and if a reading aloud of the laws was a common occurrence, 'it mattered less if people could not read the inscriptions' (Harris [W.] 1989; quotation from Thomas [R.] 1996, 23). It also seems less likely that the population at large was required to read the laws, when a periodic reading informed illiterates of their contents (Steiner 1994, 67; Thomas [R.] 1996, 23).
1.2.3. h. The Role of Scribes and the Use of Perishable Materials

Whatever their role in society, it seems that scribes had occasion to use organic writing materials, especially in utilitarian contexts. If we consider the possibility that Greek scribes were trained and accomplished in Kypriot and Near Eastern writing traditions, we should accept that they knew about the advantages of perishable writing materials and would have used them extensively in their daily administrative duties. Physically, virtually no evidence for this practice survives today. For this reason, perhaps, we find it hard to conceive of archaic Greece as an alphabetic culture that retained the need for 'scribal' literacy.

1.2.4. AN EXAGGERATED VIEW. GRAFFITI AS SIGNS OF 'INFORMAL' LITERACY

If the power of scribes remained strong in various communities of archaic Greece, literate skills were probably not as widespread as scholars have assumed. When many people acquire the skills of writing, the uniqueness and value of a scribe decrease rapidly (Robb 1994, 89). Since scribes and secretaries, including those in Athens, were magistrates or important officials rather than clerks right into the classical period (Thomas [R.] 1996, 24), the idea that the invention of the alphabet placed writing skills firmly within reach of the common Greek (male citizen) seems exaggerated.

Let us look at the 'popular inscriptions' that have figured prominently in the arguments for widespread literacy -- the graffiti.

1.2.4.a. Graffiti in Athens

What do graffiti tell us about the kinds of literacy seen in the population at large? Many have assumed that graffiti were written by individuals who dedicated an object or marked it as their own property. In this respect, these 'informal' inscriptions differ from all other inscriptions, because they were presumably executed by non-professionals. It follows, then, that a large number of graffiti should be equated with widespread 'informal' literacy (Jeffery 1990, 63). In Langdon’s (1976, 49) words,
The large series of Acropolis dedications and ostraka from Athens confirm the prevalence of literacy for the 6th and 5th centuries, and the Hymettos inscriptions do the same, I feel, for the 7th century... This is not to claim that everyone in early Athens and its environs could read and write, but it seems likely to me that by the end of the 7th century there was [were] as many literate citizens as illiterate.

Whitley (1997, 641) also sees the hundreds of early Attic graffiti in Table I.1 (above) as direct evidence of the Athenians showing off their 'new found skills of writing' and as proof 'that writing was never in Attica the preserve of a scribal class' (Langdon 1976, 49; quotation from Stoddart and Whitley 1988, 764).

Some degree of literacy is implied by the individually inscribed graffito, but the evidence is not as straightforward as is usually thought. There is an unbalanced impression, created by the fact that most of the graffiti we find are on pieces of broken pots, that potsherds were the modern equivalent to our 'scrap paper', just lying around waiting to be scribbled upon by ordinary people who knew how to write. To judge from the hundreds of graffiti from the Athenian agora, however, graffiti that were arranged to fit onto the potsherds -- that is, not to be part of any original inscriptions made on a pot before it was broken -- are uncommon (Lang 1990). Except for ostraka, the ballots used by Athenians between 488 and 418 BCE in voting at ostrakophoria, only a few graffiti (i.e. the so-called 'names on sherds') that predate the practice of ostracism were incised on what was probably a sherd, not a complete pot.

If most of the Athenian agora graffiti were written on whole pots, the assumption that anyone could just pick up a sherd and conveniently use for writing deserves to be reviewed. It seems that Athenians who presumably wrote Lang's 'names on sherds' chose their pieces with considerable attention. In all but two cases they found the softest, flattest surfaces available -- the walls of large coarse or unglazed wares (twenty-five examples, see Lang 1990, 17-21) whose surfaces could be scratched easily with any relatively sharp implement. Notice that in general these 'casual' writers of graffiti seem to have avoided the harder surface of black glaze pottery, perhaps because a metal point was necessary to inscribe them (Lang 1990, 8).
Most black glaze wares were presumably inscribed by people who knew how, and who had occasion, to use a metal writing point. Skilled writers — artists, scribes, or other professionals — may have inscribed this kind of pottery, since a ‘casual’ writer not only had to get hold of such a writing instrument but also had to learn how to use it. Unless one were accustomed to writing with a metal point (on wax or papyri), it would have been relatively difficult to use, especially to apply the right amount of pressure and scratch through the hard surface of black glaze pottery. In some instances where inexperienced writers incised black glaze pottery, the circular letters (thetas and omicrons) are often small and irregular (Ung 1990, 43). One way of overcoming such difficulties was to write on the bottoms of complete pots. Unlike sherds, vases provided larger, flatter surfaces to work with and could be held more steadily, if placed on their rims. Perhaps that is why the majority of graffiti on black glaze pottery from the Athenian agora were written on the bottom of complete vessels (Lang 1990, 28). The size of a pot was also relevant — the bigger the pot, the flatter the surface. So perhaps these graffiti were written on whole pots, rather than on sherds, by people who were aware of the difficulties of inscribing black glaze pottery.

There is another reason for challenging the idea that someone could just pick up a sherd and conveniently use it for writing: archaeological context. When we look at the context of many Athenian graffiti, a large number of them come from sanctuary sites, especially from the shrine of Zeus on Mount Hymettos (Langdon 1976; one exception is Tourkovouni, see Lauter 1985). We have to ask ourselves how such pieces of inscribed clay could have been appropriate offerings to a god. State of preservation proves that whole pots were dedicated, then broken and cleared away to be dumped into votive deposits. This is a far cry from just picking up a potsherd lying around the agora or sanctuary and using it as a piece of scrap paper to practice writing one’s name.

1.2.4.b. Graffiti and Literacy

Given the nature of our evidence, there are of course limits to what can be said about the full context of graffiti on pots. One point of difficulty is whether some individuals actually practised the skills of writing by incising their own pottery or whether they had their pots inscribed by the literate. Either way, we can never be sure that the motive of
people who resorted to a professional was their own illiteracy; in certain cases it might equally have been their desire to get hold of good quality engraving (Boring 1979, 9).

Another difficulty is that illiteracy cannot always be offered as an explanation of very small number of extant inscriptions. The abundance or paucity of material culture in any given area often depends on the fortunes of excavation (see Prent 1996-97, 35-46 on the sixth century Kretan lacuna). Moreover, many scholars have focused on the study of archaic Athenian pottery, and their publications have influenced the way in which others speak of Greece in connection with literacy. Athens was also unique in having ostrakophoria and therefore in yielding a large amount of fifth century graffiti on potsherds. To this practice, which has been at the centre of arguments for widespread 'informal' literacy, there was no Spartan or Kretan counterpart.

I.2.5. AN ALTERNATIVE VIEW. 'CRAFT' LITERACY

Robb (1994, 252) believes that the first literate Greeks were neither scribes nor 'aristocrats', 'but rather a small nucleus of craftsmen who made the objects that bore the first inscriptions'. Though the evidence for 'craft' literacy 'comes earlier in the [inscriptional] record and bulks larger than does any other body of evidence' (Robb 1994, 13), we must remain aware that this picture would be considerably different, if pottery had not survived in the archaeological record.

I.2.5.a. Literate Athenian Artists

Whitley (1997, 644) speaks of archaic Athens as a society where 'craftsman' literacy prevailed. Certainly, Athens has yielded several hundred painted inscriptions on pots and dedications on stone or metal objects (see above, Table 1.1). Except for graffiti, these dipinti and dedications had to be done with the tools of the creators; it was therefore beneficial for the early vase-painter, mason, or bronze-worker to learn how to write, and to impart their knowledge to others who learned their craft (Jeffery 1990, 62). 'Some may have been illiterates, who copied a draft made by the [literate] client; but the ingenious plotting often shown in fitting one or more hexameters into a limited and
irregular space suggests that for the most part craftsmen were themselves literate' (Jeffery 1990, 62). So, it seems that early in the archaic period Athenian artists were writing their own inscriptions and signing their own works in the course of their business.

The practice of signing vases and sculptures makes us wonder whether Athenian artists intended to advertise themselves by signing their works. For artists' signatures to be effective in this way, there must have been a fairly wide reading audience (Whitley 1997, 644). Without readers, these inscriptions presumably fell on blind eyes. Whitley (1997, 644) maintains that signatures and names on the so-called Little Master Cups of the sixth century, together with *kalos* inscriptions on black glaze vases, 'were meant to be read, [aloud at Attic] *symposia* ' (aristocratic male drinking parties) (Beazley 1932, 194; Boardman 1974, 58; quotation from Stoddart and Whitley 1988, 765). Many Little Master Cups, however, have been found in Italy (for example, Vulci, Tarquinia, Taranto, Selinunte), and so were never destined to reach an Athenian audience in the first place. Many even display nonsense inscriptions, or what amounts to alphabetic gibberish (Beazley 1932, 195). But before we conclude that signatures of the seventh and sixth century had not (yet) the advertising value that some had later (Boardman 1974, 58), let us turn to another type of inscription that is thought to have been read by the average Athenian.

**I.2.5.b. Who Could Read in Archaic Athens?**

Once again Whitley (1997, 644) assumes from the positioning of sixth century inscribed gravestones beside roads or tracks that passers-by were meant to read them. It is true that several grave 'inscriptions addressed a passer-by, a casual wayfarer, and asked him or her to remember and take pity upon the person buried' (Svenbro 1988a, 51, 54; quotation from Stoddart and Whitley 1988, 764), but this does not guarantee that inscriptions were read by the general public (see also Hedrick 1994, 162-164).

Firstly, as grave markers, they had a 'significance quite independent of whether they were read'; they were reminders, 'stone memorials', or 'symbols of honour' (Thomas [R.] 1989, 49). The memory and name of the deceased would easily have been passed down
orally from generation to generation. ‘Memory is the diary that we all carry about with us.’ (Oscar Wilde, *The Importance of Being Earnest*).

Secondly, according to the prevailing view as expressed, for example, by Svenbro (1988a, 51, 58, for ancient texts of the classical period), those who could read, read aloud (ἀναλήγω, meaning to collect up, off the text), and gave their voices, as it were, to the object. In his view, reading aloud was not only meant for an audience; it was the way in which the written words would reach the reader’s own ears as well. Since inscriptions contained few, if any, word divisions, written words were probably deciphered by most people only when heard pronounced. This concept might seem strange to us, but a glance at the opening sentence of Raymond Queneau’s novel, *Zazie dans le métro* (1959) puts us quickly in the right mood. It is only by using our own voices, by hearing ourselves pronounce (aloud or in our minds) the word, ‘Doukipodonktan, ... ‘, which is actually a sentence, that we succeed in recognising what the eye cannot pronounce -- (C'est) d'où qu'ils puent donc tant (Svenbro 1988a, 166).

In an oral society where writing was inevitably perceived as something incomplete in itself, requiring a vocal supplement, reading aloud may have represented a zone of interference between the two (Svenbro 1988a, 2, 47). Hence the voice of those who read aloud would have been highly regarded in a community (De Kerckhove 1986, 289ff.; Svenbro 1988a, 51, 54, 64, 116; Thomas [R.] 1994, 33). To whom did these voices belong?

In the context of Attic symposia, those who knew how to read were possibly male ‘aristocrats’, or at least belonged to a circle of individuals who were wealthy enough to afford signed works and to drink at symposia.

In a religious context, the ability of the votaries themselves being able to read the inscriptions is always dubious. It is possible that dedicatory inscriptions went hand in hand with the objects, perhaps valuable objects, and so ‘had a significance other than that carried by the written words alone’ (Thomas [R.] 1989, 38). The inscriptions may have been used as a demonstration of wealth and piety, ‘meant to impress ...some gathering of ‘pre-literate’ Athenians’ (Robb 1994, 26). Greater worth could be attributed to an object, if it was inscribed (Stoddart and Whitley 1988, 765).
In archaic Greece the skills of literacy were limited to certain areas of society within a community. At least three main areas of society practised literacy: professional scribes, artists, and perhaps a few (male) citizens. It seems unlikely that the population at large were expected to be able to write and read, even in archaic Athens.

Professional scribes wrote and read out public inscriptions for the state. Archaic legal inscriptions that have survived from Crete provide an excellent example of some of the scribal processes at work in the wider world of archaic Greece. We expect that Greek scribes also used writing for day-to-day administrative duties. No evidence for this practice survives in the archaeological record, however, probably because scribes used perishable materials for writing such documents.

Skilled artisans inscribed objects with ‘informal’ (?) or dedicatory inscriptions on stone, metal, or clay. Some of these are epitaphs carved on tombstones, but most are dedicatory inscriptions, graffiti, and dipinti on movable objects deposited in sanctuaries. It is these inscribed works that predominate in the epigraphical and archaeological record. This large amount of evidence for ‘craft’ literacy in Athens and elsewhere suggests how inscribed objects and the work of literate artists may have become desirable, popular, and perhaps highly valued. This does not, however, entail that inscribed objects were meant to be read by the average citizen; reading an inscription without word division required skill and practice, and so we may assume that the voice of the reader was respected.

The idea that the use of writing in Athens extended beyond trained artists and scribes to include many citizens seems exaggerated. Some Athenian graffiti suggest that certain groups of individuals (mainly male citizens ?) occasionally inscribed their own pots, but most people probably relied on literate artists or other professionals.

Cities such as Athens, which attracted artistic life, may have had a larger literate community that that of a small Kretan city. Nevertheless, the uses of writing and the
kinds of literacy that existed in both areas resemble each other closely. Krete was clearly not the unique society that Whitley wants it to be in this respect.

However, this is not to say that literacy was a neutral skill with predictable results and effects, independent of a society’s character and existing customs (cf. Goody and Watt 1963, 304-345). The effects of literacy may well turn out to be specific, determined by a particular cultural context. But abundance or paucity of extant inscriptions cannot be an accurate reflection of the early applications of writing in the different regions of archaic Greece. The realities of archaeological preservation and survival play a significant role in the way in which we understand archaic Greek literacy. They are neither predictable nor measurable.

If Attica and Krete were not as diametrically opposed as Whitley’s statistical analysis implies, how worthwhile is it to pursue further the subject of regional variation in the uses of the Greek alphabet, based on existing data? What are the possibilities for learning more from data of yet another region? Taken in isolation, statistical differences between the kinds and quantities of archaic inscriptions have little value. But a careful study of inscriptions individually and in the context of their total cultural and historical environment should provide a more detailed illustration of the processes at work within specific areas of society, or at the very least, within archaic Greece as a whole. Let us turn to the Argolid to find out.
1.3. Another Test Case. Literacy in the Argolid

1.3.1. INTRODUCTION

No ancient writers care to tell us whether the people of Argos or any number of other small towns in the Argolid were literate; no one was interested (Boring 1979, ix). Nor is there any interest in this century. When scholars write about ancient Greek literacy, they usually focus on Athens, occasionally on Sparta and Krete. ‘Indeed if asked to write a monograph about literacy in almost any of the other cities [except Athens and Sparta], I think that it would have proved impossible’, wrote Boring (1979, ix-x) about Spartan literacy. Archaic Argos may have produced Akousilaos -- a writer who, according to Josephus (Contra Apionem 1.13), lived a short time before the Persian wars -- and Telesilla (Hdt. 6.76; Polyainos, Strategemata 8.33; Paus. 2.20.8; Diehl 1925, 61), an important fifth century poetess (also la 'Jeanne d'Argos'), but who else? For this reason ‘Argos is of little importance in the literary classical tradition, and this in turn helps to explain why, in comparison with other Greek cities, Argos has been neglected’ by contemporary scholars till recently (Tomlinson 1972, 222).

The benefit of this neglect by writers, both past and present, means that a study of Argolic literacy can remain relatively free from prejudice. Fortunately, we can base such a study on about one hundred or so archaic inscriptions that bear the unmediated mark of their writers, whoever they may have been. This brings us to the central question: who could read and write in the archaic Argolid?

1.3.2. SIGNS OF ‘SCRIBAL’ LITERACY IN THE ARGIVE PLAIN

1.3.2.a. Hieromnarnones as Scribes

Thomas (1996, 19) maintains that the hieromnarnones (ἱερομνάμονες, in Ionic hieromnemones), together with the nnamones (the Doric form of the word, used in Krete, Nemea, and Halikarnassos), ‘must form a linchpin in the transition [of oral] to written law. ...the very name suggests that these officials were at first responsible for
‘remembering’ -- perhaps remembering judicial cases, a living archive, sacred and secular rules, perhaps ‘oral law’ (see also, Jeffery and Morpurgo-Davies 1970, 150; Edwards and Edwards 1977, 139-138). Once writing spread to their communities and was used for public record, many of these (hiero)mnemones ended up as scribes and guardians of the written word, adding on to their earlier responsibility as ‘memorisers’ the new task of writing (Thomas [R.] 1996, 20).

Both van Effenterre (1973, 39) and Thomas (1996, 22) argue that memory continued to be an important duty of the (hiero)mnemones, and that writing did not take over public business completely. The main duties of these officials included custody of shrines and supervision of religious ceremonies (van Effenterre 1973, 39; Beattie 1975, 26). Sometimes they also took care of secular affairs, which meant that they were responsible for public registers and records (Beattie 1975, 26).

In Greek inscriptions the term hieromnemon appears for the first time in the late seventh-early sixth century, at Tiryns (here hiaromnemon). Amazingly, it is first in the Argolid that we find clear evidence for the existence of this scribal class.

Let us therefore examine the inscriptive evidence within its archaeological and historical context.

The Hiaromnemon at Tiryns c. 600-550 ?

SEG 22.269, 30.380, 34.296, 35.275, 36.347, 41.294.

This text is a sacral law inscribed on a series of large stones covering the underground passages (north-west side of fortifications of the lower city) leading to the cistern on the outside of the citadel (Figure 17; Appendix A-16; for the Greek, see Appendix D, Text 5). Its twenty-three ‘fragments are of immense epigraphical [and historical] importance, establishing for the first time that the alphabet at Tiryns was related to that of Argos-
Mycenae and not to the Kleonai-Phleious group, as was previously thought’ (Jeffery 1990; quotation from Hall [J.] 1995a, 587).

We find important references to the ἄλλουσία (haliaia), the δαμος (damos), and to a single ἐπίγνωσμον (epignomon), as well as to the gods Zeus and Athena. The existence of a sovereign popular body (damos) and an assembly (haliaia) in the year around 600 BCE suggests very strongly that Tiryns was independent from Argos at this time (Verdhelis, Jameson, and Papakhristodhoulou 1976, 189, 192; Hall [J.] 1995a, 587). O. Hansen (1985, 162-163) goes as far as to suggest that there was an amphictyony of Tiryns, which Argos destroyed, together with Nauplia around 600. Foley (1988, 127), however, prefers to see Tiryns as a community dependent upon Argos for religious affairs (see however, Foley 1998, 142, where she raises doubts on this matter). Her claim centres on the dearth of archaeological evidence for an archaic settlement at Tiryns and similarities between the Tirynthian and Argive alphabet (see also Piérart 1991a, 570). But as J. Hall (1997a; 1997b, 89-109) points out, her first point is weakened by the fact that that the area around Tiryns remains little excavated in comparison with Argos, whereas her second fails to recognise that the Tirynthian script is very similar [but not identical] to that of Argos. Though the existing epigraphical evidence is still very restricted, its letterforms present ‘a certain amount of innovation compared with Argos’ (Hall [J.] 1995a, 611).

The fragmentary nature of the Tiryns inscription does not permit full recovery of its contents, but clearly they have to do with meetings where wine and probably food were consumed, with specified contributions to them and with fines imposed for failure to conform and take care of the libations (Verdhelis, Jameson, and Papakhristodhoulou 1976, 204-205; Hansen [O.] 1985, 162 n5). These fines were imposed on the πλατιώιναχχοι (platiōinarkhoi), whoever they were (college of attendants [?], Dubois 1980, 239-251; wine-drinkers, Koerner 1985, 452-457; drunkards, van Effenterre 1982, X; van Effenterre and Ruzé 1994, 296), by the hiaromnamon. In this inscription he does more than merely remember; he seems to have had priestly functions associated with keeping order in the religious community of Tiryns (Thomas [R.] 1996, 20; Hansen [O.] 1985, 162 n5; Osborne 1997, 78).
Hiaromnamones at Mykenai

The power of the hiaromnamon is more evident at Mykenai, where an early inscription (c. 525 BCE) from the akropolis mentions (a body of ?) hiaromnamones in connection with the cult of Perseus (Figure 18; Appendix A-11; for the Greek, see Appendix D, Text 6; on Perseus, see Paus. 2.15.4; 2.16.6). The inscription consists of the final clause of a law added on the crowning stone (capping block) of the structure from the hellenistic fountain house at Mykenai (Appendix A-11; Jeffery 1990, 172). It was found by Tsountas (1892, 65) between the ‘Lion Gate Tomb’ and the ‘Tomb of Clytemnestra’, but it must have come originally from a building (perhaps an archaic fountain house, see Holland, Hood, and Woodhead 1953; Jameson 1990a, 215) identified as the spring (fountain ?) of Perseus described by Pausanias (2.16.6) as being on the road from Mykenai to Argos.

Three additional fragments (found by Papadhimitriou in the 1950s but still not fully published) probably belong to the same monument, giving us the original inscription (Argos Mus.: Jeffery 1990, 445 no. E [not from Elaious]; Jameson 1990a, 215). This inscription is also on a circular object, perhaps the base for a shaft that supported the capping block (Jameson 1990a, 215). Its fragmentary nature makes it difficult to decipher, but according to Jameson (1990a, 213-223) its subject matter appears to be the same as that found on Tsountas’ text, even if the writing on this inscription is earlier. These three fragments have been interpreted as the main text, to which Tsountas’ inscription was an addendum (Jameson 1990a, 215).

Tsountas’ text translates loosely as: ‘If there is no body (college ?) of damiorgia, the hiaromnamones for (the heroön or fountain of ?) Perseus will serve as adjudicators or judges (kriteras) for the parents, as it has been decided.’ So, it seems that matters closely related to cult or polis regulations could be included under the title of hiaromnamon. This implies that the office of hiaromnamon in the initial sense of ‘remembrancer’ had probably acquired increasingly important responsibilities. We are told that in the absence of damiorgoi (in Ionic, demiourgoi, see below), they were expected to judge and to take
control of cult matters. Their position in the community was therefore an important one, perhaps second only, or equal, to the damiorgoi.

This direct reference to the hiaromnamones in a position of (acting) ‘judge’ is consistent with previous picture of the scribe’s developed role in archaic Greece. Recall Beattie’s (1975, 8-47) arguments in favour of Spensithios acting as a ‘Reeve’, and judge, of a special kind. Although the hypothesis was rejected by Edwards and Edwards (1977, 140) and others, Spensithios definitely had the right or responsibility of deciding the order of procedure. His position was also second to, if not on a par with, the kosmoi, the highest ‘magistrates’ of a Kretan city.

**Hiaromnamones at Asprókhoma(ta) (Mykenai) c. 475**


*Hiaromnamones* are further attested in an inscription from Asprókhoma, an area only one kilometre north-west of the citadel at Mykenai, on the road to Kleonai (Figure 19; Appendix A-11). The inscription, dating to about 475, is written on a limestone tablet or plaque only two centimetres thick. The text refers to the hiaromnamones in connection with sets of armour and weapons, presumably dedicated by them in a temple (Jeffery 1990, 173). The temple was probably that of Enyalios, god of war, identified by another inscription (to which I shall return) at Asprókhoma, and the *hiaromnamones* were probably those of the cult of Perseus from Mykenai (Shear [T.] 1966, 195; Tomlinson 1972, 209).

The idea that (non-military) officials dedicated weapons seems to have puzzled Mitsos (1946, 116-117), who explains this custom in the light of an undated passage about Archinos of Argos (Polyainos, *Strategemata* 3.8). Apparently, ‘when Archinus was tyrant in Argos the old weapons were dedicated to the gods after new ones had been issued by the city’ (Mitsos 1946, 117). We need not go this far, however, if the unknown temple is indeed that of Enyalios. Given his persona as god of war, we expect his worship to involve the usual offerings of a military nature. Unfortunately, few finds from
the sanctuary have been published (or found?), but a pile of iron spearheads and a bronze helmet appear among them.

What is interesting about this particular inscription is the way in which it was carved to imitate bronze (Jeffery 1990, 173). In addition to the unusual thinness of the stone, the omicron is cut as ‘a small drilled hole, like those of Argive bronze’ plaques originally nailed onto the façades of temples (Jeffery 1990, 173). Its letters, including the omicron as a simple dot, resemble those found later on a bronze helmet inscribed ‘to Enyalios’ (Figure 20; Náfplio, Leonárdho Mus. ?: SEG 23.187; Mylonas 1966a, 70ff.; Daux 1966a, 782; Mylonas 1967a, 96; Lazzarini 1976, 243; Jeffery 1990, 445 no. 3a). Both inscriptions come from Asprókhoma and date to around 475. If this bronze helmet belonged to one of the sets of shields, helmets, and javelins mentioned on the limestone plaque, then the plaque almost certainly came from the temple of Enyalios, where perhaps it was inscribed by the same hand that inscribed the helmet.

To take this hypothesis one step further: what if this hand belonged to one of the hiaromnamones mentioned on the limestone plaque? One of them could have inscribed the sets of armour and weapons, dedicated them, and then written up a document recording the dedication as part of a list of temple treasuries.

A Group of Four Hiaromnamones at the Heraion
c. 480-475
c. 460-450

1. Bronze statuette of 480-475 BCE:
WALTER 1911, 141 no. II, fig. 72; SCHWYZER 1923, no. 96.3; LAZZARINI 1976, 313 no. 938; JEFFERY 1990, 169 no. 21.

2. Bronze statuette of 460-450 BCE: SEG 16.244.
WALTER 1911, no. 1, 139-140, fig. 71; SCHWYZER 1923, 96.2; MASTROKOSTAS 1957, 24; LAZZARINI 1976, 313 no. 939; JEFFERY 1990, 153, 166, 170 no. 36.

IG IV 517; SEG 11.303, 16.244, 34.289.
RICHARDSON 1896, 42-48; MICHEL 1900, 710; WALDSTEIN 1902, 197-202 no. 2; ROEHL 1907, no. 39.14; SCHWYZER 1923, no. 96.1; VOLLGRAFF 1930, 28-30; BUCK 1955, 288 no. 82; WÖRRL 1964, 12, 19, 48, 84-85; LAZZARINI 1976, 313 no. 937; STROUD 1984, 208-209; JEFFERY 1990, 152, 164, 170 no. 32; VAN EFFENTERRE and RÜZÉ 1994, no. 86; BILLOT 1997, 48.

Three inscriptions from the Heraion mention a group of four hiaromnamones, who presumably dedicated public offerings to the goddess (Appendix A-13). The earliest offering (c. 480-475 BCE), a bronze statuette (now lost) with inscribed base, was
dedicated by four *hiaromnamones* from the proceeds 'of the hippodrome' (Figure 21).

This inscription alludes to the Heraia, the games commemorating Hera at the Heraion, where horseracing was one of the features (see Chapters II.1.6.f and III.2.4.b; Jeffery 1990, 161-162). The hippodrome is known from a funerary inscription of the late sixth century (Figure 22; see also below, I.3.4.c; Argos Mus. E210: *SEG* 11.305, 22.262, 33.294; Daly 1939, 168; Friedländer and Hoffleit 1948, no. 136; Peek 1955, 79 no. 305; Hansen [P.] 1975, 21 no. 141; 1983, 74 no. 136; Robert [J.] and Robert [L.] 1984, 438-439; Moretti [L.] 1953, 44-47; Jeffery 1990, 168 no. 15, 443; McGowan 1995, 628). Whatever the proceeds were remains unknown.

The other two inscriptions mentioning four *hiaromnamones* date to c. 460-450 BCE, that is, to a period after the destruction of Mykenai in 468, when Argos had influence over what was now an *Argive* Heraion. The first inscription is a stone base that once bore a statuette (see Appendix D, Text 7). Perhaps here, too, the dedication came from the proceeds of some part of the Heraia, either the *hippios dromos* (men's footrace) or the horseracing (Jeffery 1990, 166). The second inscription is inscribed on a massive limestone stele, a *telamon* (stone frame/support) into which was inserted an inscribed bronze or lead plaque, now lost (Figure 23; for the Greek, see Appendix D, Text 8). The preserved part of our document thus served as a heading to the real contents of the inscription (Waldstein 1902, 202). The inscription was the property of Hera, to whom the four *hiaromnamones* made the offering.

Importantly, the four *hiaromnamones* mentioned on the stone stele carry the names of the four tribes of Argos: the Dymanes, the Hylleis, the Pamphyloi, and the Hyrnathioi. From this evidence, Buck (1955, 283) argues that the *hiaromnamones* at the Heraion consisted of a 'representative' picked from each tribe. Common to all Doric states were the following three tribes: Dymanes, the Hylleis, and the Pamphyloi. The fourth tribe, the Hyrnathioi, is in evidence only in the Argolid, or rather in Argos (Buck 1995, 283; Tomlinson 1972, 54, 86, 188-189; Wörle 1964, 11; Roussel 1976, 249; Jones [N.] 1980, 112-113). The name of the fourth tribe, Hyrnathioi, first appears in this inscription or perhaps in another of about 460-450 BCE, still not fully published (see Appendix D, Text 9; Argos Mus.: *SEG* 41.283; Jeffery 1990, 444 no. E; Kritzas 1992, 231-240; van Effenterre and Ruzé 1994, no. 65).
Though only partly published, this second text, written on a bronze plaque found about two hundred metres from the temple of Apollo at Argos (Kapetanos plot), deserves further attention for the light it sheds on the Hymnathioi and the political institutions of Argos around the mid-fifth century. The text mentions a body of magistrates, the ‘Twelve’, distributing money to twelve unnamed groups, traditionally called ‘phratries’, though perhaps they did not exist as early as this (Wörle 1964, 17; Roussel 1976, 154; Charneux 1984, 207; Piérart 1985, 346-347; Kritzas 1992, 235; van Effenterre and Ruzé 1994, 274).

Kritzas (1992, 235) associates two of the ‘phratry’ names appearing in this text with those which are found under the heading of Hymnathioi on an Argive inscription of c. 400 BCE (Figure 24; Kritzas 1980a, 498; for the Greek, see Appendix D, Text 10). He therefore suggests (1992, 236) that we have here the twelve ‘phratries’ of this non-Dorian tribe, the Hymnathioi. The number twelve may be related to the months of the year, if we suppose that each ‘phratry’ took control of the affairs of the tribe for one month (van Effenterre and Ruzé 1994, 274). Since the Argives did not hesitate to give as eponyms for the ‘phratries’ of this fourth tribe the names of important mythical figures or divinities (such as Temenos, Diaphontes, and Hera), we can assume that the Hymnathioi were not composed solely of new citizens, but included old ‘phratries’, formerly of the three Dorian tribes, as a result of a re-division of the citizen body (van Effenterre and Ruzé 1994, 274; cf. Roussel 1976, 248; Jeffery 1976, 140). If the formation of this fourth tribe took place a little before the middle of the fifth century, it could be interpreted as a democratic institutional reform intended to break up the existing social structures and integrate new citizens (Kritzas 1992, 236; Hall [J.] 1995a, 590; Foley 1998, 137-143).

By this time Argos had conquered Mykenai and Tiryns and taken over the administration of the Heraion. Buck’s (1955, 283) idea that one hiaromnamon was picked from each Argive tribe fits comfortably into this scenario. It fails, however, to explain the presence of four hiaromnamones mentioned in the first of the series of inscriptions from the Heraion, seemingly dating to a period (480-475 BCE) when Mykenai is thought to have had influence over the sanctuary (Adshead 1986, 101; Kritzas 1992, 232; Hall [J.] 1995a, 613).
Unfortunately, we have no clear evidence of Mykenai's tribal system at this time. Our only clue is provided by Herodotus (7.202), who writes that during the Persian wars Mykenai sent eighty soldiers (hoplites) at the battle of Thermopylai (in 480 BCE) and that together with Tiryns, Mykenai fielded a joint force of four hundred hoplites at the battle of Plataia (in 479 BCE). If the military organisation of Mykenai was such that each tribe contributed a regiment to the army of the city, then the number of men (four hundred, less Tirynthians, and especially eighty), in multiples of four, suggests that Mykenai had four tribes by about 480 BCE.

With such an assumption, we might suppose that Mykenai's tribal system influenced the cult administration and therefore the number of hiaromnamones at the (Mykenaian) Heraion. This would explain the presence of the four hiaromnamones mentioned in the earliest inscription at the Heraion -- they were 'representatives' picked from each tribe. Yet, the editors of the Asprókhoma dedication suggest that the five sets of armour listed in the inscription were dedicated separately by at least five individual hiaromnamones (Mitsos 1946, 116; Jeffery 1990, 173).

If we reject the hypothesis that Mykenai had four tribes at least by 480 BCE, we must suggest other interpretations for the inscription from the Heraion dating to 480-475 BCE. An unlikely hypothesis would be that the four hiaromnamones at the (Mykenaian) Heraion corresponded not to the number of tribes but to some other division of the population. It may even have been an arbitrary number. If, like Spensithios, the hiaromnamones were foreign scribes hired by a particular city to render their services to that community (van Effenterre 1973, 37 and esp. 1979, 284ff.), they may have had little to do with any tribal system.

Another possibility is that the inscription from the Heraion dating to 480-475 BCE is Argive and was dedicated by a group of four hiaromnamones from Argos. The problem with this hypothesis lies in the fact that hiaromnamones are not (yet) attested in inscriptions from the city of Argos before the mid- or late fifth century (see below). Unless we conclude, as did Strøm (1998, 90) in her study of the Heraion bronzes, that the appropriation and annexation of the Heraion by Argos took place sometime between 675 and 575 BCE, the earliest in this series of inscriptions mentioning four damiorgoi is difficult to explain as Argive.
At Argos *hiaromnamones* are first attested in the later fifth century (c. 450-425 BCE). We find the word written on this *stele* from the Koros plot, at the south-west angle of the *agora* (Figure 25; Appendix A-10-69; for the Greek, see Appendix D, Text 11). The stone is very damaged, because it was re-used as a boundary marker, as a threshold, and as a covering for a drainage pipe during the first few centuries AD (Mitsos 1983, 243). Therefore, out of the sixty-three inscribed lines, only a few are preserved and nine were read by the editor (Mitsos 1983, 243).

The final nine lines mention the punishment that will fall on all those who are negligent, and those who render inoperative the decisions inscribed on the *stele*, including those who propose and preside (the *hiaromnamones*, *boathooi* [?], and president). It was a crime of treason against the city not to respect the letters of this written law (Detienne 1988b, 50). The repetition of the punishment reinforces the idea that 'not conforming to what was written' was a cause for worry and that it was important to obey the decisions taken by those in charge. Again the responsibility was in the hands of the *hiaromnamones* and the *boathooi* (?).

These measures were perhaps taken after a disaster or an attack against the public order of Argos. The event in question is unknown, though at line fifteen the editor sees traces of 'Lakedaimon' (Mitsos 1983, 248). Mitsos believes that the decree refers to the well-known events of 418-414 BCE, when the Argive generals conspired with King Agis of Sparta (Thuc. 1.89-118; 5.59.5-63). This act would have been interpreted as an attempted coup by the oligarchs to take over democratic Argos, with the help of Sparta. To prevent further attempts (which did happen one year later), the city threatened all those who went against the regime, i.e. the oligarchs who were against the democracy (Mitsos 1983, 248).

Mitsos' reading of the inscription only makes sense if the inscription belongs to the end of the fifth century. In a recent study, however, van Effenterre and Ruzé (1994, 390) date
the inscription to the second or third quarter of the fifth century, based on the letterforms. This new date suggests that the hiaromnamones were known at Argos before the late fifth century.

With respect to Mitsos' hypothesis about a disaster or an attack against the public order of Argos, do we know of any such events taking place between 475 and 425 BCE? The only clash between Argos and Sparta that we know of for this period is the battle at Tanagra in 458, when the Argives helped the Athenians fight the Spartans, who were defeated by an army of Argives and Athenians at Oinoe (Meritt 1952, 340-380; Meiggs and Lewis 1988, 77-78 no. 36; Jeffery 1990, 164 no. 30). But these events will not have affected public order at Argos. Perhaps we need not look beyond the Argive plain for an explanation. As a result of the internal conflicts of the 460s between Argos and the other communities of the plain, Argos may have taken measures to ensure that its enemies respected the (new) laws of the city.

**1.3.2.b. Damiorgoi as Literate Public Officials**

In 'Homeric' times damiorgoi (δαμιοργοι, in Ionic demiourgoi) were skilled workers of public things, such as seers, healers, carpenters, bards, judges, and heralds (Od. 8.135, 9.135, 17.382-386, 20.134-135; Finley 1956, 57ff.; Murakawa 1957, 385ff.). The roles of bard and judge remind us most readily why the title of damiorgos was later used by many Peloponnesian states to refer to a high-ranking public official, a 'magistrate' (Thuc. 5.47; Gaisford 1948, 765= Etymologicum Magnum, ὅμιοργος, see Busolt 1920, 505-509; Jeffery 1975, 319).

The inscriptive evidence from the Argolid has usually been taken to support this view of the archaic damiorgoi. Wörle (1967, 61ff.) maintains that they were a specific board of 'magistrates', like the nine Attic archons, except that within this board individual members did not have different titles and duties, as the archons had at Athens (see also Jeffery 1975, 320, 324; Detienne 1988b, 70). It is equally possible, however, that the damiorgoi represented a special category of citizens, fluctuating in number according to how many passed the required standards of lineage, wealth, or perhaps even literacy.
What is clear from the inscriptive evidence of the Argolid is that the term *damiorgos* was not used in order to signify craftsman-"damiorgos" in archaic times (Murakawa 1957, 391). Jeffery's (1975, 330) study of the *damiorgoi* shows that their chief business was *nomophylakia*, like that of the Athenian Areopagus. More specifically, as we shall see, the *damiorgoi* at Argos, the Heraion, and Mykenai dealt with serious acts of impiety, including desecration of shrines and temples, and with threats or offences against the state. Not only did they keep order and impose fines at sanctuaries, they also acted as overseers of public buildings and festivals. Moreover, to judge from the Perseia inscription at Mykenai, they were also responsible for reviewing the performance of the *halithia* (whoever or whatever they were). This presupposes that the position of the *damiorgoi* was powerful. Acting as chief 'judges', they probably supervised most of the city's officials, including the *hiaromnamones*, whose powerful roles as scribe and judge elsewhere in Greece were threatening for politically fragile communities. To undertake such duties, one presumably had to be literate.

**A Group of Nine *Damiorgoi* at Argos**

*c. 575-550*

On the Larisa, *in situ*.

IG IV 614; SEG 11.336, 17.147, 39.348.

ROEHL 1882, no. 30; 1907, 54.1 no. 37.3; COLLITZ and BECHTEL 1899, 121 no. 3260; ROBERTS 1887, 109 no. 73; VOLLGRAFF 1928b, 231; 1932, 389-393, pl. 1; PEEK 1941, 200; MITSOS 1952; FINLEY 1957, 141; MURAKAWA 1957, 391; HUXLEY 1958, 599ff.; HAMMOND 1960, 33-36; WÖRLE 1967, 61-70; JEFFERY 1975, 323-325, 330; KELLY 1976, 131-133; ARNHEIM 1977, 64-67; CARLIER 1984, 394-395; JEFFERY 1990, 156-158, 168 no. 7; PIÉRART 1991b, 142-144; PARIENTE 1992, 217; VAN EFFENTERRE and RUZÉ 1994, no. 87.

This inscription, written around 575-550 BCE, was found on a *stele* (door post ?) rebuilt into the wall of the Venetian tower on the Larisa, the akropolis of Argos with its mediaeval castle on the summit (Figure 26; Appendix A-10-81; for the Greek, see Appendix D, Text 12). It records either a decision taken by the city under the responsibility of the *damiorgoi* or a dedication offered by nine members of the board of *damiorgoi* (van Effenterre and Ruzé 1994, 322). We have only the last lines of the text; the first lines may have been written on a separate stone (Hammond 1960, 33). In the first two lines we read, 'under the 'reign' of the nin[e *damiorgoi*]' (---)ν ἐν[ἐν] η[η] άναστάσει, followed by a list of nine names.
Since many of the names have a flavour of Argive epic, Vollgraff (1932, 377-389) has argued that the inscription might be a list of the mythical heroes set up by Pheidon of Argos -- a list of *damiorgoi-basileis* (Wörle 1964, 61-70; Carlier 1984, 394). But such an explanation is unlikely; as Mitsos' (1952) prosopography shows, some of these (royal) names were also used by Argives living during the archaic period. This was especially the case with aristocrats (Piéart 1991b, 142), who apparently liked to attach themselves (by name) to their glorious past. The idea of glorifying one’s past would certainly explain the rare use of the Homeric verb *anassein* instead of the more usual *arkhein*. Perhaps, then, the Argives saw in the *damiorgoi* the inheritors of a royal and prestigious power (van Effenterre and Ruzé 1994, 322).

Another explanation for the nine is that they formed a group of ‘magistrates’ in power during that year, with three *damiorgoi* chosen from each of the three Dorian tribes (Hammond 1960, 33-36; Wörle 1964, 12, 61-63; Tomlinson 1972, 189). In this context the verb *anassein* suggests that they held the highest position (Carlier 1984, 395), but even here it is perplexing (Jeffery 1975, 324). Jeffery (1975, 324) wonders why this rare verb was used and suggests that these men had to perform some special duty. And why was the number nine referred to, if it happened to be the normal number of the board (Jeffery 1975, 324)? Jeffery believes that these *damiorgoi* have all been listed and their names added up, because this inscription commemorated some particular event, as it did in the record of the eight Athenian *hieropoioi* who were in charge of the *dromos* for the Panathenaia in 566 BCE (Jeffery 1975, 324; 1990, 72 no. 18). We might therefore assume that these are the names of nine men elected from a larger group having the title of *damiorgoi*, to act out their duties as expected by the verb *anassein* (Jeffery 1975, 325).

### A Group of Six Damiiorgoi at Argos

On the Larisa, *in situ.*

*SEG* 11.314, 22.263.

The inscription is of similar appearance, measurements, and date to the previous text; it, too, was found built into a Venetian wall of the Larisa (see Appendix D, Text 13; Jeffery 1990, 158). In Jeffery's opinion, they may well both be by the same mason. This second, and probably later, text records the consecration of objects to Athena Polias and the conditions of their usage in the sanctuary (van Effenterre and Ruzé 1994, 324). It begins with 'when the six mentioned by name (in the left column) were damiorgoi, this is what was done in the sanctuary of Athena; the objects, the working materials, and the [...] they dedicated to Athena Polias.'

There is a contrast between the damiorgoi (and the priests, sacrificers, etc.) and a simple individual, a traveller or a suppliant (whediestas), who is forbidden to use the objects of the goddess outside the sanctuary. This implies that in the past some people thought that the practice (i.e. the private use of sacred objects) was permitted (Bourguet 1930, 6; Jeffery 1990, 158). The damiorgoi fined the culprits, and the amphipolos took care of the objects (Buck 1955, 283).

Only six damiorgoi are listed here. Their number continues to be a multiple of that of the three Dorian tribes, and can therefore be simply explained as a list of six individuals selected from a larger body to oversee (and pay for?) the renovations done in the precinct. However, scholars who maintain that the nine formed a board of 'magistrates', whose number was later cut down to six, seek other, more complex explanations. Some (Wörrie 1964, 61ff.; Tomlinson 1972, 189; Arnheim 1977, 64-67; Carlier 1984, 394) see this reduction as a sign of a (constitutional) reform that took place between the two dates - 'the substitution for monarchy of a closely controlled oligarchic system' (Tomlinson 1972, 189; on kingship, see also Paus. 2.29.2; Diod. Sic. 7.13-14; Plutarch, Moralia 340C). Others believe that the term damiorgos refers to different people in the two inscriptions, that is, the names of the six damiorgoi belong to mythical kings whereas those of the nine belong to ancient kings and heroes (Vollgraff 1932, 377-389; Carlier 1984, 394). More recently, van Effenterre and Ruzé (1994, 324) suggested that the diminished number of damiorgoi represents either a decrease in population or a reduction in the competencies of the damiorgoi. This last suggestion is perhaps the most logical in view of the next two inscriptions.
Damiorgoi at the Heraion

Damiorgoi at the Heraion c. 575-550

Athens, National Mus., inv. Argeia 14016
IG IV 506; SEG 11.302.

Five fragments of a badly damaged bronze plaque, originally nailed to a wall, were found at the Heraion in 1895 (Figure 27; for the Greek see, Appendix D, Text 14). The bronze worker used ‘the same tall, careful lettering as did the mason of ... [the stone law on the Larisa], and the two inscriptions must be close in date’, this one probably being a little later according to Jeffery (1990, 158). The text begins by stating the punishment (of exile and confiscation of property) for vandalising the inscription and for disregarding the written words, i.e., the law. Then it goes on to the main text, where it states that all who kill, commit any other crime, or contrive against (the city ?) shall be punished by cursing, death, or exile, like the famous Tean curses (Jeffery 1990, 158). It ends, ‘but if there is no (body or college ?) of damiorgoi, ... (or if there is no damiorgos).’

Two points stand out here. First, since the damiorgos gave out penalties for defacing inscriptions and for ignoring written laws (Kelly 1976, 132), he was probably literate. Second, since provision was made for when there was no damiorgos, ‘the implication is that, at the administrative level, there is little connection [at this time] between the [damiorgos at the] Heraion and [the six or nine damiorgoi] from the city of Argos’ (Hall [J.] 1995a, 610). This explanation further supports the idea that during this period the Heraion was under the influence of Mykenai.

The possibility that damiorgoi were not always available for duty appears again more clearly in the Perseia inscription from Mykenai, to which I now return.

Damiorgoi at Mykenai c. 525

SEE ABOVE FOR BIBLIOGRAPHY
For the following reading of this inscription, I thank my supervisor who gave me access to Jameson's unpublished notes.

In the final clause of a law added as a crowning stone of the hellenistic fountain house at Mykenai (see above, I.3.2.a), mention is made of a vacancy in the office of the damiorgia -- ‘If there is no body (college ?) of damiorgia, ...’. This vacancy cannot be understood

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simply as an occasional or temporary absence of the damiorgia (cf. Jeffery 1975, 327; van Effenterre and Ruzé 1994, 356). Although it is possible that in a city as small as Mykenai there were occasional lean years with no citizens ‘wealthy’ (or skilled) enough to qualify for the category of ‘workers for the public’, or that in a busy year they might neglect to provide overseers for one of the smaller cults (Jeffery 1975, 327), the inscription is better explained as resulting from some crisis (anarchia, as in Athens or akosmia, as in Crete) that stopped the damiorgia from taking up office or assembling at the time when the sanctuaries needed them (IG IV 493; Wörrle 1964, 69 n28; Jeffery 1975, 327; van Effenterre and Ruzé 1994, 354-356). The absence of damiorgoi at Mykenai and the (Mykenaian) Heraion perhaps signalled the start of internal conflicts between the communities of the Argive plain, a period of unrest that was to end in the destruction of Mykenai, Tiryns, and Midea.

I.3.2.c. Artynoi. Another Group of Literate Officials?

If it can be shown that the duties of the artynoi were similar to those of the damiorgoi (Tomlinson 1972, 198), as our next inscription suggests, I think they, too, were literate.

Artynoi at Argos or Halieis  

Paris, Petit Palais, Formerly of the Collection Tyskiewicz, Dutuit no. 118.  
IG IV 554; SEG 11.315, 15.199, 37.1783, 42.273.  

This inscription, on a bronze plaque dating to about 480-470 BCE, has no known place of origin, but has been attributed to Hermione, Argos, and Halieis (Figure 28; for the Greek, see Appendix D, Text 15). It concerns the use of ‘the treasures of Athena [by the city] to meet some emergency’ (Jeffery 1990, 161). Both the president of the council, named Ariston, and his fellow councillors (the artynoi) were to be ‘protected by this law from any subsequent impeachment on the grounds of illegal procedure’ (Jeffery 1990, 161). The last line states that the council in office will enforce (the exile and the confiscation of
property), otherwise they (the members of the council) will themselves be liable to Athena.

Though the origin of this text remains unknown, Jameson’s (1974a, 67-75) attribution of the inscription to Halieis has been readily accepted by many scholars. Brandt (1992, 83-93), however, argues against the attribution to Halieis, favouring Argos instead. He suggests that the dimensions, topic, and form of this bronze plaque all fit the architrave blocks of the sanctuary of Apollo Lykios at Argos, where such texts are known to have been displayed. Moreover, the letterforms resemble that of another bronze plaque of about 475 BCE from Argos (Figure 29; for the Greek, see Appendix D, Text 16; proxeny for Gnosstas of Oinous, found in the agora: SEG 13.239; Charneux 1953, 395-397 no. 3; 1984, 208; Guarducci 1969, 51-52 no. 4; Jeffery 1990, 162, 169 no. 22; van Effenterre and Ruzé 1994, 151 no. 35).

Yet Brandt’s arguments can also be used in favour of an attribution to Halieis. Bronze plaques were also nailed to temple walls at Halieis (Náfplio, Leonárdho Mus. HM 620; SEG 42.281; Jameson 1974a, 73; 1976c, 235; and HM 237, 345, 388; Jameson 1974a, 71 n18; Foley 1988, 130). Furthermore, the Argive script in our example was often used at Halieis.

Since the epigraphical and archaeological evidence remains equivocal, we must look elsewhere for clues. The political vocabulary of the inscription may help. The artynoi, otherwise unknown in Argolic inscriptions, appear in Thucydides 5.47.9, dating to 420 BCE, as Argive officials (see also, Plutarch, Moralia 291E, for Epidauros). It has been suggested that they replaced the damiorgoi as principal ‘magistrates’ from about the first quarter of the fifth century as part of a democratic reform after Sepeia (Wörrie 1964, 76; Tomlinson 1972, 198; van Effenterre and Ruzé 1994, 382). True, the damiorgoi have not (yet) been attested epigraphically at Argos after 550 BCE (and at Mykenai after 525). But this is no proof that the artynoi or any other group took their place.

Given the nature of our evidence, only generalisations are possible. Whoever the artynoi were, they seem to have held a specific office of some importance, either at Argos or at Halieis. Their role was at least partly judicial. We can therefore assume that, like the damiorgoi, they would have benefited from being literate.
1.3.3. SIGNS OF 'INFORMAL' LITERACY AT ARGOS AND HALIEIS

The evidence gathered so far suggests that a small section of the population, made up of a few professionals and officials within the Argive plain, would have been skilled in writing for administrative purposes. This picture seems consistent with our previous discussion of 'scribal' literacy in Attica, Sparta, and Krete. Now it remains to be asked whether only such public functionaries and scribes were literate in the archaic Argolid.

The epigraphical evidence for 'informal' literacy is not as helpful as we might have hoped. For one thing, we have as yet little inscribed pottery for the Argolid. Only brief descriptions of graffiti have been published (mainly for the Heraion and Argos), often without illustrations, specific dates, script types, and archaeological contexts. Moreover, rarely do these graffiti give us anything more than a name, referring to a divinity, a person, or both. Graffiti that record the names of divinities do help in identifying the god or goddess worshipped at a specific site, but give us little information about their writers. Onomastic graffiti, on the other hand, sometimes do. This is especially true with names that have been written on objects from contexts other than votive deposits.

1.3.3.a. Literate Soldiers at Halieis

To judge from the preliminary publications of fifth century graffiti at Halieis, soldiers used writing as a way of marking their possessions (Jameson 1969, 321, pl. 80; 1974a, 71 n21; 1976c, 234). Personal names were scratched on drinking cups found within the confines of the akropolis (Náfplio, Leonárdho Mus., HP 317: Daux 1966a, 789). Jameson argues that within this area was a soldiers' garrison, perhaps a Laconian one (Boyd and Rudolph 1978, 333-355; Boyd and Jameson 1981, 327-328; Jameson, Runnels, and van Andel 1994, 71). At least seven and possibly eleven names are in the Argive alphabet, two are in the East Argolic or Laconian, and one at least (possibly as many as five) is compatible with the script of Korinthos and its allies (Jameson 1974a, 71). Other fifth century graffiti from Halieis include an abecedarium in the Argive alphabet and single names (?) on black glaze sherds (Figure 30; Náfplio, Leonárdho Mus., HC 99: Jameson...
1969, 319, pl. 80; 1976c, 234; Jeffery 1990, 446 no. 9b). These were found in the northern half of the akropolis, presumably in non-votive contexts dated after the ‘Tirynthian’ resettlement, which means that they too perhaps belonged to soldiers.

Though much of the archaic material from Halieis remains unpublished (Appendix A-38), we can draw a few conclusions based on what we already know. First, Spartan interest in Halieis can be seen from the alphabet used there through the fifth century. The script, called East Argolic, is distinct from the other identifiable Argolic script -- the one used in the Argive plain. ‘The distinction between the two regions arises in part from the differential treatment accorded certain letter forms, ... but the most significant variations are firstly, that the east Argolic scripts prefer the ‘red’ alphabet [and used sigma], while the Argive plain favours the ‘blue’ alphabet ... [and] generally tends to employ san (Foley 1988; Jeffery 1990, 175; quotation from Hall [J.] 1997a, 149-151). Hall (1997a, 147) has shown that even the settlements within these two regional groups show slight, though distinct differences in chirographic principles despite their geographical proximity to one another.

Taken as a whole, the East Argolic script of Halieis is similar to the Laconian; it differs only in the absence of certain refinements (Jeffery 1990, 174-202; Jameson, Runnels, and van Andel 1994, 71). The East Argolic script may have reached the Akte via Laconia (Jeffery 1990, 42, 174-175; Foley 1988, 124ff.), and may therefore reflect the ties that the eastern peninsula, and especially Halieis, had with its neighbour Laconia.

A second point to remember is the arrival of the ‘Tirynthians’ at Halieis in the fifth century (Hdt. 7.137.2; Strabo 8.6.11). The question is whether these newcomers were the descendants of the citizens of Tiryns attested around 600, villagers who took advantage of Argive weakness after the defeat at the battle of Sepeia (c. 494 BCE), or the so-called ‘slaves’ (see Chapter II.1.5.b.) expelled from the responsible positions that they held in Argos during this time of weakness, or indeed some combination of these (Jameson, Runnels, and van Andel 1994, 77). ‘Herodotos (7.137) identifies Halieis as “from Tiryns” at the time of Aneristos’ exploit before 446,’ but ‘the exact date of their coming and ... [of course] the precise identity of the new settlers are [is] uncertain’ (Jameson, Runnels, and van Andel 1994, 77). What is certain is that the Argive alphabet, presumably brought by natives of the Argive plain, first appears at Halieis in the second
quarter of the fifth century. Some of these newcomers were probably literate, as the Argive graffiti on the drinking cups suggest. Indirectly, then, we have evidence of 'informal' literacy among the former inhabitants of Tiryns.

Judging from the Halieis graffiti, these 'casual' writers were not exclusively local or 'Tirynthian'. One graffito (perhaps more) on the drinking cups also shows the script of Korinthos and its allies. We know of Corinthian and assorted Peloponnesian troops helping Halieis to fight back an attack by Athenians around 460 BCE (Thuc. 1.105.1). The events that surround the Athenian attack are unclear, but it has been suggested that Athens' aim was to secure good communications with their ally Argos in one of that city's rare periods of activity in this century ... The Athenians (and Argives) wanted either to prevent the establishment at Halieis, under the protection of Sparta and its allies, of the refugees recently expelled by Argos from Tiryns in the Argeia, or to strike before fortifications [in Halieis] were completed (Jameson, Runnels, and van Andel 1994, 76).

1.3.3. b. Casual Writers of Graffiti in the Argive Plain?

As we have just seen, onomastic graffiti often marked people's property, and so were probably inscribed by their owners. This usually applies to inscribed pots used in non-votive or utilitarian contexts.

Of the eleven published Argive graffiti, only five examples are onomastic (SEG 31.318, 36.340, 38.310, 40.328; Protonotariou-Dheflaki 1972a, 155; Bommelaer and Grandjean 1972, 176; Pariente, Aupert, and Moretti [J.-C.] 1988, 719-720; Onasoglou 1990, 88), and only one example comes from a non-votive context. It was found in a grave at Argos, situated at 262 Gounari Street (Appendix A-10-53: SEG 31.318; Protonotariou-Dheflaki 1972a, 155, pl. 120). The name Εὐγάμα was scratched on the bottom of this fifth century black glaze skyphos. The writing appears to be Ionic, and therefore probably not incised by an Argive.

The remainder of the graffiti from the Argive plain are dedicatory. Three of them, however, bear personal names. The first two graffiti are fragmentary and no longer preserve the full names of the individuals (Appendix A-10-64 and A-10-40, Argos Mus., Chapter I The Uses of Writing and Literacy
Aphrodisian: Daux 1968, 1028 fig. 15; Lazzarini 1976, 189 no. 73; and Theatre: SEG 16.251; EF 1956b, 386). They were both inscribed on Attic cups of about 450 BCE. The third example comes from the temple of Hera at Tiryns (Figure 31; Frickenhaus, Müller [W.], and Oelmann 1912, 105 no. 226; Jeffery 1967a, 20; 1975, pl. 48; 1990, 150 no. 10). The inscription is on an Attic black-glazed plate of the fifth century. It was a public dedication by the phrouroi, guards who perhaps watched over the akropolis of Tiryns (Jeffery 1967a, 20). The phrouroi are known from other inscriptions (on stone) in the Argolid (Kyra: IG IV 194; Jamot 1889, 186-187; Jeffery 1967a, 20-21; Íria: Jeffery 1967a, 18-20; 1990, 444 no. G; Lazzarini 1976, 33 no. 941). Given the probability that soldiers at Halieis were literate, it is likely that the phrouroi were as well.

I.3.3.e. The Writing of Ostraka at Argos?

Aristotle (Pol. 1302b.18-19) tells us that the Argives used ostraka (Wörle 1964, 126; O’Neil 1981, 342). As yet, however, only one isolated example of what appears to be an ostrakon has been found at Argos (Figure 32; Appendix A-10-65: SEG 36.340; Touchais 1986, 688; Catling 1986, 26; Pariente et al. 1986, 764-765; Piérart and Thalmann 1990, 97). The graffito reads 'Ἀλκανδρος and was written on the inside surface of the foot of black glaze skyphos (c. 475-450 BCE). Clearly, the name was incised after the pot had been broken, and therefore could be an ostrakon, even if the name is unattested in Argive prosopography. The (secular) context of this graffito -- it was found in the stoa of the agora -- lends further support to the ostrakon interpretation. It is interesting that in Athenian ostrakophoria the location of the 'polling-station' may have been somewhere in front of the Stoa Basileios (Brenne 1994, 20).

If ostracism did take place at Argos in the fifth century, we would expect to find more than just one ostrakon. Only two other graffiti beside the Alkandros graffito possibly served as ostraka. The first is incomplete; only the last three letters can be read. Thus, it could originally have been part of a dedicatory inscription, with the name of the donor ending in [---]εῖς (Appendix A-10-59; Bommelaer and Grandjean 1972, 176 fig. 28). The second graffito is the name Φαένωρ written on the base of an Attic black glaze cup (c. 500-480 BCE). Its context, in the excavations off room G of the theatre, seems non-votive (Figure 33; Pariente, Aupert and Moretti [J.-C.] 1988, 719-720, fig. 28), and the
writing, which is later than the vase, was scratched around the bottom of the foot in a manner resembling that of Athenian ostraka. But the name Phaenip(p)o is in the genitive case; if it were an ostrakon, we might expect it to be in the nominative like that of Alkandros.

I.3.3.d. Argive Merchants with Basic Reading Skills

Inscribed weights appear only rarely in archaic Greece; so the series of inscribed lead weights (c. 500 BCE) from the agora of Argos stands out here (Appendix A-10-65: Piérart et al. 1987, 591; Catling 1987, 18, fig. 23). To some extent these weights indicate that merchants benefited from the ability to read (and perhaps write) in the course of their business. Whether they inscribed their own weights is impossible to determine, but certainly lead was soft enough to be scratched with any sharp instrument. Lead plaques were often used by private individuals to write curses; and in the commercial activities of the agora at Argos (three) lead plaques of the fifth century list various kinds of merchandise (Figure 34; Appendix A-10-59: Piérart et al. 1987, 591; Catling 1987, 18, fig. 23). These were probably texts documenting the registration or delivery of goods, such as hay (Piérart et al. 1987, 591).

I.3.4. ‘CRAFT’ LITERACY IN THE ARGOLID

Inscribed dedications, especially those on stone or metal, suggest that for the most part Greek artists were ‘craft’ literate in the archaic period. We have evidence of ‘craft’ literacy among sculptors, masons, and bronze workers working in the Argolid. Inscribed altars, stone and metal objects, statue bases, and bronze plaques come from all over the region. There is no doubt that in the archaic period a small literate community of artists worked in and around Argos and Epidauros, the two areas where we find the most dedications.

Strangely, however, we have no direct (or published) evidence for literacy among pot painters of the Argolid, except for an early (seventh century) dipinto from the Heraion
The inscription reads: '[--]andros dedicated me.'

Luckily, we do have graffiti on (local and imported) pottery from the Argolid, and to judge from their contents, they may have been inscribed by professionals (EF 1956b, 387 fig. 45; Daux 1968, 1032 fig. 15; 1969, 1004; Piérart et al. 1987, 590 fig. 7; Pariente, Aupert, and Moretti [J.-C.] 1989, 721). Most of the dedicatory graffiti (except for three pieces above) are anonymous and generic, such as 'I am for the hero' or 'I belong to Hera'; they lack the common formula 'so-and-so dedicated me (this) to ...'. The donor's name is always left out. When compared with inscriptions on stone and bronze, this kind of anonymity seems odd, because the dedicator's name was an important and integral part of stone and bronze dedications. Here we assume that dedicators requested that their names be written on the stone or bronze. With graffiti, however, it is possible, though unlikely, that individuals actually inscribed their own pottery and purposefully left out their names. Perhaps the absence of personal names is better explained as follows: pots were inscribed in advance, so owners never got a chance to request a personal dedication. What better way to suit the needs of various worshippers, than to make graffiti anonymous?

**1.3.5. WHO COULD READ IN THE ARGOLID?**

A few artists even went through the effort of signing their works in the course of their business. Surely, these artists would have wanted their signatures not to fall on blind eyes. The question is: whose eyes did they fall on?

If Argolic artists were advertising their skills to potential clients, both parties needed to be literate. Let us look at the evidence in more detail to see if artists attracted the attention of literate clients from the Argolid.
I.3.5.a. Signatures from the Argolid

The earliest (c. 575-550 BCE) recognised signature of a bronze worker is written in the Argive script on a fragment of a bronze shield strap with two small relief panels and part of a third (Figure 36; Malibu, J. P. Getty Mus. 84.AC.11: SEG 35.266; Anonymous 1985, 166; Jeffery 1990, 444 no. B, pl. 74 no. 6). It states that 'Aristodamos of Argos made it [the bronze object]'; its provenance remains unknown.

Another sixth century (c. 525 ? BCE) signature of a bronze worker was found on a bronze plaque or stele dedicated by Kleandros (Figure 37; Private possession: SEG 26.419; Androutsopoulos 1949, 73-75; Lazzarini 1976, 278 no. 721; Hansen [P.] 1983, 195 no. 366; Jeffery 1990, 173-174 no. 7, 445). The inscription is said to come from Tourovrysi near Ayios Yeōrgios in Nemea, but Jeffery (1990, 173) assigns it to a hand from Mykenai. The texts begins with the signature of an unknown artist, whose name ends in [---]iahy.

We find more evidence for Argive sculptors signing their works on the bases of statues. None of these signed bases was set up in Argos, however. They come from Olympia, Delphi, and Hermione (Appendix A-50).

One of the earliest (late seventh-early sixth century) and most famous of Argive sculptures was signed by a certain (Poly/ ?)medes (Figure 38; Jeffery 1990, 154-156). The signature is on the base of a kouros in Delphi, along with another similar inscribed base and kouros, the two identified in previous literature as Kleobis and Biton (Delphi Mus. 4672, 980: Homolle 1909, 5f.; Von Premerstein 1910, 41-49; Schwyzzer 1923, no. 317; Daux 1937, 61ff.; Richter 1942, 78ff.; van Groningen 1945, 34-43; Buschor 1950, 35ff.; Tod 1946, 4-5 no. 3; Marcadé 1953, no. 115; Vatin 1977, 13-22; Foley 1988, 128; Jeffery 1990, 154-156, 168 no. 4, 444). The inscriptions themselves are badly damaged and this has resulted in considerable controversy over their decipherment. Jeffery (1990, 155) sees the first line of the second inscribed base as the name of another sculptor, perhaps from the same workshop as (Poly)medes, whose name ended in [---]tou. However we choose to decipher these inscriptions, one maker was undoubtedly Argive and signed his name in the Argive script.
A signed base from Olympia once (c. 480-475 BCE) supported a group of bronze statues (Figure 39; Olympia Mus. 23, 28, 30, 12: SEG 11.1250; Roehl 1882, nos. 41-42, 95; 1907, 56 no. 11, 27 no. 3; Loewy 1885, 24-26 no. 30; Dittenberger and Purgold 1896, 630-631; Collitz and Bechtel 1899, 124-125 nos. 3270-3271; Roberts [E.] 1887, 114 nos. 80-81; Schwyzer 1923, no. 80.3; Friedländer and Hoffleit 1948, nos. 142, 153; Hansen [P.] 1983, 204-205 no. 380; Jeffery 1990, 160, 169 no. 19, 211, 215 no. 20, 443, 446, pl. 28). The monument was dedicated by Praxiteles, an Arkadian who emigrated to Sicily, but bears the signatures of three Argive sculptors: Asopodoros, Atotos, and Argeiades. A fourth artist, Athenodoros, was Akhaian. Although the monument is generally described as Argive, its inscription is not in true Argive script, because it uses the non-Argive lunate gamma (Jeffery 1990, 160). Perhaps the sculptors themselves did not carve out the letters on the stone bases, but left them to the masons (see below, for such an example from Hermione).

Another statue base from Olympia was signed by an Argive sculptor, whose name is now lost (Olympia Mus. 946: Roehl 1882, no. 44a; Loewy 1885, 27-28 no. 32; Dittenberger and Purgold 1896, 632; Collitz and Bechtel 1899, 125 no. 3273; Jeffery 1990, 160, 169 no. 24). The name of the sculptor was in a different script from that of the dedication, which was written in Ionic lettering. The artist may have been one of the several Argive bronze workers flourishing around 475 BCE (Jeffery 1990, 166).

Dorotheos was certainly one such sculptor. His signature appears on a base for a group of bronze statues set up at Delphi (Figure 40; Delphi Mus. 3840: Pomtow 1909, 170; Bourguet 1929, 326ff. no. 502; Peek 1934, 47; Marcadé 1953, no. 30; Jeffery 1990, 166, 170 no. 35). Although the attribution to Dorotheos remains tentative in this example, we have another base from Hermione that bears his signature in Argive letters (Figure 41; IG IV 684; SEG 11.379; Loewy 1885, 43-44 no. 51; Philadelpheus 1910, 174; Peek 1934, 45ff. no. 8b; Marcadé 1953, no. 31; Jameson 1953, 149ff.; Lazzarini 1976, 190 no. 75; Jeffery 1990, 178-179, 182 no. 9). The Hermione base was found on the 'Bitsi' near the second tower of the Venetian wall that cuts across the promontory roughly halfway from the tip (Jameson 1953, 148-149). The text is in the East Argolic script, but the signature is in Argive letters of about 460-450 BCE (Jeffery 1990, 178-179). Dorotheos no doubt
came 'from Argos to see his work erected, and signed the base himself' (Jeffery 1990, 178-179); not all sculptors did.

The last of the series of signatures from the Argolid is from a Kretan sculptor, Kresilas (Figure 42; IG IV 683; SEG 11.378; Roehl 1882, no. 47; 1907, 29 no. 2; Loewy 1885, 36 no. 45; Roberts [E.] 1887, no. 287; Michel 1900, 823 no. 1066; Peek 1934, 45ff. no. 8a; Marcadé 1953, no. 63; Jameson 1953, 149ff. no. 2; Hammond 1960, 33-36; Wörle 1964, 61ff.; Guarducci 1967, 366-367 no. 5; Lazzarini 1976, 189-190 no. 74; Jeffery 1990, 178-179, 182 no. 8, 446). This inscription was also found in the Venetian wall at Hermione. Perhaps the sculpture came from the same workshop as the previous dedication, though the writing dates to c. 450 BCE or a little later (Jeffery 1990, 178-179, 446). The signature of Kresilas is not in the Aiginetan script of Kydonia (which he never uses, see Marcadé 1953), his native city, 'but in the same lettering as the dedications' (Jeffery 1990, 179). According to Jeffery, either Kresilas sent no signature with this bronze or the local masons failed to copy his signature exactly from the draft.

I.3.5.b. The Advertising Value of Signed Works

On current evidence it seems that, if Argolic artists were trying to advertise their skills to potential clients, they were not doing a good job of it within the Argolid. Signatures of Argolic (especially Argive) sculptors and bronze workers have been rarely found within the Argolid. Perhaps artists were so well known within their own community that they need not bother to sign works that were set up locally. It is equally possible, however, that their signatures were ineffective, because the local population was on the whole illiterate. Then, the presence of signed works at Olympia and Delphi might imply that the 'international' mix of members from those communities in general were literate.

I.3.5.c. Passers-by and the Reading of Inscribed Tombstones

Another type of inscription that is thought to have been read by the average citizen is the funerary monument. On the basis that some inscribed gravestones are positioned beside paths and address passers-by, some scholars assume that such passers-by could read what
was written (Stoddart and Whitley 1988, 764; Svenbro 1988a; Whitley 1997, 644). So far very few inscribed gravestones have been found in the Argolid, and none of them addresses passers-by.

Earlier I argued that as grave markers, they had a significance regardless of whether they were read. That does not mean 'that their written context was irrelevant; but ... [as with] other tangible memorials in some ways, they [were] not purely documents whose written content was all that mattered.' (Thomas [R.] 1989, 51). The shape of a monument said something about the social position of the individual (McGowan 1995, 632). Some grave markers had 'visual connotations directly related to the use of columns on racecourses' (McGowan 1995, 626).

This concept can be illustrated more clearly by three funerary monuments from the Argolid. The first two are columns from Troizen. The earliest column is on an octagonal shaft of about 550-525 BCE that was re-used in a hellenistic cistern (Figure 43; IG IV 801; SEG 11.388; Legrand 1893, 84-86, 627; Roehl 1907, no. 110; Schwyzer 1923, 49 no. 102; Vollgraff 1929, 234; Peek 1934, 50-52; 1955, 56 no. 216; Welter 1941, 39ff., 54; Friedländer and Hoffleit 1948, no. 30; Hansen [P.] 1975, 21 no. 143; 1983, 75-76 no. 138; Jeffery 1990, 176, 181 no. 2, 445, pl. 32; Robb 1994, 66-67; McGowan 1995, 621). A capital originally stood on top of the shaft, 'which carried a tripod won, according to the epigram, by Damotimos, the son of Amphidama, in a race at the Games in Thebes' (Jeffery 1990, 176). The inscription reads on two faces: side A, 'This is the tombstone of Damotimos; his dear mother, Amphidama, had it made because no children were born in his megaron.' and side B, 'And the tripod that he won running at Thebes ... unharmed, she set up over (her) son.' (McGowan 1995, 621). These games probably paid tribute to Apollo Ismenios, or they were funeral games, where one tried to win tripods (Jeffery 1990, 176). The reference to Damotimos entering a Theban contest probably reflects Troizen’s general attitude towards its neighbours across the Saronic Gulf (Jeffery 1990, 176).

The second funerary monument from Troizen (c. 500 BCE) was a round, unfluted column found beside the road from Galatás to Troizen (Figure 44; Poros Mus. ?: IG IV 800; SEG 11.387; Legrand 1900, 179-180; Wilhelm 1905, 416; Roehl 1907, no. 110.7; Schwyzer 1923, no. 101; Welter 1941, 40, 51; Friedländer and Hoffleit 1948, no. 29; Peek 1955, no.
Previous publications show a hexagonal socket on top of the column, indicating that it once held a statue that perhaps commemorated the skills of the deceased (Legrand 1900, 180). Its epitaph reads: 'Vison [the father] made this monument for dead Praxiteles, and his companions piled up this mound, moaning heavily, in exchange for his good deeds; and their fleeting work they completed in one day.' (McGowan 1995, 621).

The possibility of a visual association between a funerary column and a column on a racecourse is further suggested by an inscribed Doric capital of about 500 BCE discovered near the Heraion (Figure 22; also see above, 1.3.2.a; SEG 11.305; 22.262; 33.294). The capital served both as a monument for a young man who died in battle, and as a memorial to his athletic prowess (McGowan 1995, 628). The epitaph reads: side A, 'I, Kossina, have buried Hyssematas near the hippodrome, providing a memorial for many men today, and those who will come after, of a brave man', and side B, 'who died in battle and lost young manhood, (he was) prudent, a winner of victories, and wise among his peers.' (McGowan 1995, 628). Because Hyssematas was buried beside the hippodrome, 'it is possible that his athletic prowess lay in chariot racing. Apparently, by using the column ..., Kossina intended to bring to mind the shape of a turning post on a racecourse.' (McGowan 1995, 628). The 'turning post' shape of the capital and Kossina's choice of location for the tomb near the hippodrome provided enough visual information for passers-by to realise that Hyssematas was an 'aristocrat': he was wealthy enough to own race horses (McGowan 1995, 632).

1.3.6. SUMMARY

From the hundred or so specimens of sixth and fifth century inscriptions that have survived from Argos and the Argolid we can at least say that some people could write. Evidence for 'scribal' literacy, or for the administrative use of writing, centres around the Argive plain, at Argos, Mykenai, and Tiryns. Two main areas of society used writing in this way: professional scribes (the hiaronnamones) and high-ranking officials or judges (the damiorgoi and the artynoi).
The *hiaromnamones* comprised only a small proportion of the population at Argos (with the Argive Heraion), Mykenai (with the Mykenaian Heraion and Asprókhoma), and Tiryns. We hear of four such officials working together for one community. Perhaps they were 'representatives' picked from each of the four local tribes. Part of their services to a community included taking over the office of *damiorgoi* in their absence, judging cult matters, imposing fines, keeping order in religious affairs, and ensuring that written laws were respected.

As judges and public workers, the *damiorgoi* at Argos and Mykenai (and the Mykenaian Heraion) dealt with serious acts of impiety, imposed fines, punished state offenders, oversaw the running of public buildings and festivals, and supervised the work of city officials. They were also responsible for exiling, or confiscating the property of, those who defaced or ignored written laws, killed, and committed crimes against the city. If they were highest in command and saw themselves as the inheritors of a royal and prestigious power (Kelly 1976, 132; van Effenterre and Ruzé 1994, 322), they were no doubt also literate.

The *artynoi*, who may have replaced the *damiorgoi* at Argos, held a judicial position, similar in many respects to that of the *damiorgoi*. Like the *damiorgoi*, they must have come across written documents in the course of their duties. Though they perhaps chose to leave most of the writing to scribes, to the *hiaromnamones*, they probably knew how to read.

Unfortunately, the few other public inscriptions that could be used to support the existence of 'scribal' literacy in the Argolid mention neither the *hiaromnamones* nor the *damiorgoi*. As we have already seen, one comes from Argos and lists payments to 'phratries' (Argos Mus.: Jeffery 1990, 444 no. E; Kritzas 1992, 231-240; van Effenterre and Ruzé 1994, no. 65). Two others come from Halieis (Náfplio, Leonárðho Mus. HM 620: *SEG* 42.281; Jameson 1974a, 73; 1976c, 235; Náfplio, Leonárðho Mus. HM 237, 345, 388: Jameson 1974a, 71 n18; Foley 1988, 130); these texts, written on bronze plaques, have been published only in preliminary form. Two more legal texts have been discovered at the sanctuaries of Epidaurōs, but they date to the late fifth century (*IG IV* 913-914; *IG IV²* 1.40-41, 1.146; Jeffery 1990, 181-182 nos. 17-18, 446).
Although there are limits to what may be said about the extant public inscriptions, it is interesting that the existing evidence for 'scribal' literacy is almost exclusively confined to the Argive plain, with just a few exceptions in the Akte. This brings us to consider whether the communities of these two regions put literacy to different uses. In a recent study Hall (1997a, 152) has questioned whether the differences that emerge between the two regions concerning the choice between the 'red' and 'blue' alphabets has an ethnic significance. Unlikely, he concluded (see also Foley 1988, 124ff.). It is also unlikely that writing was put to different uses in both regions. If there is as yet relatively little evidence of 'scribal' literacy in the Akte, it is probably more a consequence of survival and archaeological recovery than any cultural or ethnic differences between these two regions. As at Athens and Sparta, I think the scribes at Epidauros, Hermione, Troizen, and other communities of the Akte wrote their public documents on perishable materials.

We should also note the technical details of the inscriptions; some of these survive better than the documents themselves and are more often to be found in the archaeological record. Argos provides us with a good example. The holes on the many architrave blocks from the hypostyle hall in the agora at Argos happen to match those on inscribed bronze plaques, indicating that the inscriptions were originally nailed to the façade of a building (probably that of the temple of Apollo Lykios) (Figure 45; Thuc. 5.47.11; EF 1953b, 248-253; Bommelaer and des Courtils 1994). From the holes visible on the one hundred and seventy blocks at his disposal, des Courtils (1981, 607-610) estimates that over one hundred bronze plaques once covered the façade of this building. If the plaques originally covered the entire exterior of this building, we might expect to recover many more bronze plaques from Argos in the future, unless of course they have corroded completely or were recycled in antiquity. It is worth noting that similar plaques with holes were found at Mykenai, the Heraion, the sanctuaries of Epidauros, and Halieis. This implies that the practice of nailing bronze plaques to (temple) walls was fairly widespread within the communities of the Argolid. It also shows how dangerous it is to draw conclusions about the epigraphical habits of a region based only on the documents themselves.

What is at least clear is that some areas of society within the communities of the Akte were literate. Signs of 'informal' literacy in the form of graffiti and of 'craft' literacy in the form of dedications have been found throughout the region. The best evidence for

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'informal' literacy comes from Halieis. Soldiers living there (in a Laconian garrison?) wrote casual graffiti, usually their own names, on several black glaze cups from the akropolis area. This kind of 'informal' literacy reminds us of the graffiti from Abu-Simbel in the Sudan, where Greek mercenaries (from Ionia and the Dorian Hexapolis) serving with the Egyptian king Psammetikhos inscribed their names on the statues of Rameses II (Bernard and Masson [O.] 1957; Meiggs and Lewis 1988, 12-13 no. 7). As Whitley concludes: 'No Cretan, Argive or Spartan ever scrawled his name thus' (Stoddart and Whitley 1988, 767). He may have a point, because so far we have very little evidence for literate soldiers in the Argeia; the only possible sign of such literacy comes from Tiryns, where guards (the phrouroi) of the sanctuary dedicated an inscribed pot to their local goddess. Perhaps more Tirynthians (including soldiers) knew how to write, because the use of the Argive script at Halieis suggests that some of Tiryns' former inhabitants were literate.

In general, 'casual' non-dedicatory graffiti appear only rarely in excavations of Argolic sites. A single sherd from Argos was interpreted as an ostrakon; but little else indicates that ostrakophoria were ever held at Argos. Some (male) citizens and merchants at Argos no doubt knew how to read and perhaps write. Evidence for this, however, is meagre; only a few lead weights have so far been found at Argos.

Dedicatory graffiti occur more frequently. As anonymous dedications, they tell us nothing about their writers, which in itself seems odd; their anonymity suggests that perhaps the graffiti were prepared (in advance) by potters and vase painters. These graffiti, together with one painted dipinto from the Heraion, make up the only surviving evidence we have for literacy among Argolic potters and vase painters.

We have more evidence for 'craft' literacy among Argive sculptors, masons, and bronze workers. Some Argive sculptors evidently signed their works as a means of advertising themselves, but not within Argos itself; only one signed work by an Argolic artist has been found in the Argolid, at Hermione. It is possible that artists' signatures had little advertising value in a primarily illiterate society.

There is little explicit evidence that people in the Argolid read inscriptions; no inscribed tombstone even addressed passers-by. It seems that the visual aspects of the monuments

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alone were enough to reveal the status of the deceased. Whatever else passers-by needed to know about the dead person, they could get by asking one of his/her family members or one of the few literate members of their community, who could read out the inscription.

So much for what we know of literacy from Argolic inscriptions. If we compare the results of what is preserved from the Argolid with what has survived from other regions in Greece, we can at least recognise that the Argolid had the same kinds of literacy as did Attica, Krete, and Sparta. This is as far as I will go on the subject of regional variations in the uses of the Greek alphabet, because to speak of regional 'models' of literacy based on differences in the quantities of inscriptions is misleading, pace Hall (1997a, 145) who continues to maintain that 'most of the other regions of mainland Greece -- notably, Euboia, Korinth, the Argolid, Lakonia and possibly Boiotia -- appear to follow the Attic model' of literacy, i.e. the number of personal or informal inscriptions outweighs the number of official inscriptions (my italics).
Chapter II

The Exploitation of the Natural Landscape

It seems to me we all look at Nature too much, and live with her too little.
Oscar Wilde.

In this chapter the focus shifts to the physical landscape. In the past, the landscape has been perceived as a phenomenon that is primarily a human creation; it has been studied and understood by archaeologists in functionalist terms just like a ceramic pot (Darvill 1997, 2). These studies have been important stages in the development of archaeological approaches to landscape, but as a social concept, a landscape incorporates a broader variety of themes on the interaction between people and the worlds that they inhabit (Bender 1993, 1).

A landscape is potentially dynamic and historically sensitive; but does a study of spatial organisation in settlements necessarily reflect behaviour and social organisation? Although the organisation of settlement space is related to aspects of life, it is important to remain aware of some of the limitations of settlement studies in archaeology.

In attempting to generate a balanced picture of the archaic landscape of the Argolid, I place the emphasis in this chapter on human activity and human involvement. Part I builds on the three intensive survey projects conducted recently in the Argolid outlined in the Introduction. The discussion begins by looking at agricultural activities in the landscape, and by making inferences about settlement data, general trends in patterns of land ownership, and the relation and interaction of agricultural labour. ‘Did landowners work their own holdings? What labour systems were in operation?’ (Alcock 1993, 55). How does land ownership relate to residence? Although the material record from surveys provides the essential data – ‘site size, location, and function’ -- these questions
sometimes have to be interpreted in the light of what we know from excavations and various ancient testimonia (Alcock 1993, 55).

Any discussion of the agricultural landscape must naturally embrace pastoral activities. Here I address similar general questions about ownership, the status of workers, and the economic and social benefits of owning animals.

The exploitation of the natural landscape in archaic times was in no way limited to farming and the rearing of animals. Non-agricultural and maritime activities, such as mining, the exploitation of clay sources and timber, quarrying, and fishing, were also important. Since there is very little direct archaeological evidence for these activities, we must invariably turn to the extant products that derive from these resources.

This approach to material culture may seem somewhat encyclopaedic, but only such a holistic approach can create a clearer picture of how people exploited the environment around them.
II.1. Settlements and Agriculture

II.1.1. INTRODUCTION

The typical Greek polis was a unit including both town and country -- a settlement area (asty) and a rural territory (chora) (Shipley 1996, 8). From archaic to hellenistic times there were a thousand or more poleis scattered throughout Greece; but in a recent article on city-chora relationships, we are told that 'there are only two, Sparta and Athens, about which we have anything like the requisite sort of detailed evidence to conduct a fruitful analysis ...' (Cartledge 1998, 40). However, times are changing fast: certainly the publication of the three intensive surveys in the Argolid makes it one of the most well published regions in Greece, especially when compared to Attica (see below for a review of surveys in Greece.).

The information available from Argolic surveys can no doubt be used to determine what human activities appear in the archaeological record, but can it bring us closer to understanding past interactions in the human landscape on a social level? I believe that a close analysis of survey data for a specific historical period, when taken together with textual and excavation material, allows us to think in social time (the span of an adult lifetime) and thus contributes greatly to the understanding of settlement patterns in a socio-historical context. These patterns need to be explained in terms of agricultural strategies and social structure. We need to ask ourselves what people chose to do, and where. In an agricultural society this question translates as: who owned and farmed the land, what agricultural strategies did they pursue, where did they live, and how could they move around? The choice of where to live may seem secondary here, but it is especially relevant to the subject of land exploitation.

After examining such questions, I shall move on to another aspect of the agricultural landscape: the place of animals in farming. Although 'the countryside of the shepherd is a different countryside from that of the arable farmer ..., the two ... must meet' (Osborne 1987, 50). Agricultural activities tie in with animal husbandry, since the cultivated, together with the uncultivated, land was exploited in antiquity.
II.1.2. REVIEW OF PUBLISHED WORKS

Apart from the evidence of surveys, discussion of human landscape, land-use, and agriculture has been limited to before or after the archaic period (for the bronze age, see Halstead 1987; 1992; for the classical period, see below). To my knowledge, Foxhall (1995, 239-250; 1997a, 113-136) is the only scholar who has approached the subject of agricultural systems for the early iron age and archaic periods. In ‘Bronze to Iron: Agricultural Systems and Political Structures in Late Bronze Age and Early Iron Age Greece’ (1995) she suggests changes that occurred in agricultural economies between late bronze age states and poleis of the early archaic period. More recently (1997), in an article on Solonian property classes, she has briefly touched upon the agricultural systems of archaic Greece (on Solon, see also Gallant 1982, 119ff.). Isager and Skydsgaard’s book, Ancient Greek Agriculture (1992), provides another brief treatment of pre-classical agriculture and animal husbandry, although it essentially deals with classical Greek agriculture.

Most discussions of pre-modern Greek agriculture have focused on the classical period, especially classical Athens. Important works for this period, besides that of Isager and Skydsgaard, include Amouretti’s (1986) study of cereal and olive culture, Osborne’s Classical Landscape with Figures (1987), Burford’s (1993) study of land and labour, and Foxhall’s forthcoming book on olive cultivation. The series of papers delivered in Athens (Wells [B.] 1992) and in the Leicester-Nottingham conference (Shipley and Salmon 1996; for review, see Gill 1998b) also present important discussions of the human landscape in later periods.

For hellenistic and Roman landscapes, the works of Foxhall (1990a), Barker and Lloyd (1991), and Alcock (1993) are basic. Their observations and those of others greatly help us to understand some of the results of recent surface survey projects in Greece.
II.1.3. ARCHAEOLOGICAL SURVEYS IN GREECE

In the past twenty-five years or so archaeologists have progressively turned to survey as a means of studying the past. The alleged aims of most of these surveys include the observation of human settlement and land use in various regions throughout history (see Cherry 1983, 375-416; 1994, 91-112; Bintliff and Snodgrass 1985, 123-161; 1988a, 57-71; 1988b, 506-513; 1991, 88-93; Bintliff 1985, 196-216; 1997, 1-38; Cherry, Davis, and Mantzourani 1991; Barker 1991, 1-9; Barker and Lloyd 1991; Wells [B] 1996; Cavanagh et al. 1996; Snodgrass 1985b, 87-95; 1987-89, 52-70; 1990, 113-136; Davis 1991, 132; Jameson, Runnels, and van Andel 1994; Alcock, Cherry, and Davis 1994, 137-170; Alcock and Cherry 1996, 207-211).

Alcock (1993, 33ff.) provides an excellent overview of the current progress of regional survey in Greece and of the problems affecting survey methodology and interpretation of survey results (note that her bibliographic entry for Roy et al. 1988 is incorrect). Here I list some of the most important published intensive surveys undertaken in Greece.

The largest study area (70 km$^2$) has been surveyed by a British/Dutch team in Laconia near Sparta, on the east side of the Eurotas river (it is only partly published, see Cavanagh and Crouwel 1988, 77-88; Cavanagh et al. 1996; Mee and Cavanagh 1998, 141-148; for review, see Gill 1998a, 137-138).

Two other surveys in the western/central Peloponnesos include those at Messenia and at Megalopolis. The Minnesota project that took place in Messenia was essentially concentrated on reconstructing a bronze age environment (McDonald and Rapp 1972). In Arkadia two study areas were explored by a British team between 1981 and 1984, in the territory of Megalopolis (60 km$^2$) (Lloyd, Owens, and Roy 1985, 217-224; 1988, 179-182; 1992, 185-194).

So far there has been no intensive survey of Attica except for Lohmann’s (1985, 27-57; 1993) work in the south-west, in a region known in classical times as Atene. The survey focused mainly on classical and later material.
In Boiotia two large survey projects have taken place: the first from 1979 was in south-west Boiotia (55 km²) (Bintliff and Snodgrass 1985, 123-161; Bintliff 1985, 196-216; 1991b, 122-132), and second more recent one (1985 to 1989) was conducted in the Skourta plain (44 km²) (Munn and Munn 1989, 274-275; 1990, 73-127).

A collaborative British, American, and Greek survey took place in 1983-84 in the north-west part of the island of Keos (20 km²) (Cherry, Davis, and Mantzourani 1991). A second Cycladic island project was undertaken by a British team on Melos (30 km²) in 1976-77 (Renfrew and Wagstaff 1982). More recently, a survey team has been working at Ayia Kyriaki on Melos (Photos-Jones et al. 1999, 377-413).

Kythera and Krete too have received a fair amount of attention from surveyors. Most of the projects (such as Sphakia, Praisos, Mesara plain, Gournia, and Kythera), however, are ongoing and their results are not all fully published (see Nixon, Moody, and Rackham 1988, 159-173 for Sphakia; Whitley, Connor, and Mason 1995, 405-428; Whitley, Prent, and Thorne 1999, 215-264 for Praisos; Broodbank 1999, 191-214 for the British, as opposed to the Australian survey of Kythera).

Another recent survey by the Danish in Aetolia has only been published in preliminary form (Dietz et al. 1998, 234-314; see also Petropoulos and Rizakis 1994 for a preliminary report on Patras).

In the north-east Peloponnese there have been no fewer than six survey projects: the most recent of these is the Eastern Korinthia Archaeological Survey (not yet published), an on-going American project; the largest is the Nemea Valley Archaeological Project (50 km²), a joint American-Greek-British venture carried out in 1984-89 (Wright et al. 1990, 579-659; Alcock 1991b, 421-463); another project is being carried out by the Dutch on the plain of Astros (Goester 1993, 39-112); the other three, to which I now turn, I have already been noted in the Introduction.
II.1.4. ARCHAEOLOGICAL SURVEYS IN THE ARGOLID

I summarise here the results of the three surveys that form the basic structure of this chapter.

II.1.4.a. The Southern Argolid Survey

The Argolid Exploration Project (AEP), an American undertaking of the early 1980s in the southern Argolid, focuses on a particular area, which is smaller than a region (such as Messenia or the Argolic Akte as a whole) and larger than a single polis (Figure 46; Jameson, Runnels, and van Andel 1994, 3). The peninsula faces the Argolic gulf and the open Aegean (Figure 47). Because of its geographical position, it seldom operated as a closed system; it always had contact with the Akte, the Argive plain, and the neighbouring islands across the sea.

Although coverage by intensive survey of the region was only about 20% (44 km²), much more was surveyed extensively (Figure 48; Jameson, Runnels, and van Andel 1994, 218). In addition to the excavations at Halieis and the Frankthfé cave, the total research project included a wide range of ethnographic studies (Forbes [H.] 1976, 236-250; Forbes [H.] and Koster 1976, 109-126; Forbes [M.] and Clark 1976, 251-264; Koster and Koster 1976, 275-285), studies in ethnoarchaeology (Murray [P.] and Kardulias 1986, 21-41) and geomorphology (Pope and van Andel 1984, 281-306; van Andel and Lianos 1983, 303-324), and has produced many other articles that integrate the several levels of research (for example, Runnels and van Andel 1987, 303-334; van Andel, Runnels, and Pope 1986, 103-128).

The publication of the first of three projected volumes focuses on the survey evidence (for a 'preview' to Jameson, Runnels, and van Andel 1994, see van Andel and Runnels 1987). As many reviewers note, it includes a very good geological and environmental analysis by van Andel, and a brilliant historical and archaeological synthesis by Jameson (see Davis 1995, 458-465; Alcock and Cherry 1996, 209-211; Gill 1996, 128-130; Osborne 1996c, 165-169; Broodbank 1997, 371-374). However, details concerning the individual periods within a site are in most cases only given a cursory explanation (Alcock and Cherry 1996, 210). Another disadvantage for those studying the historical periods, is that
the finds (pottery, coins, architectural members, etc.) have not yet been published (Munn, forthcoming; cf. Runnels, Pullen and Langdon 1995 for the prehistoric and early iron age finds).

II.1.4.b. The Methana Survey

The rugged volcanic peninsula of Methana was explored intensively in the 1980s by a British team, whose members have recently published the survey results (Figure 49; Mee and Forbes [H.] 1997). The peninsula, barely attached to the north of the Troizenia, is located on the Saronic gulf, 'in the orbit of several of the major political centres: Aigina, Argos, Athens, Corinth, and Mycenae' (Figure 47; Mee and Forbes [H.] 1997, 2). Despite its close proximity to the Troizenia, it was often politically and culturally independent of its neighbours (Mee and Forbes [H.] 1997, 33).

Although only 21% of the peninsula (10 km²) was investigated by the survey team, the peninsula itself is not large; surveyors maintain that the area remaining to be explored consisted of 'slopes so steep that few if any sites are likely to have been located or have survived there' (Figure 50; Mee and Forbes [H.] 1997, 33).

II.1.4.c. The Berbati-Limnes Survey

The Berbati-Limnes survey, the most restricted of the three projects in the Argolid, is a collaborative Swedish/American project focusing on a small area east of Mykenai, the valley or plain by the village of Prosymna and the mountainous region around the village of Limnés (Figure 51; Appendix A-19; Wells [B.] 1996, 9). The area is hemmed in by mountains, but a number of strategic passes leading to Mykenai and Korinthos would have been used as a means of communication with the outside world (Wells [B.], Runnels, and Zangger 1990, 207). The surveyed areas seem marginal today when compared with prosperity of the Argive plain; perhaps it was just as peripheral in antiquity (Wells [B.] 1996, 9).

The Berbati-Limnes area has about 61 km² of very uneven territory, of which about 25 km² were surveyed intensively (Figure 52; Wells [B.] 1996, 16). The survey's
methodology was modelled on that of the southern Argolid survey, but the presentation and interpretation of the results leave the reader somewhat disappointed. The publication is basically a detailed description of artifacts and their find-spots. Except for the brief concluding remarks on prehistoric land use and economy, it offers only a limited discussion of settlement patterns and land-use in the archaic period.

II.1.5. THE ORGANISATION OF THE AGRICULTURAL LANDSCAPE

With the evidence from these and other surveys we have become more aware of the variety of ways in which human activity has been organised within the Greek landscape, but surveys have (as yet) only imperfectly revealed the landscape of the archaic period. Compared with the numerous studies in settlement and land use for the classical period, the archaic has received little attention, probably because it is less visible than the classical period. Unfortunately, one cannot simply apply interpretations of classical data to the archaic period, because what holds for the former period, does not necessarily hold for the other.

The following discussion of the agricultural landscape of the archaic Argolic is an attempt to correct this imbalance, on the basis of published evidence.

II.1.5.a. Settlements Patterns in the Argolid: The Survey Evidence

The study of different archaeological surveys presents a few practical problems. Surveys vary in intensity, leading to inconsistencies in site identification. For example, the approach used for site collection in the southern Argolid survey failed to make allowances for data assemblages that would help to distinguish site components of differing functions and/or periods (Jameson, Runnels, and van Andel 1994, 223). Furthermore, the size of sites for specific periods can be rather haphazard (Osborne 1996c, 165-169); the extent of ‘find-spots’ (usually referred to as sites) in the Berbati-Limnes survey is not even recorded. In the southern Argolid there are areas about whose soils, past or present, no information is available, because only major drainage systems were mapped in the geomorphological studies (on climate and geography of Greece, see Semple 1932; Philippsen 1952; Rackham 1990, 88-91; Sallares 1991). ‘Attempts to
determine the paleofertility of soils were made during the southern Argolid survey, but failed because chemical analyses can only determine present compositions, not show the chemical history of the soils' (Zangger 1992, 15). We must also remember that Argive pottery from the archaic period is still relatively unknown, less visible than late geometric sherds, and certainly more difficult to date (see Runnels, Pullen, and Langdon 1996). Caution must therefore be used in interpreting the survey evidence.

Unlike scientific experiments, intensive surveys cannot be replicated. Methodologies can be criticised and compared, and the finds can be re-scrutinised; in the end, however, we have no choice but to accept the authors' interpretations. A study of the historical periods that aims to use the full archaeological potential of survey results must therefore deploy as much topographical, geological, and historical information as possible. This task is not always easy, since the importance of survey is usually 'on a general diachronic perspective' (Alcock and Cherry 1996, 210). Nonetheless, it forms an important part of any study that attempts to discuss agricultural activities in the landscape.

In this section I begin by presenting the available data on the physical environment.

The Use of the Terms ‘Town’, ‘Village’, and ‘Farmstead’

I must first define my use of the words ‘towns’, ‘villages’, and ‘farmsteads’. They are mere labels and correspond in no way to any modern uses of the terms (an ancient ‘town’ might only be very small modern village; a ‘farmstead’ might only be a shed or a barn), hence, their appearance within quotation marks.

In most historical terms, ‘towns’ were perhaps cities, city-states, or states, and in Greek terminology, poleis, but in discussing landscapes I prefer to avoid of such terms and their implied connotations. Such words have always been difficult to define, and here is not the place to review what constitutes an archaic city/city-state/state or polis (see Snodgrass 1977; 1986b, 47-68; Morris [I.] 1991, 25-57; Hansen [M.] and Fischer-Hansen1994, 23-90; Hansen [M.] 1997, 9-23).
The Southern Argolid (Figure 48)

During the eighth century the size of settlements, and probably also the size of the population, increased sharply, as is the case in the rest of Greece (Snodgrass 1971, 402-416; 1980a, 19-24; Jameson, Runnels, and van Andel 1994, 374). From the eighth to the seventh century there is some degree of continuity of site location in the southern Argolid, with an increase in the number of sites and a higher percentage of new sites in the seventh and sixth centuries (Jameson, Runnels, and van Andel 1994, 374).

By the seventh century a hierarchy of settlements had emerged, with ‘towns’, ‘villages’, and isolated ‘farmsteads’. The appearance of ‘towns’, created by the concentration of the functions (and populations?) of scattered villages, which had been founded in the geometric period, marks a significant change from earlier periods (Jameson, Runnels, and van Andel 1994, 254). Here, as elsewhere in the Argolid, activity is best documented at nucleated ‘town’ or ‘village’ sites.

There was a ‘high degree of continuity of settlement [from the archaic to the classical period] (between 70% and 80% of Archaic sites continued to be occupied) and no sharp changes in land use’ (Jameson, Runnels, and van Andel 1994, 382).

The ‘Towns’ (Figure 53)

We find three archaic centres in the southern Argolid, at Hermione (E19 in the survey’s site register), Halieis (A65), and possibly at Mases (C11). Hermione (22.5 ha = 0.23 km²) and Halieis (18.0 ha = 0.18 km²) were large fortified ‘towns’, with sanctuaries, cemeteries, and evidence of a built-up area of habitation (Appendix A-38, A-50; see Jameson, Runnels, and van Andel 1994, 249 for the categories of site functions).

Hermione was the largest and longest-lived centre of the southern Argolid, with a total ‘home territory of some 39 km², of which 18 [km²] were cultivable and eventually [it] possessed not only the territory of the “aborted” polis of Mases but also that of Eileoi, Didymoi, and Thermisi, for a total area of some 275 km², of which 87 [km²] were cultivable’ (Appendix A-36, A-45, A-51, A-52; Jameson, Runnels, and van Andel 1994, 377, table 1.1). By contrast, Halieis was small, with a total territory of 84 km² (Jameson, Runnels, and van Andel 1994, table 1.1). Yet it had a high percentage (43% or 36 km²)
of agricultural land to total territory. As far as we can tell, it had no archaic 'villages' within its territory.

The region of Halieis has been described as a large area of flat alluvial coastal plain, with low rolling hills divided by several small basins and some larger valleys (Jameson, Runnels, and van Andel 1994, 153). It did not have the best agricultural land, because of the poor flow of its main stream and its lack of springs, but other factors made up for its relative fertility (Jameson, Runnels, and van Andel 1994, figs. 3.9-11; Acheson 1997, 173). One of these has to do with its soils. 'Because of the very shallow slope of the land, water retention in the soils of the coastal plain would have been ... [high and] the danger of soil erosion on the lowlands [Loutro Alluvium] would have been minimal.' (Acheson 1997, 173). The total territory exploited by its 'town' inhabitants probably also included the deep and rich Upland soils of the Flámboura area on the neck of the Halieis peninsula (Appendix A-42; Jameson, Runnels, and van Andel 1994, figs. 3.19, 6.18).

On the east side of the peninsula the adjacent promontory of Hermione is rock-strewn and plunges abruptly into the sea (Jameson, Runnels, and van Andel 1994, 153). The kambos of Hermione, a plain of four to five kilometres on the east side of the peninsula, has a bit of Upland soils and Loutro Alluvium, thus making the area good for agriculture (Jameson, Runnels, and van Andel 1994, 39, fig. 6.16). Moreover, the coastal plains of Dhardheza and Kapari, together with a large portion of the Pikrodhafni valley, were also very fertile. The (Upland) soils in these areas lay above ophiolites, a bedrock combining 'dark igneous rocks, thin purple limestones, dark shales, and cherts', which forms excellent soils (Jameson, Runnels, and van Andel 1994, 17, fig. 6.16). These areas were also irrigated by springs and streams in the various drainage systems (Jameson, Runnels, and van Andel 1994, 39, figs. 3.10-11). All these factors make for 'good agricultural land in the interior valleys' (Jameson, Runnels, and van Andel 1994, 17).

Both Hermione and Halieis also had 'excellent small harbours' (van Andel and Runnels 1987, 109). The bay at Hermione had a draft of 'less than one or two metres of water until the rapid rise of the sea in the third and fourth centuries AD' (Jameson, Runnels, and van Andel 1994, 209). This shallowness, together with its protected beach and enclosed harbour, would have made it convenient for the drawing-up of small ships in the archaic
period (Jameson, Runnels, and van Andel 1994, 54). It was in fact coveted by Athens in the fifth century.

Another port of Hermione mentioned by Homer (II. 2.562) and Pausanias (2.36.1-3) has been attributed to Magoûla Evstratfou (C 11), ancient Mases (Appendix A-36; Homer, II. 2.562; Paus. 2.36.2), which was for a short time a small 'town' (5.0 ha = 0.05 km²). Mases' total territory was only 45 km², but more than half (23.5 km²) of it was agricultural land (Jameson, Runnels, and van Andel 1994, fig. 1.18; table 1.1). The settlement was located near good Upland soils and Lower Flamboura Alluvium, with several streams and springs nearby (Jameson, Runnels, and van Andel 1994, figs. 6.16, 6.19). In the archaic period Mases probably cultivated the 'inland valley of Loutrô ... and the small coastal valleys to the south (Dhouroufi and Lakkes) (Jameson, Runnels, and van Andel 1994, 34-36); not for long, however, since Hermione absorbed Mases, turning the 'town' into a 'village' or perhaps just 'a local agricultural center depending on Hermion' (quotation from van Andel and Runnels 1987, 107; Jameson, Runnels, and van Andel 1994, 34, 375-377, 467).

The ‘Villages’ (Figure 46)

Some nine (possibly as many as fourteen) archaic ‘villages’ have been identified in the southern Argolid. The survey team determined whether these sites were ‘villages’ on the basis of size (1.0 to 5.0 ha = 0.01 to 0.05 km²), architectural remains, and a comprehensive cross-section of ‘domestic’ artifacts (Jameson, Runnels, and van Andel 1994, 249). When looking through the register of sites, however, one notices that the density and spread of artifacts in the archaic period is low (1% to 8% of the total sherd count), and only a few structures, probably dating to later periods, are visible (at E9, F4, and G1). Except for Mases (C11), it is unlikely that these sites, identified by the presence of a handful of sherds, were flourishing centres in archaic times. But pending the final presentation of the artifacts of the historical periods (Munn [forthcoming]), their identification in the site index as ‘villages’ must by default be accepted as published.

Besides Mases (C11), another large settlement was located in the territory of Hermione, on the hilltop west of Kinèta (E36, Appendix A-50). It was larger than Mases in size, estimated at 6.0 hectares (= 0.06 km²), but unlike Mases had no visible architectural
remains (see Table II.1 below). It sits on the edge of good arable soils, the Upland soils, in an area with streams and groundwater reservoirs (Jameson, Runnels, and van Andel 1994, figs. 3.9-10, 6.16).

Magoúla stá Ilfa (G1), located on the south-east edge of the Iliókastro plateau, was also a sizeable 'village' (area not determined in survey), with a possible temple at the south-east edge of the site (Jameson, Runnels, and van Andel 1994, 519). As an inland site, it lacks harbour facilities and other advantages offered by the sea, but made up for this with its proximity to good Upland soils and its abundance of streams (Jameson, Runnels, and van Andel 1994, figs. 3.9, 6.16). The Iliókastro plateau also offered good quality water from groundwater supplies and perennial springs nearby (Jameson, Runnels, and van Andel 1994, fig. 3.10).

Three smaller 'village' settlements were noted in the survey at Sambaríza Magoúla or ancient Eíones (E9, Figure 54; Appendix A-58), Áyios Ioánnis (F4, Appendix A-35), and Profitís Ilías in the Foúrnoi area (F5, Appendix A-46). These range from about 0.16 to 1.40 hectares (that is, 0.0016 to 0.0140 km²). Sambaríza Magoúla, located at the eastern edge of the survey area, yielded architectural remains, perhaps dating to the archaic period, but little archaic pottery (Jameson, Runnels, and van Andel 1994, 485).

Áyios Ioánnis has architectural features, but only a small percentage of archaic sherds; Profitís Ilías has no visible architecture and even fewer sherds (Jameson, Runnels, and van Andel 1994, 508-509). Both sites, however, are located in the Foúrnoi drainage basin, near streams and good Upland soils (Jameson, Runnels, and van Andel 1994, figs. 3.11, 6.16-17). Profitís Ilías lies inland, so it lacked the advantages of the sea.
Table II.1. The Location of ‘Town’ and ‘Village’ Settlements in the Southern Argolid

<table>
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<tr>
<th>Sites</th>
<th>On Hilltop or Akropolis</th>
<th>Close to Arable Land</th>
<th>Near Coastal Plain or Valley</th>
<th>With Potential Harbour</th>
<th>Inland</th>
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<td>Hermione E19 *</td>
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After Jameson, Runnels, and van Andel (1994). ‘Towns’ are marked by an asterisk.

The So-called ‘Farmsteads’ (Figure 46)

The southern Argolid survey identified between seven and sixteen small ‘farmsteads’, dating to the archaic period, four of which also had eighth century material. They range in size from 0.05 to 0.60 hectares (= 0.0005 to 0.0060 km²), with the largest sites (C12, B2, and B57) concentrated in the rich agricultural areas of Mases and Flámboura (Appendix A-36 and A-42). Although some of these have roof-tile concentrations (C12, E71, and G22), only one site has visible structures (B2). Three sites (B67, E40, and E47) have only a few archaic sherds, but they have nonetheless been identified as ‘farmsteads’ in that period.

As with ‘village’ sites in the southern Argolid, most ‘farmsteads’ obtained water from nearby streams or groundwater (see below, Table II.2; Jameson, Runnels, and van Andel 1994, figs. 3.9-11, 6.16). All but one (C12) lie inland, close to good arable soils and within four kilometres of a more nucleated centre (Figure 55).
The Methana Survey (Figure 49)

It is clear that in the archaic period the Methana peninsula ‘was exploited almost exclusively from ‘villages’ or other similar nucleated settlement centres’ (i.e. hamlets) (Foxhall 1997b, 257). The available evidence for the size of sites points to a general increase during the archaic period.

Geometric and archaic habitation is centred essentially on three nucleated settlements: one ‘town’ and two ‘village’ sites (Gill and Foxhall 1997a, 57-61). Óga (MS67), at Kypseli on the east coast of Methana, was the largest (6.1 ha = 0.061 km²), with at least one, perhaps two sanctuaries and a large quantity of archaic sherds (Appendix A-68; Mee et al. 1997, 146-147). This ‘town’ was located near somewhat flat land, which is rare on Methana, and adjoined good farmland (see below, Table II.3).

Another rarity on Methana was water. The Methanioi relied on cisterns, because springs and wells were few and far apart (James et al. 1997, 7). Since the peninsula has always been hotter and more arid than the rest of mainland Greece, its agricultural land must have suffered from lack of water (James et al. 1997, 5). The rate of precipitation in antiquity, as now, was probably low, but since we have no certain methods to determine precipitation patterns for prehistoric and historic times (Zangger 1992, 15; cf. Lehmann 1937, 31-49; Balcer 1974, 143; Forbes [H.] 1982, 36; Jameson, Runnels, and van Andel 1994, 157-161), we can only hypothesise.

The ‘village’ of Methana (MS10) on the west side of the peninsula was smaller (5.2 ha = 0.052 km²) than Óga and appears to have no associated sanctuary or other architecture.
(Figure 56; Appendix A-63; Mee et al 1997, 122-127). Its identification as an archaic ‘village’ must be based on the numerous sherds found there; the site apparently remained a large ‘village’ settlement until classical times, when it became the major site on the peninsula (Gill, Foxhall, and Bowden 1997, 65). All the architectural elements date to the classical and hellenistic periods. The site itself sits on a low but prominent akropolis, only a few metres from the sea. The land below it now grows citrus fruit and was thus perhaps also fertile in antiquity.

At Magoúla (MS60), a small site (1.8 ha = 0.018 km²) on the north end of the peninsula, the survey team found numerous cut blocks, of unknown date, and a mix of archaic fine wares (Appendix A-61; Mee et al. 1997, 143-144). Though this ‘village’ is much smaller than ancient Methana, it yielded almost as much pottery (Gill and Foxhall 1997, table 5.2).

Obviously, preference was for coastal locations on Methana. Whether the population took advantage of the sea as a means of livelihood, or for communication with other communities, or both, is difficult to say. Access by sea to major ‘towns’ in the Argeia and the Corinthia, however, must have been a consideration for those settling on the coast of Methana (cf. Wagstaff and Cherry 1982, 259).

Table II.3. The Location of ‘Town’ and ‘Village’ Settlements in Methana

<table>
<thead>
<tr>
<th>Sites</th>
<th>On Hilltop or Akropolis</th>
<th>Close to Arable Land</th>
<th>Near Coastal Plain or Valley</th>
<th>With Potential Harbour</th>
<th>Inland</th>
<th>Close to Water Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Óga MS67 *</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
<td>?</td>
</tr>
<tr>
<td>Magoúla MS60</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
<td>?</td>
</tr>
<tr>
<td>Methana MS10</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>√</td>
<td>-</td>
<td>?</td>
</tr>
</tbody>
</table>


Methana’s other archaic sites have not been identified as ‘farmsteads’ per se, though two of them are close to easily cultivable land and about the size of regular ‘farmsteads’, that is, less than one hectare (for size, see Gill and Foxhall 1997, 59). The problem with identifying Ayios Konstantínos (MS12, Appendix A-66), on the west coast of the peninsula, as a ‘farmstead’ is that the survey team reported only one sherd identifiable as archaic and no associated features (Mee et al. 1997, 127-128). It is noted, however, that the area ‘overlooks excellent agricultural land which was doubtless being cultivated’
(Mee and Forbes [H.] 1997, 40; quotation from Gill and Foxhall 1997, 57), though perhaps not in the archaic period. Similarly, the other site at Makróngru (MS123) appears to have yielded only one archaic sherd (Appendix A-62; Mee at al. 1997, 161-162).

The Berbati-Limnes Survey (Figure 51)

The Berbátí region has no identifiable archaic ‘towns’ or ‘villages”; it has only small ‘farmsteads’ at this time (Appendix A-19). Ekroth (1996, 215) lists eight archaic sites as ‘farmsteads’ in the Berbátí valley, in three disparate areas (Find-spots 20, Find-spot 24, and those on the Phytésoumia spur FS21, FS522, FS523, FS525, FS527, FS528), without giving any settlement sizes. At both find-spots 20 and 24, we may assume the existence of several buildings; but on the Phytésoumia spur only one structure (if that) has been located at the five find-spots (Ekroth 1996, 213). The majority of these got a supply of water through springs on the plateau and the Kefalari Rema (Ekroth 1996, 219). Table II.4 below shows their setting in the landscape.

What is interesting is that all these ‘farmsteads’ lie on the west-north-west side of the valley, close to the pass towards Mykenai. The whole eastern and southern part of the region, including the upper Limnés area, had no visible traces of human activity during the archaic period (Ekroth 1996, 215). The reason for this distribution was probably that the pass to Mykenai would have been the main entrance to the Berbátí valley at this time as so attracted settlement close by (Ekroth 1996, 215).

Table II.4. The Location of ‘Farmsteads’ in the Berbátí Valley

<table>
<thead>
<tr>
<th>Sites</th>
<th>On Hilltop or Akropolis</th>
<th>Close to Arable Land</th>
<th>Near Coastal Plain or Valley</th>
<th>With Potential Harbour</th>
<th>Inland</th>
<th>Close to Water Sources</th>
</tr>
</thead>
<tbody>
<tr>
<td>Find-spot 20</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Find-spot 24</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
<tr>
<td>Phytésoumia spur</td>
<td>✓</td>
<td>✓</td>
<td>✓</td>
<td>-</td>
<td>✓</td>
<td>✓</td>
</tr>
</tbody>
</table>


‘As opposed to the development in the Southern Argolid there does not seem to be much continuity from the Archaic times to the Classical in the Berbati-Limnes area.’ (Penttinen 1996, 280).
Areas Not Included in the Surveys

We know of other Argolic ‘towns’ existing outside the survey areas both from excavations (Appendix A) and from literary references; here I use only the contemporary or near contemporary evidence of Homer, Hesiod, and Herodotos. Two Aktean ‘towns’ are mentioned by Homer and Herodotos: Troizen (Appendix A-56; Homer, Il. 2.561; Hdt. 3.59; 7.99; 8.1, 43, 72; 9.28, 31, 102, 105) and Epidaurus (Appendix A-28 and A-31; Homer, Il. 2.561; Hdt. 1.146; 3.52; 5.82; 7.99; 8.1, 43, 72; 9.28, 31).

The major ‘town’ in the Argeia was Argos (Appendix A-10; Homer, Il. 1.30; 2.115; 4.171; 6.152, 224; 9.22; 13.379; 14.119; 15.30; 19.15; Od. 1.344; 3.180, 263; 4.99, 174, 562, 726, 816; 15.80, 224, 239, 274; 21.108; 24.37; Hdt. 1.31; 1.82; 3.131; 5.57, 61, 67-68, 86-89; 6.75-84, 92; 7.148-152; 9.12, 34). Mykenai (Appendix A-11; Homer, Il. 2.569; 4.52, 376; 7.180; 9.44; 11.46; Od. 3.305; 21.108: Hdt. 7.202; 9.31), Tiryns (Appendix A-16; Homer, Il. 2.559; Hdt. 6.77, 83; 9.28, 31), Midea (Appendix A-20), Asine (Appendix A-22), and Nauplia (Appendix A-17; Hdt. 7.76), however, were no doubt also important centres of population in the Argeia (Whitley 1988, 180).

The problem with identifying these places as ‘towns’ is that the location of some of the related settlements has yet to be securely established. As Morgan and Coulton (1997, 93) point out for Tiryns, however, it would ‘be most unwise, given the very limited extent of excavation in the surrounding plain, to draw negative conclusions about an absence of related settlement, and thus to dismiss Tiryns as an urban centre.’

II.1.5.b. Settlement Patterns in the Archaic Period and their Relation to Agricultural Activities

Overall, it is fair to say that no ‘towns’ were missed in survey, although some may have lain outside survey areas (for example, in the Thermisi area and on the Dhfdhyama plateau). The impression we get is that the majority of the population in the Argolid preferred to live in ‘towns’ or ‘villages’, even if they were living mainly from agriculture (Gallant 1982, 119; on towns, see Alcock 1991a, 421-463; Whitelaw and Davis 1991, 265-281; Bintliff and Snodgrass 1988a, 60-63). Residence in a central ‘town’ offered a possibility for social and political connections, community life and facilities, and defence.
(or a sense of security), which hardly any ‘villages’ and no ‘farmsteads’ could provide (Osborne 1987, 59; Cherry, Davis, and Mantzourani 1991, 345; Alcock 1993, 105-107). Competition and expenditure by elites living in ‘towns’ also contributed to local economic activity (Gallant 1982, 117-119; Alcock 1993, 116).

On the whole, the appeal of a ‘town’, with its various religious, civic, and economic attractions, seems obvious to many of us. ‘Town life nourishes and perfects all the more civilised elements in man.’ (Oscar Wilde). But we live in a market economy, with most of life’s necessities at our instant disposal. If we lived in a society where we had to rely directly on agricultural production, we might think twice about settling in a city. Unless we farmed the land in its immediate vicinity (which in our day is of course rare, given the large suburban spread), we would have to spend a great deal of time travelling to and from our fields (see Wagstaff and Augustson 1982, 109-110 for ethnographic evidence from Greece). In antiquity access to fields was hampered by the long distances farmers had to travel from their place of residence to their plots, which were often segmented and spread across the territory of the community, and by the slow means of transportation available to them (Chisholm 1979; Jameson 1990b, 173; Cherry, Davis, and Mantzourani 1991, 464). How, then, did ‘town’ inhabitants find time to travel to their fields, cultivate their land(s), and also participate in the social and political activities of the ‘town’?

There was obviously a great variety in the wealth and status of people collectively called ‘farmers’. Let us begin from the top with substantial landowners. How much time they devoted to their own land depended on their other responsibilities and needs, i.e., they could perhaps be absentee landlords (Jameson 1994a, 60). If they obtained the labour of others to help in the work required on their more distant holdings, their less fertile land, or their entire estates, then they were more likely to live a leisure life in ‘town’. Who were those others?

Tenant Farmers or Agricultural Slaves

Tenancy was a basic system of agricultural labour (see Burford 1993, 177-181). Under it, those who cultivated the land did not own it, but at least had the permission to farm and to support themselves from it (Willetts 1969, 496; de Ste. Croix 1981, 135; Jameson 1992, 136). These tenants probably had little choice about where to live (a point to which I
shall return). For landlords this was 'cost-effective', with tenants keen to invest a lot of
time and effort in land that they did not even own (Osborne 1985a; Wood 1988).

Agricultural slavery was another way of liberating landlords from personal cultivation of
their own holdings (see Burford 1993, 208-222). The subject of slave labour in archaic
and classical Greece, however, is a disputed one. Jameson (1977-78, 122-145; 1992, 138-
145) argues in favour of slavery and suggests that agriculture was so intensive that
slavery was advantageous on even the smallest plots. Wood (1983, 1-46; 1988, 42-80)
challenges this point of view, suggesting instead that the use of slaves in agriculture was
negligible. In her view the wealthy hired out their land to the poor, ensuring their own
profits and at the same time offering the poor land on which to live (see also Osborne
1988, 279-323; Gallant 1991a, 30-33).

In discussing agricultural labour we must rely heavily on the literary sources, because the
existence of slaves is extremely difficult to detect in the archaeological record (Jameson
1994a, 61). Jameson (1990b, 191-192; 1990c, 103-104) points out that no distinctive
quarters have been identified for them in houses; they either lived in with their owners’ or
with their own family, indistinguishably from citizens or metics (cf. possible slave burials
in the Akanthos cemetery). Fortunately, two early written sources mentioning slaves in
connection with Argos have come down to us.

The first is in an early fifth century inscription from the sanctuary of Epidauros (Figure
57; Appendix A-28; for the Greek, see Appendix D, Text 17). The bronze plaque
mentions a certain Kallippos and his foiketai (= oiketai), slaves or serfs (Epídavros
63; Touchais 1978, 672, fig. 71; Lambrinoudhakis 1980a, 191-192, pl. 122a; 1980b, 58-
Epidauros, see also IG IV 1341; IV² 1.137; Robert [F.] 1933, 383; Lazzarini 1976, 232
no. 402; Jeffery 1990, 166, 170 no. 37). Kallippos was arguably an Argive landowner
(ἀγγός) who came to Epidauros as a suppliant after the battle of Sepeia (Lambrinoudhakis
has not yet published the text, and the use of the photo in Jeffery was on the
understanding that his interpretation was not questioned). In this case the term oiketai
refers to the individual connected to an oikos, a household family, rather than to an oikia,
a house (Xenophon, *Oeconomicus* 1.5; Jameson 1992, 142). The *oiketai* were therefore the dependants or slaves of Kallippos.

Another piece of information for the existence of slaves in the Argeia comes from Herodotos' (6.71-83) much disputed passage about the battle of Sepeia, where he uses the word *douloi* (as used in other Ionian texts). When Argos was defeated by Sparta and lost thousands of men, the *douloi* took over state business until the young Argive citizens, the sons of the dead, attained maturity. These young men apparently overthrew the *douloi* (perhaps around 478), who then captured Tiryns and held it (perhaps until 468) until they once again tried to gain control of Argos and were defeated (Hdt 6.83; Seymour 1922, 24-30; Willetts 1959, 495-506; O’Neil 1981, 341-343). In other versions of the same story (Aristotle, *Pol.* 1303a 6-7; Plutarch, *Moralia* 245C-F; Paus. 2.20.8-9) the *douloi* of Herodotos are replaced by *perioikoi*. These ‘dwellers around’ were normally non-citizen dependent workers (see Burford 1993, 193-207 on dependent labour; also Pollux, *Onomastikon* 3.83, who in the second century AD speaks of a group called the *gymnetes* [meaning ‘Stripped men’, either bare of weapons or stripped in order to work, as Hesiod, *Op.* 391-393, recommends] at Argos as ‘between slavery and freedom’; Snodgrass 1980a, 89; see also Foley 1998, 139).

There is a vast, though often misdirected, literature on this topic (Seymour 1922, 24-30; Lenschau 1938, 412-429; Luria 1933, 211-228; Willetts 1959, 501-502; de Sanctis 1966, 49-52; Lotze 1956, 54ff.; 1971, 102ff.; Forrest 1960, 221-241; Tomlinson 1972, 97-98; van Compernolle 1975, 355-364; Asheri 1977, 21-48; Arnheim 1977, 67-70; Adshead 1986, 91-103; Vidal-Naquet 1986, 209-210; Demand 1990, 59-60; Cartledge 1980, 89-91). Lotze’s (1956, 53-55) argument is perhaps the most reasonable; he suggests that the term *douloi* comes from an earlier period, when it was used to describe peasants who had by the sixth century acquired citizenship (cf. Forrest 1960, 222; Whitley 1988, 181).

In the end we must admit that we simply do not know whether the *douloi* of Herodotos were citizens, agricultural serfs (Willetts 1959, 496; Arnheim 1977, 68), or full ‘slaves’ (Whitley 1988, 181 n53). What is probable, however, is that the Argives had slaves and used them to run their larger estates (perhaps under the supervision of a bailiff?).

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The Autourgoi

We can assume that the relatively wealthy farmers formed only a small part of the population. The majority was probably free landowners of modest means (Burford 1993, 167-172; Jameson 1994a, 62), who worked their own land, as the autourgoi of Thucydides (1.141.3) suggests. No doubt a middling class of landowners existed as well, and I shall return to them later.

Ideally the smallholders possessed enough land to deliver minimum subsistence when cultivated in the usual non-intensive way, with traditional Mediterranean crops, that is, cereals, vines, pulses, and perhaps olives (Halstead 1987, 83; Hodkinson and Hodkinson 1981, 283, see also Burford 1993, 120ff. for ploughing and planting). In truth, however, many may have failed to achieve this standard, especially since the quantity of crops varied immensely from year to year and the small landowners must have cultivated the undesirable and unproductive land (Cherry, Davis, and Mantzourani 1991; Osborne 1987, 38; Jameson 1992, 145; Jameson, Runnels, and van Andel 1994, 564). The closer the land was to ‘towns’, the more valuable it must have been, for its proximity to the ‘town’ reduced travelling time to fields and provided access to water and fertilisers from the town’s houses (Jameson 1994a, 62).

Those smallholders who did not have enough land to be securely self-reliant, either needed to implement extra measures of agricultural extensification (e.g. spreading out into marginal lands) and diversification (e.g. investing in livestock), or to augment their income by working for others. In the first instance, the evidence from survey suggests that ‘such extensification seems to start no earlier than the late sixth century, and is more generally a fifth- and fourth-century phenomenon across Greece’ (Foxhall 1997a, 127). We should therefore consider the second option in more detail or one would have to assume that the category did not exist.

The smallholders could have supplemented their income by working for others. In addition to working in the fields, they might find work as craftsmen, peddlers, in transportation, or as seamen (Alcock 1993, 106; Jameson 1994a, 62; on hired free labour, see Burford 1993, 81, 186-193). All of this may have been sporadic, part-time work for which a ‘town’ location was advantageous, especially if they turned their residence into a
place of commerce (Jameson 1990b, 185; 1994a, 62). 'Village' settlements, to which we now turn, would also have served them in this function (Jameson 1994a, 63).

**Residence outside Major Centres**

So far, the picture that I have constructed of the residents in 'towns' is one of a mixed community of relatively well-to-do absentee landowners, residing in 'town' for social and political reasons, and perhaps smallholders taking advantage of employment opportunities (Hodkinson and Hodkinson 1981, 286). For the majority of small 'towns', however, 'the total number of people who could productively take up predominantly urban residence would be limited' (Alcock 1993, 116); the remaining population would have to live elsewhere. 'Village' life was another option.

According to *our* definition, 'village' life might approach the conditions of a 'town', if the 'village' was sizable and far enough from a 'town' to have social and economic autonomy. 'Villages' that were close to major centres probably relied on the nearest 'town' 'for craft production, agricultural processing facilities, and opportunities for employment and exchange' (quotation from Alcock 1993, 102; on trade and exchange, see Garnsey, Hopkins, and Whittaker 1982; Osborne 1991a, 119-145; Meijer and van Nijf 1992; Foxhall 1998a, 295-309). Large 'villages' could provide the community with better resources, an improved lifestyle, and added security, as well as alleviate any civic duties and agricultural catastrophes by sharing the responsibility among themselves (Alcock 1993, 102).

The extent to which 'villages' attracted occupants is a crucial element in determining the role of the countryside in archaic Greece. 'Villages' must have been far more numerous than 'towns' (see Hansen 1995, 51, 80), but to judge from most published maps, the opposite seems to be true. Very little work has been published on 'villages' of the historic period (except, for example, Askra in Boiotia, see Bintliff and Snodgrass 1988a, 57-71; Zagora; Emborio; Vroulia), but Hansen (1995) has examined the role of the *kome*, a term which he believes in some contexts (e.g. the Dorian Peloponnesos) designated a 'village'. However, we have no direct evidence that the term *kome* can be applied to archaic 'villages'; as Hansen (1995, 80) himself notes, 'kome is surprisingly rare in archaic and classical sources ...'. It is only in the classical period that Argos used
toponyms to denote *komai* in the sense of 'territorially based subdivision[s] of the *polis* with functions that seems to justify a comparison with the Attic demes.' (Piérart, 1983, 269-275; 1985, 345-356; Charneux 1984, 207-227; quotation from Hansen 1995, 71).

In trying to understand the place of the ‘village’, we should ask how much of the population would go for the ‘less sociable’ option of ‘village’ life. Population estimates are generally unreliable, but they give us some idea of the distribution of population. For example, in the archaic period the total area of the known ‘villages’ in the southern Argolid covers about twenty hectares compared with the forty and a half hectares taken up by the ‘towns’ of Hermione and Halieis. If area can be connected with population, the ‘villages’ of the southern Argolid may have supported as much as half the population of ‘towns’ (Morgan and Coulton 1997, 125). Jameson, Runnels, and van Andel (1994, 562, table B.6) estimate that ‘village’ sites in the southern Argolid have a population of about 2,400 and smaller sites (farmsteads, special-purpose sites ?) have a population of 135. If we suppose that most sites were inhabited at the same time and that small family units lived on ‘farmsteads’ (though unlikely, see below), there would have been a population of about 2,550 living outside ‘towns’ in the archaic period (Jameson, Runnels, and van Andel 1994, 549). This can be compared to a total ‘town’ population of 3,330 for Hermione (2,110) and Halieis (1,220). According to the authors’ estimates, therefore, some 41% of the population lived outside ‘towns’. ‘Furthermore, since the survey covered only 20% of the area of the peninsula, there may well be other... [‘village’ settlements] in the territory of either city’ (Morgan and Coulton 1997, 125).

Granted that these figures might be misleading with regard to what was happening in the countryside (especially since ‘off-site’ pottery scatters were not recorded, see Alcock, Cherry and Davis 1994, 137-169), the place of the ‘village’ in the southern Argolid was clearly important. We might start by asking why some people chose to live in ‘villages’ rather than ‘towns’.

The principal reason for choosing ‘village’ life over ‘town’ life may have been to cut down on long travelling distances between place of residence and individual plot(s). I would propose that middling farmers and people who gained access to land via dependency relationships worked the land around ‘villages’, because it was likely to be less valuable, and thus more accessible, than the land found near ‘towns’.

*Chapter II The Exploitation of the Natural Landscape*
Archaic ‘Farmsteads’ and the ‘New Model’ of Classical Agriculture

The factors that encouraged the progress of village-based residence may be comparable to those that led to the establishment of rural sites, usually called ‘farmsteads’ (Cherry, Davis, and Mantzourani 1991, 477). Increased settlement beyond main centres has been seen as evidence of an agricultural strategy that tries to maximise subsistence production (Halstead 1987, 77-87; Garnsey 1991, 92-94; Hodkinson 1988, 38-41; Cherry, Davis, and Mantzourani 1991, 463-464; Burford [A. M.] 1993, 59-61; Alcock et al. 1994, 163-164; Osborne 1985b, 119-128). In this scenario agriculturalists living on ‘farmsteads’ no longer needed to travel to and from their fields, could grow cereals and pulses on a yearly rotation, and could raise animals on their land, dropping manure where it would be most needed. This ‘new model’ of agriculture must also have operated in combination with the more traditional, Mediterranean agricultural system (Halstead 1987, 77-87).

Some (Gallant 1982, 111-124) have used such a change in the agricultural regime to explain the appearance of ‘farmsteads’ (in the archaic period); others see it as resulting more from a rise in population (Snodgrass 1977, 13; 1980a, 22-24; Morgan and Whitelaw 1990, 81; Jameson 1994a, 57; cf. Osborne 1987, 59-70). Neither of these hypotheses can be supported by survey data from the Argolid. There is no evidence in the archaic period for a ‘plethora of small isolated rural farmstead[s]’, such as the more densely populated and intensively farmed countryside of the fifth, fourth, and third centuries (Foxhall 1997a, 123-127; cf. Morris 1994a, 363). Nor is there ‘evidence for dramatic changes in cultivation practices’ during the archaic period; the basic ‘repertoire of crops and techniques available to farmers in the Late Bronze Age’ remained unchanged in the eighth to sixth centuries (Foxhall 1997a, 123, 127). Moreover, the survey evidence ‘hardly suggests over-population or a landscape approaching its carrying capacity’ (Foxhall 1997a, 127).

Since architectural remains are usually not adequately well preserved to be identified, one is required to argue from size and composition of the ceramic (and roof-tiles) scatters whether a site might be a ‘farmstead’ or larger site. Given the very small concentration and size (between 0.05 and 0.60 ha) of archaic ‘farmsteads’ in the southern Argolid, is it unlikely that the rural sites here and the Berbáti valley were indeed individual farmsteads,
inhabited for at least some part of, if not all, the year (Jameson, Runnels, and van Andel 1994, 249; Ekroth 1996, 217). It should be noted here, however, that the definition of a site based on size is problematic and has prompted several methodological debates on the subject (see Bintliff 1985, 196-216; Wright et al. 1990, 604-608; Cherry, Davis, and Mantzourani 1991, 16-31; Jameson, Runnels, and van Andel 1994, 224-228). For example, in the forthcoming volume of the Laconia survey, most sites are smaller than 0.50 hectares, and a site of 0.60 hectares is unusually large for a 'farmstead' (sites less than 0.15 ha are designated single 'farmsteads', those from 0.15-0.29 ha 'multiple farmsteads' and from 0.30-2.99 ha 'hamlets'; personal communication, Dr. Graham Shipley).

Rather, archaic 'farmsteads' may represent single storage shelters, used seasonally by labourers who had to work land at some distance from their place of residence (for the classical period, see Osborne 1985b, 119-128; 1987; 1988a, 279-323; 1992a, 21-27; Bintliff and Snodgrass 1985, 123-161; Snodgrass 1990, 127-128; Cherry, Davis and Mantzourani 1991, 335-337; Lohmann 1992; cf. Roy 1996a, 104-116). The ability or desires to keep such shelters in the countryside was perhaps more typical of wealthy landowners, since 'they represent additional capital investment in the countryside, at a level well beyond the means of the poor' (Alcock 1993, 61).

So long as the nucleated centre was no more than one to two hours away (up to about eight kilometres), fields could be conveniently exploited from such 'villages' or 'towns'. Every known archaic 'farmstead' in the Argolid is within four kilometres of a nucleated place of residence (for the southern Argolid, Figure 53). What is more, all these 'farmstead' sites lie on, or next to, known ancient land routes. Therefore, any surplus production could be sent to 'villages' or 'town' residences easily by inland routes or by sea, and then be shipped to external markets by sea from the larger centres. With these advantages, what would have been the point of isolating oneself in a 'farmhouse' on a permanent basis (for the classical period, cf. Osborne 1985b, 119-128; 1987, 56-70; 1992a, 25)?

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II.1.5.c. The Potential Contribution of Historical Events to the Interpretation of Changes in the Late Archaic Landscape

The picture we get for the Argolid changes by the end of the archaic period, when we witness a substantial decrease in the relative number of ‘villages’, together with a partial abandonment of ‘farmsteads’ in Berbáti and the southern Argolid (a point to which I shall return), and soon after a rise in the number of classical ‘farmsteads’. The problem in interpreting such shifts in focus are enormous. Were they a result of depopulation, of population movement -- from ‘villages’ to ‘town’, or of some crisis? (for a discussion of nucleated versus dispersed settlement, see Wagstaff and Cherry 1982, 251-256; Runnels and van Andel 1987, 322-330; Bintliff and Snodgrass 1988a, 69-71).

The first of these possibilities, depopulation, is a simplistic interpretation of survey data but, when combined with historical evidence, requires fuller reflection. The second, population movement, is obviously more complex and deserves more attention than I can give it here. The third, usually occasioned by warfare, is perhaps the most popular explanation of a kind that we often reject, but sometimes it certainly must have served as a trigger for population changes.

The slighter evidence for ‘villages’ and ‘farmsteads’ in the late archaic period might also reflect less intensive exploitation of the landscape. Whatever the interpretation, the data should not go unchallenged; they are worth exploring from many angles in an attempt to understand more fully the changing patterns of landholding at the end of the archaic period.

The Decrease in the Number of ‘Villages’

Usually, a decrease in the number of ‘villages’ has been analysed in conjunction with the later rise in the number of classical ‘farmsteads’. Given the problems of how land ownership relates to residence on rural sites, however, it would be unwise to assume a widespread movement of people from ‘villages’ or ‘towns’ into the rural countryside. Instead, we could consider a movement of the population from ‘village’ to ‘town’.
If there is a direct relationship between the loss of smaller sites and the growth of larger ones, it would difficult to prove without proper investigation (urban surveys) of ‘town’ sites of the same period in the surveyed areas. Yet the observed general increase in ‘town’ sizes from archaic to classical times hints at such a redisposition of the people across the landscape.

Let us assume a movement of population from smaller to larger centres after the archaic period. What conditions may have made people move out of ‘villages’? Perhaps middling farmers, who had been previously living in ‘villages’, had by then accumulated enough wealth to consider the possibility of moving into ‘towns’. If they were becoming more ambitious, they may have desired the social life and luxuries the ‘town’ could provide. With fewer of these people living in ‘villages’, the number of opportunities for agricultural employment would be reduced for the poorer ‘village’ inhabitants and they may have been forced into ‘towns’, if there were work opportunities to be found there (Hodkinson and Hodkinson 1981, 285; Jameson 1994a, 55-63).

Whatever the situation may have been, any shift in investment (by ‘villagers’) from the countryside to ‘towns’ would have contributed to the apparent neglect of the rural landscape. This abandonment comes out even more clearly when we look at the pattern for archaic ‘farmsteads’ in the Argolid, particularly in the Berbáti valley.

The Apparent Abandonment of Archaic ‘Farmsteads’

On the evidence of surface finds in the southern Argolid only one archaic ‘farmstead’ continued into classical times; this demonstrates little continuity from archaic to classical times in this area. The same picture is evident at Berbáti, where the valley was nearly deserted in the late archaic period (Ekroth 1996, 225). Here too, only one of the areas where archaic ‘farmsteads’ were identified, Find-spot 24, continued into the classical period.

Berbáti is particularly interesting from an historical viewpoint. The near abandonment of the valley seems to have occurred in response to very specific historical circumstances and must be seen both in relation to its proximity to Argos and Mykenai and in the broader context of the Argeia’s history. Recall the battle of Sepeia, when the Spartans
invaded and defeated the Argive army, and the Argives are said to have lost some 6,000 men (Hdt. 6.71-83; Wells 1923, 76). The outcome of this battle might be interpreted in many different ways; it may have resulted in a fall of the Doric regime at Argos, which was supplanted by a new organisation (perhaps governed by slaves, serfs, rebels, or residents from perioikic communities, see above; Jameson 1992, 135-146). If those who farmed land in Berbáti did so via dependency relationships, this new regime enabled them to seek opportunities elsewhere, such as in Argos. With the death of their landlords, they perhaps had no other choice but to seek their livelihood in ‘town’.

A second hypothesis is that the Berbáti valley was farmed by the inhabitants of neighbouring Mykenai, who under this new regime gained access to land previously owned by the Argives killed in battle. With abundant fertile land now available on the plain, the Mykenaians would have abandoned cultivating the more isolated valley of Berbáti (on the fertility of the Argive plain, see Finke [also known as Zangger] 1988, 5, 149).

A third, and somewhat unlikely explanation for this shift has been perceived as a need for security (Andrewes 1990, 176f; Ekroth 1996, 225 n114). The local instability in Argos may have triggered population mobility in out-lying communities, because living in the countryside had become too dangerous. The problem with this argument is that it assumes that the ‘rural’ sites were inhabited.

Another consideration to bear in mind, if the Berbáti valley was farmed by Mykenaians, is the loss of men in the Persian wars. As noted above (Chapter I), Mykenai sent eighty soldiers at the battle of Thermopylae in 480, and together with Tiryns, fielded a joint force of four hundred hoplites at the battle of Plataia in 479 (Hdt. 7.202; Paus. 2.16.5). If these men came from any community with a minimum of between 2,000-3,000 people (Jameson, Runnels, and van Andel 1994, 558), the loss of hoplites may have played a role in depopulating the land-owning class of Mykenai, resulting in a reduced exploitation of the Berbáti valley.

A similar explanation can be given for the southern Argolid, because Hermione (Hdt. 8.72; 9.28.5) and probably Halieis (together with Hermione) also sent troops to fight the
Persians (Jameson, Runnels, and van Andel 1994, 556). Hermione is assessed to have had
a minimum of 567 men of the lower classes (the crews of three warships sent to fight at Salamis) and 333 of higher social and economic rank. Even if these 900 represented the entire muster of all able-bodied citizens, which... [Jameson, Runnels, and van Andel 1994, 556] argued they do not, ... these estimates make no allowance for light-armed troops from the lower economic classes,... Nor for slaves or resident aliens, whose number at this time we have no means of gauging (Jameson, Runnels, and van Andel 1994, 557-558).

Surely, ‘village’ inhabitants contributed to these military contingents, particularly dependents and slaves. The loss of men who cultivated land near ‘villages’ and ‘farmsteads’ might therefore explain why ‘village’ and ‘farmstead’ sites were abandoned at the end of the archaic period.

II.1.5.d. Early Classical ‘Farmsteads’

How different was classical occupation of the countryside from that of the archaic, given the apparent decrease in the relative number of ‘villages’ at the end of the archaic period and substantial increase in the number of classical ‘farmsteads’ (Jameson, Runnels, and van Andel 1994, 249-250, 549; Ekroth 1996; Penttinen 1996, 272, 278-279)? If the survey data for this shift in focus and its corresponding agricultural ‘revolution’ has been understood ‘correctly, ordinary citizens were significantly better off in the fifth century than in the sixth’ (Morris [I.] 1994a, 352). The ‘new model’ would not have appealed to everyone, however. In some places maybe only the wealthy landowners could take these chances; resulting in the poor being left behind in the ‘towns’ (Jameson 1992, 145; Morris [I.] 1994a, 364; see also Roy 1996a, 104ff. for Euripides’ poor ‘peasant’ farmer, who lived in an isolated farm).

Again, the settlement history of the Berbáti valley in the early fifth century is of interest. It is argued that the Berbáti ‘farmsteads’ in the classical period ‘were originally kleroi allotted to free men in the historical context of a land reform in Argos around the middle of the 5th century’ (Penttinen 1996, 279). After the subjugation of the previously independent communities in the neighbourhood, Mykenai and Tiryns, Argos probably incorporated at least some of their inhabitants into its citizen body (see Chapter 1.3.2.a).
Together with Mykenai, the inhabitants of the Berbáti valley must have been controlled by the Argives in the 460s.

This picture brings to mind a reform similar to that of Kleisthenes' at Athens (Caskey and Amandry 1952, 216-219; Piérart 1983, 275; Charneux 1984, 207; Penttinen 1996, 280). The Argives may well have given land to non-citizens within the recently subjugated territories to expand the base for Argive citizenship (Strabo 8.372-377; Gschnitzer 1958, 69; Penttinen 1996, 281). The average size of these landholdings may have been relatively small (Penttinen 1996, 279), at least in the beginning, thus coinciding with the average size typically given to a family farm (Jameson 1978, 131).

What is significant here is that the potential size of individual plots depended less on how much arable land actually existed and more on the socio-political system of Argos. The land reforms may have created a larger number of small landowners and thus a tightening of pressure upon the resources of the Argive countryside. Without the means to acquire more land, these new landholders turned to more productive ways of farming.

In contrast the southern Argolid seems to have had a totally different socio-political structure in this period. In classical times it supported two 'towns', Hermione and Halieis, which interacted with the countryside in a rather different way from Argos. First, unlike Argos, they are not known to have any 'interest in ... expansion, that is, in acquiring more territory for ... [their] existing inhabitants; their limited land kept them minor towns' (Jameson, Runnels, and van Andel 1994, 378).

II.1.6. PASTORAL ACTIVITY AND THE ROLE OF ANIMALS IN FARMING

Pastoralists were heavily 'dependent on gaining access to adequate grazing ... [lands; yet] we have very little idea how this was managed in antiquity in any specific case'. (Forbes [H.] 1995, 330). Pastoralism leaves almost no detectable residues in the archaeological record. Consequently, this study of pastoral activity, like any other, must remain general. Both the writings of Hesiod and the more recent work of ethnographists are helpful, but they can rarely be supported by concrete evidence from the archaic Argolid.
It is only in recent studies that animal husbandry has been incorporated into landscape studies of the ancient world (Koster and Koster 1976, 275-285; Koster 1977; Chang and Koster 1986, 97-148; Jameson 1988, 87-119; 1989, 7-17; Garnsey 1988, 196-209; Hodkinson 1988, 35-74; 1990, 139-164; Cherry 1988, 6-34; Forbes [H.] 1994, 187-196; 1995, 325-338; cf. earlier works such as Keller 1963). The work of Hodkinson and H. Forbes stands out here. Hodkinson (1988, 35-74; 1990, 139-164) argues that in (classical) Greece wealthy landowners took an interest in animal husbandry and that this activity went hand in hand with the agricultural activities of their estates. Forbes presents (1994, 187-196; 1995, 325-338) similar conclusions, but emphasises the wealth that animal husbandry created through the exploitation of both the cultivated and uncultivated landscape, and through that of (slave) labour.

I now examine some of these ideas in more detail.

II.1.6.a. Sharing the Land between Farmer and Shepherd

Any farmers who had no animals and any shepherds who had no farms would have depended on each other in antiquity. Farmers presumably put agricultural land and crop surplus at the disposal of shepherds, and in return got to improve soil fertility by having animals drop manure directly on their land or by accumulating it in folds and spreading it in their fields (for example, see Homer, *Od*. 17.297-299 for the use of manure; Forbes [H.] 1995, 329). Shepherds, however, also would have needed to exploit uncultivated land (a point to which I shall return).

II.1.6.b. Grazing the Uncultivated Land

The grazing of many, if not most, ancient flocks also required large amounts of uncultivated land (Forbes [H.] 1995, 331). Mountainous areas were probably exploited for this purpose (James et al. 1997, 40), which meant that shepherds had to travel long distances to reach this uncultivated land (Burford 1993, 153; Forbes [H.] 1995, 331). They were often nomadic and therefore less likely to own land. We sometimes picture them as poor, landless wanderers, but this rather depends on whether they owned the animals they tended.
II.1.6.c. Those Who Reared Animals

In Homeric society the role of the shepherd was still a respected figure, not confined, as in later periods, to men of low status (Hodkinson 1990, 143). With the appearance of 'towns' his predominance diminished (Hodkinson 1988, 35-74; 1990, 139-164; Skydsgaard 1992, 9-12). Apparently many were of inferior status, several being slaves (Xenophon, Hellenica 4.6.4). 'Even those who were free [were the poorest among the free and] seem not to have owned the animals they tended' (Forbes [H.] 1995, 322).

II.1.6.d. Those Who Owned Animals

The owning of animals appears to have been the domain of the wealthy, not of the lowly individual (Forbes [H.] 1995, 332). The more land one owned, the easier it was to keep a large amount of animals. Small peasant subsistence farms could only support a few farm animals (Burford 1993, 151), though Foxhall believes that we have overestimated the extent of land required to provide for such a small number (in Wells [B.] 1992, 170). She stresses that there were many sources of fodder, such as olive prunings, and olive and vine press cake available for animals. Perhaps, then, traction animals would have been worthwhile keeping on a small farm. There is no doubt that larger farms made good use of traction animals.

Nevertheless, an animal also demands a great deal of time and effort (see Burford 1993, 144ff.). One has 'to consider all the problems that go with the care and management of animals: their feeding, their reproduction, their stalling, their diseases', and so forth (Wells [B.] 1992, 168). It is unlikely that small subsistence farmers had time to spare on such activities, unless the results brought them sufficient rewards.

II.1.6.e. The Economic Benefits of Pastoralism

What were the rewards of pastoralism? One can store riches much more successfully in animals than in vast tracts of fallow land, and one can eat them too (Gallant 1982, 118;

Pigs 'are potentially the best-suited of domestic animals to intensive rearing since they thrive on household and garden waste and can be confined in a small area' (Burford 1993, 147-148; quotation from Jameson, Runnels, and van Andel 1994, 289). In the temple of Apollo at Halieis the excavators found several bones of piglets (some forty-nine piglets, compared to thirty-eight ovicaprids) (Jameson, Runnels, and van Andel 1994, 289). This seem to be confirmation of local animal husbandry (Jameson 1976b, 74-91; 1988, 87-119).

Together with its contribution to food, pastoralism was also an activity that encouraged the production of goods by way of trade (Forbes [H.] 1995, 322). Sheep and goats supplied foods such as meat and milk as well as hides, wool, and hair (see Burford 193, 146ff.). To judge from the evidence of spindle whorls and loom-weights from 'farmsteads' at Berbati, Lerna, and Fournoi, 'the preparation and weaving of wool was [important, even if it was] largely a household industry' (Caskey 1955, 32; quotation from Jameson, Runnels, and van Andel 1994, 294; Ekroth 1996, 187-192; on the importance of wool, see Pliny, NH 8.190-193).

Some species of animals were above all work animals and would have provided extra help on farms. Hesiod (Op. 405) advises: 'First, get yourself a house, a woman, and a plough ox.' Although the ox would have had an advantage as a draught animal in the days of poor harness, mules and donkeys were often used for ploughing as well as riding (for the Greek, see Appendix D, Text 18; Hesiod, Op. 436, 606, 816; Rackham 1990, 107-108). 'Work animals were not normally regarded as acceptable victims for sacrifice', but when an ox was no longer needed it must surely have been eaten (Jameson, Runnels, and van Andel 1994, 287).

Animals were also used for transportation. The story of Kleobis and Biton, as reported by Herodotos (1.31), describes how these two youths of Argos dragged their mother in an ox-cart from Argos to the Heraion, because the oxen had not yet returned from the fields to the town. In addition, 'the many traces of wheel ruts associated with ancient roads throughout Greece are a reminder that we should not underestimate the value of the ox
cart and the more lightly loaded donkey-cart, ... but in most of the Akte, where no roads went, donkeys, and horses, and more recently mules, have been indispensable pack animals' (Renfrew 1972 355; Rackham 1990, 105-106; quotation from Jameson, Runnels, and van Andel 1994, 288). Horses were not as useful as draught animals, since the method of harnessing them was somewhat inefficient (Meijer and van Nijf 1992, 136).

Animal husbandry could therefore be used ‘as a means of short-term accumulation of wealth, normally more difficult to achieve through agriculture’ (Jameson, Runnels, and van Andel 1994, 297). We should therefore think of it as an activity mainly reserved for the wealthy (Forbes [H.] 1995, 332).

II.1.6.f. Social Aspects Associated with the Keeping of Animals

The elite would have used the breeding of animals, particularly of horses and cattle, as a way of increasing their status in society (Aristotle, Politics 1321a.11; Hodkinson and Hodkinson 1981, 279). Breeding allowed for social displays in festivals or games, through feasting on domesticated animals (cattle) and through racing (horses) (Jameson, Runnels, and van Andel 1994, 297). ‘Both aspects are seen in the Homeric poems and have continued to be prominent [in archaic times], however different the cultural forms’ (Jameson, Runnels, and van Andel 1994, 297).

Fortunately, feasting leaves behind some traces in the archaeological record (see Chapter III, Table III.1). We have several bone collections come from religious sites in the Argolid: Halieis, Lerna, Midea, Tiryns, Áyios Adrianós, and Asine (Reese 1994, 194). Halieis produced a few knuckle bones, often modified and probably used in divination, exotic fauna such as ostrich eggshell, and a high concentration of goat bone-cores (Appendix A; Reese 1994, 193). Although no bones have been reported from Hermione, a number of terracotta statuettes of (bronze) cows and of (terracotta) women holding cows were dedicated to Demeter Chthonia, suggesting the annual killing of cattle (Jameson 1974c, 118; Touchais 1980, 605; see also Paus. 2.35.5-8, Chapter III.1.4.a). Cattle were normally the major victims of animal sacrifice before the success of Christianity in the second century AD. But at times other animals were sacrificed, owing
to the limited supply of cattle, the lack of funds to obtain them, or the requirements of a particular cult. The pig was one of them.

Horses were bred for racing by the local elite in some areas of Greece (Piérart 1992a, 119-155; Burford 1993, 150-151). The Argive plain was known for its horse breeding in the eighth century (Piérart 1992a, 199-155). This tradition carried on into the archaic period, since we have inscriptive evidence mentioning a hippodrome, located somewhere on the road from Argos to the Heraion, at a place called Khónikas (see Chapters I.3.2.a; I.3.4.c; III.2.4.b; and Appendix A-15). Although 'we do not know whether there were stadiums for chariot races in any of the Aktean cities in antiquity, ... a few horses may certainly have been bred and maintained [there] by the local elite' (Jameson, Runnels, and van Andel 1994, 288).

II.1.7. SUMMARY

With the available survey evidence we can now better understand how the agricultural landscape of the archaic Argolid was exploited. On an environmental level, the natural factors that influenced the decision of what land to cultivate include contemporary climate, soil properties, and site properties. Very little is yet known about the local climate and soil fertility in antiquity, but something can be said about the general topography of sites. To judge from the location of most sites, 'coastal plains and flat inland basins ... [were] preferred places for agriculture, because their drainage is excellent and their stoniness is limited.' (Zangger 1992, 15). Proximity to water was also paramount.

The location of place of residence with respect to arable is especially significant in this context. In general, we assume that the inhabitants of the Argolid lived in nucleated settlements and practised a subsistence-based agriculture on fragmented holdings. Such choice of residence could mean that farmers travelled long distances to and from their fields, unless they were wealthy enough to own the land close to the settlement, or to own a cart, or to leave the work on their plots to others. In an Argolic context there is no doubt that tenancy and slavery was a vital source of agricultural labour for wealthy landowners.
The farmers who had to work their own land perhaps supplemented their income by working for larger landowners. By definition, these poorer landowners worked the less valuable land, probably located at a considerable distance from ‘towns’. To cut down on long travelling distances, they may have taken up residence in ‘villages’, which offered them some of the advantages of ‘town’ life, without the extra burden of travel.

‘Village’ life involved a large percentage of the population. We can assume that the middle classes, who benefited from farming land close to their place of residence, and those who gained access to land via dependency, lived in ‘villages’. Middling farmers living in ‘villages’ could easily exploit the labour of the poorer landowners, or non-landowners, who needed to supplement their income with part-time work.

This situation seems to have changed by the end of the archaic period, when it can be argued that middling farmers moved out of ‘villages’ for a variety of reasons. The poor perhaps followed them, because there were fewer opportunities for agricultural employment in ‘villages’ devoid of those middling farmers.

Nevertheless, a number of other possibilities can explain the apparent changing patterns of landholding at the end of the archaic period. The decrease in the number of ‘villages’ and the partial abandonment of ‘farmsteads’ at the end of the archaic period could be a result of depopulation, population movement, or a crisis of some sort, as noted above. Whatever the reason, the survey evidence does point to the countryside being neglected for some time.

A detailed knowledge of the agricultural landscape in the transition between the archaic and the classical periods would facilitate a human interpretation of the processes involved in settlement pattern change. The settlement history of the Berbáti valley may be a good example. Its proximity to Argos and Mykenai made it vulnerable to the events that triggered depopulation in the first few decades of the fifth century, the loss of men in the battle of Sepeia and in the Persian wars. The former contributed to the ‘downfall’ of the land-owning classes in Argos; the latter affected the hoplite populations of Mykenai, and probably also Hermione and Halieis. No doubt those living in neighbouring ‘villages’ and farming land in remote areas took advantage of this situation and moved into ‘towns’.

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Land close to these centres, which had previously been owned by the wealthy ‘town’ folk, may have become available for cultivation by middling farmers, poor landowners, serfs, and perhaps even slaves. The more remote areas such as the Berbáti valley, where agricultural land was available, were partially abandoned in favour of the less remote and more fertile areas, such as the plain of Argos.

The picture presented here emphasises how the organisation of the agricultural landscape can be argued to have been governed more by socio-political factors than by geographical considerations. It is argued that when Argos took the democratic step of allotting small plots to its citizens in classical times, it was primarily concerned with implementing a new socio-political system. As a result, it would have created a large number of small landowners who, having no means of acquiring more land, gave in to the pressures of production by farming their land in an intensive way. In the long run, such land reforms would have contributed to the depletion of the natural resources in the area (see Zangger 1992, 13-19 for soil erosion in the Argive plain; cf. Gallant 1982, 116-117).

The southern Argolid had a different socio-political history. Its two ‘towns’ had no interest in expansion and any pressure to exploit the countryside in an extensive way did not come before the fourth century.

Arable farming was not the only way of exploiting the land. Those who owned animals benefited from animals grazing on their land through the spread of manure to improve soil fertility, from work animals, and from pack animals. The breeding of horses and cattle may also have provided social benefits for an elite through racing and feasting.
II.2. Non-Agricultural Resources

II.2.1. INTRODUCTION

Although it is very hard to judge from archaeological evidence alone, there are signs that at least some areas of the Argolid exploited the natural resources around them through non-agricultural activities. Here I look at five such activities in the Argolic landscape: mining, quarrying, clay extraction, wood-cutting, and hunting and gathering.

I refer the reader to Appendix B for a discussion of some of the uses to which metals were put in the archaic Argolid.

II.2.2. MINING AND METALWORKING

Our most detailed records of ancient mining relate to the silver mines at Lavrion in Attica. We also know that mining took place on and around Mt. Pangaeum in Thrace (Hdt. 5.1; 7.112; 9.75), in Khalkidike (Strabo 10.1.9), and on Siphnos (Hdt. 3.57; Paus. 10.2.2) and Thasos (Hdt. 1.64; 3.46-47, see Shepherd 1993, 69ff. for an overview of these ancient mining sites). However, no ancient author mentions any ancient mining or metalworking in an Argolic context.

II.2.2.a. The Lack of Evidence for Mining in the Argolid

Argos, Mykenai, and the Heraion were known for their bronzework (Jeffery 1976, 141; Jameson 1976d, 82; Rolley 1982; 1986; 1992, 37-54; Healy 1987, 58; Foley 1988, 96; Strøm 1998, 73), but there is no geological evidence that metals were mined in the Argeia. What is still needed is a systematic search for ore deposits and ancient workings in the region. Without it, discussion of mining must inevitably fall back on studies of typology, which presume local production on the basis of visual criteria of metal objects. Although we cannot exclude the possibility of some metal production from local sources.
in the region by the late sixth century, when many centres will have had full-time metalworkers, we must be careful in interpreting these typological studies. Even if it can be proved that metals were worked locally (for example, from evidence of wasters), the raw materials need not come from local mines. The importation of raw metals -- either as ingots or as ready-made artifacts -- into the Argolid is more than likely (see Cartledge 1983, 15; Snodgrass 1983, 23-26 on the importation of metals).

II.2.2. b. The Exploitation of Nearby Mines

The closest known ancient mine where copper may have been obtained is at Nemea (Taylour 1964). The date of the workings remains unknown. If it supplied the Argeia with copper in the archaic period, there still remains the problem of tin, which was needed to make tin bronzes (Shepherd 1993, 71). A Greek metallurgist, who had seen the entire repertoire of official reports in Greece, informed Benton (1964, 138) that the country had no tin. Pausanias (5.37.5-6) mentions the port of Crisa (near Delphi) as a source of tin, but there is much controversy over this name and its location (Davis 1929; Alsop 1964; Benton 1964; Healy 1978, 60; Shepherd 1993, 71). Of course tin may have been imported from Cornwall, or elsewhere in Brittany, and from the west coast of Italy (Muhly 1973, 404-413), but at some cost (we are ill informed about the costs of ancient transport, see Meijer and van Nijf 1992, 133ff.).

II.2.2. c. The Lack of Archaeological Evidence for Metalworking

Another problem with seeing Argos, Mykenai, and the Heraion as important bronze-working centres is that we have no archaeological evidence (slags, kilns, crucibles, etc.) for metalworking in these areas for the archaic period (copper slag was found in the late bronze age levels at Mykenai, see Davies [O.] 1932, 985-987). Archaic and classical kilns have been identified at Argos, but it seems that they were ceramic kilns (see below; Piteros 1996, 99-102).

The only archaeological evidence that could date to the archaic period comes from Palaiokástro (G2) in the southern Argolid (Figure 46). Iron slag of unknown age was found here; it has been associated with the exploitation of iron in this area. Perhaps the
mining of iron was a reason for founding the classical ‘town’ at Eileoi, close to the archaic ‘village’ of Magoïla stá Ilía (Appendix A-58; Jameson, Runnels, and van Andel 1994, 302).

II.2.2.d. The Miners

This idea of a mining town brings to mind Emile Zola’s *Germinal*, where the poor inhabitants of a small town lived and died for their local mine. The picture that we conjure up for antiquity may not be that far removed from Zola’s (Osborne 1987, 76-81). Mining was a very dangerous, unhealthy, and physically demanding activity that no privileged class would attempt. Much of the hard physical work was left to slaves.

II.2.3. QUARRYING AND BUILDING ACTIVITY

Extracting rock from a quarry was perhaps just as physically demanding as underground mining (for techniques used, see Scranton 1941; Coulton 1974; Dworakowska 1975; Osborne 1987, 91; Shepherd 1993, 410ff.). Unlike mining, however, quarrying was a much less dangerous occupation, and for this reason may have been more respectable. We should perhaps not exaggerate the role of quarrying in any society, however, because it was surely a far from prestigious activity; those who so worked probably had no choice in the matter, being too poor to own and work a piece of land.

In the archaic period the demand for large quantities of stone must have come primarily from public building projects and to a lesser degree from house-building, depending on availability. I begin by examining the former in some detail.

II.2.3.a. Quarrying of Stone for Building Projects

Though quarrying left fewer marks in the landscape than silver mining invariably did (Osborne 1987, 91; Burford 1993, 117), it is nonetheless reflected in the building activity of two communities of the Argolid.
The first large building project took place at the Heraion (Figure 58; Appendix A-13); the second at Argos (Figure 59; Appendix A-10). The Heraion underwent important works in the early archaic period, including the Old Temple (late seventh century), North Stoa (seventh century), North-east Building (late seventh-early sixth century), and West Building (late sixth century) (Amandry 1952, 273; des Courtils 1992, 250). In contrast, we find surprisingly few archaeological remains at this time in Argos (des Courtils 1992, 241); as far as we know, no trace of important architectural activity exists for this period (des Courtils 1992, 250). The sanctuary of Aphrodite, whose cultic activity goes back to the seventh century to judge from the pottery, has failed to produce architectural remains before the fifth century (Paus. 2.20.8; des Courtils 1992, 241). The sanctuary of Apollo Pythaeus on the ‘Aspis’ at Argos has indeed yielded a few architectural fragments dating from the end of the sixth century, but no archaic remains in situ (Figure 60; Vollgraff 1956, 18-19; Roux 1957, 485).

A change comes at the end of the sixth and the beginning of the fifth century (des Courtils 1992, 242). The Argives probably constructed a temple in honour of Apollo Lykios around 500. The one hundred and sixty-five blocks of a Doric building in poros that were found reused in the hypostyle hall at the limits of the classical agora suggest this (Figure 45). The blocks belonged to a building, most probably the temple of Apollo, where official inscriptions were written on bronze plaques affixed to its walls (see Chapter I.3.2.c; des Courtils 1981, 607-610). This construction testifies to a re-awakening of building activity in the city, but the structure remains isolated, either because it really was, or because of the hazards of archaeological explorations within the city. It is possible that the other sanctuary of Apollo, on the ‘Aspis’, also received a building around this time (des Courtils 1992, 250).

In the years 460-450 BCE we see a veritable fever of building activity, as much at the Heraion as in Argos. At both sites we have evidence of a building programme implying an overall architectural conception, which suggests not only that the construction of the monuments had been envisioned from the start, but also that the initiators had designed, perhaps in the field, the overall plan of the buildings in these two areas as a single and project (des Courtils 1992, 250). Recall that the Heraion was now in the hands of Argos (see Chapter I.3.2.a).
The ambitious building programme of the Heraion in the 460s, aimed at embellishing and enlarging, was political and matched the institution of the Games in honour of Hera (see Chapter III.1.4) of patriotic character (des Courtils 1992, 251). At the same time the creation of a popular agora (Stoa ‘Pi’) and buildings for the assemblies to meet at Argos (the theatre ‘à gradins droits’ and the hypostyle hall; Appendix A-10-33; A-10-66) are clear symbols of democracy (Ginouvès 1972; des Courtils 1992, 249, 251).

II.2.3.b. Locating Local Quarries

Most public buildings at Argos and the Heraion were made of local limestone, or partly limestone and partly mudbrick, but without a search for the source of identical material in the natural landscape, we cannot determine the approximate location of local quarries. ‘Being a moveable surface feature the rock face of any ancient quarry ... would be destroyed by later workings or become weathered, unrecognizable as a quarry and so become integrated into the natural landscape’ (Shepherd 1993, 409).

A few local quarries have been identified in the southern Argolid during the survey, but whether these were exploited in archaic times remains open. Small limestone quarries were perhaps opened up in the Foúrnoi valley (F59) and in the hills south of Koiládha (B47) to provide stone for Hermione when it erected the city walls and the foundations of a late archaic temple (Figure 61; Jameson, Runnels, and van Andel 1994, 303). Conglomerate quarries found north of Kranídhi may have been exploited in archaic times to build the walls of Halieis’ temples (Jameson, Runnels, and van Andel 1994, 303-304). Unlike those at Hermione, the fortification wall of Halieis was built with mudbrick (Jameson, Runnels, and van Andel 1994, 305). Similarly, the domestic architecture at Halieis consisted of mudbrick walls set on stone socles.

II.2.3.c. Stone for Domestic Structures

It is clear that for domestic architecture any stones would do. Unfortunately, our knowledge of seventh and sixth century private architecture is slight. As I have just
mentioned, the houses at Halieis were built of mudbricks and timber on a stone socle. This construction seems not to have been unique to Halieis.

A few remains of archaic houses have been excavated in isolation at Argos, but they are limited to building foundations, in the north-west of Argos (Appendix A-10-4), in the centre of the city (Appendix A-10-17, A-10-26), and to the south-east of the agora (Appendix A-10-79). These structures underwent rebuilding at the end of the classical and beginning of the hellenistic period (Barakari-Gleni and Pariente 1998, 167) and were then levelled in Roman times.

II.2.3.d. Building with Imported Stones

Sometimes local stone was unfit for building, 'because it was too soft and would crumble when worked or exposed to the weather' (Osborne 1987, 81). Building stone would then have to be imported into the area, often at great expense (see Burford 1960, Snodgrass 1983, 16-26; Meijer and van Nijf 1992, 116ff. on the transportation of building materials). Despite that, building materials comprised the main cargoes in antiquity (Snodgrass 1983, 18).

The only known evidence of imported stone for construction comes from the sanctuary of Eileoi, whose columns were cut of andesite that was no doubt imported from the Saronic gulf (Appendix A-51).

II.2.3.e. The Use of Marble

Imported stone was also used to make sculptures from about 650. Stone suitable for carving sculptures, such as marble, could be hauled over long distances by sea (from Naxos and Paros, and elsewhere; on sea-transport, see Snodgrass 1983, 16ff.). Apparently, the only good sourced of marble in classical times were the quarries near Tegea, at Doliana (Osborne 1987, 88).

As far as we know, this picture obtains for the archaic period as well. The southern Argolid lacks deposits of good-quality marble, such as was used for the inscribed marble perirrhanteion at Halieis (Nafplio, Leonárdho Mus. HS 22, 33: Jameson 1969, 320, pl.
80). The Argeia was no different in this respect. The fact that the Argives used bronze rather than stone for their archaic inscriptions suggests that Argos had no good local stone (Jeffery 1976, 141). Bronze was also easier and cheaper to transport than good-quality carving stone.

Perhaps the absence of marble in the region explains why this particular stone was rarely used for building (marble as a building-stone begins to be used elsewhere around 550; Snodgrass 1983, 18). Only 'in the fourth century did [the Epidaurians] import Pentelic marble for a major part of the superstructure of the round Tholos, as well as for the sculptures of the temple of Asklepios' (Burford 1969; quotation from Osborne 1987, 89).

**II.2.3.f. Precious Stones**

Some stones were desired for their aesthetic value, like Troizen's 'variegated dark red and white stone' (Osborne 1987, 81). But as Theophrastus remarks, such stones were not that valuable and thus of little importance for the economy of any Greek city (Osborne 1987, 81).

**II.2.4. WOOD-CUTTING AND THE USE OF WOOD**

In contrast with the rather restricted use of stone in modern rural contexts, its rate of recurrence in the archaeological record may seem remarkable (Orme 1981, 90). Undoubtedly, it occurs in abundance on Greek sites because it have survived the test of time infinitely better than has the wood that was originally used to build houses. Could it be, however, that stone was in fact used more often than wood for building, because of a local scarcity of wood?

**II.2.4.a. Wood for Building**

An affirmative answer to this question is doubtful, even if we are still under the impression that in Homer's days Greece was a country full of trees (Meiggs 1982; Hughes 1983, 436-445; cf. Rackham 1990, 92-111; 1996, 28-29). Although we observe
the gradual replacement of wood for stone in some archaic temples, this change was probably due to the obvious advantages of stone rather than to deforestation for timber.

Wood was nevertheless a vital resource, and it must have been important for Greek cities to assure an adequate supply (Meiggs 1982; Meijer and van Nijf 1992, 117). Most of the timber for beams, uprights, and the strengthening of walls in the southern Argolid could have been supplied locally in the archaic period (Snodgrass 1983, 18; Jameson, Runnels, and van Andel 1994, 306). In 1686 Portokhéli bay was still depicted as ‘surrounded down to the shore by large pine trees’ (Jameson, Runnels, and van Andel 1994, 307). The consequences of timber cutting were obviously minimal in this region (and elsewhere, see Rackham 1996, 28-29). The same cannot be said about the Argeia, where the demand for wood used for construction, shipbuilding, and to meet energy needs, must have been higher. Here the demand for wood could perhaps not be met locally.

It has been said that the firing of kilns to manufacture roof tiles must have brought about severe damage to the Mediterranean forests in antiquity (Wikander 1990, 290 n13; Wertime 1983, 445-452). This too is doubtful at least in archaic times, when it was mainly public and religious buildings that were roofed with tiles. For the roofs of houses, tiles could be used, but brushwood, stretched out over wooden planks to hold up a coating of mud, was also common (Forbes [H.] 1997, 198). This brings us to consider the use of rubble, reeds, and brushwood in building and other activities.

II.2.4.b. Wood from the Uncultivated Landscape

The uncultivated landscape also provided wood for building (Forbes [H.] 1997, 208). Rubble, reeds, and brushwood (i.e. twigs) have probably been used recurrently, especially by shepherds who built huts, animal folds, and fences (Jameson, Runnels, and van Andel 1994, 305-306; Forbes [H.] 1997, 197).

A far more extensive application of this vegetation was for use as firewood in cooking and heating (Forbes [H.] and Koster 1976, 122; Jameson, Runnels, and van Andel 1994, 308; Forbes [H.] 1997, 199).
All these activities (and more, i.e. ship building, the making of tools, cremation, etc., see Hesiod, Op. 420-436 for the many uses of wood) could well have contributed to the depletion of the natural landscape (even if it is a renewable source). Yet to imagine that wood was rare at this time would be misguided. In theory, if access to wood was somehow limited, it was perhaps because the wealthy estate owners held the rights to wood-cutting in their area or certain trees within these estates had been designated as public or sacred (see Burford 1993, 24). Consequently, the communal land may have suffered from over-exploitation.

In reality, however, we have no idea how wood-cutting was managed in antiquity. We might assume from a hellenistic agreement between Troizen and Methana concerning rights to wood-cutting that communities did come to impose controls on them (IG IV² 1.76, 1.77, IG IV 752).

II.2.5. THE EXPLOITATION OF CLAY SOURCES AND CERAMIC MANUFACTURING

A great variety of natural clay sources was no doubt exploited in the archaic Argolid, but we have no physical evidence to prove that this activity took place in any given region. We have only modern clay sources to study, and matching these with ‘ancient pottery compositions’ has produced varying negative results (Jones [R. E.] 1986, 52). ‘To an extent, therefore, the term ‘pottery source’ is an abstract one and the process of determining it is an approximation’ (Jones [R. E.] 1986, 7).

Nevertheless, the establishment of local production of pottery at any given site implies the presence of suitable and accessible sources of clay nearby. Although raw clay can sometimes be transported over some distance, ethnographic studies show that in the majority of cases clay beds were located within a half hour’s walk from the potter’s workplace (Jones [R. E.] 1986, 872). So, if we can identify local production centres, we can presume that clay sources were exploited close to these potential workshops.
II.2.5.a. Identifying Local Workshops

Archaeologists have tried to locate production centres in archaic Greek sites, but without much success. This kind of identification requires archaeological evidence that is often hard to find. For example, we need evidence for kilns, 'pottery wasters', or a concentration of pottery from a settlement site in a range of related fabrics. In their absence, ... one popular approach is to integrate the attribute[s] of chemical and petrological composition into the existing framework of pottery attributes derived on traditional visual criteria (Jones [R. E.] 1986, 8).

To my knowledge, such scientific investigation of pottery from the Argolid deals exclusively with the bronze age (see Jones [R. E.] 1986, 192-205). Nothing comparable has been attempted with archaic pottery.

Despite this lack of evidence, many scholars speak of local production centres in the archaic Argolid (Daux 1959b, 755; Courbin 1966; Coldstream 1968; Rafn 1984, 305-308; Foley 1988; Ekroth 1996; and others). Most pottery workshops have been identified by a concentration of pottery that, to the naked eye, has a uniform fabric or painted decoration. As was mentioned earlier, this kind of investigation needs to be supported by scientific analysis or by direct archaeological evidence for the manufacture of pottery. Since neither option is possible for the archaic period, we must consider two others.

II.2.5.b. Archaeological Evidence for Pottery Making

First, if we can find archaeological evidence for pottery making in prehistoric periods, we can at least be sure that the topography of the area offered a potential for good clay sources. Our second option is to find evidence for roof tiles and large utilitarian containers. These items were usually of local fabrication (Jameson, Runnels, and van Andel 1994, 307), because they weighed too much to be transported very far. With the introduction of the concept of mass-production through the use of moulds, tiles could be made by local potters or by a group of itinerant potters who specialised in roofing buildings.
Argos is the only site that has so far yielded direct evidence for the manufacture of pottery in archaic times. Two kilns and one waster have been dated to the archaic period (Appendix A-10-47; A-10-75; Piteros 1996, 99-102). We also know that clay sources were exploited in the area during the bronze and early iron ages, because a number of kilns for those periods were found (EF 1955b, 314; 1957, 677 fig. 31; Daux 1959b, 768 fig. 24; Cook [R.] 1961, 64-67; Belshé, Cook [K.], and Cook [R.] 1963, 8-13). No doubt the banks of the Inákhos, Xeriás (the ancient Kharadros), and Erasfnos nearby supplied potters with good clay in those periods as well as in archaic times (Figure 3).

Several pottery workshops of the archaic period have also been identified on the basis of storage jars and pithoi (Appendix A-10-2; A-10-24; A-10-38; A-10-39; A-10-59; A-10-83; pithoi at A-10-46; A-10-55). If they were in fact workshops, it is interesting that the majority appear to be located around the agora, a situation parallel to that of Athens with its pottery workshops close to the agora. Another hint of local production comes from clay tiles. It is argued that Argos played an important role in the production of architectural terracottas (Winter [N.] 1993, 149).

According to Foley (1988, 73), the Khaos shrine at Mykenai may have had its own pottery workshop (Appendix A-11). ‘Among the sources of clay that probably served the needs of potters at Mycenae, those at Plesia and Longaki have been the more important’ (Jones [R. E.] 1986, 192).

To my knowledge, no kilns have been found here. A great many roof tiles and some pithoi, however, were discovered during the excavations on the acropolis and at the Khaos shrine (Appendix A-11; Wace 1949, 85; Cook [J.] 1953a, 30-68). It is possible that these were produced locally or near the Heraion, where already in late seventh century buildings were roofed with tiles (Coulton 1976, 29, 215; Pfaff 1990, 149-156; Billot 1990, 101, 139; Ekroth 1996, 21).

Another so-called local workshop has been placed at Asine on the evidence of four pots of the same fabric found in a grave (Appendix A-22; Rafn 1979, 29). No archaeological evidence for pottery production has come down to us for the archaic period, but bronze age kilns are known (Frödin and Persson 1938, 67, fig. 66).
The only indirect evidence for pottery production at archaic Asine comes from the archaic roof tiles on the Barbouna hill (Wells [B.] 1990, 152-161). These, however, were probably produced at Argos in the fifth century.

Bronze age kilns were discovered at Berbáti, a presumed centre of prehistoric pottery production (Jantzen 1938, 553 pl. 11).

The Berbáti survey also has yielded a large amount of roof tiles, probably belonging to small structures related to agriculture and a possible archaic temple, together with pithoi (Appendix A-19; Ekroth 1996, 179-228). Given the site's proximity to Mykenai and the Heraion, it is possible that these roof tiles came from a centre of production at one or both of these places.

Like Berbáti, Tiryns has evidence of bronze age kilns and archaic tiles (Appendix A-16; Dragendorff 1913, 338-341; Catling 1980, 29). Perhaps it exploited clay sources near the sea.

The only reasonably identifiable ceramic workshop in the archaic Argolid is that of Kourtáki (Appendix A-12). The thousands of whole pots found stacked one inside the other at this site came from a workshop associated with a sanctuary (of Demeter and Kore ?) (Papakhristodhoulou 1969, 131f.; Foley 1988, 150; Kosmetatou 1996, 117). It was definitely in a good location to exploit the banks of the Inákhos river, where, ideally, clay sources could be found.

A few places (Halieis, Stavros, Kalaureia) in the Akte yielded a large number of roof tiles and some pithoi (Appendix A-38, A-41, and A-70; Jameson 1979, 262; Jameson, Runnels, and van Andel 1994, 442; Welter 1941, 10, 45). A workshop was no doubt established near Halieis and Hermione by the sixth century (Winter [N.] 1993, 149). Its location was perhaps closer to Hermione that to Halieis, because Hermione, unlike Halieis, had access to water from the numerous streams in the area. Without water (and wood to fire kilns) pottery production was impossible.
II.2.6. EXPLOITING THE ‘WASTELAND’ FOR FOOD

Long after the introduction of agriculture and the domestication of animals, the communities of the Argolid continued to gather uncultivated plants and, to a smaller extent, to hunt (on ancient hunting, see Lane Fox 1996, 119-153; for a hunting scene from Tiryns; Foley 1988, 62-63). They searched the landscape for a variety of wild plant and animal products that, at present, still form a vital part of the traditional Greek diet (Forbes [H.] 1997, 208).

The mountainous landscape in the Argolid is likely to have encouraged the hunting of game. ‘Remains of red deer have, in fact, been found in a fourth-century B.C. deposit in the sanctuary of Apollo at Halieis’ (Jameson, Runnels, and van Andel 194, 261). Hares, foxes, boar (Hdt. 1.43), partridges, and other wild birds were no doubt hunted (Malagardis 1991, 109-114); snails too may have been collected to be eaten.

Wild greens, mushrooms, and an assortment of herbal plants are still part of the diet of Greeks today, and we can presume that in antiquity they were consumed in even greater quantities (Forbes [M] and Clark 1975, 251-264; Foxhall and Forbes [H.] 1982, 74-75; Forbes [H.] 1997, 202-203). Not only could they be used in cooking, but more importantly they supplied the local community with medicines.

II.2.7. SUMMARY

Despite our lack of explicit information on the various activities by means of which the landscape of the archaic Argolid was exploited, the inhabitants surely made use of the natural resources at hand. Mining was perhaps the exception, because no mines have been found in the Argolid. The Argeia seems to have exploited the nearby mine of Nemea for its copper, however. Iron was worked at Palaiokóstro in the southern Argolid, but no mine has (yet) been found to indicate that iron ore was extracted in this area.

Quarrying, though also difficult to pinpoint archaeologically, was logically carried out near centres that used large quantities of stone for building. At least two large building projects were planned in the Argolid, at the Heraion and at Argos. The stone used in these building projects seems to come from local sources; however, no quarries have yet
been identified in the area. We know of only a few quarries in the Argolid, at Fóúrnoi and Koílándha. Hermione and Halieis no doubt exploited these when they constructed their religious and civic buildings.

When stone was unsuitable for building, a community sometimes imported it from elsewhere. Marble, in particular, was imported, because the Argolid lacked such good-quality stone. The region must have imported marble from the islands or from Doliana, to make small-scale objects and sculptures. Importing cannot have been cheap, and for this reason perhaps, marble seems not to have been used in construction at this time.

Wood was another important building material in the archaic period, and no doubt the inhabitants of the Argolid exploited the natural environment in search of timber for building houses and boats, brushwood for building huts, animal folds, fences, for firing kilns, for heating and cooking, and for making tools. If wood-cutting was prohibited on private estates, and if the wood on communal land was being over-exploited, perhaps it had become a valuable commodity by archaic times. The use of stone in construction was an alternative solution.

Stone walls were able to support more weight and thus a more sturdy roof. During the course of the seventh and sixth centuries more and more public and religious buildings were roofed with tiles. The production of tiles may have been a local activity, because they were heavy and difficult to transport for very long distances. Where large amounts of roof tiles have been found, we might expect a ready source of clay in the area. As with mines and quarries, the problems of identifying clay sources are enormous, since little archaeological evidence of kilns or other equipment have come down to us in the archaic period.

Thus, it follows from what has been said above that most of these activities required the work of specialists and a poor or unfree workforce that was willing to endure the physical hardships associated with mining, quarrying, and perhaps even wood-cutting. On a smaller scale, the collection of brushwood for heating and cooking, and hunting and gathering also demanded a lot of time and labour from individuals of a household. Together with farming, all these activities took up a vast amount of time in the daily lives.
of the ancient Greeks. As we shall see, those who lived near the sea had even more opportunities to occupy their time.
II.3. Maritime Resources

II.3.1. INTRODUCTION

The Argolid, with its long coastline, has at different times turned itself towards the sea. There are specific resources of the sea that the region may have offered, such as fish, salt, purple dye, and harbourage. To determine whether these resources were exploited in archaic times is difficult, however, because, like the exploitation of land resources, they leave few traces in the archaeological record.

II.3.2. FISHING

Bintliff and Gallant have presented two opposing views on the significance of fish in antiquity. Bintliff (1977, 117-122, 216-218, 240-244) maintains that fish was a primary resource for the Argolid, especially for the southern Argolid, despite the fact that the Aegean can only maintain a small number of fish, owing to the shortage of rivers emptying into it (Jameson, Runnells, and van Andel 1994, 311). He thinks that fishermen followed the movement of fish.

Gallant (1985) presents a more balanced view of fishing. He believes that despite the ancient literary and iconographic interest in fish (see Malagardis 1991, 114-115), in reality it could only partly supply communities with nourishment. The fishing equipment in those days made the activity very demanding physically and in general made large-scale fishing impossible; catches were perhaps no more than a kilo or two a day. Gallant argues that the movement of fish was also more difficult to observe that has been alleged and that no community could depend on fishing for its existence.
II.3.2.a. Fish as a Supplement to Farming

Gallant (1985, 40-42) sees fishing above all as an activity that complements agriculture when crops failed or produced low harvests. Fish, when smoked, dried, salted, or pickled, could make up for seasonal food shortages and even short-term famines, if eaten with fresh fish.

The Argolid, and particularly the southern Argolid and the Methana peninsula with their long coastlines, was very well situated for farmers who needed to supplement their food intake with fish (Jameson, Runnels, and van Andel 1994, 313). For example, the Halias had about thirty-eight kilometres of coastline, compared to about thirty-two kilometres for Hermionis (Jameson 1976d, 85). No doubt the inhabitants of Halieis took advantage of these opportunities. Its very name brings to mind a fishing town, since Halieis is probably derived from halieus, meaning fisherman (see Liddel, Scott, and Jones 1940, s.v. ἁλιεύω, but cf. Jameson, Runnels, and van Andel 1994, 311 for Halai, meaning salt pans). In fact Halieis is the only place that has yielded concrete evidence for fishing: three fishhooks from the early sixth century and small pieces of lead (probably seventh-sixth century) used to weigh down fishnets were discovered around the akropolis (Figure 62; Jameson, Runnels, and van Andel 1994, 315, fig. 5.23).

Who then was using this equipment?

II.3.2.b. Those Who Fished

We do not know enough about fishing as an occupation. We can only assume that in many coastal communities farmers would fish regularly in their spare time to enhance the family diet or to allow for a bit of surplus, if exchanged in the agora. Perhaps fishing was also a supplementary activity for poor men who owned little or no land.

II.3.3. SALT-PANNING

A great deal of salt was needed to preserve dried fish, and it is possible that salt was collected in the archaic Argolid for this and other purposes. To produce salt one needed
to build 'temporary mud dikes' and let the 'summer sun evaporate the trapped sea water' (Jameson, Runnels, and van Andel 1994, 310). No traces of mud dikes were detected during the southern Argolid survey, but this is to be expected given the build-up of soil that has accumulated over the years (Jameson, Runnels, and van Andel 1994, 311).

II.3.4. TEXTILE DYEING WITH MUREX SHELLS

'Murex trunculus, Bolinus brandaris ... and the related Thais heamastoma ... were used in the Mediterranean basin to produce a colour-fast purple dye' (Figure 63; Hdt. 4.152, mentioning a purple fisher from Itanos). These two murex varieties were discovered at various places on the coast and sea in the southern Argolid (Jameson, Runnels, and van Andel 1994, 317). No actual dye installations, however, have been identified in the region. 'Since the flesh is edible and useful as fish bait, and since the shell is ornamental, the small quantities ... [that have been found cannot be used as] evidence of a shell-purple dye industry' (Jameson, Runnels, and van Andel 1994, 317).

According to Plutarch (Alexander 36) in 331 BCE Alexander the Great came across a large amount of textile (the worth of 500 talents) dyed with Hermionian purple that had been stored in Susa for one hundred and ninety years (on the importance of purple dye in the textile industry, see Meijer and van Nijf 1992, 103ff., especially 107). If this story has any bearing on reality, we can assume that by the late sixth century Hermione exploited the sea for its murex shells to dye clothing. This type of textile production was probably a household activity in archaic times, as other textile establishments seem to suggest (see above, II.1.6.e).

II.3.5. HARBOURAGE

The Argolid 'projected into the sea routes that ran up and down the east coast of Greece and across the Aegean, and inevitably it was of interest to ships travelling those routes' (Jameson, Runnels, and van Andel 1994, 380).
II.3.5. a. The Location of Natural Harbours

I have already mentioned that the harbours of Hermione, Halieis, and Eîones (Sambarîza Magoûla) were sought-after by Athens, and at times perhaps also by Sparta (Jameson, Runnels, and van Andel 1994, 320). Halieis' small harbour at the entrance to the Argolic gulf was apparently important enough to be sheltered by a diagonal extension of the city wall (Jameson 1969, 311-343; cf. Hdt. 3.60 for Samos). The same may be said about the walls at Petrothalassa, which it seems stretched to the sea and functioned as a shelter for a small port (Appendix A-47; Jameson, Runnels, and van Andel 1994, 54).

Another important harbour was that of Mases. Its focus was on the Argolic gulf; it 'was, no doubt, always the port for travel to the Argeia, and it may be significant that it flourished along with Argos in the eighth and seventh centuries but declined thereafter' (Jameson, Runnels, and van Andel 1994, 337-378).

Pogon (at Vídhi), the harbour of Troizen, was one of the finest in the Peloponnesos (Appendix A-57; Jameson, Runnels, and van Andel 1994, 16; Hall [J.] 1995a, 582). It was in this harbour that the Greek navy assembled before sailing to Salamis in the war of 480 BCE (Hdt. 8.42). Another good harbour on the Saronic gulf was that of Epidaurus town, which Argos may have used to secure entry to the gulf when helping Aigina in its struggle against Athens (Morgan and Whitelaw 1990, 81).

Other harbours in the Argolid include one at Nauplia (exploited by Argos) and two good harbours at Asine in the Argeia (Tomlison 1972, 44-45; Morgan and Whitelaw 1990, 81; Zangger 1994, 221-239; Hall [J.] 1995a, 582). In the Akte there was also a harbour at Vathy on the Methana peninsula (James et al. 1997, 5).

II.3.5. b. Communication by Sea

Communication by sea was important in archaic times, but as Hesiod (Op. 689-691) warns, 'Do not put all your livelihood in hollow ships. Leave the greater part behind, put only the lesser part on board. It is a terrible thing to come to disaster on the waves of the sea.' (for the Greek, see Appendix D, Text 19). Transportation by sea was always
perilous, both for cargo and personnel. This was particularly true of ships sailing south along the coast of the Argolic gulf, where they had to circumnavigate the Hermonid or Cape Malea (Morgan and Whitelaw 1990, 81; see also Hall [J.] 1995a, 582-583 for the harassment by pirates of shipping in the Argolic gulf).

The importance of imported goods, such as metals, marble, fine pottery, clothing, and works of art, probably made the risk worthwhile, however. Some of these goods could be exchanged for assistance provided to ships moored locally (Jameson, Runnels, and van Andel 1994, 380). This type of exchange promoted mercantile activities, which must have played an important role in the development of communities located near harbours.

Communication by sea also meant that there was successful exchange between regions of the Argolid and elsewhere, when seafarers went abroad to sell their goods and services (Jameson, Runnels, and van Andel 1994, 322-323).

II.3.5.c. Boat Building

Only those communities with good harbours and access to wood could build and beach the boats needed for such journeys (on boat building, see Meijer and van Nijf 1992, 159-164). Boat building probably offered extra 'cash' for those who needed to supplement their income with part-time work.

II.3.6. SUMMARY

The sea was a valuable resource for those inhabiting the Argolid in archaic times. Though fishing was only a part-time activity to supplement farm produce, it could be used as a short-term solution to food scarcity. Salt was needed to preserve fish, and certain places in the southern Argolid offered the possibility for salt collection. Apart from fish, other sea creatures were no doubt eaten. One of these, the *murex trunculus*, was used as bait to catch fish and was probably also eaten. In large numbers the murex shell served to dye clothing purple.
Certainly many coastal sites in the Argolid offered the added advantage of an excellent harbour. Being on sea routes, these harbours were of interest to those travelling up and down the east coast of Greece. The possibilities for exchange of imported goods with travellers and for temporary ventures out to sea by the locals increased communications between regions and promoted the local economy. Boat building also contributed to the community's stability.

The overall impression from looking at land and sea activities is that the Argolid was never rich in natural resources. What was available, such as stone suitable for building, wood, clay, fish, salt, and natural harbours, must have been exploited to some extent, but metals, good-quality stone, and a variety of other commodities needed to be imported into the region. The Argolid's natural resources had only minimal economic importance. On a local basis, however, they may have been significant, since a community with resources to offer could eventually become a centre for craft production, providing extra income for the local inhabitants, or a point of contact for exchange, attracting merchants and neighbours into the area.
We now move from the natural to the ceremonial, from the profane to the sacred. Greek religion was a matter of *doing* not of believing, of *behaviour* rather than faith (Cartledge 1985, 98). This activity, this *behaviour*, we call ritual. Unlike both religion and magic, ritual refers to a formal performance that is acted out (repetitiously) according to explicit and communally-recognised rules of behaviour, rather than to abstract concepts and beliefs (see Renfrew 1985; 1994; Hodder 1982b, 159; Whitehouse 1996, 9-29 for archaeological definitions of ritual; see Lewis [G.] 1980 for an anthropological introduction to ritual).

Social anthropologists concerned with interpreting ‘religious’ behaviour observe ritual activity in all its visual, verbal, spatial, and temporal dimensions. For the archaeologist, most of this information is lost. Some archaeologists are thus as pessimistic about the investigation of ancient religious rituals as they are about social archaeology. Their reaction is understandable, given the lack of an agreed theoretical framework for analysis and interpretation of religious data in classical archaeology.

Even if not all the behavioural specifics (the *how*) of rituals can be discerned archaeologically, where these activities can be shown to involve either the use of special artifacts or special places, or both, we can use this concrete evidence to guide our thinking. What we interpret are physical manifestations of human activity, determined by the actors in ancient rituals, who went to these places and used special objects to pay respect to the divinities or to the dead.
However, if we can establish that a ritual took place, we should avoid making hasty generalisations about the intent (the why) of ritual activity. Archaeologists are ill equipped to start making 'direct' interpretations (i.e. the olive means life; libations at the grave are to nourish the dead) about religious beliefs. Whatever we conclude about ritual activities can only 'make sense to us'; we can never be certain that this was what 'made sense to them'.

Rather, we need to focus on contextualising the pattern of material evidence for rituals of each particular time and place. Only when we have considered all the available evidence can we say something about 'the cultural conditions' and context that such patterns addressed (Barrett [J.] 1991, 1; Morris [I.] 1992, 203). This is no easy task, but it is crucial to look at ritual within the wider context of the society that created it, if we want to generate broader conclusions about the general social structure of the society under consideration.

My emphasis in this chapter is on contextual analysis of the ritual system of the archaic Argolid, to see how we can gain insight into the social structures that motivated it. I examine ritual in two frames: sanctuary and burial. The first section deals with sanctuaries and rituals in honour of divinities. Here I concentrate on rituals of a communal nature, those that involved the social state of a group. When we ask what kinds of communal rituals existed in the archaic Argolid, we can see that some were designed to fraternise, others to exclude; some focused on women, others on men; some helped to legitimate social control, others to make contradictions acceptable. The list goes on, but what is important to notice is that all these rituals contribute to a picture of society through which groups of people defined themselves.

'Religious ... [rituals] inevitably bear on the problem of death, and the rituals associated with the transition from life to death, including the burial itself, stand in special relation to the sacred rituals of life' (Renfrew 1985, 17). 'In Part II of this chapter I explore the patterns of burial evidence within the total ritual context of the archaic Argolid. My investigation of burials follows closely the guidelines set forth by Morris (1992) in his analysis of burial rituals in ancient society.
If the study of ritual is a study of symbolic action, then it is only through such a study that we can approach the role played by human behaviour in creating the social structures of the archaic Argolid. This is because in rituals people use symbols to make explicit social structures (Morris [I.] 1992, 1).
III.1. Rituals for the Divinities

III.1.1. INTRODUCTION

The worshipping of divinities in archaic times produced substantial deposits. Often we can trace cults of this period back to the ninth or eighth century, but permanent structures for worship were then still relatively uncommon. The appearance of temples, altars, and temenos walls after about 750 BCE 'implies a definite change in people's perception of [sacred] space... Now the space was organised and divided up [tem-ene] and [in some places] a frontier was clearly drawn between what was sacred and what was profane' (de Polignac 1995a, 20).

Within this sacred space were performed two types of rituals: individual rituals, usually involving private worship, and communal rituals. Individual rituals, such as gift-giving, libation, purification, and prayer, can sometimes be traced archaeologically by the discovery of certain objects (votive objects, perirrhanteria, hydriai, phialai), but they could take place within domestic environments and required no specific actors (Renfrew 1985, 21-22). Sacrifice, feasting, processions, and games, on the other hand, were exclusively communal rituals, that is, public rituals carried out, either by groups of people, or by designated individuals [priests, officials] acting on the communal behalf, and often doing so in a communally recognised sacred area. The concept of communal ritual does not, of course, imply that participation is open to the whole community: it need not be public in that sense, although it could be so. The right of participation in specific rituals may be rigidly defined (Renfrew 1985, 21).

I concentrate particularly on this aspect of communal rituals, because it involved group dynamics and societal organisation.

III.1.2. REVIEW OF PUBLISHED WORKS

Several works deal with ancient Greek religion, but fewer focus on ancient Greek ritual. Hodder, in The Present Past. An Introduction to Anthropology for Archaeologists (1982b,
159), apologises for the brevity of his chapter on ritual, partly because the process of compartmentalisation of (bronze age) archaeology has hived ritual as a peripheral aspect of human behaviour. This situation has changed over the last decade, particularly as the result of the work of a group of British prehistorians, based within the post-processual tradition (see Hodder 1990; Barrett [J.] 1991; 1994; Bradley 1993). The vitality of this field of study may be demonstrated by the interest shown in conferences that have been dedicated to themes of ritual and belief (Garwood, et al 1991; Waldren, Ensenyat, and Kennard 1995; Wilkins 1996). The works of Renfrew (1985; 1994a; 1994b) and Whitehouse (1991; 1996) are essentially 'landmarks' in the study of ritual in Greek and Italian archaeology.


Classical archaeologists are now beginning to draw on this rich literature, but for more than half a century it had been neglected (Wilkins 1996a, 2). In the context of classical studies, perhaps the greatest contribution on this subject has been made by Burkert. He has written a number of important books, of which the most recent in translations are *Structure and History in Greek Mythology* (1979), *Homo Necans* (1983, for a review, see Bremmer 1985), and *Greek Religion* (1985). They provide comprehensive discussions on Greek religion and rituals, based on the literary tradition. Moreover, they provide useful comparisons between ancient Greek rituals and those from the Near East (see also Quaegebeur 1993).

Other works in the classical tradition deal with more specific aspects of rituals in ancient Greece, but again mainly from a literary viewpoint. The work of de Polignac (1984; 1995a; 1995b, 7-19; 1996, 59-66) is perhaps an exception here. Others, such as Parker’s *Miasma* (1982), focus primarily on classical Athens, but are nonetheless excellent works.

The subject of animal sacrifice ties in with that of ritual dining. M. Goldstein's dissertation on *The Setting of the Ritual Meal in Greek Sanctuaries* (1978) is a useful general guide; for more recent articles on specific sites, one can also consult Bookidis (1990; 1993) for Korinthis and Tomlinson (1980; 1990) for Perakhora. In the context of the symposium, Schmitt Pantel (1985; 1990), Bruit (1990a), and O. Murray (1990) touch on different aspects of ritual dining.

Finally, a number of works deal with processions and festivals. For a good general discussion of Greek religious festivals, one should consult N. Robertson's recent book on *Festivals and Legends. The Formation of Greek Cities in the Light of Public Ritual* (1992). Like many other works on this subject, the emphasis is on classical Athens. Another important article on public rituals by Connor (1987) gives a good introduction to methodology, and a highly problematic explanation of the story of Pisistratos and Phye from processions in which mortals impersonate the divinity. A more recent article by Graf (1996) on *pompai* in Greece provides insight into the different forms of processions connected with specific religious experiences, from the display and confirmation of civic order to the quest for individual blessing. For a discussion of the Olympics and other Panhellenic festivals, one can consult McGregor (1941), Cartledge (1985), Raschke (1988), and Morgan (1990). To my knowledge, Zeitlin (1970) is the only scholar who discusses festivals in an Argive context.
III.1.3. RITUAL KILLING AND RITUAL DINING

Wherever there was ritual killing, there was ritual dining, because the flesh of an animal was never wasted (Dietrich 1988, 36). However, a feast could take place without animal sacrifice, if the worshippers ate raw or boiled fruit, vegetables, cereals, and so forth (Bruit 1986; 1990a; Jameson 1994b, 37-38).

We have plenty of references to animal sacrifices and feasting in the literary and pictorial record of archaic Greece (Thönges-Stringaris 1965, 1-99; Fehr 1971; Dentzer 1982; Verbanck-Piérard 1992, 85-106), but nothing, except late sources, specifically refers to these activities in the Argolid. For this reason, I prefer to concentrate on the archaeological and epigraphical evidence.

III.1.3.a. The Archaeological Evidence

Table III.1 below lists all archaic sites in the Argolid where we find explicit signs of animal sacrifice and feasting (Figure 64). I begin by examining the individual evidence for animal sacrifice, before I move on to the subject of feasting.
### Table III.1. Sites Where We Find Evidence of Animal Sacrifice and Feasting

<table>
<thead>
<tr>
<th>SITES</th>
<th>Evidence of Animal Sacrifice</th>
<th>Evidence of Feasting</th>
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<tbody>
<tr>
<td></td>
<td>Knife/Axe</td>
<td>Spits</td>
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<td>Argos</td>
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<td>Foúrnoi</td>
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<tr>
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<tr>
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<tr>
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<td>Tiryns</td>
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### Knives and Axes for the Slaughter

The actual ritual killing of the animal could leave behind traces in the archaeological record in the form of knives and axes. Knives have rarely been reported from sites in the Argolid: only in the temples of Apollo at Halieis and at Epidauros respectively (Appendix A-28; A-38). The same applies to axes. There is no doubt that at both these sites animals were being sacrificed; we also have plenty of skeletal remains to prove it.
Spits for Roasting the Animals

Once slaughtered, the flesh of an animal was cooked, either roasted on spits or boiled in large cooking vessels (Figure 65). Spits (obeloi) in sacred context have so far only been found in the Argolid at the Heraion (Waldstein 1902, 66, 77, fig. 31) and at the temple of Apollo at Halieis (Mazarakis Ainian 1988, 105ff.). In a funerary context, longer spits have also been found in three eighth century graves at Argos (Courbin 1957; 1974, 11, 13, 40, 136; 1983, 155; Protonotariou-Dheilaki 1980; Foley 1988, 83).

When Waldstein (1902) excavated the spits at the Heraion he proposed to connect them with Pheidon's monetary reforms, in which the king withdrew the old obeloi and offered them to Hera. Courbin (1983, 149-150), who restudied the whole problem, suggests that the Argive obeloi formed a proto-monetary system in the late eighth century. More recently Ström (1992a, 41-51, esp. 49), however, concluded that the Heraion obeloi were dedications, possibly of official character, used for the roasting of meat at banquets. The fact that spits have also been found at Halieis together with the horns of goats, animal bones, iron knives, swords, and spears makes this clear. Here we might suppose that they formed part of the sacred utensils of Apollo.

Cooking Pots

If meat was boiled, we should also be looking for evidence of cooking ware. So far, only the tholos at Berbati and the temples on the akropoleis of Tiryns and Óga on Methana have reportedly yielded cooking vessels in sacred contexts (Appendix A-19; A-56; A-68), although on older excavations, such as at the Heraion, cookers were probably not noted as such. Even if the cooking pots suggest that an assortment of foods was being prepared on the premises, we cannot, however, be sure that this always involved meat and its attendant animal sacrifice.

Animal Bones and Horns

The most indisputable evidence for sacrifice and feasting comes from the non-edible parts of the animal, the horns or other skeletal remains. Animal bones have been reported from several sites in the Argolid; since they are the only sure sign that an animal has been sacrificed and eaten, their contexts deserve more attention.
Animal sacrifice may have taken place at Argos on Párodhos Bel fnou, where a clay-lined pit was found containing bird and ankle-bones, olive pits, kraters of the early archaic period, a plate, together with other vessels and objects (see square 18 in Figure 66; Appendix A 10-28). It may seem surprising to learn that chickens and other birds were sacrificed in antiquity (Burkert 1985, 55). The ankle-bones, however, probably belonged to mammals. The structure of the pit, and the objects found inside, point to a ceremonial function. Perhaps this was some sort of heroön, similar to that found at the foot of the theatre.

Closeby, in the area between Goúnari Street and the theatre, was found a pit with masses of ceramic evidence and some animal horns and bones, together with two turtle-shell lyres (Appendix 10-36). The construction has been interpreted as a heroön, dating to the late sixth or early fifth century.

In another pit on Párodhos Danaou (Kotsiantis plot) in the north-east part of the Argos, horns of sheep and deer, as well as other animal bones, have been reported (Appendix A-10-71). The deposit made the excavator think that this was a cult place, perhaps related to Hera and some hero, or possibly even Aphrodite and Ares.

On Mt. Árakhnaio (Áyios Ilías), north-west of the sanctuary of Asklepios at Epidaurus and north of Kazárma, burnt animal bones as well as many open-shaped pots were found on a small elongated plateau, near foundations of sizeable rectangular constructions (Figure 67; Appendix A-25). The foundations have been interpreted as enclosure walls for the open air temene of Zeus and Hera with their respective altars located inside them. The burnt animal bones found here indicate that animals were sacrificed to these divinities.

Remains of bone were found in the area to the north of the tholos at Berbáti (Wells, Ekroth and Holmgren 1997, 195). The deposit was initially classified as debris from a tomb cult.

In the courtyard of Building E (identified as a small shrine of Apollo) in the sanctuary of Asklepios at Epidaurus burnt bone and votives were found in an ash layer that was probably debris spread from the altar of Apollo (Pythaeus) (Figure 68; Appendix A-28).
Animal bones were also discovered in a well during the construction of a house in Fodmoi village (Appendix A-46). The well contained small quantities of pottery, loom-weights, pieces of iron, a bronze handle, several coins, and two figurines. Since the objects seem votive in character and show signs of burning, we can assume that they came from a nearby shrine or altar, where animal sacrifice and feasting had taken place.

Three functions, temple, treasury, and hestiatorion, have been put under the same roof at Halieis (Figure 69; Mazarakis-Ainian 1988, 118). In the middle room (the hestiatorion, see below) of the temple of Apollo at Halieis was found a high concentration of goat bone-cores (Appendix A-38). Goats were apparently sacrificed here in large numbers.

Both shrines at Mykenai (Klados and Asporoktoma) have produced animal bones (Figure 70; Appendix A-11). It seems that animal sacrifices and feasts in honour of Hera and Enyalios were held at these two places (for the cult of these deities, see Tomlinson 1972, 203-204, 206-210).

In the area of the bronze age tholos at Prosymna, archaic deposits from two bronze age tombs (10 and 40) contained many small fragments of charred bone, three or four animal teeth, probably of a dog, and part of the horn of a bull (Figure 71; Appendix A-11). There is no doubt that feasting took place here, though the dog's teeth may have come from a burial, unless the ancient Greeks ate dogs (for Sardis and Lahium, see Greenewalt 1976, 31ff.; Smith [C] 1996, 80ff.).

The Species of Sacrificed Animals

Although excavation reports usually fail to mention the species of the animal, in general the excavated evidence consists mainly of ovicaprids (Jameson 1988, 90-95). Note, however, Pausanias' (2.26.9-10) remark that it was against the custom of the Epidaurians to sacrifice goats.

According to Van Straten (1995, 77), piglets were even more popular than goats and sheep, as they happen to have been the cheapest animals, but no bones of piglets have yet been identified at Argolic sites. Bones of pigs, however, were noted from the temple of Apollo at Halieis (Appendix A-38). It is possible that the terracotta female pig-carriers have been the representation of pigs and not goats, as they have not been identified at Argolic sites. Bones of pigs, however, were noted from the temple of Apollo at Halieis (Appendix A-38).

There is no doubt that feasting took place here, though the dog's teeth may have come from a burial, unless the ancient Greeks ate dogs (for Sardis and Lahium, see Greenewalt 1976, 31ff.; Smith [C] 1996, 80ff.).
dedicated to the goddess Demeter in the Argolid may have replaced the need for an actual sacrifice of a piglet (Appendix A-38; A-56).

According to Xenophon (pseudo-Xenophon or the Old Oligarch, *Ath. Pol. 2.9*), the Athenian state often provided cattle for sacrifice, which meant that the poor could eat meat just like the rich. Hera's most important festival in the Argolid, known in the fifth century as the Hekatombaia (one hundred cattle), is perhaps another such case (see below III.2.4.a; Bernardini 1976, 213-217; Burkert 1983, 162ff.). However, to judge from the bone deposits at this and other sanctuaries throughout mainland Greece, apparently few cattle were slaughtered (Bevan 1986; cf. Van Straten 1995, 170-174, see below). The only published mention of any part of a bull's anatomy in an Argolic context is the horn from a bronze age tomb at Prosymna (Blegen 1937, 198; 1938, 380-382). This situation stands in sharp contrast to the bone evidence from Miletus, Samos, and Ephesos (Peters and von den Driesch 1992; Karwiese et al. 1998).

When the bone evidence from the Athenian *agora* was analysed, Reese (1989, 63-70) found that most of the burnt bone fragments come from sheep and goat. Attic sacrificial calendars (c. 440 onwards) indicate that when the state was low on funds, cattle were hardly ever slaughtered (SEG 33.147; Sokolowski 1969, 18, 20; Jeffery 1990, 75, 128, 334f.; Rosivach 1994, 14-29; Van Straten 1995, 171-173; Morris [I.] 1992, 123).

**Utensils Used in Ritual Meals**

The act of eating and drinking was a public affair. While we cannot normally predict the precise form that such ceremonies took (see, however, the mid-fifth century law from Selinous: Jameson, Jordan, and Kotansky 1993; for the Greek, see Appendix D, Text 20), we might expect the archaeological record to be particularly helpful here, since the equipment for the occasion is likely to be the focus of unusual elaboration and the residues especially copious. Feasting required the use of utensils, for which we have ample evidence in archaic sanctuaries. Some vessels can be associated with storage, mixing, cooling, pouring, serving, and drinking of wine; others were for the cooking, serving, and eating of food. We find much more evidence for (wine) drinking than for eating, however.
The problem with identifying these utensils directly with feasting is that some of this equipment could be votive (and domestic) in nature. The exceptions might be pots for storage, pots for the mixing and cooling of wine, and pots for cooking. These vessels would hardly be appropriate gifts to deities. Moreover, if any utensil shows signs of burning, we can safely assume that it once formed part of a ritual feast.

The Consumption of Wine

The presence of kraters and amphorae, connected with the storing and mixing of wine, suggests the possibility of a feast, even if we cannot be sure that food was consumed (two shrines at Argos, Appendix A-10-45; A-10-81, the temple of Apollo at Asine, a sanctuary at Berbáti, a shrine at Kastráki, a temple at Kounoupítsa, and the temple of Zeus at Stávros). Drinking also took place at the bronze age tombs of Mykenai (Wace 1932; Wace, Hood, and Cook [J.] 1953, 68-83), but this act was in honour of the dead, in the phenomenon we now call 'tomb cult' (Snodgrass 1980a, 38-40, 49-65; Humphreys 1981. 96-126; Whitley 1988, 173-182; 1995, 43-63; Morris [I.] 1988, 750-761; Alcock 1991a; 447-467; Hägg 1992b, 169-176; 1999; Antonaccio 1992, 85-105 1993, 46-70; 1994, 79-104; 1995; de Polignac 1995a).

The Consumption of Food

We find evidence for eating, such as plates or bowls, in places where we have no visible traces of a sacrifice; in the absence of any cutting and roasting implements or animal bones, all we can say is that at least non-animal products were being eaten at these sites.

The evidence of plates and bowls suggests that feasting took place in several places at Argos (Appendix A-10-10; A-10-28; A-10-40; A-10-51; A-10-61). Two of these areas are associated with tombs, the first with a ‘tomb cult’ in bronze age tombs on the Defras (A-10-10), the second with a burial south-west of the Odeon (A-10-51). The other signs of feasting at Argos were reported from two pits that could be interpreted as heroa (A-10-28; A-10-61) and from an area connected to a cult to Erasinos (A-10-40).

Ritual dining appears to have taken place at Berbáti (in the tholos area), at Methana (in a temple that has not yet been attributed to a particular divinity), on Mt. Kokkýgion in
honour of Zeus, and on the akropolis at Mykenai where Hera was worshipped (Appendix A-63; A-49; A-11).

The Preparation of Food
Cooking pots and burnt objects or bones are the most conspicuous signs of a feast. As I have already mentioned, few sites have yielded cooking vessels. We find more evidence for the preparation of food in the burnt bones and objects that have been recovered at various sites throughout the Argolid (see above, Áyios Ilfás, Berbáti, Epidauros, Foúrnoi, and Prosymna).

Dining Arrangements
As far as we known, ritual meals usually took place within the confines of the sanctuary (cf. the Selinous law, where meat was not to be carried away from the sanctuary, see Jameson, Jordan, and Kotansky 1993). Although feasting took place in simple open-air areas set around an altar (Homer, II. 447-474), under temporary shelters, in certain rooms of temples, dining en masse is identified archaeologically by the existence in sanctuaries of multiple dining rooms called hestiatoría (Jameson 1994b, 46-47; see also Cooper [F.] and Morris [S.] 1990, 66-85 for dining seated in round buildings; Börker 1983, for the possibility of stoas and peristyle buildings being used for dining).

At Halieis people dined in a separate room, with a separate entrance, under the same roof as the cella in the temple of Apollo (Figure 69; Appendix A-38). The room was decorated with painted plaster, was paved, and had a drain along the east side for the channelling of water, but no benches on which to sit or recline. Bergquist (1990a, 36) believes that in the early archaic period one did not recline at banquets (cf. Dentzer 1982; Boardman 1990, 122-131; Cooper [F.] and Morris [S.] 1990, 66-85; Jameson 1994b, 51-53). Nevertheless, there may have been wooden benches on which to sit, for example the columns and the spectator ‘tiers’ overlooking the racetrack here are thought to have been wooden (cf. the benches at Korinthos, Bookidis 1990, 88-89).

The only other known archaic dining hall in the Argolid is the West Building at the Heraion (Figure 72; Appendix A-13, Brownson 1983, 233-224; Waldstein 1902, 131-
Frickenhaus 1917, 121-130; Weickert 1929, 172-174; Amandry 1952, 239-254; Miller 1973, 9-18; Goldstein [M.] 1978, 233-245; see also the Heraion at Samos, Kron 1988, 135-148). The original function and date of the building are uncertain; some have called it a gymnasium or a hospital for women, others a hestiatorion; some date it to the late sixth century, others to the mid- or late fifth century. An early date seems more acceptable, and the twelve benches or couches in each of the three rooms on the north side of the building, together with the off-centre doorway, point to its function as a hestiatorion (Tomlinson 1972, 238). Frickenhaus (1917, 121-130) proposed that at the great festival to Hera the thirty-six most prominent citizens of the city of Argos, among them the hieromnai, gathered in the three dining rooms. Certainly the twelve couches in each room bring to mind the inscription mentioning the body of magistrates, the ‘Twelve’, distributing money to twelve unnamed groups, traditionally called ‘phratries’ (see Chapter I.3.2.a: Wörle 1964, 17; Roussel 1976, 154; Charneux 1984, 207; Piérart 1985, 346-347; Kritzas 1992, 235; van Effenterre and Ruzé 1994, 274). It is possible, however, ‘that the feasting was not restricted to the [small] rooms ..., since around the courtyard on to which the rooms opened, on the three sides, the surrounding colonnade was doubled, leaving ample space for a larger number of couches, perhaps less durable in form, to be laid out at the time of the festival’ and ritual meal (Tomlinson 1972, 238).

Similar buildings have been found in other Argolic sanctuaries, but they date mainly to the classical period. Those of Asklepios at Epidauros (Kavvadhias 1900a, 143-154; 1990b, 103-105; 1902, 49-51; Frickenhaus 1917, 131-133; Delorme 1946, 108-119; Tomlinson 1969, 106-112; Goldstein [M.] 1978, 246-257) and at Troizen (Legrand 1897, 543-551; 1905, 259-318; 1906, 52-57; Frickenhaus 1917, 114-118; Welter 1941, 31-35; Goldstein [M.] 1978, 262-274), however, have the same distinction from room to room with a limited number of couches (Tomlinson 1969, 106f.). What is clear in all these examples is that ritual dining in specially built areas was restricted to a certain group of people.
III.1.3. b. The Epigraphical Evidence

An inscription on a bronze plaque from Epidauros (c. 450 BCE) mentions a certain Kallistratos, a μάγειρος (a cook), who no doubt was at the service of the Asklepieion (Figure 73; Athens, NAM inv. 8166: IG IV 1204; IV2 1.144; Kavvadhias 1891, 37-38, no. 12; Michel 1990, 823, no. 1067; Roehl 1907, no. 109.2; Lazzarini 1976, 199 no. 78; Jeffery 1990, 182 no. 16, pl. 34). We know that from the fifth century onwards the mageiros was often a public official whose duties included the killing, the butchery, and the cooking (Detienne 1979, 21). Kallistratos was therefore the official in charge of sacrifice as well as cooking of the victims. His official appointment implies that sacrifices and communal meals at Epidauros were being held on a regular basis and were being controlled by an official body.

III.1.3. c. Animal Sacrifices in the Rural Landscape

The slaughter and consumption of a domestic animal was a festive occasion for all communities of the Argolid. Normally these events took place at sanctuaries, but sometimes they occurred at tomb cults, heroa, or graves. The latter seems to have been the case at Argos. That none of the known fourteen archaic sanctuaries in the city has (yet) yielded clear evidence of ritual killing and dining seems odd. At first sight, this pattern gives the impression that animal sacrifices were rarely performed in urban sanctuaries. Let us see if evidence from other Argolic sites can support such a supposition.

Sacred precincts that have yielded evidence of animal sacrifice outside Argos are the sanctuary of Zeus and Hera at Áyios Ílias, the temple of Apollo at Epidauros, the Heraion, the temple of Apollo at Halieis, and the two shrines (one to Hera and another to Enyalios) at Mykenai. Except for the suburban temple of Apollo at Halieis, located outside the city gate, the sites are all extraurban (Appendix C-52; C-43/C-55; C-61; C-28; C-41; C-38).

This picture suggests that ancient feasts were hardly localised within the town or village, but rather were celebrated in the middle of the countryside. It is consistent with de Polignac’s (1984; 1995a) basic argument that extraurban sanctuaries marked cultural and
territorial boundaries (the city being a 'bipolar' entity), and their foundation was synonymous with the foundation of the polis. Since the publication of de Polignac’s influential ideas, however, the subject of extraurban sanctuaries has been open to debate (see for example, Hall [J.] 1995a, 577-613; Malkin 1996, 75-81). Malkin (1996, 75) suggests that we look at extraurban sanctuaries in religious terms, that is, as 'the division of the same between the Greeks and their gods'. He believes that this division corresponds to the 'relationship between humans and divinities' in Greek sacrifice, when both parties shared the same sacrificial victim, except that the gods got the fat and bones and humans got the meat (Malkin 1996, 79). Just as the distribution of victims is unfair, so is the distribution of land: the divinities 'got relatively small temene in the “centres” of cities, and broad, excellent lands in the most dangerous and inconvenient places.' (Malkin 1996, 79). It is possible that the allotment of such land also signified de Polignac's conceptual ideas of 'centre and periphery' and of 'territoriality', but according to Malkin (1996, 79-81) these connotations only came into being over a long period of time.

The idea of the 'division of the same' and the desire to 'give up' land and animals for the divinities was a significant element of religious behaviour, and perhaps the regular need for sacrifices at non-urban sanctuaries represented a re-enactment of this 'return' of property (i.e. land, crops, and animals) offered to the gods in the early period of settlement. If in the archaic period the land on which were founded these extraurban sanctuaries no longer seemed to be dangerous and distant because its surroundings were now being cultivated, it is possible that some cities took advantage of their location as a way of delimiting territory (see Malkin 1996, 80-81 for Cyrenaica). In this case the regular procession of animals from 'towns' out to rural sanctuaries served to reinforce the community's 'control over the territory, a control that was exercised according to the norms of agrarian civilization' (de Polignac 1995a, 40) and to intensify the unity of the social group by the co-operation it required (for processions in the Argolid, see III.1.4.a and III.1.4.c). The parade of the animals from the 'town' through the communal fields that made up the cultivated territory also symbolised a control over the (once) 'dangerous' wilderness, since the sacrificial animals were always domesticated species.

Rural sanctuaries with their accompanying festive sacrifices might 'articulate the necessary organic relationship between countryside (the economic basis) and urban centre (the political superstructure)', but not necessarily on an equal footing (Cartledge 1998,
43). It seems that the city was only a secondary, though usually unifying, religious pole (Jost 1990, 229, 236). Its sanctuaries were adapted to an urban setting and regrouped in a reduced space that limited the amount of victims for sacrifices (or perhaps prevented sacrifices altogether) and their accompanying processions. Certainly the practice of animal sacrifice suited the image of a ‘wild’ or ‘primal’ countryside better than it did the civilised character of the city, and this may be one of the reasons why at present no urban site in the Argolid has yielded clear evidence of ritual sacrifice.

***.1.3.d. The Concept of Hospitality

The idea that most Argolic sacrifices and feasts were held at rural sanctuaries makes us wonder whether these ritual activities provided a setting for communal gatherings of groups from two or more communities. It is tempting to liken such rural gatherings to those described by Gernet (1981, 21-61) as occasions for exchanging hospitality and for sharing between the neighbouring communities which participated in them on a relatively equal footing (see also Burkert 1985, 254). Participation in common cult activities was apparently a way ‘of showing neutrality or friendship’ (Sinn 1996a, 71).

The notion of shared hospitality between groups of people from different (but neighbouring) communities finds support in the epigraphical record. An inscription (c. 450-400 BCE) from Tylissos and two joining fragments from Argos, drawn up by Argive arbitrators to settle a series of disputed points between Knossos and Tylissos, mentions sacrifice in the context of hospitality (Wissowa 1937, col. 1723ff.; Kahrstedt 1942, 72-91; Vollgraff 1948; Graham 1964, 154-165, 235-244; Tomlinson 1972, 134-136; Meiggs and Lewis 1988, no. 42; Jeffery 1990, 165, 170 no. 39; van Effenterre and Ruzé 1994, 222-233). One of the fragments from Argos (A: lines 16-17) states that the Knossos and Tylissos must make a communal sacrifice of a cow to Hera at the Heraion before the Hyakinthia; the other fragment (B: lines 38-42) states that the inhabitants of Knossos must offer hospitality to all who come to sacrifice (Figure 74; Argos Mus.: SEG 11.316; 15.200; 22.264; 25.360; 26.424; 30.354; 39.344; Roberts 1887, 112 no. 77; Vollgraff 1910, 331-354; 1913, 279-308; Dittenberger 1915, 67-69 no. 56; Schwyzer 1923, 41-42 no. 83; Guarducci 1935, 56 no. 4; 1969, 552; Buck 1955, no. 85).
It is clear from this inscription that sacrifices, and their ensuing feasts, were meant to encourage or restore good relations between two communities. These two communities, however, were Kretan. To catch a glimpse of shared worshipping between communities in the Argolid, we must look for evidence of sanctuaries located at the borders of regions. Most often, these frontier sanctuaries were dedicated to the worship of Artemis (Schachter 1992; de Polignac 1994, 6).

As Table III.2 (below) shows, the cults of Artemis in the Argive plain were mainly west of the Inákhos river (Argos, Magoúla, Dhoúka, Oinoe, Mt. Lykone, Mt. Artemísion, Mt. Megalovoúni), and on the borders with Arkadia (Mitsos 1949, 73-77; Tomlinson 1972, 210ff; Fossey 1987, 71-88). They are positioned around the western hills, and each sanctuary is on a road leading from Argos and at the borders with Arkadia. Most of these sites are located in the mountains, in wild areas, which Tomlinson (1972, 210) interprets as a result of Artemis' nature as the huntress. However, it is more likely that placement of these cults served to reinforce the religious contacts between Arkadia and the Argolid (Pritchett 1980, 32-33, 91-92; Fossey 1987, 77-88; de Polignac 1995a, 38-39; 1998, 146). The neighbouring communities had an obvious mutual interest in their existence.

We can assume that these places were frequented by the neighbouring populations of both regions at certain times of the year, perhaps for festivals in which sacrifice and feasting would take place and for travellers or traders who journeyed across borders 'under the protection of a sanctuary' (Sinn 1996a, 67). Unfortunately, lack of excavation prevents us from proving that such activities actually took place. The rural character and location of the cults, however, point in that direction.
III.1.3.e. The Communal Meal. How Communal Was It?

The evidence of sacrifice discussed so far hints at the possibility that feasts were prime opportunities for meetings of inhabitants from different communities. The communal consumption of food was meant to create or reinforce links between members of one or more communities (Detienne 1979, 10; Schmitt Pantel 1985, 150, 154-155). But it could also be a ritual of exclusion. I would now like to turn to this aspect of communal dining.

Both the social and religious aspects of communal eating have been discussed at length in the context of the symposium, but the process of consumption at sanctuaries has received less attention. The identity and demarcation of the group is revealed in consumption, that is, in the practice of eating together or separately (Goody 1982, 38, 47-48). According to Goody (1982, 47-48), this activity consists of the following phases:

- the assembling of the participants
- the serving or distribution of the cooked food
- eating the food
- clearing away

while the following aspects require comment:

- the distribution in time (daily meals, feasting, etc.)
- the structure of a meal
- ways of eating (table manners, cleansing)
- the technology of eating (table, instruments, etc.)
- who eats with whom (the eating group)
- the differentiation of the cuisine
- the disposal of any surplus (of importance in sacred meals)

Archaeological evidence can only impinge on a few of these points. The most important one in the context of this research centres on the assembling of the participants, that is, the eating group.

The Eating Group

Forms of dining can give much information about the social structure of a society. The hestiatorion marked a certain hierarchy between those who were privileged enough to eat indoors, and others who ate outside or in more temporary structures. The question is:
what type of hierarchy? Was it based on age, gender, wealth, family descent, or some sort of group membership? The question of age, wealth, and family decent is an important one for the study of dining rooms, but direct evidence is lacking for any decisive answers. We must therefore concentrate on gender and group membership.

It has been maintained that men did not customarily eat with women, nor, presumably, with their children (Dentzer 1982, 509-511). Although we can never be sure that this was the case, three archaic inscriptions seem to support this gender-based segregation. The first provides us with some details about the organisation of communal meals at Sikyon. The earliest use of the word *hestiatorion* appears in this late sixth or early fifth century inscription (Athens, NAM: SEG 11.244; 30.350; Orlandhos [A. C] 1938, 5-12; Peek 1941, 200-207; Lejeune 1943, 185ff.; Buck 1955, no. 96; Jeffery 1990, 143 pl. 23; van Effenterre and Ruzé 1994, 290 no. 75). It mentions two prerequisites for belonging to a group of people (a civic association similar to the *syssitia* of Krete ?, see below) who shared the *hestiatorion* and other possessions: one must live in Sikyon and make contributions in one form or other. Seventy-three people are listed among those who belong to this group. They all seem to be male.

Another early inscription concerned with communal meals comes from Tiryns and is therefore directly relevant to Argolic society (see Chapter I.3.2.a for bibliography). The fragmentary nature of the inscription does not permit full recovery of its contents, but it is clear that the subject matter deals with regulations pertaining to meetings, where wine and probably food were consumed, with specified contribution to them, and with fines imposed for failure to conform (Jameson, Verdhelis, and Papakhristodhoulou 1975, 204-205). Since the names of Zeus and Athena are evidently linked with the organisation of these meetings, they were seemingly of religious character. It is not certain, however, whether we have a reference to occasional cult gatherings as in the Attic *parasitoi* or with meetings on the order of the *syssitia* or *phiditia* (men's clubs ? or messes) of Sparta and Krete (on *syssitia*, see Singor 1990, 80-82).

A few explanations have been given for the group mentioned as *platiwoinoi* (those who take wine), and the prominent *platiwoinarkhos*, presumably at the head of group. The original editors (Verdhelis, Jameson, Papakhristodhoulou 1976, 195-199) liken them to the Attic *parasitoi* (*parasites*, those who take their food [*sitos*] besides, see Athenaeus
6.234c-235e, 239b-f; Jameson 1994b, 47-48). Dubois (1980, 250-256), however, believes that the *platiwinoi* were a college of attendants (sacred ‘cup-bearer’ priests) for the cult of Zeus and Athena, in charge of libations of wine at religious ceremonies. Van Effenterre and Ruzé (1994, 296) compare them to the *pariwoinoi*, who were drinkers or drunkards. Whoever they were, these men formed groups of a collective and selective character. They probably held no official status, but came from a distinctive class of male citizens, probably an elite (Jameson 1990a, 216). In this respect, Tiryns was surely not unique (Jameson 1992, 138).

A third inscription supporting the idea of segregated eating comes from Krete -- the Spensithios decree of about 500 BCE (see Chapter I.2.3.e). The last few lines of side B list the conditions required for admission into a men’s club (the *andreion*).

### III.1.4. PROCESSIONS, GAMES, AND OTHER RITUALS AT FESTIVALS

Rituals performed in association with festivals were civic in nature, organised by (and for) the community. Particular days were set aside for such demonstrations of piety. On these days members of the community joined in a procession towards the sanctuary, sacrificed animals, held feasts, and sometimes participated in a variety of other ritualised performances (dancing, hymns, play-acting, athletic games, and other contests).

Here I intend to focus on only three of these rituals: processions, play-acting, and athletic games. I deliberately refrain from using the evidence for sacrifices and feasts to support the existence of festivals at specific sites, because, even if the remains give the impression that these activities are residues from festivals, they could equally come from contexts connected with other types of gatherings (for example, funerals, tomb cult, marriages). For obvious reasons, I also exclude from this discussion such activities as dancing, the recitation of hymns, musical contests, and so forth -- they rarely leave traces in the archaeological record for us to examine and are not restricted to festival settings (see for example, Appendix A-10-36 for lyres buried in a *heroön*).

We are poorly informed about Argolic festivals. Although we gather that most festivals began with a procession to the sanctuary, few sacred routes have been identified (Hall [J.]
The same goes for costumes and masks, which were part of play-acting at some ceremonies; only a few clay masks have been found in sacred contexts (Jantzen 1975, 159-161; Vernant 1984, 13-27; 1985; Carter 1987, 355-383; see also Burkert 1985, 103-104). We are slightly better equipped to identify athletic games, because these were held in specifically built locations, recognisable from architectural remains. The inscriptive evidence also helps here, as many prizes were inscribed with the names of contests or the like. We also find inscriptions referring to the existence of individual buildings for games, such as hippodromes, which have not yet been discovered. Finally, we have the ancient authors, whose testimonies inform us about some ritual activities at Argolic festivals.

### III.1.4.a. The Archaeological and Literary Evidence

#### Processions

The only procession in the Argolid for which we have evidence is the Argive march from Argos to the Heraion (Burkert 1983, 162-163). This demonstration of piety is well known from ancient literature. The earliest reference to it appears *prima facie* to be the tale of Kleobis and Biton, as reported by Herodotos (1.31). These two youths of Argos dragged the cart of their mother, the priestess of Hera, from Argos to the Heraion, because the oxen had not yet returned from the fields to the town, which was the starting point of the procession. Upon their arrival, Kleobis and Biton were granted the greatest mortal blessing -- they entered the temple of Hera where they fell into a deep and eternal sleep.

Herodotos ends his story by remarking that the Argives set up statues to them at Delphi. However, the two *kouroi* found at Delphi at the turn of the century have (?) perhaps wrongly been connected with the story of Kleobis and Biton (Figure 38; Chamoux 1955, 5ff.; Von Premerstein 1920, 41ff; Schwyzer 1923, no. 317; Daux 1937, 61ff; Richter 1942, 78ff; van Groningen 1945, 34ff; Buschor 1950, 35; Tod 1946, 4-6 no. 3; Marcadé 1953, no. 115, pl. 24; Vatin 1977, 13-22; 1982, 509-525; Faure 1985, 56-65; Foley 1988, 128; Jeffery 1990, 154-156, 168 no. 4, pl. 26; Croissant 1992, 72; Ridgway 1993, 70). Hall (1995a, 595-596), who re-examined the epigraphic and iconographic evidence,
convincingly shows that these two statues did not represent Kleobis and Biton, even though they are Argive.

So, neither the Herodotean story nor the Delphi kouroi can be used as evidence for an archaic procession from Argos to the Heraion. The earliest such evidence is to be found in Pindar’s tenth Nemean Ode (10.34), usually dated to about 464 BCE (Hall [J.] 1995a, 596). It is around this time that a new ‘sacred way’ going from Argos to the Heraion can be traced in the archaeological record; it replaced the old ‘sacred way’ between Mykenai and the Heraion in the early fifth century, after the Argive destruction of Mykenai and Tiryns (Hall [J.] 1995a, 612-613). Excavations near the village of Khónikas, about one kilometre west of the Heraion, ‘have brought to light the remains of [an early fifth century] monumental colonnaded poros building’, perhaps connected with the yet undiscovered ‘hippodrome’ (see below, III.1.4.b). Hall (1995a, 612), however, prefers to view the building ‘as part of the new program of monumentalization taking place at the Heraion, ... symbolizing Argos’s newly won control over the sanctuary and her newfound domination over the plain’.

Another Procession from Argos to the Heraion?

We are told that the virgin girls of Argos took part in a procession to the Heraion and there performed choral dances (Euripides, Elektra 172f.). If this reference relates to an actual event, then a date before the mid-fifth century might be postulated for its establishment.

A Procession from the Heraion to Nauplia?

It is likely that the Heraion was associated with another procession, for which only a scrap of evidence survives. Pausanias (2.38.2) says that Hera (that is, her cult statue) was bathed every year (by women) in the spring of Kanathos near Áyia Móni at Nauplia to recover her virginity. This event must have been established in the archaic period, when many cult statues were still relatively small, portable wooden objects.
A Procession at Hermione

Pausanias (2.35.5-8) also describes in great detail a procession held in honour of Demeter at Hermione. The passage is so explicit that it deserves to be quoted in full:

... Chthonia was brought to Hermione by Demeter, and made the sanctuary for the Hermionians. At any rate, the goddess herself is called Chthonia, and Chthonia is the name of the festival they hold in the summer of every year. The manner of it is this. The procession is headed by the priests of the gods and by all those who hold the annual magistracies; these are followed by both men and women. It is now [2nd c. A.D] a custom that some who are still children should honour the goddess in the procession. These are dressed in white, and wear wreaths upon their heads... Those who form the procession are followed by men leading from the herd a full-grown cow, fastened with ropes, and still untamed and frisky. Having driven the cow to the temple, some loose her from the ropes that she may rush into the sanctuary, others, who hitherto have been holding the doors open, when they see the cow within the temple, close the doors. Four old women, left behind inside, are they who dispatch the cow. Whichever gets the chance cuts the throat of the cow with a sickle. Afterwards the doors are opened, and those who are appointed drive up a second cow, and a third after that, and yet a fourth. All are dispatched in the same way by the old women, and the sacrifice has yet another strange feature. On whichever of her sides the first cow falls, all the others must fall on the same. Such is the manner in which the sacrifice is performed by the Hermionians (Loeb translation, Jones 1931; my italics; for the Greek, see Appendix D, Text 21).

The sanctuary of Demeter Chthonia has been located in the vicinity of the main church of the modern town, Áyios Taxiárkhis (the Archangel Michael), beyond the city walls on the slopes of the Prôn (Appendix A-50; and Appendix C). Although it has not been excavated and thus remains undated, several inscriptions found at Hermione attest Demeter’s worship from at least the 460s (see Chapter I.3.5.a).

Masks Used in Play-acting

According to Jameson (1990a, 218-220), the terracotta masks discovered in the bothros at Tiryns should, by analogy with the mask found in the sanctuary of Artemis Orthia at Sparta, be connected with an adolescent festival in honour of a female divinity and a male hero (Figure 75; Jantzen 1975, 159-161; for Artemis Orthia, see Vernant 1984, 13-27; 1985; Carter 1987, 355-383; see also Burkert 1985, 103-104). These masks were worn
by individuals, who were play-acting the role of terrifying (female) creatures, probably Gorgons (Morgan and Whitelaw 1990, 88; Jameson 1990a, 218-210).

**Athletic Installations**

No site in the Argolid except Halieis has yielded physical evidence for sporting contests at festivals. It seems that Halieis was the site of an important (unknown) festival, which included athletic contests (Appendix A-38). The architectural remains point to the establishment of footraces, as starting lines of a narrow racecourse (16 m by 167.4 m) were found in the area of the sanctuary. The excavators speculate that wooden tiers ran along the east side of the track for spectators. At a later period (c. fourth century) a bath complex has also been identified, as would be normal at this time for a site of athletic competitors (Jameson 1974c, 119).

Pausanias (2.24.2) mentions that a racecourse, in which the Argive held games in honour of Nemean Zeus and at the festival of Hera, adjoined the sanctuary of Athena Oxyderkes on the Deiras at Argos. If the reference is to the festival of Hera at the Heraion, Argos probably only took possession of the games there sometime after 460. Moreover, the games of Nemean Zeus were only transferred to Argive control at the end of the fifth or the beginning of the fourth century (see Musti and Torelli 1986, 262-263; Miller 1990, 24-20; Doffey 1992, 193). These two events suggest that the racecourse probably dates to the fourth century.

***III.1.4.b. The Inscriptional Evidence***

**The Hippodrome**

The Heraion had a hippodrome for horse-races, but no such structure has (yet) been discovered (Daly 1939, 168). We know that it existed from two inscriptions found near the Heraion: the first reference is on a sixth century memorial of a young warrior; the second is on a stone statue base dedicated at the Heraion around 480-475 by four *hieromnamones* (see Chapters I.3.2.a; I.3.4.c; II.1.6.f).
Prizes Won at Games

The games in honour of Hera at the Heraion are well known from ancient authors, but their evidence is late and often confusing. The fifth century bronze vessels inscribed par' Heras Argeias provide better proof that such games were held (Amandry 1980, 233-234). These vessels were given as prizes to the victors in the games. We have six examples from various contexts dating between 470 and 425 BCE, all mentioning the games of Argive Hera (Figure 76; see below, Table III.3). This series is the most numerous after that of the Panathenaic amphorae.

Table III.3. Bronze Prize Vessels Inscribed to Hera

<table>
<thead>
<tr>
<th>Shape</th>
<th>Date</th>
<th>Provenance</th>
<th>References</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hydria</td>
<td>c. 470-450</td>
<td>Ankara (found in tomb at Sinope)</td>
<td>SEG 30.1456; 39.1365; AMANDRY 1971, 615 no. 3; JEFFERY 1990, 164.</td>
</tr>
<tr>
<td>Hydria</td>
<td>c. 460-450</td>
<td>Pompeii Mus.? (Pompeii, house of J. Polybios)</td>
<td>SEG 34.1061; 39.353bis; 39.1061; 42.275bis; LAZZARINI and ZEVI 1988-89, 33-48, figs. 13-15.</td>
</tr>
<tr>
<td>Dinos (lebes)</td>
<td>c. 450-425</td>
<td>BM (found in tomb near Piraeus)</td>
<td>SEG 11.330; SMITH 1926, 256-257; VOLLGRAFF 1930, 33f.; AMANDRY 1971, 65; JEFFERY 1990, 170 no. 43.</td>
</tr>
</tbody>
</table>

All dates are BCE.

It is noticeable that the bronze prizes date to the period after the conquest of Mykenai and Tiryns, when Argos was free to dominate the region and control the Heraion.

Contests in Rites of Passage

An early inscription (c. 525 BCE) from the akropolis of Mykenai mentions (a body or college [?] of) hiaromnamones in connection with the cult of Perseus (see Chapter I.3.2.a; and Appendix A-11). As was shown in Chapter I, it reads as follows: 'If there is no body (college ?) of damiorgia, the hiaromnamonas for (the heroön or fountain of ?) Perseus will serve as adjudicators or judges (kriteras) for the parents, as it has been decided.' The reference to parents shows that we have to do with children, most likely sons;
the reference to acting as judges shows that the disputes might occur, over either success in some contest or the achieving of some standard; [the reference to] ... parents and high officials of the state suggests that the issues affected membership in the community, i.e. the achieving of status as a citizen or in a hierarchy among citizens. Since it is Perseus’ cult officials who are to substitute for the δαμιονηστοι, Perseus would seem to be patron of the institution whereby boys took their place in the Archaic community of Mykenai. (Jameson 1990a, 215).

III.1.4.c. The Symbolism of Processions

Religious festivals marked periods when groups came together, setting themselves apart from others, in celebrations that contrasted with the normality of everyday life. ‘The fundamental medium of group formation is the procession, pompe’ (Burkert 1985, 99). ‘Hardly festival is without its pompe’, but unfortunately, hardly any Argolic pompe has left its mark on the landscape. Only the famous Argive procession from Argos to the Heraion has (so far) been securely identified.

For this reason, perhaps, it has also attracted the attention of scholars, who speak at length about the symbolism behind the act. As I have stated earlier, de Polignac (1995a, 40) has interpreted this procession as a collective reaffirmation of Argos’ control over the cultivated territory. The analogy is with a ‘sacred ploughing, in which the processional route represents a symbolic furrow leading from the dwelling place of human beings in the centre, to the dwelling place of the deity on the edge of the plain now taken over by agricultural civilisation.’ (de Polignac 1995a, 42). This ‘agrarian mediation’ between the Argives and Hera apparently invoked ‘the first form of protection that they desired from her: namely, fertility’, fertility of the fields, of the flocks and herds, and of humans (de Polignac 1995a, 42).

Of these three points, human fertility in the context of processions ought to be considered more closely. Marriage was the ritual that ensured fertility, and in the Argolid it was Hera who exercised power over this fundamental institution. Although she is never worshipped as the wife (‘Teleia’) of Zeus in the Argolid (Aloni-Ronen 1997, 18-19; see Jost 1985, 358-359 for such cults in Arkadia), certain signs point to Zeus’ presence at the Heraion in the context of his coupling with the goddess. Myth tells the story of how Zeus turned himself into a cuckoo on Mt. Kokkýgion near Hermione in order to flutter into
Hera's bosom (Homer, II. 14.296; Kallimakhos Fr. 75.4; Theokritos 15.64; Paus. 2.17.4), and in the Heraion the gold and ivory image of Polykleitos carried a sceptre on which this cuckoo perched (Paus. 2.36.1; 2.17.4; cf. LIMC, s.v. Hera 682ff.).

The bathing of her statue in the springs at Nauplia also ties into this image of Hera. The implication is that her marriage to Zeus required that she first take a bridal bath to recover her virginity. The thousands of hydriai found at the Heraion (Waldstein 1902, 100ff; Caskey 1952, 175ff., 197ff.) may have been associated with such ceremonies (Guettel Cole 1988, 163-164; cf. Foley 1988, 73, 137-138; Morgan and Whitelaw 1990, 90). What is odd about this matter is that Hera's cult statue had to be taken all the way to Nauplia, even though there existed a perfectly good stream for purifications close to the Heraion (cf. Demeter at Phaleron, Burkert 1990, 77-85; Parker 1983, 28). In another passage from Pausanias (2.16.1) the Eleutherion stream at the foot of the hills near the sanctuary is said to be frequented by the priestess of Hera and perhaps other women at the sanctuary for purifications and other rituals in their secret ceremonies. Why was this place not used for Hera's bath? I would guess that the more distant springs of Nauplia offered the perfect setting to parade the image of Hera through the edge of cultivated territory. If the ceremony had taken place just a short distance from the Heraion (i.e. the Eleutherion), the procession would have lost its grandeur, its goal. The procession, therefore, was perhaps as important as the purification ceremony.

If we suppose that the bathing of Hera's statue was a women's affair, we might suggest that this hypothesised procession symbolised human fertility through its connection with women. In a similar bathing ceremony of unknown date, the image of Pallas Athena (the famous Palladion from Troy), along with the shield of Diomedes (paraded by young men, paides), was apparently paraded by women (young virgins, loutrochooi and all women of Argos, argeiai gunaikes) in the procession that bore Athena from the acropolis to bath in the river Inakhós (scholiast on Kallimakhos, Hymn to Athena 5.1; Paus. 1.28.8; 2.23.5, for a recent discussion, see Billot 1999, 7-28). 'This annual Argive ceremony of the Bath of Pallas ... also draws attention to ... [Athena's] interventions in the domain of [human] fecundity' (de Polignac 1995a, 82).

It is possible that the public nature of such processions accentuated
the crucial yet temporary responsibility of the women vis-à-vis the perpetuation of the community' [i.e. giving birth]... That responsibility conferred upon the women a latent citizenship of a religious nature, without which there could never have been any citizenship of the other, political, kind' (de Polignac 1995a, 73, see also Brumfield 1996, 67-74).

I now return to Hera’s role as matrimonial goddess in the context of festivals. At the Heraion it was Hera who supervised the switch over from childhood to that of adulthood, via the ritual of marriage (de Polignac 1995a, 63). The virgin girls of Argos took part in a procession to the Heraion and performed choral dances (Euripides, Elektra 172f.; also on a geometric krater, Krystalli-Votsi 1980, 85-92). These virgins probably participated for the first time in the solemn festivals held in the Heraion (Auffarth 1999, 44), and their movement out of the town centre represented a distancing or a change of status (de Polignac 1995a, 62). ‘This presentation of the younger generation to the goddess and the community was also -- through the performance of dances and songs, designed to give pleasure to both -- [and provided] an integration into the cult and, thereby, equally into society’ (de Polignac 1995a, 62).

III.1.4.d. A Festival without Religious Content?

Although choral dances were probably performed in many festive occasions, the chorus of maidens from Argos reminds us of the myth of the Danaids at Argos. When Pindar (Pythian Ode 9.11f.) describes the marriage of the forty-eight daughters of Danaos, he says that the Danaids formed a chorus. Gernet (1981, 25) stresses the importance of this word, because lively choruses present a structure that obscured the opposition between sexes. Whatever the importance of the choral dance may have been in the context of the procession of Argive virgins, the main issue is that the integration of young virgins into society was a ritual to prepare girls for marriage.

This idea stands in opposition to the main theme of the Danaid tetralogy as it was presented by Aeschylus in the Suppliants. The play focuses on the desperate wishes of a group of women to escape the fate of marriage (Diamantopoulos 1957, 222ff.). The forty-eight Danaids, loyal to Artemis, murder their bridegrooms, except for one Danaid, Hypermnestra, who, acting out of loyalty to Aphrodite and Hera, deceives her father and
saves her husband from death in order to bear children. Aphrodite defends her motives in court, and the Argives forgive her rebellious actions.

To commemorate Hypermnestra’s acquittal and the survival of her husband, Lynkeus, the Argives held an annual ‘Beacon’ (pyrsos, previously called Lynkeia) festival on the Larisa (Paus. 2.25.4; Diamantopoulos 1957, 220-229; Detienne 1988c, 159-175; Piérart 1998, 165-193; Auffarth 1999, 39-48; Billot 1999, 50-51). As Diamantopoulos (1957, 223-224) argues,

the tradition of the trial and acquittal of Hypermnestra was therefore sponsored by the Argive state ... two reasons for this state sponsoring are clear: by holding a festival in memory of a judicial decision given by the demos and concerning the ancestress of the Argive kings, the Argive state both stressed in the person of Hypermnestra the seniority of the royal house to which she gave birth, and indirectly paid honour to the court that rendered the decision. It [thus] brought out the antiquity of the demos as a judicial body as well as that of the dynasty.

There was little religious about the institution of this public festival, even if Hypermnestra acted out of devotion to Hera and Aphrodite. Its main theme was political, and in the context of the outcome of the battle of Sepeia the subject of forced marriage must have been a topical issue. The festival could be connected to ‘an internal policy of [Argive] constitutional reforms’ (Diamantopoulos 1957, 244). The first of these reforms, which we have already discussed in the context of the land distribution (Hdt. Il. 6.83; see Chapter II.1.5.c), may have begun immediately after Sepeia, when the wives of the dead warriors were forced to remarry so that losses of the city might be restored (Plut., Mul. Virt. 245 F; van Compernolle 1975, 362-363). According to Auffarth (1999, 45) the feast of lights also symbolises Argos’ ‘claim to domination of the plain, as does the frequent use of the Danaids as place-names in the Argive plain’ (see also Piérart 1992a, 119-148).

III.1.4.e. Behavioural Inversions at Festivals

Rituals often draw attention to society’s moral limits by making particular statements in the guise of behavioural inversions or reversals of norms (Arens 1988, 223). This perspective might offer a profitable line of interpretation for rituals that involve the reversal of genders.

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The attitude of the Danaids has been seen by Auffarth (1999, 39-48) as 'a reversal of order of the polis'. He therefore sees the myth as a rite of reversal, where the ritual, rather than being reversed back in order to reinforce the normal order, was used as a didactic 'model of identification for a communitas (as defined by V. Turner [1969]), people living for a time on the margins of society' (Auffarth 1999, 48). Despite this marginalisation, the city of Argos kept them as ancestors in their cultic memory. The maidens brought the Greeks civilisation from Egypt, invented the pentekonter (a ship with fifty oars, Apollodoros 2.1.12), opened the water sources on the Argive plain to make agriculture possible there (Paus. 2.37.1), and finally, brought the Greeks the mysteries of Demeter from Egypt (Paus. 2.22.1).

Another rite of reversal (involving transvestitism and role inversion) is meant to have taken place at Argos during the Hybristika (the outrageous) festival (IG XIV 1293 A; Graf 1984, 245-254; Pirenne-Delforge 1994, 154-160, 167-170, 205, 394f., 453f.; Lambropoulou 1995, 149; Billot 1999, 21, 33). Plutarch (Mul. Virt. 245 F) mentions a certain festival celebrated at Argos at which the men and women exchanged clothing in the worship, presumably of Aphroditos or Bearded Aphrodite (? Ares). We have no clue about the date of this festival, but, if it came into being with the setting up of a formal cult (temple) of Aphrodite at Argos, it could date to the early fifth century.

The strong emphasis on the female principle and the inversion of normal activity finds a parallel in the story of Telesilla, the poetess of Argos. Before describing Telesilla's organised resistance against the Spartans in Argos, Pausanias says that in front of the statue of Aphrodite was a slab with a bas-relief depicting Telesilla, her books at her feet and her helmet in hand, which she is about to place on her head (on statues associated with rites of inversion at Sparta, see Flemberg 1995, 121). The helmet might be a reference to the arming of Argive women during the battle of Sepeia (the sources also mention an Areas worshipped by women). Pausanias (2.20.8-10) describes the event as follows:

Telesilla mounted on the wall [of Argos] all the slaves and such as were incapable of bearing arms through youth and old age, and she herself, collecting the arms in the sanctuaries and those that were left in the houses, armed the women of vigorous age, and then posted them where she knew the enemy would attack. When the Spartans came on, the
women were not dismayed at their battle-cry, but stood their ground and fought valiantly. Then the Spartans, realising that to destroy the women would be an invidious success while defeat would mean a shameful disaster, gave way before the women. This fight has been foretold by the Pythian priestess in the oracle quoted by Herodotos [6.77], who perhaps understood to what it referred and perhaps did not:-- 'But when the time shall come that the female conquers in battle, driving away the male, and wins great glory in Argos, many an Argive women will tear both cheeks in her sorrow.' (adapted from Loeb translation, Jones 1931; my italics; for the Greek, see Appendix D, Text 22)

Notice that it was the women who were armed by Telesilla, and that it was their presence that made the Spartans retreat; no mention is made of slaves, male youths, or old men being armed and fighting off the enemy. Women seem to have held temporal power here.

Whatever the truth that lies behind this story, in the context of norm inversions, there is a link between the role of women after Sepeia and Telesilla, and between Telesilla and the position of women at the Aphrodite festival. It is can hardly be coincidental that Telesilla's image was set besides that of Aphrodite's. What is interesting is that during both events women held a temporary position of power, even if soon after they went back to the real world of male domination. Once again this power was emphasised (mainly) in the context of religious rituals.

Both these festivals had a somewhat initiatory character -- the prenuptial maidens in particular -- which brings us our next subject, rites of passage.

III.1.4.f. Rites of Passage

'Only from a few parts of Greece is there information preserved on the tests and contests through which young people made the transition, in stages, into adulthood and thus into full membership of their communities' (Jameson 1990a, 216). It so happens that the Argolid provides us with two examples of such rites.

The hideous masks at Tiryns (Jantzen 1975, 159-161), as well as at Sparta, were apparently used during transition rituals, as part of rites of passage for boys reaching adolescence. Although these masks are often thought to depict Gorgons, they also recall
the description of the outward disfigurement of the mad Proitides from Tiryns. Jameson (1990a, 216) believes that these rites of passage were confined to an elite group, perhaps the sons of the men mentioned in the famous inscription from Tiryns.

Although no masks have (yet) been found at Mykenai, a similar local institution has been identified on the basis of the Perseia inscription. By analogy with rituals in evidence at Sparta and Tiryns, it is thought that masks at Mykenai would also have been part of a ritual put on by dancers wearing these frightening masks to evoke 'the struggle of the young hero [Perseus] against a female monster' (Jameson 1990a, 213). These rituals may have been held at the heroön of Perseus and at the Chaos shrine, two locations that represent the beginning and the end of the initiation (Auffarth 1999, 45).

III.1.5. SUMMARY

Ritual is seen by social anthropologists as 'holding society together', as having certain 'political functions, in that it is a mechanism for the legitimisation of social control', and as 'making contradictions acceptable' (Burns and Laughlin 1979; quotation from Hodder 1982b, 167). This brief study of communal rituals in the archaic Argolid can be seen to support this view.

In the first instance, killing and dining rituals must have helped to reaffirm bonds between groups and to legitimate social control. The evidence we find for these activities comes from rural sanctuaries; this location suggests a general community focus and perhaps a strengthening of bonds within and between communities. The procession of domesticated animals through the cultivated landscape was a visible display of a community's wealth and control over territory. The ensuing feast provided a perfect setting for communal gathering of groups within and between communities to exchange hospitality. Feasting, however, could also be a ritual of exclusion. The differentiation between eating groups appears in the architectural remains, with special building marked off as dining halls for the privileged -- archaic hestiatoria were found at Halieis and at the Heraion. This type of hierarchy seems to go beyond wealth and status; it may also signal a demarcation between male and female roles within religious society. But even within male groups, communal meals seem to have been of a collective but also selective nature.
Rituals often helped to legitimate social control and to make contradictions in society acceptable. The festive rituals in themselves contrasted with the normal daily activities. On special days members of a community usually set out for a sanctuary in a procession. In the case of Argos, the procession has been interpreted as a collective reaffirmation of Argive control over the territory. The ritual apparently also evoked the idea of a symbolic ploughing over agricultural territory, to ensure fertility. In the Argolid this was Hera's role. She intervened in human fertility, through her status as goddess of marriage. Since this domain fell to women, it is possible that certain rituals were exclusively female and accentuated the temporary responsibility of the women vis-à-vis the perpetuation of the community. This position of temporary power was probably in direct contrast with women's real power in society. Religious rituals therefore provided the setting in which such contradictions were deemed acceptable.

Hera also presided over the transition from the world of childhood to that of adult life, through the institution of marriage. In preparation for marriage, young girls took part in processions (and festivals) that involved a change of status and integration into society. There was no escaping one's fate of marriage; this is clear from the story of the Danaids. It is possible that the only known non-religious festival at Argos was set up to emphasis, through the mythical character of Hypermnestra, the importance of child bearing and Argive lineage.

Behavioural inversions were common in religious rituals involving rites of passage, but at Argos there seems to have been a festival that involved the reversal of genders. This ritual may have celebrated the role played by women during the famous (and perhaps fictitious) attack on the Spartan army at Argos. 'Reversal of identity and imitation of the powers of the opposite sex can ... [serve to] reaffirm the social order' (Lambropoulou 1995, 153). Here again we might have an example of women being given temporary power in the context of religious rituals.

When boys entered adulthood, they had to leave behind the protection offered by women (their mothers) in order to become full members of society. This transition was sometimes marked by rituals involving performances by dancers wearing frightening
masks of female monsters. These rites of passage allowed their new qualities to come into being.
III.2. Rituals for the Dead

III.2.1. INTRODUCTION

When told that his medical bill would be a large one, Oscar Wilde said: ‘Ah, well then, I suppose that I shall have to die as I lived -- beyond my means.’ This witticism illustrates what many archaeologists who study burials assume, that ‘patterns in death reflect patterns in the life of a society’ (Hodder 1982a, 197). Ethnoarchaeological studies of burial data, however, have shown that burial ritual is not a passive reflection of other aspects of life, that it does not constitute a mirror image of social organisation (Hodder 1982a, Ch. 8).

As I. Morris (1992, 23-24) maintains:

At the most fundamental level (although this probably never happens in reality) we [should] assume as little as possible [about burial rituals], and simply look for patterns in the burial record. This in itself is subjective, since we have to decide what features are worth looking at. Prehistorians tend to assume that the treatment of the body, the provision and placing of the grave goods, the use of markers, the spatial arrangement of cemeteries and so on are worth investigating ...; [while] ancient historians can be a little more confident since the literature from Homer onwards suggests that many of our expectations about what actions would carry meaning are valid.

But, we have to minimise our assumptions about what practices ‘mean’ until we have broken the evidence down along the five axes Morris (1992, 29) proposes: typology, time, contexts of deposition, space, and demography.

In this section I address the burial evidence of the archaic Argolid with these five axes in mind. I examine the first three axes together, under the general heading of typology. The first step is to ask what, if anything, grave typology can tell us about the social structures of the time. Here I also identify points at which patterns changed as well as the nature of these changes, and compare burials with other classes of evidence, thereby incorporating time and contexts of deposition into my study of typology. My investigation of burial
evidence along the last two axes (space and demography), however, is unfortunately somewhat limited by the evidence available.

### III.2.2. REVIEW OF PUBLISHED WORKS

Death is a subject that has captivated many scholars. For general works on the subject of death rituals, Hertz (1960), van Gennep (1960), Huntington and Metcalf (1979), Bloch and Parry (1982), and Danforth and Tsiaras (1982) are among the best.


Two conferences on death, the first edited by Gnoli and Vernant (1982), and the second published as *AION ArchStAnt* (1988), contain important articles on Greek ideas of death. Another collective effort, by Humphreys and King (1981), presents ethnographic studies from around the world.

Works on burials are fewer. The main problem is that there is so much archaeological evidence to be collected from scattered primary sources (i.e. excavation reports), that it is very difficult to create a good synthesis of burial data. Kurtz and Boardman's *Greek Burial Customs* (1971) was one of the first good synthesis available, but it focuses mainly on Athens between 1100 and 325 BCE and is now almost thirty years old. More recently, I. Morris has written two books on burial, one specifically discussing burial rituals in a Greek and Roman context (1992) and another dealing with death and burial in the eighth to fifth centuries (1987, see also 1989). These two works are central to the discussion of rituals for the dead presented in this chapter. Other important studies concentrate on Athenian burials: Strömberg (1993), Houby-Nielsen (1995, 129-191; 1996, 41-54; 1998, 127-145), and Kistler (1998).

For a discussion of archaic burials in an Argolic context, one should consult Rafn (1979; 1984, 305-308; 1991, 57-71) for fifth century graves at Asine and Halieis. Though their focus is mainly on eighth century graves in the Argive plain, Hägg (1965, 117-138; 1974;

III.2.3. BURIALS

III.2.3.a. The Archaeological Evidence

'How we interpret the archaeology of the seventh and sixth century depends largely on what we make of the events between 750 and 700' (Snodgrass 1977; 1980a, 15-84; 1987, 170-210; 1993; quotation from Morris [1.] 1998, 24). So I begin with a summary of the earlier evidence, and then discuss its implications for the later archaic Argolid.

The Eighth and Seventh Centuries

Many local differences can be seen in the burial customs of the eighth century Argolid, but some common features can be distinguished. The method of disposal of the dead preferred by most of the communities of the Argive plain was inhumation in contracted positions (see Foley 1988, 34-46 for a review of the evidence). At Asine and Nauplia, however, some cremations were also found.

We also find distinctions in grave types and size, position of the corpse, and orientation of graves. Three main grave types are known: the simple pit, the cist (a stone-lined pit), and the pot burials, either huge storage jars (pithoi) for adults or other types of pots (mainly amphorae and kraters) for infants (Figure 77). These types were all found at the main sites in the eighth century, except at Asine, where pithoi have yet to be discovered (Hågg 1998, 132). Moreover, when we compare the size of cists, we notice that those from Asine were longer and narrower than the norm, whereas those from Tiryns (and probably from Argos) were shorter and wider (Hågg 1974, 125, fig. 33; 1983a, 29). The proportions of the cists at Asine are a direct result of the positioning of the body in the grave, because skeletons were placed supine, stretched out on their backs, as opposed to the more common crouched or contracted position found elsewhere in the Argolid (note, however, that Argos has two supine burials from this period; see Hågg 1998, 132)
The orientation of the graves at Asine was also unique. Its early graves show a clear predisposition to place the head of the corpse an easterly direction; while at other sites this orientation was rare (Hägg 1980, 119-126; 1998, 132).

Argos also has some unusual graves. These were larger, both wider and longer, than most graves in the Argolid (Hägg 1974, 125, fig. 33c; 1983a, 27-31). To some extent their unusual size results from the fact that some were used for multiple burials. However, a few large tombs contained only one corpse (Courbin 1957, 322-386). These have been designated as warrior tombs.

Around 700 BCE, rich graves, especially the 'warrior' graves, peter out at Argos (see Foley 1988, 47-52). Cists were abandoned in favour of pithoi (Hägg 1983a, 27-31; Foley 1988, 50). The pithoi were of a different shape from those of the eighth century (cylindrical as opposed to ovoid), and contained no grave goods (Foley 1988, 50). Most have a westerly-south-westerly orientation (Hägg 1998, 133).

Only two graves stand out from this pattern. They are two poros graves of the late seventh or early sixth century found in the Bakaloyiannis plot (Kypséli: T 83 and T 84) at Argos (EF 1955b, 312; Bommelaer, Croissant and Grandjean 1971, 736; Courbin 1974, 123; Morris [I.] 1987, 184; Foley 1988, 48, 206). One of these two graves also contained unusually 'rich' material -- two pins wrapped in gold leaf and fragments of a terracotta plaque -- even though it had been disturbed.

Most seventh century cemeteries therefore present a monotonous picture of burial traditions. Rich displays of goods seem to have been inappropriate in burial. Grave goods were rare and metals leave almost no traces of their existence in the archaeological record.

By 650 BCE most graves are grouped in cemeteries, located along the routes leading from the town, without lavish memorials. A new public space for the dead was thus created.
The Sixth and Early Fifth Centuries (Figure 78)

In the sixth century cist burials come back into fashion. As Tables III.4 and III.5 show, almost half of the known sixth century burials were in cists. Although *pithos* graves were still popular, they were no longer used exclusively.

Table III.4. Sixth and Early Fifth Century Burials in the Argolid, Excluding Argos

<table>
<thead>
<tr>
<th>Site</th>
<th>Site Number</th>
<th>Type of Burial</th>
<th>No. of Burials</th>
<th>Sex or Age</th>
<th>Grave Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>Skhinokhőri</td>
<td>A-4</td>
<td>In.</td>
<td>8</td>
<td>Female ?</td>
<td>Pins and 1 sphinx</td>
</tr>
<tr>
<td>Mykenai</td>
<td>A-11</td>
<td>In: cist; tile</td>
<td>2</td>
<td>?</td>
<td>Iron and 1 pot</td>
</tr>
<tr>
<td>Skaidháki</td>
<td>A-6</td>
<td>In. ?</td>
<td>?</td>
<td>Female ?</td>
<td>1 pot, little basket, necklace, silver rings</td>
</tr>
<tr>
<td>Nauplia ?</td>
<td>A-17</td>
<td>In: pit + <em>pithos</em></td>
<td>2</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Berbáti</td>
<td>A-19</td>
<td>In: cist ?</td>
<td>1</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Asine</td>
<td>A-22</td>
<td>In: cists</td>
<td>4</td>
<td>Female ?</td>
<td>Many pots, glass, pin, bronze, iron sandal attachments</td>
</tr>
<tr>
<td>Epidaurus</td>
<td>A-31</td>
<td>In: cist ?</td>
<td>1</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>Halieis</td>
<td>A-38</td>
<td>In: cists, pits, <em>pithos</em>, with tumuli C: early 6th c.</td>
<td>Many, in groups</td>
<td>Female ?</td>
<td>Many pots, attachment for wooden chest, spindle, iron blade, mirror, bronze pots, iron sandal attachments</td>
</tr>
<tr>
<td>Troizen</td>
<td>A-56</td>
<td>In. + grave marker</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>Throni</td>
<td>A-65</td>
<td>Grave marker</td>
<td>1</td>
<td>?</td>
<td>-</td>
</tr>
</tbody>
</table>

In= Inhumation; C= Cremation
The late seventh or early sixth century cremation from Halieis stands out here. It was reported as one of the earliest burials in a large cemetery with some fifty sixth and fifth century cist graves. Something about this individual was ‘unique’, but we will never know what.

In= Inhumation; C= Cremation

---

### Table III.5. Sixth and Seventh Century Burials at Argos

<table>
<thead>
<tr>
<th>Site Number</th>
<th>Type of Burial</th>
<th>No. of Burials</th>
<th>Sex or Age</th>
<th>Grave Goods</th>
</tr>
</thead>
<tbody>
<tr>
<td>A-10-1</td>
<td>In: <em>pithos</em></td>
<td>2</td>
<td>?</td>
<td>2 pots; 3 pots + 1 <em>phiale</em></td>
</tr>
<tr>
<td>A-10-11</td>
<td>In: <em>pithos</em></td>
<td>1</td>
<td>?</td>
<td>-</td>
</tr>
<tr>
<td>A-10-19</td>
<td>In: <em>pithos</em></td>
<td>1</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>A-10-20</td>
<td>In: <em>pithos</em></td>
<td>3 (reused)</td>
<td>?</td>
<td>1 pot</td>
</tr>
<tr>
<td>A-10-22</td>
<td>In: <em>pithos</em></td>
<td>1 Adult</td>
<td>3 imported pots + geometric krater with child</td>
<td></td>
</tr>
<tr>
<td>A-10-25</td>
<td>In: <em>pithos</em> (late 7th-early 6th)</td>
<td>4 Child + adults</td>
<td>Many small pots, figurines, <em>phiale</em></td>
<td></td>
</tr>
<tr>
<td>A-10-47</td>
<td>In: <em>pithos</em></td>
<td>1</td>
<td>?</td>
<td>1 pot outside the grave</td>
</tr>
<tr>
<td>A-10-48</td>
<td>In: <em>pithos</em></td>
<td>3</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>A-10-70</td>
<td>In: <em>pithos</em> + krater</td>
<td>1</td>
<td>?</td>
<td>1 pot</td>
</tr>
<tr>
<td>A-10-78</td>
<td>In: <em>pithos</em>, cist</td>
<td>? Male</td>
<td>1 pot and figurines</td>
<td></td>
</tr>
<tr>
<td>A-10-40</td>
<td>In: urn</td>
<td>2</td>
<td>?</td>
<td>4 pots; 2 pots</td>
</tr>
<tr>
<td>A-10-44</td>
<td>In: urn ?</td>
<td>2 skulls</td>
<td>?</td>
<td>35 pots</td>
</tr>
<tr>
<td>A-10-56</td>
<td>In: <em>pithos</em>, cist, cauldron, krater</td>
<td>5 Children + 1 female ?</td>
<td>2 pots (<em>kalathoi</em>)</td>
<td></td>
</tr>
<tr>
<td>A-10-51</td>
<td>In: cist, pit, and <em>pithos</em></td>
<td>7 Child; female ?</td>
<td>Many small pots, bronze bowl, iron sandal attachments, iron horse bits</td>
<td></td>
</tr>
<tr>
<td>A-10-52</td>
<td>In: urn and cist, multiple burials</td>
<td>Many ?</td>
<td>Many pots</td>
<td></td>
</tr>
<tr>
<td>A-10-15</td>
<td>In: cist</td>
<td>1</td>
<td>?</td>
<td>1 pot and figurines</td>
</tr>
<tr>
<td>A-10-29</td>
<td>In: cist</td>
<td>4</td>
<td>?</td>
<td>? (rich)</td>
</tr>
<tr>
<td>A-10-49</td>
<td>In: cist</td>
<td>1</td>
<td>?</td>
<td>1 pot</td>
</tr>
<tr>
<td>A-10-53</td>
<td>In: cist</td>
<td>?</td>
<td>?</td>
<td>Pots, one was inscribed</td>
</tr>
<tr>
<td>A-10-54</td>
<td>In: cist</td>
<td>2</td>
<td>Child + adult</td>
<td>Over 50 pots, many imported and figurines</td>
</tr>
<tr>
<td>A-10-56</td>
<td>In: cist ?</td>
<td></td>
<td></td>
<td>Many imported pots and figurines</td>
</tr>
<tr>
<td>A-10-79</td>
<td>In: cist, ‘pyre’</td>
<td>?</td>
<td>?</td>
<td>7 imported pots; 16 pots with ‘pyre’</td>
</tr>
<tr>
<td>A-10-3</td>
<td>In: pit</td>
<td>1</td>
<td>?</td>
<td>1 pot</td>
</tr>
<tr>
<td>A-10-9</td>
<td>In: pit ?</td>
<td>3</td>
<td>?</td>
<td>Small pots and figurines</td>
</tr>
<tr>
<td>A-10-12</td>
<td>In: pit + tile</td>
<td>3 Adults</td>
<td>Pots</td>
<td></td>
</tr>
<tr>
<td>A-10-14</td>
<td>In: secondary burials in pit</td>
<td>6 (family graves)</td>
<td>5 adults (female); 1 child</td>
<td>Many imported pots, figurines, 3 pairs of iron attachments for sandals (from female burial)</td>
</tr>
<tr>
<td>10-61</td>
<td>In: unspecified type + pit with secondary burials</td>
<td>Multiple</td>
<td>Child + young male warriors</td>
<td>150 pots, lamps, bone pins, bronze blades, iron handles, shield straps, drilled bone, figurines, the fitting for boots or heavy sandals</td>
</tr>
<tr>
<td>A-10-30</td>
<td>In. ?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>A-10-50</td>
<td>In. ?</td>
<td>?</td>
<td>?</td>
<td>?</td>
</tr>
<tr>
<td>A-10-63</td>
<td>In. ?</td>
<td>?</td>
<td>?</td>
<td>Bronze <em>phiale</em></td>
</tr>
<tr>
<td>A-10-60</td>
<td>In: grave marker secondary</td>
<td>?</td>
<td>?</td>
<td>13 pots</td>
</tr>
<tr>
<td>A-10-78</td>
<td>Stele</td>
<td>-</td>
<td>Female ?</td>
<td>-</td>
</tr>
</tbody>
</table>
III.2.3.b. Grave Typology

The different grave types of the eighth century have been associated with different ethnic groups at Argos. Foley (1988; 1998, 140), who has studied the burial evidence for the eighth century Argolid in great detail, suggests that in Argos 'cist burials may have been used with some degree of exclusivity by the Dorian segment of Argive society'. The 'subservient non-Dorian' population, on the other hand, began to bury 'their dead in *pithoi* and other graves [mainly other pots and pits] -- burials which generally had fewer offerings than cists.' (Foley 1998, 141)

Foley (1998, 138, 140, 141) provides three basic points in support of her argument:

- Cists account for the majority of burials at Argos during the eighth century, but not at Tiryns (and perhaps not at Mykenai and Nauplia).
- Cists tend to be richer in grave goods than *pithoi*.
- There was an apparent spatial differentiation in the choice of grave types, with cists being found in the centre and eastern area of Argos, while *pithoi* and pits located on the periphery of the city, in the north, west, and south-west areas.

Her arguments have been systematically deconstructed by J. Hall (1997a, 122-128), who has studied the question of ethnicity in the Argolid and its relation to burial. I agree with Hall's objections, having reached similar conclusions myself, based on a study of archaic burial evidence in context. But more needs to be said on this subject. For one thing, Hall provides no alternative explanations for the changes in mortuary practices of the seventh and sixth centuries. Although these changes cannot be explained through models of ethnicity, they cannot just be ignored. After considering Foley's arguments in more detail, I intend to offer an interpretation for these changes in the context of social structure.

The Cist-Using Dorians: A Misguided View?

Foley (1988, 137-143) believes that the Dorians were the dominant group at Argos during the eighth century and that they used cists with some degree of exclusivity; whereas the dominant group at Tiryns was non-Dorian and used *pithoi* (she also presents a weak case for the use of *pithoi* at Mykenai and Nauplia). She uses the number of each burial type to
support her conclusions. The twenty-nine late geometric cists at Argos are compared with the mere fourteen pithoi; at Tiryns, however, only five of the twenty-nine graves she mentions are cists (Foley 1998, 141). What she purposely excludes from this brief survey are the forty-six dark age and geometric graves recently found near the Agricultural prison at Tiryns (see Foley 1998, 141 n20). The Greek excavator notes that most of these are cists (Hatzipoulou 1988, 123-125), but Foley refuses to acknowledge them because no precise information was given about their dates (except that they were geometric).

Foley is certainly not the only one to see cists as a higher-status mode of mortuary disposal. Hägg (1983a; 1998) has also argued that the rich favoured cists while the poor had a tendency to inter their dead in pithoi. Undoubtedly, the cists of Argos are usually richer in grave goods than the pithoi (see Foley 1988, Appendix B; Hall [J.] 1993, Ch. 4 and Appendix A). The contents of a grave, however, cannot be used to differentiate graves of the rich or poor. Ethnographic comparisons indicate that there is no correspondence between splendour of graves and grave goods and wealth and social standing of the deceased (for a study case, see Ucko 1969, 266-267). What is more, a good many eighth century cists at Argos contain no grave goods, whereas certain pithoi were richly furnished or ornately decorated (Protonotariou-Dheilaki 1980, 63, grave 48, and Hägg 1974, 24, 39; Courbin 1974, 34ff; Foley 1988, 210, pithoi T23, Bakaloyiannis plot).

Foley (1988, 38) suggests that pithoi ‘were convenient and perhaps less costly than cists and no doubt were a quicker method of burial’. As Blitzer (1990, 675-711) has cleverly demonstrated in her ethnographic study of koroneika, the modern equivalent to pithoi, this assumption is incorrect. The amount of time it took to make a pithos would almost certainly prescribe that they had to be ‘ordered in advance’, perhaps as much as eighty days in advance. For this reason pithoi were probably not acquired expressly for burials; existing domestic pithoi were surely pressed into service for this purpose. Their use was certainly more costly than lining a cist with stone slabs or pieces of stone and rocks. Moreover, a considerably deeper pit had to be dug for a pithos than for a cist, because the pithos was inserted into the ground at an angle as opposed to being laid down flat (Hall 1997a, 126).
Foley’s assertion that the location of cists in Argos was principally central and easterly, whereas that of pithos burials was peripheral, is implausible. Hall (1993; 1997a, 123) has re-studied the geometric burials at Argos and his maps clearly show that ‘pithoi appear alongside cists in the central and eastern part of the town, while cists are attested alongside pithoi both to the north and to the south’. Not only are cists, pithoi, and pits spread out throughout Argos, they also occur together in cemeteries (Dheilaki 1977, 98-99; Hall [J.] 1997a, 128). As Hall (1997a, 128) notes, ‘this is a very strange situation if each grave type bears a diacritical reference to a specific ethnic group’: ‘we would have to accept a situation in which members of different ethnic groups were buried alongside one another’.

Another objection to Foley’s theory is that cists make up almost three-quarters of the burials at Asine (Hågg 1974, 160). ‘This ... represents the highest proportion of cists for any site in the Argive plain, yet if there is any polis in the Argolid for which a non-Dorian identity is stressed by the literary tradition, it is Asine’ (Hall [J.] 1997a, 128).

Finally, Foley’s argument cannot be used to justify the sudden disappearance of cists at about 700 BCE, when pithoi and pot burials replaced cists throughout the Argolid. ‘If grave types were ... intimately related to ethnic groups, is it likely that the Dori ans suddenly adopted a mode of disposal that was previously associated with another, lower-status ethnic group?’ (Hall [J.] 1997a, 128).

The ‘Structural Revolutions’ of the Eighth and Sixth Centuries

All in all the evidence fails to uphold the view that cists correspond to an exclusively Dorian mode of burial. It may be that grave types in the eighth century Argolid carried no social, economic, or ethnic meaning, but we cannot rule out the possibility that the differences were related to other social structures.

I. Morris (1987, 184) explains how mortuary practices in Athens isolated the prominent group (agathoi), who were given formal cemeteries, from the low-status group (kakoi), who were excluded from these formal cemeteries. After 750 BCE this distinction between elite and non-elite disappeared and was replaced by something more egalitarian. Everyone was entitled to the same kind of burial and cemeteries were no longer
exclusive. The gradual increase in the use of pithoi after 750 was perhaps a consequence of allowing the kakoi access to formal cemeteries, in graves other than those used by the agathoi.

'Some of the rich responded by differentiating themselves in new ways, using lavish grave goods and markers ...' (Morris [I.] 1998, 25). This would explain the rich warrior graves that sprang up at Argos at the very end of the eighth century (Hägg 1980, 120f.; 1988, 132-133; Foley 1988, 37). These exceptionally spacious graves contained armour and weapons (the richest had a panoply), obeloi (spits), and banqueting equipment (Foley 1988; Hägg 1998, 132-134). The selection of objects might refer to the Homeric model of 'princely' hospitality and to the large communal meals that the heroes had in the homes, or to the banquet that accompanies the warrior funerals (de Polignac 1996, 35; 1998). This banquet reference may also be viewed more metaphorically, in that it represented the deceased as agathoi in a general sense and thus associated the individual with the 'acceptable' conduct and lifestyle of agathoi (Houby-Nielsen 1996, 49). Whatever the case may be, it is clear that by the late eighth century the cemetery had become the setting for social conflict (Morris [I.] 1998, 27).

'After about a generation or so, a more egalitarian ethos won out.' (Morris 1998, 25) These values are perhaps best represented by 'middling citizens', the metrioi (Morris 1998, 26). This group was 'neither poor nor rich'; each individual cultivated his land and did his share of civic duty as a hoplite (Morris [I.] 1998, 26). In archaic Greek literature (especially in Archilochus, Solon, Xenophanes and Hesiod), 'the good community is presented as a group of such men', who represented the highest 'source of human authority' (Morris [I.] 1998, 26). Conversely, the lyric poets, an elite, presented the other extreme.

The community of middling men was just a rabble of peasants, while the good society was a group of like-minded aristocrats who transcended the boundaries of the individual polis. Such creatures lived in a world of luxury, using the same kind of vessels, clothes, and houses as the gods, heroes, and Lydians, and they claimed to draw authority from the links with these privileged groups (Morris [I.] 1998, 26, my italics).

Argos was apparently enthusiastic to adopt the new ways of the 'middling' culture (Morris [I.] 1998, 30). I would argue that it was these people who associated themselves with a particular style of mortuary symbolism that best represented their values. The
pithoi, which came from domestic contexts associated with agricultural activities, can be seen as an ideal symbol for such a group. It was relatively plain, did not allow for display of grave goods, and showed strong ties to the agricultural landscape.

Since extravagance was no longer proper in burial, and families no longer succeeded in showing off their dead as noble warriors or aristocrats (Morris [I.] 1998, 25; van Wees 1998, 340-341), they redirected their wealth towards sanctuaries (Snodgrass 1980, 54). The seventh century bronzes (especially tripods) at the Heraion, a principal meeting point for competitive emulation between aristocratic groups, attest to this custom (Aloni-Ronen 1997, 18). During the seventh century, therefore, ‘the elitists would legitimize their claims to be special elite by appeals to sources of authority outside the polis’ (Morris [I.] 1998, 27).

Since the cemetery ceased to be the setting of social conflicts in the seventh century, it is possible that cist graves were no longer appropriate -- what was the point in having a large empty grave? -- and that the only acceptable form of burial was the pithos. To accept this idea requires a leap of faith, but I have found no other explanations for the abandonment of cists around 700 BCE.

So, what seemed like a triumph for those engrossed in ‘middling values’, perhaps looked very different to those who lived in the world of luxury (Morris [I.] 1998, 27). By redirecting their source of wealth towards sanctuaries, they were also redirecting their attention towards external groups outside the boundaries of the polis.

In the sixth century everything changed. At most sites the amount and richness of excavated votives declined steadily, attaining fairly low levels in the fifth (Snodgrass 1989-90, 287-294). Until the mid-sixth century there were very few wealthy or outstanding graves. Only one cist from Argos dates from this period (Appendix A-10-51). This cist, located at the foot of the Larisa in the area of the public square, was quite unusual, not only because of the grave-type but also because of its grave goods, since it included eight miniature vases (skyphoi of the mid-Corinthian period, see Daux 1967b, fig. 24), a shallow bronze bowl, four iron horse bits, and a pair of iron sandals.
The appearance of this cist might signal what was to come in the mid- and late sixth century, when we see a slight shift back towards display. Morris (1998, 35) suggests that there was a swing back toward middling ideology around 550-500 BCE. This shift was less notable than that of the late eighth century, but was nevertheless significant. Once again, the elite temporarily opposed this, with some lavish cists in the late sixth century (Appendix A-10-14; A-10-29; A-10-54; A-10-79; Morris [I.] 1988, 35). The richest grave of this period (c. 525-500), from the Kanellopoulou plot at Argos, stands out as the most impressive archaic grave of all these and has been thought to come from the Argive royal line (Appendix A-10-61; Morris [I.] 1987, 184). It contains the inhumations of two warriors, accompanied by fifty pots and many bronze and iron weapons. The structure is unique for Argos, and has recently been identified as a heroön (Pariente 1992, 205).

Since a similar pattern is attested at Mykenai, Asine, and Halieis, it may be that the reintroduction of cists in the sixth century was part of an attempt by the elitist groups to reaffirm their authority. But this situation did not last, because in the fifth century 'there was an abrupt collapse in funerary display all over central Greece. No rich grave goods have been reported from ...' [the early and mid fifth century] (Morris [I.] 1998, 32). Morris (1992, 152) sees the fifth century as a period when ceremony and display were restrained throughout Greece as a result of a solid communal belief. From an historical point of view, the Persian wars of 480-479, in which Argos took no part, and the establishment of a democracy at Argos in the 460s may have played a part towards bringing about this new ideal. This idea seems also to have 'coincided with an important change in literary culture', when 'new poetic forms ... [appeared, such as] the epinician ode, mediating between the interests of the aristocratic household and the community of citizens' (Morris [I.] 1998, 35).

III.2.3.c. Spatial Groups

Who gets buried where is another complex question. The location of tombs was most probably controlled by the community (Riva and Stoddart 1996, 94). By the seventh century many communities transferred their cemeteries beyond the city walls and set up a new public space for the dead (Morris [I.] 1998, 25). This shift away from intra-mural burial is connected to the concept of death as polluting. These new feelings towards
pollution may have required all adults to be inhumed collectively. Only the graves of children, heroes, and founders were permitted within the settlement area, usually in the *agora* or by the gates (Morris [I.] 1987, 57-71, 193; Houby-Nielsen 1995, 131). The graves of children were still acceptable within the city walls, seemingly because little pollution could result from such insignificant bones (Parker 1983, 41).

This pattern of spatial segregation is not so evident at Argos, however, since they never completely abandoned the notion of intra-mural burial (Morris [I.] 1987, 184). Nevertheless, J. Hall (1997b, 99) has identified three clusters of eighth century cemeteries outside the city walls: in the north-west section of modern Argos at the foot of the 'Aspis'; in the central area near Ayios Petros; and in the south-western area near the *agora* (Figure 79). These burial plots must have been connected to separate villages or hamlets (Hägg 1982, 300).

Though the central area had a substantial and significant cemetery in earlier times, graves in this region virtually disappear in the seventh century. Instead, the cemeteries in use at this time are located to the south and in a new area to the north (Figure 80; Hall [J.] 1997b, 99). As Hall points out, the most reasonable explanation for this change is to presume that previously isolated villages had come together to create one large settlement.

This pattern persists into the sixth century, except that the new nekropolis to the north of Argos is abandoned. The cemeteries in the central and especially the south areas were still extensively used for burial.

**III.2.3.d. Demography**

Lately there has been an enormous interest in ancient gender, but this research deals mainly with the literary and pictorial evidence rather than the archaeological evidence from burial rituals (see, however, Strömberg 1993; Morris [I.] 1992). At least for the Argolid, this is due in part to the lack of sexed skeletons, which makes it hard to say much about the gender of skeletons. If we follow Strömberg’s methodology for sexing Athenian graves of the geometric period, the gender of only about half a dozen Argolic
graves can be identified on the basis of grave goods (Appendix A-4; A-6; A-10-36; A-10-61; A-22; A-38). The weapons indicate a male burial (A-10-61), while the various items of jewellery (A-4; A-6; A-22), the spindle (A-38), and most the iron sandal attachments come from female burials (A-10-14; A-10-51; A-22; A-38). The majority of burials, however, cannot be sex-determined according to Strömberg’s methodology. As Houby-Nielsen (1995, 140-141) points out, it is not often possible to identify the sex of the deceased by recognising the expressed gender role of the burial context.

We have even less information about age. All we can say is that at Argos child burials are very uncommon down to 725 BCE, when they suddenly multiply, rising from 12% to 43% (Morris [1.] 1992, 79). Morris (1987, 57-109, 182-185, 218-221) argues that the rise in child burials was to some extent brought about by changes in the way children were buried (see also Houby-Nielsen 1995, 132ff.). His explanation is that for two centuries the Argives preferred to bury their children with only modest rituals, which left behind few traces in the archaeological record. Then around 725 BCE, they chose to dispose of their children’s bones in a new way, by burying them in pots.

III.2.4. SUMMARY

Burials are difficult to interpret, but placing them in their archaeological contexts can provide a revealing account of social structure and how it changed through time. The forms chosen for display and disposal seem to relate to other aspects of society. Foley has tried to see in the different grave types at Argos differences between ethnic groups. Although most of her ideas can be refuted, they help raise interesting questions about mortuary practices at Argos.

There were rapid shifts towards the group ethos in eighth century Argos, which may have influenced modes of disposal and display. The succeeding period was one of intense social conflict, and the patterns blur. I have offered some suggestions to explain the changes in burial after 700, but these need not be definitive explanations. Unlike Foley’s theories, however, the ideas presented here can also be applied to the sixth and early fifth century burials.
What I have tried to do is to give explanations for certain actions in the context of burial. These actions were only part of the funeral ritual, and may not even have been the most important part. For instance I offered no discussion of the funerary procession or the laying out of the corpse, because we have no direct evidence for such rituals. Although we do have evidence for ritual dining in connection with graves, this comes primarily from tomb cults, which is another subject altogether (cf. three early structures from Asine, related to a cult of the ancestors, Hägg 1983b, 189-193; Mazarakis-Ainian 1999, 9-36).
The type of analysis that prioritises patterning of material culture 'is likely to be more particularistic', yet some general hypotheses may still be generated from such interpretations of past human activities (Hodder 1982a, 215). On a symbolic level, we find 'structural oppositions' such as literate/illiterate, urban/rural, profane/sacred, elite/peasant, men/women, youth/adulthood, and life/death. These symbolic principles are detectable in most societies, although they are accentuated differently in every society (Hodder 1982a, 215).

Interpretation of the nature of these structural oppositions in the archaic Argolid is by no means straightforward. For example, what did it mean then to be a literate as opposed to an illiterate individual? In western society, where literacy is usually taken for granted, being illiterate puts one at a disadvantage (i.e. not being able to deal with regular business transactions, etc.), but being literate offers no great privileges either. Obviously, in a primarily oral society illiterate individuals were in the majority and consequently illiteracy was not considered an impediment. Literacy was restricted to only a few social areas (scribes, artists, and a select group of citizens) and literate individuals did have an advantage over illiterates, in that they were often in high-ranking positions. This is why some members of Greek poleis took measures to ensure that scribes did not abuse their positions. So the gap between literate and illiterate was wide, but not impossible to breach. Unlike today, however, there seems to have been an interest in controlling the written word rather than in teaching it to the population at large.

Another structural opposition present in every society is the distinction between urban and rural. For us, an urban life requires no immediate contact with the countryside, since we live in a market economy where the basic necessities are at our instant disposal. The
modern farmer has much more in common with the ancient Greeks than with the urban folk of today. I stress ‘ancient Greeks’ rather than ‘ancient Greek farmers’, because in the archaic period most individuals were tied directly to the land, mainly via arable farming and animal husbandry, even if they lived in an urban environment.

With respect to the supernatural world, however, the opposite is true. In ancient Greek society the sacred and the profane were on two different planes; their boundaries were clearly marked, both physically and ritually. Rituals were performed according to explicit and communally recognised rules of behaviour, which helped to legitimate social control and to make contradictions acceptable. The right of participation in some rituals was rigidly defined on the basis of status, gender, or age.

This brings us to consider differences between elite and peasants, men and women, and youths and adults. These divisions are not as easy to discern from the preserved record as we would want them to be, but the study of human activities and behaviour does point a way forward. We can presume that the elite were probably better equipped to acquire writing skills than the underprivileged. Wealthy individuals were also in a better position to exploit the natural environment with little effort, since they could afford to leave the work on their landholdings to others while they enjoyed a leisurely social life in town. In terms of their relationship with the divinities, they could also gain respect in their communities by offering gifts and sacrifices and by organising select gatherings of male citizens. Women too may have held temporary power in religious settings, but this role was probably in direct contrast to their real power in society. There was no escaping the fate of marriage for young girls. In fact, they were specially prepared for this role through various rites of passage. In order to become full members of society, boys too had to go through a period of transition marked by rituals.

The last rite of passage in every society is the transition from life to death. The rituals associated with burials and funerals, however, are particular to each society. How Argolic families chose to bury their dead may be one indication of the changes in social structure and other cultural transformations of the eighth to fifth centuries. Different status groups expressed themselves through different mortuary practices and displays; the type of grave, the burial gifts, and the position of the corpse are informative here. In general, the more egalitarian the society, the more uniform the burial contexts.
What I hope to have shown in this study of the patterning of material culture in the archaic Argolid is that the symbolic systems that can be discerned are a part of, even if concomitantly a summation of, normal human activity in social context. Although the limited archaeological evidence tends only to direct us towards assumptions that cannot be scrupulously tested, the remarkable merit of this type of approach to the history of societies is that, unlike literary accounts, everybody helped to create them everywhere—young and old, rich and poor, men and women, literate and illiterate, citizen and foreigner, free and unfree, in town and country, in life and death.
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The ancient historians gave us delightful fiction in the form of fact; ...
Oscar Wilde, The Decay of Lying

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