

Chapter One

Greek Environment and Prehistory

GREEK ENVIRONMENT AND PREHISTORY

Greece in prehistory lay on the peripheries of the wider Mediterranean world, and it was slow to enter fully into that world. Formed by the Pindus mountain range, which extends from the European continent toward the southeast until it is submerged in the Aegean Sea, Greece has a jagged coastline, making access to the sea difficult in some places. The land was broken by mountains, and many of the plains are so small that they can support only a single settlement. Even where land exists, much of it is rocky and poor. Rivers are small and usually dry up in the summer, making agriculture dependent upon rainfall and offering no prospects for the large-scale irrigation projects made possible by the annual flooding of the rivers of the Fertile Crescent. No large, unified state that commanded large numbers of workers could arise under these conditions. But 72 percent of Greek land is within 25 miles of the sea, and access to the sea was a crucial element from the earliest period of Greek history.

Out of Africa

Africa is widely considered to have been the original homeland of humans or their hominin ancestors. This has been supported most recently by a theory of the development of human languages, in which language in the original place of origin was marked by high phonemic diversity and decreased with increasing distance from the point of origin. Human languages do display such a pattern of decreasing diversity in accordance with their distance from Africa, which is thus suggested to have been their origin.¹

The traditional view is that over the course of millennia people wandered out from Africa, following a land route along the Levantine Corridor and eventually reaching the area of the upper Tigris and Euphrates Rivers (the “Hilly Flanks”) in which rain-fed cultivation was possible.

WEBSITE 1.1

The Origins of Farming in South-West Asia

Study this website by Andrew Sherratt (2005). Especially note Map 4 for the Levantine Corridor and the Hilly Flank (“The Origins of Farming in South-West Asia,” *ArchAtlas*, February 2010, Edition 4.)

<http://www.archatlas.org/OriginsFarming/Farming.php>

Other possible routes for the trek out of Africa have recently been suggested. In one such scenario, it is argued that early hominins visited Crete at least 130,000 years ago, traveling from Africa by sea. An African origin is also supported archaeologically by the recent discovery of large numbers of stone tools from the Lower Palaeolithic and the Mesolithic that have been found in the Preveli Gorge in southern Crete—hand axes, cleavers, and scrapers.² There is, however, no evidence for continuity of occupation from such early visits to the occupation and settlement by modern humans.

Another possible route out of Africa, which passed by way of Arabia, has also recently been suggested as a result of the discovery of artifacts in the United Arab Emirates that date back 100,000 years, as well as evidence that the climate in that period was wetter and thus more conducive to human occupation than today’s conditions. Thus archaeologists have suggested that humans arrived on the Arabian peninsula directly from Africa rather than by way of the Nile Valley or the Near East.³ Again, however, there is no evidence as yet for continuity of occupation into historic times.

The Origins of Farming (the Pre-Pottery Neolithic A, PPNA)

It seems probable that a number of different routes out of Africa were discovered and used over time, but that the one most frequently used was the land route along the Levantine Corridor, which led eventually to the hilly flanks of the upper Tigris and Euphrates, an area in which there was sufficient rainfall to support cultivation.

As they traveled, these early explorers came to recognize useful plants and learn ways to encourage their growth. In some cases this early cultivation enabled them to remain in the same spot, or to return to favored spots seasonally, and eventually to create villages.⁴ The Levant thus offered especially suitable conditions for the development of a true Neolithic lifestyle— combining hunting/gathering with purposeful cultivation and eventually permanent settlement. These people did not yet make pottery, but probably used baskets, animal skins, and wooden bowls as containers; thus this early Neolithic period is known as the Pre-pottery Neolithic A (PPNA).⁵ The next period, PPNB, is marked by increased dependence on animals, developments in the use of houses, and the use of pottery.⁶

Obsidian. **Obsidian**, a vital resource for both craftwork and cultural interactions, was found in abundance in the northern parts of this area. A black volcanic glass that takes a very sharp edge, obsidian was the best material known for the production of cutting tools in the Neolithic; even today it remains the sharpest cutting edge known and has been used in

heart and cosmetic surgery.⁷ Another property of obsidian that is of great value to historians is that its sources can be identified with great precision,⁸ and thus its travels in exchange or trade can be accurately traced.

One of the earliest exploited and most important sources of obsidian in the Mediterranean lay inland in eastern Anatolia, where a number of volcanoes are centered in two general areas: Cappadocia, and the vicinity of Lake Van. The travels of Anatolian obsidian provide important evidence for trade networks and cultural contacts by land on trails that eventually crossed the sea. Even in the Upper Palaeolithic, small amounts of Anatolian obsidian traveled substantial distances—from Van some 400 km to Shanidar Cave in the foothills of the Zagros Mountains of Kurdistan in Iraq, and from Cappadocia some 350 km to Antalya on the southwest Anatolian coast. In the Mesolithic, Anatolian obsidian traveled even farther, providing information about exchange routes. Small amounts reached as far south as Jericho in the eighth millennium B.C. (PPNA). By the seventh millennium the pace of obsidian transport had stepped up dramatically. Large amounts were found at the Turkish site of Çatal Höyük (6300–5500 B.C.), where the excavators suggest its working was a specialization (see below).

WEBSITE 1.2

Obsidian Trade in the Near East, 14,000–6500 B.C.

Study this website by Andrew Sherratt (2005). See especially Maps 1–6. (“Obsidian Trade in the Near East, 14,000 to 6500 B.C.” *ArchAtlas*, February 2010, Edition 4.)

<http://www.archatlas.org/ObsidianRoutes/ObsidianRoutes.php>

As Sherratt’s maps show, the route along which obsidian moved crossed the Hilly Flanks of northern Mesopotamia where plant cultivation was first developed,⁹ and the two activities—obsidian working and farming—seem to have developed in a mutually reinforcing manner, leading to the increase in both settlements and trade. Along with the obsidian, other small items were carried, such as seashells (used for ornamental purposes) and other decorative stones, and local fruits and nuts, and—most importantly—information.

Early Island Visitations. While obsidian traders moved along these routes in the east, other Mesolithic adventurers were striking out by sea, leaving evidence of their occupation of caves and rock shelters along coastlines and on islands. The possibility of early hominin visits to Crete at least 130,000 years ago was discussed above. Later evidence shows that such explorations continued sporadically. But it was in Cyprus, in about 10,500 B.C., that the first well-attested human visit to a previously unoccupied large Mediterranean island by seafaring occurred.

At that time hunters seeking easily-caught pygmy hippos visited the rock shelter at Aetokremnos, on the southern coast of Cyprus.¹⁰ A search for obsidian was not in question, since the island possessed no obsidian sources. A typical hunter/gatherer band consisted of

some 25–50 individuals, and they probably stayed for only short periods of time, since the distance from the mainland was too great for commuting; however, no signs of a campsite have been found at Aetokremnos. The island is, however, visible under optimum conditions from both the Anatolian and Levantine coasts, and surely had attracted the attention of adventurous fishermen, some of whom may have made it there and back to report the presence of the pigmy hippos.

The home base of the hunters is not known, but it was almost certainly on the facing coastal areas of southeast Turkey or the Levant. The stone tools at the site have some similarities to materials in both southern Turkey and the Levant, but they were a selective assemblage and probably reflected a specialized adaptation to local conditions.¹¹ Simmons favored a Levantine origin for the settlers for a number of reasons, including the location of the site on the south coast of the island, and the presence of imported fallow deer that were similar to fallow deer from Syria/Lebanon (“Persian” deer), rather than to Anatolian types.¹²

The site of Aetokremnos was utilized for a few hundred years at most.¹³ In the end, Simmons argues, the hunters drove the hippopotami into extinction,¹⁴ and there is no evidence that any hunters remained on the island. However, as often occurs in Cypriot archaeology, subsequent finds have begun to fill an apparent gap in island habitation, suggesting, if not permanent occupation, at least continued and even routine contacts with the mainland.¹⁵

Thus Mesolithic remains have recently been discovered at two other campsites on Cyprus—Nissis Beach (Ayía Napa) and Aspros—dating sometime between 10,000 and 9,000 B.C. These help to fill the gap between Aetokremnos and the first Neolithic settlements, and provide additional evidence of Mesolithic seafaring and mobility. These campsites were probably occupied seasonally and only for short periods, as the rocky territory is not suitable for long-term occupation. Because of the sea incursion that occurred at the end of the last Ice Age, at least 20 more such sites are thought to have been submerged, their under-water remains awaiting discovery.¹⁶

Other early travelers who crossed the sea are also known from their use of coastal rock shelters and caves. One such site is the cave at Öküzini in southwestern Anatolia, which provides evidence for prolonged occupation by a well-established group at a site near the coast that was probably reached by sea.¹⁷

Cave Occupation in Greece. In Greece, two noteworthy caves occupied in the Palaeolithic/Neolithic are the cave of Theopetra in Thessaly, and the Franchthi Cave, in the northeastern Peloponnesus near the Argolid Gulf. Theopetra is exceptional in being located, unlike the other occupied caves, in an inland location, three kilometers from Meteora and behind the village of Kalambaka. Occupation in the cave bridged the transition from Neanderthals to modern humans, as well as the Neolithic transition from hunting and gathering to agriculture. It also contains the first evidence of a human-built structure (a wall partially closing the entrance, probably built to offer shelter from the weather).¹⁸

The Franchthi Cave is perhaps the best known cave with evidence of prehistoric occupation in Greece. It is located in the northeastern Peloponnesus near the Argolid Gulf on the edge of a well-watered coastal plain. Evidence for human settlement at the cave goes back to at least the nineteenth millennium B.C., the Upper Palaeolithic. The first occupants of the cave had probably arrived by sea, as did later arrivals.¹⁹ They were probably small groups of hunters, numbering no more than 25 to 30, who visited the cave on a seasonal

WEBSITE 1.3

Photograph of the Theopetra Cave

<http://www.flickr.com/photos/alexmitrakoulis/4018531459/>

WEBSITE 1.4

Pictures of the Franchthi Cave

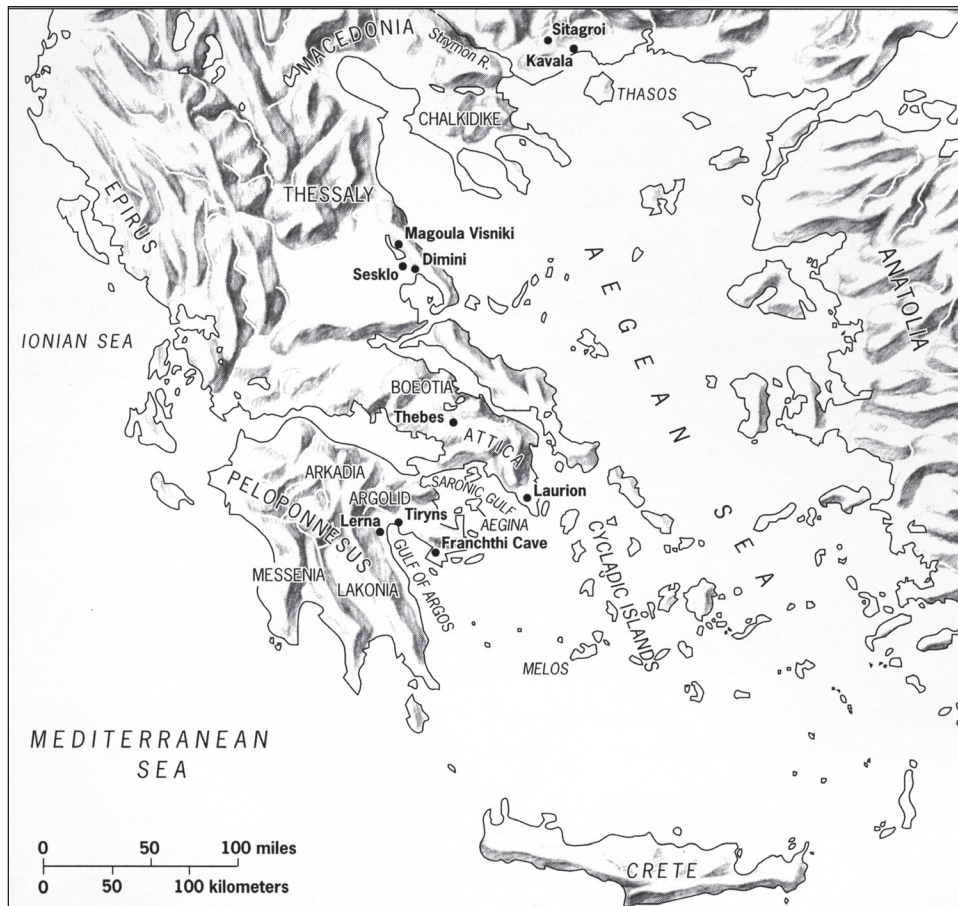
http://www.dartmouth.edu/~prehistory/aegean/?page_id=118

basis. From around 15,000 B.C. the cave was abandoned for a few thousand years, but from the twelfth through the eighth millennia it again sheltered small bands of hunter-gatherers. These people had begun to exploit the sea by fishing, and it is possible that they remained in the cave year-round.

The people at Franchthi possessed obsidian in small amounts and were on the fringes of an obsidian network that operated from the Aegean island of Melos.²⁰ Since Melos had never been attached to the mainland during the Holocene, the obsidian must have been brought by sea. According to Catherine Perlès, a specialist on the Franchthi Cave and obsidian, the quantities found were too small—at most 1 one percent of the total lithic material—to have been the result of regular maritime expeditions to Melos by the occupants of the cave, and she suggested that the obsidian was acquired very sporadically through exchange routes.²¹ Later, in the Upper Mesolithic, the amounts of obsidian increased 30-fold, although they were relatively still quite small: obsidian made up only 3.15 percent of the total lithic material. By that time, the material was imported in unworked blocks and worked on the site.

Perlès believes that the acquisition, working, and distribution of Melian obsidian was not carried out by individual users who traveled to acquire their own supplies, or came upon it as a side benefit during fishing trips, but that it was purposely collected and distributed by specialists.²² She suggests that specialized seafaring groups pre-formed the obsidian into cores on Melos for transport, and also acted as itinerant “middlemen,” moving from village to village, knapping the obsidian as required. The amounts found at Franchthi Cave seem to preclude any great activity on the part of the inhabitants of the cave in this “industry” of acquisition, transport, and production.

Speculation on the type of craft used for this sea travel has led to the hypothesis of papyrus vessels propelled by oars. In 1988, a group of archaeologists and students used a reproduction of a double-prowed papyrus vessel propelled by oars on a test voyage from Laurion in mainland Greece to Melos,²³ a route perhaps similar to that taken by the carriers of the Franchthi obsidian, had they gone part of the way overland. The modern trip involved a full-time crew of seven men and women, with three part-time paddlers, and required seven days (not counting delays caused by adverse weather). Reed boats were in used in Corfu in the 1960s,²⁴ and papyrus or reed boats are still used in Sardinia at the regatta festival of fishermen held annually in August (“Is Fassonis”) at Santa Giusta, in the vicinity of Mt. Arci, the principal Sardinian obsidian source.²⁵



Map 1 Neolithic and Early Bronze Age Greece

The missing element in this picture—people who do seem to have been involved in the acquisition, transport, and distribution of obsidian—may be provided by the recently excavated Mesolithic island site of Maroulas on Kythnos, whose occupation is contemporary with that of Franchthi Cave.²⁶ Obsidian from Melos has been found at Maroulas in large quantities, amounting to 16.87 percent of the total lithic assemblage (as compared with 3.15 percent at Franchthi). Cores were found, indicating that obsidian was worked on the site, although, according to the excavators, the large proportion of obsidian tools (36.36 percent) may mean that some were imported as finished products.²⁷ The occurrence of obsidian at Maroulas adds substantially to the evidence of the Franchthi cave for Aegean seafaring in the Mesolithic, and it also suggests a possible explanation for the small amounts of obsidian found at Franchthi: that site lay near the end of an obsidian transport route that ultimately led to the Argolid—Melos, Kimolos, Siphnos, Seriphos, Kythnos, Keos, Attica, Argolid.

Although Saliagos, which lay 500 meters off the coast of Antiparos, is another island that has evidence for obsidian collection and distribution,²⁸ Maroulas is the only Aegean

island site to have provided evidence of occupation in the Mesolithic in the form of dwelling remains and burials.²⁹ Three circular flagstone floors more than three meters in diameter and bordered with small and large stones have been found, as well as three less-well preserved flagstone constructions in irregular ellipsoid form. Under the surface of one of the circular floors, an adult burial was discovered under a large slab. Another burial was that of a child buried with the bone of a dog. In all, nine burials were found, most were only partly preserved; other burials appear to have been destroyed by sea erosion. The burial customs (burials under the floors of houses and burials associated with dogs), and the use of circular dwellings, have parallels in the Natufian culture of Syria and Palestine, dated 12,500–10,200 B.P.,³⁰ and thus in the same timeframe as the early finds of obsidian at Franchthi Cave.³¹ People, presumably families, were living on Maroulas for at least part of the year, although they may have incorporated their stays into a seasonal travel pattern in order to maximize their resources.

The Development of Metallurgy

Another world-changing discovery, the earliest metallurgy in the form of the cold working and annealing of native copper, occurred in eastern Anatolia in the eleventh through the ninth millennium B.C.,³² at the Anatolian sites of Çayönü Tepesi in eastern Anatolia,³³ and Aşıklı in Central Anatolia, whose economy was still based on hunting.³⁴ Metallurgy probably developed almost by accident, as a result of the use of attractive green copper ores (malachite) and bits of pure native copper for jewelry and pigment. The potential of native copper was limited, however, since it could not be drilled to form beads. Later it was discovered that copper could be pounded into thin sheets and these could be rolled to form beads. Excessive working made the copper brittle, but applying fire to the pounded copper (annealing) returned its flexibility, making it possible to form it into rings and bracelets, and also useful objects such as hooks and awls. Meanwhile, malachite, which unlike native copper could be drilled, was also used to make beads. For a long time there was no recognition that malachite was a form of copper that could be transformed by fire. Smelting was perhaps discovered when malachite was accidentally dropped into the fire, revealing that it changed into copper.

The uses of copper were limited, however, because of its relative softness. It was only by mixing it with other metals (alloying) that a material was produced—bronze—that could be used to make effective tools and weapons. The earliest alloy to be used was arsenic, perhaps accidentally, since it often occurs naturally with native copper. This yielded a harder and more useful material, arsenical bronze, but its production was dangerous. The arsenic gave off toxic fumes when heated, attacking the eyes, lungs and skin, and leading to peripheral neuropathy, which can cause weakness in the legs and feet.³⁵ Perhaps it is not surprising that the Greek god of metal-working, Hephaestus, was lame! These effects were tolerated, however, perhaps because they were not immediate and the true danger was not understood, or because the risk was considered to be justified because of its benefits, just as our society tolerates the risks of coal mining and nuclear energy production. Tin is a safer and more successful alloy, but it was not locally available in these early metallurgical sites.

A contributing factor to the acceptance of the metallurgist, and to his elevated status, may well have been the transformative effect of metallurgy: the striking show that the smith put on as he worked, and the new possibilities of the products of his work, made him

seem to be almost a magician and set both him and his new material apart.³⁶ A number of scholars see the development of metallurgy as the primary cause of the development of stratified and organized communities (urbanization), as can be seen in many of the sites of early metallurgy in this upper Mesopotamian area which show signs of significant urban development.³⁷

The Problems of Settlement Life in the Neolithic. The shift from hunting and gathering to settled agriculture may seem to have been a beneficial one. It provided for the storage of food, and thus made life a little more secure in fluctuating growing conditions. The number of children that were raised probably increased once it was no longer necessary for women to restrict themselves to raising the one small child at a time that they could carry on gathering trips.³⁸ Thus birth rates and population increased. But the introduction of agriculture would not necessarily have improved health conditions, for the Neolithic diet was less varied than that of hunters and gatherers. People also lived close together and shared their living quarters with their domestic animals, and had not devised safe ways to dispose of waste. Thus they were more subject to the spread of disease. One invention was very helpful, however, and it was widely used: the production and use of lime plaster. Lime plaster, which has sanitizing properties, was used to produce a sort of proto-pottery, known as **White Ware**, which was watertight and, with its disinfect properties, was useful for keeping food, although it could not be used over a fire. It was also used for coating house floors and walls, providing a background for vivid portrayals of hunting scenes that were probably intended to magically influence the hunt.

The largest and most accessible PPNB settlement for the modern visitor is Çatalhöyük in central Anatolia, a farming settlement that was also involved in the procurement of obsidian. Established in the Late Pre-pottery Neolithic (7500–7000 cal B.C.),³⁹ its mud-brick houses were agglomerated, with only a few centimeters separating one house from the next. There were no streets, and access to the houses was through holes in the roof, which also served as chimneys. No evidence of windows has been found. While this building style offered protection from the extremes of the steppe environment, with its cold and windy winters and hot summers, living in such poorly ventilated rooms with wood cooking fires was very unhealthful. This is evidenced by the sooty black deposits that were found on the inner surfaces of the upper rib cage of many of the older individuals. Mortality in the first two years of life was unusually high—about half of these children died. Not surprisingly, many showed signs of rickets, the result of a lack of exposure to sunshine. The inhabitants of these houses were also subject to diseases brought on by living in close association with animals, and by the lack of any sort of sanitary provisions—small areas sporadically located among the adjoined houses were used for rubbish disposal, the keeping of small animals, and as toilets. There is, however, no evidence for infanticide, and, in fact, there is some evidence for attempts at medical treatment of adults. Some of the bones were stained by cinnabar (mercuric sulphide), a bright red pigment widely used for ailments in the Middle East. Such homeopathic medicine is even practiced by some in the west today;⁴⁰ it does not seem to have been very successful at Çatalhöyük.⁴¹

Cultivation was only at an early stage, and people relied on a combination of gathering wild plants and cultivating wheat and barley. There is no evidence that grain was ground for bread. That they were heavily dependent on hunting is suggested by the wall paintings in the houses. Almost every house bears large, sometimes three-dimensional wall paint-

ings, painted on the lime-plastered walls. These include the portrayal of skulls of aurochs (wild bulls) on the walls of many houses, molded in high relief and painted, or made by covering actual skulls with clay. Other paintings depict huge aurochs being attacked by hoards of tiny human hunters. Leopards also appear. But it was not hunting and the early stages of agriculture that brought wealth to the settlement. A wall painting in one of the houses provides a clue to the success of the settlement. It portrays the terraced houses of the city with the obsidian-producing volcano erupting in the background. The finest Anatolian obsidian was easily found at the base of Hasan Dag, and Çatalhöyük was an ideal trading site for the material, which made its way south as far as Jericho, a city perhaps a thousand years older than Çatalhöyük.

The most controversial of the wall decorations are large splayed figures, headless, some of which appear to be pregnant or even in the process of giving birth. In Cauvin's interpretation, the bull is the male fertility figure, while the headless figures are women giving birth (the "Goddess").⁴² The recent discovery of a small stamp seal in the shape of a bear (with head), probably used for decorating cloth or leather, however, now brings this interpreta-



Figure 1.1 Clay stamp of a bear from Çatalhöyük.

Photo: Courtesy of the Çatalhöyük Research Project, University College London Institute of Archaeology.



Figure 1.2 Clay stamp of a bear/woman: woman as death/life from Çatalhöyük.

Photo: Courtesy of the Çatalhöyük Research Project, University College London Institute of Archaeology.

tion into question—the figures are not women at all, but bears. Another find greatly complicates the interpretation of the role assigned to women in the ideology of the culture. The small figurine looks from the front like the “typical” Near Eastern pregnant “Mother Goddess figure,” but from the back it portrays a figure of skin and bones or a skeleton, raising the question of the interpretation of the numerous representations of pregnant women—are they intended to be seen as a woman giving birth to new life, or “as a woman turning into an ancestor, as a woman associated with death, or as death and life conjoined?”⁴³

The Eastern Obsidian Network

The travels of obsidian created a widespread interaction zone, and a pan-regional culture developed, linking sites from southeastern Anatolia, the uplands of the Tigris and the Euphrates, the Levantine Corridor (the passage from the northern Negev through the Jordan Rift Valley to southern Anatolia), reaching Cyprus and extending as far south as the Sinai.⁴⁴ This sphere goes by various names, including the “*aire culturelle*,”⁴⁵ but is perhaps most widely known to English speakers as the “**Levantine Interaction Sphere**.”⁴⁶

Obsidian Networks in the West

In addition to the sources of obsidian in Anatolia and the Aegean (Melos), other rich sources of obsidian lay in the west central Mediterranean. Perhaps the best known of these was on the string of volcanic islands, the Aeolian islands, most notably, Lipari. Lying off the northeast coast of Sicily near the dangerous strait of Messina at the toe of Italy, the Aeolian islands feature in Homer’s *Odyssey* as the home of Aeolus, King of the Winds, and the sailor-snatching monsters, Scylla and Charybdis. At about the same time that people from the Franchthi Cave first acquired obsidian from Melos, people seeking obsidian visited (but did not settle) these islands, especially Lipari, perhaps attracted by the fiery displays of its volcano. Obsidian could easily have been picked up on the shore, and there is evidence that reduction into pre-cores occurred on the island long before any settlement took place.⁴⁷ The earliest evidence for its distribution comes from the island of Capri in the Tyrrhenian Sea, where finds of Liparian obsidian have been made in a local sanctuary from the Middle Neolithic (end of fifth and early fourth millennium). These finds are especially significant since they suggest that early exchange may have taken the form, not so much of “trade,” as of “dedications” by visitors to holy sites.

Settlement began on the Aeolian Islands only at the end of the fifth millennium when people from Sicily established themselves on Lipari, and later on Salina.⁴⁸ Both sites have provided strong evidence for the working of obsidian, which is likely to have been the motivation for their establishment. The large amounts of obsidian found in all the Aeolian settlements assure that the local population directly controlled the operations of extracting and working the obsidian, which was widely distributed, carried regularly to the Italian coast by sea reaching southern France, perhaps by way of Corsica, and carried to northern Italy and Croatia.⁴⁹

The other important central Mediterranean obsidian site was that of Monte Arci on Sardinia. The high quality of this obsidian had probably attracted settlers to the island by the sixth millennium. From there it was widely distributed, reaching Corsica, central and northern Italy, and southern France.⁵⁰

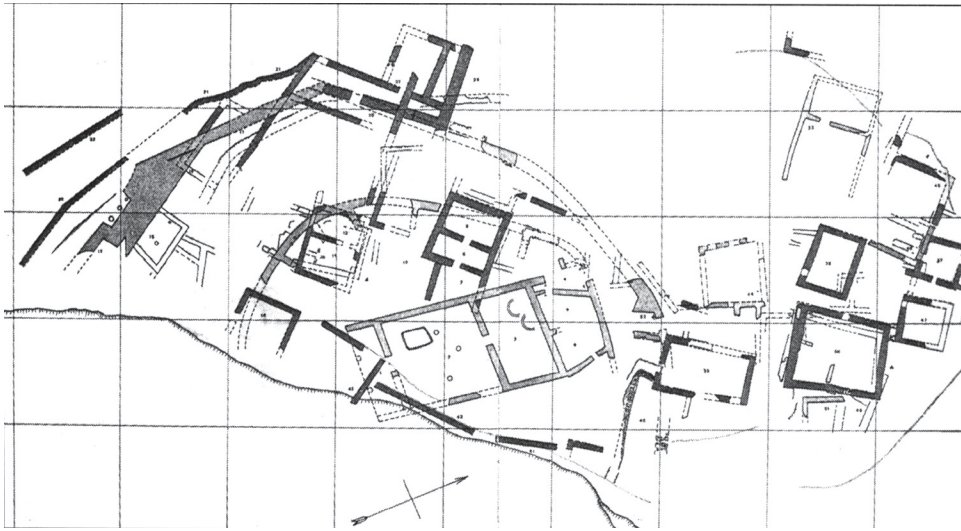


Figure 1.3 Site Plan of Sesklo

Theocharis, Demetrios R. 1973. *Neolithic Greece*. Athens: National Bank of Greece. Figure 177.

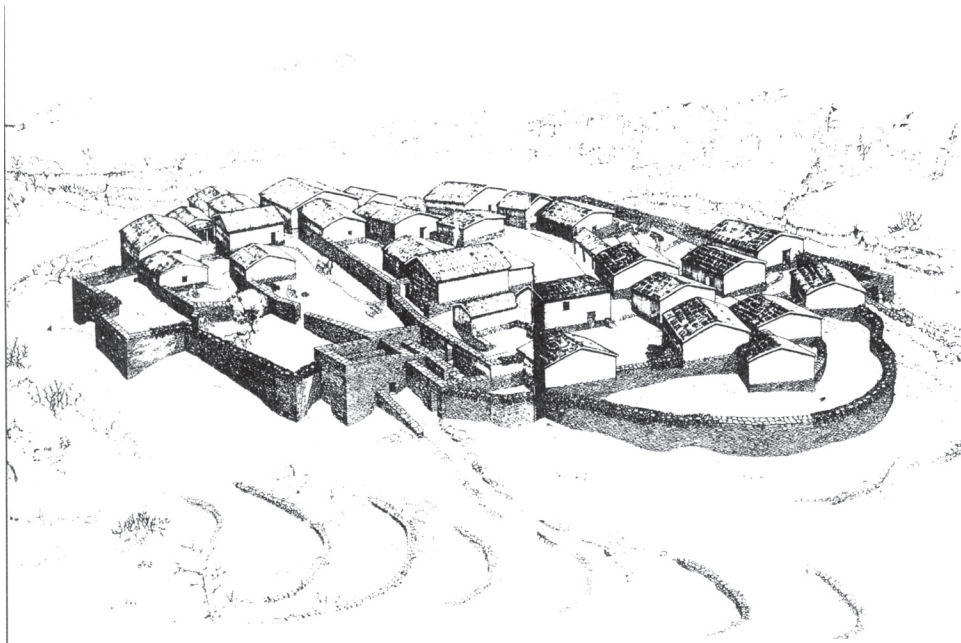


Figure 1.4 Reconstruction of Sesklo

Theocharis, Demetrios R. 1973. *Neolithic Greece*. Athens: National Bank of Greece. Figure 178.

SESKLO, THE BEGINNING OF THE NEOLITHIC DISPERSAL FROM THE EAST

In Greece, which had a sparse Mesolithic population, new settlements were made in the late eighth and seventh millennia by people arriving by boat following various island-hopping routes from Anatolia.⁵¹ The earliest known sites were at Knossos, Kynthos, the Franchthi Cave, and five sites in Thessaly, of which the best known is Sesklo in Thessaly,⁵² whose first Neolithic occupation is dated to the second half of the seventh millennium. These people brought with them the animals and plants necessary for a Neolithic diet; they did not yet make pottery, although they used clay to make figurines—thus the existence of a “pre-pottery Neolithic” is disputed by some.

Despite the discovery of pits on the site, which led to early suggestions that the first inhabitants lived a subterranean life, the pits do not seem large enough to have served as housing. They were more likely to have resulted from digging for clay, which was used to build wattle and daub houses—the most likely form of early housing. By the Middle Neolithic (5800–5300 B.C.), the inhabitants lived in timber-post framed houses and they created house models that show the vital elements of a Middle Neolithic house: the stone foundation and mud-brick walls.⁵³ In the Late Neolithic, roofless models were made that show the interior of the house and its furnishings: the hearth, and the bench or bed; ovens; tables; roof beams with painted relief or incised designs. One model even contains miniature figures of the eight members of the family: parents, grandparents, and four children. These models were placed close to the hearth or the central post of the roof, or under the floor, and are considered to be foundations offerings and supplications for the protection of the household.

Other clay products of the workers of Sesklo consisted of small figurines of humans and animals, which continued a tradition from the Early Neolithic. Similar prehistoric figurines, which often represent a female, sometimes obese or with sexual features emphasized, have been found over a wide geographical area from western Europe to Russia, and over a time span that extends from Palaeolithic (ca. 25,000 B.C.E.) to the Bronze Age (ca. 2000 B.C.E.). Some scholars believe that these figurines reveal the worship of a “Great Mother-Goddess.”⁵⁴ Others argue that the evidence does not support this, and that those who make such claims focus too much on the female figures while ignoring other figures found in the same contexts, which included males, figures without sexual characteristics, and animals. They also overlook the wide variations in the female figures. Modern ethnographic studies of tribal peoples suggest that such figurines could have been put to a variety of uses, not all of which were religious. They could have been used as dolls, as teaching devices in initiation ceremonies or before childbirth, in sympathetic magic rituals aimed at inducing pregnancy, as characters in mythological accounts, or in sorcery and black magic.⁵⁵ The fact is that we simply don’t know how the early peoples used such figurines.

Aside from the house models and these ambiguous figurines, there is little to suggest the religious beliefs of the Neolithic period in Greece. Evidence for cult places, the performance of rituals, or sacrifice is lacking. Nonetheless, we may assume that these people “shared the belief common not only to the religions of the Near Eastern societies but to those of all recorded farming cultures, that there exist supernatural powers that can control the weather, the productivity of the soil and the fertility of living creatures, and that these powers need to be propitiated, if the natural processes are to continue.”⁵⁶



Figure 1.5 “Mother-Goddess” figurine (Volos Museum M168)

Courtesy of the Archaeological Museum of Volos.

The settlement eventually grew to cover some 25 to 30 acres, and may have had as many as 3000 to 4000 inhabitants. In a central location on a defensible hill—the **acropolis**—stood a prominent building with a courtyard. The plan of this building is of a type called a *megaron*: a rectangular building of two rooms having an entrance and porch on the short side. The degree of social differentiation, if any, indicated by this building is unclear. It may have been the meeting place of a group of leaders, but to characterize it as an administrative center seems to go too far. Nevertheless, its presence and the regularity and similar orientation of the houses suggest some degree of community organization.

Sesklo, by virtue of its size, organization, and evidence for craft specialization, now appears to have grown into a small town. Moreover, early interpretations of the walls that saw them simply as fences have been weakened by the finding of somewhat more imposing walls at a number of other sites of the Sesklo culture.⁵⁷ Supporting the view that the walls of Sesklo were defensive is the ultimate fate of the site: in about 4400 B.C. the village was burned and destroyed, and the site remained deserted for 500 years. A few other settlements of the Sesklo culture also show signs of destruction at about this same time, although others remained and underwent a gradual cultural transformation.

The developments of the Middle and Late Neolithic that are seen at the site of Sesklo were much more pronounced in that northern area than in the south, which was less fertile and drier, with greater regional fluctuations in rainfall. In these more difficult areas, settlement was sparse until the late fourth millennium. The people in the Franchthi Cave had few neighbors.

The Neolithic Dispersal Becomes the “Great Exodus”

Around 6000 the early and sporadic arrival of people from the east seen at Sesklo, Knossos, the Franchthi Cave, and a few other sites in Thessaly, was followed by larger scale population movements as people rapidly abandoned their homes and sought new ones, often in far-flung places. Jacques Cauvin called it the “Great Exodus.”⁵⁸ In this upheaval, the pre-pottery Neolithic period (PPNB) in the eastern Mediterranean came to an end in most places in the late seventh millennium with a widespread pattern of site abandonments and migrations, often toward coastal areas. As Cauvin remarked, it was a period of “house-moving fever.” One of the results was the arrival of the full-scale **Neolithic Revolution** at a number of locations in Greece, including the Franchthi Cave, as new people arrived, bringing the full “Neolithic package” of barley, emmer wheat, sheep, and goats. From that time the cave continued to be inhabited, at least on a seasonal basis, until 3,000 B.C.

Various explanations for the Great Exodus have been suggested—environmental deterioration, over-exploitation of the land, resistance to growing demands by the elite in an increasingly stratified society, or a conceptual change postulated by Cauvin, the “discovery of the gods.” On a more prosaic level, a climate change around 6400–6200, which is reflected in the ice cores and in pollen cores in Greece, Anatolia, and the Levant, it seems to offer a key clue.⁵⁹ The cause of this change, and of the great population movement, has recently been suggested as the abrupt drainage of Laurentide lakes in North America and the associated switch of the North Atlantic thermohaline circulation 8200 years ago, which brought markedly cold and arid conditions to the Levant, North Syria, Anatolia, Cyprus, Greece, and Bulgaria.⁶⁰ People were faced with the urgent need to move: “The farmers would be forced to migrate, essentially immediately and with few alternatives, if they wished to survive yet another year of crop failures and encroaching famine.”⁶¹ They moved in groups, bringing with them some of the basic elements of a Neolithic agrarian life: emmer and einkorn wheat, sheep, and goats. Hunting and fishing dropped off drastically with the dramatic shift to food production, and population probably increased, as suggested at the Franchthi Cave by the building of houses outside the cave.

Concurrent with the period of the Great Exodus came the widespread use of pottery, first attested in northern Syria ca. 7000 B.C., when a sophisticated variety appeared fully developed, called **Dark-Faced Burnished Ware**. It had a mineral tempering and was burnished and decorated in painted slip. The vessels, which were carefully made, appear only in small numbers and perhaps had a specific use, being reserved for special occasions or for special foods. The style spread across a wide band of territory from Central Anatolia into Upper Mesopotamia.⁶²

This carefully made burnished ware was soon followed by the production of large numbers of coarsely-made plant-tempered pots, apparently intended for daily use.

WEBSITE 1.5

Dark-Faced Burnished Ware

<http://www.brynmawr.edu/collections/nehinterns/amuq/Amuq%20B%20DFBW%20image.htm>

In the Neolithic migration westward, another type of pottery was produced, a specialized form of impressed ware, called **Cardial Ware**, made by imprinting the vessels with the scalloped shell of the *Cardium edulis*, a marine mollusk. Reflecting the maritime travels of its users⁶³ and widely found throughout the western Mediterranean, it is the distinguishing mark of the movement of Neolithic settlers.

WEBSITE 1.6

Some Examples of Cardial Ware

http://en.wikipedia.org/wiki/Cardium_Pottery

In mainland Greece, in the Sesklo culture, still another type of pottery was developed: cream-colored pots decorated with red geometric designs based on a zig-zag pattern, revealing their derivation from the designs of weaving. The high quality of the pottery attests to craft specialization and even some degree of community organization.

THE EARLY BRONZE AGE IN THE AEGEAN: GREECE

As discussed above, metallurgy developed in the east in the metal-bearing regions of eastern Anatolia as early as the late ninth millennium, with the working of native copper in the same area in which obsidian was found.⁶⁴ In Greece, however, the significant use of copper and the production of bronze were long delayed, although there were small deposits of copper in the Aegean. Sources existed at Laurion in Attica (later best known for its silver), the Aegean island of Kythnos, and Cyprus. Both the Laurion copper ores and those from Kythnos naturally contain arsenic, which increases its strength and suitability for casting; arsenic was also intentionally added to produce arsenical bronze, despite the dangers of the process (see above).⁶⁵ But Greece in the period called Early Helladic I or Early Bronze I was marked not by advances in metallurgy, but by a recession, with a decline in the number of known settlements and, most notably, by a lack of metal finds.

The sources of tin, which is not found in Greece, remain a matter of debate. There were small deposits in eastern Anatolia, but their use in the Early Bronze Age is a matter of dispute. Possibilities are Afghanistan (via Mesopotamia and Syria), the Balkans, Spain, or even Britain, with Afghanistan (or some area even further east) being the most likely.

Tin bronze was introduced into the Aegean during the period of Troy I and Troy II (ca. 3000–2250 B.C.), at Poliochni on the northern Aegean island of Lemnos in the form of copper from an undetermined source pre-alloyed with tin. The copper in the alloy was geologically far older than any known deposits in the Aegean, Balkans or Anatolia; possible sources are central Asia, north-west India, or perhaps Afghanistan, which has no known copper deposits old enough, but which is geologically complex, thus offering at least a possibility.⁶⁶ The tin bronze probably traveled to the northeast Aegean by way of the Anatolian Trade Network, a vast network that stretched from Troy eastward across Anatolia to Tarsus and on to the rich urbanized centers of lower Mesopotamia, and extended westward from Troy to the Aegean islands.

By Early Helladic II Early (2650–2450/2350 B.C.E.), however, there is evidence for some production of bronze in Greece and the Aegean. With its introduction, settlements increased in number and grew into towns, and some buildings can be called monumental. The cause of this change may be related to the overseas contacts needed to obtain tin for the production of bronze. If, as seems likely, the sources of tin were in Afghanistan and it was transported by way of Mesopotamia and Syria, the contacts with these more advanced cultures may have been a source of new ideas as well.⁶⁷

The House of Tiles at Lerna (Early Helladic II). The best known example of the achievements—and vicissitudes—of Early Helladic II Greece is the settlement at Lerna, a site on the Gulf of Argos about 10 km south of Argos.⁶⁸ While there is some evidence for occupation of the site of Lerna in Early Helladic I, it was only in Early Helladic II that the inhabitants leveled the ground and built substantial buildings and heavy walls surrounding the site. The walls contained compartments that served as living and storage rooms, and a tower, all rebuilt several times. Among the houses within the walls was a monumental building, **Building BG**. After the destruction of this building an even larger and more complex building was built, called the **House of Tiles** because of the unusual terracotta tiles used for its roof.

The House of Tiles measured 25 meters by 12 meters, and consisted of two large rooms and two smaller ones, with exterior corridors accessible from both the inside and outside and used for stairways to an upper floor. There appear to have been open balconies on the upper floor, and a light-well provided light for the interior rooms on the first floor. The interior walls were carefully plastered, and in the largest room the walls were decorated with rectangular panels. Stairs were fitted with clay treads, and doors were set in wooden jambs. The building was also used for storage, for a large number of seals used to seal stores were found, suggesting that the people of Lerna had taken the first steps in the development of writing. Red clay benches were set along the two long exterior walls of the building, providing shelter from sun and rain. The functions of display, storage, and public convenience are apparent, and the building perhaps paralleled the proto-palaces of Crete.

Houses of a similar plan, called the **Corridor House**, have been found at a number of different sites in mainland Greece, including Thebes in Boeotia and Kolonna on the island of Aegina.⁶⁹ Moreover, not far from Lerna, at Tiryns (a later Mycenaean palace site), the remains of a huge round building have been found, about 28 meters in diameter and more than 26 meters in height.⁷⁰ The foundation consisted of three thick concentric ring walls without connecting doors. If it was ever used as a palace, there must have been access to an upper floor by a ramp of some sort.

To call the Corridor Houses palaces is anachronistic, but they do seem to have been built to accommodate large numbers of people and to have provided for the differentiation of public and private space. Some scholars see these buildings as evidence for the development of a form of social organization called the **chiefdom**, in which power is concentrated in a single leader who effectively controls the community's resources.⁷¹

The building boom that accompanied the beginning of the Bronze Age in Greece soon faded, however. Before the House of Tiles was even completed it was destroyed by fire, along with the entire settlement, although the inhabitants apparently escaped. Intruders, who appear to have come from somewhere not far away,⁷² settled on the site, constructing

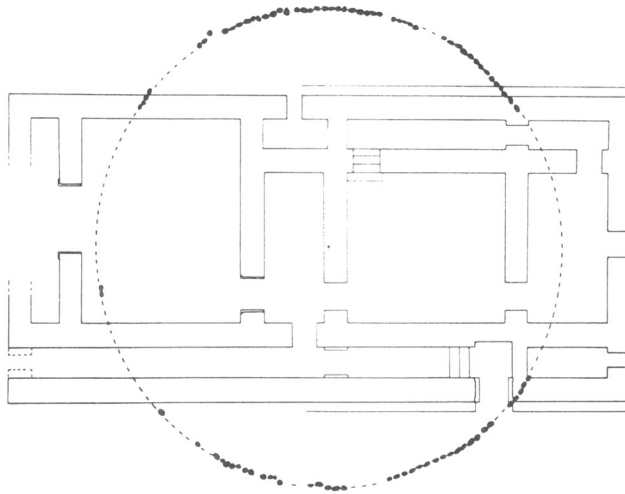


Figure 1.7 The House of Tiles at Lerna, site plan and view of main excavated area.
Courtesy of the American School of Classical Studies at Athens.

small irregular buildings of one or two rooms, some with apsidal (rounded) ends (Lerna IV). Their handmade pottery provides them with a name, the **Patterned Ware** people. The Patterned Ware people used no seals and had little foreign contact. They did not rebuild the House of Tiles; on the contrary, they heaped up a tumulus over four meters high over the remains of the building and marked off its perimeter with a circle of stones, leaving the area inviolate throughout their occupation of the site. Whether they treated the ruins in this way from fear, or piety, or from some other motivation, is a question that cannot be answered.

Similar destructions are archaeologically attested at about the same time in a number of other places, yet the once-popular hypothesis of a wide-scale incursion of new people (the introduction of Greek speakers into Greece?) is now generally rejected, since the destructions did not all occur at exactly the same time, and some of the Corridor Houses, such as those at Thebes and Kolonna, appear simply to have been abandoned, with no signs of fire, violent destruction, or special treatment, such as burial under mounds. Nevertheless, there was a decisive break in culture.

The period of three or four centuries that followed the destruction of the House of Tiles and the other monumental buildings of EH II (Early Helladic III–MH II), was characterized on the mainland by small buildings requiring little skill in construction and showing little evidence for specialized function. Metals were scarce, craft specialization existed at only a few sites, and there was a decline in contacts with the Cycladic islands and a complete break in contact with Crete. Life reverted to a simpler, subsistence level. Asine, a village on the coast of the Argolid, provides an example.⁷³ Asine had 300 to 500 inhabitants, no fortifications, no evidence of central authority, and no specialized workshops. Its people were less long-lived, shorter, and slighter than Middle Helladic Greeks as a whole. There were some variations in expenditure on burials, but nothing to indicate remarkable wealth. The people were, however, in contact with neighboring settlements and possessed some imports.

Kolonna on Aegina

There was, however, one remarkable exception to this bleak picture in the settlement of Kolonna on the island of Aegina, in the center of the Saronic Gulf.⁷⁴ Kolonna had a Corridor House in EH II (town III), called by the German archaeologists the *Weisses Haus*.⁷⁵ In the next phase of the settlement (town IV), however, the *Weisses Haus* lay in ruins and a smelting furnace was installed in it, suggesting a violent destruction. Unlike the depressed situation at Lerna, however, where the ruins of the House of Tiles were buried in a great tumulus, at Kolonna a well-planned settlement, EH III Kolonna (town V), was built after the destructions. It had impressive fortification walls, and its single-story, three-room houses were set side-by-side in groups between streets, indicative of planning and of a strong central authority. The walls of town III were destroyed by fire, but they were rebuilt in town VI in a stronger configuration, with two gates flanked by rectangular towers. In the succeeding level (town VII, EH I), hidden walkways and dog-leg gateways were added to the fortifications, and successive rebuildings continued to add to their sophistication. In MH II (town IX) the settlement expanded beyond the fortifications with a fortified suburb; when the suburb was attacked and destroyed at the end of town IX, the inner wall and wall

of the suburb were strengthened (town X, MH III). Such impressive fortifications were unique in the Aegean of this period.⁷⁶

Kolonna was a trading center, with numerous maritime contacts, attested by imports of Cycladic and Minoan pottery, as well as by imitations of Middle Minoan **Kamare Ware**, (c. 2100–1550 B.C.E.), an elite type of eggshell pottery closely associated with the Minoan palaces and possibly also with ritual practices.⁷⁷

But Kolonna itself was also a producer and exporter of its own speciality, **Gold Mica Ware**, a fine ware made of volcanic clay containing sparkling bits of gold-colored mica. Gold Mica was widely exported, reaching the islands, Attica, and the Argolid.⁷⁸ In fact, one of its importers was Asine, where 16 percent of the total sherds of MH III date and 86 percent of all imports were from Aegina. In late MH, Kolonna's pottery business flourished: new shapes and decorations were added, production increased, and distribution was expanded. The organized nature of Kolonna's pottery production is demonstrated by the development of a system of marking the pots before firing, which is thought to indicate the workshop or potter who made the vessel.⁷⁹ Later, during LH IIIA–IIIB, there was a cutback in production, perhaps because decorated Mycenaean pottery had taken over the market. Kolonna's pottery production was subsequently limited to cooking pots, but they continued to be highly desired for their resistance to high heat.

WEBSITE 1.7

Kamare Ware

This website portrays examples of Kamare Ware.

<http://www.google.com/search?q=KAMARES+WARE&hl=en&client=firefox-a&hs=CUY&rls=org.mozilla:en-US:official&prmd=ivns&tbn=isch&tbo=u&source=univ&sa=X&ei=GEfqTdOEB4Hz0gH-2s3LAQ&ved=0CBkQsAQ&biw=1197&bih=633>

Perhaps the most striking discovery at Kolonna was a rich grave of a male in his early to mid-twenties, who was buried in a **shaft grave** at the foot of the suburban fortification of town IX. The tomb was built outside the wall, but it was later incorporated into a bastion built up against the wall and accessible only from inside the fortifications. The burial contained a gold diadem, a bronze sword with a gold and ivory hilt, three bronze daggers, one with gold fittings, arrowheads of obsidian, boar's tusks from a helmet, and fine Minoan and Cycladic decorated pottery, including a Melian bowl.⁸⁰ This burial at a prominent location and incorporated into the town's fortifications, with its grave offerings of a golden diadem and a sword decorated with precious gold and ivory—signs of male power and authority—attests to the existence of clear social distinctions, and perhaps the beginnings of a concept of kingship. It is also important in demonstrating that the later rich graves in the famous Shaft Grave Circle at Mycenae (see Chapter 3) were not a sudden anomaly, but the product of a mainland tradition of long standing.

Thus in the Neolithic and early Bronze Age, the mainland of Greece developed gradually and with recurrent setbacks, from the Franchthi Cave through the village culture of Sesklo and into the beginning of a more complex society such as we see at Lerna. By the

Middle Helladic, while most of Greece was in a period of recession, as seen at Asine, the settlement of Kolonna on Aegina was an important center of pottery production and distribution that sent its specialized ware to the islands, Attica and the Argolid (including Asine). Moreover, its people lived in a well-fortified and planned city, with signs that suggest the elevation of the ruler to a special status.

Meanwhile, on the island of Crete development continued through the Neolithic and into the Bronze Age without the profound interruptions that occurred on much of the mainland. The island's location fostered contacts with the seafaring peoples of the Near East, who probably served as sources of tin and of bronze technology, as well as of ideas about ways to organize the production and distribution of this valuable new resource. By the end of the third millennium a complex, palace-centered, and literate civilization had developed on the island, the Minoan. This civilization had considerable effects on later Greek culture, as well as being important and interesting in itself, and it is to this that we turn next.

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MAP SITES

Sites: Sesklo, Lerna, Franchthi Cave, Theopetra Cave, Asine, Aegina/Kolonna, Çatalhöyük
Areas: Levant, Cyprus, Macedonia, Thessaly, Argolid, Peloponnesus, Aegean Sea, Anatolia, Crete

Islands: Melos, Lipari

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⁵²M. Wijnen (1982), *The Early Neolithic I Settlement at Sesklo: An Early Farming Community in Thessaly, Greece*. Leiden: Leiden University; http://www.unige.ch/lettres/archeo/introduction_seminaire/nelithique/wijnen.html (Accessed 06/2/11.); Also see J. Rutter's website: http://projectsx.dartmouth.edu/classics/history/bronze_age/lessons/les/2.html#6

⁵³<http://www.ime.gr/chronos/01/en/nl/culture/modelsfr.html> (Accessed 06/03/11.)

⁵⁴The work of the archaeologist M. Gimbutas has perhaps done most to promote the goddess hypothesis. See, for example, Gimbutas, Marija (1982), *The goddesses and gods of Old Europe, 6500–3500 B.C., myths and cult images* Berkeley University of California. Gimbutas's work has appealed to many in the women's movement and has even inspired tours of the goddess sites, but the

hypothesis has also drawn much criticism: see Lauren E. Talalay (2003), "The Feminist Boomerang: The Great Goddess of Greek Prehistory," pp. 307–318 in Mark Golden and Peter Toohey, eds. (2003), *Sex and Difference in Ancient Greece*. Edinburgh: Edinburgh University Press. Talalay's article in its original, unabbreviated form can be found in *Gender and History* (1994), 6: 164–183.

⁵⁵The classic article on the interpretation of these figurines is P. J. Ucko (1962), "The Interpretation of Prehistoric Anthropomorphic Figurines," *Journal of the Royal Anthropological Institute of Great Britain and Ireland*, 92: 38–54.

⁵⁶Oliver Dickinson (1994), *The Aegean Bronze Age*. Cambridge; New York, NY: Cambridge University Press, p. 258.

⁵⁷On the warlike propensities of the culture, see C. N. Runnels et al. (2009), "Warfare in Neolithic Thessaly: A Case Study," *Hesperia*, 78: 165–194.

⁵⁸Cauvin (2000), p. 144.

⁵⁹Bar-Yosef, Ofer. 2001. "The World around Cyprus: From Epi-Paleolithic Foragers to the Collapse of the PPNB Civilization," pp. 129–64: 150.

⁶⁰B. Weninger et al. (2006), "Climate Forcing Due to the 8200 Cal Yr BP Event Observed at Early Neolithic Sites in the Eastern Mediterranean," *Quaternary Research*, 66, pp. 401–420.

⁶¹Weninger (2006), p. 418.

⁶²O. P. Nieuwenhuys, P. M. M. G. Akkermans, and Johannes Van der Plicht (2010), "Not So Coarse, Nor Always Plain: The Earliest Pottery of Syria," *Antiquity*, 84: 71–85.

⁶³Gustaf Sobin (1999), *Luminous Debris: Reflecting on Vestige in Provence and Languedoc*. Berkeley: University of California Press.

⁶⁴<http://www.transanatolie.com/english/turkey/Turkey%20PDF/SOMP-05-Research-Ancient%20Metallurg-Ozbal.pdf> (Accessed 06/03/11.); Benjamin W. Roberts, Christopher P. Thornton, and Vincent C. Pigott (2009), "Development of Metallurgy in Eurasia," *Antiquity*, 83: 1012–1022.

⁶⁵M. Georgakopoulou, Y. Bassiakos, and O. Philaniotou (2011), "Seriphos Surfaces: A Study of Copper Slag Heaps and Copper Sources in the Context of Early Bronze Age Aegean Metal Production," pp. 123–145 in *Archaeometry*, 53; <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4754.2010.00529.x/full> (Accessed 06/06/11); Veronica McGeehan-Liritzis (1983), "The Relationship between Metalwork, Copper Sources and the Evidence for Settlement in the Greek Late Neolithic and Early Bronze Age," *Oxford Journal of Archaeology*, 2: 147–180.

⁶⁶E. Pernicka et al (2003), "Early Bronze Age Metallurgy in the North-East Aegean," pp. 143–172 in *Troia and the Troad: Scientific Approaches*, edited by G. A. Wagner, E. Pernicka, and H.-P. Uerpmann. Berlin: Springer, 163–172; M. Cultraro (2008), "Metal Artefacts from Early Bronze Age Poliochni on Lemnos: Archaeometric Analysis in Archaeological perspective," pp. 451–457 in *Proceedings of the 4th Symposium of the Hellenic Society for Archaeometry: National Hellenic Research Foundation, Athens, 28–31 May 2003* vol. BAR1746, edited by Y. Facorellis, N. Zacharias, and K. Polikreti. Oxford: Archaeopress.

⁶⁷A single source for the invention of metallurgy, which was subsequently transmitted by groups of itinerant metalworkers, is argued persuasively by Roberts, Thornton, and Pigott (2009), pp. 1012–1022. One such traveling smith is evidenced aboard the Cape Gelidonya ship, see Chapter 3.

⁶⁸See J. Caskey and E. T. Blackburn (1997), *Lerna in the Argolid*, rev. ed., a pamphlet published by the American School of Classical Studies at Athens; also J. Caskey (1960), "The Early Helladic Period in the Argolid," *Hesperia* 29: 285–303.

⁶⁹J. W. Shaw (1987), "The Early Helladic II Corridor House," *American Journal of Archaeology*, 91: 59–79, esp. 59–65; R. Hägg and D. Konsola (1986), *Early Helladic Architecture and Urbanization*, proceedings of a seminar held at the Swedish Institute in Athens, June 8, 1985, Göteborg.

⁷⁰K. Kilian, "The Circular Building at Tiryns," in Hägg and Konsola (1986).

⁷¹D. J. Pullen (2011), "Before the Palaces: Redistribution and Chiefdoms in Mainland Greece," *American Journal of Archaeology*, 115: 185–195. Available online: http://www.ajaonline.org/sites/default/files/AJA1152_Pullen.pdf

⁷²Jeremy Rutter (1995), *The Pottery of Lerna*, vol. 4. Princeton, NJ: The American School of Classical Studies at Athens, pp. 111–116.

⁷³G. Nordquist (1987), *A Middle Helladic Village: Asine in the Argolid*. Uppsala: Academia Ubsaliensis.

⁷⁴W.-D. Niemeier (1995), “Aegina—First Aegean ‘State’ Outside of Crete?” pp. 73–79 in *Politeia: Society and State in the Aegean Bronze Age: Proceedings of the 5th International Aegean Conference/5e, Rencontre égéenne internationale, University of Heidelberg, Archäologisches Institut, 10–13 April, 1994*, ed. Robert Laffineur and W.-D. Niemeier.

⁷⁵Shaw (1987), pp. 59–65.

⁷⁶Niemeier (1995), p. 75. The walls of Troy VI were not earlier, and their towers were added in a later phase.

⁷⁷On Euboea as a part of the maritime network of sites in the Euboean Gulf, of which Aegina was perhaps the most successful (see below), see Jan Paul (2006), pp. 270–297 in Sigrid Deger-Jalkotzy and Irene S. Lemos (2006), *Ancient Greece: From the Mycenaean Palaces to the Age of Homer*. Edinburgh: Edinburgh University Press.

⁷⁸<http://www.indiana.edu/~sava/database.htm> (Accessed 06/05/11.)

⁷⁹Michael Lindblom (2001), *Marks and Makers: Appearance, Distribution and Function of Middle and Late Helladic Manufacturers’ Marks on Aeginetan Pottery*. Jonsered: Paul Aströms Förlag.

⁸⁰The diadem is very similar to one in the Aegina Treasure in the British Museum, which was found in a robber’s cache at Kolonna. It was formerly thought to have been robbed in modern times from a Cretan burial, but its similarity to the diadem in the shaft grave now establishes it as a tomb-robber’s hoard from antiquity, reburied by the robber in a Mycenaean tomb in Kolonna. See Reynold Higgins 1987, “A Gold Diadem from Aegina,” *Journal of Hellenic Studies*, 197: 182.