

EARLY NEOLITHIC SITES IN GREECE BEYOND THE THESSALIAN REGION

In the last chapter we have seen that at other sites in Thessaly people were living in much the same conditions as at Sesklo. We were able to discern three different types of settlement location. All three were situated on the boundary between two different topographic zones, but one group of settlements was situated in low foothills near the plain, the second group was situated on the boundary between a river valley and terrace and the third group of settlements was either on the shore of a lake or on the coast. There are some minor differences between the groups which are largely due to slightly different local conditions. During the period a certain regionalism developed, which can be noted especially in the most obvious material, the pottery.

So far our discussion has been restricted to Early Neolithic settlements in Thessaly, which are geographically and climatically quite closely related to Sesklo and which are situated in an area which is suitable for early agriculturalists. In this chapter we will investigate whether in other areas, which are geographically and climatically different, a similar development may still be noted. We have to keep in mind that in several areas which at first sight seem very suitable no traces of Neolithic settlements have been recovered, for the simple reason that those plains are covered by recent alluvium. This is the case with the plain of Arta in Epiros, the plain of the River Alphios and its tributaries in the Northwest Peloponnese, the Kopaïs basin and the valley of the River Spercheios in Boeotia and possibly with the river valleys of Eastern Macedonia and Thrace (Vita-Finzi 1969, pp. 77-82). In the remaining areas, exploration for prehistoric sites has begun only fairly recently. Systematic research and survey has been carried out in a few regions of Greece only – like Macedonia, parts of Epiros, Thessaly and Messenia. Even this does not always provide all the information wanted. The presence of Neolithic

settlements may be mentioned, without indicating whether they were occupied during Early, Middle or Late Neolithic. Cave sites may easily be overlooked in survey, often being difficult of access. Early Neolithic sites have been recovered very rarely on the islands. Since those few settlements which have been found are always situated directly on the coast, we are led to believe that similar settlements have been drowned by the gradual rise in sealevel.

In this chapter we will first investigate the regions of Greece which surround Thessaly, namely Macedonia, Epirus and Boeotia. Afterwards we will move South to Attica and the Peloponnese. Finally we will discuss some of the island sites.

VII. 1. *Macedonia*

Macedonia may be reached from Thessaly by land, through the Vale of Tembe and the valley of the River Xerias, and by sea. The region is quite different from Thessaly. It consists largely of mountain areas, separated by wide river valleys – those of the Aliakmon, Axios (or Vardar) and their tributaries – and by two large plains, of which the plain of Macedonia is the most important. In the Eastern part the peninsula of Chalkidiki stretches into the sea. It consists of rolling hills and mountain ranges.

In Pre- and Protohistoric times, a large part of the present plain of Macedonia, the wide delta of the Aliakmon-Loudhias-Axios was an arm of the sea, stretching deep inland (Bintliff 1976, 241-262).

The climate is in general colder than in Thessaly, although the plain of Macedonia does not show a large difference, and the distribution of annual precipitation is more even. The average January temperature increases from an average of 4° C in the North to an average of 8° C in the South. In inland areas winter may be grim, with much snow in higher

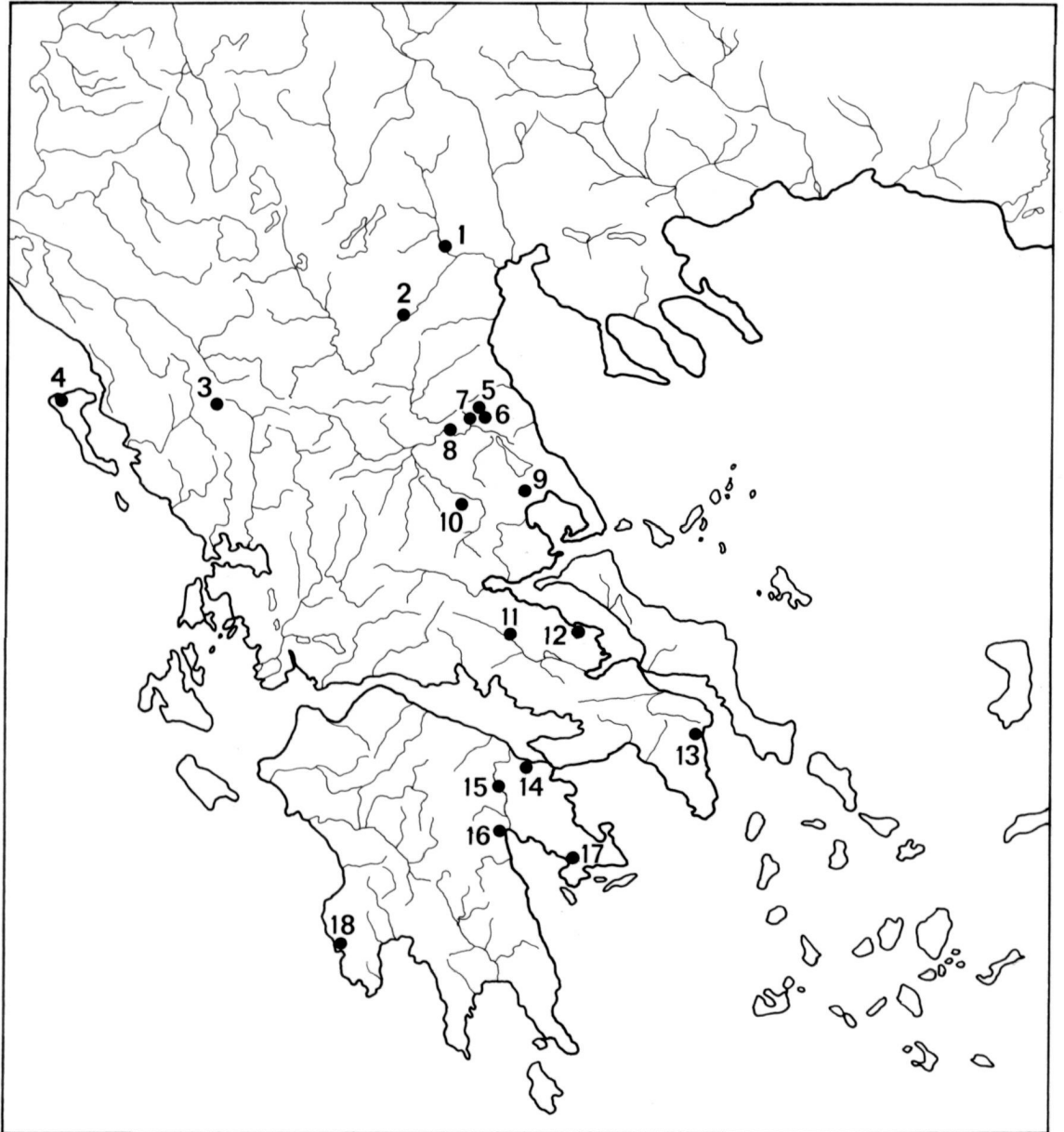


Fig. 22 Map of Greece – distribution of excavated Early Neolithic sites.

1 Nea Nikomedeia. 2 Servia. 3 Asfaka. 4 Sidari. 5 Nessonis. 6 Gendiki. 7 Soufli. 8 Argissa. 9 Sesklo. 10 Achilleion. 11 Elateia. 12 Halai (Locris). 13 Nea Makri. 14 Corinth. 15 Nemea. 16 Lerna. 17 Franchthi Cave. 18 Cave of Nestor, Pylos.

parts, but summers are never as extremely hot as in Thessaly. The highest summer temperatures are still found inland – they vary between 26°C on the coast to 28°C inland. Coastal Saloniki has an average annual temperature of 15.9°C. The annual average of precipitation decreases from 800 mm in the West to some 400 mm in the East.

The data on the vegetation of Macedonia during the Early Neolithic indicate that regions below a height of 500 m were covered with a dense deciduous oak forest (Bottema 1974). The faunal remains are very scarce and will be discussed with the sites on which they were discovered.

VII. 1. 1. *Servia* (fig. 22 no 2)

Until 1974, when flooding by an artificial lake brought an end to its existence, the site of Servia could be found in West Macedonia, some 6 km North of the present village of the same name, near the road connecting Thessaly and Macedonia. It was a low spreading mound on a river terrace, about 17 m above the Aliakmon and in the vicinity of the only convenient ford across that river. It was discovered in 1909 by A.J.B. Wace (1913-14, P. 123) and excavated in 1931 by W.A. Heurtley. When it became clear that the site was immediately threatened by flooding a rescue excavation was undertaken by the Greek Archaeological Service and the British School in Athens (Ridley and Wardle 1979, pp. 185-230). The main area did not contain any Early Neolithic material, but it was found in some trenches laid out 500 m downstream, east of the main site. Both areas stand on the lowest river terrace, within a few hundred meters of a good spring. The soil in this region probably consisted of riverine clay.

We have a little additional data on the vegetation during the Early Neolithic period from charcoal analysis, which so far has revealed maple, plum-type, ash and poplar, with pine and deciduous oak dominating (Hubbard 1979, p. 228). The wild animals represented in the Early Neolithic faunal sample are red deer, roe deer, bear and a small canid.

The only architectural remains of the Early Neolithic settlement consist of a large cobbled yard and a

couple of post-holes on the extreme edge of the trench.

Having studied rather superficially a limited sample of the Early Neolithic pottery¹, we concluded that it consistently showed the same characteristics and that it could be described as follows:

Ware: Medium and fine ware most common. Coarse ware present, but rare.

Appearance: Handmade ware of good to high quality. Manufactured by a combination of modelling and coiling techniques. Medium sized vessel walls most common; both thin and heavy walled vessels occur.

Paste: Micaceous clay. Non-plastics include quartz, quartzites, fine limestone chips, possibly fine pottery grit. Grains generally < 1 mm, most not exceeding 4 mm; coarser sand rare.

Firing conditions: Open fire, not entirely controlled firing atmosphere. Temperature 750-850°C. Hardness in most cases around 3; fine wares > 3 < 5 on Mohs' scale.

Colour: Light or dark uncertain buffish/reddish most common with a tendency to dark. Non-oxidised dark rare. Relatively few fully oxidised. Burnished ware often mottled black-red: 'Buntpoliert'. Red slip over buff surface.

White ware extremely rare.

Core mostly oxidised.

Surface finish: Mostly disappeared, due to weathering. Rest well to highly burnished. Large part of fine ware red slipped, prone to scale; sometimes with high burnishing gloss. Fine 'Buntpolierte' ware highly burnished.

Accessories/Decorations: Pierced lugs rare.

Plastic decoration: oblong and round knobs, raised bands.

Painted decoration: red-on-red and red-on-buff. Linear patterns and solid triangles.

Incised decoration: nail impressions, very rare.

Vessel shapes: Plate-like vessel rare. Open bowl with flaring vessel wall, convex-walled open bowl, slightly closed globular jar, hole-mouthed jar and low collared vessel occur in all ware types.

Rim: usually plain, a few ledge-rims. Lip: blunt, interior tapered or upturned/folded over.

Base: low plain and higher widely flaring ring-base;

may be oval. Few high trumpet-bases; few flat footed ones.

All things considered, it seems to us that the Early Neolithic pottery from Servia compares either with transitional Early Neolithic II/III or with the beginning of Early Neolithic III from Sesklo. On the one hand we have the presence of early painted material from the very lowest level to the surface, on the other hand we have the repertory of shapes (necked jars, many offset and rolled rims), the plastic decorations as well as the very highly burnished red monochrome.

The finds other than pottery include chert and quartz implements, polished and ground stone tools, bone implements, spindle whorls, bone and terracotta beads, many clay 'spools' or bobbins of unknown use and several figurines.

The subsistence pattern is largely the same as for the Thessalian sites. Carbonised seeds and rubber casts from daub included einkorn, emmer, two-row hulled barley, peas, lentils, flax and the stones of cherry and Cornelian cherry (Hubbard 1979, p. 227). The bone sample contains about 60% sheep/goat. Pig and cattle are next in importance at about 15% each (Watson 1979 p. 228). The remaining 10% is largely made up of roe deer and red deer. This last percentage indicates that hunting was still of some importance.

The building materials recovered were local – wood and cobbles. Raw materials used to manufacture utensils and other objects were largely available locally, but some may have come from other regions.

VII. 1. 2. *Nea Nikomedeia* (fig. 22 no 1)

The site of Nea Nikomedeia is some 45 km Northeast of Servia, at a distance of 10.5 km from modern Verria. It is situated in the plain of Macedonia, an alluvial plain formed by recent silting at the mouth of the Rivers Aliakmon and Axios. In the 7th and 6th millennium B.C., the coast was probably at a distance of some 5 km from the site (Bintliff 1976, p. 247). This is a low mound, built up of occupation debris over a natural rise. In 1958 the site was first

noted by Ph. Petsas, then ephoros. It was excavated under the aegis of the British School at Athens by Robert J. Rodden, during the years 1961-1963. The deposit was rather shallow, varying between 0.70 and 1.30 m in thickness. It consisted largely of Early Neolithic material, overlain by a thin level of Late Neolithic.

During the period of first occupation the knoll was probably surrounded by lacustrine silts. According to Bottema (1974 pp. 147-148) 'the first farmers found the area covered with deciduous oak forest. To the East and Northeast the forest gave way to swamp forest gradually passing into Tamarisk shrub and saline meadows and, at the edge of the water, to halophytic plant communities including *Salicornia*. The landscape was transected by small freshwater marshes. This made a mosaic of freshwater and saline habitats; a source of rich plant and animal life. The rivers and marshes were bordered by *Fraxinus excelsior*, *Salix*, *Alnus* and *Vitis*. At higher elevations deciduous oaks, *Pistacia terebinthus*, *Corylus* and perhaps even *Carpinus orientalis* were growing. This forest type must have covered most of the plain outside the swamps'. Some additional information is given by the sample of carbonised wood; it contained *Fraxinus*, *Acer*, *Cercis*, *Populus* or *Salix*, *Castanea* and *Rosaceae* with oak, both deciduous and evergreen, dominant. Faunal remains included red deer and roe deer, hare, a canid, tortoise, fish and bird bones.

Vestiges of several buildings were recovered. According to the excavator there were two Early Neolithic building phases, separated by a thin layer of humus. All buildings were constructed in wattle and daub. Wall slots were cut some 0.30-0.35 m into the virgin subsoil. In the centre of the slots, oak stakes were driven in the subsoil at intervals of some 1.00 - 1.50 m. Upon this framework the walls were erected in wattle and daub. Most of the dwellings were square, measuring some 7.50 x 7.50 m, but there was also a large rectangular construction with sides some 12.00 m long. The buildings had an East-West orientation. The excavator assumes that the houses had pitched, thatched roofs with hanging eaves.

A rather superficial study² of all the reconstructed vessels and some boxes of sherds chosen at random

makes it possible to give the following description:

Appearance: Handmade ware of good quality. Mostly medium or fine ware. Little coarse ware. Manufactured in a combination of coiling and modelling techniques.

Generally of medium wall thickness.

Paste: Micaceous clay. Non-plastics include quartz, possibly some limestone, fine pottery grit and – at least in one case – a small shell. Grains in medium ware generally some 1 mm, not exceeding 4 mm. In medium fine not exceeding 2 mm. Coarse inclusions rare.

Firing conditions: Open fire, not entirely controlled firing atmosphere. Hardness generally 3 on Mohs' scale.

Colour: Dark uncertain buffish most common, followed by light uncertain buffish. Reddish shades occur less often. Fully oxidised rare. Relatively few dark non-oxidised. In some cases black base.

Core: Fairly often not oxidised.

Surface finish: Surface always smoothed, often burnished. Quality varying from streaky fugitive to highly glossy. Red slip over buff surface, often exterior only; mostly burnished.

Accessories/Decoration: Many of pierced lugs, most pierced vertically. Fairly high percentage of painted decoration- 9.5%: red-on-white slip or on buff surface; white painted mostly on exterior surface. Linear patterns and solid ones. Red-on-buff flakey, not well burnished. Red-on-white slip highly burnished, not flakey. White paint on red slip, slightly burnished, flakey. Impresso decoration: over entire exterior surface; finger nail, finger tip or pinched; few spatula.

Vessel shape: Open bowl with flaring vessel wall very rare. Convex walled open bowl and slightly closed globular jar most common, followed by hole-mouthed jar. Rim: plain, some up-out-turned. Lip: blunt, some thickened. Tapered inwards and rolled over far less common. Base: low ring-base and flat footed disc type. May be oval.

All things considered the Early Neolithic pottery from Nea Nikomedeia can best be compared with transitional Early Neolithic I/II - beginning of Early Neolithic II from Sesklo. On the one hand we have a complete absence of more complicated vessel forms

(like necked jars) and on the other hand we have a fairly large amount of early painted decoration. If the pottery from the two building phases could be dated to slightly different periods we would suggest that the first dates to transitional Early Neolithic I/II and the second to Early Neolithic II. However, the very uniformity of the pottery seems to exclude this. The presence of impresso-decorated ware poses another problem. If this type of decoration was indeed introduced from some region North of Thessaly, it should have come to Nea Nikomedeia before it reached Thessaly. This hypothesis is confirmed by its presence together with early painted ware, whereas plastic decoration does not occur.

The finds other than pottery include quartz, chert and flint blades and flakes, polished and ground stone tools, bone implements- including needles-, clay sling-stones and spindlewhorls, stone ear-studs, stamp-seals, ornaments and stone and ceramic figurines.

Several intramural burials have been discovered but in most cases little trouble had been taken in preparing the graves, except for one case in which a large pebble had been placed between the jaws of the deceased.

The subsistence pattern was an agricultural one. The sample of carbonised seeds included einkorn, emmer, naked barley, lentil, pea and bitter vetch (van Zeist and Bottema 1971). The faunal sample consists of about 65% sheep/goat, 15% pig and 15% cattle, while the remainder is of wild animals. Hunting played therefore a relatively unimportant part. Of the domesticated animals, a large part was slaughtered at an immature age: 90% of the pig, 50% of the cattle and 47% of the caprines – indicating that the stock was mainly kept for meat.

Building materials were all available locally: oak stakes, mud and chopped plants for daub, wood (willow?) and reed for wattle and roofing.

The raw materials used to manufacture the blade and flake implements are mostly available locally: flint from the outcrops in the Vermion range, some 10 km away, chert and quartz from large pebbles in nearby stream-beds (Rodden 1962 p. 277). Green and bluish-purple serpentine are available within a days reach, too. The same applies to the coarser grained rocks, like basalt, schist, sand- and limesto-

ne, used to manufacture heavy stone tools.

Even if one thinks away all the recent alluvial plains, Macedonia with its large river valleys and its wide, fairly accessible coastline offered favourable conditions for an Early Neolithic economy, unless too dense a forest cover formed an impediment. One would think that the area should already have been settled during Early Neolithic I, but so far we do not have any proof of this.

VII. 2. *Epiros*

Epiros is an entirely different region from Thessaly. It is covered for the most part by high mountains which run parallel to the west coast. In the East it is separated from Macedonia and Thessaly by the steep Pindos range, which can be divided into two parts – southern and northern. These are separated by the Zygos pass, the only way to reach Epiros from Thessaly, which in winter is covered by snow. The mountains are cut through by rivers, occasionally forming lakes. Land below 200 m can only be found in the coastal area, upto a maximum of some 15 km inland, and in many places consists only of river mouths and swamps. The fairly large plain of Arta was created by recent alluvium from silting at the mouths of the Rivers Arakhtos and Louros.

The climate of Epiros, even in the lowlands, is entirely different, partly due to the fact that it is situated West of the Pindos range. As a result the yearly amount of precipitation is relatively high – between 1100 and 1200 mm, near the Pindos even up to 1500 mm. From the second half on June to the first week of September it is almost as dry as Thessaly, but from October to May the monthly rainfall varies between 130 and 175 mm. The temperature is lower too, the monthly average being some 24°C in August and 6°C in December, with a yearly average of 14.5°C. In the mountains it is of course much colder, these being covered with snow during most of the winter – sometimes from early October to late May.

Pollen diagrams, from Ioannina (Bottema 1974) provide some good data on prehistoric vegetation. At the beginning of the Early Neolithic period, the lower elevations were covered with dense deciduous

oak forest with little shrub vegetation.

On the whole conditions do not quite seem favourable for an Early Neolithic economy, except maybe for the coastal area and in some of the river valleys. So far only one site with traces of Early Neolithic occupation has been discovered. It is *Asfaka* (fig. 22 no 3), a mound situated near the village of the same name, 15 km Northwest of Ioannina on the boundary between the foothills of Mount Mitsikeli and the marshy valley of a small river which debouches in to Lake Ioannina. It was observed during a survey by David Clarke and C. Vita Finzi (Higgs 1966 p. 22) in 1965. The pottery contained some monochrome ware and impresso-decorated ware in simple shapes. A radiocarbon sample gave a date of 7380 ± 240 BP.

VII. 3. *Boeotia*

Boeotia lies South of Thessaly. It can be reached from the plain of Karditsa, by crossing the Western part of Mount Othrys, and from the plain of Almyros, along the coast or by sea. On the North and West the region is bordered by high mountain ranges: Othrys, the Southern Pindos, Parnassos and Elikon – but the Eastern part consists of hill-land, river valleys and basins, in which there are some small lakes. Since the Early Neolithic, the geography of this region has changed slightly, for the once extensive Lake Kopais has recently been drained and the present plain of Thermopylae is alluvial and has been created by recent silting at the mouth of river Spercheios. We can not therefore, expect traces of Neolithic occupation in either area.

Climatologically there are no large differences between Thessaly and Boeotia. Summers in the inland are suffocatingly hot whereas winters may be fairly cold. On the whole the climate is slightly more humid, average winter precipitation being a little higher.

For the areas at lower elevations we have some good data provided by the pollendiagrams from cores of Lake Xinias, in Southern Thessaly at an elevation of 500 m, and from Lake Kopais (Bottema 1978, 15-28; Greig and Turner 1974, 177-194). Both indicate that the area was covered with deci-

duous oak forest with a considerable amount of shrub vegetation. *Quercus cerris* is dominant, but the spectra contain also high values of *Pistacia*, *Juniperus* and *Poterium* type.

In several areas of Boeotia conditions would have been quite favourable for an early agricultural economy. However, so far only two Early Neolithic sites have been discovered – Elateia and Halae, which will be discussed hereafter.

VII. 3. 1. *Elateia* (fig. 22 no 11)

The mound of Elateia is some 80 km Southsoutheast of Achilleion, at a distance of 1.5 km Northeast of modern Elateia. It is on the boundary between the valley of the River Kifissos and the Sfingion hills. The mound is some 4 metres high and consists largely of building debris over a low natural rise. During the years 1904 - 1910 it was tested by Prof. G. Soteriades (1912, p. 253-299), who discovered that there had been two Neolithic occupation periods - one with painted pottery, the other with only monochrome ware. In 1953 a small scale excavation was carried out by Prof. Saul S. Weinberg (1962, pp. 158-209), mainly with stratigraphical objectives. He discovered a succession of Neolithic levels, beginning with Early Neolithic.

The soil in the region consisted at least partly of riverine clay. We think that the vegetation will have been the same as in the Kopais basin, twenty km to the Southeast: an oak forest with a considerable amount of shrub vegetation.

In the lowest stratum of one of the trenches, remains of a wattle and daub construction were discovered. It was supported by a line of posts, as could be deduced from a row of four large postholes, a pivot stone on the same line and a parallel row of smaller postholes. A succession of at least four floors belongs to the occupation of the house.

Our study of the pottery from Early Neolithic Elateia³ makes it possible to give the following description:

Appearance: Handmade monochrome ware, often spongy and rather coarse. Little medium and fine ware. Reasonably good quality. Manufactured by a combination of modelling and coiling techniques.

Medium wall thickness.

Paste: Non-micaceous clay. Non-plastics include limestone, micaceous schists, possibly fine pottery grit. Limestone prone to elusion, giving the surface a spongy appearance. Grains in coarse ware up to 6 mm or more. Less medium wares with inclusions not exceeding 4 mm.

Little non-spongy fine ware made of micaceous clay. Non-plastics not exceeding 2 mm in size. Possibly imported.

Firing conditions: Open fire, not entirely controlled firing atmosphere. Hardness around 3 on Mohs' scale.

Colour: Mostly dark or light uncertain buffish/red-dish; lower levels mostly dark, becoming lighter in higher levels. Little oxidised, the amount increasing in higher levels. Some 10% dark non-oxidised. Interior surface generally of lower value than exterior; often dark non-oxidised. Often smudged, perhaps secondarily.

Medium ware mostly fired dark uncertain reddish to dark red.

Non-spongy fine ware fired dark uncertain buffish to buff, interior often mottled.

Core: Mostly non-oxidised.

Surface finish: Always smoothed, often traces of burnishing. Medium ware: burnished exterior, sometimes both surfaces.

Fine ware: well smoothed only.

Weinberg mentions slipped ware (1962, p. 168), possibly self-slipped.

Accessories/Decoration: Plastic decoration: small knobs, oval pellets in rows, raised bands, wavy or in zigzags.

Vertical pierced lugs.

Vessel shape: Convex-walled open bowl and slightly closed globular jar most common. Few hole-mouthed jars. Weinberg mentions collared jars from the lowest level onwards (1962 p. 170). These should have been as common as open bowls and globular jars. Most shapes are slightly oval.

Rim: plain, often slightly thinned.

Lip: blunt, irregular; inside tapered quite common.

Base: round or plano-convex. Ring base rare.

Pottery lids: discs with a flat bottom and convex top.

Maximum diameter 12 cm.

Comparison of this pottery with Early Neolithic material from Sesklo is slightly difficult, for we are unable to indicate how the monochrome pottery from Elateia developed – partly because several level indications have disappeared in storage and partly because the material seems rather incomplete in comparison with the information provided by the excavation report. However, all things considered, we think that the pottery from the lowest stratum at Elatia can be compared to Early Neolithic I from Sesklo, whereas in the highest monochrome stratum it shows characteristics which may be compared to Early Neolithic III ware. If this was indeed the case, then early painted decoration would have been introduced during the last part of Early Neolithic III, instead of during Early Neolithic II.

The finds other than pottery include obsidian and flint implements, ground and polished stone tools, bone implements, sling bullets, clay spools and disc spindlewhorls.

On the subsistence pattern we have little information, for there are no carbonised seeds and the bone sample has not yet been analysed. The presence of sickle blades, querns, pounding stones and implements made from the bones of domesticated animals points to an agricultural economy.

Building materials were available locally, oak and other timber for posts, wattle, mud and chopped plants for daub, and timber, reeds and mud for roofing.

The raw materials used to manufacture implements and other objects could partly be obtained in the vicinity: clay, coarse grained rocks, pebbles and larger cobbles; the finer grained rocks were available either in the nearby hills or on Mount Parnassos, 20 km to the Southwest. The obsidian is from Melos.

VII. 3. 2. *Halae* (fig. 22 no 12)

The other site in Boeotia where traces of Early Neolithic occupation have been discovered is Halae. It is a site situated on the coast in the straits of Euboea, Northwest of Theologos and 35 km East of Elateia. The prehistoric settlement is underneath a classical acropolis, which was excavated between

1911 and 1921. The prehistoric settlement was investigated in 1931 (Goldman 1940, p. 381-514) and again in 1935. Unfortunately the final publication has never been written.

The pottery from the lowest levels of this site is apparently mostly rather plain and simple. It could belong partly to Early Neolithic I.

Having investigated Early Neolithic sites in the regions surrounding Thessaly, we have seen that our knowledge of the settlement pattern is extremely haphazard. It is certainly too early to reach definitive conclusions on the distribution of settlement, but nonetheless we have seen that some of the ideas suggested in the last chapter have proved to be valid for this wider area too. As was the case in Thessaly, settlements in Macedonia, Boeotia and even in the inhospitable region of Epiros are to be found on the boundary between two different topographic zones: on the interface between river valleys and terrace, between low foothills and plains and on lake and seashores. Moreover we have noted that where contact between regions was reasonably easy, similarities could be noticed in the development of ceramic material, although there are local differences. On the other hand, Epiros, a region which could not easily have been reached from eastern Greece, but which could have had contact with the Italian peninsula, showed a different ceramic development, which might eventually be compared with contemporary Italian material.

The subsistence pattern was the same in all regions, though there may have been slight differences, due to local circumstances.

Building techniques were adapted to the materials available. In manufacturing implements, raw materials available locally were the most widely used, meaning that in general they were available at a distance of no more than 15 km. In some cases material from more remote areas was used, implying long-distance travel or exchange. It is remarkable from this point of view that obsidian – a raw material from the island of Melos – was not been used in Early Neolithic Macedonia and Epiros, whereas it has been found at all Early Neolithic sites in Thessaly, with the exception of Prodrornos, and at the Boeotian sites too.

Our next stage is a visit to the Early Neolithic settlements of Attica and the Peloponnese.

VII. 4. *Attica*

South of Boeotia lies the region of Attica. It is most easily reached from Thessaly by following the East coast the straits of Euripos. The North of Attica consists of a range of low mountains, including Mount Parnis and Mount Pendelikon. The Southern part, the peninsula, is composed of coastal lowlands with hills in the centre. The entire lengthy coastline has numerous small inlets, suitable as harbours.

The climate is a maritime Mediterranean one; summers are not so extremely hot as in the Thessalian plain (27°C) and are generally cooled by a sea-breeze, the meltemi. Winters are less cold (10°C) – the average annual temperature amounts to 17.4°C. It is quite dry, with an average annual precipitation of 384 mm – with the greatest down-pour in November-December.

On the vegetation at the beginning of the Neolithic period we have no information, but we think that the data from Boeotia are valid to some extent for Attica too – although we must keep in mind that the average precipitation being lower, the vegetation of this region will have been less stable. On the whole one would assume the region to have had a less dense forest cover with a larger amount of scrub vegetation.

Conditions for an agricultural economy are relatively favourable in the coastal area and, with all its natural harbour facilities, one would expect this region to have been settled during Early Neolithic I. The only settlement so far discovered is Nea Makri.

VII. 4. 1. *Nea Makri* (fig. 22 no 13)

The site of Nea Makri is situated on the shore, some 120 km Southeast of Elateia, near Marathon. It is an extensive flat site which apparently spreads over several hectares. The site was partly excavated by Prof. D.R. Theocharis in 1954 (Theocharis 1956, pp. 1-29). This proved that the deposit, which was over three metres thick, could be divided into two

parts. The upper part contained Late Neolithic material and the lower part Early Neolithic.

On this shore several small streams debouch into sea. The soil is fertile, supporting vine and grain.

In the lowest levels remains of pit-houses have been discovered, dug into the virgin soil. The buildings in the following stratum had been erected in wattle and daub over stone foundations.

The following description results from our study of the pottery from Early Neolithic Nea Makri:

Appearance: Handmade, monochrome, slightly spongy ware of reasonably good quality. Manufactured by a combination of coiling and modelling techniques. Mostly medium wall thickness. In higher levels many thin walled vessels.

Paste: Micaceous clay. Non-plastics include fine limestone, quartz, possibly fine pottery grit. In lower levels coarse grains, up to 6 mm, in higher levels generally finer, not exceeding 4 mm. Limestone elusive on surface.

Fine ware: micaceous clay. Non-plastic inclusions not exceeding 2 mm, generally finer. No limestone.

Coarse ware: 4 fragments with chaff-temper. May be of wall plaster.

Firing conditions: Open fire, not entirely controlled firing atmosphere. Hardness of coarse and medium ware 3; fine ware $> 3 \leq 5$ on Mohs' scale.

Colour: Lowest level all dark, non-oxidised. Afterwards introduction of incompletely oxidised colours. In higher levels increase of lighter shades and of mottling with black. Interior surface often grey. Higher levels also oxidised colours. Majority remains dark non-oxidised.

Storage jars: dark uncertain reddish.

Core: of sherds with (slightly) oxidised surface, mostly oxidised.

Surface finish: In lowest levels roughly smoothed. Afterwards mostly burnished, sometimes very shiny. Coarse ware smoothed.

Accessories/Decorations: Plain and pierced lugs.

Incised ware from lowest levels onwards. Linear motifs; parallel zigzags in horizontal or vertical bands; in a few cases dots between zigzags. May be filled with white paste.

Plastic decoration: in higher levels oblong and rounded knobs in rows. Coarse jars decorated all over with rounded knobs.

Vessel shape: In lowest level convex walled open bowl and slightly closed globular jar most common; few hole-mouthed jars. In higher levels introduction of open bowl with flaring vessel wall, collared jar and storage vessel.

Rim: mostly plain in lower levels. In higher levels also up-/out-turned and thinned types.

Lip: in lowest levels mostly blunt or interior tapered. In higher levels also rolled over lip.

Base: plano-convex base and low ring-base equally common. Incised ware always has a flat base.

All in all, the pottery from the lowest level at Nea Makri may be compared with Early Neolithic I from Sesklo. It has simple shapes, the vessel walls are not very regularly shaped and are quite thick; the paste is rather coarse. Some regional difference occurs already in the use of incised decoration. It is clear that the development does not follow exactly the same lines as at Sesklo or elsewhere in Thessaly, but one still finds certain similarities, such as the introduction of collared vessels and plastic decoration. Professor Theocharis suggested that the site may have had ceramics before the beginning of the Thessalian Early Neolithic (Pers. comm. 1977). So far there is no proof of this, but it was hard to obtain well stratified material.

The material other than pottery included four flint blades, many obsidian implements including cores and waste flakes, polished and ground stone tools, bone implements including a haft, white marble and sandstone or gypsum plates and bowls, figurines, slingstones and disc spindlewhorls.

The subsistence pattern is agricultural. Carbonised grains are not available and the bone sample has not been analysed. According to the excavator a lot of bones were discovered in the lowest stratum, including sheep/goat, cattle, pig and deer.

Building materials were available locally. The raw materials used to manufacture utensils and other objects are partly found in the vicinity. The pure white marble may be from Mount Pendelikon, some 7 km to the West. Obsidian came from the island of Melos. It is noteworthy that many cores and waste flakes have been discovered at Nea Makri, indicating that blades were manufactured on the spot: So far this is the only site for which this is attested. Since it is situated on a shore which is easy acces-

sible from Melos, one has to accept the possibility that people from this area shipped obsidian from Melos, knapped blades and then transported them over the country -or exchanged them for other goods.

VII. 5. *The Argolid*

The Argolid forms the Northeastern part of the Peloponnese. To reach it from the North one had either to cross the Isthmos or to go by sea. For the most part, the region consists of low mountains and hills through which small streams seek their way to the sea. Along the Northern coast of the gulf of Argos are stretches of lowland, of which the plain of Argos is the largest.

The climate is a maritime Mediterranean one. Summer temperatures tend to be higher than in Attica, with the same average precipitation. Winters are, however, slightly more humid: the average precipitation in November-January is 60-70 mm, whereas in Attica it is only 40-45 mm. The average annual temperature is 18.1°C, the average annual precipitation is 495 mm.

We do not have any information on the vegetation of the region at the beginning of the Neolithic. Bintliff (1977 p. 72) has suggested that 'the present picture with steep soilless, barren limestone ridges is the natural one for the Southeast of Greece. But on moister zones, the areas with a deep soil, higher vegetation would in the natural state find greater scope for flourishing, e.g. into a savanna woodland on the dry but deep soiled Older Fill of the plain, a dense woodland on the moist and deep soiled Neogen and Flysch sediments of the hill-land.'

Conditions for an agricultural economy would in that case have been favourable in the lower areas. So far four sites with Early Neolithic occupation have been discovered in the region. We will begin our discussion with the settlement which has the best Neolithic stratigraphy and which certainly had human occupation from Early Neolithic I onwards.

VII. 5. 1. *Franchthi Cave* (fig. 22 no 17)

The Franchthi Cave is at present situated on the

coast, opposite the village of Koilada, some 65 km Southsoutheast of Corinth. In front of it is a small rocky terrace. Beneath it the present surface slopes gently down to the shore, some 50 m. away. On the base of the heavily eroded slope have been discovered many remains of prehistoric occupation, including obsidian, animal bones and Neolithic sherds.

The excavation of the cave has been carried out in six summer seasons, between 1967 and 1974, as part of a joint project in the Porto Cheli area by the Universities of Indiana and Pennsylvania. The Field director was Prof. Th. Jacobsen (1969 pp. 343-381 and 1973 pp. 45-89 and pp. 253-283). In the front section of the cave an enormous deposit has been excavated – in some places it was over eleven metres deep. The stratigraphy stretches from the Palaeolithic, divided into three phases, through the Mesolithic, divided into two phases, and Neolithic to surface deposits containing a mixture of Classical and post-Classical material. In all trenches a clear division was found between Mesolithic and Upper Palaeolithic. In most of them there was a break of some one metre thickness between the Mesolithic and Neolithic, but in one trench the development appears to be continuous, including an Aceramic (Pre-Pottery) phase. In all cases the change from Mesolithic to Neolithic was obvious in the finds, especially in the animal bones, being marked by the appearance of domesticated sheep and goat.

The trenches on the shore only contained Neolithic material, which could be divided stratigraphically into Early and Middle Neolithic.

During the period of the first Neolithic occupation the topography of the site was quite different. The sealevel was lower than at present. As a result there was a coastal plain in front of the cave, the shore being some two km. from the present coast, except for a narrow slough which developed some 500 m from the cave in the entrance to the present bay. South of the Franchthi headland there was a stream and in the immediate vicinity there were two springs. The coastal plain had a covering of old alluvium, the old 'red deposits' (van Andel et alii, 1980, pp. 389-402).

On the vegetation we have some additional data in the form of carbonised almonds and pistachio. The faunal sample included remains of red deer, hare

and fox, bird bones, tortoise shell and large fish bones, indicating that the biotopes of these animal species could be found in the vicinity of the settlement. We think the area was lightly wooded with a lot of shrub vegetation.

The excavator assumes that the settlement stretched further to the West than the present coastline indicates. As a result we are left with only a small part of the Neolithic site. In view of the finds, this part may have been an area of craft activity rather than living quarters. There are no traces of architecture, except for some crude wall fragments, made in stone, which may have been terrace or retaining walls.

Study of the pottery of the good stratigraphical sequence of trench L5, units 54 - 30, permits us to give the following description:⁴

Appearance: Handmade ware, reasonably good to high quality. At first only medium ware, from unit 41 onwards, fine ware too, in a lower percentage. Coarse ware rare.

Manufactured by a combination of coiling and modelling techniques. Medium wall thickness most common. Black burnished ware very thin.

Paste: Non-micaceous clay. Non-plastics include grey, black and white grits. From unit 45 onwards, limestone. Grains generally around 1 mm, not exceeding 4 mm.

Fine ware: no limestone. Grains smaller than 2 mm. In a few cases golden mica flakes (Import?)

Firing conditions: Open fire, incompletely controlled firing atmosphere. Hardness of medium ware at first 2 - 3, increasing to 3 - 4. Fine ware \geq 5.

Colour: Lower units, light uncertain buffish/reddish most common. In higher units dark uncertain reddish gradually increases. Dark non-oxidised increasing. Few sherds fully oxidised.

Fine ware: Red variegated light buff fired through light uncertain buffish to light non-oxidised.

Grey variegated from light non-oxidised to dark non-oxidised.

Black burnished: dark non-oxidised.

Red Urfirnis (unit 32 and higher) light red fired.

Core: mostly oxidised in all wares.

Surface finish: Always smoothed; from beginning exterior often burnished, at first streaky. From unit

35 all burnished outside, inside when possible; very streaky to very glossy.

Red slip introduced in unit 34, use increasing rapidly.

Accessories/Decoration: Horizontal and vertical pierced lugs, amount decreasing slightly in units higher than 44.

Painted decoration introduced in unit 46; at first red on surface; linear patterns and soon solid triangles. Flaky, rare to unit 40. From unit 35 more complicated patterns, including cross-hatching. From 33 on red-on-cream slip.

Plastic decoration introduced in unit 35; rounded or oblong knobs, single or in groups; rare.

Vessel shape: Deep convex walled open bowl, slightly closed globular jar and hole-mouthed jar most common. Mostly medium sized. Introduction of low necked pseudo-collared jar, carinated vessel and shallow open bowl with flaring vessel walls in unit 30. All remain rare.

Rim: straight simple in lower units – either thinned or unchanged. From unit 42 up-/out-turned rim. Lip: blunt or tapered.

Base: only a few fragments of ring-bases. Indications of convex base scarce.

Considering these observations we conclude that the development is a very gradual one. Slight changes are to be noted somewhere in units 46-45 with the slow introduction of early painted ware, the slightly diminishing frequency of pierced lugs and the introduction of limestone in the non-plastics of the clay. This development is not completed until unit 40, when fine wares are introduced. Around unit 35 we notice another change with the introduction of red slipped ware, the pseudo-collared vessel (38), plastic decoration and red-on-cream painted ware.

We tend to divide the Early Neolithic sequence here into two phases, the first containing units 54-39 and the second units 38-30. The slow changes within each phase may be indicated by a and b.

Early Neolithic Ia (unit 54-46)

– medium gritty monochrome ware.

simple vessel shapes.

Early Neolithic Ib (45-39)

– slow introduction painted decoration.

limestone temper

Early Neolithic IIa (38-36)

– Introduction fine ware; more complicated vessel shapes.

Early Neolithic IIb (35-30)

– Introduction slip, red and cream

Introduction plastic decoration.

This would however create a difference between the division of the Northern and Southern Greek Early Neolithic. Hence it seems better to make a tripartite division in which Early Neolithic II begins with the introduction of painted ware (unit 45) and Early Neolithic III with the introduction of slip and plastic decoration. Since we will compare the pottery from other, less well stratified sites to the Franchthi material, we will speak of Peleponnesian Early Neolithic I, II and III.

The finds other than pottery include obsidian and flint/chert implements, polished and ground stone tools, stone bowls and plates, bone implements, figurines, ceramic objects and worked shell. Hundreds of beads, made of stone, bone, clay and shell have been recovered by water sieving. The worked shell included spondylus, oyster and *cowrie*, but no *Cardium edule*.

In the lowest Early Neolithic levels several child burials were discovered. Most of the children were aged six months or less. One of the graves, discovered in the cave, had grave gifts: a small marble bowl and half of a burnished hole-mouthed jar. The grave had been covered with a stone cap.

The subsistence pattern was an agricultural one. The sample of carbonised seeds included emmer, einkorn, 6-row hulled barley, lentil and pea. The faunal sample consisted for the largest part of sheep/goat. Of the bones which could be identified to species, the majority belonged to sheep. 5 - 15% of the sample was of pig, 5 - 10% of cattle, 5% was of wild animals and 5 - 10% consisted of large sized fish vertebrae, of which some were identified as tuna. These fish were also present in the Upper Mesolithic levels. Fishing and hunting seem to have played some part, albeit a minor one, in the food pattern.

Since there are no architectural remains, except for the stone walls, we can say little on building materials. Stone was available in plenty.

The raw material used to manufacture implements and other craft objects were largely available locally. Blue flint was present on the hilltop of Palaiokastros, 2 km Northeast of the cave and among the cobbles along the beach. The volcanic stone used for querns perhaps came from one of the islands. Obsidian was of the best quality from Melos. It was already being used during the Upper Mesolithic.

VII. 5. 2. *Lerna* (fig. 22 no 16)

Lerna is situated on the shore near the village of Myloi, some 40 km (by sea) Northwest of Franchthi. It is on the south bank of the Amymone stream, which debouches into the gulf of Argos. It is an artificial mound, made up entirely of building debris of successive ancient settlements, principally of the Bronze Age. It was excavated by the American School of Classical Studies in Athens, during the years 1952-1959. The director was John L. Caskey (1954, pp. 2-30; 1955 pp. 25-49; 1956, pp. 147-173; 1957 pp. 142-162; 1958, pp. 125-140 and 1959 pp. 202-207). A fully stratified Neolithic sequence was discovered in a deposit which sometimes reached nearly four metres in thickness. It could be divided into Early Neolithic, resting on virgin soil, and Middle Neolithic. The entire settlement could not be excavated. In some parts the deposit was at or below the water-table and in others it had been cut by Early Helladic builders.

The soil in the area is a fertile riverine clay. On the vegetation during the Early Neolithic we have some additional data, provided by the analysis of carbonised wood, which for the most part consisted of oak (M. Hopf 1962, p. 16). The faunal sample included *Bos primigenius*, wild swine, red deer, fox, hare, mallard, grey goose, crane and molluscs (Gejvall 1969 p. 10 and 48). The biotopes of these species could probably be found in the vicinity of the settlement. According to Gejvall the birds indicate a biotope with humid conditions and high ground water.

The architectural remains consist of rectangular dwellings of unknown size. They were built in wattle and daub over a stone foundation. There were

at least three different phases, marked by superimposed walls. The earliest was over 0.50 m thick and stood to a height of five courses.

Of the pottery of Lerna we can give the following description⁵:

Appearance: Handmade ware. Good to high quality. Fine and coarse spongy ware. A little medium ware.

Manufactured by a combination of coiling and modelling techniques.

Spongy ware heavy walled, fine ware may be thin walled.

Paste: Fine and medium ware: non-micaceous clay. Non-plastics including fine quartz and little limestone. Fine ware generally 0.4 mm not exceeding 1.5 mm; medium ware 1 mm not exceeding 4 mm.

Spongy ware: non-micaceous clay. Non-plastics including much limestone, some quartz, grey and black grits. Generally 2-4 mm, can be as large as 8 mm or more.

Firing technique: Open fire, not entirely controlled firing atmosphere.

Hardness: spongy ware ca 3 on Mohs' scale; fine ware 4 > 5.

Colour: Spongy ware: dark uncertain buffish/red-dish; not oxidised.

Core mostly not oxidised. Red variegated: rim light buff fired through light uncertain buff body to dark non-oxidised base.

Grey variegated and black burnished, both non-oxidised.

Plain monochrome: light buff fired.

Core: oxidised or not oxidised, mostly according to surface colour.

Surface finish: Spongy ware: exterior often burnished, interior smooth.

Fine ware: often burnished exterior and interior. Black burnished very glossy.

Few red slipped, both variegated and spongy ware.

Accessories/Decoration: Pierced lugs, few lugs on spongy ware.

Plastic decoration: pellets and knobs, without pattern (Vitelli 1977 pp. 17-30).

Painted decoration: few red on buff surface, most spongy ware. Linear patterns and solid triangles. Some patterned variegated ware. Paint and biscuit very powdery, pattern not recognisable.

Vessel shape: Convex-walled open bowls and slightly closed globular jars most common, well rounded profiles.

Rim: simple straight. Lip blunt or symmetrically tapered (variegated ware).

Base: round base. Ring-base, from low to large wide out-flaring (spongy ware).

We conclude that the pottery is dated by the presence of painted and plastic decoration and of fine wares. Allowing for the possibility that plastic decoration, which we did not have in our sample, is introduced only in the higher levels, we assume that the pottery from the lowest levels belongs to the second part of the Peleponnesian Early Neolithic II.

The finds other than pottery include obsidian and flint implements, ground and polished stone tools, bone implements, ceramic objects and a few figurines.

The highest level of the Early Neolithic stratum contained a pit grave with the skeleton of an adult. It had a burnished monochrome bowl as a grave gift.

The subsistence pattern was probably an agricultural one. No samples of carbonised seeds have been taken, nor were there impressions on pottery (M. Hopf 1962 pp. 1-16). The faunal sample was small, 165 identifiable bones in total. It consisted of 52.8% sheep/goat, 20.6% pig, 10.3% cattle, 15.7% wild animals and 0.6% dog. This seems to indicate that hunting still played a fairly important role in subsistence, especially since the wild animals include *Bos primigenius*, a good supplier of meat. Fish bone remains are rare in the entire bone sample: from Early Neolithic to Late Roman times there are 13 fragments only. Gejvall supposes they were eaten by pigs, dogs, foxes and other scavengers.

Building materials could be found in the vicinity: stone from the stream beds and the shore, mud, branches, reeds and chopped grasses. Raw materials for manufacturing utensils were largely available locally – only the obsidian came from a distance, being Melian.

VII. 5. 3. Nemea (fig. 22 no 15)

The site of Nemea is situated near the modern villa-

ge of the same name, some 30 km Northnorthwest of Lerna, in the vicinity of the Corinth-Argos road. The valleys of several streams, coming down from Mount Thraki, unite here in a small basin. It is an area which is well known for its wine and its olives. It was known that the Classical site of Nemea was to be found here. The site was excavated between 1924 and 1926 by the American School of Classical Studies at Athens. The directors were Carl W. Blegen and B.H. Hill. By mere chance Blegen (1975, pp. 224-227) discovered at a distance of some 600 m from the main site a rather large amount of Neolithic material and he decided to make a trial trench. This was enlarged till it measured 30 x 8 m. Apparently it had been a kind of cave or overhanging rockshelter, which had collapsed. The hard packed layers of earth, containing animal bones and potsherds, lay both below and above the fallen rock material. The whole deposit dated to the Early and Middle Neolithic periods. When the excavation was reopened in 1973 a rescue excavation was carried out near the 'cave' (Miller 1975, pp. 143-172). The area had been deep-ploughed to make it ready for viticulture, disturbing a large part of the ancient fill. Fortunately there were still some remains in the form of large amorphous pits cut into bedrock.

Architectural remains have not been discovered, neither in the old excavation nor in the new one. Blegen supposed the cave to have been a rubbish deposit near the settlement and the pits were clearly rubbish pits. If these pits were within the settlement, then it has been largely destroyed. If they were slightly outside, then there would still be some hope of recovering further remains.

The study of the Early Neolithic pottery permits us to give the following description⁶:

Appearance: Handmade ware, good to high quality. Fine and sometimes spongy medium and coarse ware. Manufactured by a combination of coiling and modelling techniques.

Medium wall thickness most common. Spongy ware may be heavy walled.

Paste: Fine ware: red variegated non-micaceous clay. Grey variegated slightly micaceous clay. Non-plastics include quartz, brown grits and fine limestone; most smaller than 0.4 mm, not exceeding 1.5 mm. Medium and coarse ware: slightly micaceous

clay. Non-plastics include much limestone, quartz, brown and grey grits. Medium generally around 1 mm, not exceeding 4 mm; coarse generally 2 mm, not exceeding 8 mm. Limestone on surface prone to elusion: spongy effect.

Firing conditions: Open fire, nor entirely controlled firing atmosphere.

Hardness 3 on Mohs' scale; of variegated ware $> 3 < 5$.

Colour: Spongy ware never completely oxidised. Mostly dark uncertain buffish/reddish. Few dark non-oxidised. Core always non-oxidised.

Red variegated: rim light buff fired, through light uncertain buffish body to dark non-oxidised base. Core irregular (oxidised to non-oxidised).

Grey variegated: light non-oxidised rim to dark non-oxidised base.

Surface finish: Medium and coarse ware mostly exterior burnished, interior smooth. Finish of spongy ware has disappeared.

Variegated ware: well burnished exterior, smooth interior.

Accessories/Decoration: Vertical pierced lugs.

Plastic decoration: on variegated ware, small round knobs in a row below lip or diagonally over body.

Painted decoration: on spongy ware only. Red on buff surface, fugitive rectilinear pattern and solid triangles.

Among the 1925/26 material one bowl with incised decoration, a line pattern in lozenges.

Vessel shape: Spongy ware: convex walled open bowl and slightly closed globular jar with plain rim and blunt or flattened lip most common. Supported by ring-base. Few pseudo-collared jars.

Red variegated convex-walled open bowl and open bowl with flaring vessel wall. Plain rim; interior or symmetrically tapered lip. Plano-convex base or ring-base, low straight to wide out-flaring.

Grey variegated: convex-walled open bowl and open bowl with flaring vessel wall most common, but also semi-carinated closed globular jar and semi-carinated shallow open bowl. All have plain rims; simple shapes unchanged with tapered lip, more complicated shapes thinned with interior tapered or sharp lip. Plano-convex base or low ring base.

From the above description we conclude that the

Early Neolithic pottery from the rubbish pits of Nemea can be dated around the beginning of the third Peloponnesian phase: there is spongy ware, but there are also fine wares; there is painted decoration, but also plastic decoration.

The material other than pottery included quite a lot of obsidian blades, flakes and cores and two chert cores, indicating that blades were manufactured locally. Other finds consisted of ground and polished stone tools, bone implements, a few stone ornaments and various bone material.

The only evidence we have for the subsistence pattern is given by some of the stone tools (querns); they seem to point to an agricultural economy. The bones have not yet been analysed.

The raw materials are for the largest part available locally or at a modest distance, with the exception of the obsidian.

VII. 5. 4. *Corinth* (fig. 22 no 14)

The road from the Isthmos to Argos leads, immediately South of the Gulf of Corinth, through a three km. wide valley between Mounts Oreios and Akrokorinthos. At the foot of the latter lies the site of Ancient Corinth.

Since 1896 excavations have been carried out all over the site by the American School of Classical Studies. It is no easy matter to reconstruct the earliest settlement, for the site has been inhabited from the Neolithic until the last century. Since the site is situated on a fault-line it has been subject to catastrophic earthquakes rather often, including that in 1858 which demolished the last settlement. The most recent series of earthquakes at this site was during the winter of 1980/1981. This does not facilitate the investigations either.

Weinberg has tried several times to establish the stratigraphy of the prehistoric settlement (1937, pp. 487-524; 1947, pp. 165-182) and finally succeeded in establishing a neat sequence from the beginning of the Middle Neolithic to the Early Helladic (Weinberg and Robinson 1960, pp. 240-253). Unfortunately the trench was too small to get a good stratigraphy for the Early Neolithic as well. In 1968 and 1973 further evidence for an Early Neolithic strati-

graphy was brought to light (Lavezzi 1978, pp. 402-451; Williams II, 1974, pp. 24-25), but as yet only a small part of the Neolithic settlement has been recovered.

None of the excavations has revealed architectural remains. In fact, the finds are largely restricted to pottery. We studied some of this material⁷ and in doing so were struck by the fact that many of the mock-variegated fragments (see below) seemed to have an additional layer of clay spread over the interior and exterior surfaces- a kind of clay slip. The core often had many holes, which apparently were not caused by the burning out of the non-plastics, but looked like air-bubbles, giving the impression that the clay did not cohere very well. We wondered whether the consistency of this paste had been too dry and whether an additional coating of clay had been used to cover weak spots. Of the Early Neolithic pottery from Corinth we can give the following description:

Appearance: Handmade ware, good to high quality. Fine ware, medium and coarse spongy ware, medium fine and medium ware. Manufactured by a combination of coiling and modelling techniques. Medium wall thickness most common. Fine ware may be thin walled.

Paste: Spongy ware: micaceous clay. Non-plastics include much limestone, quartz, brown and black grits. In medium ware grains 1-2 mm, not exceeding 4 mm; in coarse ware 2 mm, generally not exceeding 8 mm.

Other wares: non-micaceous clay. Non-plastics include quartz, brown, grey and black grits; little or no limestone. In fine ware granules generally ca 0.1 mm, not exceeding 1 mm; in medium fine ware ca 0.6 mm, not exceeding 2 mm; in medium ware ca. 1.0 mm, not exceeding 4 mm. Some sherds contain golden mica.

Firing conditions: Open fire, incompletely controlled firing atmosphere. Hardness of spongy and medium wares generally 3; fine ware $> 4 \leq 5$ on Mohs' scale.

Colour: Fine ware: red variegated exterior light buff fired rim through light and dark uncertain buffish body to dark non-oxidised base; interior entirely buff, entirely non-oxidised or changing from buff to non-oxidised.

Grey variegated: exterior from light non-oxidised rim to dark non-oxidised base; interior non-oxidised.

Black monochrome: dark non-oxidised.

Medium fine ware: mock-variegated as red variegated, often with non-oxidised core.

Red slip over light uncertain buff surface. Painted decoration on light buff fired or light uncertain buffish surface.

Medium ware: mostly dark uncertain buffish.

Spongy ware: light and dark uncertain buffish and reddish most common. Fair amount of dark non-oxidised. No oxidised colours.

Surface finish: Often disappeared on spongy ware; where present, smoothed or slightly burnished.

Variegated wares: most burnished, some very glossy.

Medium ware: lightly burnished. Towards end of period introduction of red slip over exterior only or over exterior and interior surface; flakey and fugitive, burnished.

Painted ware burnished, sometimes before, sometimes after.

Accessories/Decoration: Horizontal and vertical pierced lugs. Strap handles on small bowls.

Plastic decoration: round knobs in groups all over vessel; beads in rows.

Painted decoration scarce: red on white slip (very few) and red on buff surface, both on medium and on spongy ware. Linear patterns, net patterns, solid triangles.

Vessel shape: Convex-walled open bowl and slightly closed globular jar most common. Few shallow bowls with flaring vessel walls. More complicated shapes like a spouted vessel, biconical and gouged bowls, the latter only with fine variegated ware. Pseudo-collared jars in spongy ware.

Transition Early to Middle Neolithic: introduction of askoïd jug, in red on white painted ware only. Rim: straight thinned, unchanged rare.

Lip: blunt or flattened; with unchanged rim tapered symmetrically or interior. Some coarse spongy ware has blunt lip with impressions, causing corded appearance. One ledge-rim on red slipped ware.

Base: rounded base or low ring-base. Lavezzi (pers. comm. 1977) suggested introduction of ring-base to be slightly later. Grey variegated occasionally flat

footed base or flat base.

This is the description of an unstratified, mixed Early Neolithic assemblage. From the stratigraphy we have only the indication that red slipped ware was introduced during the transition from the Early to Middle Neolithic. Comparing the above to the well stratified pottery from Early Neolithic Franchthi, we notice, that all the characteristic elements for the entire Early Neolithic sequence are present. Although we have no proof, we assume that Corinth had human occupation from the earliest phase of the pottery bearing Neolithic.

The very scarce data give no information on the subsistence pattern, nor on the raw materials used, except for clay.

vii. 6. *Messenia*

The region of Messenia is in the Southwestern part of the Peloponnese. It is largely built up of low mountains, cut through by many streams and rivers. The high and barren Taïgetos separates it in the East from Laconia. The only lowland areas are the coastal plains and the valley of the River Pamisos. The latter is covered by recent alluvium.

The climate is a maritime Mediterranean one; summers are hot, though less suffocating than in the inland areas. The annual rainfall is far higher than in the Eastern Peloponnese, albeit less than in Epiros – amounting to some 700 mm.

A lot of work has been carried out in this region by the University of Minnesota, in an attempt to reconstruct the Bronze Age environment (McDonald and Rapp 1972). This has had some results for the Neolithic as well, since it provides us with the vegetation history of the region (Wright 1972). More recently the bay of Navarino, better known as Homeric 'sandy Pylos', has been investigated (Kraft et alii 1980) in order to reconstruct the palaeogeomorphology. Pollen analysis indicates once again a forest cover with a fair amount of shrub vegetation, oak, pine and olive being the dominant trees.

The areas best suitable to settlers with an agricultural economy are the coastal plain and the valley of the Pamisos. The only proof of such habitation has

been discovered on the Northeastern slope of Palaiokastro, a ridge near the bay of Navarino. The site is known as the *cave of Nestor* (fig. 22 no 18). Survey of the region was carried out during the excavation of the Palace of Nestor at Ano Englianos, some 7.5 km to the Northeast. A few test trenches have been dug in the cave, under the supervision of D.R. Theocharis and W.A. McDonald (Blegen 1954, p. 32; McDonald and Hope Simpson 1961, p. 243). These explorations have not yielded any architectural remains, but there was a deep accumulation of stratified debris. It showed that the cave had been used over a long period, from the Neolithic till at least the end of the Late Helladic. According to D.R. Theocharis (1977, pers. comm.) there was Early Neolithic I material among the pottery. It is not clear what purpose the cave served, although it is not unlikely that it served as a shelter.

Having investigated the Early Neolithic sites of those parts of mainland Greece which do not border on Thessaly directly, we notice that, although the data are extremely scarce, Early Neolithic settlements are again situated on the boundary between two different sorts of topography: on or near the shore and in the low foothills near a plain. We have also noticed that although there are similarities in the earliest ceramic material, regional differences in development are soon detectable. A tripartite division of the Early Neolithic may still be maintained, although we have to bear in mind that it is best to make comparisons with the nearest well stratified site instead of looking at a fixed model like Sesklo.

The subsistence pattern is basically the same at all sites, that is agricultural, although at some sites hunting and/or fishing still played a certain role. This seems especially to be the case in the Argolid, where the environment is less stable and the soil less fertile than in, for example, Thessaly.

Building was, as far as we know, adapted to the raw materials available. The raw materials used to manufacture implements and other objects were mostly available locally – that is to say either in the immediate vicinity or within a day's reach. The only exception is obsidian, which is present at all sites. This all came from Melos. Proof of the manufacture of obsidian implements has however been discover-

ed at only one site for certain, Nea Makri, and possibly at Nemea too. Geographically, Nea Makri would be well suited to serve as a harbour for boats coming from Melos.

VII. 7. *The islands*

Our next step will be to investigate whether there were any Early Neolithic settlements on the Greek islands and whether there was any similarity with the mainland sites.

One of the problems which presents itself immediately, is the fact that sea-level has risen some seven metres since the Early Neolithic. Considering the fact that Greek islands are rather rocky and that most of them, especially those in the Eastern part of the Aegean, do not have a high average annual precipitation, one assumes that the most suitable areas for an agricultural economy would be near the coast, if possible near a bay or on the side of the island which is best protected against the heavy winter storms. Settlements situated in such a location will more likely than not have been submerged.

The only sites at which traces of Early Neolithic have been recovered are Sidari on Corfu, Aghios Petros and Skyros in the Sporades, Kythnos in the Cyclades and Knossos on Crete.

VII. 7. 1. *Sidari*

The east side of Corfu is covered with rolling hills. The coast has many beaches and inlets. The north side is dominated by the forbidding Mount Pantokrator, but the coastal area is gently sloping and has the same character as the eastern shore. The west side plunges steeply into the Ionian sea and heavy breakers lash the cliffs. Even at present there are no fishing activities near this shore.

The climate is mild and fairly humid. The average January temperature is 10°C, the average in August 26.6°C, while the yearly precipitation amounts to 1170 mm.

On the vegetation during the Early Neolithic we have no information, but it probably did not differ much from the Epirot lowland vegetation: a dense

forest cover with some shrub vegetation. The area best suited to Early Neolithic settlers seems to be on the eastern and northern coast. At present only one site has been recovered, that of Sidari on the north-west coast.

The mound or cliff of Sidari consists of a deposit of building debris over a low natural elevation. In 1965 survey and a trial excavation were undertaken by Dr. A. Sordinas (1968, pp. 29-96; pp. 401-407). This revealed a stratigraphical sequence from the Mesolithic, through the Neolithic to the local Bronze Age. The Neolithic directly overlay the Mesolithic and has been divided into two phases with a sterile layer in between. The lower phase belonged to the earliest pottery-bearing Neolithic and the upper to a later phase of Early Neolithic.

No architectural features have been discovered, except for some lumps of baked clay which could be daub remains.

The pottery can be described as follows:

Appearance: Handmade monochrome ware of reasonably good quality.

Manufactured by a combination of coiling and modelling techniques. First phase: heavy walled vessels. Second phase: Thin vessel walls.

Paste: First phase: non-micaceous clay with fine sand, granules some 0.1-0.3 mm.

Second phase: non-micaceous clay. Non-plastics including crushed chert, granules 0.6-2 mm.

Firing conditions: First phase possible sun-dried. Second phase: open fire, not entirely controlled firing atmosphere.

Colour: First phase: dark uncertain buffish, core lower values.

Second phase: dark uncertain red to dark red fired, core oxidised.

Surface finish: Smoothed.

Accessories/Decoration: First phase some incised decoration; zones filled with parallel wedges.

Second phase: horizontal lugs. Impressed decoration, made with fingernail or stamp; all over body.

Vessel shape: First phase: convex-walled open bowl and hole-mouthed jars.

Rim simple, straight. Lip blunt or flattened. Convex base.

Second phase: convex walled open bowl most

common. Rim straight, a few out-turned. Lip blunt or interior tapered.

Base: low ring-base or flat footed base, often slightly concave centre.

The first phase material can be compared with the earliest pottery from most other Early Neolithic I sites, except for the fact that it may have incised decoration. The second phase material might in Greece best be compared to the pottery from Early Neolithic Nea Nikomedeia, although painted decoration is absent. This would place it somewhere in the beginning of Early Neolithic II. On the whole we have, however, the impression that it may be better to relate Corfu to Early Neolithic Italy or to the Epirot/Dalmatian coast rather than to the Greek mainland.

The finds other than pottery from the Early Neolithic strata consisted of flint implements made of local raw material. The Mesolithic stratum consists of a shell midden. The most distinctive feature was the presence of a large number of microliths, struck on diminutive nodules of fine grained grey translucent flint of unknown provenience. According to the excavator the microliths had typological affinities with the Italian Mesolithic (Sordinas 1969, p. 405).

The prevalent subsistence pattern during the Mesolithic was attested by the number of *Cardium* shells, although some small game was evidenced too. During the Early Neolithic there was an agricultural economy, or at least stock-rearing as is attested by the presence of bones of sheep/goat.

VII. 7. 2. *The Sporades*

Investigation of the provenience of the different raw materials used at Early Neolithic sites in Thessaly and consideration of the manner in which domesticated sheep/goat and crops may have reached the Northern part of the Greek mainland, inevitably draws one's attention to the long chain of islands, which runs out into the Aegean from Thessaly.

These islands consist mainly of hill-land, gentle in some places but with steep precipices in other areas. In general the soil is quite fertile. The climate is maritime Mediterranean, milder and slightly more humid than in inland Thessaly. In winter, northern and western coasts may be subject to heavy gales, in

which even well enclosed beaches may be inaccessible.

In view of the fact that even now some of the islands are well wooded by Greek standards, one may assume that they had some forest cover during the Early Neolithic period too.

Southern and eastern coasts offer the best conditions for settlement by early agriculturalists. Unfortunately many of these settlements may have disappeared, since the shore slopes gently into the sea on most coasts.

By very careful investigation, Prof. D.R. Theocharis succeeded in discovering two island sites which still have traces of Early Neolithic settlement: Aghios Petros and Skyros. Only at *Aghios Petros* has he excavated (1970, pp. 271-277). This revealed that the site had been occupied during Early Neolithic II/III and the Middle Neolithic. The Early Neolithic stratum had some architectural features in the form of a stone foundation wall.

The pottery included early painted ware, red slipped ware and impresso decorated ware⁸. The material other than pottery consisted of flint and obsidian implements, ground and polished stone tools, bone implements, ceramic objects and figurines.

We have only the results of a preliminary analysis of the bone sample. It included sheep/goat, pig and cattle and only a few bones of wild mammals. The subsistence pattern was agricultural and hunting played a role of little importance. There is no evidence of fishing.

It is not clear whether raw materials, other than obsidian, were available locally, that is to say on nearby Alonissos, or whether they had been brought from greater distances.

The other site was situated on the eastern coast of *Skyros*, below the present town of *Skyros*. Unfortunately it has building debris some 10 m high overlying it. Part of it has been washed away by the sea. According to Theocharis (1977, pers. comm.) some of the pottery from this natural profile could be dated to Early Neolithic I.

VII. 7. 3. *Kythnos*

Kythnos is one of the islands of the Cyclades. The

climate is drier than in the Sporades, the average annual precipitation being only some 380 mm.

A preliminary survey of the island led to the discovery of an apparently Pre-Ceramic camp and cemetery (Honea 1975, pp. 277-279). The artefacts consisted of a flaked stone industry which could be divided into two groups, one native and one imported. In the former, quartz and quartzite were dominant; the tools are large and heavy. In the latter group, flint and obsidian were dominant. The flint came from Paros or Naxos, the obsidian from Melos. A tendency towards the production of tools on small flakes could be noticed, but retouched tools were infrequent – it was largely a flake industry.

One complete and three partial ochre-sprinkled burials have been discovered. All were located under disturbed rock-caving. The bodies were in a tightly flexed position and had a flat stone between the knees and chin.

One carbon sample taken from an exposed burial yielded a date of 7875 ± 500 BP (GX 2837).

VII. 7. 4. *Knossos*

The site of Knossos is to be found on Crete. The centre of the island is dominated by several groups of high mountains from West to East Mount Levka, Mount Ida, Mount Dikti and Mount Thripitis. They are separated by river valleys running from North to South. The northern coast is largely composed of gentle sloping hills, the southern coast partly of steep cliffs, partly by the large plain of Mesara.

The climate of northern lowland Crete is a maritime Mediterranean one. The average temperature in the coldest winter month is 12°C, the average of the warmest summer month is 28.5°C. The average annual precipitation is some 530 mm, of which the largest fall is in December and February, whereas the summer months are almost entirely dry. The southern part of the island is far warmer, especially in summertime.

At present, most lowland areas and the highland plain of Lasithi are fertile and extensively used for agriculture. They used to be irrigated by small windmills. We have no information on the vegetation of Crete during the Early Neolithic. However,

there are historical sources which cite Crete as having an extensive forest cover. During Roman times it was famous for timber and even in the 17th century Mount Ida was covered by cypresses (Bintliff 1977 p. 74). It seems quite probable that the fertile lowland, which at present grows many olives and fruit trees, had a forest cover during the Early Neolithic, possibly intermingled with shrub vegetation.

The site of Knossos is situated in the North of Crete, 5 km Southeast of Iraklion, in the wide valley which separates Dikti and Ida. The area is covered with rolling hills and several streams seek their way to the sea through this valley. The site is world famous for its Minoan palace, but the presence of a Neolithic settlement below the palace remains had already been recognised by Sir Arthur Evans at the beginning of this century (Evans 1921, p. 34). His soundings established that it was of considerable size and that occupation had lasted for a long time, the depth of the deposit being nearly ten metres. Most of the soundings were too small to get any real stratigraphy. For this reason the excavation of the Neolithic settlement was undertaken by the British School of Archaeology during the late 1950's, at first under the direction of M.F. Sinclair Hood, later under John D. Evans (Evans 1964, pp. 132-240; 1968, pp. 239-276). These excavations revealed that the Neolithic sequence at Knossos covered the entire Neolithic period, including an Aceramic phase. There was no marked break between the Pre-Pottery and pottery-bearing Neolithic.

Architectural remains have been recovered from the Aceramic stratum on. In the lowest three strata these consisted of more or less rectangular buildings, 4 x 5 m in size and built in mudbrick. In strata IX and VIII the mudbrick had apparently been fired (Evans, 1964, p. 144). In the foundations mudbrick alternated with large stones, including discarded grinding slabs. The roofs are supposed to have been flat. From stratum VII onwards the dwellings had been erected in pisé on a stone foundation, often made of large slabs and kouskouras – a very soft local limestone. This technique was used during the remainder of the Neolithic.

John D. Evans has estimated the size of the settlement in different periods (1971, pp. 95-118). The Pre-Pottery settlement measured some 0.25 ha,

while at the end of stratum VIII it covered a little over 0.50 ha.

The Early Neolithic pottery is very different from the mainland material. Dr. A. Furness has refined and modified a sequence made by Dr. D. Mackenzie for the pottery excavated by Sir Arthur Evans (Furness 1953, pp. 94-134). The material excavated by John D. Evans corresponded remarkably well to this sequence (Evans, 1964, p. 194). Paste, firing conditions and general appearance are not very different from those of the mainland pottery, but vessel shapes and decoration show no relationship. The vessel shapes include open bowls with splayed profiles from the lowest level on, whereas on the mainland they are only introduced at the end of Early Neolithic III. Bases are all flat. Accessories include wish-bone handles, strap handles and trumpet lugs from the lowest level onward. Plastic decoration is restricted to coarse ware, whereas incised decoration is found only on fine ware. The latter has motifs outlined by incised lines, while the patterns are then filled in with points. The designs include triangles, chevrons, chequers and step patterns. The incisions are often filled with white chalky matter. The only mainland site where a similar type of decoration, albeit with simpler designs, has been found is Nea Makri, where it is present from the lowest level on – as is the case at Knossos too.

On the whole, the pottery does not fit a normal Early Neolithic pattern, be it Greek or Near Eastern. This is not the case with the finds other than pottery. These include abundant obsidian and a little chert – largely a blade industry; ground and polished stone tools, including quite a few mortars and querns; bone implements, ceramic and stone objects and ornaments, including ear-studs; ceramic and marble figurines.

Several child burials have been discovered within the settlement, most of infants aged six months or less. There were no grave gifts.

The subsistence pattern was undoubtedly agricultural. The Pre-Pottery stratum yielded a fairly large sample of 3000 seeds, of which 2900 were of bread wheat – *Triticum aestivum* – a remarkably pure crop for the period. In addition there were seeds of emmer, einkorn and lentil. The carbonised wood was in every case undoubtedly oak. The faunal

sample consisted largely of sheep/goat, pig and some cattle. There was evidence of slaughtering at an immature age.

All raw materials used, either for building or for manufacturing utensils and other objects, are of local origin, with the exception of the obsidian, which is from Melos.

It will be clear from the above that there are some imponderables in the earliest Neolithic strata from Knossos: the pure crop of a wheat type which does not occur elsewhere in Greece during the same period; the use of (fired) mudbrick in the lowest strata; the presence of highly developed pottery shapes from the lowest pottery bearing levels onwards. Given the fact that there is no satisfactory evidence for earlier human occupation on the island, it is even more difficult to solve the problem of the origin of the Cretan Neolithic. The early dates for the lowest strata do not permit any links with Asia Minor, where similar pottery developments are found during the Late Chalcolithic. There may have been some contacts with mainland Greece – Nea Makri – but the two regions have clearly developed independently from each other.

The investigation of the island sites is rather unsatisfactory, in so far as only a few settlements have been located. But even these sites are situated on the boundary between two topographic zones. Four of them are directly on the shore, whereas the fifth is situated in the low foothills of a mountain range, an hour's walk from the shore.

The pottery develops differently from that of the mainland. Corfu shows influences, which are related to Italy rather than to Greece. Crete has a completely independent style. For other sites we do not possess enough data, although some of the material from Aghios Petros is related to the pottery of Thesaly.

The subsistence pattern was probably agricultural, although fishing may have played a role too.

Most of the raw materials used in building and in manufacturing utensils and other objects were available locally or within a day's travel. The only exception is again the Melian obsidian, which was used at all sites except Corfu.

VII. 8. *Final remarks*

We have now discussed all the known Early Neolithic settlements in Greece in this and previous chapters. The main stress has been on pottery, since this happens in most cases to be the only reasonably reliable dating material. We have, however included an overall impression of other categories of artefacts as well.

Looking at the climate of the various regions, we were struck by the fact that there are fairly great differences, not so much in temperature as in precipitation – from some 1200 mm in Epirus to a bare 380 mm in Attica. This makes some areas better suited for agricultural purposes than others. One would not expect many early Neolithic settlements in a region where conditions are marginal for agriculture.

As to the location of the settlements, the idea expressed in the last chapter has proved to be valid for Early Neolithic settlements outside Thessaly too. Quite a number are found near the sea, which is hardly surprising given the important role played by the sea in Greek history. Moreover Thessaly was known as the granary of Greece. It will be no surprise if coastal sites are shown to have larger marine component in the diet once more attention is paid to the recovery and analysis of fishbones.

At sites with stratigraphical evidence, we have tried to apply the Sesklo model for the development of pottery. With the necessary reservations, this model can also be used for unstratified material from settlements in the regions nearest to Thessaly. The Greek mainland – Corfu included – may be divided into five regions:

1. Northern Greece (Macedonia, Epiros and Corfu)
2. Thessaly
3. Central Greece (Boeotia, Locris)
4. Attica
5. The Northeast Peloponnese (Korinthia and the Argolid)

Characteristic of region (1), Northern Greece, is the early introduction of impresso ware, before or together with early painted ware. This may have its origins in contacts with Yugoslav Macedonia. Characteristic of (3), Central Greece, is the late introduction of early painted ware and the complete

absence of impresso and incised ware. Characteristic of (4), Attica, – at least of the only site representing Attica – is the incised line pattern decoration, which is often filled with white paste. Characteristic of (5), the Northeast Peloponnese, is variegated ware and the late introduction of red slipped ware at the transition from Early to Middle Neolithic. A case apart is the development at Knossos, which from the first pottery bearing stratum onwards is entirely different from the pottery both of the Greek mainland and of the Near East. Late Neolithic vessels from some of the Greek islands and Late Chalcolithic pots from West Anatolia are the only material showing any similarity.

Comparison with the Sesklo sequence proved to be rather difficult where the Peloponnesian sites without stratigraphy were concerned. It was more useful to compare them to a local model: Franchthi. Here we are confronted with a problem, for the obvious changes in pottery types, that is the introduction of fine wares together with the introduction of new shapes, seemed to demand a division of the Early Neolithic into two parts, whereas at Sesklo we have a tripartite division. In this way a difference would be created between Thessalian Early Neolithic II and Argolid Early Neolithic II and this is just what we are trying to avoid. The solution would be either to make the Thessalian sequence bipartite – by renaming Early Neolithic I and II as Ia and Ib – or to make the Argolid sequence tripartite – by introducing a phase for the period when early painted decoration appears. The latter would in our opinion be preferable, given the fact that the introduction of painted decoration is one of the characteristics of Thessalian Early Neolithic II. The only caveat to this proposal is that regional developments in Thessaly and the Argolid are so divergent that ceramic material from an unstratified site in the South should only be compared to a Southern model and not to a Northern one.

All sites, regardless of location, had basically the same subsistence pattern, an agricultural economy, but at several sites hunting and/or fishing will have played some role. In areas where the economic equilibrium was extremely delicate and where the soil was less fertile than in Thessaly, people may have had to relapse temporarily to hunting and/or

fishing.

Caprovines were the most common domestic animals. At those sites where the bones could be attributed to one or other of the species, sheep predominated over goat (cf. Chapter VI). The bone samples from Knossos and Nea Nikomedeia indicate that a fairly large proportion of these animals was slaughtered immature – indicating that they were kept for meat.

Emmer was apparently the most important crop at all sites but Knossos.

At all sites outside Thessaly raw materials were available locally, or at not too great a distance, whereas in Thessaly they came in some cases from distances beyond a day's reach. The only exception at most sites is obsidian. It was not used at sites which were far removed from the island of Melos and to which the access was difficult: those in Macedonia, Epiros and Corfu. The chipped stone industry was a simple flake industry, but the only site

were inhabited by people with a similar life style. There are local and regional differences in the development of the pottery; there are slight differences in the subsistence pattern – which are probably due to local circumstances. The architecture is in all cases adapted to local opportunities. But on the whole the pattern is the same at all sites.

The next question to arise will be how the appearance of an agricultural economy, involving domestic crops and domesticated animals which apparently were not native to Greece – at least as far as the caprovines and wheat are concerned – took place.

where local manufacture of obsidian tools is in evidence is Nea Makri, and possibly Nemea.

A few scattered burials, mostly of infants, pit graves and human bones are the only data we have on the way people disposed of their deceased. They have been found all over Greece, at Nea Nikomedeia, Franchthi and Lerna as well as at Knossos.

We have seen now that all over Greece settle-

NOTES

1. The Hon. C.C. Ridley kindly permitted me to study the material and provided all the necessary stratigraphic information.
2. By courtesy of Robert J. Rodden.
3. By courtesy of Prof. Saul S. Weinberg.
4. Prof. Th. Jacobsen and Mrs. K.D. Vitelli kindly permitted me to study the material. Mrs. Vitelli selected the sample and gave all required stratigraphic information.
5. By courtesy of Prof. John L. Caskey.
6. Prof. S. Miller kindly permitted me to study the 1974 material and provided all further necessary information.
7. By courtesy of Prof. Saul S. Weinberg and Prof. John L. Lavezzi. Prof. Lavezzi selected the sample and provided all necessary information.
8. The material recovered in the excavation is being studied, and will be published, by N. Evstratiou of the London Institute of Archaeology.