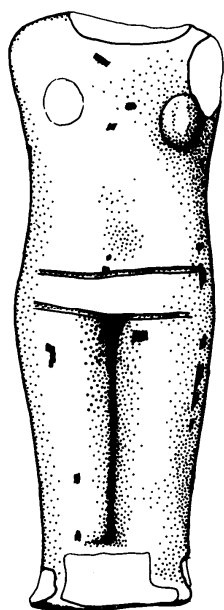


THE KOUPHOVOUNO PROJECT

2002 SEASON

EXCAVATION SEASON 2



William Cavanagh, Christopher Mee, Josette Renard

Kouphovouno topoplan 2002

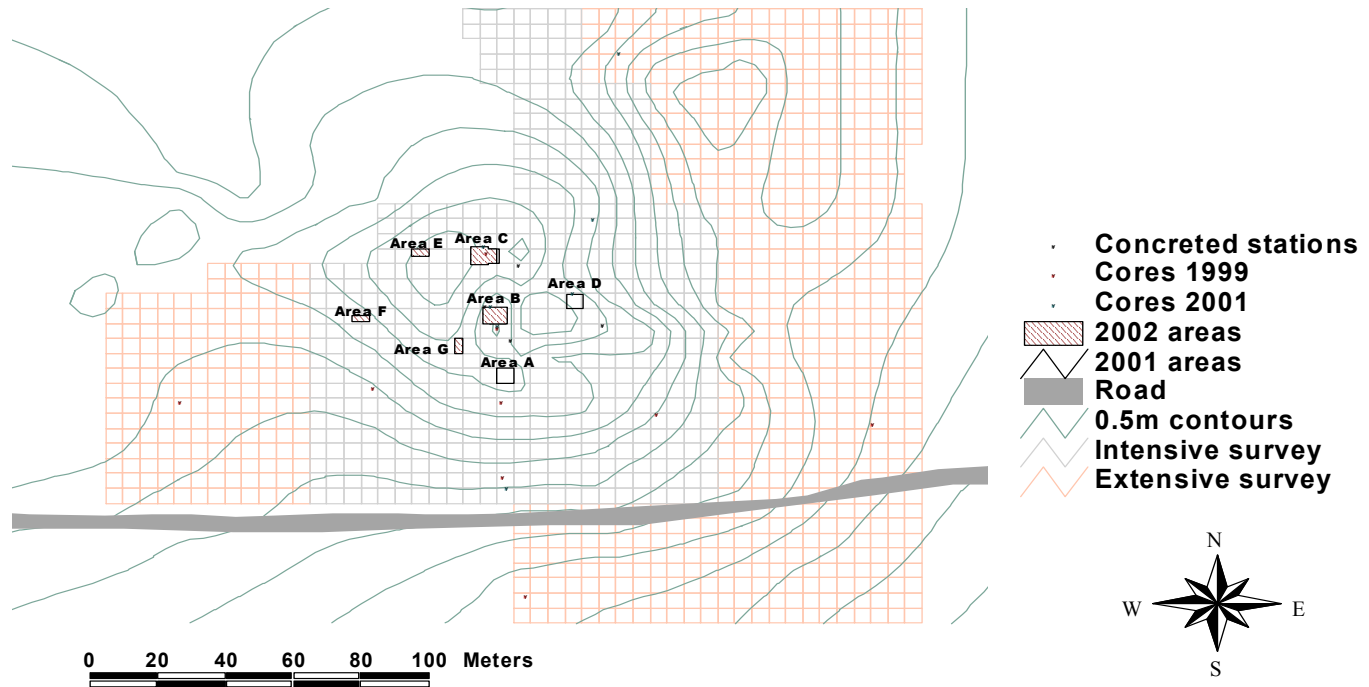


Figure 1: Plan of the site of Kouphovouno showing the grid for the 1999 survey, and Areas excavated in the 2001 and 2002 seasons

PREFACE AND ACKNOWLEDGEMENTS

The second excavation season of the Kouphovouno Project took place during the five weeks 30 June – 3 August 2002. Particular thanks are due to the members of the Archaeological Service of the Greek Ministry of Culture who helped the progress of the project and extended the hospitality of their facilities at their headquarters in Sparta: Dr Mantis, Dr Panagiotopoulou, Stella Raptopoulou, Nassos Themis and Elena Zavvou. We are most grateful to Mr David Blackman, Rebecca Sweetman, Helen Clark and all the staff of the British School at Athens for their prompt and skilful advice in setting up the excavations and ensuring a prompt start to the season. The excavations were funded by the British School at Athens, the British Academy, the Institute for Aegean Prehistory, the Universities of Liverpool, Clermont-Ferrand and Nottingham, the École Française d'Athènes, the French Ministry of Foreign Affairs and CNRS. Without their support the excavations could not have taken place. The team was led by Dr William Cavanagh, Professor Christopher Mee and Professor Josette Renard. As in the earlier stages of the project, the procedures and activities were filmed on video by Jean-Pierre Renard, who also kept the video diary. Soil studies were overseen by Peter James (University of Liverpool) who was assisted in the field by Anne-Flore Marziou. Graham Murray (U. of Nottingham) and Raphaël Orgeolet (U. Paris I) acted as field officers. Sarah Morton, Adam Partington (U. of Nottingham) Maia Pomadere and Yoann Le Mézo (U. Paris I) were trench supervisors. Laurent Mahy acted as surveyor. Scientific study of the pottery was undertaken by Neil Brodie (U. of Cambridge) and Ian Whitbread (U. of Leicester). Anna Lagia (U. of Ohio) continued the study of the human skeletal remains. Anna Stamatou (University College London) had responsibility for computing and Lucy Valassi was finds assistant. Fanny Moutarde (U. Paris I) organised the flotation of soil samples. Dr Bill Phelps visited us and gave advice on the pottery. Jenny Doole acted as illustrator and Estelle Carraud kept house. The students, who worked on all aspects of the project, including excavation and finds processing, were: Esther Wheeler (BSA); Louise Gavin, Martyn Henson, Timothy Manders, Hannah Moran, David Osborne, (U. of Nottingham); Dorothée Desvignes, Christelle Orgival, Simon Besson, Virginie Thomas, Emmanuelle Fournier (U. Clermont-Ferrand); Artemis Brofidou, Sophie Cringle, Thomas Loughlin, Maria Lymperaki, Peter Wilcock (U. of Liverpool).

RESEARCH QUESTIONS

The major questions guiding the research programme have been outlined in our previous reports. Its focus on the rise of complex societies in Greece over the course of the MN–EBA periods (say 5000–2000 BC), results from recent progress in our understanding of the process. Intensive survey has demonstrated that few Middle–Late Neolithic sites survive in southern Greece – the earliest identified in the course of the Laconia Survey were Final Neolithic – and very few of them have been excavated. In central and northern Greece the situation is quite different. This north-south divide must be faced, if the change of settlement in the Final Neolithic and the subsequent development of more complex societies in the Early Helladic period is to be understood. Also radiocarbon dates have made clear the long duration of the Late and

Final Neolithic periods, and the whole framework and structure of the process needs reassessment. Consequently new data, and data from excavation, are needed for progress.

The Kouphovouno Project is designed to investigate the relationship of what is recorded through surface survey, to the archaeology under the surface.

Aims and objectives

This research orientation has led us to establish the following objectives:

1. Refine the dating framework by establishing a stratigraphic sequence for the MN, LN, FN and EH periods with ¹⁴C.
2. Investigate the technology of architecture, and organisation of domestic space
3. Collect environmental evidence to model the subsistence economy and natural setting
4. Undertake scientific analysis of ceramic and lithic technologies for information on exchange and craft specialisation
5. Recover human remains and study their funerary context
6. Study geomorphology and tell formation processes as a control on survey and excavation results and to throw light on changes in the environment.
7. Compare the distribution of surface remains with excavated evidence

The excavations in this second season set out with a number of specific aims in mind:

1. To further clarify the significance and interpretation of the stone platforms, which are a particular characteristic of the Early Helladic and earlier occupation of the site.
2. To clear the burnt floors of the Middle Neolithic house(s) recovered in Area C to establish the extent and form of these structures.
3. To examine the spread of occupation over a wider area of the site, and develop a clearer understanding of the processes of tell formation at Kouphovouno.

In the course of excavation we have continued to refine and develop our recording methods, this year, notably, by the introduction of single context recording. It was agreed, after discussion with the relevant experts, that every archaeological sediment should be sampled in the first place for soil analysis and secondly for water sieving.

During 2002 excavation was confined to the plot of land (0.425 ha) purchased by the excavation on behalf of the Greek state. Five main areas were worked: Areas B and C of 2001 were extended and the new Areas E, F and G were opened up (fig. 1). In what follows we shall report first on the results of the excavations in each of the five areas and follow this by an account of the specialist studies.

EXCAVATED AREAS

AREA B

Area B lies close to the summit of the tell, 15 m south of Area C and the top of the plough soil is at about 199.0 masl. Last year Area B produced two EH/MH burials, in a cist (0108) and a pit (0105) grave respectively, and a number of stone platforms

(0104, 0106 and 0107). Study of the pottery in spring 2002 indicated that most of the levels excavated below the plough soil appear to be of LN and FN date.

In 2002 the main objectives were to clarify the extent and examine the make up of the stone platforms, to uncover more stratified contexts of the LN and FN periods and to investigate architectural features of that period. To achieve these objectives, and in accordance with the strategy of area excavation, Area B was re-opened and a further extension to the west of 2.5 m added, making the total extent of the exposed area approximately 5 x 7.5 m. The stone platforms 0104/0119 and 0107/0120/0121 continued into the extension. The latter, in the south-west corner, was roughly oval in shape, though with some straight edges, and measured 2.6 x 2 m, though the longer dimension continued into the south baulk. The stones were assembled in a shallow hollow (though the uppermost surface of the context into which the hollow had been cut could not be clearly distinguished), with the stones more densely concentrated along the central axis, and scattered less abundantly to the south-west. At its maximum the pile was 0.2 m deep. The platform was planned and sectioned and the section drawn, whilst the soil samples for chemical analysis and flotation should also contribute to our final interpretation.

Stone platform 0104 was recorded in a similar fashion; it was an irregular, sub-rectangular structure, with stones pressed into the underlying fill, which produced LN/FN pottery. Two (plus another uncertain) broken quern stones were recovered from the stone pile, evidently thrown in with the main fill. Context 0106 was also a stone platform, similar in form and appearance to 0104. The pottery from all three of these stone platforms was similar in date: a very few sherds of EHII date in the uppermost part of their fills appear to derive from the layers above, but the main contexts date to LN/FN.

The levels stratified below the stone platforms should provide for our pottery chronology important assemblages of an earlier date. Last year, in the trials made into these sediments, two small (~ 0.5 m diameter) stone piles were discovered and tentatively identified as supports for a wooden framed building, whose timbers had entirely disintegrated. Certainly the fill around these stones was rather soft to excavate and contained much charcoal and other organic matter. The fill worked down to reveal a number of features including a small apsidal arrangement (0133) and a feature in the centre of the Area composed of clay fired bright orange (0127-0131); further excavation is required to reveal their full significance. A number of other features with indications of burning, black soil, or fragments of burnt mud brick, await excavation at the beginning of next season.

AREA C

Area C, situated at the summit of the tell, between 199.45 and 199.40 masl, now covers an extent 7.5 x 6 m. We concentrated our efforts on the two-thirds of the Area towards the west in an attempt to define the extent of the MN floors uncovered in 2001, and to understand the relationship between the floors and the stone platforms. These aims have been met in part, and excavations also revealed new features and a burial.

East part of Area C

(1) We were able to demonstrate that the floor 0218 and the floor 0225, uncovered in 2001, were contemporary (late MN) and had been cut by a circular pit (0280). The pit was made possibly in the Neolithic and used as a grain store before it was filled with large stones. The pottery scattered among the stones in the pit has been dated to EH. The bottom of the pit lies about 0.70 m below the surface of the Neolithic floor and appears to stop on a new layer of the MN period, already revealed by the core carried out in this sector in 1999.

(2) The stone platform 0241 (= 0219 of 2001) covered the fill of the pit at its northern end and cut floor 0248 (= 0225 of 2001). This stone platform, which continues further south beyond the limits of the excavation, has in large part been removed, yielding pottery of late EHI – early EHII (fig. 2).

(3) The extent of the MN floor 0268 (= 0229 of 2001) could not be clearly established within the limits of the excavated area. The floor seems to disappear under stone platform 0241 to the east and, in the extension opened a further 2.5 m to the west, it extends into a sector occupied by features whose function is yet to be ascertained.

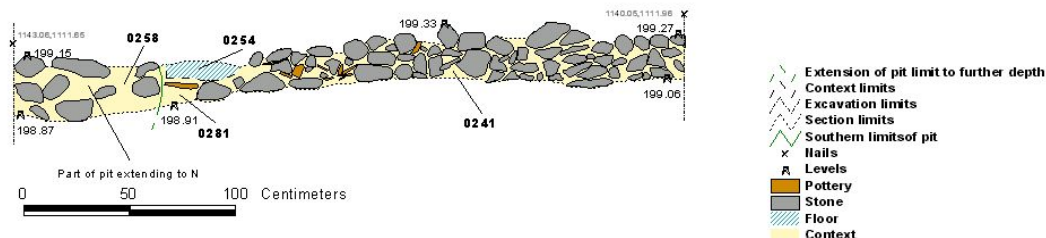


Figure 2: Section through EH stone platform 0241 and other contexts

North part of Area C

(1) The MN floor 0269 (= 0218 of 2001) extended further to the north and to the west. In the north it was covered by significant quantities of burnt mud-brick/pisé, indicating a fire of considerable intensity. Its boundary to the north-east was disturbed by some later features. To the west it was cut by a hollow, within which a stone platform had been constructed (0245). The stone platform was firmly dated to EHII.

(2) At the western end of the mass of vitrified clay, along the north baulk of the Area, a circle of stones was probably the remains of a support for vases (0270).

(3) In the north-west corner of the excavation, the remains were uncovered of a collapsed structure arranged in an arc. Building clay, burnt red, rested on a concentration of small stones and sherds (0282), directly associated with floor 0269. An extension of the excavation to the west will be required to clarify this sector, which has been severely disturbed by roots and insects.

West part of Area C

(1) In the western part of the excavation, work was slowed by the discovery of the burial of a small individual (no taller than 0.90 m). The skeleton rested within a simple earth pit, contracted on its right side and with its head to the north. The skull, lying very close to the modern ground level, had been disturbed, probably by the passage of agricultural machinery, seemed exceptionally large compared with the

other bones. EH pottery was associated with this burial. A MN figurine was found in the surface soil, close to the grave (fig. 3).

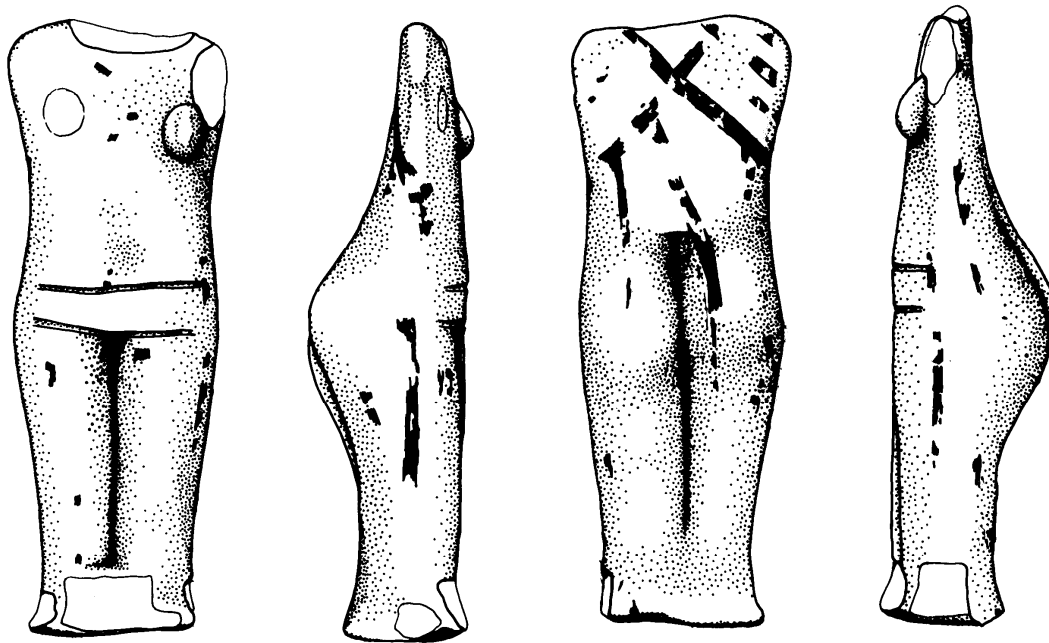


Figure 3: Drawing of the Neolithic figurine from Area C

(2) Along the west wall of the trench a thick zone of burnt clay was uncovered (0266), rich in plant remains and charcoal. Its boundaries could not be defined, as it continued westwards beyond the edge of the excavated area. Associated pottery tended to date this context to EH.

South part of Area C

(1) The excavation of this part of the Area was not completely carried through. There were uncovered, scattered over an area of about 4 m² in the south-west corner of the excavation, animal bones with butchery marks, shells, and stone tools. This assemblage, which seems securely to lie on floor 0268, is associated with a clay vessel of medium size, found in situ among some stones, as well as a patch of burning and charcoal, whose precise limits were masked by later deposits as yet unexcavated. It could represent an area for food preparation and cooking.

(2) Along the south baulk, below the western end of platform 0241, floor 0268 seems to continue as a setting of flat stones, set horizontally, which continue south beyond the limits of the Area.

AREA E

This new sounding measuring 5 x 2.5 m, was opened 17 m west of Area C, on the west slope of the site, with the aim of defining the form of the tell in the Neolithic and Bronze Age, and at the same time to explore the prehistoric levels. At a depth of 0.20 m, the excavation revealed a feature probably of Roman date: it could be the fill of a ditch or stone rubble containing pottery as well as fragments of tile, used as fill. A small trial trench 1 x 2 m was sunk in the north-west corner of the Area, with the aim

of attempting to reach the prehistoric levels as soon as possible. At a depth of 1.20 m below ground level, the finds still did not indicate a level of prehistoric date, and consequently the excavation was halted after two weeks of work. It does indicate, however, that if there are prehistoric levels further down, the west slope of the tell must have been relatively steep, or the prehistoric levels must have been truncated by Roman terracing.

AREA F

In order to investigate the composition and formation of the tell an area measuring 2.5 x 5 m was opened some 35 m west of Area B, in the south-west sector of the plot. Surface survey had indicated Roman occupation further to the south-west, and we hoped that this Area would lie just beyond the Roman remains. In the event, Late Roman levels were uncovered here. Just below the plough soil, whose surface lay at 199.2–199.4 masl, an alignment of hard-packed clay crossed the area from north-east-south-west (0503). Certainly considerably later than the Roman, it could not be associated with any stone foundation or clay floor and its significance is not clear. We next encountered a major Late Roman destruction deposit, consisting of tile, pottery and jumbled stone. Finds included a coin, glass and a square-headed Roman iron nail. LR combed and grooved wares confirmed the date. This destruction deposit was exposed over the whole extent of Area F, though two baulks were left unexcavated to allow sections to be drawn.

In order to explore the lower levels we opened a trial at the west end of the Area ('box A') and took this down to approximately 0.75 m below ground level. Underneath the destruction deposits signs of pure Neolithic occupation levels were recovered. A small shell pendant was found within the earth contained by a small upturned MN carinated bowl. No EH material was discovered below the Roman, possibly because the Bronze Age levels had been terraced away.

AREA G

This new sounding, 4.5 m south-west of Area B, was opened over 5 x 2.5 m in the middle of this season's campaign. At about 0.30 m below ground level two small circular stone structures were excavated, close to the south baulk, and dated to EH by the pottery they contained. Excavation continued down into sediments of a dark brown colour, containing Late Neolithic pottery. A first alignment of large stones, running east-west, appeared at the centre of the trench, but did not reveal any solid construction. A little lower a second alignment of small stones (0626) was discovered along the east baulk and continued in that direction into the trench wall. But the most interesting structure is a curvilinear alignment of stones of solid construction (0625), uncovered in the centre of the Area. Following an east-west orientation, the curved section was found in the eastern part of the Area, and the structure continues into the west baulk. It is probably a wall, but in the absence of any associated floor it is uncertain whether it is a foundation, a socle or part of the superstructure. Excavation came to a halt at a level of brownish-green clay containing numerous inclusions of charcoal and burnt mud-brick/pisé. The associated pottery is firmly dated to the Late Neolithic, notably by sherds decorated in dark-on-light ('matt-painted') and by polychrome pottery characteristic of the period. Structures 0625 and 0626 were left in situ, with a view to excavation in the next campaign.

ARCHAEOBOTANICAL STUDIES

By 31 July 2002, 1100 litres of archaeological sediment from Areas B, C, E, F and G had been processed through the flotation machine. Moreover, the sieve residue from the samples derived from Areas B and C has been strewn and separated into four categories: bone, seed, charcoal and shell, ready for study by the relevant specialists. Naturally we also recovered from these samples lithics and some other objects (beads, bone pins). The quantity of soil per context taken for flotation varied between 0.05 and 77 litres, though on this site only in exceptional cases (such as a high concentration of seeds or charcoal) will a sample of less than 20 litres produce a large enough selection to be representative.

The samples from Area C produced for the most part seeds and bone, and a smaller quantity of charcoal and shell. Area B proved to be rich in bone, but poor in seed, charcoal and shell. Area G, opened later in the season, seemed rich in charcoal. Areas E and F have not yet been studied.

The processing of the flotation samples was organised by Fanny Moutarde working at the base camp, generally in the afternoons and with student assistance. This meant that there were no problems over water supply and the BSA flotation machine worked well. She has recommended certain improvements in the size and mesh of the sieves and underlines the value of feedback from the water sieving to the excavators, informing them of differences in the nature of different contexts.

Study of the seeds will proceed at a number of different levels. First it will address the historical development at Kouphovouno, specifically looking to developments, over the course of the various periods represented on the site, in diet and in agricultural methods. Analysis of the seed remains will also consider their spatial distribution and what that tells us about the organisation of the settlement. Further, specific studies will attempt to help define the nature and function of particular buildings and structures. Next the data collected will be placed in its regional context, comparing them with information from elsewhere in the Aegean region. Finally, comparison between the data on food production and food processing and the analysis of the pottery will contribute to our understanding of diet. More specifically an investigation will consider the transition from the Final Neolithic to the Early Bronze Age, with the aim of establishing the extent to which changes in the evolution of the pottery over this time are related to changes in agriculture and diet.

ARCHAEOZOOLOGY

Study of the faunal remains will have two major objectives. The first will aim to clarify the evolution of pastoralism during the Neolithic and Early Bronze Age at a local level. Its products and its modes of production will be used to throw light on the economic strategies selected within the constraints of the given historical, geographical, social and environmental contexts. The second will compare the results from Kouphovouno with the various systems recognised elsewhere in the Mediterranean, with the aim of distinguishing correlations, influences and modes of transmission.

HUMAN REMAINS

An extended preliminary report on the skeletons which were recovered in the 2001 season has now been submitted by Dr Anna Lagia. Our protocols for the excavation and recording of skeletal material were updated in the light of last year's experience in consultation with Dr Lagia.

One burial was uncovered in 2002, in Area C. Although the skeleton was found in conditions not favourable to perfect preservation, nevertheless much useful information was recovered. The burial of an individual of small size, it lay in a crouched position on its right side, with the head to the north and the face towards the east, whilst the legs were evidently crossed. It had been placed in a simple earth grave, and no special features were discerned in the course of excavation. The excavation of this burial was overseen by Annaïg Fremont, who has submitted a fuller report on the circumstances of excavation.

FINDS

Pottery

All of the pottery from the five areas excavated this year, a total of 27,692 sherds, has been processed. Once washed, the sherds were divided into fine table wares and coarse cooking and storage vessels, counted and weighed. Feature sherds were marked with individual numbers and brief comments written on the date and composition of each context/find.

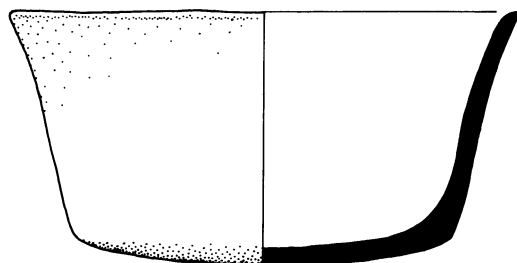


Figure 4: MN bowl from Area F context 0518

Most of the Middle Neolithic pottery comes from contexts in Area C and consists predominantly of fine ware shapes, such as bowls (fig. 4) and jars, with relatively few coarse sherds. Urfinis decoration in glossy black, dark brown or red paint is common. This can be monochrome or take the form of simple linear motifs (fig. 5) or scribble burnish, randomly burnished lines which fire a darker colour, typically black on brown. Scribble burnish is characteristic of the later phases of the Middle Neolithic at other Peloponnesian sites, such as Franchthi.

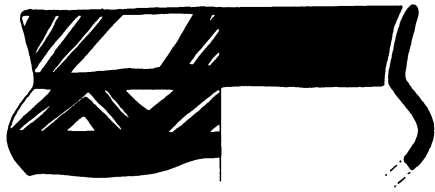


Figure 5: MN bowl fragment from Area C context 0247

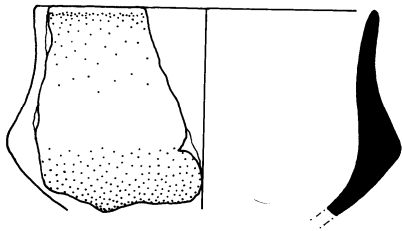


Figure 6: LN black ware bowl from Area G context 0603

There is Late Neolithic pottery, mainly late phase, from Areas B and G, in particular fine and coarse varieties of black ware (fig. 6), usually burnished and occasionally decorated with white paint or incision. Grey ware is also present and matt-painted pottery (fig. 7), typically with a white-slipped or white fabric, sometimes red or buff. Some sherds have polychrome or more rarely black on red decoration.

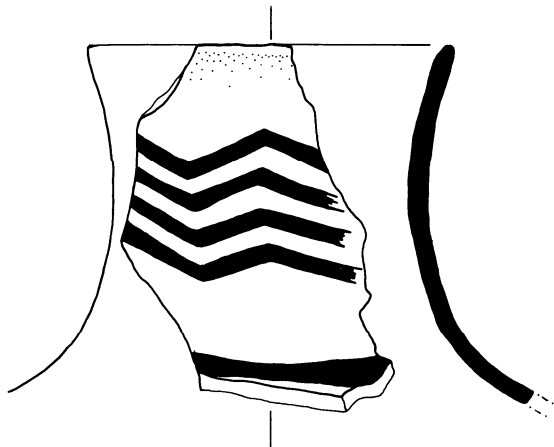


Figure 7: LN matt-painted jar fragment from Area G context 0607

Few clearly Final Neolithic contexts were excavated this year, although this is a phase which we need to define more precisely in terms of the coarse ware fabrics. From Early Helladic contexts in areas B and C we have EHI red-slipped and burnished pottery, typical EHII fine shapes (fig. 8) and coarse ware vessels, often with finger-impressed cordons (fig. 9).

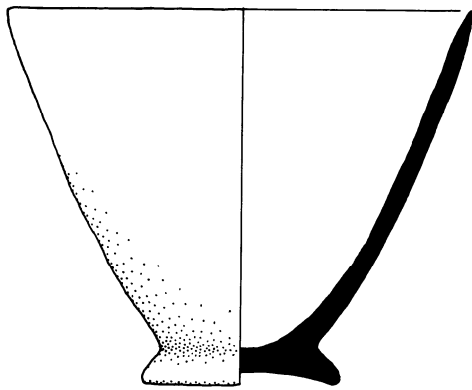


Figure 8: EH II bowl from Area C context 0245

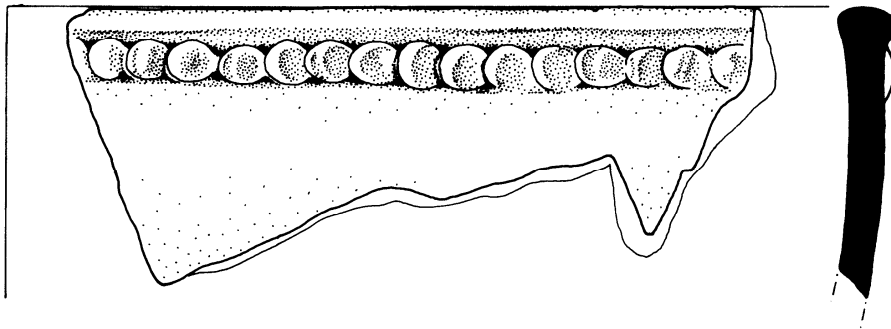


Figure 9: EH II basin from Area C context 0251

Areas E and F produced some Late Helladic, Archaic, Classical and Hellenistic sherds in mixed deposits. The fact that there was so much Roman floor and roof tile but a limited range of ceramics, mainly from closed vessels, is characteristic of Laconian rural sites and may indicate that they were not permanently occupied.

Terracotta

Of particular interest is a fine Middle Neolithic female figurine (fig. 3) from Area C. Similar figurines, although not as well preserved, have been found at Corinth, Franchthi and Nemea.

Stone

The stone tools include axes, adzes and querns. The chipped stone artefacts, of obsidian and flint, will be studied in due course by Anna Karabatsoli.

FABRIC

Dr Neil Brodie and Dr Ian Whitbread continued their study of the pottery fabrics. They reviewed selected contexts from the 2001 excavation season, concentrating on

those that are chronologically best defined, dating from MN to LN/FN, EHI and EHII. The aims of this review were:

- Verifying the definition of fabrics identified in the 5-day fabric study of surface material that they undertook in 2001;
- Using the more stable chronological framework of last year's contexts to begin the assessment of fabric variation over time;
- Recording hand specimen descriptions of the most prominent fabrics with the aim of defining key fabric characteristics with which to establish a systematic framework of fabric classification for the project.

The aims were achieved and the hand specimen descriptions taken will be written up for consultation following the 2002 Excavation Season.

Future directions

The primary aim is to develop a framework of fabric classification to be used in conjunction with data on shape and surface finish. This information will then be fed back into the project for the purpose of characterising contexts and furthering the interpretation of the ceramic assemblage. There are various key questions that they would like to address from the ceramic-technological perspective using Kouphovouno as a test case.

Intra-site organisation

Spatial organisation of the ceramic assemblage with respect to excavated features (such as cobble platforms) with the aim of exploring issues of household production/consumption. This would include synchronic and diachronic variation in relation to data from other specialists working with the excavation.

Intra-regional organisation

Analyses of the regional ceramic context of Kouphovouno will look both to the environmental context (e.g. raw materials exploitation) and to social considerations (in relation to other sites in the area) by examination of material from the Laconia Survey and Laconia Rural Sites Project. Through this part of the study, it is intended to define the organisation of ceramic production, distribution and consumption within the region and the role of Kouphovouno within this network.

Inter-regional perspective

The results of research into the intra-site and intra-regional contexts discussed above will be placed in a broader inter-regional context. This part of our study will compare the inland scenario of Kouphovouno with the contemporary coastal sites (e.g. in the Argolid, Saronic Gulf and Cyclades) which currently dominate much of our understanding of prehistoric ceramic production, exchange and consumption.

GEOMORPHOLOGICAL AND SOILS RESEARCH

It was agreed to sample every context in the four trenches. Where possible, several samples were taken from each context. A proforma was designed for recording the location, elevation, stratigraphic position and general characteristics of the sample. The procedure involves taking a sample which is bagged for analysis. Adjacent to this

sample, several small blocks of soil are taken for description in the field, using a hand lens. In this way, morphological characteristics (e.g. colour variation; anthropogenic and pedogenetic inclusions; voids and void-fillings; evidence of bioturbation) may be recorded in situ. Thus post-depositional, diagenetic change may be evaluated which can affect chemical and other anthropogenic soil traces. Where possible, blocks of soil are collected for micro-morphological analysis.

The laboratory analyses envisaged include the following:

- particle-size distribution
- total organic C and fractions of a number of other elements, including P, Pb, Cu and Zn. It is hoped to use ICP analysis appreciably to extend this list of elements. If feasible, more than one fraction will be determined for each element (e.g. hydrochloric acid-extractable and 'total' amounts from perchloric + hydrofluoric acid digestion).
- free calcium carbonate content
- pH
- mineral magnetic properties (forward and back-field measurements)
- micromorphological analysis, where appropriate.

The first stage of analysis of the data will be to characterize the chemical, mineral magnetic and other physical properties of the soil material of each context type.