

IX. EARLY BRONZE AGE IN THE PELLA-IMATHIA PLAIN, W. MACEDONIA*

by

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1.1 Much of the area of the present day prefectures of Imathia and Pella is occupied by one of Greece's largest plains, covering about 15,000 ha. This vast lowland expanse is bordered to the east by the river Axios, to the north by Mount Païkon and Mount Voras, to the west by Mount Vermion and to the south by the Pieria range and the river Aliakmon. The tremendous volume of water carried by the rivers that cross the area – apart from the Axios and the Aliakmon, the plain is also watered by the Loudias, the Moglenitsas, the Arapitsa and their many small tributaries – is discharged into the Thermaikos Gulf, into which they all flow. The presence of rivers undoubtedly played a vital role in shaping the natural relief of the area and especially the present-day plain. A series of studies has shown that during prehistory most of the present plain was under water (the so-called gulfs of Loudias and Kastanas), while the plain itself appears to have been a narrow strip of land extending about 10 kilometres back from the shoreline and the mouths of the rivers to the foothills of the mountains¹. Within this area defined by sea, rivers and high mountains there are three relief units: alluvial plain, hill-land and mountain. The plain, fringed by the sea and watered by countless perennial rivers, and the low hills must have been covered by hydrophilic vegetation and forests of, chiefly, oak and plane-tree. The mountains were covered with conifers,

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¹ Bintliff J., The plain of western Macedonia and the neolithic site of Nea Nikomedeia, *ProcPrehSoc* 42, 1976, 241–63. Schulz 1989, 373–393. Sivignon M., The geographical setting of Macedonia, in: Sakellariou M. (ed.), *Macedonia. 4000 years of Greek history and civilisation*, Athens 1983, 12–27. Shackleton N., Stable isotope study of the paleoenvironment of the neolithic site of Nea Nikomedeia, Greece, *Nature* 227, 1970, 943–944.

up to their summits (1,200–1,500 m)². A decrease of forests, accompanied by a shift in the wooded area towards the foothills of the mountain massifs, took place in the 2nd millennium BC³; this, it is assumed, was probably due to human activity. Up until that time, however, human intervention in the natural environment appears to have been limited, and there is no palynological evidence of any such activity⁴.

1.2 Before the end of the 1970s virtually nothing was known about the Early Bronze Age (hereafter EBA) in this plain. The only existing data came from the field survey carried out by D. French (1967), who had located 7 EBA sites⁵. During the 1980s archaeological work in the area intensified, and within two decades much EBA material had been brought to light. The excavations of the Mandalo (1981–1988) and Arhontiko (1992–) tells carried out by the Aristotle University of Thessaloniki have contributed a wealth of data, while non-intensive surveys over the past twenty years have identified numerous EBA sites, thus giving us considerable information about settlement patterns⁶.

² Athanasiadis N., Gerasimidis A., Μεταπαγετώδης εξέλιξη της βλάστησης στο Βόρα Αλμωπίας, Επιστημονική Επετηρίδα του Τμήματος Δασολογίας και Φυσικού περιβάλλοντος Πανεπιστημίου Θεσσαλονίκης 29/4, 1986, 213–249. *Idem*, Μεταπαγετώδης εξέλιξη της βλάστησης στο όρος Πάικο, Επιστημονική Επετηρίδα του Τμήματος Δασολογίας και Φυσικού περιβάλλοντος Πανεπιστημίου Θεσσαλονίκης 30/11, 1987, 405–445. Bintliff J., The plain of western Macedonia and the neolithic site of Nea Nikomedeia, *ProcPrehSoc* 42, 1976, 241–63, Drivaliari 2001.

³ Andreou – Fotiadis – Kotsakis 1996, 562, 564, Bottema 1982, 279–284.

⁴ Bottema 1982, 261–266. Kokkinidou 1990, 28–29.

⁵ French D. H., Index of prehistoric sites in central Macedonia and catalogue of sherd material in the University of Thessaloniki, Athens 1967.

⁶ Pella Prefecture: Chrysostomou P. 1990. Hrysostomou P., Η νεολιθική κατοίκηση στη βόρεια παράκτια ζώνη του άλλοτε Θερμαϊκού κόλπου, *AErgoMak* 10, 1996, 159–172. *Idem*, Η νεολιθική έρευνα στη βόρεια λεκάνη των Γιαννιτσών, in: Satrazanis A. (ed.), Γνωριμία με τη γη του Αλεξάνδρου. Από τα προϊστορικά μέχρι τα νεότερα χρόνια. Ιστορία-Αρχαιολογία-Τέχνη στο νομό Πέλλας, Thessaloniki 2003, 101–132. Hrysostomou A., Αρχαία Αλμωπία, Thessaloniki 1994. Kokkinidou 1989. Kokkinidou 1990. *Eadem*, Η Έδεσσα και η ευρύτερη περιοχή της κατά τη διάρκεια της νεολιθικής και της εποχής του χαλκού, in: Kioutoutskas G. (ed.), Η Έδεσσα και η περιοχή της. Ιστορία και πολιτισμός, Edessa 1995, 51–68. Kokkinidou – Trantalidou 1991, 100–102.

Imathia Prefecture: Merousis N., Stefani L., Προϊστορικοί οικισμοί του νομού Ημαθίας, *Μακεδονικά ΚΘ*, 1994, 339–66. *Idem*, Κατοίκηση και φυσικό περιβάλλον στην προϊστορική Ημαθία: συμπεράσματα και προοπτικές από την επιφανειακή έρευνα των ετών 1993–1996, *Αρχαία Μακεδονία VI* (vol. II), Thessaloniki 1999, 735–51. *Idem*, Οι προϊστορικές έρευνες στην Ημαθία: παλιά και νέα δεδομένα (Α' μέρος), *Αρχαιολογία* 88, 2003, 34–38, Β' μέρος, *Αρχαιολογία* 89, 64–72. Merousis N., Settlement patterns in prehistoric Imathia and Pella, W. Macedonia, Greece. International Conference "Settlers and Settlements in Greece, 9000–1000 BC" (University of the Aegean, Rhodes, Greece, October 2002 – in press).

1.3 There is no archaeological data for the transition from the Neolithic to the EBA and, on the basis of radiocarbon dates, archaeologists have postulated the existence of a gap in the 4th millennium BC⁷. For the area we are concerned with, the radiocarbon dates supporting this hypothesis come from Mandalo⁸. In the series of 19 radiocarbon dates from that settlement the 4th millennium is missing, which has led to the hypothesis that the settlement was abandoned for about a thousand years and re-inhabited in the 3rd millennium BC.⁹ The gap observed at Mandalo is also encountered elsewhere in Macedonia (e.g. Sitagroi-Dikili Tash), although until recently there have been only few radiocarbon dates from the 4th millennium BC.¹⁰ The radiocarbon dates we have at present suggest that in the plain of Pella and Imathia the EBA begins about 2800 BC; the end of this era may be placed conventionally at the beginning of the 2nd millennium BC, although there is no data showing significant changes over the transition from the 3rd to the 2nd millennium. Evolution does not occur suddenly in prehistoric Macedonia, as it does in southern Greece, with the appearance in the 2nd millennium of strongly hierarchised societies and palaces; by contrast, in Macedonia, everything takes place in the *longue durée*. Based on existing data, it would indeed appear that the 3rd millennium BC does not need to be divided into periods or phases, as is the case with southern Greece, since no changes differentiating one time phase from another have been observed within this period.

1.4 The principal characteristic of settlement patterns in the transition period from the Neolithic to the EBA in the Pella / Imathia plain is the reduction in the number of sites¹¹. In the Late and Final Neolithic periods (5th and 4th millennium BC) the plain appears to have been quite densely settled (36 definite + 3 possible Neolithic sites), while in the EBA there are 26 inhabited sites and another 6 that have not been dated, with certainty, to that age. This means that at least 10 Neolithic sites had been abandoned, while at the same time it is clear that most EBA sites had been inhabited in the Late Neolithic period: only 8 sites were

⁷ Papadopoulos St., Το «πιθανό», το «αμφίβολο» και το «άγνωστο» στη νεολιθική εποχή της ανατολικής Μακεδονίας και Θράκης, in: Voulgari L. (ed.), Η προϊστορική έρευνα στην Ελλάδα και οι προοπτικές της : θεωρητικοί και μεθοδολογικοί προβληματισμοί, Thessaloniki 2003, 255–264: 261–262.

⁸ Kotsakis et al. 1989. Maniatis – Kromer 1990. Manning 2001², 94, 162, fig. 37–38.

⁹ Kotsakis et. al. 1989. Maniatis – Kromer 1990.

¹⁰ Papadopoulos St. 2002, 57–58, 66, 69, 71. Idem, Το «πιθανό», το «αμφίβολο» και το «άγνωστο» στη νεολιθική εποχή της ανατολικής Μακεδονίας και Θράκης, in: Voulgari L. (ed.), Η προϊστορική έρευνα στην Ελλάδα και οι προοπτικές της : θεωρητικοί και μεθοδολογικοί προβληματισμοί, Thessaloniki 2003, 255–264: 261–262.

¹¹ Merousis N. – Stefani L., Τοπίο στην ομίχλη. Η 2^η χιλιετία στην κεντρική πεδιάδα της Δυτικής Μακεδονίας. Β' International Symposium "The Periphery of the Mycenaean World", Lamia 1999 (in press).

first settled in the 3rd millennium BC. This suggests that the criteria upon which site selection was based remained essentially the same from one age to the next, which means that the strategic exploitation of natural resources also remained largely unchanged. During the EBA only tell sites were inhabited, and their area seems to have decreased in comparison to the Neolithic tells¹². The occupation of tells and the abandonment of flat settlements and caves during the EBA is a phenomenon encountered all over Macedonia, and must have been associated with changes in economic organisation. It has been postulated that in the extensive Neolithic tells and flat sites there were large open spaces interspersed among the built-up areas, which increased the surface area of the settlement¹³; by contrast, in the EBA, the data from Arhontiko and Mandalo make it clear that the tells were very densely inhabited, with the houses built right next to one another and the urban units thus densely structured. Perhaps the occupation of long-lived tell sites, the predominant pattern in the EBA, was related to the adoption of an intensive agricultural regime in locations which offered more opportunities for diversification in the immediate area of the settlement. The intensification of agricultural production is a phenomenon which appears to be characteristic of the EBA in Macedonia. The large monochrome vessels produced at this time make it clear that storage activity had increased sharply and was probably the primary concern of the community. Apart from these storage jars, a series of other pottery vessels of various sizes and shapes unknown in the Neolithic age (jugs, cups, kantharoi (pl. 1a-b)) appear to have been produced to meet new needs. Sherratt's¹⁴ *secondary products revolution* may have been the main cause of these changes.

The principal characteristic of the EBA, as we have said, is the production of monochrome coarse ware. The decorated ware that was the trademark of the Late Neolithic stops being produced and eventually disappears. In the 3rd millennium the only form of decoration on pottery vessels is a plastic band adorned with impressed motifs. It has been argued that the interruption in the production of decorated ware in the EBA is connected with the general economic changes observed during that period¹⁵. Decorated vessels evidently ceased to be prestigious

¹² Merousis N., Settlement patterns in prehistoric Imathia and Pella, W. Macedonia, Greece. International Conference "Settlers and Settlements in Greece, 9000–1000 BC" (University of the Aegean, Rhodes, Greece, October 2002 – in press).

¹³ Kotsakis K., What tells can tell: social space and settlement in the Greek neolithic, in: Halstead P. (ed.), *Neolithic Society in Greece*, Sheffield 1999, 66–76.

¹⁴ Sherratt A. 1981.

¹⁵ Cf. Halstead 1994. Sherratt A. G., Mobile resources: settlement and exchange in early agricultural Europe, in: Renfrew C., Shennan S. (eds.), *Ranking, resources and exchange: aspects of the archaeology of early European society*, Cambridge 1982, 13–26.

objects and were replaced by other products, most likely metals, woollen cloth or obsidian blades from the Carpathians and Melos.

The changes that occurred in the 3rd millennium BC were not confined to pottery. Production of clay figurines fell considerably, so that by the end of the 3rd millennium BC they had essentially disappeared, trade in *Spondylus* ornaments virtually stopped, while the art of stone-cutting is also thought to have regressed. Furthermore, changes in the typology of spindle-whorls suggest changes in the production of yarns and cloth¹⁶.

In closing this review of changes in the EBA, it should be noted that these changes do not seem to have been abrupt; on the contrary, it is clear that they began in the Neolithic period (5th millennium BC)¹⁷. The production of undecorated storage vessels is already vigorous in the middle of the 5th millennium BC. It is, however, entirely characteristic that the diversity typical of the Late Neolithic had disappeared by the 3rd millennium, and most researchers speak, in this context, of a *koine* that spread across the Balkan peninsula and into Thessaly¹⁸. Sherratt¹⁹ thinks that the uniformity and homogeneity of ceramic tradition in the EBA replaced the numerous local styles of the Late Neolithic, which preserved a kind of competition among the various communities. This, in conjunction with the probable improvement in agricultural production, set in motion developments that may have led to the self-sufficiency of each settlement and reduced the need for trade goods (e.g. decorated ware).

2.1 Mandalo²⁰ (pl. 2a). The prehistoric settlement of Mandalo is located on the hill known as Sitsan Tepe, 65 km NW of Thessaloniki, 20 km NW of Pella and 1 km NW of the village of the same name among the low hills that separate the plain of Aridaia from the Giannitsa-Veria plain. It is a small tell site that covers an area of not more than 0.20 ha at its base (0.05 ha at the summit), with a height

¹⁶ Papadopoulos St. 2002, 279–282, 284.

¹⁷ Halstead 1995, 11–19.

¹⁸ Papadopoulos St. 2002, 59, 284.

¹⁹ Sherratt A. G., Mobile resources: settlement and exchange in early agricultural Europe, in: Renfrew C., Shennan S. (eds.), *Ranking, resources and exchange: aspects of the archaeology of early European society*, Cambridge 1982, 13–26 : 23.

²⁰ Papaefthymiou-Papanthimou – Pilali-Papasteriou 1987. Papaefthymiou-Papanthimou – Pilali-Papasteriou, 1988. Pilali-Papasteriou – Papaefthymiou-Papanthimou 1989, 17–27. Eadem, Ο προϊστορικός οικισμός στο Μάνδαλο Δυτικής Μακεδονίας: Νέα στοιχεία στην προϊστορία της Μακεδονίας, *Αρχαία Μακεδονία V*, Thessaloniki 1993, 207–216. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1996, 143ff., fn. 2, 3, 6, 8, (bibliography). Eadem, Ο προϊστορικός οικισμός του Μανδάλου Δυτικής Μακεδονίας μέσα στα πολιτιστικά πλαίσια της Ύστερης Νεολιθικής, Στ' Διεθνές Συμπόσιο Αιγαιακής Προϊστορίας, Athens 1987, in press. Pilali-Papasteriou et al. 1986.

of about 7 m. An unauthorised excavation in March 1981 led to an excavation programme by the Aristotle University of Thessaloniki in the autumn of the same year. The work continued without interruption until 1988. Over the course of these 8 seasons archaeologists investigated the southern slope of the tell (stratigraphic section measuring 2x11 m), the summit and the eastern section (a total of 170 m²). The stratigraphic study revealed 7 successive habitational horizons (Mandalo I/ 2 horizons, Mandalo II/ 3 horizons, Mandalo III/ 2 horizons), in two of which there had been catastrophic fires. Phases I-II belong to the 5th millennium BC, and do not concern us here. Mandalo III falls within the EBA, and according to 5 radiocarbon dates²¹ begins around 2950 BC and ends around 2200 BC, when the settlement was finally abandoned.

As has already been noted, the 4th millennium BC is missing from the series of radiocarbon dates for Mandalo, which is why the hypothesis of a gap of about a thousand years in the habitation of the settlement has been advanced. This hypothesis, however, may not hold, since there may well be discontinuity in the sampling of the transition of Mandalo II-III. Perhaps the dating of the radiocarbon samples from the BA section, the stratigraphy of which is currently being studied, will supply an answer. It is, however, characteristic that the gap in the radiocarbon dates does not exist in the stratigraphy of the settlement. EBA houses were built directly over Neolithic ruins, and appear to have disturbed the Neolithic strata.

Based on the observations of the sections of the summit, Mandalo III appears to have had two main habitational horizons²². The first (upper) horizon is characterised by a thick layer composed mainly of small stones, with a few fragments of a mud floor and large quantities of pottery. The second (lower) horizon, which was destroyed by fire, is formed of a succession of post-hole houses. There are numerous examples of hearths apparently having been corrected by the householder 2 or 3 times, showing this to have been a phase of long habitation, which must have been divided into 2 or 3 building horizons. Unfortunately the excavation was not carried deep enough to reveal the entire ground plan of a house. On the basis of statistical analysis of the distance between post-holes, it has been suggested²³ that the houses in Mandalo were probably rectangular, similar in ground plan to those in Arhontiko (Pella) (pl. 2b).

The changes from Neolithic Mandalo II to EBA Mandalo III lie mainly in the pottery²⁴. There is no change at all in the manner of building construction. In both

²¹ Kotsakis et al. 1989. Maniatis – Kromer 1990. Manning 2001², 94, 162, fig. 37–38.

²² Merousis – Nikolaidou 1997, 156. Nikolaidou – Merousis et al. *im Druck*.

²³ Kotsakis 1987.

²⁴ Merousis – Nikolaidou 1997, 156. Nikolaidou – Merousis et al. *im Druck*.

cases the houses are made of piled clay on frames of wooden posts, furnished with hearths, platforms and pits²⁵. In contrast, significant changes are found in the pottery (pl. 3a). During the EBA the pottery is almost exclusively monochrome coarse ware, principally storage vessels, jugs, cups and “amphoroid” vessels. The burnished ware of the late Neolithic period is eventually no longer produced, and is replaced by striated ware and a few brown burnished vessels. The intense storage activity suggested by the storage vessels in the households of Mandalo is confirmed by storage pits, which are usually found next to the hearths and contain cereals and pulses (barley, einkorn, lentils, emmer, bitter vetch, Celtic bean)²⁶.

The excavation material yielded a few metal objects, including a large axe, although these were rare (pl. 3b). Tools were represented by a variety of types of stone tools, including blades of obsidian from the Carpathians and Melos²⁷, indicating that products from remote places made their way to the settlement. Finally, we note the presence of a cylinder seal²⁸, its surface decorated with two bands of zigzags, clay anchors (pl. 4a) and a few figurines²⁹ (pl. 4b).

2.2. Arhontiko Pellas³⁰. The settlement of Arhontiko in the Prefecture of Pella, 4.5 km NW of Ancient Pella is a tell settlement with a total area of 0.60 ha, founded upon a natural hill some 20 metres high. To the north and east of the tell there is a double *trapeza* covering 0.68 ha, and there is a smaller low tell to the south (0.5 ha). Habitation of the archaeological site of Arhontiko is confirmed from the Middle Neolithic period onwards, but there are indications that the area may have been inhabited from the end of the Early Neolithic right through to the Late Byzantine period. Excavation of the tell was begun by the Aristotle University of Thessaloniki in 1992, and is proceeding under the direction of Prof. Katerina Papaefthymiou and Prof. Angeliki Pilali of the Aristotle University of Thessaloniki.

²⁵ Cf. Ridley – Wardle – Mould 2000, 79–97, fig. 3.2–3.11.

²⁶ Valamoti S.-M. Archaeobotanical investigation of LN and EBA agriculture and plant exploitation in Northern Greece (unpubl. diss., Sheffield 2001).

²⁷ Kilikoglou et al. 1996. Pilali-Papasteriou – Papaefthymiou-Papanthimou 1997.

²⁸ Pilali-Papasteriou 1995.

²⁹ On clay anchors see Ridley – Wardle – Mould 2000, 248–263 (C.A. Mould).

³⁰ Papaefthymiou-Papanthimou – Pilali-Papasteriou 1991–1992. Pilali-Papasteriou – Papaefthymiou-Papanthimou 1995–2000. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1992. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1993. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1994. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1996. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1997a. Papaefthymiou-Papanthimou – Pilali-Papasteriou 1998a. Papaefthymiou-Papanthimou et al. 1999. Papaefthymiou-Papanthimou 2000. Pilali-Papasteriou – Papaefthymiou-Papanthimou 2002. K. Papanthimou – A. Pilali, The prehistoric settlement in Archontiko of Giannitsa, Giannitsa 2003.

The interdisciplinary work carried out to reconstruct the palaeoenvironment of the area showed that Arhontiko was originally 5 km from the sea. About 2 km due south of the settlement, a narrow strip of land sloped gently down to the sea. The hill upon which Arhontiko is built was on the edge of a district of rolling hills criss-crossed by torrents coming down from Mount Païkos to the north and emptying into the sea. The area between the settlement and the sea was covered by shallow, brackish marshes. At its nearest point to the settlement the sea was shallow (maximum depth less than 8 m), with a gently shelving bottom (4.5 ‰)³¹.

The archaeo-zoological study of the material identified a total of 24 species of animal³². Most numerous were sheep and goats (*Capra ibex/Ovis aries*), followed by pigs (*Sus scrofa*) and cattle (*Bos taurus*). Wild species accounted for about 20–23% of the total, and included several species of deer (*Dama dama*, *Cervus elaphus* and *Capreolus capreolus*). The fact that sheep and goats outnumbered all other species is easily explained, since these animals provide not only meat but also hides, bone marrow, milk and wool. It is thought that the cattle played a supplementary role in the economy of the settlement. The relatively high occurrence of wild animals – apart from the species named, there were also hares (*Lepus europaeus*), mustelids (weasels, martens, badgers - *Mustela*, *Martes*, *Meles*) and even bears (*Ursus*) – suggests that during the EBA the people of Arhontiko hunted intensively in the surrounding forests. In fact, the observed decrease in the relative occurrence of wild animals in the 2nd millennium may have to do with a decrease in wildlife population due to overhunting, or it may perhaps reflect improvements in stock-raising that caused the reduction of the need for hunting.

The excavation work focused on the south slope and the summit of the tell. On the south slope a stratigraphic section (8 sections measuring 3x2 m) confirmed habitation until the later phases of the Late Neolithic; none of these sections reached bedrock. Radiocarbon dating of the EBA stratum puts it at 2287–2139 BC.³³

Excavation of the summit and eastern slope of the tell (24 sections measuring 4x4) brought to light important remains of Late Bronze Age – Early Bronze Age houses (pl. 4c, 5–6). Four building horizons were identified in this area³⁴:

³¹ Papaefthymiou-Papanthimou – Pilali-Papasteriou 1997a, 171–172. Papanthimou – Pilali 2003 (footnote 30), 13, 14–15 (digital reconstruction of the broader area of Arhontiko). Papadopoulou E., Πήλινα μικροεργήματα από τον προϊστορικό οικισμό Αρχοντικού Πέλλας (unpublished M.A.thesis. University of Thessaloniki 2002) 31–32.

³² Kostopoulos 2000.

³³ Papaefthymiou-Papanthimou – Pilali-Papasteriou 1998a, 311.

³⁴ Papadopoulou E., Πήλινα μικροεργήματα από τον προϊστορικό οικισμό Αρχοντικού Πέλλας (unpublished M.A.thesis. University of Thessaloniki 2002) 36–63.

Phase A (Late Bronze Age), building horizon I, recently radiocarbon dated to 1567–1414 BC.

Phase B (Early Bronze Age), with 4 building horizons (excavation area 111 m²).

Building horizon II (ca. 0.20–0.30 cm of deposit). This horizon yielded ruins of 2 houses furnished inside with clay structures. One of the two houses appears to have the same orientation and interior layout as House Δ of Phase IV.

Building horizon III (ca. 30–35 cm of deposit). There are many problems with the habitational reconstruction of this phase. The houses are raised on piles, again with many kinds of clay structures, while two of them occupy the same location as the Phase IV houses.

Building horizon IV (ca. 0.30–0.35 cm of deposit). This building horizon has yielded the most preserved houses of this period in Central and Western Macedonia. They are all built of posts driven into the ground to form the body of the house. The walls are also constructed of logs, and plastered with a very thin coat of mud³⁵. There is no evidence for the shape of the roof. The paragraphs below give brief descriptions of the 4 houses discovered on the eastern slope of the tell³⁶ (pl. 7a).

House A: Rectangular building with an area of 24 m² (4x6.5m), inside which 4 circular structures were found that may have been storage pits, with the grave of an infant beneath one of them. Two clay structures complete the set. Another set of structures (an oven beside two platforms and another semi-circular platform) were found against the south wall of the house. On the north wall there were 4 clay structures and 3 pits. This house had the most weaving equipment: the 3 sets identified – light, medium and heavy – may indicate that different kinds of yarn were spun there.

House B: To date 23 m² have been uncovered. The house is divided by a partition. Two sets of clay structures, west and east. In the western half a group of 12 intact vessels were found *in situ*. A total of 8 clay structures were found in House B.

House Γ: At the moment only 15 m² have come to light. Like House B, this house is also divided by a partition. To date 6 structures have been found. An exterior space to the south of the house may have been a passageway, 4 metres long.

³⁵ See fn. 25.

³⁶ Papaefthymiou-Papanthimou – Pilali-Papasteriou 1999. Papaefthymiou-Papanthimou et alii 2001. Papanthimou – Pilali 2003 (footnote 30), 21–35. Papadopoulou E., Πήλινα μικροαντιχειμένα από τον προϊστορικό οικισμό Αρχοντικού Πέλλας (unpublished M.A.thesis. University of Thessaloniki 2002) 50–63.

House Δ: This is the only house that has been totally excavated. A total of 10 clay structures were found within its 30.8 m² interior.

House E: Very little of this house has been brought to light, because excavations did not continue in this sector.

The principal feature of all these houses in Arhontiko are the clay structures they contain. Typological study of these structures has identified 5 types³⁷ (pl. 7b):

i. Ovens: horseshoe-shaped with a vaulted top and an opening in one narrow side, they were used for cooking food; ii. Platforms: they are characterised by a flat surface, they served as a kind of counter for food preparation; iii-iv. Small and large-round structures: small round structures, probably hearths and/or storage structures, large structures have served as storage needs (*siroi*); v. composite structures: their function remains unclear.

The spatial distribution of the clay structures suggests that each set comprises of 4 structures, which served basic everyday household needs, such as storage, food preparation, cooking and the heating/lighting of the interior. In addition, each house was found to have two sets of clay structures, usually one at the east end and one at the west. It is characteristic that food preparation and cooking were done against the exterior walls of the house, while the storage pits were located on the transverse axis³⁸. The fact that these structures were scattered across the entire floor of these small houses, leaving virtually no free space, suggests that the EBA inhabitants of Arhontiko lived essentially outside their houses, while other activities, such as sleeping, are likely to have been accommodated on a kind of gallery (*παράρτι*) under the roof.

2.3 In addition to work on the settlements described above, the Archaeological Service (IZ EPKA/Greek Ministry of Culture) has, from time to time, carried out small-scale rescue excavations, which are briefly outlined below.

At the Hatzinota tell in Lefkadia (Naoussa, Pref. of Imathia), a small-scale exploration at the beginning of the 1980s brought to light EBA pottery similar to that found in all the settlements of the same period. The deposits here are particularly thick, and habitation seems to have begun at least in the EBA, continuing into the LBA, while during the Hellenistic and Roman periods the site was used as a graveyard³⁹.

The Nea Zoi settlement at Almopia (Pref. of Pella) is built on a hill in a strategic position commanding communications routes. Excavations on the slopes and summit of this hill have confirmed that it was inhabited in the EBA, but the de-

³⁷ Papaefthymiou-Papanthimou et al. 2000, Maniatis – Phakorelis 1998.

³⁸ Papaefthymiou-Papanthimou et al. 2000, 429f.

³⁹ Allamani V., ADelt 38, 1983, B' Chron 304f.

struction of the antiquities was so great that no specific data relating to the organisation of the settlement at this time could be gathered. The area was also inhabited in the LBA and the Iron Age, after which it was used as a cemetery⁴⁰.

At the Giannitsa settlement (Pref. of Pella), which was inhabited from the Early Neolithic period, excavations have brought to light phases belonging to the EBA, when the settlement was more limited in size. After the 3rd millennium the settlement was abandoned⁴¹.

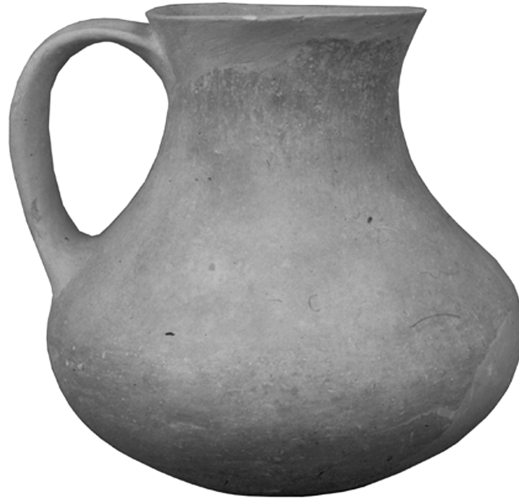
Finally, the thick deposits of the EBA stratum in the prehistoric settlement of Aravissos (Pella) have revealed two habitational phases, the first of which included a fire destruction layer exceptionally rich in finds, from a rock dwelling. EBA deposits have also been excavated at the Agrosykia settlement⁴².

⁴⁰ Chrysosotomou A. 1994, 34, 36.

⁴¹ Chrysosotmou P., Η νεολιθική έρευνα στη βόρεια λεκάνη των Γιαννιτσών, in: Satrazanis A. (ed.), Γνωριμία με τη γη του Αλεξάνδρου. Από τα προϊστορικά μέχρι τα νεότερα χρόνια. Ιστορία-Αρχαιολογία-Τέχνη στο νομό Πέλλας, Thessaloniki 2003, 101–132: 106.

⁴² Chrysostomou op.cit. 107.

Plate 1



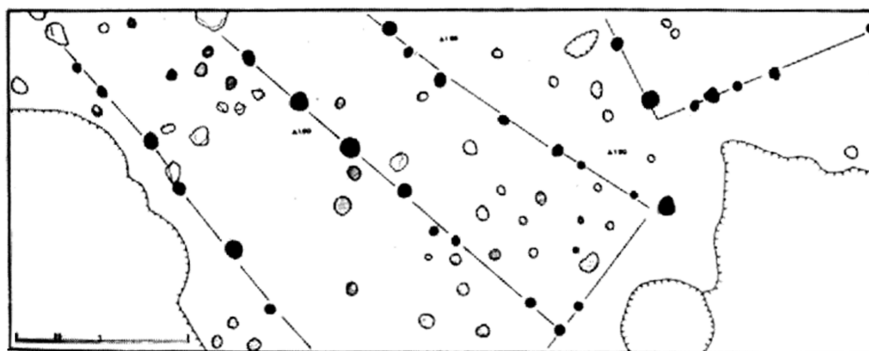
a) Toumba Episkopis: EBA jug.



b) Toumba Episkopis: EBA vases.

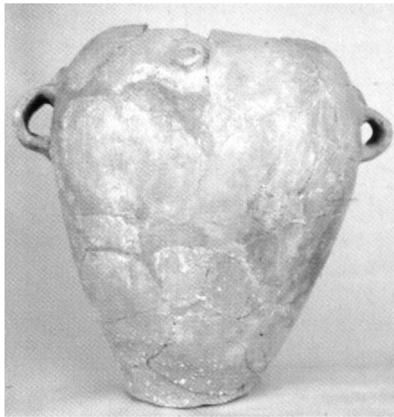
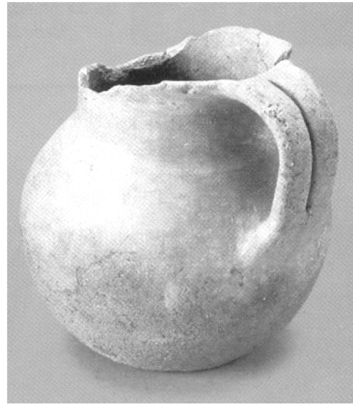


a) The prehistoric tell of Mandalo.



b) Mandalo: Reconstruction of post-hole houses (after Kotsakis 1987, fig.2).

Plate 3



a) Mandalo: EBA pithoi and jug.



b) Mandalo: Bronze axe.



a) Mandalo: Clay anchors.



b) Mandalo: Clay figurine.



c) Arhontiko: EBA vases.

Plate 5



a) Arhontiko: EBA kantharos.



b) Arhontiko: EBA "brazier".



c) Arhontiko: EBA kantharos.

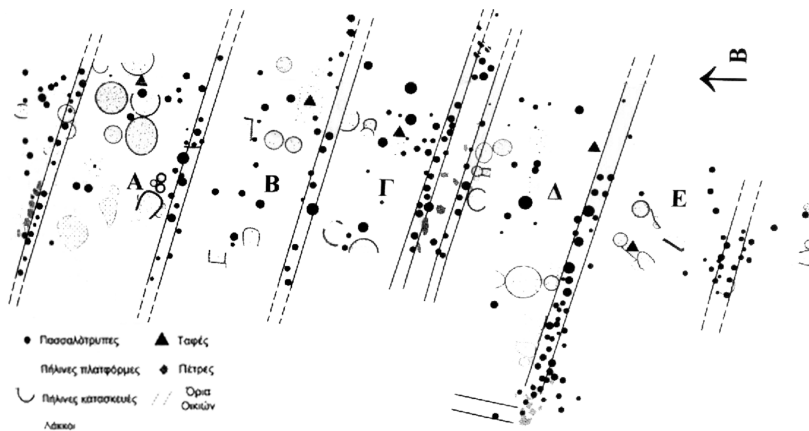


a) Arhontiko: EBA "brazier".



b) Arhontiko: EBA bronze axe.

Plate 7



a) Arhontiko: Ground plan of EBA houses Phase IV; (after Papanthimou-Pilali, AERgoMak16, 2002, 459).



b) Arhontiko: EBA clay structures.