



5. Koropi: dog bones (humeri) bearing cutmarks, mainly to dismember the carcass. © A. Hadjikoumis.

have been absent from Attica. Wolves and foxes were probably hunted to protect domestic species and for their fur, as well as meat. The manufacture of objects from bone, horn and antlers is well documented. Contextual study of the faunal assemblage also provides insights into social practices such as periodic communal meals and unusual occasions of meat consumption, with possible chronological differences within the Early Bronze Age. The study continues with examination of more Final Neolithic and Early Helladic contexts to distinguish functional and diachronic variation across the site.

The School's Leventis Fellow, Evi Margaritis (Cambridge), pursued the study of well-stratified remains of olive and vine from excavations in the Cyclades, the northern Aegean, mainland Greece, Crete and Cyprus. Data obtained provide hitherto missing information for the early exploitation and cultivation of the vine and the olive in the Aegean Early Bronze Age, and support such related studies as residue analysis for olive oil and wine. Cultivation of fruit trees is evident from the gathering of fruit and from pruning. Olive and vine trees were initially managed for their branches and leaves – for fodder, fuel and building material. Pruning produced stronger and more numerous branches, which led to improved fruit production. In turn, this likely prompted exploitation of the growing quantity of fruit and the development of management strategies involving more intensive and careful pruning which transformed wild olives and vines into productive, cultivated trees. Microscopic study of the archaeobotanical data is enhanced by molecular analysis conducted in collaboration with the Department of Molecular Biology and the National Institute of Agricultural Botany at Cambridge University. Olive leaves and stones from very old and wild olives from Vouves, Margarites, Kavousi and Gortyn on Crete are currently undergoing DNA analysis to determine whether domestication was an indigenous development on Crete. These modern samples will be compared with archaeobotanical samples from Papadiokambos, Chryssi and Mochlos in east Crete. At Mochlos, analysis of Early and Late Bronze Age data also sheds light on differences and similarities in the varieties and origins of olives of these periods.

Research into metal production in the Early Bronze Age Cyclades conducted by the Scientific Research Officer of the Fitch Laboratory, Myrto Georgakopoulou, focused on finds from recent excavations on **Keros** (ID2759). Although Keros appears devoid of ore

resources, a small smelting site for both pure and arsenical copper was identified north of the Special Deposits on the Kavos promontory. Significant evidence for metal-working and metal consumption was also recovered from all three settlement phases at Dhaskalio, mostly from the best-documented final phase. Frequent copper spills, tuyères and some metallurgical ceramics, probably from crucibles and moulds, indicate copper-working, and a litharge fragment suggests that cupellation was also practised. Excavated contexts date to the later Early Bronze Age, when tin-bronze was already known in the Cyclades, yet most copper-based artefacts at Keros were of arsenical copper, with very few tin-bronzes among the analysed finds. As at other contemporary sites in the southern Aegean, most copper artefacts are consistent with Cycladic sources, but the tin-bronze is incompatible with an Aegean provenance. The almost total absence of metal from the Special Deposits South and North suggests that despite the metal-rich character of the settlement, metal was not among the prestige artefacts deposited on Kavos.

I conclude this account of the work of the School with a review of the most significant findings of the School's archaeological fieldwork, beginning at the Neolithic settlement of **Koutroulou Magoula**, a tell now understood to be terraced on the north, east and south sides (ID2762). Excavation directed by Nina Kyparissi-Apostolika (then Ephoreia of Paleoanthropology and Speleology for Southern Greece) and Yannis Hamilakis (Southampton) revealed the well-preserved walls of at least two new Middle Neolithic structures, with several open-air activity areas in between (Fig. 6). A corridor-like feature, belonging to a structure probably of the Bronze Age, indicates more extensive later activity than previously understood. One inhumation was revealed, raising the possibility of further burials nearby (Fig. 7). The large quantity of finds includes small objects such as clay balls and some 60 figurine fragments, plus two new fragments of terracotta house models, confirming that the site is unique in the Neolithic of Greece for its wealth of figurines. Other finds include chipped and polished stone, plus some 24 quern stones mostly found broken and clustered in an outdoor activity area. Preliminary indications are that most pottery dates to the second half of the Middle Neolithic period. Alongside the excavation, study of the 5,200 animal bones recorded in 2011, including worked fragments, enabled recognition of various patterns of differential treatment and deposition. Soil flotation samples were taken, soil micromorphology sampling continued and a pilot programme of organic residue analysis was conducted in preparation for the 2012 excavation season.

At **Lefkandi**, excavation at Xeropolis under the direction of Irene Lemos (Oxford) clarified the history of the so-called megara and associated structures (ID2763). The successive Megara A and B were the main élite residences on site: research in 2011 focused on their origins and the earlier construction history of the area, and on their relationship to certain structures identified in previous years (see Fig. 32). Earlier walls under Megaron A formed part of an LHIIIC early house plan standard for the known multi-roomed houses on Xeropolis, which differ from the megara in orientation and plan. The walls had two construction phases equivalent to Lefkandi 1a and 1b, each associated with more than one phase of occupation. It is now clear that the construction of



6. Koutroulou Magoula: 2011 excavation state plan. © BSA, *Koutroulou Magoula Project*.

Megaron A began during Lefkandi phase 2a: a number of pictorial vases were found within it and in its newly-discovered northeast room, at or below floor level.

The complexity of the area around the hearth at the northern end of the megara underlines the significance of these buildings during the last stages of LHIIC. The hearth had three main phases (Fig. 8). First, a low rectangular platform was raised just above floor level. The floors of Megaron A then accumulated around it and began to cover it. In the second phase, soil heaped up along the earlier borders raised the hearth’s sides and left a depression which was given a new base. The third phase saw the construction of a freestanding mud-brick hearth.

Megaron A was shown to have a supplementary northeast room which contained a number of Lefkandi



8. Lefkandi: Megaron A, hearth. © BSA, I. Lemos.



7. Koutroulou Magoula: inhumation in Trench 14. © BSA, *Koutroulou Magoula Project*.

phase 1b/2a vessels and was thus initially contemporary with the first phase of Megaron A. It was evidently used for food storage and processing, since several vases associated with these activities were found together with querns and hand-stones. The presence of a pictorial krater (Fig. 9) suggests the storage of vessels used for drinking and food consumption. Evidence of burning is also found in the north of the room. The room continued in use throughout the life of Megaron A, and the two structures were probably abandoned at the same time. The room’s contents lay under the collapse of its mud-brick walls, but there is no certain evidence that the internal surfaces of the later Megaron B extended over the debris. Instead the area probably remained an open space while Megaron B was occupied.