ISSN 0570-6084 No. 54

# ARCHAEOLOGICAL REPORTS FOR 2007–2008



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Catherine Morgan

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PUBLISHED BY THE COUNCIL OF THE SOCIETY
FOR THE PROMOTION OF HELLENIC STUDIES
AND
THE COUNCIL OF THE BRITISH SCHOOL AT ATHENS
2008

Cover illustration: Kalapodi, bronze pendant shaped like a ram from the destruction layer of the Geo temple

Archaeological Reports is published by the Society for the Promotion of Hellenic Studies and the British School at Athens, for their subscribers. It is now also available to subscribers to the American Journal of Archaeology (see back cover) and to members of the Society for the Promotion of Byzantine Studies under similar terms. Members of the public can purchase copies from the Secretary, The Society for the Promotion of Hellenic Studies, Senate House, Malet Street, London WC1E 7HU, UK.

'Archaeology in Greece', compiled annually by the Director of the British School at Athens, is the only account of recent archaeological work in Greece published in English. It is usually supplemented each year by reports from other parts of the ancient Greek and Byzantine world: South Italy, Sicily, Sardinia, Albania, Cyprus, Asia Minor and the Black Sea are covered regularly.

Executive Editor Richella Doyle

Production Editor Gina Coulthard

Archaeological Reports is very grateful for the support of the A.G. LEVENTIS FOUNDATION

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Printed in England by Stephen Austin and Sons Ltd, Hertford

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# ARCHAEOLOGY IN GREECE 2007–2008

#### INTRODUCTION

As a simple snapshot of events in Greek archaeology drawn from both published and unpublished but authoritative sources, Archaeological Reports offers something for everyone. This year brings no shortage of headline-making discoveries: the cloth around a LGeo-EAr cremation burial in Argos; the identification of a BA boat at Mitrou, which continues to generate controversy; the 8th Ct BC temple and architectural models from Nikoleika, which confirm the importance of Achaia in the development of EIA religious architecture; the wealth of epigraphical evidence emerging from Messene; and the Rom horse and chariot burials from Lithochori in Macedonia. Many of these discoveries were made in the course of rescue excavation - a valuable reminder of the importance of this essentially random exercise in challenging our expectations. Other research projects reported this year are important for the periods under study - systematic excavation of the Med settlement at Corinth, for example - or for the way in which they bring new kinds of location to the fore. Research in the Achaian and Arcadian uplands is such a case, where evidence from sites such as Gremoulias provides solid confirmation of the importance of the mountain networks neglected in more traditional polis-focused narratives.

In their various introductions to AR, previous British School directors have rightly emphasized the importance of a long view, of building up accretional pictures of sites and regions year on year. In some cases, the time-frame involved is relatively short thanks to the availability of major funding: the speed with which our picture of both PH and Cl-Rom W Macedonia has changed is in no small measure due to funding for rescue archaeology from the construction of the Egnatia Odos, the Iliarion Dam and the Edessa bypass, and from the state electricity company ( $\Delta EH$ ) which undertakes extensive lignite mining here. The single biggest such rescue story for the next few years will surely be the Thessaloniki metro where, despite initial pessimism from those expecting quick headlines, an exciting cumulative picture is already emerging not merely of the LRom-Byz city, but also of the Ot period, where so much remains to be studied. As excavation progresses into deep deposits, we expect much more to report in 2009. Among longer-term projects - and here I emphasize those undertaken by the Aristotelian University in Thessaloniki and reported fully every year in AEMTh - a more gradual accumulation of knowledge from time to time reaches a point where systematic reappraisal is required. A good example this year is the city of Pella, where a clear view of long-term changes in the form and planning of the city from the Cl period to the 4th Ct AD can now be taken. Finally, we should also emphasize the vital role of research conducted within the Greek Archaeological Service. This year, our Laconia chapter includes important bodies of information derived from long reports by Athanasios Themos and Eleni Zavvou in the Πρακτικά του Ζ΄ Διεθνούς Συνεδρίου Πελοποννησιακών Σπουδών on their personal fieldwork in the Helos area and around Cape Malea. Not only is this region of great interest in its own right, but it is also of vital importance as the link completing the chain from W Crete through Kythera and Antikythera, Pavlopetri and into Laconia - all the subjects of extensive AR reports over the years - and giving us for the first time a full view of this gateway to the Aegean. The newer Ephorias too, established in areas which have rarely received such close, focused attention until now, are starting to play a very significant role, as our reports of the work of the 35<sup>th</sup> EPCA in uncovering Rom Fiskardo and of the 33<sup>rd</sup> EPCA in reconstructing the urban plan of anc. Ambrakia demonstrate.

In addition to presenting a personal choice of the year's archaeological highlights, the introduction to AR generally contains some reflection on major trends, new directions and events in Greece. Two events cannot be avoided. First, the tragic forest fires of the summer of 2007 came perilously close to adding major sites - notably Olympia - to their trail of destruction. Secondly, from the perspective of Athens, a long shadow has been cast by the attempted suicide of the Secretary General of the Archaeological Service, Christos Zachopoulos, in December 2007 and the period of reorganization within the Ministry of Culture which followed. Greek press reports have dwelt on the very difficult conditions which have reigned, from a shortage of staff in the Ministry, to a shortage of museum guards which threatened the extension of opening hours for major sites and museums during the summer (a threat now happily averted), to slowness in releasing pledged funds. Some of this has reached the UK press, although in a highly selective and frequently inaccurate fashion: readers alarmed by Helena Smith's Guardian report of 23<sup>rd</sup> June will be relieved to know that the reported closure of Delos Museum is an error and that, while Herakleion Museum remains closed for much-needed renovation (which is proceeding according to schedule), an outstanding temporary exhibition, including many of the gems of the collection, is well worth visiting. In sum, though, this has been an exceptionally hard year for colleagues here in Greece.

There is, nonetheless, much positive to report. In recent years, the Ministry of Culture has honoured in succession the Foreign Schools in Athens for their contribution to Greek culture. A commemorative volume has been published, edited by the head of the Foreign Schools' Department, Eleni Korka, and entitled *Foreign Archaeological Schools in Greece from the 19<sup>th</sup> to the 21<sup>st</sup> Century* (Athens, Ministry of Culture, 2007). In 2007, the spotlight fell upon the archaeological work conducted in Greece by Greek universities, with a 2-day presentation of a wide variety of projects held on 6<sup>th</sup>–7<sup>th</sup> December 2007. Material not previously presented in *AR* is noted at the appropriate point.

The issues of ending the trade in illicit antiquities and of the restitution of cultural property remained high on the agenda. In March 2008, the Ministry of Culture collaborated with UNESCO in staging a conference on the restitution of cultural property in the New Acropolis Museum – the first major event held on the premises. In the previous month, Greece itself returned to Albania 2 (Hel and Rom) statues which had been looted from Butrint and recovered by the Greek police in 1997. Returns to Greece continue: 94 objects stolen from the Theodoropoulou Collection and offered for sale in Munich were returned by the German authorities to the Greek state and temporarily exhibited in the National Museum in October 2007 before making a permanent return to Larisa Museum. And at the time of writing, Shelby White has just agreed to return to Greece part of a funerary stele and a calyx krater from her collection, upon receiving clear evidence that they had been looted from Greek sites.

Broader definitions of cultural heritage – landscapes, sites and environments – came to the fore in September 2007 with another UNESCO conference, this time on *World Heritage and Heritage Routes* – *New Orientations*. Greece has a very

successful history of bidding to have its major sites and monuments inscribed on the World Heritage list - in 2007, the old town of Corfu became the country's 17<sup>th</sup> world heritage site. And a Europa Nostra award for 2008 has been given to the open-air museum of the Palace of Galerian in Plateia Navarinou, Thessaloniki, where not only the structure but a large number of mosaics are conserved in situ. Creative thinking about the preservation and public presentation of the sites and monuments that form part of the built environment continues apace, as exemplified in the publication of V. Karageorghis and A. Giannikouri (eds), Conservation and Presentation of the Cultural and Natural Heritage of the Large Islands of the Mediterranean: Proceedings of the International Symposium, Rhodes, 1<sup>st</sup>-3<sup>rd</sup> September, 2005 (Athens, Ministry of Culture/Archaeological Institute of Aegean Studies, 2006), which presented case studies from a swathe of islands from Melos to Crete and Rhodes in the wider context of experience, trends and practice on Cyprus, Sicily and Sardinia, and considering also the impact of national and international legal frameworks. But there is also an interesting and important move to consider sites, and especially smaller sites, within their physical environment and to create management plans which encourage visitors to experience sites in combination as part of a landscape. Caves are a case in point. A one-day colloquium on New Research in Greek Caves, organised in May 2008 by the Irish Institute and the EPSNE, featured not only a wealth of new archaeological material, but also innovative planning to attract and inform a wider public.

It is hard to overestimate the effect of funding from the Third Community Support Framework as a catalyst for fresh thinking about the public presentation of sites and monuments. With the deadline for the completion of work, 31st December 2008, drawing close, very many of the reports submitted for AR this year note contributions made by projects to new displays, information panels and the like. An impressive overview of the projects supported is presented in A. Kottariou and S. Chondrogiannis (eds), Το παρόν και το μέλλον των μνημείων μας: Πολιτιστική κληρονομία και Γ΄ κοινοτικό πλαίσιο στήριξης. Η προσφορά της Αρχαιολογικής Υπηρεσίας στην κοινωνία των πολιτών (Thessaloniki, Union of Greek Archaeologists, 2006) (Greek and English text). This book arose from a conference convened at the beginning of the framework period, where more than 300 projects were presented in 93 papers and 182 display stands: a follow-up, at the end of the period, is promised, with a full publication. Thanks to various combinations of European, state and private funding, a large number of museums have been refurbished and/or completed - from the Byzantine Museum of Veroia, to Thebes Museum, the Piraeus, National and Numismatic Museums in Athens, and a Museum of Marble Craft on Tenos – the list is long. As we began preparation for this edition of AR there were 181 state museums in Greece: by the end of 2008 we are promised 201. What should be their wider role? Certain museums, especially those with a clearly defined local role, have long served as regional arts centres -Aiane is a case in point. The educational focus of the newly redesigned displays in the Archaeological Museum of Thessaloniki is complemented by a lively outreach programme of events for the wider public. But there is now general recognition that not only could more be done, but that it is absolutely necessary that it should be done and as broadly as possible. The Union of Greek Archaeologists has been at the forefront of this movement for outreach, with initiatives including lobbying for the age limit for free child entry to be raised. The response is already encouraging. Fifty-eight museums of all kinds staged special events for ICOM's International Museum Day on 18<sup>th</sup> May 2008: under the overarching theme of *Museums as Factors in Social Change and Development*, presentations included subjects as diverse as games about the anc. world for primary schools and myth and history in the songs of Markos Vamvakaris.

Certain major conferences held in Greece over the past year will be of interest to readers of AR, not least because the resulting publications promise to be landmarks in the field. Major review conferences have focused on periods (The Dark Ages Revisited, University of Thessaly, Volos, 14th-17th June 2007, programme at http://extras.ha.uth.gr/coulson/en/ index.asp; The Aegean Early Bronze Age: New Data, Athens, 11th-14th April 2008); on regions (Half a Century on the Isthmus: A Conference to Celebrate over Fifty Years of Excavation and Survey on the Isthmus of Corinth, Athens, 15th-17th June 2007; The Byzantine Mani, 5th EBA and Demos Oitylos, 21st-22nd June 2008); and on single sites (Λύκτος έὔκτιμένη, Demos Kastelliou and 23<sup>rd</sup> EPCA, November 2007; Mallia, EFA 2<sup>nd</sup>-3<sup>rd</sup> November 2007; Akrotiri on Thera: 40 Years of Excavation 1967-2007, ASA, 16th-17th December Conferences otherwise directly connected with archaeology included: Numismatics and Economic History in Epirus in Antiquity (University of Ioannina, 3<sup>rd</sup>-7<sup>th</sup> October 2007); Neue Funde archaischer Plastik aus griechischen Heiligtumern und Nekropolen (DAI and Athens University, 2<sup>nd</sup>-3<sup>rd</sup> November 2007); Greek Geometric Pottery Forty Years On (BSA, 29th March 2008, programme and abstracts at www.bsa.ac.uk).

Finally, 2007–2008 has seen a number of significant anniversaries. The Archaeological Society at Athens celebrated the 170<sup>th</sup> anniversary of its foundation and the Austrian Archaeological Institute in Athens its 110<sup>th</sup> (the latter celebrated with a colloquium on *New Research into Temple Architecture in the NW Peloponnese*, with presentations on Nikoleika, Graika Aigialeias, Trapeza Aigiou, Gremoulias and Lousoi). In May 2008, the Swedish Institute celebrated its 60<sup>th</sup> anniversary with a 2-day presentation on the work of the School. On behalf of the BSA and the Society for the Promotion of Hellenic Studies, we convey warmest congratulations.

In conclusion, a brief note is due on the production of this edition of AR. An important casualty of events in the Ministry of Culture was the Archaiologikon Deltion, which has not been published this year. Although there is currently no indication of a publication date, it is hoped that it will appear in time for inclusion in AR 2008-2009. The most up-to-date published sources remain the Ergon of the Archaeological Society, and the press reports which we cite only when they can be traced backed to an authoritative source within the Ministry of Culture. I am especially grateful to colleagues in various Ephorias who have clarified details of their work as reported in the press. AEMTh 2006, while dating back rather further, is one of the largest volumes in the series and DeltChAE 2007 also appeared this year. Individual collections pertaining to regions are noted with abbreviation at the start of the relevant chapter. Of wider relevance is the 4-volume Πρακτικά του Ζ΄ Διεθνούς Συνεδρίου Πελοποννησιακών Σπουδών: Πύργος, Γαστούνη, Αμαλιάδα 11-17 Σεπτεμβρίου 2005 (Πελοποννησιακά, Παράρτημα 27) (Athens, Society for Peloponnesian Studies, 2006), which is abbreviated Praktika Z' Synedriou with volume number. As ever, we have devoted most space to unpublished site reports and work originally published in Greek (especially in Greek sources available in few UK libraries): published sources in other languages are noted only if they are primary publications of new material or major regional collections. We are grateful to all our contributors for the time and trouble taken in preparing reports for AR.

Readers' attention is also drawn to the revised note on transliteration inside the back cover. We have sought to make a clearer distinction between anc. names, where British Library conventions are more appropriate (although exceptions are made for common usage), and mod. Greek, where current conventions for the transliteration of demotic produce results of greater use to the reader in cross-referencing maps and primary literature. Throughout, we have made exceptions for personal names where an author has expressed a strong preference. The result is perhaps less consistent, but certainly more natural and of greater practical use in research.

This year, AR has been written by 3 officers of the BSA, the Director, the Knossos Curator, Don Evely, and the Assistant Director, Robert Pitt. We are, as ever, grateful to Heinrich Hall for German translation and the exercise of a sharp editorial eye, to John Hayes, for final proof-reading, and to Jessica Piccinini for emergency translation of an Italian contribution. All remaining translations are our own. The staff of the BSA offered invaluable support: the librarian, Penny Wilson Zarganis, compiled lists of publications, Tania Gerousi collated press cuttings, George Bruseker (IT Officer) prepared illustrations, Vicki Tzavara liaised with contributors and Helen Clark, the School Secretary, provided administrative support to the compilers and proof-read the entire text with a critical eye. This has been a true team effort, and we are very grateful to all for their hard work. Last but not least, the authors warmly thank the production editor, Gina Coulthard, for her tolerance and humour.

> Catherine Morgan The British School at Athens

#### **MUSEUMS**

#### National Museum, Athens

The temporary exhibition on *Praxiteles*, transferred from the Louvre, was shown from 25<sup>th</sup> July–31<sup>st</sup> October, with a new catalogue edited by N. Kaltsas and G. Despinis (Athens, Ministry of Culture/National Archaeological Museum, 2007).

Two new permanent exhibitions, of the Egyptian and Stathatos collections, were opened on 14<sup>th</sup> May 2008. The Egyptian collection was one of the first to be held by the National Museum, and is the only one of its scope and quality in Greece. It was substantially enhanced by large gifts from Ioannis Dimitriou (1880) and Alexandros Rostović (1904), and is now regarded as one of the finest in the world. Around one fifth of the 6,000 artefacts in the collection are now on display in 2 rooms. The Stathatos Collection, which spans the PH to post-Byz periods, but consists primarily of jewellery and metal objects (especially Hel jewellery from Karpenissi and Thessaly), is now more fully displayed in entirely refurbished galleries.

## New Acropolis Museum

With the new building complete, the transfer of antiquities from the old museum on the Acropolis began in October 2007, amidst huge public interest. The spectacle of a chain of 3 cranes moving some 246 large items (113 tons) and 4,200 smaller marble items alone (124 tons) and the gradual opening of museum space to the public has engaged wide interest in the process of creating a new museum. The building itself continues to cause controversy both for its design and its location (see e.g. *Ergon* [2007], 113–24), and was strongly defended by its architect, Bernard Tschumi, in a lecture given at the Megaron Mousikis in October 2007 (*Ta Nea* [09/10/07]).

The Foundation of the Greek Parliament in collaboration with the Epigraphical Museum staged an exhibition "Εδοξεν τῆ Βουλῆ καὶ τῷ δήμῳ (Athenian Democracy Voiced Through its Inscriptions), with complementary collections of material displayed in the new gallery of the Foundation (Mitseon 1) and in the museum. The catalogue (M. Lagogianni-Georgakarakos' and K. Bouraselis [eds], "Εδοξεν τῆ Βουλῆ καὶ τῷ δήμῳ [Athens, Epigraphical Museum/Athens University, 2007]) includes a complete set of photographs and transcriptions.

#### Archaeological Museum of Thessaloniki

The designs of the new thematic exhibitions reported in AR 53 ([2006–2007], 61–62) are discussed in detail by a number of contributors to AEMTh 20 (2006).

#### **ATHENS**

by Robert K. Pitt

CENTRAL ATHENS (1st EPCA: 1st EBA)

**Acropolis.** A translation of the 1962 Gr edition has been published of S.E. Iakovidis, *The Mycenaean Acropolis of Athens* (Athens, ASA, 2006).

A report on the **Propylaia** restoration project is now available: M. loannidou, *The Restoration of the Propylaia of the Athenian Acropolis* (Athens, Ergon IV, 2007).

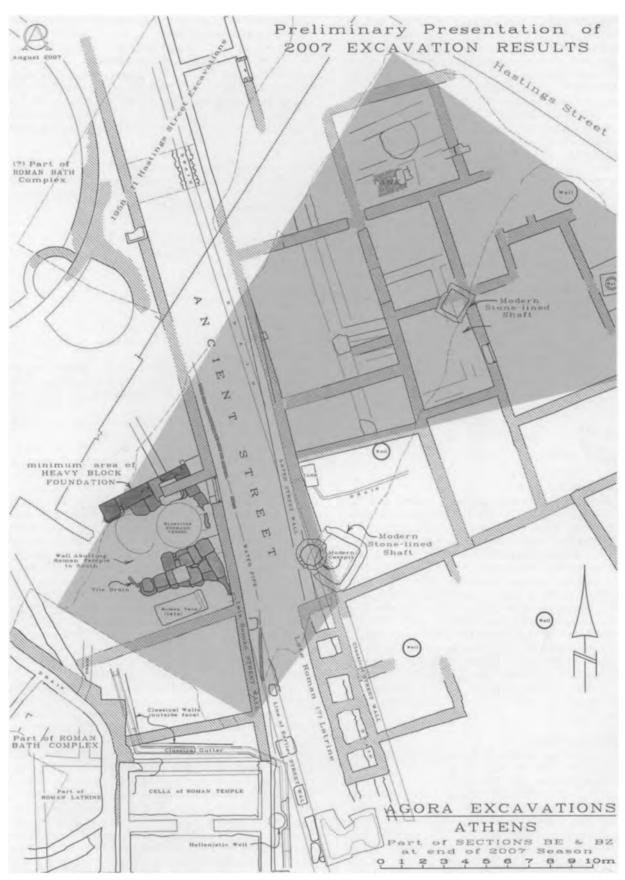
**Anc. Agora**. J.M. Camp (ASCSA) reports on the 2007 season of excavation.

In section BZ south (Fig. 1) 2 primary areas were investigated: the N-S road and the areas W of the road. In the road, we continued to take down the very hard-packed gravel surfaces, mostly of the 4<sup>th</sup> Ct AD. In doing so, we fully exposed the later water supply lines found in earlier seasons, one of terracotta and 2 of lead. These will all have been for fresh water and were probably pressure lines. Lower down, we cleared more of the deep street drain and, at the extreme N, another subsidiary channel entering it from the W. All these channels, both supply and drainage, were in use in the 4<sup>th</sup> or 5<sup>th</sup> Ct AD.

To the W, we explored deeper fills under the Rom levels. In one area we exposed a fairly well-preserved pyre, of the type known from across the anc. street and in other areas of the Agora. They are usually deliberately buried under the floors of private houses or commercial buildings and the example found this year seems to date to the L4<sup>th</sup> or E3<sup>rd</sup> Ct BC. It contained a lamp, a drinking cup, a pyxis and several of the characteristic unglazed plates, cooking pots and small saucers.

In section BZ north we excavated mostly Cl and Hel levels in and behind the Cl commercial building. One of the major gains of the season was to establish beyond doubt that the commercial building extended this far N. More of its E back wall was exposed, along with several cross-walls and we can now speak with some confidence of at least 6 rooms/shops set side-by-side along the E side of the street. An intermediate phase of the building was uncovered in the form of a draw-shaft and part of the tunnel of a Hel cistern complex found outside the building to the E. It was of standard form, a vertical shaft waterproofed with a good hard white mortar. The shaft itself was ca. 0.75-0.9m di., preserved to a d. of ca. 2.5m. The tunnel runs off to the NW and may be heading to a collapsed cistern located within the building itself. The tunnel showed signs of collapse about 1m from the draw-shaft and will have to be explored in future seasons. Fill within the shaft suggests that it went out of use in the 2<sup>nd</sup> half of

### 4 ROBERT K. PITT



1. Athens, agora: plan of 2007 excavations, section BZ

the  $3^{rd}$  Ct BC. A wall of the  $1^{st}$  Ct BC/AD was eventually built over the mouth of the draw-shaft. Finds from this season in this area included several lead and terracotta tokens or seal impressions. In the Agora we have about 900 examples, carrying a wide range of symbols and depictions. Some of this year's finds were of types previously known, such as one showing a round shield decorated with the letter A (Fig. 2). This type is part of a series showing shields, breastplates, helmets and greaves, thought to have been used for issuing armour from the state arsenal. Other examples found this year are more unusual, in particular a small lead token with the stamped depiction of a 'Gallic' shield, recognizable from its elongated oval shape and the central spine (Fig. 2). Such shields were used by N invaders into Greece in the 270s BC, usually referred to as Gauls or Celts. They were largely turned back by the Greeks (especially the Aitolians and Athenians) at Thermopylai in 279 BC, though a small contingent attacked Delphi and was driven off with divine help (Pausanias 10.19-23).

In section  $\Gamma$  we continued to explore the building traditionally identified as the Strategeion, as well as the slight remains of Cl buildings lying somewhat to the E. In the 'Strategeion' we excavated a series of well-preserved levels in the E part of the building, presumably successive floors covering its period



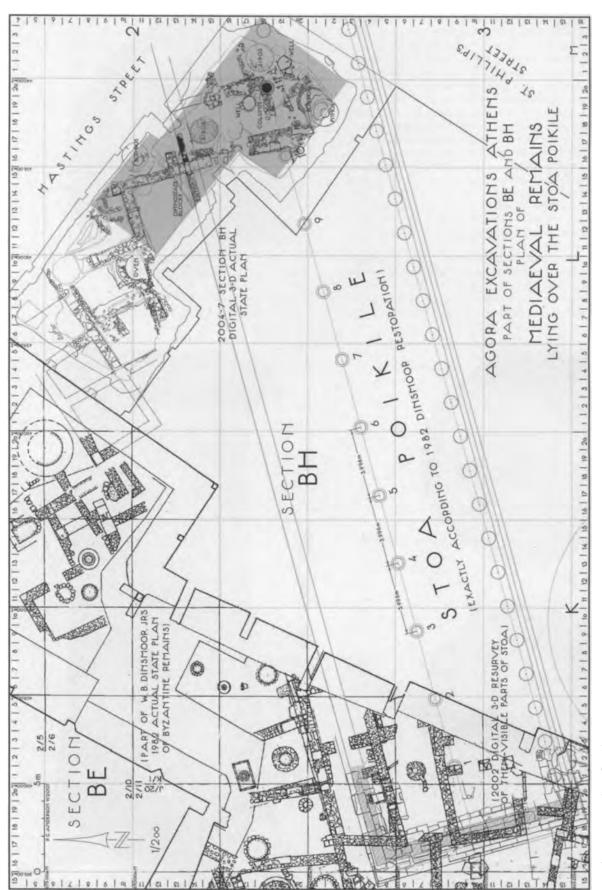
3. Athens, agora: terracotta token



2. Athens, agora: token showing a round shield



4. Athens, agora: lower part of a rf lebes gamikos



5. Athens, agora: plan of section BH

of use. This included a pit full of marble chips, itself overlying a pit filled with amphorae. Parts of at least 6 were recovered; though found in fragments, at least some of the amphorae seem to have been deposited while still whole. From their shapes, several seem to have come from the N Aegean - perhaps from Thasos – while 2 others are recognizable as coming from Chios. One had an incised inscription on the shoulder: a  $\Delta\Pi$ ligature followed by 3 vertical strokes (= 53), presumably a measure of volume or cost. Associated bg pottery found in the pit (Pheidias mug, stamped bowl, unglazed plate with moulded rim) suggests that it was filled in the L5th Ct BC, though the amphorae are said by Mark Lawall to be from the 1st quarter of the 4th Ct BC. Elsewhere, fill under the floor went down as much as 3m, producing pottery of the L8<sup>th</sup> and E7<sup>th</sup> Cts BC. The 'Strategeion', carved out of bedrock at the W, was set over a surprisingly deep gully in its E part.

Further E, we began to explore a series of small irregular buildings, in part to determine if they represent houses, shops or public buildings. There are at least 2 phases. The earlier remains, only partly explored, consist of the rubble walls of buildings in use in the  $4^{th}$  and  $5^{th}$  Cts BC, lying W of the main road, which at that time led into the Agora square from the SW. These remains were replaced by walls of more substantial construction, presumably in the LCl or Hel period. In the  $M2^{nd}$  Ct BC, when the Middle Stoa was built, the line of the old road to the E was covered and the road was shifted W, covering much of this area with a succession of hard-packed gravel surfaces. Small finds from section  $\Gamma$  this year included lead weights, terracotta (Fig. 3) and lead tokens, bone eyelets, the lower part of a rf lebes gamikos (Fig. 4) and part of the marble eye from a trireme.

In section BH (Fig. 5) we cleared the last of the 10<sup>th</sup>/11<sup>th</sup> Ct walls and other Byz installations (Fig. 6) and began to go lower, into LRom fills. Here, further excavation confirmed what we suspected last year, that we have uncovered a stretch of the back wall of the Stoa Poikile, the first new section to become visible since the W end of the building was found over 25 years ago. The new part found this season consists of 2 adjacent blocks from the outer face of the back wall of the building, made of limestone and originally joined at the ends with a double-T clamp. They are orthostat blocks, i.e., from the first standing course of the wall. The back faces are finished with a drove (flat-faced chisel), while the top surfaces have been finished with a claw chisel. Each block has a projecting boss left on its outer face. The difference in the tooling and the presence of bosses so low down leave open the possibility that the blocks are reused. Blocks in secondary use, presumably made available by the Persian destruction of Athens, were found in the W foundations. The tops of the new blocks lie ca. 1.3m higher than any part of the building seen to the W.

To the SE, the top of a limestone unfluted column shaft ca. 0.6m di. appeared below the Byz walls, lying very close to the projected placement of an interior Ionic column of the stoa and also apparently in situ (Fig. 7). It stands to a level of ca. 53.2masl, much higher than anything seen to the W. If it is in situ, then we are unlikely to see the E end of the building, which can lie no closer than 4m NE of the column, beyond the present limits of the trench. As this column falls 44m from the W end, the minimum l. of the stoa must be 48m. In any case, at present it looks as though the E part of the building, where we are presently excavating, is appreciably better preserved than further W.



6. Athens, agora: Byz installations in section BH



7. Athens, agora: top of a column shaft of the Stoa Poikile

The identification of the stoa remains controversial, with several scholars preferring to see the remains as those of another missing stoa, the Stoa of the Herms. The identification as the Poikile rests first on Pausanias (1.14-15), who described it during his visit to Athens in ca. 150 AD. After referring to the Hephaisteion as being on the hill above the Royal Stoa, he describes in order a sanctuary of Aphrodite Ourania, a gate carrying a trophy of the Athenian cavalry over the Macedonians and the Stoa Poikile. He then moves on to describe a series of monuments which lies to the E, under mod. Plaka. We have the sequence of monuments noted by Pausanias: sanctuary, gate and stoa, in the order in which he saw them, moving towards the E. The archaeological evidence corresponds to what we know from other anc. sources (Agora III, nos 47-98) concerning the history of the stoa. It was built at the time of Kimon's ascendancy, that is in the 470s or 460s BC, and it survived until L antiquity, at least until the time of the Bishop Synesius, who saw the building (though not the paintings) in the years around AD 400. Pottery found against the foundations and under the floor at the W indicates a construction date around 470 BC and the building certainly stood until the 6th Ct AD. Finally, the numerous anc. references (50) indicate that the Poikile was a well-known and prominent building, used for a variety of public functions. The present remains of a large stoa (over 44m) facing S, overlooking the Agora square and the Acropolis, correspond to such prominence.

The Stoa of the Herms seems also to have been standing in the 5<sup>th</sup> Ct BC, at the time of Kimon (Aeschines III, 183–85), and it is referred to in several Hel inscriptions. Pausanias does not describe it, however, nor does it appear in any source of the Rom period, leaving open the possibility that it did not survive the siege of Sulla in 86 BC, in which case the archaeological evidence for our stoa would not match the history of the Stoa of the Herms.

Publication: J.K. Papadopoulos, The Art of Antiquity: Piet de Jong and the Athenian Agora (Princeton, ASCSA, 2007).

CENTRAL ATHENS
(3<sup>rd</sup> EPCA: 1<sup>st</sup> EBA)

**Kerameikos**. A further volume is published: F. Ruppenstein, *Kerameikos* 18. *Die submykenische Nekropole: Neufunde und Neubewertung* (Munich, Hirmer, 2007).

ATTICA (2<sup>nd</sup> EPCA: 1<sup>st</sup> EBA) by Robert K. Pitt

CENTRAL AND SOUTHWESTERN ATTICA

**Voula.** Eleftherotypia (18/05/07) reports the excavation on Vari avenue of an anc. market place in the anc. deme of **Halai Aixonides** (AR 53 [2006–2007], 8). The complex (1,500m²) dates to the 5<sup>th</sup> and 4<sup>th</sup> Cts BC and comprises a series of rooms and a small temple around an open square.

To Vima (30/03/08) reports on the excavation of a plot of 1 stremma which has uncovered 28 graves of the anc. cemetery of **Halai Aixonides** dating from the  $5^{th}$  and  $4^{th}$  Cts.

Vari. A number of recent excavations around the anc. cemetery of Vari at Kaminia, between Varkiza and Vari, have brought to light a series of Myc graves. Two related walls converge towards an artificial hill which may conceal a tholos tomb.

SOUTHERN ATTICA (LAVREOTIKI)

**Thorikos**. R. Laffineur (Belgian School/Liège) reports that a topographic plan of the **Myc necropolis** on the **Velatouri** hill has been completed, giving a complete record of all tombs.

Between the peribolos wall of tomb V and the group of 2 upright stones of prassinite on the SE, a stone (now moved to the Lavrion Museum) was found which the excavator interprets as having inscribed Linear B numerals upon it. To the SW of the Myc necropolis, on the NW slope of the Great Velatouri, 4 squares were opened. In square G56b8, intentionally placed stones suggest a tomb which remained either unused or was emptied in a later phase (thus explaining the absence of almost all material). Alongside the N section of square G56a8, a rich inhumation of the LGeo period was identified (Fig. 8). A cylindrical pit was dug deep into the natural bedrock and is related to a small platform upslope, bordered by a flat stone on the SE. Reddened earth and charcoal from atop the platform suggest a ritual funerary installation. A large amphora decorated with lines and horizontal bands in a washy paint contained bone and teeth fragments, whitened by incineration. Between the platform and the shoulder of the amphora, a blackpainted cup and a pyxis were found, decorated with zones of lines and meanders (Fig. 9). A bronze fibula was found in the filling of the cylindrical pit and a gold ring shaped as a simple ribbon was deposited at the bottom.

Cleaning took place at the Thorikos settlement and industrial quarter under the direction of R. Docter (Ghent) and P. Iossif (Belgian School). The area to be cleaned was restricted to the E sector of the settlement. Work on the 'industrial' road revealed traces of chariot wheels. A lekythos was found in SW corner of room E of the oikos, probably coming from the lower part of the wall. Fieldwork continued in the W sector of the shrine of Hygeia and to the S of the Street of the Herms. Particular attention was given to the cleaning of washery 1, cistern AO, the settling tanks and to the ergasteria of the surrounding area.



8. Thorikos: LGeo inhumation



9. Thorikos: LGeo pyxis

#### CENTRAL ATTICA (MESOGEIA)

Publication: a volume is now available on the deme of **Myrrinous** (mod. Merendi): E.P. Vivliodetis, O  $\delta\eta\muo_5$   $\tau ov$  Muppivoύντος: Η οργάνωση και η ιστορία (Athens, ASA, 2007). It comprises a collection of all archaeological, literary, and epigraphic evidence for the history of this deme and its citizens, followed by a study of the 1951–1972 excavations of the deme cemetery.

Leontari cave. L. Karali-Giannakopoulou (Athens) reports on the joint Athens University/EPSNE excavations begun in 2003. The cave, situated W of Paiania, lies at an altitude of 691 masl and consists of 2 main areas with a total *l*. of ca. 50m, w. 20m, h. 11m and d. 6m. First occupied in the E phase of the LNeo,

it probably served as a shrine to Pan during Cl times and continued to be used for seasonal habitation at least until the end of the Cl period. Finds included numerous pottery sherds from the Neo to the mod. period, fine worked lithics, animal bones and sea shells. The excavation was completed in 2007, and study continues on the archaeozoological, palaeobotanical and geomorphological evidence.

**Cholargos.** To Vima (16/11/07 and 09/12/07) reports on the discovery of 4 Cl graves on Mesogeion avenue during the construction of the metro station of Cholargos. Two were child burials in larnakes and 2 were cist graves.

#### NORTHERN AND NORTHWESTERN ATTICA

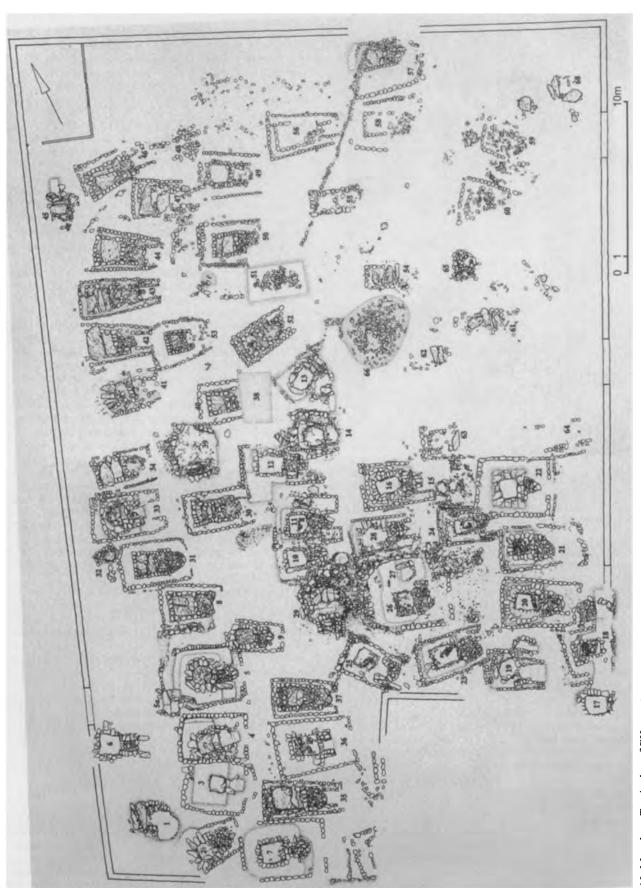
**Marathon, Tsepi.** M. Pantelidou-Gofas (ASA) reports (*Ergon* [2007], 13–20) on continued excavation of the EH cemetery (**Fig. 10**).

In tomb 41 it was confirmed that the grave was covered by a large slab which had broken prior to any burials: the tomb had, therefore, remained unused, allowing study of the initial construction, something not possible in other tombs which had suffered interference from subsequent burials. Tomb 42 (Fig. 11) was found to be similar in form to other cist graves of Tsepi, with threshold, cairn in front of the entrance, lined cist grave and covered by 2 large slabs. The grave contained a large number of bones, pushed to the W end opposite the entrance. There were also many skulls, nearly all broken, the majority in pieces gathered together to the sides of the grave. This differs from the orderly deposition of remains from the other tombs in the S sector of the cemetery. In the E section of the grave, at a low level of the fill in front of the entrance, the skeleton of the last person buried was found and, above it, a scattering of pebbles and a few sherds. A stone 0.1m l. had been placed in the mouth and, over the chest, 3 skulls were found, together with bones, from a secondary deposit. One skull had been beaten, perhaps with a stone found next to it, the 2<sup>nd</sup> had a circular hole and only the 3<sup>rd</sup> was intact. The only grave goods was a tiny amphora with incised decoration. Consistent with findings from tombs 45 and 68, the excavator suggests that in some cases stones were thrown at the bones of the dead, sometimes damaging the cranium.

In tomb 39 a trench was opened in order to establish its relationship with an area of black soil and ashes, likely a funeral pyre. Investigation was hampered by the overlying visitors' walkway, which here is only 1.2–1.4m from the cemetery surface. Ceramic analysis continued to refine important key typologies dating the finds to the oldest phase of the site, i.e., the Chal period, a little before 3200 BC.

**Kotroni.** A 3<sup>rd</sup> season of survey was carried out by Athens University (A. Papadimitriou-Grammenou, P. Georgiou-Geka and P. Petridi) on the hill of Kotroni (anc. Aphidnai) between Kapandriti and Lake Marathon. The most important architectural find has been part of a tower E of the crest of the hill. A trial trench uncovered a section of the perimeter of the tower and sherds dating from PH to Cl times.

**Skala Oropou**. A. Mazarakis Ainian (ASA) reports (*Ergon* [2007], 21–30) on continued excavation. Of particular interest was the discovery of part of an apsidal building (**Fig. 12**) from the LGeo period measuring 3.4m w. and a l. so far exposed of 3.8m. In the middle of the room was a circular stone construction next to a hollow cavity containing some animal bone and fragments of drinking vessels.



10. Marathon, Tsepi: plan of EH cemetery



11. Marathon, Tsepi: tomb 42

# ISLANDS OF THE SARONIC GULF with KYTHERA (26<sup>th</sup> EPCA: 1<sup>st</sup> EBA)

E. Konsolaki-Giannopoulou (ed.), ΕΠΑΘΛΟΝ. Αρχαιολογικό Συνέδριο προς τιμήν του Αδώνιδος Κ. Κύρου, vol. 1 (Athens, Demos Porou, 2007) contains a wide range of papers on the Saronic Gulf and neighbouring areas. Individual articles are cited only when they present new finds or significantly expand previous reports.

#### Salamis

Ambelakia. Ta Nea and To Vima (12/02/08) both report a lecture at the Museum of Cycladic Art by M. Pologiorgi (2<sup>nd</sup> EPCA) on her excavation of 11 tombs of different types dating from the L5<sup>th</sup> or E4<sup>th</sup> Ct to the 3<sup>rd</sup> Ct BC along E. Venizelou street (on the line of the anc. road leading to the city gate). An infant interment in an amphora is illustrated. Two sarcophagi each contained a female burial with a bronze mirror, together with clay pyxides. One mirror survived intact but heavily oxidized, preserving only traces of its decoration. The other, decorated in sphyrelaton with a scene of Aphrodite(?) and an Eros, and perhaps the product of a Cor workshop, had been deliberately separated into its 2 parts and both the cover and the mirror disc used as receptacles for fruit offerings (pomegranate seeds, almonds, chestnuts, etc.). This rare example of a mirror recovered from a properly documented context provides important evidence for funerary customs, which counters commonly held views on the magical role of mirrors in graves. Finds from this excavation are held in the Salamis Archaeological Museum.

Salamis Archaeological Museum. *Kathimerini* (25/03/08) reports progress in the preparation of the new archaeological museum in the former First Capodistrian Public School, supported by the Third Community Support Framework. The museum, due to open by the end of 2008, will have 3 rooms. Room 1: Neo sherds and lithics from Glinani, EH and MH material from Mertzani and Sklavou, finds from the Myc acropolis at Kanakia, the Cave of Euripides at Peristeria and the Hel sanctuary of Dionysos. Room 2: Geo to EByz material including a group of 4<sup>th</sup> Ct marble grave stelae. Room 3: coins, a Herm boundary marker and explanatory material on local historical matters such as the naval battle, and Euripides and Salamis. Cl, Hel and Rom grave monuments will be displayed in the courtyard. The museum will also house educational programmes.

The article comments critically on the poor condition of the area around the Tomb of the Salaminomachoi; E. Lygouri (26<sup>th</sup> EPCA) notes that this forms part of the harbour zone in which the Ministry of Culture cannot intervene, but comments on the effective protection now given to the Kynosouras and Ambelakia areas.

**Moni Faneromenis.** G. Poulimenos reports (*DeltChAE* 28 [2007], 131–46) on a new study of the Latin phase of the katholikon. The katholikon of the monastery is redated to the E18<sup>th</sup> Ct AD (between 1718 and 1732), noting that it was founded on a previous ruined church to which a new roof and dome were added. Remains from the period of Latin (13<sup>th</sup>–14<sup>th</sup> Ct AD) as well as Byz occupation were identified. Study of the katholikon revealed a Latin church of the Romanesque Lombardish school, likely built between 1296 and 1317, the bema of which probably belonged to an earlier Byz church.

#### **Aigina**

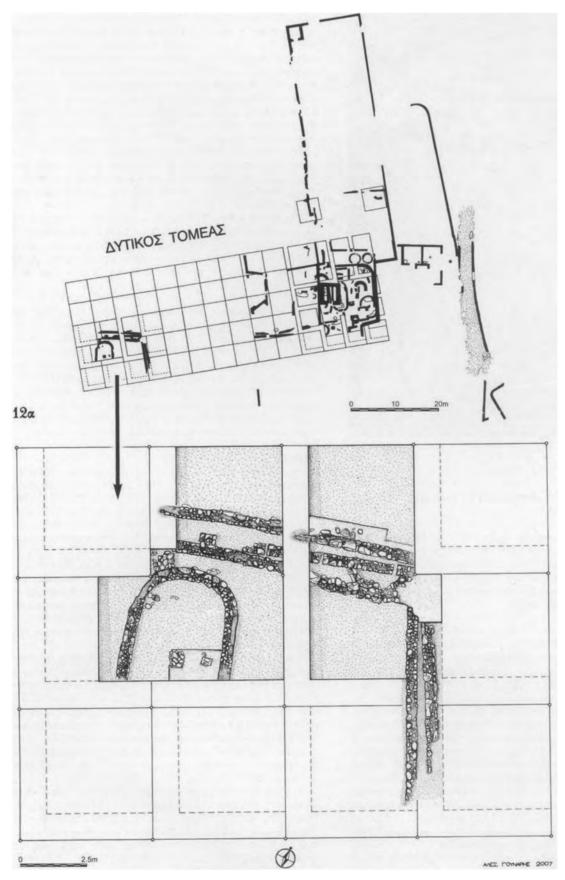
**Portes** (Lazarides). N. Polychronakou-Sgouritsa (Athens) reports on continuing work in the Myc settlement and cemetery. This important PH site was located in 1979. In 1979–1980 the  $2^{nd}$  EPCA excavated part of a building in the Myc settlement, plus 3 chamber tombs, A, B,  $\Gamma$  (AR 26 [1979–1980], 19). Renewed work by Athens University began with surface survey from 2002 and excavation from 2005.

Ceramic evidence indicates settlement at least from the end of the 17<sup>th</sup> or the beginning of the 16<sup>th</sup> Ct BC; this expanded chiefly in the 14<sup>th</sup> and 13<sup>th</sup> Cts, and the site was abandoned at the start of the 12<sup>th</sup> Ct. The remains are either preserved by burial (in the case of the tombs) or are barely visible (in the case of building remains), hidden in many cases by vegetation and large stone piles.

The latest research (2002–2006) has uncovered between stone piles on the E downward-sloping side of the site, several rooms (mostly small) laid out towards the sea, at some distance from the building previously excavated on the level part of the site. The stone walls of these structures are in places preserved to over 1 m h. NE of the settlement, where the ground slopes gently, parts of a wall of large stones could be traced for some distance. This probably belongs to a defensive construction on the seaward side of the settlement, which also served as a retaining wall.

In addition to the 3 tombs already excavated, 2 more were located at a small distance to the S (see AR 53 [2006–2007], 9). One, within the mod. village cemetery, was used as an ossuary, while part of the dromos of the other, with stone-clad walls, was uncovered. Investigation of the latter tomb will be undertaken in 2008.

Continuing study of finds from the area has revealed new MH-LH material, as well as material of the end of LH IIIB/LH



12. Skala Oropou: plan of the excavations of the W sector

IIIC. Examination of 3 iron artefacts in the archaeometry laboratory of NCSR Democritos shows them to be anc. and made in different technical traditions: they must be added to the very few examples from the Aegean which predate the 11<sup>th</sup> Ct BC.

Publication: E.G. Papastavrou, Υπόγειοι λαξευτοί Τάφοι της Αίγινας (Athens, ASA, 2007).

#### **Poros**

Kalaureia. B. Wells and A. Penttinen (Swedish Institute) report on the first season of the research programme, 'The Sea, the City and the God', at the Sanctuary of Poseidon. Objectives are: to define the extent of the sanctuary and its relationship to the polis; to study the local cults through archaeological material; to investigate the relationship of contemporary local residents to the archaeological remains and their perception of archaeologists.

Two excavation areas were selected on the basis of geophysical survey conducted in 2004 and 2006: area I, close to the entrance to the site and S of building D (which had previously yielded a wealth of cult material); and area H, SE of the Temple of Poseidon.

Area I yielded a large building complex, of which 4 rooms/spaces were partly investigated. Two architectural phases may be dated to the 2<sup>nd</sup> and 1<sup>st</sup> Cts BC. The collapse of roof tiles indicates ERom abandonment and subsequent slow Objects found in the rooms hint at their disintegration. function. In a room in the SW, 5 coins were found together with 2 bronze fish hooks and a number of lead sinkers from fishing nets. Broken pottery in a small compartment in one corner may have fallen from shelves. The room may have been a fish shop or a tavern. A  $2^{nd}$  room was used for food preparation; a grill was built in one corner, with a pit full of ash and broken cooking pots in front of it. A further room may have been a store; large fragments of jars were found together with ash and charred olive pips. The northernmost space, probably a courtyard, has yielded pottery indicative of earlier activity. It is on a level with the EIA L remains found beneath building D: an EGeo II amphora neck points to earlier presence in the area.

In area H, a large level area was created during the 2<sup>nd</sup> Ct BC, with a circuit wall similar to that surrounding the temple area but of smaller dimensions. The area's function is unclear. A LBA bronze Reshef figurine (Fig. 13) was found in the levelling fill for the peribolos: its presence in a context dating a millenium later requires further investigation.

In the SE part of area H, 3 unfluted column drums, at 1.07m di. too big to form part of any known building in the sanctuary, are likely the remains of a votive column of the end of the 6<sup>th</sup> Ct BC. Two large blocks of hard dark grey limestone with mouldings and a large block of soft marl were found in the same area but some distance from each other. The dark grey blocks belong to the same monument, but all 3 pieces were probably removed for reuse in mod. buildings in the Kalaureia area.

Underneath the fill for the peribolos was a cultural layer of the L8<sup>th</sup> Ct BC. EIA L pottery stratified on bedrock all over the area investigated indicated extensive activity. The 8<sup>th</sup> Ct was undoubtedly an important period in Kalaureia's history, when the sanctuary was prominent in the Saronic Gulf area.

**Kavos Vasili**. E. Konsolaki-Giannopoulou ( $26^{th}$  EPCA) reports ( $E\Pi A\Theta \Lambda ON$ , 127–70) on excavation of an EH settlement previously noted (AR 49 [2002–2003], 15; AR 50 [2003–2004], 13) from press coverage. The site is on the N coast, facing Aigina, which is directly accessible by boat. The 3 main

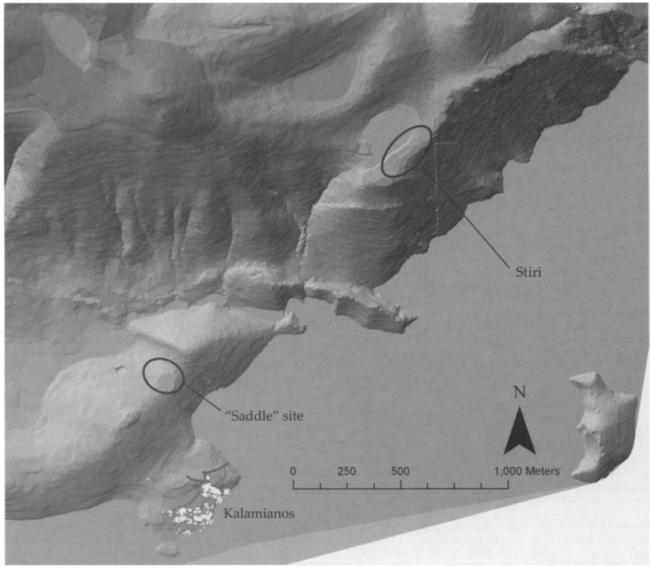


13. Kalaureia: Reshef figurine

buildings (A, B,  $\Gamma$ ) excavated, covering  $ca.40-50m^2$ , plus 2 adjacent subsidiary structures ( $\Delta$ , E), covering ca. 15–20m<sup>2</sup>, form part of a large settlement. The main buildings are oriented SE-NW, and lie in a radial arrangement towards the centre of the settlement. They are all rectangular, and have off-centre doorways with stone socles. Building A consists of a main room, an anteroom and a paved court to the E set 0.90m below ground level. A black steatite signet seal was found in the anteroom. The floor deposit contained much shattered pottery with, in the SW corner, a saddle quern and stone mortar fixed to the floor. Immediately to the E, a small structure set deep below ground (with stone steps in the S wall) was likely for food or livestock storage. Building B, 7m N of building A, has a main hall, a stone-paved porch and a small courtyard to the E. There is a clay hearth in the centre of the main room, and a bench-like structure in the NE corner. Three stone mortars were fixed to the floor and grinding tools were found in the floor deposit. An unexcavated rectangular structure was attached to the W side of building B, and to the SE, building E formed the S boundary of a triangular courtyard in front of building B. Building  $\Gamma$  has a stone-paved porch, and a main and a rear room. A large circular clay hearth in the main room had stamped ECyc II decoration on the flat surface of the raised rim: the deposit of ash and burnt material included a pig mandible. A conoid clay seal was found in the rear room. The 2-roomed building  $\Delta$  was a subsidiary of  $\Gamma$ . Two retaining walls running NE–SW lay at the W edge of the excavation. The entire settlement probably covered ca. 15ha (to judge from sherd scatter and surface architectural remains). In the unexcavated SE part, a 15m l. wall (as preserved), running E–W, may indicate a road flanked by houses. Preliminary analysis of the ceramic evidence suggests a floruit in EH II, with abandonment, perhaps following a severe earthquake, before the start of EH III. A further EH site is noted on the knoll of Kokorelli, 1,000m SE of Kavos Vassili. There is also evidence of talc mining in the area.

**Modi (Liontari)**. E. Konsolaki-Giannopoulou ( $26^{th}$  EPCA) reports ( $E\Pi A\Theta \Lambda ON$ , 171–98) on research on the LMyc site on the nowadays deserted island of Modi, off the E coast of Poros (for press reports, see AR 50 [2003–2004], 13). Surface collections (A. Kyrou) had included Myc pottery and small bronzes, with evidence for a LCl-Hel watch-point on the N part of the island. Excavation confirmed LMyc settlement. In the

W part of the island, 2 rooms of a poorly preserved structure, founded on bedrock, were excavated. On a terrace of the SE slope below the central ridge was found a 7m x 2m structure with 2 rooms: the fill contained part of a 12<sup>th</sup> Ct BC Argive pictorial krater (perhaps waiting for transhipment), plus fragmentary LH IIIB/C terracottas. A newborn infant was buried under the floor of the S room in a small casket with bone decoration. On a plateau in the SE part of the island was a large complex of at least 7 rooms: pottery in the destruction level dates to LH IIIC, but earlier levels have not yet been reached. In the surface layer here were EH sherds, a serpentine button seal of likely EBA date and a terracotta palette akin to ECyc marble examples. In the floor deposit was a miniature bronze wheel likely of LH IIIC date. Overall, the pottery assemblage consisted of coarsewares and finewares mainly dating to LH IIIC E and M, with smaller proportions of LH IIIB2 and LH IIIC L. Cretan connections are confirmed by a large transport stirrup jar and a fragment of a tripod tray: a piece of copper ingot and sheet bronze from a vessel also point to trade. Surface remains of stone structures on the terraced slopes and a



14. Saronic Harbours Archaeological Research Project (SHARP): Myc sites in the Korphos region

fortification wall on the W side indicate a substantial, well-protected settlement. A trading role (perhaps as a maritime stop-over) is proposed.

Y. Bassiakos (ΕΠΑΘΛΟΝ, 199–220) discusses the raw material used in craft production at both Kavos Vasili and Modi.

#### Hydra

M. Petritaki (26<sup>th</sup> EPCA) reports ( $E\Pi A\Theta \Lambda ON$ , 253-57) on test excavations conducted after survey. On the property of Sirius A Ltd at Kaoumithi, surface levels produced 2 EH vessels. In the courtyard of the property of S. Voulgari, 3 robbed chamber tombs previously reported were investigated, along with one other, investigation of which was impeded by mod. structures. The dromos of tomb 2 had been remodelled: within the chamber (2.50m di.), only one pit held a few bones and the other 2 had been disturbed. The bones are estimated to represent 13 individuals (7 adults and 6 sub-adults): radiocarbon dating at NCSR Democritos gave a date range of 9<sup>th</sup>-11<sup>th</sup> Ct AD (ca. 894–1020 AD). Twenty-two iron nails were found, probably from wooden coffins or boxes, plus sheet bronze from jewellery. It seems likely that these tombs were reused for much later burials since they do not conform to known Byz types. Tombs 3 and 4 were robbed in antiquity: tomb 4 contained obsidian and an EH sherd (the only PH finds preserved). In 1975 a further, probably Myc, tomb was found nearby by P. Themelis.

#### Spetses

M. Petritaki (26<sup>th</sup> EPCA) reports (*EITAOAON*, 257–60) on rescue excavation on the property of Roseberry Ltd, on the promontory of Ag. Marina on the E coast, which produced evidence of Myc settlement. In the S part was a destruction level with LH IIB and IIIA1–2 pottery. Settlement remains, found at some depth a little further N, consist of a retaining wall and house walls of 2 phases – LH IIIB and LH IIIC (E and M), with a typical pottery assemblage for each phase. Two animal figures were found, as well as obsidian, animal bone and shell. Some EH II sherds were found in surface levels, including part of a clay hearth rim with zigzag decoration. A LRom–ECh use level (with pottery and coins of the 3<sup>rd</sup>–6<sup>th</sup> Ct AD) also lay close to the surface.

# Saronic Harbours Archaeological Research Project (SHARP)

D. Pullen (ASCSA/Florida) and T. Tartaron (ASCSA/Pennsylvania) report on the first of 3 planned field seasons (**Fig. 14**).

Research focused on the recently discovered Myc settlement at Korphos-Kalamianos, a harbour settlement with a large, planned urban centre, where the foundations and lower walls of the entire town are exposed due to extensive soil loss. An architectural inventory of construction over an area of ca. 9ha was completed: significant progress was made in high-precision mapping of the area, and 2 smaller sectors were selected for detailed architectural drawing and description. The Myc walls, including extensive segments of fortification wall, were shown to cover ca. 7.2ha (Fig. 15). At least 50 separate structures and complexes were identified, nearly all on a similar N–S grid. A large number of complexes, with 5–8 or more rooms, were built as single units.

Surface survey on the Kalamianos site and in the surrounding area used 25m x 25m grid squares as 'discovery units' (following the methodology of the Eastern Korinthia Archaeological Survey). Myc buildings located within these units were examined (via artefact collections and counts) before the remaining area was walked (**Fig. 16**): pottery from

wall fills helped to date their construction, and collections from interior spaces aimed to establish date and function. A number of discovery units were walked in the surrounding area at Kalamianos, Aramada and Stiri. Significant Myc activity was located in a saddle between 2 small hills N of Kalamianos, and at Stiri, SE of the Panagia church. In both cases, canonical cyclopean masonry of Myc type was used in complexes and buildings similar to those at Kalamianos. Ceramic finds also included FNeo, EH and LRom to EMed.

Geological and geomorphological research (R. Dunn) focused on problems of erosion and sediment movement, hydrology, and coastline change over time.

The 2007 season demonstrated the importance of the Korphos region as a centre in LH IIIB and probably also LH IIIA, centred on the harbour at Kalamianos. By LH IIIB Mycenae had established a strong presence in the region, using Kalamianos as an important stop in maritime routes to Attica and the Corinthia, and directly challenging the former regional power, Aigina.

#### **Kvthera**

Publication: G. Ince and A. Ballantyne, *Paliochora on Kythera:* Survey and Interpretation: Studies in Medieval and Post-Medieval Settlements (Oxford, Archaeopress, 2007).

**Kythera Island Project**. C. Broodbank (BSA/London) and E. Kiriatzi (BSA) report on a further study season.

Preliminary study of the Rom pottery (K. Slane) from the survey and the 1960s excavations at Kastri, indicates a low-level presence of ERom and high density of LRom. Notable also is the substantial presence of MRom (3<sup>rd</sup>–4<sup>th</sup> Ct AD), the possibility of some continuation after ca. 650 AD into the EByz and wide-ranging trade connections within the E Mediterranean in terms of amphorae, table and cooking wares. Study of almost all 47 sites in Paliopolis was completed, one of the most intensively investigated coastal landscapes in the Mediterranean.

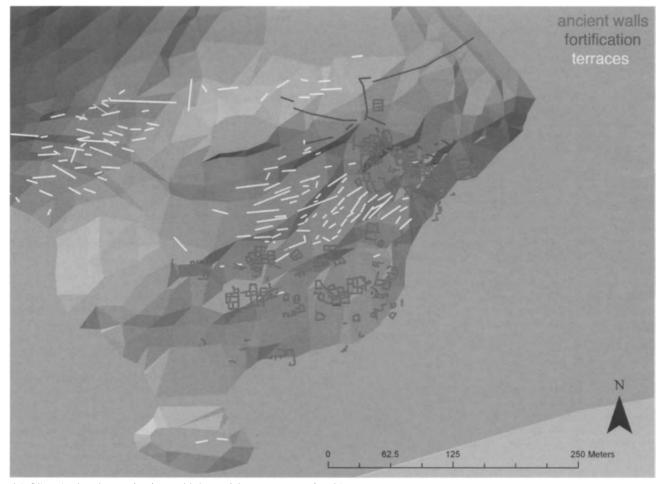
Study of ca. 100 thin sections of geological samples from Kythera and S Laconia (E. Kiriatzi and R. Siddall) confirmed that the source of the red micaceous pottery, abundant on Kythera and present in a number of Peloponnesian sites during the LBA, must be on Kythera. S Laconia cannot be a source of the Lustrous Decorated Minoanising pottery present in coastal sites in the S and E Peloponnese: Kastri remains a strong candidate for at least some of this pottery while the possibility of production in the Argolid needs to be further explored.

Progress was made with other specialist studies. Preparation and analysis at the Fitch Laboratory of 10% of the 299 samples of largely iron-related metallurgical material from the project's surface collections was begun (M. Georgakopoulou). GIS research (V. Delrieu) focused on analysis of all tract densities to explore for potential site-level densities in areas not yet designated: 4 candidates were so isolated. Archival research (J. Bennet, S. Davies and D. Harlan) on the 18<sup>th</sup> Ct landholding patterns of Strapodi was conducted in conjunction with micro-toponym location by E. Kiriatzi through interviews with local informants.

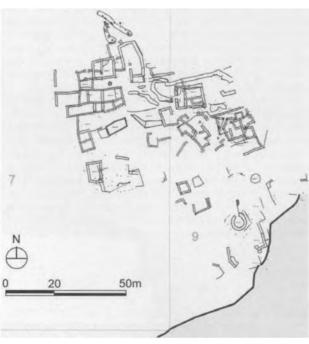
#### CORINTHIA

(37th EPCA: 25th EBA)

**Diolkos.** To Vima, Kathimerini, and Ta Nea (06/09/07) all report on plans by the Ministry of Culture, the Ministry of Merchant Marine and the Ministry of the Environment, Physical Planning and Public Works to collaborate in



15. SHARP, Korphos-Kalamianos: high-precision GPS map of architectural remains



16. SHARP, Korphos-Kalamianos: sector 4 buildings

immediate measures for the protection of the anc. diolkos, the deteriorating condition of which has long been a cause for concern. This will be followed by a study leading to longer-term measures for conservation and public presentation.

**Isthmia**. E. Gebhard (ASCSA/Chicago) reports on a study season focused on the renovation of the Sanctuary of Poseidon and the Isthmia Museum, a project undertaken by the 37<sup>th</sup> EPCA with support from the European Fund for Rural Improvement and the Third Community Support Framework.

Study of finds from the University of Chicago excavations continued. M. Risser and K. Nolin's work on LAr and Cl ceramics focused on comparison between shapes presented as votives in the temple and temenos and those used for food preparation and feasting after the sacrifices, using pottery from the Cl terraces, the temple and the reservoir (great circular pit) in the area reserved for dining. A. Thomsen studied the terracotta figurines, identifying among the horse figurines dominant at the sanctuary 2 distinct types: E and LAr individualized figurines and 'standardized' horses close to the 5<sup>th</sup> and 4<sup>th</sup> Ct 'Late Group' from the potters' quarter at Corinth. L. Houghtalin continued to prepare the publication of ca. 900 coins from the Chicago excavations and 600 from the UCLA/Ohio State expedition. From their study of the arms and armour, A. Jackson and I. Marszalek report on the poor condition of certain dedications, noting damage and repair to a helmet prior to dedication. Iron weapons of the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC from a funerary monument SW of the sanctuary (the W foundation) closely resemble arms from tombs at Vergina and Derveni, and probably reflect Macedonian influence at Corinth and Isthmia from the time of Philip II and his successors. Finally, K. Hallof commenced study of 4 2<sup>nd</sup> Ct BC documentary stelae; P. Funke studied the historical context of the decrees.

In the Palaimonion, M. Sturgeon's restoration of the sculptural programme was assisted by documentation of floor elevations: phase III (Hadrianic) ca. 0.38m-0.60m above the underlying stadium floor; raised in phase V (Antonine) to ca.1.25m above the stadium.

In the Rachi settlement, V. Anderson-Stojanović's study of remains assigned to houses III, IV, V and VI showed that there were only 3 houses here. Domestic structures are generally consistent in size, between 60–75m<sup>2</sup>. Analysis of activities practised and their location in the settlement was undertaken.

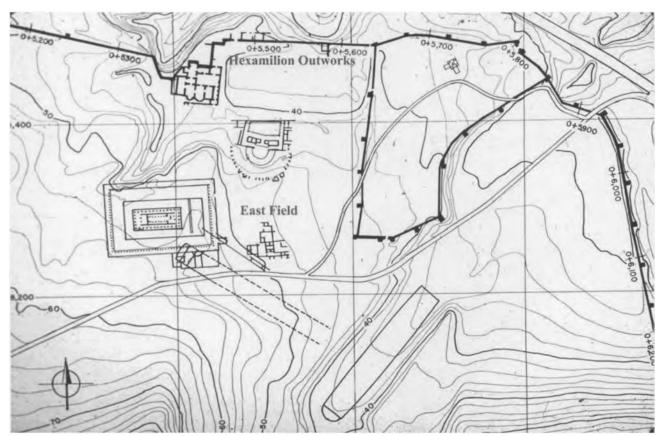
Tim Gregory (ASCSA/Ohio) reports the completion of cleaning and stabilization of the excavation area along the S side of the Rom bath. In collaboration with the 37<sup>th</sup> EPCA, work was undertaken to make the Rom bath, the Hexamilion and the E field accessible to visitors (Fig. 17).

Study towards publication of the Rom bath continued (**Fig. 18**). The protective layer over the great monochrome mosaic in room VI was removed. Cleaning to the SW corner of room XIV completed the overall project of documentation. A 0.6m w. wall, poorly built of rough stones in a mud mortar, was found in fill of the 7<sup>th</sup> Ct AD. The surviving portion ran E-W

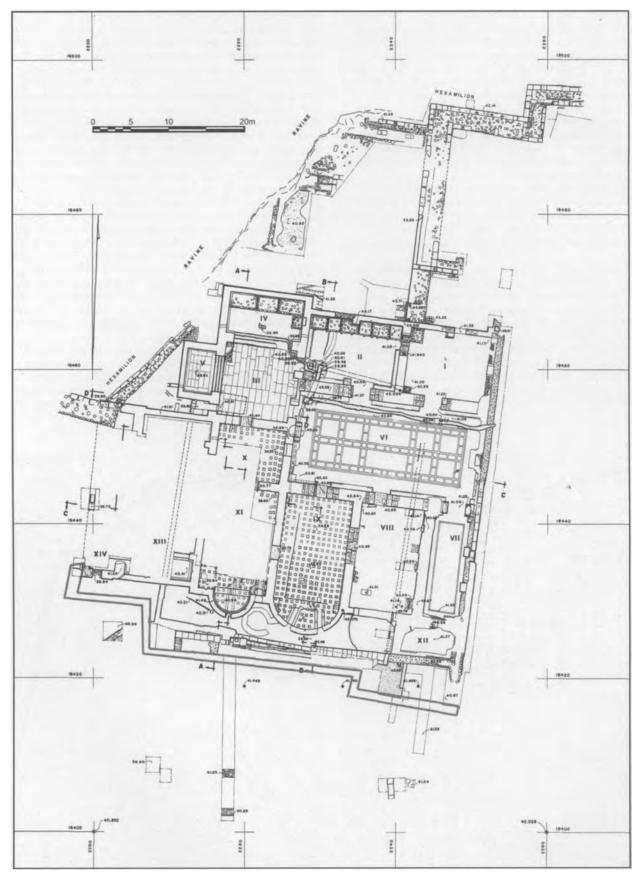
for ca. 2.30m: it must belong to a building large for its period (the so-called Byz Dark Ages) and which may have been partially removed during excavation of this area in 1978. At the SW corner of room XIV a wall of ashlar blocks ran W from the presumed corner of the bath, indicating the presence of at least one other room or defined space W of room XIV (toward the NW ravine). It is unclear whether this was contemporary with the construction of the bath, but it must pre-date its abandonment. Little can yet be said about this space, but the area to the N appears to have been used as a depository for ash, presumably from the furnaces of the building, perhaps saved for later use. Finally, 2 trenches opened in the 1970s, ca. 18m S of the S wall of the bath, were reinvestigated, revealing considerable debris from a large wall built largely of mortar, rubble and tiles (like the upper portions of the walls of the bath). This was likely part of a monumental building S of the bath, and is perhaps to be connected with 2 sets of parallel walls visible to the E and N of the trenches under consideration.

Study of the E field, between the Temple of Poseidon and the Byz fortress, (partially excavated in 1970–1972) refined the sequencing of wall phases (**Fig. 19**), producing up to 17 different phases (not all chronologically significant). As previously concluded, in an early period (perhaps 2<sup>nd</sup> Ct AD) the area was dominated by several large structures, probably public in nature.

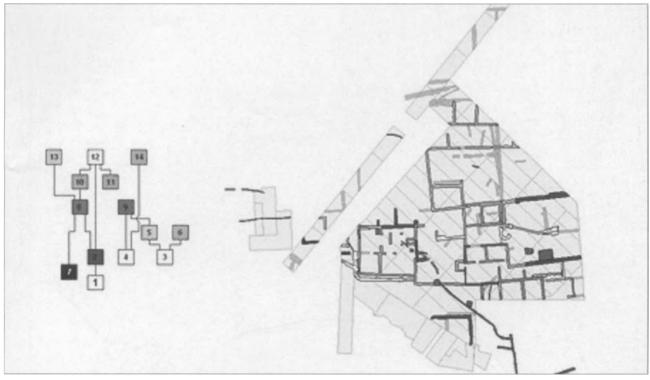
Cleaning continued in the Hexamilion outworks, NE of the Rom bath, where the Byz fortifications (the Hexamilion) run E toward the fortress (**Fig. 17**). Several Rom buildings are known in this vicinity. A project was begun to record extant spolia and associate them with existing foundations (**Fig. 20**).



17. Isthmia: plan of the Sanctuary of Poseidon showing the E field and the Hexamilion outworks



18. Isthmia: Rom baths



19. Isthmia: E field, phase plan of principal architectural development



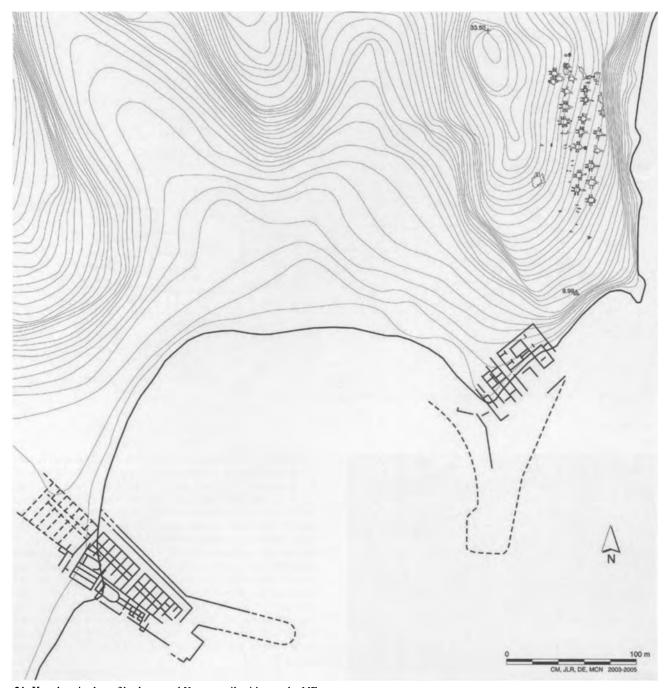
20. Isthmia: Hexamilion outworks, Doric capital reused in Byz foundations

**Kenchreai**. E. Korka (Ministry of Culture), J. Rife (ASCSA/Macalester College) and P. Kasimi (37<sup>th</sup> EPCA) report on excavation, study and conservation on the Koutsongila ridge, N of the anc. harbour (**Fig. 21**). Excavation concentrated in 3 major areas (A, B, C, **Fig. 22**).

In 2004, geophysical survey in area A (at the S end of the ridge overlooking the harbour) had revealed a large rectangular enclosure: monumental blocks remain on the surface. Excavation revealed a N-S wall facing onto a deep, wide

depression in the bedrock. It is as yet uncertain whether this created a terrace or delimited space in a more significant way. A cremation pyre was also discovered in area A: a small, elliptical depression contained ash with burned cobbles, bones and nails, presumably from a coffin or bier. The human bones, mixed with a few animal bones (perhaps sacrificial victims), show extreme changes typical of prolonged exposure to temperatures exceeding 800 °C. An ERom basin and amphora deposited near the pyre may have been used for drink offerings or fuel. To the NE, a rectangular building was apparently used for burial: the fill contained numerous bones and LRom lamps. Next to it were 3 5<sup>th</sup>-7<sup>th</sup> Ct AD cist graves cut into bedrock: one was looted, but the others contained numerous bodies buried over a long period. Eight lead tablets bearing geometric and floral designs and rolled into tubes had been left at the top of one of the cists.

In area B (along the ridge's E cliff), structural remains have long been visible on the surface. Excavation revealed a mod. (20th Ct) circular structure, probably a Second World War turret, directly overlying a well-preserved mosaic floor of the E2<sup>nd</sup>-M3<sup>rd</sup> Ct AD (Fig. 23), which was partially uncovered in 2007. The design is conventional: a field with a diagonal grid surrounds bands of wave crests, diamonds, guilloche and cubic patterns, all framing an emblema depicting an enwreathed head of Silenus looking left. The mosaic displays several colours, and the stone and glass tesserae inside the figural panel are very intricate. It represents the Hel, or eastern, style of mosaic art of the period: there are close contemporary parallels in Asia Minor and the Corinthia (the Kokkinovrysi villa W of anc. Corinth). It likely belonged to an opulent seaside villa, though its proximity to the cemetery is noteworthy. In addition, another building, likely an ERom house, was found ca. 36m S along the cliff. The presence of

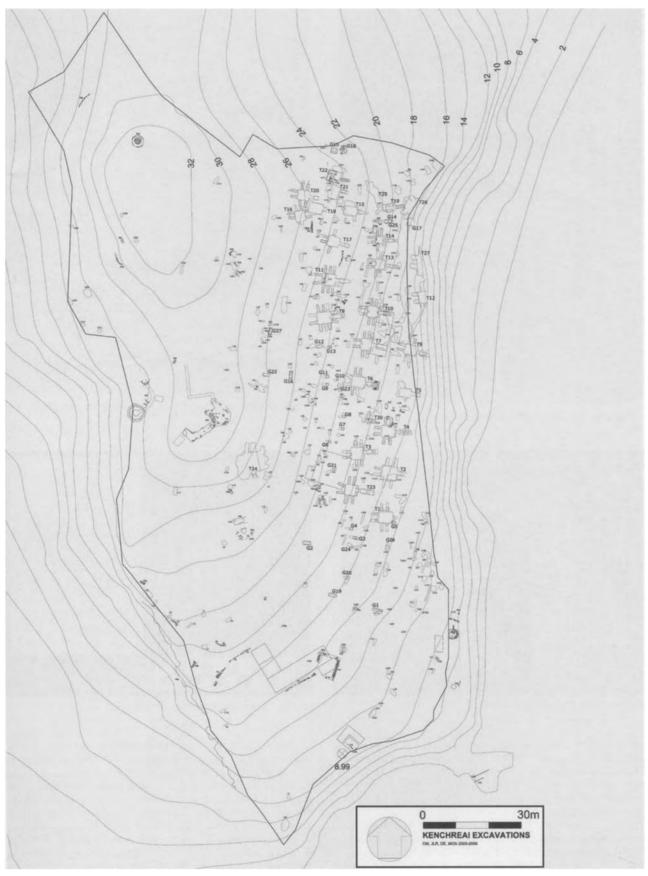


21. Kenchreai: plan of harbour and Koutsongila ridge to the NE

these structures in the SE corner of the ridge suggests that the lavish complex at the base of the N mole of the harbour extended up onto the ridge. Such buildings may comprise a wealthy residential quarter.

In area C (the cemetery), excavation around tomb 10 uncovered a building above the dromos which had apparently suffered a catastrophic collapse (Fig. 24). A niche in the W wall might have contained an epitaph or artefacts such as lamps or a sculpture. Only 2 isolated burials (graves 51–52) were found between tombs 10 and 7. Here commemorative rituals, such as dining, were apparently performed either in the home or inside the tomb. Inside tomb 7 were discrete deposits of

objects associated with funerary rituals of the 1<sup>st</sup>-3<sup>rd</sup> Ct: lamps, figurines, unguentaria, cinerary urns, Knidian bowls, cups in thin-walled ware, amphorae and frying pans. W of tombs 3 and 23, 5 wheel ruts running N-S constitute 2 or 3 cart roads used over a long period during the Rom Empire. This was perhaps the main route into the harbour from the N as travelled by Pausanias. To the SW, a substantial building, with walls in *opus testaceum* on an ashlar socle, served (until its collapse around the 120s AD) as an above-ground chamber tomb with a rock-cut cist (grave 50) along the N wall. Sixteen cist graves of the 5<sup>th</sup>-7<sup>th</sup> Ct were dug into the bedrock here: all had the typical form of a vertical shaft opening W into a wider



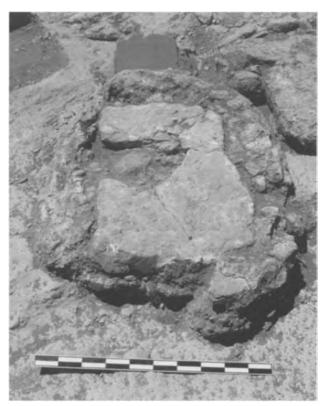
22. Kenchreai: plan of Rom cemetery on Koutsongila ridge



23. Kenchreai, Koutsongila: mosaic inside circular structure



24. Kenchreai, Koutsongila: tomb 10



25. Kenchreai, Koutsongila: grave 43, covering and epitaph in



26. Kenchreai, Koutsongila: 6<sup>th</sup> Ct lamp from grave 39

Study of artefactual and skeletal remains and of the natural environment of the ridge continued. M. Morison examined numerous artefacts, including over 19,000 sherds. R. Weir identified the 50 coins and bracteates so far discovered on the ridge. D. Ubelaker continued his study of the human bones, and S. Garvie-Lok sampled bone for chemical analysis in connection with the study of anc. diet. R. Nunes Pedroso collected samples of mortar and painted plaster. Finally, R. Dunn examined the geological conditions of the tombs to understand taphonomy. On site, conservation of the chamber tombs and their plaster was begun.

Publication: W.O. Stern and D.H. Thimme, Kenchreai. Eastern Port of Corinth, 6. Ivory, Bone and Related Wood Finds (Leiden, Brill, 2007).

**Eastern Korinthia Archaeological Survey (EKAS).** T. Gregory (ASCSA/Ohio) and D. Pullen (ASCSA/Florida) continued study of finds from earlier seasons.

Anc. Corinth. G. Sanders (ASCSA) reports the completion of excavation in the S part of the Panagia Field. Colluvium, laid down in the LNeo, was encountered over the entire area opened to date. Ot and Emod. cemeteries covering the N part of the field currently make further work here impractical. Excavation of the monumental L4th Ct AD building partially revealed in previous seasons was completed, with the exposure of the westernmost 16.5m. At least 6 rooms were laid out in pairs, with anterooms to the S and main rooms to the N, on an E-W axis. Only the foundations (of poor quality, large, roughly dressed limestone blocks), a cellar, a scrap of flooring and the foundations are preserved. As the upper part of the blocks of the outer face of the N wall are finished, the ground level here was lower than to the S where the same course was unfinished. Rooms in the W suite are ca. 7m w. On the E side of the larger N room is a cellar, 2.8m x 1.6m, accessed via steps cut into a leaning ashlar in its NE corner. The cistern was filled in the M3<sup>rd</sup> Ct with a deposit rich in pottery. The 2<sup>nd</sup> suite is only ca. 4.7m w. The main room preserved a fragment of watertight pebble and mortar flooring sloping down towards the SW and, to the SW, part of a dipping basin in the same material. The quantity of grape pits found suggests that this room served as a wine press and the cellar to the W perhaps as a wine store. Below the floor of the putative pressing area was a votive deposit of 22 miniature vessels, each of a different form. A careful search for grave cuts was made to ensure there were no further tombs of the Geo cemetery (see now C. Pfaff, Hesperia 76 [2007], 443-537). The edge of the excavated area was blowcreted to prevent collapse of the baulks. It is intended to cover the area with geomaterial and backfill to the level of the LRom domus floor.

Research resumed in the area S of the S stoa, where in the 1960s H. Robinson revealed a complex of Med houses. Phasing of the architectural remains was undertaken using the old excavation notebooks plus excavation in critical places. A pit to dispose of burnt material contained an African red slip form 50 bowl (M4th Ct AD), decorated glass and a marble portrait head carefully buried face-down. The pit was located immediately in front of a threshold. A deposit immediately predating the Med construction programme suggests that much of the area remained out of use from the M6<sup>th</sup> Ct to the MBvz period. Deposits of decayed mud-brick produced large quantities of small coins. One layer contained 3 legible coins of the E6th Ct and an almost complete Phocaean red slip form 3C bowl (450-475 AD). A complete Hel pithos was reused in the LRom period, accommodated in a deep hole dug into the LRom floor.

A new area opened to the S of Robinson's excavation was intended to reveal more buildings of his Byz phase. A large area was opened, revealing the tops of Med walls and pits, but much of it was disturbed by agricultural activity and wall robbing during the E19<sup>th</sup> Ct, resulting in the reduction and redeposition of Frankish occupation remains. Among the finds was a gilded metal object decorated with a fortress.

**Stymphalos**. H. Williams (Canadian Institute/British Columbia) reports continuing study of pottery, lamps and figurines, as well as the preparation of a small exhibition for the

new museum. Extensive hand coring was carried out selectively across the entire valley of Stymphalos as the start of a project to investigate geomorphological and environmental change in the area.

**Nemea.** K. Shelton (ASCSA/Berkeley) reports on the 2007 season of study and conservation at the **Sanctuary of Zeus**.

Work continued on the preparation of: J. Bravo and B. Rieger, Nemea IV: The Shrine of Opheltes, the Early Stadium, and the Hippodrome; and P. Bouyia, S.G. Miller and G. Zimmer, Nemea V: The Sacred Square II. Cataloguing of major ceramic deposits for Nemea X: Chronology continued, focusing on deposits in grid squares P14/P15, K14/L14, L17, F18 and G18. Dates, especially for PH and EIA material, but also for post Hel, have been refined.

Reconstruction of the Temple of Zeus continued as described in 2006. Work focused on the foundations and krepidoma on the E end and in the pronaos, especially the NE corner, and on columns K-30 and K-29 in the centre of the E colonnade.

In the stadium, a structural and environmental study of the tunnel was begun to determine the cause of the decay/collapse and to propose necessary measures.

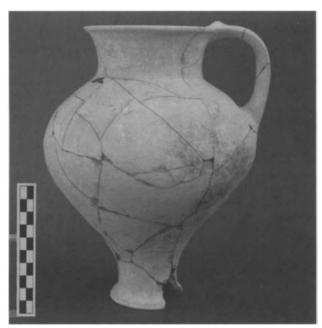
Nemea, Agia Sotira cemetery. R.A.K. Smith (Canadian Institute/Brock), J. Wright and M. Dabney (Bryn Mawr College) report on continued excavation of the LBA chamber tomb cemetery on the hillside of Ag. Sotira, outside the village of Koutsomadi near anc. Nemea.

Test trenching in the field of P. Tombros, begun in 2006, was completed and the blocking wall removed from tomb 4 (which had been partially destroyed by illicit activities over the winter). A further tomb, tomb 5, was excavated.

Tomb 5 was undisturbed. Sherd material and complete vessels indicate that it was in use from LH IIIA2 until LH IIIB (Figs 27, 28), but due to poor preservation of the skeletal material only 2 certain individuals could be identified. The stratigraphy of the dromos and blocking wall of the stomion were well preserved, and it is clear that this tomb had a complex history. The blocking wall contained 4 clearly defined construction phases with floor levels beneath each. Evidence for at least 7 episodes of tomb use and reuse were identified based on stratigraphical and artefactual information. Included among these are adult and child burials in the chamber and the dromos, as well as an offering made by tunnelling into the tomb after the chamber had collapsed. Tomb 5 fits the general picture of the cemetery's use from LH IIIA1 to LH IIIB2, and corresponds to the major periods of occupation at nearby Tsoungiza. Tomb 5 was backfilled and a layer of gravel placed over the dromos and chamber. All test trenches were backfilled and excavation dumps levelled in order to return the olive grove to its original state. We are confident that no further tombs exist to be looted in the field of P. Tombros, but the location and alignment of the excavated tombs suggests that others are likely to exist in the area.

Nemea (Kitseli). Archaiologia 103 (2007), 125, reports the discovery of leopard bones of the LPleistocene period.

**Sikyon Survey Project**. Y. Lolos (Thessaly) reports on the continuation of a multidisciplinary (archaeological, geophysical and geo-archaeological) survey of the plateau of anc. Sikyon. Since the project's inception in 2004, intensive survey has covered some 86ha (of a total of 250ha) and geophysical survey 37ha; geo-archaeological study is almost complete.



27. Nemea, Agia Sotira: LH IIIA2 jug from the chamber of tomb 5



28. Nemea, Agia Sotira: LH IIIB stirrup jar from the chamber of tomb 5

In 2007, 25ha were surveyed in 767 20m x 20m squares (Fig. 29). Artefact density varied significantly. On the upper plateau there were usually 100-150 sherds per square, with higher concentrations (ca. 200-300 and rarely up to 400) only in specific places. This pattern, observed also in previous years, probably signifies scattered, insubstantial installations (confirmed by the scarcity of architectural remains and the small quantities of roof tiles). W of the stadium, higher densities were found, as were traces of the city wall. On the N plateau, the area N of the agora and E of the stadium produced generally higher concentrations, and in certain squares roof tile greatly exceeded sherd. This phenomenon, encountered elsewhere on the plateau, relates to the large number of structures in this area - walls and corners of buildings and cityblocks, retaining walls of streets, cisterns, quarries, etc. On the S plateau also, architectural remains are common in the area investigated, S of the agora, especially ashlar walls oriented N-S, E-W, on the anc. city grid. Associated finds indicate that many of these structures are domestic: industrial activities (stone quarries and an olive-processing installation) were also located. Finally, investigation of the ridge projecting from the SE edge of the plateau produced markedly different results. Instead of the Hel to MRom pottery found elsewhere, ceramics here date back at least to the EH and continue to LH III, with very little Cl-Rom: Byz and post-Byz sherds and tiles represent periods rare in other areas.

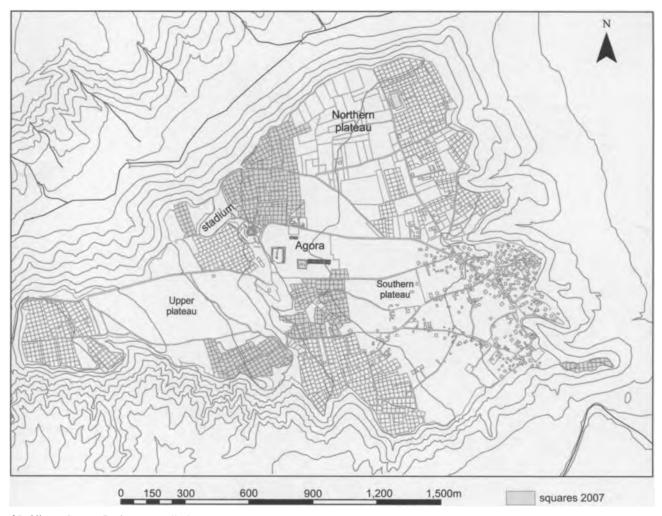
Geophysical prospection revealed a number of streets 6–6.5m w., oriented N–S and E–W, plus an almost 10m w. N–S avenue detected N and S of the agora. The dimensions of the agora are now almost established. The anc. city grid was formed of ca. 69m x 69m squares. Within the resulting insulae, a number of walls and structures, some belonging to courtyard houses, have been located.

The project website is: http://extras.ha.uth.gr/sikyon.

Kryoneri, Lechova Cave. L. Kormazopoulou, I. Zygouri and V. Papathanasiou (EPSNE) report fully (Praktika Z'Synedriou 1, 97-105) on excavations previously noted (AR 50 [2003-2004], 19; citing also reports in press in ADelt B Chr [2000 and 2002]). The cave lies within the boundaries of anc. Sikyon, closest to anc. Titane. It is a single chamber, ca. 45m d.: an ESR date from stalactite samples (NCSR Democritos) of 12,800 years bp provides a control on the artificial widening of the entrance for human use. Destruction of significant archaeological deposits by illegal excavation limits reconstruction of cult practices (a rock altar is tentatively identified). Systematic excavation of undisturbed areas produced a large volume of figurines, terracotta plaques, pottery and some jewellery of the M6<sup>th</sup>-3<sup>rd</sup> Ct BC, with a strong focus on the 5<sup>th</sup> Ct: expanding upon the ADelt report noted in AR 50 (2003-2004), a full analysis of types is presented. Figurines, predominantly females with some males and animals, include most Cor types of the 2nd half of the 6<sup>th</sup>-4<sup>th</sup> Ct, noting the popularity of ringdances and the presence of silens, satyrs and comic forms. Plaques mostly represent cockerels, sphinxes and gorgons: a pediment with female caryatids is illustrated. The ceramic assemblage (Attic, Cor and local, Sikyonian, plus local Atticizing) spans the M6<sup>th</sup>–M4<sup>th</sup> Ct, with emphasis on the 1<sup>st</sup> half of the 5<sup>th</sup> Ct, and includes a wide variety of vessel forms (notably miniatures of known types). Most pottery is Cor or local (end MCor-LCor III, also bg and Cor rf): shapes and decoration are described. Notable among metal finds are a series of rings with engraved bezel, and earrings of known type. Iconography and inscriptions indicate worship of the Nymphs (the inscriptions will be published by A. Matthaiou and Y. Lolos in an appendix to Y. Lolos, Land of Sikyon [forthcoming]).

#### ARGOLID (4<sup>th</sup> EPCA: 5<sup>th</sup> EBA)

**Profitis Ilias Kiveriou**. Ch. Piteros (4<sup>th</sup> EPCA) reports (*Praktika Z'Synedriou* 2, 503–10) the discovery of spolia from a small temple reused in a ruined later structure on the summit of this hill (338masl), 2.28km W of Kiveri, close to the border with Arcadia. These spolia include large parts of Doric columns, a stylobate, sections of triglyph, metope and geison, and limestone blocks. In addition, there is a fluted marble column support for a perrirhanterion and 2 worked fragments of black Argive marble from a base or, more probably, a Doric triglyph altar. W of the later building, 2 more 4<sup>th</sup> Ct BC Doric column capitals were found. In the area round the building were



29. Sikyon Survey Project: overall plan

2 joining and one non-joining fragments of a 4<sup>th</sup> Ct terracotta sima with floral decoration, plus a few Cor roof tiles. Artefacts collected – a few sherds of small Hel vessels, female figurines, a fragment of a peplophoros figurine of the 4<sup>th</sup>-3<sup>rd</sup> Ct, a few later sherds of household vessels and part of a LRom 2-nozzled lamp – indicate that the site was used over a long period. 30m S of the structure with the spolia, the foundations of 2 walls (0.5m w.) of a rectangular structure 6m E–W by 3m N–S were visible in the bedrock. This is likely the site of the small Doric temple represented by the spolia. The temple was probably destroyed in the LRom period: the area may have been subsequently used for Ch worship. Anc. sources do not mention this site, and the deity worshipped is unknown (the excavator suggests a female deity on the basis of the figurines and proposes Artemis as most suited to a remote site in borderlands).

Lerna. M.H. Weincke (ASCSA) reports on a further study season.

E.C. Banks, Lerna VI. Architecture and Settlement of Lerna IV, is in press. Work on the Neolithic Settlement and Small Objects continues.

B. Erikson completed study of Geo-EHel Lerna. M. Lindblom undertook volumetric calculations of complete LH I vessel profiles from Lerna and other mainland contexts as

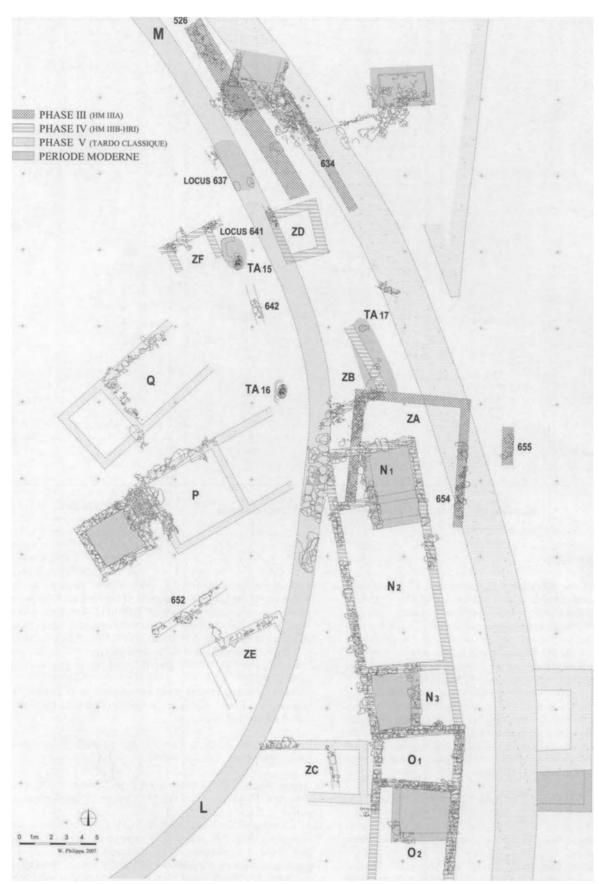
part of an investigation of consumption patterns at the beginning of the LBA. Final reports of the chemical and petrographical analyses undertaken in 2006 (H. Mommsen and I. Whitbread) are expected. D. Reese continued to study bone and shell, contributing to E. Banks' *Lerna* IV and Neo volumes. C. Zerner continued study of the stratigraphy, architecture and finds of areas BD, BA/BB and BC, and has begun work on areas B and A.

M.H. Weincke reports plans for drainage work around the House of the Tiles to alleviate the problem of insects burrowing into the anc. mud-brick.

Publication: K.D. Vitelli, Lerna V. The Neolithic Pottery from Lerna (Princeton, ASCSA, 2007).

**Argos, Aspis.** G. Touchais (EFA/Paris 1) and A. Philippa-Touchais (EFA) report on the 2007 season of excavation and study.

Cleaning of the E sector of W. Vollgraff's excavations was completed (Fig. 30), revealing the spatial organization of this part of the MH settlement. The settlement was organized in 2 successive terraces: the houses of the lower terrace, built along the peribolos, are oriented N-S following the contours of the hill, whereas those of the upper terrace are perpendicular to the



30. Argos, Aspis: MH settlement

peribolos, conditioned by the morphology of the rock. The discovery of 3 MH graves *in situ* (Fig. 31), all pre-dating the final phase of habitation, proves the presence of intramural burials in this sector.

Study of material from previous excavations continued. The presence of storage vessels, at least in the N sector, strengthens the hypothesis of functional differentiation between a N sector dedicated to domestic and craft activities and a SE sector where a high frequency of drinking vessels indicates more social practices. A preliminary inventory of all non-ceramic finds had been made: the majority of the ca. 1,500 objects are MH in date, but there are also a number of Ar, Cl and Hel items.

Finally, the topographic plan has been augmented. Three 3-D views give an impression of the MH site as seen from the plain. They demonstrate that the concentric organization of the settlement, especially in its final phase, created the impression of fortification, and thus heightened its prestige.

**Argos, Nannopoulos plot**. A. Pariente (EFA/Lyon) and Ch. Piteros (4<sup>th</sup> EPCA) report on the 5<sup>th</sup> season of excavation.

Clearance of the agora cemetery provided no further possibility of determining its chronology in the absence of funerary offerings and definable limits. The 6 tombs discovered in 2007, like their predecessors, were uniformly oriented with the head to the SW and the feet to the NE. They housed the remains of a young adult buried in a pit protected by a wooden cover, 2 children buried in a shroud, an adult buried in a shroud, and the bones of an adult interred in a coffin but found in secondary disposition due to the burial of a juvenile in the same pit. This practice, already in evidence in this cemetery, probably indicates that graves were not marked on the surface.

A limestone krepis continued to be exposed on the N side of the plot, and the E part of the monumental exedra was completely exposed along with its concrete floor. A single layer of fill covered the NE part of the monument and produced abundant pottery: some 20 lamps dating from the 1<sup>st</sup> half of the 4<sup>th</sup>-E6<sup>th</sup> Ct AD (**Fig. 32**) were associated with pottery of the 2<sup>nd</sup> quarter of the 3<sup>rd</sup>-E6<sup>th</sup> Ct AD. This fill included a fragment of a lion muzzle from a Cl terracotta gutter and an almost complete amphora, probably dating to the L5<sup>th</sup> or E6<sup>th</sup> Ct AD.

In the S part of the excavation area, the concrete floor of the exedra slopes gently to the edge of the 'Byz disturbance' previously encountered in the neighbouring plot. The brown earth layer of this 'disturbance' contained much L4<sup>th</sup>-E5<sup>th</sup> Ct and 6<sup>th</sup> Ct AD pottery.

Publication: C. Abadie-Reynal, La céramique romaine d'Argos: (fin du IIe siècle avant J.-C. – fin du IVe siècle après J.-C.) (Athens, EFA, 2007).

**Argos.** Archaiologia 104 (2007), 104; Ethnos, To Vima and Eleutherotypia (10/05/07) all report (with illustration) the discovery by A. Papadimitriou (4<sup>th</sup> EPCA) of fabric from one or more sheets of cloth in a LGeo–EAr cremation burial, found during rescue excavation at the junction of Korinthos and Hera streets. The bronze cinerary vessel also contained seeds, notably from pomegranates. Conservation measures taken by F. Dimaki (4<sup>th</sup> EPCA) and A. Moraitou (Directorate of Conservation, Ministry of Culture) are noted.

Mycenae. S. Iakovidis (ASA) reports (Ergon [2007], 31–41) on a further season of excavation on the acropolis, between the NW settlement and the M $\Lambda$  complex, and in Petsas House. On the acropolis, the open court between the excavated rooms and the N cyclopean wall was cleaned and investigated, as was the



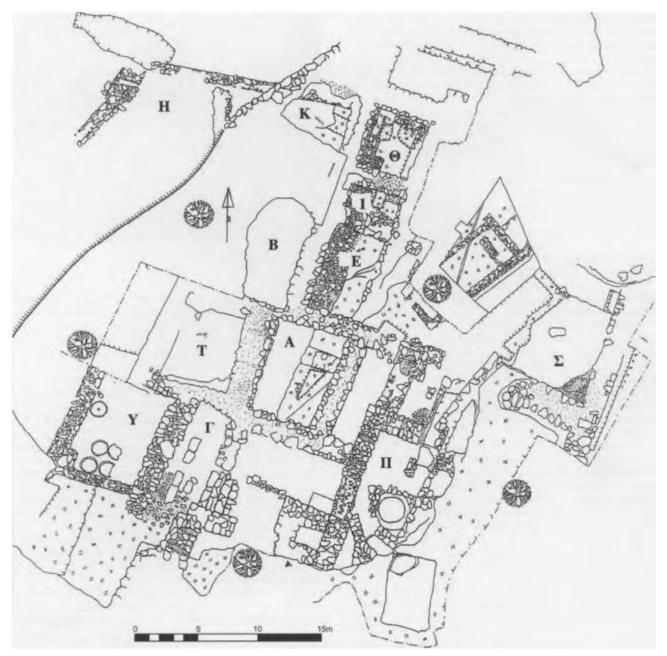
31. Argos, Aspis: MH grave

sloping pathway along the length of these rooms to the court. The 3.5m x 5m court communicates with the northernmost room (3) via a doorway in its W side, and has 2 successive clay floors over a stone fill. The pathway will be fully investigated in 2008. Finds included sherds, fragments of wall-painting, clay loomweights and spools, olive pits and scattered animal bones.

On the banks of the Chavos in the lower city, the city grid (5m x 5m) was extended, and 5 trials opened where architectural remains of historical periods existed at d. of 0.10-0.15m. In the northernmost (trench 22), 2 apsidal structures of fieldstones produced Hel sherds and wasters, indicating pottery production. Further S was a strong external wall, a square hearth and 2 orthogonal bases for columns or wall supports. The pottery was mixed with fragments of figurine and wallpainting, plus iron nails. To the SE, another strong wall with the same orientation was cut by a transverse wall running W which belongs to another less careful construction. These walls are Hel in date. In the neighbouring quadrants 63 and 74, the W wall of a building (previously revealed by geophysical survey) was excavated, and to the S, 2 parallel transverse walls which enclose rooms or perhaps a road. The finds - Myc sherds, a stone pendant, a bronze awl, Ar figurines, Cor pottery and Argive coins – date the building to the E6th Ct. All these buildings were founded in a clean levelling fill above earlier Myc architectural remains, the orientation of which conforms to the known Myc pattern.



32. Argos, Nannopoulos plot: LRom lamp



33. Mycenae: Petsas House plan

In Petsas House (**Fig. 33**), excavation of the well in room  $\Pi$  reached 12.35m d., where the fill contained many stones likely from the mouth of the well, and a corresponding shortage of finds. The LH IIIA2 pottery is mostly plainware and utilitarian. Among the few decorated examples is a bridge-spouted jug. In total, 317 near-complete vessels were collected, plus 350 which could be restored. Other finds include a portable hearth of plaster and a few tiny fragments of tablet with one or 2 characters preserved.

In room K, where excavation in 1951 stopped at a LMyc dividing wall, the dense fill was full of stones. Pottery was mixed LH IIIA2 and later. Room T which neighbours room  $\Gamma$  was also full of stones and bricks baked hard by the fire, as well as large sections of wall-painting which had fallen upright,

probably from the upper floor. In the SW corner, a pithos in situ lay in mixed Myc and Hel fill: in the N part there was a stone-paved floor and part of a carbonized wooden beam. The small room I of the 1951 excavation was completely cleared. In the area N of room E, light walls founded on bedrock were traced to their full course and shown to have been erected and destroyed during the Hel period. An opening into the neighbouring room was shown to be a fault in construction rather than a doorway. Room  $\Theta$ , N of I, was completely cleared and its flooring revealed.

In 2007 excavation also proceeded in Kato Pezouli, the uninvestigated lower level, W of the rooms. Here site H was uncovered in 1951, the exact location of which was uncertain and varies on different plans. A fruitless attempt was made to

locate it amidst mixed fills cut by various Myc and later intrusions. In the S part of this lower level, W of room  $\Gamma$ , an apotheke (Y) was excavated, packed with fill from the break up of the upper floor, just as in the neighbouring T. On the floor were receptacles for large vessels, the lower parts of 4 pithoi and settings for 2 more on slabs. Finds from this year's excavations comprise 98 complete and fragmentary LH IIIA2 vessels, abundant sherds of this period, parts of wall-paintings of different sizes, animal figurines and various Hel objects.

For the BSA, E.B. French reports on the 2007 study season. D. French continued his study of the pre-Myc pottery. Sherds preserved from the 1920, 1939 and 1950 excavations (plus unidentified material likely from older campaigns) were drawn and catalogued: pre-palatial settlement at Mycenae is being evaluated on the basis of this material, with particular attention paid to notable gaps in the ceramic record.

E.B. French completed work on *Well Built Mycenae* 16/17 *The Post-Palatial Levels* (in press). She studied pottery from LH IIIB destruction levels in connection with her work on the deposition of the 'Fill' at Tiryns.

Publications: E.B. French, Well Built Mycenae 13: The Service Areas of the Cult Centre (Oxford, Oxbow, 2007); O.H. Krzyskowska, Well Built Mycenae 14: The Ivories and Objects of Bone, Antler and Boar's Tusk (Oxford, Oxbow, 2007).

Site conservation: G. Papathanasopoulos (*Archaiologia* 104 [2007], 80–84) reports on work undertaken from 2005–2007 to conserve and present to visitors the acropolis of Mycenae, with funding from the Ministry of Culture and the Third Community Support Framework.

Eleutherotypia (12/04/07) reports a lecture given by M. Vlassopoulou-Karydi (Athens, National Museum) to the Friends of the National Museum, in which she discussed analysis of leaf samples from around bodies in Grave Circle B and their identification as papyrus.

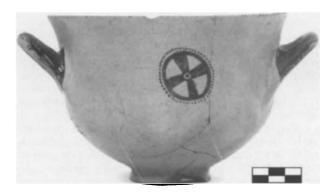
**Midea**. The Gr-Swedish excavations on the Myc acropolis of Midea continued in 2007 under the direction of K. Demakopoulou (Director Emerita, National Museum) with the collaboration of A.-L. Schallin (Director, Swedish Institute) and N. Divari-Valakou (3<sup>rd</sup> EPCA). The Gr team excavated in the SW part of the lower acropolis and the Swedish team in the area E of the E Gate.

The Gr team worked in 2 sectors: in the W part of the building complex (previously excavated in the W Gate area) and on the lower W terrace of the acropolis. In both areas excavation continued in trenches opened in 2006.

Investigation of room XIV in the W part of the building complex, abutting the fortification wall in the W Gate area, was concluded. It is a roughly square room (3m x 2.7m) built against the fortification wall. Its other 3 walls are almost ruined, evidently by the earthquake that struck Midea at the end of the 13<sup>th</sup> Ct BC. The room is founded partly on bedrock and has a sloping floor of beaten earth. The destruction deposit which covered the entire room yielded much fragmentary LH IIIB2 L pottery. A number of vases have been partly restored: a narrow-necked jug with panelled decoration on the shoulder and another wide-necked jug with linear decoration, a rosette deep bowl (Fig. 34), a stemmed bowl, a deep bowl of Group B, a medium-coarse askos and a cooking-jar. There are also many fragments of plain vessels such as kylikes, jars and hydriae. Notable among the coarsewares are fragments of a large hydria

and a basin, as well as of cooking jars and pithoi. Other finds from room XIV include fragmentary human and animal figurines, stone tools, pieces of mother-of-pearl, sea shells and remains of carbonized fruits. An important find is a lentoid seal of haematite depicting a frontal human face flanked by 2 arms with forearms and hands suspended (Fig. 35). The whole scene is surrounded by a snake, almost touched by the figure's left hand, recalling cult scenes with deities and snakes in Cretan-Myc iconography.

On the lower W terrace of the acropolis, trench C was extended 3.5m to the W to clear the entire upper surface and the outer face of a large section of the fortification wall uncovered in 2006. The full w. (5m) of this section of the wall was exposed; a 5m l. stretch, occupying the whole space of the trench, was uncovered. The 2 faces of the wall are constructed with boulders and the filling is composed of large and small stones. Part of a room was revealed against the inner face of the wall. Next to this (to the S), a large area was investigated to ca. 3.7m d. Thick accumulated deposits with piles of large stones and boulders fallen from the wall were removed. Below these, ruins left by a great destruction were uncovered, with the remains of human victims, evidently from the devastating earthquake. Marked traces of burning were also visible. With the removal of the debris, a large part of the inner face of the fortification wall was uncovered. An opening leading to a



34. Midea: LH IIIB2 L rosette bowl



35. Midea: lentoid seal from room XIV

tunnel through the thickness of the wall was found. Only a small part of the interior of this was partly cleared: it is constructed in the corbelled system. The opening, which has a boulder as a monolithic lintel, is flanked by a wall and a megalithic construction. The vaulted gallery probably led down to an underground cistern or spring – a water supply system similar to that of Mycenae and Tiryns, and of the Myc acropolis of Athens.

The pottery from the destruction layer, as from all other destruction layers at Midea, dates to LH IIIB2 L. It is fragmentary, but includes all typical painted, plain and coarseware shapes of the period. The most common painted ware shapes are Group A deep bowls, stemmed bowls and kraters. A fragmentary krater is decorated with antithetic whorl-shells and added white paint. Closed shapes include stirrup jars, feeding bottles, jugs and amphorae. Plainwares include many fragments of conical and carinated kylikes, as well as a large mug found in front of the gallery opening together with a fragmentary coarse stirrup jar. Many fragments of other coarse or transport stirrup jars were found, including sherds of a stirrup jar with light-on-dark decoration and a Linear B sign. The abundant coarseware comprises many fragments of storage and cooking vessels, and hydriae and 2handled jars, which were probably used to transport water from the underground cistern. Fragmentary sherds of the much discussed Handmade Burnished Ware were also recovered; large parts of jars with appliqué cordon and horseshoe handles have been restored.

Investigation of the room next to the area with the gallery opening continued. The part of this room uncovered is defined by the fortification wall and a cross wall. Under an accumulated layer of many fallen stones, a beaten earth floor was reached on a higher level than that of the area with the gallery. The room was founded on a stratum above the debris of the great destruction. The floor deposit contained fragmentary LH IIIC E pottery, including rosette bowls, as well as Group A and B deep bowls with antithetic and running spirals, kraters with similar decoration and monochrome interior, and 2 characteristic vases of the period, a deep semiglobular cup with monochrome interior and a medium band around the rim, as well as a stirrup jar with triangular patch on the shoulder and foliate band in the belly zone. On the floor of the room, an intact (0.11m l.) bronze violin-bow fibula was found. This pottery and the fibula demonstrate that the room belongs to a building constructed after the destruction, in LH IIIC E. Sherds of this period were also found in the upper layers of the adjoining space S of the room. These finds are of considerable interest and add to our knowledge of the post-Palatial settlement of Midea.

The work of the Swedish team was divided between 3 sites: (1) the baulk between trench 3 and room 9, in the row of basement rooms abutting the citadel wall (**Fig. 36**), where excavation commenced in 2006; (2) trench 9, last examined in 2004; (3) trench 14, partly excavated in 2005. The 2 latter sites were chosen in the hope of mapping the use of the interior side of the citadel wall, and the adjacent rooms, during the Myc period.

In the baulk between trench 3 and room 9, work resumed in the massive destruction layer 4; a light grey and finely grained soil (largely ash) containing charred seeds and figs. Pottery fragments and animal bones were frequent. Parts of Myc female figurines, one pierced faïence bead and 2 separate pieces of a figurative relief plaque of bone were collected. The baulk has now been taken down to floor level and forms part of room 9 excavated by Åström. Perpendicular to the citadel wall and bordering trench 3 is a well-preserved wall; facing the citadel wall is a wall with fewer courses.

In 2004, work in trench 9 had concluded at a point when most of the area was seen to be covered with small- to mediumsized stones. Some may have been part of a paving, but now they have the appearance of rubble. In the neighbouring trench 3, the aim was to determine the relationship between a room earlier excavated next to the citadel wall and the area of trench 9. Due to lack of time and resources, work in trench 9 concentrated on the NE quadrant. Excavation recommenced at layer 4, with the removal of stone rubble. Especially in the NW corner of the investigated area, there was clear evidence of a conflagration. The stones had clearly been scorched and the soil between was dark grey and contained charred seeds and figs as well as charred sherds. The area was excavated down to bedrock and, except for pottery, animal bones, shells and charred seeds, only a chert arrowhead was recovered. No structures were identified.

Work continued in the baulk between trench 3 and trench 9: NE quadrant, at the level (layer 2) where excavation stopped in 2004. This is a dark brown soil containing large pottery fragments, one spindle-whorl and one obsidian arrowhead. Again, stones were numerous, but did not form any structures: bedrock was reached in the larger part of the baulk.

The area of trenches 13, 14 and 15 is not yet fully understood: it slopes down towards Åström's rooms 6 and 7, and erosion has affected it severely. Trenches 14 and 15 yielded a post-disaster paving of small stones and in trench 13 is a platform-shaped structure of later date, but only at the N end of trench 14 has the Myc ground level been excavated. The S end of trench 14 was, therefore, further investigated, in an area of 1m x 1.5m, to find the corresponding level.

Work in the S end of trench 14 had been discontinued in layer 2 in 2005, i.e. in a dark brown loose soil. Only a few cm remained before layer 3 appeared as a hard, light grey soil that mostly consists of fine ashes. Charred seeds were noticed, but few could be collected in one piece. At the top of the layer was the head of a Myc female figurine and an incised pottery fragment, probably of later date; at the bottom of the layer were one flat lump of molten lead and half a spindle-whorl. Layer 4 consists of densely packed small stones between which were found sherds and a conical spindle-whorl. It appears to be paving and is the only level in trench 14, S end, that could be associated with the neighbouring Myc building (rooms 6 and 7). Layer 5, with reddish-brown soil, continues to bedrock with an increasing number of stones and pottery fragments in the lower part.



36. Midea: basement rooms abutting the citadel wall

**Tiryns.** J. Maran (DAI/Heidelberg) reports on a further season of excavation and study.

W lower town: for a 2<sup>nd</sup> year, excavation continued in grid squares L51 and L52, offering a rare opportunity to uncover EMyc (LH I-II), EPalatial (LH IIIA) and EIA remains, elsewhere missing or covered by later structures. Undisturbed pre-LH horizons were not reached, but finds in later levels reveal the history of pre-Myc occupation. The earliest pottery dates to the LNeo, while the next clear horizon is EH II. In addition to large quantities of EH sherds, certain finds unexpected in domestic contexts include at least 3 EH clay sealings and building materials, such as terracotta and slate tiles, used to roof major constructions during the 'Period of the Corridor Houses'. Such finds suggest that significant EH architectural remains linked to administrative practices are to be expected.

The earliest architectural phase is EPalatial (LH IIIA), continuing into the incipient LPalatial period (LH IIIB). Two Myc building phases in L52 exhibit marked differences in construction techniques, orientation and probably also size. Architecture of the earlier phase appeared only at the end of the excavation: accordingly, the layout and size of the emerging building remain unclear. The uppermost part of a carefully built, solid wall was uncovered, which closely resembles in construction and width the walls of the large LH IIIA complex found in 1969–1974 S of the new excavation. A multiple-room building of similar size and construction dating to LH IIIAI and IIIA2, with its origins possibly reaching back into LH II, is therefore expected. The later Myc phase (LH IIIA2 and possibly LH IIIB1 E) is represented by a partially uncovered building with painted walls (noting plaster fragments with blue, and sometimes one further colour). Finds, such as lumps of unused clay, fragments of unfired or slightly fired vessels and a spiral clay coil used to build up vessels, indicate the use of the building for pottery manufacture - the first such discovery in Tiryns. Domestic wares and coarsewares were produced, but a smaller number of pieces are thin-walled and made of fine clay. The choice of this particular area for a potter's workshop may have been guided by the proximity of the acropolis. The workshop is very close to the acropolis rock and to the upper citadel in particular. When the first megaron was built in the 14<sup>th</sup> Ct, the workshop was immediately visible to its occupants. Therefore, although only one disputable sealing has so far been discovered, an immediate relationship between palace and potter's workshop is postulated.

A decisive break in settlement in the W lower town occurred early in LH IIIB1: the lack of LH IIIB2 and IIIC occupation, indicated by previous excavation, was confirmed. The potter's workshop and contemporary neighbouring buildings were abandoned without destruction and there are no signs of Myc reoccupation of the area. The abandonment of this part of the lower town may be connected with the creation of a new approach to the citadel from the W in LH IIIB2 with the construction of the W staircase and the associated gate in the W bastion. No construction in the area of the W lower town bordering on this approach was thenceforth tolerated, perhaps for reasons of security or aesthetics (to preserve the view of the palace and fortification on the low acropolis).

Further investigation of an EIA construction of large horizontal slabs and stones discovered in 2006 and thought to be a grave, revealed no grave pit or post-Myc finds. The possibility of a burial at a greater depth cannot be ruled out, but the structure was probably part of a well-built slab pathway built when the foundations of the Myc potter's workshop were used for a new PGeo building. This phase was short: MGeo or LGeo horizons cut into the ruin of the reused Myc building.

Fresco project: A. Papadimitriou (4<sup>th</sup> EPCA) and U. Thaler continued the restoration and analysis of a large complex of wall-paintings found in Archaeological Service excavations in the area of the W staircase (1999–2001). Wall-paintings in the National Museum from earlier excavation in the same area are also included (in co-operation with L. Papazoglou-Manioudaki), since they form part of the same complex. A systematic search for joins between fragments from the new complex began by focusing on friezes showing imitations of wooden beams and spirals. These probably belong to the famous Tirynthian procession of life-size women, and are thus important for clarifying the relation to the old frescoes published by Rodenwaldt. It was thus possible to assemble large parts of the friezes as well as new compositions of figural fresco painting.

Publications: C. Podzuweit, *Tiryns* 14. *Studien zur spätmykenischen Keramik* (Wiesbaden, Reichert, 2007); K. Kilian (with T. Mühlenbruch), *Die handgemachte geglättete Keramik mykenischer Zeitstellung* (Wiesbaden, Reichert, 2007).

**Epidauros**. V. Kyriaki (*Praktika Z' Synedriou* 1, 363–84) reviews restoration work undertaken on the hestiatorion (the so-called gymnasium) of the Asklepieion by the Committee for the Conservation of the Monuments of Epidauros (ESME) from 1984–2006.

S. Makrypodi and E. Mastellos (*Praktika Z' Synedriou* 4, 337–60) also report on the restoration of the stadium of the Asklepieion.

**Franchthi Cave**. K. D. Vitelli (ASCSA) reports on continuing study and analytical programmes.

Comprehensive analysis of the fauna from trench H1B began with the lowest unit (unit 213) and progressed upward. Full taphonomic analysis was undertaken on every 3<sup>rd</sup> unit, while a more restricted analysis was recorded for the remaining units. By the end of the 2007 season, full taphonomic analysis was completed for 2,407 specimens from 16 units. Restricted analysis was completed on an additional 1,492 specimens. In order of decreasing frequency, the most common taxa include: hare (*Lepus* sp.); birds (partridge and pigeon [*Columba livia*], in particular); red deer (*Cervus elaphus*); wild ass (*Equus hydrantinus*); tortoise (*Testudo graeca*); wild cattle (*Bos primigenius*) and wild boar (*Sus scrofa*).

Research on shells and ornaments (C. Perlès) continued: the sequences in H1A and FA were completely studied for the Pal and rarer Mes species. For the much more numerous Cyclope shells a sample of ca. 2,100 individual specimens was recorded for the Lower and Upper Mes and a record of all FMes specimens was completed. All the micromolluses from H1B were identified and counted, and all food shells were resorted to establish the proportions of burnt specimens. Finally, samples were assembled for a major programme of C<sup>14</sup> redating.

#### ARCADIA

(39th EPCA: 5th EBA)

**Paralio Astros**. S.I. Arvaniti (*Praktika Z' Synedriou* 4, 385–410) provides a detailed description of the fort of Paralio Astros, arguing for a Ven (L17<sup>th</sup>–E18<sup>th</sup> Ct AD) first building phase, comprising the external enclosure, NW tower and NW gate.

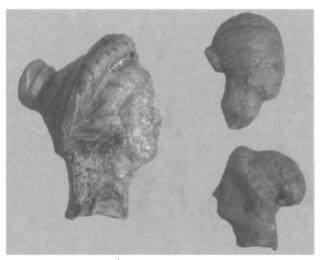
**Louka**. Y. Pikoulas identifies a section of the anc. cart road from Nestane to Tegea in the area of this village (*Praktika Z' Synedriou* 1, 170–76).

E. Eleutheriou (Volos) reports (Praktika Z' Synedriou 4, 283-99) on Byz remains in the small mountain plain around Louka. 2.9km N of Louka and 11.5m N of the church of Panagia Faneromeni is a large (14.2m x 8.6m) rectangular structure containing 2 cisterns. An EByz date is proposed on the basis of the construction technique and the little pottery preserved. Byz marble spolia are built into the S peribolos wall of the church. Ca. 200m ESE of the church are the remains of a one-roomed church (Ag. Theodoroi) 8.6m x 2.8m, with an internal apse and walls 0.8m thick (precluding a tiled roof). The wall construction and the little pottery preserved suggest a M-LByz date (12<sup>th</sup>-13<sup>th</sup> Ct AD). Continuing ENE, tiles and MByz and LByz sherds (plain, incised and glazed) are visible in the fields. Ca. 400m away is the ruined 'Kokkini Ekklisia' (cruciform, without narthex), the plan and construction of which are described in detail: an E13th Ct date is proposed on architectural grounds (there were no ceramic finds). Cleaning and excavation are required to verify this. Ca. 800m NE from the Kokkini Ekklisia are traces of a rectangular building (W side 6m l. with a 1.6m w. entrance; N 7.75m l.; S 9.7m l.; E traces only), with walls 0.75-0.80m thick, preserved to a maximum 0.72m h. Only a few tile fragments were visible, and the structure cannot yet be dated. 750m further on is the path to the mod. church of Ag. Efthimiou, whence leads the route to the hermitage of Ag. Vasileiou. Here 2 small churches, enclosed in a peribolos, are probably Byz (likely LByz) constructions, but have undergone major mod. reconstruction. Finally, going S through Louka, the site of Vidi lies ca. 120m before the church of Profitis Ilias. Here the S side and NW corner of a 2-storey tower (7.4m x 4.8m) are preserved to ca. 10m h.; around the tower, especially to the E, were traces of buildings. The tower likely controlled routes to the LByz settlements at Mouchli and Tsipiana (mod. Nestane). Surface finds of tile, unpainted, incised and glazed pottery, combined with the architecture, indicate a LByz date.

Agia Paraskevi Arachamitai. B. Forsén (Finnish Institute) reports on a project conducted in 2006–2007 to clarify whether column drums allegedly found here in the 1930s could belong to an anc. temple. The site is located at the highest point of the pass leading from Asea to Arachamitai: magnetometry revealed at least 2 monumental buildings, one rectangular (ca. 30m x 11m), the other square (ca. 65m x 65m) with a large central courtyard. Trial trenches showed that the rectangular building is a stoa, open towards the N and with a series of square rooms along the S side, and likely Hel on the basis of form. A Lakedaimonian coin found below the collapsed roof offers a tpq of 50–25 BC for the destruction of the stoa.

S of the stoa lay a shallow pit filled with dark soil, much pottery and other small finds. The pottery includes many mouldmade bowl fragments, both imbricate and floral bowls of ca. 225–50 BC and some long petal bowls of ca. 150–80 BC, as well as miniatures, cooking pots, amphorae, jugs and some lamps, plus a few female figurines of the  $2^{nd}$  Ct BC (Fig. 37). At the S end of this trench lay a terracotta water channel, and next to it  $L5^{th}$ –M3<sup>rd</sup> Ct BC bg pottery and a foot fragment from a  $2^{nd}$  half  $6^{th}$  Ct BC bronze hydria. These finds may be the remains of ritual dining common in sanctuaries. Two tile stamps, one beginning APTEM... and the other  $\Delta E \Sigma \Pi$ ..., might indicate the cult of Artemis Despoina, although further research is needed. Further work is also required to explain the date and function of the larger square courtyard structure.

**Skortsino, Troupitses Cave**. I. Efstathiou-Manolakou (EPSNE) reports (*Praktika Z' Synedriou* 4, 126–40) on renewed study of this cave in 2005 (see previously *AR* 48



37. Agia Paraskevi: 2<sup>nd</sup> Ct BC figurine heads

[2001–2002], 29). A full plan and geological study were made, trenches opened to confirm the stratigraphy and a large quantity of surface pottery collected. Pottery was mainly FNeo (the only phase of occupation, ca. 4200-3300 BC). It consisted of handmade coarseware in both open and closed shapes: pithoi and pithoid vessels with flat bases and vertical strap handles, plus deep bowls predominate (undecorated or with plastic decoration), with smaller numbers of black bowls with incised decoration. Strainers and scoops are also present. In addition, bone, flint and obsidian tools were found, plus one obsidian tanged arrowhead, shell and bone beads, animal bones (of domesticated and hunted species) and a piece of bronze sheet. Most evidence of occupation came from the forward rather than the rear part of the main chamber; part of a hearth was located. Evidence suggests that the cave was mostly used for storage, with only occasional human occupation. Human bones were scattered though the cave: it remains unclear whether the cave was used for burial.

**Leondari**. A. Louvi-Kizi (*DeltChAE* 28 [2007], 99–114) presents a study of the architecture of the church of the Ag. Apostoloi as part of a programme to restore the monument. New architectural observations refine the building sequence from the point of original foundation, probably in the L14<sup>th</sup> Ct AD, onwards.

Mt Lykaion, Sanctuary of Zeus. M. Petropoulos (39<sup>th</sup> EPCA), M.E. Voyatzis (ASCSA/Arizona) and D.G. Romano (ASCSA/Pennsylvania) report on the 2007 season of excavation and survey.

Trenches were opened in the lower and upper areas of the sanctuary, at the altar of Zeus, in the temenos, in the xenon, in the area of the stoa seats or steps and on the terrace SW of the hippodrome. The altar trench produced EH, MH and LH pottery, an LM II rock-crystal lentoid seal, plus pottery and votive objects from the Geo–Hel (miniature vases, bronze tripods and rings, iron blades and a spit, silver coins) and much animal bone. Use of the altar from the 3<sup>rd</sup> millenium BC is inferred. Some 52m² of the temenos area near the altar were excavated to bedrock, with virtually no finds. In the lower sanctuary, excavation within the xenon revealed a small area of the floor and evidence for interior wall-plaster. Trenches outside the N wall of the stoa exposed the building's foundation and part of the interior.

Documentation of all extant blocks via a combination of topographical survey and architectural drawing continued, and the first actual state drawings of the buildings and monuments of the sanctuary were created. Architectural documentation focused on a ca. 40m *l*. series of steps or seats to the N of the stoa and on the E wall of the adjacent xenon.

Y. Pikoulas continued his historical study of the Mt Lykaion area, identifying anc. roads and towns, and M. Davison continued the cultural landscape study reported in 2006.

The project website is: http://www.lykaionexcavation.org.

Loutra Heraias. A.-V. Karapanagiotou (39th EPCA) presents (Praktika Z'Synedriou 2, 260–72) a preliminary publication of a Myc cemetery on the S slope of the hill of the chapel of Ag. Giorgos, close to the NW edge of the village of Iamatikes Piges, 12km from Paloumbas and ca. 15km from the known Myc cemetery at Palaiokastro. Remains of a collapsed tholos tomb and traces of at least 6 more were visible on the surface, along with remains of slabs displaced by the digger used to open a road up the hill. Only the chamber of the tholos tomb survived, cut into the soft limestone of the hill (2.8m x 2.15m). The dromos could not be located. The chamber floor was covered with fill which had seeped in from above and the S part of the chamber had subsided. The tomb was reused, presenting evidence of earlier burials pushed aside, as well as the latest burials on the floor of the chamber. Remains of a least 8 individuals lay at the W side of the chamber, along with their grave goods. In the southernmost part, 2 skeletons were preserved in supine position. Grave goods consisted of more than 25 vessels representing a variety of closed shapes (especially alabastra, also pithoid amphorae), plus dress ornaments (bronze and bone pins), beads, whorls, 2 knives and 3 razors and a sealstone. Use of the tomb dates to LH IIIA-B.

**Karytaina**. E. Yannouli (*Praktika Z' Synedriou* 4, 141–58) reports on excavation inside the castle by the  $5^{th}$  EBA in 2002 and 2003. Particular attention was paid to a rectangular structure, 5.4m x 4.25m in the centre of the castle. This has a pebble and mortar floor through which the bedrock projected to 0.15m h. in the centre and walls of rough stone and tile in lime mortar, up to 1.45m thick and preserved to 0.3m h. The strong foundation of the S wall, combined with the central location of the structure, imply that it was a defensive tower, and perhaps the Frankish donjon. The building dates to the  $13^{th}$  Ct AD, contemporary with the castle walls. Finds consist of roof tiles with incised and impressed decoration and household pottery, as well as painted and glazed ware, noting one Byz and one Hel or Rom vessel (unique at this site).

A 2<sup>nd</sup> trench was opened in the central court, in the SW part of the castle. At a d. of 2m were remains of an arched gateway built in limestone (w. 2.3m, d. 1m, h. 2m), set into bedrock; grooves for the opening of the door are preserved in the threshold, plus one of the iron hinges. This was approached via a descending path from the higher courtyard. S of the gateway, 8 walls created a series of 4 small storage areas. These also date from the period of the castle's construction in the 13<sup>th</sup> Ct. Pottery dates to the Byz (and in particular, LByz) period, and includes household, painted and glazed wares: most characteristic is a small amphora with decoration typical of the L12<sup>th</sup> E13<sup>th</sup> Ct AD. A coin of Andrea Venier (1382–1400) was also found, plus much shell and animal bone.

A final trench was opened further N, 1.5m from the interior face of the W wall. Four walls of 13<sup>th</sup> Ct structures were discovered, plus 3 later, probably from the period of the 2<sup>nd</sup> Tourkokratia. Proximity to the W tower suggests that these may have been auxiliary buildings serving the guard.

Cleaning outside the castle provided new data on several matters, notably the building's defences and access points.

**Lousoi.** G. Ladstätter (Director, Austrian Institute) reports further examination of the cult building on terrace I and of the peripteral temple (*AR* 53 [2006–2007], 30–31).

On terrace I, W of the peripteral temple, the following sequence of cult buildings is visible following excavation from 2004 onwards. First, the foundations of a simple rectangular building (5m x 7m) of LCl date; a hoard of terracotta figurines (found in 2005) indicates a cult function. Above this oikos, a rectangular building, subdivided into 2 rooms (5.7m x 8.1m), was erected in the Hel period; its E access and some limestone orthostats from its superstructure survive. Deposits of lamps and balsamaria (located in 2004) indicate that this structure also served a cult purpose. Probably in the LHel period, this structure was extended with the addition of symmetrically placed halls in use at least until the E2<sup>nd</sup> Ct AD.

In 2007, an altar was revealed 2.7m E of the orthostat building, oriented axially towards its entrance (Fig. 38). The rectangular substructure of 6 limestone slabs (2.6m x 1.3m) survives; the upper surface was smoothed and mortises cut into it to facilitate the placing of orthostats. One of this upper level of limestone blocks survives in situ in the NE corner (h. 0.6m). Similarities with the materials and techniques used in the orthostat building and the stoa NW of terrace I suggest a Hel date for the altar. The exact orientation towards the orthostat building further indicates a cult ensemble combining that structure and the stone altar to its E. The surroundings of the altar contained relocated fills with anc. disturbances, with finds of occasionally Ar date, but mostly Cl, Hel and Rom dates.

A sounding NE of the structures revealed the rubble foundation of the N hall of later date, also foundations of the Hel orthostat building cut into a fill containing sherds of numerous Geo and Ar thin-walled drinking cups. Numerous Cl, Hel and ERom sherds indicate continuity of intensive eating and drinking (feasting) in the context of this building, suggesting a cult that preceded the LCl oikos and went back to the Geo period. It could be a local heroon.

In the area of the Hel peripteral temple, work concentrated on the W area of the E hall in the sekos. In conjunction with previous excavation results, the following architectural phases can now be proposed.



38. Lousoi: orthostat building, altar in foreground



39. Lousoi: temple area

The temple (**Fig. 39**), erected in the EHel period, had a peristasis of 6 x 15 columns (15.8m x 42.35m) and a sekos subdivided into a pronaos, an elongated E cella hall (15 x 8 m), a square W cella hall (7.8 x 8 m), and a transverse room (adyton) to the W (2.8 x 8 m). The E cella hall was subdivided into 3 aisles by 3 pairs of interior supports, indicated by 6 individual footings, and in the NE by one limestone slab as bedding for a wooden pillar. This hall was paved with a well-preserved floor of clay slabs.

The building was radically redesigned, probably in the LHel period. The E cella hall was subdivided by a N-S wall. Its E part was transformed into a new pronaos and the W part remained a cult space, now divided into 3 aisles by 4 secondary internal supports, located in accordance with the room's new proportions. In the course of these modifications, the clay slab floor was partially removed, as were 5 of the 6 limestone bedding slabs for the original internal supports. The base of a cult statue, placed axially in front of the W wall, belongs to this modification. The same almost certainly applies to the 6 internal supports in the W cella hall. The surroundings of the cult statue base contained numerous LHel and E Imperial clay lamps from the period of the temple's use, as well as secondary deposits of older cult objects, including a LAr iron sword and a Cl bronze sauroter.

Soundings beyond floor level in the E cella hall in 2006 provided information about the pre-Hel use of the temple area. The terrain, sloping down to the N, was subdivided into terraces by E-W running support walls, of which rubble foundations survive at varying elevations. Associated with these walls were use deposits and fills above the preserved wall tops, containing finds such as sherds of Ar drinking cups and cooking pots, bones, ashes and burnt clay.

Thus the area was used for meals or feasting from the Ar period onwards, before the erection of the temple. A cult of the same duration is indicated by the secondary deposits in the area of the cult statue base. Fragments of an Ar Laconian clay roof suggest an older cult building, probably located S of the Hel temple. It can therefore be assumed that the Hel cult is intentionally connected with an older cult, the origins of which lie in the Ar period at the latest.

Overall, the excavations suggest that the extra-urban Sanctuary of Artemis is complemented by an urban sanctuary, with its own distinctive, but so far unidentified, cult from the Ar until the E Imperial Rom period.

**LACONIA** (5<sup>th</sup> EPCA: 5<sup>th</sup> EBA)

**Vasara (Veroia).** Th. Papageorgiou (5<sup>th</sup> EBA) reports (*Praktika Z' Synedriou* 4, 49–64) on the conservation of the wall-paintings of the church of Ag. Nikolaos (13<sup>th</sup> Ct AD, with a 2<sup>nd</sup>, post-Byz, layer of painting dated epigraphically to 1597).

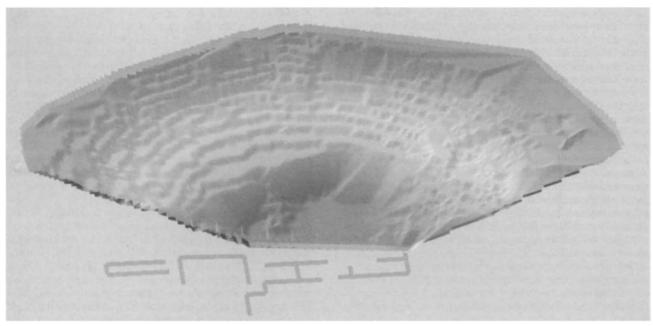
**Trypi (anc. Kaiada)**. Th. Pitsios (Athens) reports a renewed programme of anthropological research at this rock-cleft located in the foothills of Taygetos, on the boundary of mod. Trypes, ca. 10km NW of Sparta. A research programme instigated in 1983 by P. Themelis (AR [1984–1985], 24; AR [1985–1986], 29) documented the physical form of the feature and, on the basis of the large quantity of human bone present, identified it with anc. Kaiada, into which the Lakedaimonians threw condemned criminals, prisoners of war and weak infants. Anthropological investigation to date has not confirmed the presence of infants or small children: most of the skeletal material found inside the cleft probably belongs to men with a biological age of 18–35 years.

A new 3-year research programme, begun in 2003 by the Anthropological Museum of Athens University in collaboration with P. Themelis (Rethymnon) and under the supervision of the EPSNE and 5<sup>th</sup> EPCA, aims to investigate in detail the circumstances of deposition of the human skeletal material in the rockcleft, and to collect, clean and characterize all remaining material.

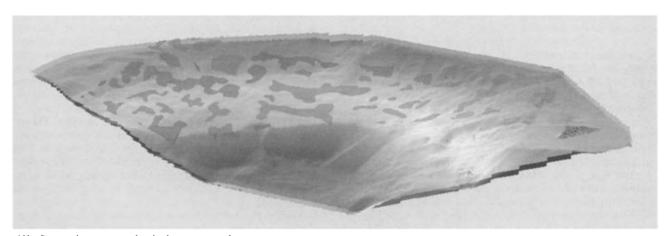
Sparta theatre. C. Morgan (Director, BSA), A. Vasilogamvrou (Director, 5th EPCA) and K. Diamanti (Director, 5th EBA) report on the first season of a 5-year investigation of the anc. theatre in preparation for its proper conservation and public presentation. In 2007, the BSA undertook 2 nonintrusive surveys, to trace the extent of theatral and later antique remains in the koilon with a view to future excavation, and to contribute to the assessment of immediate and mediumterm conservation needs. Combined topographical and resistivity survey (C. Gaffney, H. Goodchild and S. Harrison [Birmingham Archaeology]) revealed extensive areas where seating may be substantially undisturbed (Fig. 40), plus the likely location of structures probably related to Byz settlement. A new condition report on the exposed masonry was made by C. Woolfitt (Ingram Associates). The 5<sup>th</sup> EPCA and 5<sup>th</sup> EBA completed drainage work, removed part of the old excavation dump and continued archival and architectural study with particular reference to the parodoi. Ceramic finds from previous excavations in the area were located in the Archaeological Museum of Mystras, and conserved.

**Kouphovouno**. W. Cavanagh (BSA/Nottingham), C. Mee (BSA/Liverpool) and J. Rénard (Clermont-Ferrand) report that, following the 2007 study season, descriptions and interpretations have now been drafted of the stratigraphic sequences, archaeological features, sediments and finds in each of areas B, C, G and H (**Figs 41, 42**).

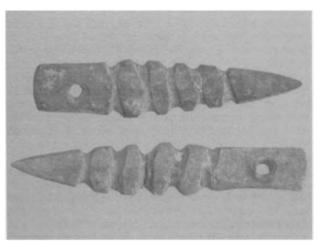
The sequence of MNeo contexts from the sondage in area C showed the range of shapes and decorative motifs. Sherds were examined for evidence of manufacture and use wear: even decorated pottery was sometimes exposed to fire, with burned areas inside and out. The M-LNeo transition (evident in area G, especially in the 2006 sondage) is characterized by an increase in storage and cooking vessels. The quality of Urfirnis decoration declines at the end of the MNeo and gradually evolves into the Matt Painted style. Black Ware is also present early in the LNeo period, and even proto Polychrome. Good



40a. Sparta theatre: topographical survey results



40b. Sparta theatre: geophysical survey results



41. Kouphovouno: LNeo bone pins from area G



42. Kouphovouno: MNeo carinated bowl from area C

LNeo contexts in area G enable identification of variation in the proportions of different ware types from the stratigraphy. No clear FNeo levels were noted: possibly the settlement was restricted to the summit of the hill in this period. EBA contexts were associated with stone platforms: ceramics suggest that some date from transitional EH I/II or E EH II, while others represent a more developed stage of EH II and there are also later EH II contexts. The W edge of area G was disturbed by substantial LRom fill and it is evident that there was considerable Rom activity at Kouphovouno. I. Whitbread has identified the main pottery fabrics used: 130 samples will be subject to petrographic analysis in the Fitch Laboratory (BSA).

Initial identification and classification of the animal bones was completed (J. Cantuel). Preliminary observations confirm an overwhelming predominance of domesticated ovicaprines, pig and cattle, of varying proportions but with the first always predominant. Wild animal bones were not common, but show a variety of species including deer, boar, wild goat, hare, aurochs, wolf and fox.

A pilot study on the physical, chemical and lipid analyses of soil samples is in progress: hydrographic study of the environs of Kouphovouno has been completed (E. Fouache and C. Cosandey) and initial results obtained from micromorphological analysis of samples from the excavation (C. Ballut). In collaboration with the 5<sup>th</sup> EPCA, measures were taken for the long-term conservation of the site.

Publication: R. Orgeolet (*Praktika Z' Synedriou* 1, 269–89) discusses the function of the EH pits.

Chrysapha, Monastery of the Agioi Tessarakanta Martyroi. J. Papageorgiou and D. Charalambous report (*Praktika Z' Synedriou* 4, 225–74) on a programme of conservation of the 17<sup>th</sup> Ct wall-paintings (painted by Giorgios and Dimitrios Moschos) completed by the 5<sup>th</sup> EBA in 2005.

Amyklai. In an interview with Ta Nea (07/11/07), A. Delivorrias (Director, Benaki Museum) describes a programme of research begun in 2004, with the aim of completing excavation at the Sanctuary of Apollo and assembling all available material evidence for the Amyklaion Throne and other major monuments of the site. New information incorporated into the restoration drawings of the throne made by M. Korres indicates that it had a round base 8m di. and ca. 4m h.; the supports for the throne, with their lion-paw bases, have also been recognized.

Gytheion, Lakonis Cave. Nautemboriki, Avgi and Eleutheros Typos (09/02/08) all report the discovery of the tooth of a male Neanderthal, along with animal bone including rhinoceros, wild boar and deer (indicating a warmer climate at that time). The find was made in 2002 in an excavation directed by E. Panagopoulou (EPSNE): data on diet from strontium isotope analysis of the tooth (M. Richards and K. Charvati [Max Planck Institute]) reveal that the Neanderthal spent his early years in a more mountainous area (at least 30km from the area of the cave).

Anc. Helos. A. Themos (*Praktika Z' Synedriou* 2, 452–80) synthesizes a large quantity of published and unpublished material and textual evidence in discussing the location of Helos. Among the archaeological sites discussed, attention is drawn to the following new or updated information.

Lakka (Vlachioti). A. Themos (*Praktika Z'Synedriou* 2, 457) reports sherds of EH II light painted bowls and sauceboats in a location on the N side of the mod. village.

E part of Plain of Helos. A. Themos (Praktika Z' Synedriou 2, 458-59) reports surface evidence of Neo and Hel settlement from current and previous surveys at Karaousi, Dragatsoula, Keramidiona, 'Stou Manolaki' and on the hill of Ai Strati. Karaousi, a hill N of mod. Asteri, has produced finds from the Neo-LH IIIC and from the PGeo-Hel (noting previous excavation here, AR 6 [1959-1960], 9). At Dragatsoula, E of Asteri, mostly PH pottery is visible in the fields around the cemetery: a marble column base (0.3m h.) is built into the porch of the cemetery chapel. At 'Stou Manolaki', a widely-cited candidate for the site of Helos, further surface finds of Cl, Hel and Rom pottery were made over ca. 50 stremmata, noting also PH sherds and obsidian. At Keramidiona, where pithos burials have previously been reported, Hel and Rom sherds were found.

Central part of Plain of Helos. A. Themos (Praktika Z' Synedriou 2, 460-64) reports in the vicinity of **Peristeri** a LH IIIA2-B1 chamber tomb excavated in the 1930s, and 2 others, found in the 1980s (ADelt 36 B1 [1981], 129) and in 2004 (AR 51 [2004-2005], 30). The last is described (containing multiple burials from LH IIA-SubMyc/EPGeo, including M or Minoanising cups). A SubMyc or EPGeo burial in the fill of the entrance contained an amphora, an oinochoe (with wavy line decoration), bronze pins and a bronze ring. Two further chamber tombs, found by G. Steinhauer in 1976-1977 at the site of Solaki, W of the mod. village, are here reported in full. One was destroyed in the course of the road widening that led to the excavation, but the  $2^{nd}$  was excavated (4 vases are traceable in Sparta Museum), confirming activity in the area from LH IIA-LH IIIC L: Myc sherds were collected just to the W. Slightly further W, from the area of Filisi, an EH pyxis probably comes from a tomb. On the hill of Anemomylos Skalas (the site of the Byz church of Ag. Giorgios) sherds and tile date from the PH-Hel periods. These include EH bowls, a Myc kylix, Cl and Hel bg, and part of a grinding stone. Further N from Filisi, on the E bank of the Evrotas, part of a water channel was located cut into the rock: its course could be followed for ca. 100m running S, parallel to the river, before turning E. In later periods, mills were constructed along its course.

Geraki (anc. Geronthrai). J. Crouwel and M. Prent (Netherlands Institute/Amsterdam) report on the 2007 season, which was dedicated to the final study of material from earlier excavation and survey, with particular focus on the PH and Hel pottery and other finds.

Following study of EH II L destruction deposits in 2006, work concentrated on the earlier occupation of the acropolis. Prolific but fragmentary pottery of earlier periods comes from different parts of the site, but rarely from good contexts. The presence of FNeo and EH I was confirmed, although EH II E pottery was rare (especially in comparison with EH II L). Attention focused on material associated with wall 30 (in trench 17/13K and the NE of field 17), which belongs to the EH fortification system (Fig. 43). This was constructed and filled in EH II (probably EH II L). Material of this date, as well as FNeo/EH I and EH I/II, deriving from occupation levels elsewhere on the acropolis, was used in the construction.

The defensive system on this part of the acropolis was extended in EH II L (wall 180 was built in front of wall 30, with a casemate room between them, in trench 17/13q), and the entire settlement and its defences were destroyed in the same phase — a sequence of events which strongly recalls that at Lerna in phase IIIC. Early pottery from another wall trench to the NE (17/13r), associated with a fragment of a wall of

small stones resting directly on the original hill surface, which predates the fortification, was shown to date to EH I/II E.

An EH II L pottery deposit from the SW part of the acropolis (trial trench 19/2a), perhaps deriving from another casemate room, was strewn together with finds from survey in this area, resulting in further joins. Study of PH pottery from trial trench 25/4b, below the SE crest of the acropolis and outside the acropolis wall, together with survey finds from the area, produced much EH II pottery, including Geraki ware, and material of historical periods. Finds likely derive from higher up on the acropolis.

Ca. 40 EH clay sealings from the casemate room and other contexts were consolidated and studied (by J. Weingarten) for separate publication. Study of MH pottery from the site began: this largely comes from fills and dumps of household ware. I. Whitbread continued work on the MH fabric typology.

Study of the historic periods focused on 2 LHel buildings (room 1 of building C and room 5 of building B) and the intervening street in the SE corner of the excavation area, with further work on the stratigraphy and artefact assemblages. Work on the flotation and sorting of soil samples was completed.

Monemvasia, lower city, Church of Agios Nikolaos. P. Skagou (5<sup>th</sup> EBA) reports (*Praktika Z' Synedriou* 4, 181–208) on survey and excavation undertaken to understand the plan and construction of the monument, which are described in detail. Ag. Nikolaos is built on the ruins of a predecessor, the S wall and apse of which are visible on the exterior on the S side. Part of the floor of the earlier church was excavated (along with a section of the N wall and the apse) 2.61m below that of its successor. In addition, excavation revealed traces of another, larger ruined church destroyed at an unknown time, and within which the predecessor of Ag. Nikolaos was located. The original level of the cobbled floor, sandstone column bases and a rectangular tomb, probably built for the founder when the church was constructed, were also found.

Cape Malea. E. Zavvou (*Praktika Z' Synedriou* 2, 413–51) summarizes archaeological and textual sources for the cities on the W shore of the cape, synthesizing published data and new discoveries, and providing a full bibliography. Among the new data, the following site entries should be noted.

Boza (Asopos). E. Zavvou (*Praktika Z'Synedriou* 2, 418–21) reports surface finds of EH and MH, as well as Myc, PGeo and Geo sherds on the S and SW slopes of the peninsula (where PH activity is previously attested). From the plateau of the peninsula come EH, Myc, Hel and Rom sherds (the last phases include bg and rf, amphorae, loomweights, tile and water pipe). Architectural members and traces of walling with cement are visible across the peninsula. On the W slope, EH burials and a large structure of this period (perhaps for storage and trading) are noted with previous bibliography. Surface finds include an EH clay sealing.

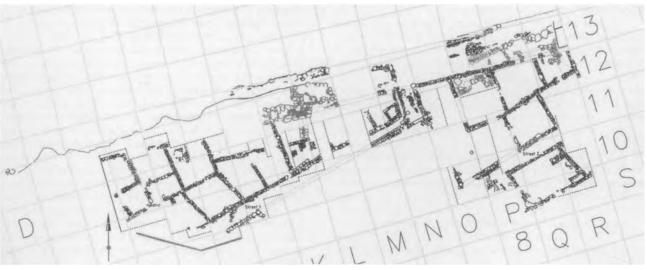
Byz and later remains on the S foot of the peninsula include the wall of a church and part of a Byz marble thorax with spiral decoration.

**Aremos (Asopos).** E. Zavvou (*Praktika Z'Synedriou* 2, 421) reports the discovery of a large rectangular kiln on the property of A. Tricha, preserving part of the furnace and firing chamber. Debris, including tile wasters, scattered around the kiln is as yet undatable.

**Visaliades (Asopos).** E. Zavvou (*Praktika Z' Synedriou* 2, 421-22) reports the discovery of a large rectangular kiln, similar to that at **Aremos**. The greater part of the firing chamber, the furnace and the subterranean chamber was preserved. Here too, debris, including tile wasters, scattered around the kiln is as yet undatable.

Cultivation of land on the S side of the road between Asopos and the coast at Boza (property of A. Vlachogiannakou) revealed architectural remains from a bath: tile, amphora, and Hel and Rom sherds were collected. Surface remains covered the entire 35 stremmata of the plot: the exact nature of the site (settlement or some other form of establishment) is as yet unclear.

**Agridi** (Asopos). E. Zavvou (*Praktika Z' Synedriou* 2, 422) notes spolia of what may be a funerary monument in sandstone, discovered and removed to the corner of the landholding during the opening of a drainage ditch some years ago. A large quantity of tile fragments, Rom sherds and part of a kioniskos was scattered across the plot. The site lies a short distance E of **Visaliades**.



43. Geraki: plan of excavated area

Koutroubes (Asopos) lies 1km SE of Boza and just E of Agridi. Here, E. Zavvou (*Praktika Z' Synedriou* 2, 422–23) reports a stone slab bearing an inscription of the 1st Ct AD which refers to H πόλη των Βιαντυνέων and honours the descendants of Gaius Iulius Eurykles, whose family owned estates in this area.

**Tsoukalas (Asopos).** E. Zavvou (*Praktika Z'Synedriou* 2, 423) reports Hel and Rom sherds at this site, which lies between Goula and mod. Asopos. Part of a grey marble door (likely from a tomb), sculpted to imitate a wooden door, was found on a neighbouring plot and handed over to Sparta Museum. Part of a similar door, in sandstone, is stored in the Demarcheion of Asopos.

**Xyli peninsula (Pounta).** E. Zavvou (*Praktika Z'Synedriou* 2, 424) reports Hel and Rom sherds, especially LRom combed ware, as well as EH sherds and obsidian.

**Plytra.** E. Zavvou (*Praktika Z' Synedriou* 2, 427–32) reports on renewed excavation and survey. One of the city's cemeteries is located on the W side of the archaeological site. Beside the mod. harbour mole lies a subterranean built tomb (columbarium) with niches, ca. 5.35m x 6.90m, oriented N–S with the entrance to the N (staircase in the NW corner). The upper surfaces of the walls of 2 further tomb monuments were located in the same area, one almost touching the E side of the first tomb and the other just to the NNW (dimensions ca. 4.7m x 5m). Their disposition and orientation suggest that a road ran between the former 2 monuments and the last mentioned. A further, similar tomb was found to the E along the line of this road (dimensions 4.17m x 5m).

Ca. 100m further E, a built subterranean columbarium with hemispherical and orthagonal niches was discovered in rescue excavation on the property of G. Venetsanaki and A. Vraimaki. Its dimensions were 1.72m x 0.64m. It was used for multiple burials from the 2<sup>nd</sup> to the 4<sup>th</sup> Ct AD. Grave goods included a large number of pottery and glass vessels, a marble ossuary with incised decoration of a bucranium and garland, and a Laconian bronze coin from the reign of Hadrian (117–118 AD). Notable finds include lamps of the Firmalampe type, one of which bears the mark of a N Italian workshop (NERI: 1<sup>st</sup> half 2<sup>nd</sup> Ct AD), and a glass bowl with a double-line incised signature (E4<sup>th</sup> Ct AD). These finds confirm that the local harbour had significant trading connections across the Mediterranean during the Rom period.

The area of the anc. city was even larger, however, taking into account published finds from within mod. Plytra, while many LRom and EByz structures are located in the NE part of the archaeological site, in the area of an anc. quarry with a relief of Herakles, and on the slope opposite it. These structures have blind apses at their sides and in many cases preserve traces of wall-painting within red painted frames – traits which identify them as tomb monuments.

An undecorated sandstone sarcophagus, with a stone headrest on the interior, contained a  $4^{th}$  Ct AD lekythos and a W sigillata fragment with a round, garlanded stamp (IVLI: end  $1^{st}$  Ct BC-E1 st Ct AD). Finds from the area as a whole (architectural members, inscriptions, clay and marble vessels) have been assembled over a number of years: many have been handed over by local inhabitants to the Demarcheion of Asopos. Among these are: fragments of a sandstone door; the base of a grey marble perirrhanterion (0.55m h.; 0.32m upper di.); a sarcophagus lid (1.94m x 0.79m); and fragments of inscriptions.

MESSENIA (38<sup>th</sup> EPCA: 26<sup>th</sup> EBA)

**Messene**. P. Themelis (ASA) reports (*Ergon* [2007], 42–59) on excavation in several parts of the site (**Fig. 44**).

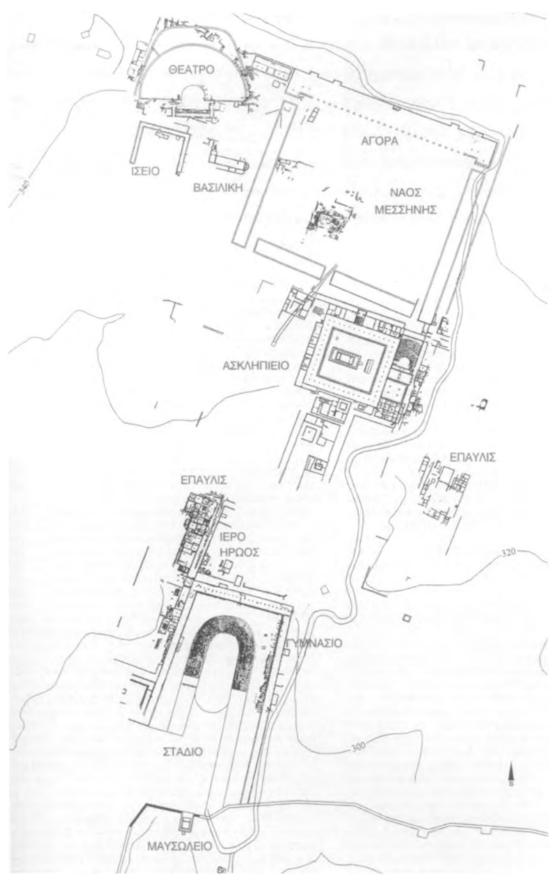
In the theatre, a large number of EByz graves containing no offerings were uncovered in front of the E and especially the W parodoi. In the latter case, graves were lined with blocks from the superstructure of the parodos, most of which had builders' marks (Gr characters denoting course and position). Graves in the E parodos were usually built of limestone blocks, notably the geison blocks of a Doric stoa, the location of which is not yet known. The channel round the orchestra was cleaned and work undertaken to drain the orchestra and proskenion. Fragments belonging to 2 surviving stone thrones were collected, and surviving elements from the steps and stairways of the koilon put in order.

The 2 body sections of the 2<sup>nd</sup> Ct BC marble statue of large Herculaneum type, found in the E apse of the proskenion, were joined and the statue set on a stone base. The missing head probably represented Claudia Frontina, wife of Claudius Hostilius Caelianus and mother of Tiberius Claudius Sathidas Caelianus I, who was *Helladarches* of the Achaian League and chief priest of the Sebasteion during the reign of Trajan. The torso of Hermes from the proskenion was also set on a base.

The theatre basilica and surrounding area were landscaped. One of the fallen columns from the S colonnade was re-erected. One of the stylobate blocks of the S colonnade is an inscribed statue base of the M2<sup>nd</sup> Ct AD, in honour of the chief priest of the Sebasteion, Tiberius Claudius Geminianus, son of Claudius Crispianus and Aufidia Gemina. His statue was erected by Claudius Aristomenes, priest of Zeus Ithomatas, and Claudius Nikeratos, *grammateus* of the Synedrion, both members of known families in Messene. Tombs were discovered along the S side of the basilica and outside the apse. One of the cover slabs bears a 2<sup>nd</sup> Ct BC inscription on both sides setting out the boundaries of an unknown region.

Excavation of the NE corner of the N stoa in the agora revealed 2 stone measuring tables for solid substances (**Fig. 45**), as well as orthostats on which the table tops were set. On the lower face of the table slabs, around the flow hole, were metal clamps and pegs. Among other finds from the fill between the tables and the E wall of the stoa was a cast bronze Hel head of Medusa from the fulcrum of a couch.

During cleaning and landscaping of the temple of Messene, numerous fragments of inscribed limestone were discovered, from 2 decrees. The first concerns the giving of honours to Messenian judges by the Thessalians. The 2<sup>nd</sup>, of the 1<sup>st</sup> Ct BC, records the honour paid to the Messenian Archidamos Philostratou as proxenos and benefactor by the polis of the Pylians. The stele with the decree was to stand in the Sanctuary of Athena Koryphasias at Pylos, with an exact copy in the homeland of the honorand, in accordance with the customs of the ancients, and probably in the sanctuary of the goddess Messene, where the stele was in fact found. It is the only stele so far found from the city of Pylos, which was also named Koryphasion. The Doric stoa, discovered long ago close to the W side of the temple of Messene, is the prostoa of a broad-fronted building, the function of which is still unknown. W of the Doric prostoa, 2 entrances, with large stone thresholds, lead to 2 chambers. Left and right of the thresholds were large limestone bases for inscribed stelae. Probably the building belonged to some city authority. A destruction level of tile from the roof covered the floor of the rooms: in certain places, especially in the SE corner of the N room, there were strong traces of fire. This occurred before the 3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct AD (according to the ceramic



44. Messene: general plan



45. Messene: measuring tables from the N stoa

and numismatic evidence), probably due to the catastrophic earthquake of 375 AD which caused the destruction of many public and private buildings at Messene.

N of the temple of Messene, a square hypostyle hall was investigated, the N edge of which lay under deep fill; along the length of the front face was a roofed prothalamos. Inside the hall were the foundations of 2 parallel rows of bases (8 along the long sides, 4 on the short). The building is identified with the *bouleion* referred to in the inscription recording the boundary dispute between Messene and Megalopolis inscribed on the adjacent Base of the Knights.

Ch tombs with no grave goods were found in several places inside the *bouleion* and out. Digging associated with their construction was largely responsible for the destruction of the building's superstructure.

Reconstruction continued with support from the Third Community Framework: work was completed in the stadium, the gymnasium stoa and the E stoa in the gymnasium, and in the heroon-mausoleum of the Saithidai S of the stadium.

E.-A. Chlepa (*Praktika Z' Synedriou* 2, 287–304) reports on restoration and reconstruction work undertaken at the Arcadian Gate.

Anc. Thouria. E. Greco (Director, SAIA) reports on a further season of surface survey in the area of this site, conducted in collaboration with the  $38^{\rm th}$  EPCA.

In 2007 attention focused on the area S of the city, within the wall and at the S edge of plateau B and beside plateau C. The data gathered were processed in CAD and GIS systems, enabling both quantitative and thematic analyses (of finds by category and class, or elevation models, for example). The team architects made drawings and photographs in the area N of the city known as the location of cemeteries, and of a notable stone quarry from which came a large proportion of the building stone used in the anc. city. Many tombs were visible: their co-ordinates were plotted and particular attention was paid to their relationship to the quarry face, since in many cases this permitted recognition of anc. extraction marks. The addition of these new elements to the area already surveyed and georeferenced provides a complete general picture of the anc. city and its environs.

Kosmos tou Ependyti (19/01/08) summarizes the annual report of the 38<sup>th</sup> EPCA. Findings include the location of a retaining wall preserved for a *l*. of 13.95m and to a *h*. of 3m, slightly N of the Church of the Panagitsa, noting the large

number of anc. spolia built into the church and evident nearby. Excavation of the wall revealed a Cl public building (or complex) preserved to a h. of 2.4m: research at the site continues.

Trypes. Archaiologia 104 (2007), 104; Ta Nea and Eleutherotypia (11/06/07) report the discovery by O. Vikatou (7<sup>th</sup> EPCA) of a Myc pictorial amphora in the Myc chamber tomb cemetery at Trypes. The scene depicts an ekphora, with the bier carried by 4 male bearers and followed by mourners. Four further chamber tombs from this well-known cemetery were excavated in 2007; all were undisturbed and contained rich offerings. One contained a child burial accompanied by animal figurines and a kourotrophos. Decorated finewares from the tombs included pyxides, alabastra, pilgrim flasks and 2- and 4-handled amphorae; of particular note is a flask of Cypriot shape. Other offerings included steatite seals and a rich variety of jewellery.

Kephalovryso (Chalratsos). G. Chatzi-Spiliopoulou (Director, 7<sup>th</sup> EPCA) presents a preliminary publication (Praktika Z' Synedriou 2, 337-66) of an almost intact small tholos tomb, previously noted (AR [2004–2005], 31–32). The chamber was almost round (3.2m x 3.25m) and preserved to a h. of 2.52m. The entrance, ca. 1m<sup>2</sup>, faces S; the stomion is built of limestone slabs. The walls incline inwards and widen outwards. There is no dromos as such, probably because there was no need for such a retaining function since the tomb was built against the lower slopes of the hill. The doorway was 1.26m h. and was blocked by smaller slabs; there was a monolithic lintel. The chamber construction followed the usual manner of tholoi; walls were made of irregularly-sized, minimally-worked stone slabs. Almost the entire structure, apart from the very top, is preserved. An unusual feature is a wall erected over the lintel, also of stone slabs, preserved to 1m h. While it may originally have been straight, pressure from the earth behind it has forced it into a trapezoidal shape. This wall has no connection with the tholos superstructure and cannot be considered analogous to the retaining triangles of larger tholoi.

Within the chamber, ca. Im of fill contained mostly finds of later periods, as well as displaced stones and human bone. Remains of 3 funerary deposits, likely previous burials pushed aside, were identified close to the chamber wall. Human bone, notably cranial remains, were placed in the N, E and W curves of the wall. There were no burial pits, nor evidence of burial in the centre of the chamber. Myc pottery consisted of a little decorated ware (5 LH I/IIA vessels are catalogued), more plainware and some handmade wares; other finds were very few. Handmade wares mostly come from a distinct location in the NW quadrant of the chamber and cannot be associated with any particular burial deposit; the deep cup is a characteristic shape. This ware is consistent with an LH I/IIA date, but is also known in MH II and III. It is likely that the tholos was built in the MH III/LH I and reused in LH II. Non ceramic finds include a bone pin and ring, 4 clay whorls, a stone tool, bronze beads and single beads of rock crystal and glass paste. Parts of the shoulders and lips of large pithoi were found in the vicinity of the tomb, together with a quantity of post-Myc sherds and tile. E of the tholos, on the land of A. Machaira, sherds of a pithos with finger-impressed decoration were found.

2.60m from the tomb entrance, a curved retaining wall extends for 3.51m; this includes one very large block (2.04m x 0.85m x 0.35m) within a lighter structure. It is founded at a higher level than the tomb and is a later peribolos probably designed to divide contemporary constructions from the ancestral funerary monument. Much Rom and later pottery was noted in the area.

Post-Myc finds, especially much pottery, come from the area of the tholos, as well as the fill inside it: they indicate that the monument was reused during the LRom period (3<sup>rd</sup>-4<sup>th</sup> Ct AD) and perhaps later. A preliminary indication of the forms represented is given: many glass vessels are also present. Three catalogued items (a lamp, a bronze coin and *tegula mammata*) are indicative of the date proposed. It is likely that a Rom farmstead with a bath was situated close to the tholos: local reports of destroyed cist tombs may indicate burials of this period also. It is unclear whether the tholos was reused during this period, and, if so, for what purpose: there is no indication of later cult. The presence of a LRom lamp in the tomb may indicate that it was looted at that time.

**Pylos, Palace of Nestor.** J. Davis (Director, ASCSA) reports on the continuing study of finds from Blegen's excavations.

All post-BA pottery has been reviewed for the first time by J. Davis and K. Lynch. Activity continued only in certain restricted areas. There is no evidence of continuity in the socio-political institutions of the BA palace into the EIA. Activity almost ceased late in the EIA. The little Ar and later pottery has no connection with ritual or even informal veneration. There is no reason to consider the palace ruins a sacred site.

J. Murphy examined grave goods from Pylos in the National Museum; in the Chora Museum, she restudied with K. Lynch the post-BA pottery from the Kokkevis tholos which dates to the E-MPGeo, with most pottery dating to the MPGeo. L. Schepartz and S. Miller-Antonio analysed the human remains from tholos III in the National Museum.

S. Lafayette determined that much floor plaster retained by Blegen and Rawson had fallen from an upper storey of the palace. X-ray diffraction was employed at IGME to determine the composition of the plaster samples. H. Brekoulaki fully documented the nautilus frieze from hall 64, mentioned by Lang but not illustrated. New joins were made to the 'Two Men at Table' fragment from the throne room, and many to the procession scene illustrated in Lang's pl. Q. The ship fresco from hall 64 has been more accurately reconstructed, but the iconography of a large group of joining fragments with purple decoration from the same room remains a mystery. E. Kottoula completed experiments on the effects of burning on mod. samples of pigments used in the wall-paintings at Pylos.

J. Davis, S. Stocker and G. Cadogan identified Cretan and M ceramics from MH levels, some at least as early as the Old Palace period.

A new Gr edition of C. Blegen and M. Rawson, *Guide to the Palace of Nestor* has been published (Athens, Papadema, 2007) with revisions and updates by J. Davis and C. Shelmerdine.

Romanou. Kosmos tou Ependyti (19/01/08) summarizes the annual report of the 38<sup>th</sup> EPCA. Traces of PH settlement (2700–2250 BC) have been located (and are illustrated), contemporary with the settlements at Akovitika and Voidokoilia. Investigation in the E part of the settlement recovered large quantities of obsidian and bronze, probably from workshops (unique in Messenia). A few metres from this area, a deep well produced large quantities of pottery (ca. 200 vessels, mostly undecorated).

A 2<sup>nd</sup> discovery in this general area is a large pithos used for a burial. This contained PGeo vessels as funerary offerings.

ELEIA

(7<sup>th</sup> EPCA: 6<sup>th</sup> EBA)

Acropoleis of the anc. cities of Eleia. X. Arapogianni (Director, 38<sup>th</sup> EPCA) (*Praktika Z' Synedriou* 2, 5–32) describes work undertaken to clean and present to the public the monuments on the acropoleis of the major anc. cities of the region (Epitalio, Skillos, Prasidaki, Lepreon, Kato Samikon, Platiana, Alipheira, anc. Phigaleia and Koryphe).

**Triphylia.** J. Heiden (DAI) and C. Rohn (Cottbus) report that the 2007 survey season investigating the settlement and topography of Triphylia was abandoned due to devastating forest fires in the research area: the project will continue in 2008.

Olympia. Eleutherotypia (07/03/08) reports geophysical prospection aimed at locating the hippodrome, as part of a 5-year research programme undertaken by R. Senff (DAI) and G. Chatzi-Spiliopoulou (7<sup>th</sup> EPCA). The topographical significance of a building complex found by the 7<sup>th</sup> EPCA S of the entrance to the Olympic Academy in the winter of 2006–2007 and identified with the Sanctuary of Demeter Chamynes is emphasized. Pausanias placed this sanctuary SE of the stadium: built on a height, it was a vantage point from which spectators could watch chariot races. Current prospection thus focuses S and E of the stadium.

Publications: H. Kyrieleis (with contributions by B. Eder and N. Benecke), Olympische Forschungen 31. Anfänge und Frühzeit des Heiligtums von Olympia: die Ausgrabungen am Pelopion 1987–1996 (Berlin, De Gruyter, 2006); H. Baitinger and T. Völling, Olympische Forschungen 32. Werkzeug und Gerät aus Olympia (Berlin, De Gruyter, 2007).

**Linaria** (**Lagoumia**). O. Vikatou (7<sup>th</sup> EPCA) reports (*Praktika Z'Synedriou* 1, 385–86) the discovery of 4 tombs in the course of work to divert the main road beside anc. Olympia. The remains of 4 human skeletons were found. Pottery – comprising 3 prochoiskoi, a fragmentary Minyan kylix, 2 further fragmentary vessels and part of a handle – indicates a date at the end of the MH. Also found were a lead weight, 3 stone tools, 2 clay weights and a clay bead.

Linaria (Spilies). O. Vikatou (7th EPCA) reports (Praktika Z' Synedriou 1, 386-87) the discovery of part of a PH settlement. Poorly preserved architectural remains were uncovered at a d. of 0.2-0.3m. In one trench lay part of a curved foundation oriented N-S, 6m. l and 0.9m w: adjacent to this was a round construction (di. 2.7m). To the E lay a 2<sup>nd</sup> N-S wall 3.3m l. which at its S end starts to curve to the E. Another trench produced just sherds, while a 3rd also produced remains of a building. The excavation produced a quantity of EH and MH sherds and stone tools, many of which had traces of burning. The PH finds were generally in poor condition because of ploughing and slope erosion. The site lies on a low hill ca. 3km from Olympia, with a direct view over the Alpheios valley: rescue excavation covered only the area threatened by road construction (part of the project to divert the main road by anc. Olympia) and the site is undoubtedly more extensive.

**Miraka (Velmacheika)**. O. Vikatou (7<sup>th</sup> EPCA) reports (*Praktika Z' Synedriou* 1, 387–96) the discovery of part of a Rom settlement and cemetery. Between them, a wall (preserved for 4m) and a round hearth probably belong to a PH settlement badly damaged by cultivation. A few EH sherds and stone tools were found.

Remains of a Rom settlement lie close by, to the SE. Foundations of 2 buildings were examined, with remains of others visible on the surface over a wide area. Building 1 (maximum dimensions 19.2m *l.* x 7.3m w.) has only its foundations preserved, with indications of 3 rooms or areas. Building 2 is larger (50m x 20m) and better preserved: it had 8 rooms and was used for storage (the base of a large pithos was found *in situ*). Finds included spools, Rom sherds mainly from amphorae, as well as some LRom pottery of the 6<sup>th</sup>—7<sup>th</sup> Ct AD, faunal remains, glass vessels, olive pits and 7 poorly preserved coins of which only one 4<sup>th</sup> Ct BC coin of Sikyon could be read. To the W, a channel linked the buildings to a neighbouring stream.

Three 6<sup>th</sup>–7<sup>th</sup> Ct AD tombs were located in the same area as the buildings. Tomb 1 is a cist, probably of stone in secondary use, oriented E–W, containing a female burial in extended, prone position. Beside the skull was an undecorated trefoil-mouthed oinochoe and, lower down, 2 silver earrings decorated with grape clusters. The oinochoe, decorated with bands of incised wavy lines, dates to the 6<sup>th</sup> Ct AD and the earrings to the 6<sup>th</sup>–7<sup>th</sup> Ct. Tombs 2 and 3 were slab cists, oriented E–W, and contained single burials but no goods. These tombs relate to the reuse of the buildings and do not form part of an organized cemetery.

The Rom cemetery lies on a low mound ca. 100m W of the settlement. The following tombs were investigated. Tomb 1: lined with terracotta slabs; contained a 1<sup>st</sup> Ct AD skyphos. Tomb 2: tile grave, with one burial, containing a glass amphoriskos. Tomb 3: tile grave with one bronze coin of Claudius (41–54 AD) placed by the lower jaw of the deceased. Tomb 4: disturbed tile grave, with a poorly preserved skeleton, a terracotta lamp, a tear-bottle and an amphoriskos. Tomb 5: tile grave containing a glass tear-bottle and a broken pottery vessel. Tomb 6: poorly preserved skeleton with sherds of one vessel. Tomb 7: pit grave, 2.2m x 0.8m, containing one female burial in extended, prone position but with iron nails indicating a wooden bier.

Goods were placed in the S part of the tomb and around the lower body up to knee level. Offerings comprised: 18 glass vessels (including flasks, tear-bottles and a phiale, mostly 1<sup>st</sup> Ct AD); a large bronze phiale at the deceased's feet; a large bronze amphora at her right. Between these last 2 was a wooden chest of which only the bronze fittings (lock, bindings and carrying strap) survive. This contained a silver spoon, a silver bracelet with a crystal ornament and snake-head finials, a silver coin and small tear-bottles. Pottery comprised a relief skyphos decorated with ivy and vines, a lagynos and a plate with a relief double spiral on the lip exterior and the interior stamp ZOILI. Tombs 8 and 9, next to 7, were tile graves with no goods.

This tomb group dates to the 2<sup>nd</sup> half of the 1<sup>st</sup> Ct AD. This is the first time that offerings of the quality of those in tomb 7 have been found in the area of Olympia. The cemetery lies ca. 2km from the Altis and less than 1km from the cemetery at Frangkonisi which produced the important collection of glass vessels now on display in the Olympia Museum.

**Skafidia.** Ta Nea and Eleutherotypia (11/06/07) report the discovery of a large Rom bath, part of a large public or private complex, situated next to the river Yardanos. Sixteen rooms around a peristyle court were richly appointed with a variety of marble wall cladding, arched ceilings with relief decoration, mosaic pavements and wall heating. The large rectangular frigidarium had niches around for statuary, and mosaic pavements with geometric patterns and depictions of dolphins.

Anc. Elis. J. Rambach (*Praktika Z' Synedriou* 2, 63–92) publishes an EH I chamber tomb cemetery discovered in 2004

by X. Arapogianni in rescue excavation immediately E of the building housing the Archaeological Collection of Elis.

Chamber tombs of the end of the 4<sup>th</sup>–E3<sup>rd</sup> millennium BC (ca. 3400–2800) were dug directly into the hardened sand layer on which the Archaeological Collection building was constructed. Only the lowest parts of the first 5 tombs dug (the level with the skeletal remains) escaped clearance by the mechanical digger. Subsequent systematic investigation of the site revealed a total of 24 tombs, mostly chamber tombs reused on several occasions (2–16 individuals, with an average of 5–8 bodies). A few cist graves were found, usually set close to the entrance of a chamber tomb and containing a single burial in contracted position without offerings. In most cases these are probably tombs of juveniles. In total, remains of 150 individuals were found in the cemetery, including juveniles and children of a wide age-range.

The tombs lay in 2 rows (one somewhat higher than the other) in a curved line close to the NE edge of a semicircular mound of sand which sloped down to the N and E, towards the river Peneios. Their entrances were consistently oriented NE or E, towards the river. In the upper row, the dromos was at surface level, while in the lower, it was dug down more deeply: the stomion was so narrow as to allow only a single person to crawl in. The chambers were 1–1.2m h., with flat roofs. In most cases, the stomion was found open: only T16 had been closed with a large stone slab and T8 with a wall of large river stones. All the tombs had been filled with stony river sand probably in a later flood. Several tombs were joined with their neighbours via a small passageway (e.g., T16 and T9), then blocked up with slabs.

The chamber tombs were constructed in a similar fashion to Myc examples, with a dromos, stomion and wide chamber. Most chambers had a curved niche at the rear and 2 small niches at the sides. In the rear, slightly raised, niche, a body was usually found in primary disposition, contracted (or sometimes extended) - in the latest cases, it is clear that the head was oriented towards the entrance. In a few cases, 2 skeletons were found side by side. In the side niches were skeletal remains in secondary disposition, the remains of earlier burials in the chamber. In the upper row, where burial customs seem to have been less consistently observed than in the lower, niches were sometimes omitted, and bodies therefore laid less carefully on top of, or sometimes across, each other. In some cases in the upper row of tombs, bodies were laid face down. In the lower row, rules were more strictly adhered to: only one or 2 skeletons were found in primary disposition (always in contracted position), one in the raised niche and the other on the floor in front of it. The difference between the 2 rows may be chronological, with the upper slightly earlier than the lower.

Grave goods were relatively few – mostly fine, handmade pots of grey-black clay with a burnished surface and incised decoration or pattern burnishing. Closed vessels were most common, with some one-handled cups and one example of a double vessel. The most notable non-ceramic find was a bone plaque, a class of find previously known in the EH Cyclades: Aegean connections are also indicated by a sandstone pendant. Further pendants of semi-precious stones and animal tooth were also present.

Remains of Hel constructions were discovered E of the EH cemetery.

**Kyllini Harbour Project**. J. Pakkanen (Finnish Institute/London) and K. Preka-Alexandri (EMA) report on a new study of the coastal and underwater remains of this anc. naval base and Crusader harbour, the principal installations of which are today partially submerged and well preserved.

Fieldwork in 2007 focused on mapping the coastal and archaeological features both on dry land and in the sea, and cleaning the partially submerged features. Marine geomorphological studies were begun by G. Papatheodorou and M. Geraga (Patras): marine surveying techniques employed were subbottom profiler and side-scan sonar.

Survey revealed 3 possible entrance-ways to the currently silted harbour basin: recorded features include, in addition to moles, breakwaters, quays, and several possible towers.

## ACHAIA (6<sup>th</sup> EPCA: 6<sup>th</sup> EBA)

**Aigeira**. G. Ladstätter (Director, Austrian Institute) reports on continued excavation of the public guesthouse on the Solon terrace, N of the acropolis. This was originally built in the LCl period and substantially extended in the L3<sup>rd</sup> Ct BC. After it ceased to function as a public guesthouse it was modified for an as yet undefined purpose and remained in use until the end of the Hel period (AR 53 [2006–2007], 32–33).

Work continued in the functionally interconnected ensemble of rooms in the SE of the extended guesthouse, excavation of which began in 2005. In 2007, the feeder room and the andron were fully excavated (Fig. 46). In both rooms, the stone-built bottom course of the walls, covered in white plaster, and the floors, executed in terrazzo on a pebble bedding, are almost completely preserved. The square feeder room (6.4m x 6.4m) contains no specific features: its 4 doorways, originally equipped with stone thresholds, indicate its central function, giving access to the rest of the complex. In the andron (6.4m x 4.6m), the central floor area and the surrounding pedestal for the placement of 9 klinai survive in their entirety. In the SE corner of this room, where stone-robbing had extended even to foundation level, a small Hel sandstone capital from a rectangular pillar was found. It probably belonged to a window of the andron. The well-preserved floors contain several drainage features: the NE and SE corners of the andron contain 2 channels which run under the klinai pedestal, permitting water spilt inside the room to drain outside to the E of the building. A further channel runs in the S part of the W wall of the andron, collecting water from the SW corner of the andron and the SE corner of the feeder room and draining it to the S. Confirming previous impressions, the stratigraphic sequence indicates that these 2 rooms, and probably most of the extended



46. Aigeira: room ensemble, andron

guesthouse, were intentionally abandoned in the LHel period. Immediately above the floors was a fill of fine clay, notable for the scarcity of finds, which was the result of gradual wash deposit. Above it was a massive fill of clayey earth from the mud-brick superstructure, containing very small fragments of roof tiles and other ceramics, all heavily disturbed by recent viticulture.

In a sequence of rooms to the W of the ensemble described above, excavation continued in some areas and new soundings were opened. Immediately W of the feeder room are 2 small, nearly square rooms, A and B, entered from the W via a N-S oriented room, C. Beyond it to the W is a large area, D, probably an open yard. Although they partially reuse some walls from the extended Hel phase of the guesthouse, these rooms must have been built after the abandonment of the feeder room and probably much of the SE ensemble of the extended guesthouse. This is indicated by the facts that the dividing wall between rooms A and B abuts the secondarily walled-up W door of the feeder room and that the floor level of these rooms, of which some levelling fills survive, is distinctly higher than that of the feeder room and andron. These levelling fills contained diverse secondary Hel deposits but also numerous Hel bronze coins, which date them to LHel and suggest a chronological separation from the extension of the guesthouse. A clear idea of the use of these rooms has not yet been reached, but the abandonment of the andron suggests that the erection of this group coincided with the cessation of the structure's function as a guesthouse. The latest, similarly unclear phase of use is indicated by a wall corner discovered in area C: its foundations cut into secondary deposits over the aforementioned levelling fills.

The lower soundings in the area of this group of rooms revealed, immediately beneath the Hel levelling fills, a 0.5m thick, extremely hard layer of clayey earth and densely packed small pebbles. Apart from some lumps of mud packing, this fill contained exclusively PH sherds. A preliminary classification identified a few LMyc sherds, but mostly fragments of MNeo open vessels. This homogenous fill is so far identified over an area of 9m x 4m, but is expected to extend beyond the area so far excavated. It can be surmised that this material represents a secondary deposit of MNeo material originally from the Solon terrace. Older excavation data for the Hel use of the area indicated that water for bathing and banqueting was provided by a local well, indicating local access to water on this natural terrace, an impossibility on geological grounds for the remainder of the settled area at Aigeira. Access to local water and to small arable areas closely fits MNeo settlement patterns - so far the oldest known anthropogenic activity in the Aigeira area.

W. Gauss (Austrian Institute) continued to study finds from the excavations by W. Alzinger in the SE area below the acropolis (1972–1981). Examination of PH finds from excavations on the acropolis was continued by S. Jalkotzy and E. Alram (Vienna) in preparation for publication. A new study of the historical finds from the acropolis was begun by G. Schwarz, M. Poulkou and S. Karl (Graz).

Aigialeia. A. Pontrandolfo (SAIA/Salerno) reports on the 6<sup>th</sup> season of surface survey conducted in collaboration with M. Petropoulos (Director, 39<sup>th</sup> EPCA) and the KERA/EIE (Centre for Greek and Roman Antiquity, National Research Foundation).

Activity focused on the area around the villages of Ambelokipi and Vella, on the left slope of the Krios, and on the village of Monastiri on the right bank. Extensive research across the entire territory was added to the systematic survey. Its aims were: the location of natural water sources (useful

indicators to define areas which lend themselves to stable occupation); research on routes of communication within the valley and with surrounding valleys, and on the crossing points over the Krios, in order to reconstruct routes which could plausibly follow in part the anc. road network; reconstruction of population trends in that portion of the villages belonging to the demos of Aigira located in the Krios valley; research into the plant species growing in the valley and the crops cultivated. In parallel, research proceeded on the material recovered in previous years in the area of Kasaneva-Devinou.

**Ambelokipi (Kasaneva)**. Archaiologia 103 (2007), 125 reports the discovery of settlement traces in the form of stone tools and EH II sherds. The site has not been systematically excavated.

**Gremoulias (Kalavryta).** G. Alexopoulou (6<sup>th</sup> EPCA) and G. Ladstätter (Director, Austrian Institute) report on continued excavation on the Gremoulias saddle, 3.5km NE of Kalavryta.

Soundings in 2005 and 2006 had revealed the substructure of a Doric peripteral temple in limestone with a peristasis of 6 x 14 columns (euthynteria: 13.9m x 34.75m). Many fragments of a Cor marble roof were ascribed to this building (AR 53 [2006–2007], 31–32). In 2007, excavation continued along the S peristasis; a sounding following the central axis of the temple examined the area E of its E façade to a distance of 12m.

Previous conclusions about the substructure (preserved in situ) were supported. The euthynteria is built of clamp-linked limestone blocks, their edges finished in anathyrosis, on a foundation of limestone slabs. Occasional limestone blocks from the lowermost level of the krepidoma have survived.

In addition to a multitude of heavily damaged limestone blocks from the substructure and the Doric elements above it, a more substantially preserved part of a Doric column drum (lower *di*. 0.84m) and a very informative fragment of a Doric capital (lower *di*. 0.67m, abacus 0.98m), the echinus curve of which does not predate the 4<sup>th</sup> Ct BC, were found outside the S peristasis (**Fig. 47**). The E sounding also revealed limestone fragments from the temple, roughly as they had fallen, up to a distance of 4.8m: immediately E of the peristasis, a fragment of a horizontal geison joined the one discovered in 2001 (*AR* 50 [2003–2004], 35–36, fig. 49), fully completing this element. Further E, lay a fragment of a sloped geison from the pediment, as well as part of its roof ridge. The architectural elements recovered permit the reconstruction of the temple from the euthynteria up to the pediment.



47. Gremoulias: capital from limestone temple

As in 2005 and 2006, the surrounding soil contained innumerable small fragments of the *stroters* and *calypters* of a Cor marble roof, but no evidence of clay tiles anywhere near the temple. Inside the peristasis, in the area where the sekos is to be expected, the marble tile fragments lay upon a thick deposit of lime powder. This suggests that the marble roof was deliberately smashed to be burnt into lime in more recent times. No evidence for the execution of the sekos, which probably had higher foundations than the peristasis, has been revealed in the areas so far excavated due to this disturbance.

To the E of the limestone temple, at a distance of 10.2m, where there is a marked increase in the angle of the upward slope, a parallel limestone foundation with a carefully finished levelling course was revealed. The bedrock to the E was cut away diagonally to permit the laying of the wall stones, indicating that this wall supported a terrace.

To the W of this setting, several worked blocks of crystalline limestone, clearly part of the wall's superstructure, had fallen westward together with some of the fill behind it. They included blocks with anathyrosis, fragments of Doric column drums and 2 Doric capitals. Some of these spolia had been subject to secondary cutting before they were built into the wall; the polygonal cutting of the originally rectangular blocks indicates that the stability of the terrace wall was a priority. The echinus curve and the distribution of the annuli on the better preserved capital (lower di. 0.55m, abacus 1.02m) suggest a L6<sup>th</sup> Ct BC date. The use of crystalline limestone and the identical techniques used on these pieces indicate that they belong together in a LAr Doric building. The terrace fill contained several diagnostic fragments of a Cor marble roof (stroters, calvpters, lion's-head waterspouts and a well-preserved piece of the pedimental sima), largely identical with the fragments of the roof of the limestone temple and of LAr date.

Although it is only partially verified archaeologically, the following architectural development can be deduced for the sanctuary on the saddle of Gremoulias. In the L6<sup>th</sup> Ct, a monumental Doric limestone temple with a Cor marble roof was erected. Since the plateau was too small to hold several monumental buildings, this structure can be connected with the foundations of the later limestone temple, the elongated proportions of which may well belong to such an early date. The LAr structure was thus a peripteral temple.

For reasons as yet unclear, this building was replaced, not before the 4<sup>th</sup> Ct BC, by a peripteral limestone temple, re-using the original Cor marble roof. In the context of these modifications, the retaining wall to the E was erected from fragments of the older temple, the debris of which was deposited in the fill behind it.

Between the E façade of the limestone temple and the E wall, 2 further limestone blocks *in situ* suggest the position of an altar. Here a small area contained numerous lance or spearheads, mostly of iron, both full size and miniature. In the absence of written sources, this material provides the only evidence so far for the cult performed at the Gremoulias sanctuary.

**Nikoleika**. E. Kolia (6<sup>th</sup> EPCA) and A. Gadolou (National Museum) report (*Archaeologia* 104 [2007], 71–73) on continuing excavation (2004, 2006 onwards) of a Geo temple on the land of A. Komninos and P. Karachaliou. The site lies W of the Kerynites river, ca. 400m inland from the hill of Kallithea or Psoriarou (on which LH IIIA–LH IIIC tombs are known) and probably in the territory of anc. Helike (recent research has located remains of the city in the wider area).

The temple is apsidal (**Fig. 48**), oriented E-W (apse to W), and with a semicircular porch at the E end similar to that of the Temple of Artemis Aontias at Ano Mazaraki (Rakita). The



48. Nikoleika: Geo temple

building so far uncovered is 13.3m *l.* and 5.35m maximum *w.* Four tetragonal sandstone bases along the interior axis supported the wooden columns of the central colonnade: 4 square sandstone bases along the interior face of the S wall generally align with those of the colonnade and must have held the wooden supports to strengthen the walls and support the wooden frame of the roof. The walls are constructed with 2 outer rows of flat stones with smaller stones and earth between them, and presumably a mud-brick superstructure. Associated pottery dates the temple to the last quarter of the 8<sup>th</sup> Ct. The carefully worked sandstone blocks used in the construction of the porch stylobate indicate a slightly later addition. The addition of semicircular porches to the temples at Nikoleika and Ano Mazaraki indicates a harmonization of temple building and a move towards monumentalisation in LGeo-EAr Achaia.

In 2006, the E part of a tetragonal structure, built of layers of mud-brick, was revealed under the floor of the apsidal temple, in the centre of the building. According to the pottery, it probably came into use in the 1<sup>st</sup> quarter of the 8<sup>th</sup> Ct and continued in use until the construction of the apsidal temple. An associated burnt layer contained a great number of animal bone fragments (cooked or burnt) and many other finds: sherds mainly of cooking and drinking vessels (though other shapes were represented); items related to dining; and (the most numerous and characteristic find) terracotta wheels from chariot models. This altar confirms cult at the site over a long period, perhaps originating in the 9<sup>th</sup> or 10<sup>th</sup> Ct.

Pottery dates from the PGeo to EAr (950–675 BC). Terracottas include animal figurines, most probably from chariot

models, dating to ca. 700 BC, plus fragments of at least 4 building models including a sloping roof decorated in impressed technique (ca. 725–700 BC) (**Fig. 49**). All the excavated examples belong to a general tradition of model construction developed in Achaia during the Geo period. All phases of Achaian local decorated pottery are represented, including the Thapsos style ware of which Achaia was one production centre.

The deity worshipped is tentatively identified as Poseidon: terracottas indicate a male deity linked to horses and chariot driving, and literary sources attest to an anc. cult of Poseidon Helikonios at Helike. Further research is required on this point.

Thea (Patras). M. Petropoulos (39th EPCA) reports (Praktika Z'Synedriou 2, 55-56) the discovery of a small shrine during a rescue excavation. This consisted of an orthogonal built altar, part of a 2-roomed building and 5 pits which either contained the remains of sacrificial victims and pottery vessels, or were for offerings. No temple was located. Finds, dating from the LGeo to LHel, were numerous - to date, intact figurines and miniature vessels number over 40,000. The minature vessels are mostly drinking shapes, with hydriae, kraters, lekythoi, kernoi and aryballoi. The deity is identified as Demeter on the basis of an inscribed perirrhanterion (AIΣΧΡΕΑΣ  $\Delta$ [AMATPI]), noting also the popularity of female hydrophoroi among the figurines. The epithet 'Poteriophorou', applied to the cult of Demeter at Antheia by Athenaios (Deipnosophistai 11.46d) fits the iconography and choice of pottery shapes at the Thea shrine, supporting the identification of Thea as anc. Antheia.



49. Nikoleika: Geo building model in impressed technique, pitched roof

## IONIAN ISLANDS excluding Kythera

Zakynthos

(35<sup>th</sup> EPCA: 20<sup>th</sup> EBA)

**Zakynthos Archaeology Project.** G.J. van Wijngaarden (Netherlands Institute/Amsterdam) reports on the 2<sup>nd</sup> season of geological and archaeological survey carried out in collaboration with the 35<sup>th</sup> EPCA.

In 2007 survey was concentrated around mod. Machairado in the interior of the island (research area B), with the aim of investigating the transition from the mountains to the central alluvial plain. As in 2006, very many Pal lithics were discovered. The mountain zone in the W part of the study area contains various sources of high-quality natural flint, which were extensively exploited in the Pal period, as is clear by the wide distribution of flint artefacts and debitage. A clear concentration of these artefacts was attested above the valley of Achiouri (tract 2080), where there appears to have been a sizable workshop for lithic artefacts.

The prominent hill of Palaiokastro has 2 Med towers, and evidence of other periods was also found in 2007. On the N slope is a concentration of Cl and Hel sherds, with LRom, Ven and E mod. pottery and other finds also abundant. A little PH pottery includes a Myc or EIA decorated base. Further work remains to be done on the spatial and chronological differentiation of the finds at Palaiokastro and on the many different walls visible on the surface of the site. The foothills and plains produced a wide scatter of artefacts of different periods, without clear concentrations.

## Kephallonia

**Livatho Valley Survey**. C. Souyoudzoglou-Haywood (Irish Institute of Hellenic Studies/Dublin) and A. Sotiriou (Director, 35<sup>th</sup> EPCA) report on the 4<sup>th</sup> and 5<sup>th</sup> survey seasons (2006 and 2007).

In 2006 fieldwalking continued in the S and SE of the project area from Kerameies to the W to Pesada (see AR 52 [2005–2006], 50; AR 51 [2004–2005], 39–40). A large number of lithics (907 pieces) and ca. 1,500 sherds were collected from an area of ca. 5.5km². P. James continued the study of the soils and sediments of the project area. The 2007 season was a combination of study, fieldwalking of a small part of sector E and gridded collection at 3 locations of pottery densities consistent with sites. Although the survey has adopted an artefact centred 'siteless' survey strategy, the existence of 'places of special interest' or 'sites' is fully recognized. Among the most significant, resulting from the 2006–2007 campaigns, are the following.

In sector D, S of Kleismata (tract CGQ), very fragmentary EBA pottery, painted and plain, was collected from mudflow terraces spanning 70m. In the same sector, the area around the village of Pesada, where pottery clusters were identified in 2005, was confirmed as an important focus of LRom and post-Rom activity. An impressive building in Rom style masonry, preserved on 2 incomplete sides (3.3m x 5.7m), was identified in the E part of tract AUN, ca. 250m SW of the village. The walls are preserved to a h. of 0.8m under the mod. agricultural terrace wall. At Krania (sector E), ca. 350m S of the chamber tombs at Diakata, high sherd densities led to the identification of the 'lost' site of Starochorafa, where S. Marinatos excavated part of a Myc house. Gridded collection from 6 squares (10m x 10m) produced densities of 1.07 sherds per m<sup>2</sup>. The pottery, which was very fragmentary, consisted of 65.61% coarseware and 34.3% fineware sherds, but the only Myc diagnostics were 2 small kylix fragments. The site is mainly one period, probably LH IIIC, although there is a small post-BA component. At the location of Liostassakia, ca. 500m NW of the village of Kokolata, 3 of the 12 Cl-Rom rock-cut cist graves, which had survived recent bulldozing of the site, were cleared and recorded. The cemetery was excavated by S. Marinatos, but not fully published. Some of the graves had been used for successive burials. Noteworthy is a feature, not mentioned by Marinatos, at the corner of one of the 3 surviving graves. It consists of a carved channel and 2 depressions, possibly for libations. Fieldwalking in the tracts bordering the cemetery yielded Cl and Hel pottery consistent with cult activity at the graveside.

**Fiskardo.** To Vima, Eleutherotypia, Ta Nea and Kathimerini (05/04/2007) cite (with illustrations) the report by A. Sotiriou (35<sup>th</sup> EPCA) of the discovery of part of a small theatre or odeion of the 2<sup>nd</sup>-3<sup>th</sup> Ct AD in the course of a rescue excavation on the land of R. Donadou and P. Karava (**Fig. 50**). Part of the koilon and the paved orchestra (5.45m di.) were found in an excellent state of preservation: the structure continues under the neighbouring Apodemon Erissianon street and into a further plot, where excavation is expected to continue. The koilon had 4 tiers of seats of which the first had stone backrests: the small number of kerkides is unusual, but comparisons are noted with similar structures at Ambrakia and Alexandria. An unusual rectangular niche or exedra requires further explanation.



50. Fiskardo: remains of 2<sup>nd</sup>-3<sup>rd</sup> Ct AD theatre or odeion



51. Fiskardo: Rom chamber tomb

In the SW part of the same plot, was a Rom chamber tomb (8.2m x 5.8m) with a form of antechamber (Fig. 51). Inside, and in irregular arrangement, were a vaulted tomb, an undecorated stone sarcophagus and a cist tomb containing 2 enchytrismoi. The façade of the vaulted tomb had the appearance of a building with a pediment and a fully functional low stone door (with a knob on each side to open to the overworld and the underworld). A 2<sup>nd</sup> Rom chamber tomb was excavated on the plot opposite. Both tombs were found intact and with a rich range of grave goods, including glass and ceramic vessels, gold earrings, rings and a pin, the gold coin placed in the mouth of the deceased, a ring with a depiction of Eros, gold leaf, bone pins, bronze attachments with relief decoration, and bronze coins and keys. The report emphasizes the quantity and significance of the Rom remains found in this area in recent years (citing a paved courtyard surrounded by oikimata, a planned cemetery and a bath), which underline the importance of Fiskardo as a naval station linking Italy with mainland Greece and in direct contact with Nikopolis.

## Lefkada (36<sup>th</sup> EPCA: 22<sup>nd</sup> EBA)

**Agios Nikitas**. To Vima and Ethnos (06/03/08) report the discovery (and partial destruction) of a Myc tholos tomb in the course of work to widen the road from Ag. Nikitas towards the crossroads of Kathisma, in an area where Myc activity has not previously been attested. Rescue excavation by the 36<sup>th</sup> EPCA (under its Director, M. Stavropoulou-Gatsi) followed. The tholos was small but contained many burials with grave offerings (illustrated) including small vases, 2 steatite sealstones, beads of different materials, a bronze leaf-shaped point and clay spindle-whorls.

## Kerkyra (8<sup>th</sup> EPCA: 21<sup>st</sup> EBA)

G. Arvanitou-Metallinou, Η Προϊστορική Κέρκυρα και ο ευρύτερος περίγυρός της: Προβλήματα -Προοπτικές. Πρακτικά ημερίδας τιμητικής στον Αύγουστο Σορδίνα. Κέρκυρα 17 Δεκεμβρίου 2004 (Kerkyra, Ministry of Culture, 2007) includes detailed discussion of much PH material from the island and from neighbouring regions (notably Thesprotia and Kephallonia) previously noted in AR. Notably, G. Arvanitou-Metallinou reviews in detail evidence for PH textile production at Ermones (AR 51 [2004–2005], 67).

## AITOLIA AND AKARNANIA

(36th EPCA: 22nd EBA)

Agios Nikolaos Varasovas. To Vima (18/01/08) cites a report by A. Paliouras (Ioannina) of excavation of a monastic complex of the 9<sup>th</sup>-19<sup>th</sup> Ct (including a small church dedicated to Ag. Nikolaos) in this cave located high above the Gulf of Patras. Among the structures documented were monastic cells, a tower, a water conduit, kitchen and dining facilities and an oven, and a cemetery behind the church. Deep in the interior of the cave was an area for retreat.

Lithovouni Makryneias (anc. Akrai?). To Vima (08/03/08) reports the publication of the book Λιθοβούνι Μακρυνείας by the Syllogos Akron 'Panorama' (2007), which includes an illustrated account of finds from the 5th-M3rd Ct BC cemetery discovered in rescue excavation by Ph. Zapheiropoulou in the mid 1970s (AR 22 [1975–1976], 17; ADelt 31 Chr [1976], 172). 68 cist tombs were found across 2 hills S and SE of Lithovouni. Many contained rich goods, including much jewellery, bronze mirrors and strigils, silver and glass vessels, and pottery (notably Cor, Attic and Elean). One tomb, containing the burials of 2 youths, had 2 identical gold medallions with relief protomes depicting an unidentified human face, a small gold shield with the image of a thunderbolt and a haematite inset, a gold pendant, gold earrings with winged erotes, a necklace of gold beads and a glass vessel. In the same area, but slightly closer to Lake Trichonis, a LMyc tomb containing weapons was discovered in 1963.

**Kouvaras Fyteion**. *Kathimerini* (13/07/07), *To Vima* and *Ta Nea* (17/07/07) report the discovery of a LH IIIC cist tomb during construction work for the Ioniki Odos at a site close to the Agrinion bypass, ca. 10km NW of anc. Stratos. The tomb, made of limestone slabs, measures 1.48m x 0.78m, and contained a single burial in contracted position. The rich grave goods comprised a gold high-footed cup, a bronze Naue II sword 0.884m *l*. (the handle of which was wrapped round with gold wire), a bronze dagger (Sandars Type D, 0.4m *l*.), a bronze spearhead, tripod lebes and an unidentified object which may be one or more greaves. The grave is dated by 2 LH IIIC vases – a 2-handled amphora and an open vessel.

# PHOKIS AND WEST LOKRIS

(14th EPCA: 24th EBA)

**Kalapodi**. W.-D. Niemeier (Director, DAI) reports on the 4<sup>th</sup> season of renewed excavation in the sanctuary at Kalapodi. The identification with the oracular Sanctuary of Apollo of Abai, noted in 2006 (*AR* 53 [2006–2007], 41) is supported by a new inscription discovered in 2007. Cleaning of the walls of the Church of the Dormition of the Virgin, W of the village, revealed a fragment of a statue base with a dedication by the polis of Abai to the emperor Constantine. This provides further evidence that Abai was located in the valley of Kalapodi and not in the Exarchos valley further S, as commonly believed since 1819 (Sir William Gell).

Excavation continued to concentrate on the M-LAr S temple and its predecessors (Fig. 52). Further impressive remains of the Persian destruction were uncovered W of the W pteron, on and near the ramp found in 2006, covered by later layers of rubble which contained architectural fragments of the Cl N temple. The destruction is attested by a deposit of fallen roof tiles, charred wooden beams and burnt mud-brick. Fragments of Cor helmets indicate that these were suspended

from the temple together with the chariot wheels discovered in recent years (see AR 51 [2004–2005], 55–56; AR 52 [2005–2006], 68; AR 53 [2006–2007], 41–42). Large flat limestone slabs probably belonged to the back wall of the W pediment, which appears to have fallen westwards during the destruction. Excavation of the W end of the LGeo–EAr S temple revealed it to be apsidal. Among and underneath the fallen mud-bricks of the apse were charred wooden beams and iron lance points (the latter placed as votives in the temple). After the final destruction – as elsewhere on the site – further votives had been placed on the rubble of the apse, namely another iron lance point and a bronze garment pin.

In 2005, a Geo altar of fieldstones was excavated under the E pteron of the LAr S temple (see AR 52 [2005–2006], 68, fig. 105). This suggested that an associated Geo temple was located further W, under the cella of the LAr temple. The discovery of this Geo temple was therefore no surprise, but the rich associated finds were unexpected. This was a temple in antis, ca. 4m w, built of mud-brick on stone foundations. Only its E end and entrance could be uncovered, as most of it is overlain by the simple open structure of Cl date that was constructed in the former Ar cella, now transformed into an open courtyard. An application has been submitted to the Central Archaeological Council for removal of that structure to allow further study of the Geo temple and the earlier phases in the centre of the sanctuary.

The Geo temple was given up in ca. 740/730 BC for the building of the larger successor. Before the floor of the Geo temple was sealed with vertically set mud-bricks, votives were deposited on it (**Fig. 53**): an 80cm iron sword of the Naue II

type, an iron obelos and numerous bronze objects, pins, fibulae, bracelets, finger rings, pendants in the shapes of birds and of a ram, a masterpiece of Geo miniature art (shown here as the **cover illustration**), and also necklaces of faience beads. These votives had been burnt in an offering fire which caused the explosion of the liquid, most probably olive oil, in a handmade amphora standing next to the sword. Whereas the sword and the obelos are male votives, the ornaments are female votives. Parallels come from rich female burials in the area.

The excavation of Myc strata near the NE corner of the LAr S temple (see AR 53 [2006–2007], 42–43) was continued to a d. of 1m, down to natural soil. The LH IIIC layers contained rich ceramic finds, but also votives such as stone pendants, sea shells and the claw of a bird of prey, a flat bead of blue glass with the depiction of a sphinx and an amulet of green stone in the shape of a frog, which is most interestingly of ENeo date (compare R.J. Rodden, Antiquity 38 [1964], 294–95, pl. 54 right) (Fig. 54).

The lowest LH IIIC layer contained a destruction horizon with fallen burnt mud-brick and shattered pithoi which had once contained grains and pulses. This layer also yielded fragments of 2 quernstones. These finds indicate a building used to store supplies for ritual meals and then to prepare them. Its remains are probably located immediately to the N, underneath the massive foundations of the S pteron of the Cl N temple. The layer below, directly above the natural soil, revealed earlier Myc finds of the LH IIIA and IIB phases, such as fragments of pottery and terracotta figurines, including a mounted figure, indicating that the sanctuary's origins go at least as far back as the palatial Myc period.



52. Kalapodi: S temple from SW after completion of 2007 season



53. Kalapodi: destruction layer of Geo S temple with votives in situ

Publication: R.C. Felsch, H-O. Schmitt, Kalapodi 2. Zur Stratigraphie des Heiligtums: Die Bronzefunde. Die Angriffswaffen (Mainz am Rhein, Verlag Philipp von Zabern, 2007).

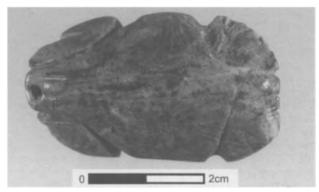
#### **BOEOTIA**

(9th EPCA: 23rd EBA)

D. Grosman, Aerial Reconnaissance in Boeotia: Preliminary Report on the 2006 Test Season (Ljubljana, University of Ljubljana, 2007), circulated as a university research report to specialist libraries, presents a valuable collection of new aerial images and discussion of their significance in understanding landscape change and site identification.

Eastern Boeotia Archaeological Project (EBAP). B. Burke (Canadian Institute/British Columbia), B. Burns (Southern California), S. Lupack (London) and V. Aravantinos (Director, 9<sup>th</sup> EPCA) report on the first season of a project aiming to document and interpret evidence for land use, settlement patterns and burial practices in E Boeotia over an extended chronological period, but with a primary interest in the LBA. The study area focuses on the plains surrounding mod. Arma, Eleon and Tanagra, which are bounded by Mt Teumessos and the Soros range along the S and the Ipatos mountains on the N, chosen partly because of the intrinsically interesting sites present (Eleon and Tanagra) and partly because this area connected Thebes to the sea and was, therefore, a major route for external contact.

In a 4 week season, 277 units were surveyed across ca. 20ha. With a focus on the elevated settlement provisionally identified as Eleon, intensive methods were adopted. Walkers 10m apart covered individual transects totalling over 18km. Large quantities of diagnostic artefacts were identified in almost all areas surveyed. Preliminary analysis was conducted on all collected ceramic and lithic objects, which are now stored in Thebes Museum. More detailed analysis focused on material from within the walled area of Eleon. Even the region surrounding the walled settlement was relatively rich in artefact counts: average field density was 0.45 sherds/m², with only 30 fields of density higher than one sherd/m².



54. Kalapodi: ENeo stone amulet in the shape of a frog, from an LH IIIC level

Preliminary analysis indicates 3 major phases of activity at Eleon: BA (including a robust MH phase), LCl-Hel and Ot. BA material was of a much longer chronological range than expected. In addition to some Neo, EH and E MH were more extensively represented by several distinctive handmade sherds. In the MH the population of Eleon may have increased significantly considering the large number of sherds of that period (the majority being Grey Minyan, but some Yellow Minyan was also found). Since these wares were probably not produced at Eleon, its inhabitants engaged in trade during the MH. E LH is signalled by the appearance of a distinctive LH fabric, although many examples are somewhat burnished, as if potters were reluctant to give up old methods of decoration. LH II and III are well represented by numerous handles with swaths of paint at their bases, kylix stems and rims with characteristic red bands. Several examples of monochrome deep bowls indicate that Eleon was active into the latest LH IIIB and LH IIICE periods, although further study is required to see how late occupation continued into LH IIIC. Geo sherds are represented, but their precise chronology awaits further study.

Digital mapping was begun of the site of Eleon, its natural topography and the built features preserved above ground. The site's most prominent feature was 70m of well-preserved Lesbian polygonal masonry, sometimes up to  $5m\ h$ . This wall had previously been considered Ar, based on the masonry style, yet the relative absence of Ar material and the high concentrations of bg pottery with highly articulated profiles indicate that it was more likely part of a major LCl construction project. The history of Eretria provides a likely sequence of events, in which the  $4^{th}$  Ct saw an architectural revival that included sophisticated use of polygonal masonry. Understanding the function of this wall requires further study and possibly excavation. Although there are traces of towers and entry points, the concave form and the fact that only one face is visible suggest that this could have been a retaining rather than a fortification wall.

Survey around Eleon also produced significant results, notably the partial foundations of a square (3m x 3m) tower in the NW, with traces of a wall running to the N and S. These remains suggest settlement expansion well beyond the hill top centre of Eleon, perhaps during the Cl period. To the SW, a number of chamber tombs located in the hillslopes surrounding Eleon were apparently opened and emptied in recent times. The closest parallel for these rough-hewn chambers cut into the natural bedrock is found near mod. Tanagra, 7km SE. The largest concentration of tombs around Eleon was found below the church of Profitis Ilias, where over 20 tombs were recorded and mapped in 2007. All were heavily disturbed and devoid of anc. material. Erosion and mod. damage make the exact dimensions of many difficult to discern. One fairly intact example features a dromos ca. 6m l. from the hillside surface to a small low entrance cut into the natural rock face. substantial chamber is preserved within the rock face, but the only material preserved derives from the tomb's mod. use as a shelter.

#### Tanagra

Publication: A. Andreiomenou, *Τανάγρα η ανασκαφή του νεκροταφείου (1976–1977, 1989)* (Athens, ASA, 2007).

**Asopia, Tsatsaris Monastery**. S. Voyatzis (*DeltChAE* 28 [2007], 75–84) identifies in the katholikon of the monastery a small church (9.8m x 6m) of cross-in-square tetrastyle type, with a dome and narthex. It was dedicated to Profitis Ilias. The church probably dates to the last quarter of the 12<sup>th</sup> Ct AD, with the narthex perhaps in the 13<sup>th</sup> Ct.

## Thespiai

Publication: B. Slapšak, *Thespiai: Preliminary Notes on the Results of the Ljubljana Research in 2006 and 2007* (Ljubljana, University of Ljubljana, 2007).

**Thisve (Kastorion).** A. Dunn (BSA/Birmingham) and E. Gerousi (23<sup>rd</sup> EBA) report on the 3<sup>rd</sup> season of survey of anc. Thisve and Byz-Frankish Kastorion, in collaboration with V. Aravantinos (9<sup>th</sup> EPCA).

Cleaning in 2006 in preparation for the magnetometer survey in the extramural survey zone, and subsequent processing of the results of that survey, led to the recognition of a spolia-built structure on an E-W orientation to the W of locus 5, which becomes locus 77. The surroundings of locus 77 were resurveyed in 2007. Completing the search for visible traces of the line of the fortifications between the upper and lower acropoleis and the recording of all *in situ* remains around the upper acropolis ('Palaiokastro') led to the discovery of 3 more features.

Locus 78: a fragmentary socle of monumental coursed trapezoidal masonry extending outwards from the N side of the upper acropolis across the narrow valley that defines this side of it; apparently a 'single skin' wall; Cl-Hel. Locus 79: several rectangular Graeco-Rom spolia set on end on an E-W orientation on flat ground within Palaiokastro resemble the foundations of Thisve-Kastorion's Byz-Frankish churches. Locus 80: a significant stretch of the W city wall (curtain wall and a tower front) was located N of the projecting tower discovered in 2006. It confirms the course taken by the W city wall between Neokastro and Palaiokastro and is in exactly the same masonry as the rest of the lower city's walls. In addition, locus 81: the Graeco-Rom rock-cut necropolis which is situated just outside the line of the W city wall, on the S slopes of Palaiokastro, was recorded topographically.

Palaiokastro (locus 23). Palaiokastro's multi-phase fortifications were a major object of study. Each identified phase of the fortifications was recorded as a separate exercise in 6 topographic layers, from 'Cyclopean' to 'Byz-Frankish'. At 2 points a phase of construction characterized by massive coarsely hewn quarried pieces of limestone up to 0.9m l., apparently define an earth embankment or 'core' whose other face is buried within later phases. They are clearly distinct from, and not functioning as, mod. agricultural terraces (of which there are examples on Palaiokastro). This is provisionally called the 'Cyclopean phase'.

Three Ar-Cl and Cl-Hel masonry styles are apparent on Palaiokastro itself (excluding new locus 78): (a) roughly dressed polygonal masonry forming the front of an approximately rounded bastion; (b) masonry of trapezoidal and rectangular blocks with smooth abutting facets and rough exposed facets; (c) ashlar masonry which is either immured within post-Rom work and only visible in top plan or, where visible in elevation, has been lime-mortar bonded (although not certainly disassembled first). Anc. masonry (b) is stylistically identical to that of the lower acropolis and the intermediate city walls; lost stretches of walls running up the slopes of Palaiokastro were likely constructed in the same technique. In this most important phase of activity single enceinte, with projecting towers, enclosed the heights known as Palaiokastro and Neokastro. Masonry (c) survives on the W-facing side of Palaiokastro, but its design is obscured by post-Rom phases.

The next discernible phase of activity in the walls of Palaiokastro is LRom-EByz. A utilitarian opus incertum, combining undressed quarried limestone with small spolia and bonded with lime mortar, is used to create an enclosed citadel for which there is no earlier evidence. The W, relatively

vulnerable, side is defended by a simple forewall without towers and an inner wall with rectangular towers which may be Cl or Hel in origin, partly built in anc. masonry (c). Forewalls on vulnerable aspects are typical of 5<sup>th</sup>-6<sup>th</sup> Ct AD fortresses in the Balkans. The S side, which is poorly preserved, is also defended by a line of towers in the last stages of disintegration. The N side is also poorly preserved. Fragments of the line of the N enceinte (without preserved evidence of towers) are traceable, but its NE 'return' is well preserved: massive spoliabuilt lime-mortar bonded foundations perhaps belonged to a bastion which only projected on one axis. The short E side, the most accessible to stone robbers, is untraceable on the surface.

Despite its enclosed design, this phase of activity on Palaiokastro does not mean that the city walls were abandoned. It is likely to be one of the *phrouria* (forts or fortresses) built, according to Procopius, by Justinian in Boeotia in the 550s at the sites of earthquake-damaged 'settlements'.

Either one or 2 later phases of activity are apparent on the better-preserved W side of Palaiokastro: a lime-mortar bonded opus incertum which encases the Cl-Hel ashlar phase as reused in L antiquity; and, at the SE corner of the citadel, remains of a rectangular building characterized by engaged external piers (buttresses) in a diagnostic MByz-Frankish masonry which overlies the LRom-EByz phase at this point.

The 3-D laser-scanner was employed at several locations, sometimes in combination with geophysical and EDM survey. The laser-scanner was used at: locus 25, a Byz–Frankish redesign and reconstruction of a Hel tower at the SE corner of Neokastro; locus 3 and locus 74, Ag. Loukas and its monumental N annexe, which include Graeco–Rom spolia; locus 24, the Hel walls at Neokastro (the 'lower acropolis'). Resistivity survey was also carried out.

Orchomenos. To Vima, Kathimerini, Eleutherotypia and Ethnos (24/05/2008) report V. Aravantinos' (Director, 9th EPCA) announcement of the discovery of a small rural shrine located W of Orchomenos, in the foothills S of Mt Akontio and immediately N of the river Kifisos, at a site where the construction of an irrigation channel in the 1950s had destroyed anc. walls. Architectural remains are few: retaining walls, periboloi and an offering pit cut into the bedrock. Thousands of ECl-Hel votives include miniature vases (mostly kotyliskoi, hydriskoi and krateriskoi), terracotta figurines (seated and standing females, animals and female protomai), lamps, skyphoi, kantharoi. etc. Terracotta imitations of wreaths of corn and flowers are noted as unique. The deity, while certainly female and connected with nature and fertility, has not been securely identified. However, Pindar and Pausanias' reports of worship of the Graces at Orchomenos may be related to the inscription on a loomweight from the sanctuary of the name EYPYNOMH (the name of the mother of the Graces according to Hesiod, Theogony).

An anc. cemetery of cist graves uncovered close by continues to be investigated; it has been robbed and severely damaged by ploughing. This must have been established when the sanctuary was in decline, since a stele bearing an inscription related to the sanctuary was reused in the construction of a tomb.

## **EUBOIA**

(11th EPCA: 23rd EBA)

A. Mazarakis Ainian (ed.), Oropos and Euboea in the Early Iron Age: Acts of an International Round Table, University of Thessaly, June 18-20, 2004 (Volos, University of Thessaly,

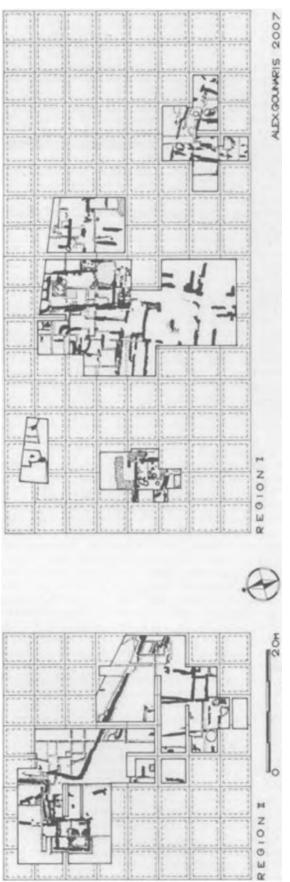
2007) offers an important set of discussions of individual sites, categories of material, and relationships between the Oropos area of N Attica and sites especially along the S Euboian coast.

**Lefkandi**. I. Lemos (BSA/Oxford) reports on the 2007 excavation season in which both regions I and II were extensively investigated (**Fig. 55**).

Region 1 area M. The EIA 'megaron' and its LH IIIC predecessor were further investigated (Fig. 56). The flooring/packing and other lower soils were removed down to the latest LH IIIC floors. The EIA building had only one floor-surface — mostly mud-bricks or earth mixes: some additional postholes of this phase were discovered. The construction sequence of the building was visible at the S end of the W wall 65: the foundation of the main wall was one course deeper than that of the porch (which presumably weighed less). Slightly later, a further angled wall was added at the SW corner, built over a pebble spread that had accumulated there since LH IIIC. It is possible that a yard was added to the W side of the EIA 'megaron' (defined by walls 120 and 134), perhaps at the same time. More investigation is needed to clarify its date and function.

The LBA building is also long and rectangular in plan (at least 12m N-S x 5.5m E-W). At the S end, it was divided into 2 small compartments, of which the E one served as its entrance. A central room probably formed the main part of the building: there may have been another room at the N end, but hill erosion and the erection of a LGeo apsidal house have done much damage. The building was probably entered via a threshold placed just E of the central median line. There are slight indications of some sort of porch or walls in antis at the E end: postholes might indicate something similar at the W end too, but later walls cover much of the relevant area. The SE room is defined at the W by wall 153 and at the N by the E/W cross wall 149; the room had a further access through a doorway at the NE. Otherwise the SE room was completely disturbed and destroyed by the LGeo pit 13. Another small room immediately W of the SE room, the SW room (ca. 2.5m<sup>2</sup>), has flat-laid mud-bricks in the E half which might originally have stood up to 0.2m above the floor. If so, they could have formed a low platform (2.5m l. x 0.8m w.). This could have been used as support for furniture. The main room (7.5m x 5.5m) was remarkably empty; one median posthole and evidence of mud-brick furniture to the NW have been discovered so far. At the N end of the room, and in particular the E part of this area, a stone construction is visible running E-W. It has a roughly flat and uneven surface, sits on a few centimetres of soil above the latest floors of the room and is covered by a thick yellow clay spread that runs on beyond it and under the floors of the later EIA building. It is hard to decide whether the structure belongs to the LBA or EIA building, but considering the manner in which the latest LH IIIC floor to the N runs off the edge of the stone structure (because of the presence of even earlier walls below), it was likely built sometime during the end of the use of the LH IIIC structure. Its full extent to the W is masked by the block of soil left to support the 'fire-box' (see below). Finally, at the N limits of the building, the existence of another room is indicated by the E-W cross wall 88. Nothing more can be known here because of severe hill erosion at this end.

As indicated, the LH IIIC building contained only minimal internal furniture: some small bins of mud-brick against wall 78/79 and a few small postholes. The latest floor was essentially bare, but a considerable number of earlier floors were found in the NW of the main room (the only area exposed this year). Seven 'pairs' of floors have been excavated; these



are made of red/orange mud-brick mix or yellow clay with an overlying layer of grey soil containing spots of carbon. Careful continuation of work here will be vital, as will a test into the underlying earlier LH IIIC phases.

In several places, LH IIIC walls were reused by the EIA builders (e.g., walls 77 and 88), although elsewhere earlier constructions were completely ignored. In some places the mud-brick floors of the EIA 'megaron' rest only a few centimetres above the floors of its predecessor, yet elsewhere, some 0.2–0.3m of an intervening one-phase fill may exist. These observations suggest that the major LH IIIC walls were reduced to their stone socles before the construction of the EIA building began, and that the interior space too was emptied by the later builders.

Within this period of transition, a 'box' made of mud-bricks (0.7m E-W x 0.4m N-S) was constructed at the N end and more or less on the medial axis of both the earlier and later buildings. Within the 'box' and spilling out from it was a very fine grey to black soil (of the sort often called 'ashy' and associated with decayed or burnt vegetable/organic matter). About half way down was part of a coarse pot (other parts of which were just outside the 'box') and some 6 murex shells that had been subjected to considerable heat. The whole find resembles a type of kiln. Further investigation might clarify the purpose of the 'box' and its date. A quantity of the 'grey ash' fill was intermixed with soils found over the LH IIIC floors, and part of the EIA floor only just covered the ashy spreads. Both these observations imply that the 'box' belongs more to the later building (the EIA 'megaron'). The suggestion that it might be linked to possible ceremonies related to the construction of the 'megaron' requires further research.

Both the LH IIIC building and its EIA successor were oriented on a compass grid and are thus distinctively different from earlier LH IIIC structures (one of them visible only 0.005–0.10m below the floors). Moreover, the LH IIIC building, again like the later one, has a long, rectangular plan different from the known LH IIIC houses on Xeropolis. It is essential to establish that it was indeed built after Lefkandi phase 2b, which would set it in stark contrast to earlier but also contemporary complexes (such as that found in the nearby area P and in earlier excavations). Such important differences in orientation and plan have major implications for understanding the function of these buildings within the spatial organization of the settlement and for reconstructing the social order on Xeropolis during the LBA–EIA transition.

Area P. The multi-phased complex is now confirmed as being used from LH IIIC-LGeo and Ar. The LH IIIC structure revealed in 2006 belongs to Lefkandi phase 3. This discovery will probably clarify the report of the so-called S house excavated by Popham and Sackett (D. Evely ed., Lefkandi IV: The Bronze Age – the Late Helladic IIIC Settlement at Xeropolis [London, BSA, 2006], 41-42), of which our complex might even be part. It is also now clear that the building extended to the W, E and S, and includes part of the N side of area P excavated in 2004 and 2006. The complex is thus of considerable size. Providing that the preliminary dating of the structure is correct, it is interesting that its construction and size are not inferior to those of houses dated to phase 2 as defined by Popham and Sackett. Following a collapse of this structure, indicated by an infill of mud-bricks, the area was again occupied: new walls were constructed and old ones reused (for example wall 94 was partly reused, while wall 130/112 was most probably utilized as an internal division). Wall 141 to the S is also new. Pottery found in these levels could belong to the LBA-EIA transitional phases. During the PGeo period (roughly 10<sup>th</sup> Ct) the excavated part of the structure is ca. 5m w. and

55. Lefkandi: overall plan



56. Lefkandi: EIA 'megaron' and its LH IIIC predecessor

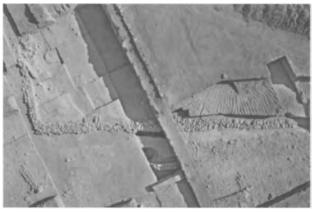
extends to both the W and E, but also outside the area investigated so far. N of the structure, an exterior space (perhaps a yard) laid with pebbles has produced a considerable amount of butchered animal bone: the area was probably used for butchery.

Architectural details of the EIA phase of the complex were clarified this year. Access from the E was through a short corridor, over a pebbled surface and a stone threshold slab at its NE corner. The corridor leads into a small room (5m x 4m). Admission to a room beyond this to the W was through wall 133 where an entrance at the SW was marked by another stone threshold. This W unit has a further pair of hollows or shallow pits: it is not yet clear whether they were intended for storage or were used for timber roof supports. Either might suggest an apsidal end in this part of the building but such a reconstruction remains tentative. Preliminary study of the pottery suggests that the EIA structure had at least 2 phases of occupation. The earliest is marked by burnt debris in the E room, above which good quality pebble-laid floors were found. Both phases date within the PGeo and Sub-PGeo periods.

Over this area, partly running above the S wall 141, but orientated slightly differently (more W-N/E-S) is what appears to be part of the S external wall and the beginning of the apse of another structure. Little is preserved to go with this, but its construction differs from other walls and there is some evidence that it belongs to a LGeo II/Ar structure.

In **region II areas S and R**, excavation focused on the area around the 'wall' revealed in 2006 (**Fig. 57**). A test trench (2m w. x 15m l.) running N-S of the E baulk in area R was opened to investigate the zones N and S of the 'wall' (consisting of

walls 118/152 and 121). In area S (to the E) the 'wall' was traced for a further 20m; it runs in a straight line (allowing for local slippage to the N) and while it is eroded in places, elsewhere it stands high. At its E end, a stone complex projecting to the N could be part of a bastion, although more work is required to understand the function of the structure and its relation to the 'wall'. Similar projections have been noted in connection with the 'wall-line' to the S. The sequences of soils S of the 'wall' (walls 118/152) and at the E end of area S, copy those seen in area R.



57. Lefkandi: fortification wall

In area R, excavation proceeded in the 'hollow' to the N of the 'wall' discovered in 2006 (wall 118), reaching LH IIIC soils. The exact interface between EIA and LBA levels was not identifiable everywhere: digging generally stopped at LH IIIC levels. More LBA and EIA figurines were recovered – mostly bulls, but with an almost complete PGeo horse figurine. A large amount of good quality pottery was found in LH IIIC levels; the most popular shape is the kylix.

Excavation to the S of the 'wall' in area R (wall 118) revealed a series of hard-packed surfaces of good quality datable to LH IIIC. Contrary to previous reconstructions, potential multiple phasing has been identified with the foundation trench itself (over 1m d.) reaching down to MH levels. To the S and within the LH IIIC hard surfacing lay wall 161, of good quality but different construction to wall 118. It runs parallel and some 3m S of it. Wall 161 too has various stages of repair/rebuild, as well as a perhaps even earlier version just to its N. Only a small part of it was uncovered this year. To test whether this 2<sup>nd</sup> 'wall' was also to be found in area S, we calculated where it might be in relation to the extension of the 'wall' there. Wall 177 was found at the extreme E end of area S in exactly the predicted position. Thus it appears that there were 2 'walls' marking the unusual profile at the N side of Xeropolis in this central region. This supports the earlier suggestion that a major, long-term civil engineering project was undertaken in a part of the settlement which might have been the main approach from the mainland in the N. Further work is needed to clarify whether the 2 'walls' were contemporaneous; clearly, however, the discovery of these 2 'walls' implies a far more complex and impressive defensive system than hitherto suspected.

In **area** T an area W of the 'wall' was opened to investigate the 'structure' found at the NW corner of area R in 2006. Excavation exposed its E and S sides (the other sides are yet to be unearthed), notably increasing its size. Its construction technique is unique at Lefkandi and elsewhere. A stone socle was first laid, with care taken primarily in the construction of its interior face, where large rounded cobbles were set in a neat row and smaller ones packed in behind; then the 'exterior' face was lined with large rounded cobbles set vertically, with smaller stones placed behind to create an even surface. The result was to build an almost vertical exterior face (up to 0.4 m h.). The vertical sherds and stones reported in 2006 appear now to have been set in a  $2^{\text{nd}}$  phase of use. Further excavation is required to understand whether this structure was part of a building or some other feature. Its use lies within LH IIIC and/or the beginning of the EIA.

Further W lies another 'structure', ca. 4m<sup>2</sup> (Fig. 58). The walls show at least 2 phases and were built with both small and flat stones and larger ones. The entrance, at the E side, was marked by flat slabs. The fill - of which only the later phase has been excavated - is generally free of mud-brick. If this is generally so, it is possible that the structure was a low wall only and was unroofed. A remarkable feature of this 'structure' is the number of circular 'platforms' within it, roughly on its central N/S axis. The largest is ca. 2m di., the smallest less than half that size. Another, even smaller 'platform', was found against and partly built into the S wall of the 'structure'. This is a circular kerb of large rounded stones enclosing flat slabs. Over this construction, a layer of smaller pebbles and stones covered most of the circular outline of the 'platforms'. The 'platforms' can be compared to a similar construction in the E room of the Toumba building (M.R. Popham, P.G. Calligas, L.H. Sackett, Lefkandi II.2: The Protogeometric Building at Toumba: the Excavation, Architecture, and Finds [London, BSA, 1993], pl. 7).



58. Lefkandi: 'structure' with platforms

The soils within the 'structure' and around the 'platforms' contain little bone and no domestic debris or ash. Among plentiful sherds outside the 'structure' and in the nearby area, the most popular shape is the krater (one example datable to Sub-Myc or EPGeo has a di. of ca. 0.7m). Inside the 'structure', a fair number of spindle-whorls and conical buttons were found. An exceptional item is a small anthropoid steatite pendant with incised decoration, similar to those found in 2006 and in the 1960s. Most of the pottery from the 'structure' and the surrounding area appears to belong to the EPGeo (ca. end  $11^{th}$ -E10<sup>th</sup> Ct). Between the area of the earlier 'structure' of unusual construction NW of the 'wall' and the 'structure' with the platforms further W, was a series of 'enclosures' dating to several phases (LH IIIC-PGeo). Excavation here remains to be completed.

**Eretria**. S. Huber (Swiss School) reports on a 2<sup>nd</sup> (and final) campaign of excavation at the summit of the acropolis. Eleven trenches were opened in 4 different areas to complete the archaeological and architectural study of the Sanctuary of Athena (**Fig. 59**).

In **area 1** the main objective was to explore terrace C, situated below the large rock-cut esplanade of the 3<sup>rd</sup> Ct BC. Since most of the layers of historical periods were eroded, PH occupation levels were reached quickly. Three N-S walls were discovered, as well as 2 graves of newborn infants, all related



59. Eretria: Sanctuary of Athena, general view

to the MBA settlement discovered below in 1995 (AKunst 39 [1996], 107–11). The remaining foundations of the Cl city wall were found W of the esplanade and some 3.8m down; they consist of an exterior facing holding a large volume of blocks and soil.

A find exceptional for the fact of its discovery in an archaeological context is a marble Cyc figurine (Fig. 60), the first to be discovered in Eretria. The head and feet are missing, already broken in antiquity (preserved h. 0.08m). The figurine belongs to the Folded Arms type of the Spedos group, and joins the rare examples found in Euboia (Manika, Magoula and Styra), thus confirming links between Eretria and the Cyclades in the EBA. The NW sector of the sanctuary (area 2, trench 27) collapsed due to the steep slope of the acropolis. Ar sediments were preserved at a great depth, yielding rich finds mainly of terracotta figurines (Fig. 61).

SW of the esplanade (area 3) the trench revealed a small wall making a right angle, the function of which remains unknown. A rocky depression was filled with thick deposits of Hel tableware, animal bones, shells and loomweights. These are probably the remains of meals related to the cult of Athena. Some 15m NE of the esplanade (area 4) a rock-cut (open?) area was cleaned. Two smashed marble plates (of uncertain date) lay on the floor, suggesting a particular function for this small structure.

As in 2006, hundreds of fragments of miniature hydriae and high-neck pitchers were found during the excavations, as well as Ar, Cl and Hel terracotta female statuettes. Among these finds, a terracotta head of Athena and a new fragment of a small Ar Cypro-Ionian limestone sculpture (a zoophoros) can be added to the sculptures found in 2006. More than 50 new



60. Eretria: Cyc figurine of Spedos group



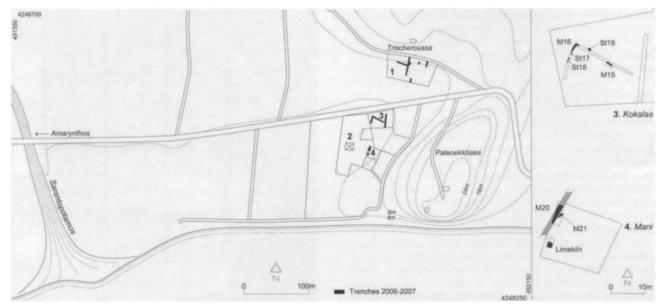
61. Eretria: head of Ar female terracotta figurine

fragments complete the series of Ar terracotta reliefs with mounted warriors (some fragments displaying foot warriors could belong to another series).

The 5 campaigns conducted intermittently on the summit of the acropolis since 1993 show that a Sanctuary of Athena was in use from the E6<sup>th</sup> (or L7<sup>th</sup>) Ct BC until the E2<sup>nd</sup> Ct BC. Unfortunately, the remains of this first complex were obliterated by the carving of the rock-cut terrace in the L3<sup>rd</sup> Ct BC and later by strong erosion since antiquity. Except for a few dispersed coarse wall bases, architectural remains of the Sanctuary of Athena consist of a few fragments of fluted columns and architectural terracottas, originating from 2 different public buildings of modest dimensions which date to the 2<sup>nd</sup> half of the 7<sup>th</sup> Ct or the 1<sup>st</sup> half of the 6<sup>th</sup> Ct BC. This previously unknown Eretrian sanctuary features poor architectural remains but rich votives and other sanctuary material. This abundant votive material allows us to trace the general history of the sanctuary from the E6<sup>th</sup> Ct to the end of the 2<sup>nd</sup> Ct BC.

**Amarynthos.** S. Fachard, T. Theurillat (Swiss School) and A. Karapaschalidou (11<sup>th</sup> EPCA) report on a 2<sup>nd</sup> season of test excavation at the foot of the Paleoekklisies hill (E of mod. Amarynthos) aimed at locating the Sanctuary of Artemis Amarysia. Two plots were investigated in 2007, both S of the national road (**Fig. 62**).

In the S. Kokkalas plot, 3 large trenches were opened. Part of an E7<sup>th</sup> Ct BC wall (M15) was discovered in the N trench; this is carefully built with 2 facings and an internal filling (2m x 0.5m E–W), but is too fragmentary to interpret securely. Ca. 10m W lay an angle shaped by 2 walls (2.6m x 0.5m E–W; 1.5m x 0.5m N–S); the coarse treatment of the facings indicates that they are foundations. A pit containing pottery from the E7<sup>th</sup> Ct BC gives a *taq* for this construction, which was probably built at the end of the PGeo. Between these walls, a cist grave covered with schist slabs contained the remains of a child and 9 Sub-PGeo III vases. The grave appears to be isolated and not part of a cemetery. To the S, a deep sounding revealed 2 large blocks carefully levelled at an elevation of 0.95masl which date to the Myc period.



62. Amarynthos: Paleoekklisies hill and surroundings

Apart from a Hel dump at the E of the plot, no finds later than the 7<sup>th</sup> Ct BC were discovered in the Kokkalas plot; the same was so in the S of the Patavalis plot, N of the national road (AKunst 50 [2007], 135–40). This sector was occupied in the EIA, but systematic excavation is required to clarify its function.

Further S, 2 small trenches were opened at the W edge of the M. Manis plot. Beneath mod. fill lay a  $4^{th}$  Ct BC monumental wall at a d. of 1.5m. The deeper soundings revealed a Geo wall (M21) and abundant  $8^{th}$ – $7^{th}$  Ct BC pottery.

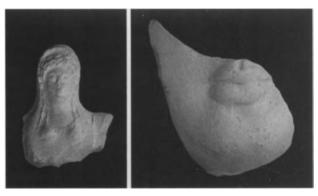
The Geo wall (SW-NE), double faced and rubble packed, was excavated only to a *l*. of 2m, while its *w*. reaches 0.8m: it apparently supported a mud-brick elevation. Built in the 8<sup>th</sup> Ct BC, it was destroyed in the SubGeo. Its function cannot yet be determined, although its considerable width suggests an important construction.

The Cl foundations of M20 rest on the Geo wall and cut into a pit containing tiles, pottery, the lower part of a female terracotta protome and a terracotta statuette of a seated female figure (Fig. 63). The base of the wall (N-S) is composed of 2 courses of rectangular limestone blocks; it was traced for 6m before disappearing into the adjacent plots, mainly to the W where a large block with anathyrosis was discovered on the surface in 2006. The first course is formed of 4 stretchers (l. 1.27m; h. 0.5m), well fitted with a straight exterior face; the 2nd course (w. 1.3m) has 10 headers (l. 1.3m; w. 0.54m; h. 0.4m) whose surface is finely levelled at 2masl. Two blocks are held together by a round-headed dovetail cramp, while a mortise for an iron clamp indicates a euthyntheria. The blocks of the 2<sup>nd</sup> course are imperfectly aligned and do not form a rectilinear facing: they probably belong to the foundations and were not intended to be visible. The 2 courses belong to different building phases, although their dates remain imprecise. The stretchers were laid in the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC; this first wall, whose elevation was probably mud-brick, was destroyed during the 3<sup>rd</sup> Ct BC. In the 2<sup>nd</sup> Ct BC, several layers covering the first wall were cut by a foundation trench for the 2<sup>nd</sup> course of blocks.

The wall was covered by a layer of over 100 fragments of marble architectural blocks from its elevation. Among them was a fragmentary inscription, ]YN $\Theta$ [. The discovery of a limekiln in trench 1, a few metres S, suggests that the marble elevation

was dismantled and smashed for the kiln. The kiln was later abandoned and filled with stone, and the entire sector covered by 1.5m of mod. fill (as in the Kokkalas plot). The function of this building is still uncertain. The use of limestone blocks for foundations is too widespread in the 4<sup>th</sup> Ct BC to indicate any particular type of construction. Although monumental, the building's dimensions are not yet known, and the associated material is too fragmentary or non-specific to determine function. Although there are good reasons to believe that the monumental wall belongs to the Artemision of Amarynthos, interpretation will be left open until the next campaign.

**Petousi island.** Ethnos (05/11/07) cites a report by G. Koutsouflakis (Director, S Euboea research team) of a Rom shipwreck at this islet outside Styra. The cargo contained many 2<sup>nd</sup>-3<sup>rd</sup> Ct AD African amphorae for olive oil, of a type probably manufactured in Libya or Tunisia and generally found in the W Mediterranean (this is the first cargo in Gr waters). The ship's final destination is unknown. The importance of the Euboian Gulf as a commercial channel between the N and S Aegean is emphasized. The report also illustrates a Byz amphora recovered from a shipwreck at Cape Vigla.



63: Amarynthos: terracotta figurines

**Agios Andreas (Styra)**. *Ethnos* (05/11/07) reports a shipwreck with a cargo of  $5^{th}-6^{th}$  Ct AD amphorae.

**Megalo Stironisi**. *Ethnos* (05/11/07) reports a shipwreck with a cargo of tiles stowed in sets of 6 and tied in large piles.

**Portolafia.** Ethnos (05/11/07) reports 2 shipwrecks, one carrying 2<sup>nd</sup>-3<sup>rd</sup> Ct AD Rom amphorae, probably from Pontos, and the other carrying 12<sup>th</sup> Ct AD Byz amphorae.

Kampos (Karystos). M. Chidiroglou (Athens), Z. Tankosic (Indiana), D. Keller (Boston) and M. Wallace (Toronto) report on a survey undertaken under the auspices of the Canadian Institute. In 2007, the Southern Euboea Exploration Project (SEEP) continued the survey of the alluvial Karystian Kampos (plain) W of Karystos.

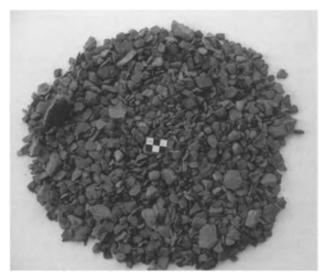
The survey area was divided into arbitrary 100m x 100m squares, which were further divided into 10 10m x 100m transects. Each transect was further subdivided into 5 20m *l*. sections, which served as the basic recording units in the field. Total collection was carried out on the surface of all areas designated as findspots, while the thin material scatter between findspots was recorded (for non-feature material) or recorded and collected (feature sherds, obsidian, etc.). Ca. 35% of the entire survey area was surveyed using a stratified sampling approach; squares were selected so as to include all the geomorphological features present in the survey area and to take account of the results of the 2006 season.

Sixteen findspots were discovered, giving a total of 26 from the 2 seasons of the Kampos survey. The most numerous (11) of the 2007 findspots have a PH component or are purely PH, 8 have a Rom component or are purely Rom and one is tentatively identified as a Cl site. Since the material from the sites identified as Rom dates very late in the period, it may be possible to reassign some Rom findspots to the EByz after detailed study. Most findspots (14) are surface scatters, while 3 also have accompanying features defined loosely as architectural remains, altered natural features, pits, cairns or similar. Two PH findspots, 07N35 and 07S28, have produced more than 2,500 (Fig. 64) and 300 pieces of worked obsidian respectively, but little other material. Both are preliminarily dated to the EBA.

The PH findspots constitute the most significant finds of the 2007 season. They consist almost entirely of obsidian scatters with little or no other material. In some locations (e.g., 07S28) an almost complete reduction sequence is present, testifying to the importance of the area in the BA obsidian trade in this part of the Aegean. Findspot 07N35 represents an obsidian workshop connected to the known EBA site of Ag. Georgios Kampou, ca. 100m E. Why other types of material culture (especially pottery) are absent from the PH findspots is a matter for further research. Based on the 2006 survey and preceding investigations in the area, we had expected PH sites in the Kampos to have been covered by alluvium, but, plainly, the extent of alluviation caused fewer problems of visibility than had been thought.

# PHTHIOTIS AND EAST LOKRIS (14<sup>th</sup> EPCA: 24<sup>th</sup> EBA)

Cornell Halai and East Lokris Project (CHELP). J. Coleman (ASCSA/Cornell) reports on continuing study of the Neo architecture and finds (especially pottery) from the acropolis, and of the Hel fortification walls. Cleaning and conservation work on the acropolis continued, with the backfilling of trenches in areas A, C and H: cleaning in H1



64. Kampos (Karystos): obsidian from find spot 07N35

resulted in the reascription of a Neo wall to the L7<sup>th</sup> or E6<sup>th</sup> Ct BC, as the boundary wall of an enclosure. Ar remains in trenches A3/A5 in area A continue to be covered with temporary roofs.

**Mitrou**. E. Zahou (14<sup>th</sup> EPCA) and A. Van de Moortel (ASCSA/Tennessee) report on the 2007 excavation season.

In 2007, the excavated area expanded to 608.95m<sup>2</sup> (1.7% of the site above sea level). Surface survey continued (covering a total of 6,175m<sup>2</sup>, or 17% of the site). Documentation of the E sea scarp of the islet has now identified 27 occupational strata spanning almost the entire BA occupation of the site. Geological drilling (J. Foss) established that archaeological strata in the terrestrial part of the site continue at least 1.1m below sea level.

Excavation in 2007 substantially increased our understanding of the E LBA as well as of the LBA/EIA transition: it also revealed the first evidence of EBA and MBA occupation. In the E sea scarp (trench LX784), an EH II building with baked roof tiles similar to those from the House of Tiles at Lerna must have been an important building of its period. There was continuity of occupation from EH III to MH II, despite occasional fire destructions.

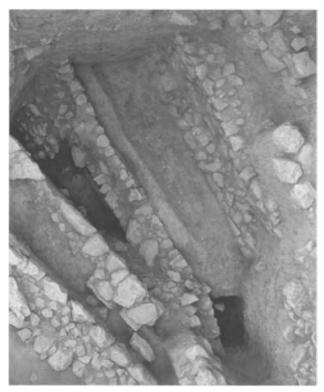
The discovery of the remains of an EH III or MH I wooden boat is very important for our understanding of BA Aegean boat building. No wood survives, but the disintegration of the hull left a black stain in the clay ground (Fig. 65). The upper part of the boat had disappeared, but its presence could be identified in the scarp's stratigraphy. The excavated part of the hull (around half) is ca. 3m l. The total l. is estimated at 5.5-6m and the w. at ca. 1m. The hull is only 0.02m thick. It curves gently in plan view, profile and cross section, but had a blunt extremity. The boat was found in a long, narrow space between 2 walls. Its use and mode of propulsion are as yet unknown, but its modest size suggests that it was a fishing boat or small transport vessel. This is only the 4th small boat discovered at a PH site in Greece and the first of BA date. Outlines of 3 much smaller LNeo and FNeo boats have been discovered at Dispilio in Macedonia and the very scant wooden remains of a much larger sea-going cargo ship, possibly of Cypriot origin, were found in the sea off Point Iria in the Argolid. No wooden boat remains have ever been found in M Crete or the BA Cyclades,

despite their seafaring tradition in PH. Such scarcity of finds makes the discovery at Mitrou highly significant for our understanding of boat building in the BA Aegean.

Habitation in the NW area was temporarily interrupted before the end of MH II until the beginning of LH I, and the area was used as a burial ground. Further excavation is required to determine whether there was a similar shift in the NE area.

In LH I new buildings were constructed in both areas, including in the NE area the monumental building D (**Fig. 66**). Throughout its lifetime building D was bordered by 3m w. orthogonal pebble streets to the W and N: the area to its E may have belonged to the same compound, separated by a terrace wall from the higher pebble street to the N. No pebble street has been found to the S, but this area needs more exploration. It is now clear that building D was destroyed by fire in LH IIIA2E, contemporary with the fire destruction of building F and of structures to the N and S of building D.

In the NW area, occupation levels from LH I through LH IIB, contemporary with building D, have been traced over a substantial area. At least 2 rooms belong to a new LH II structure, building H, of which the full extent is yet unknown. At no point in LH I or LH II is it clear whether this was a single structure, as suggested by the 2005 geophysical survey, or whether it was always a cluster of structures. LH I-LH IIB architecture in the NW area consists of small rooms with thin rubble walls usually ca. 0.4-0.5m w. Exposed areas have a utilitarian character and show diverse craft activities in both LH I and LH II. The most important was purple dye manufacture (LH I-LH IIB). Other activities were stone tool production (LH I) and lead working (LH IIB). In LH I, animals of different kinds, including deer, were slaughtered and prepared on or around a platform in an open area in trench LE792. The presence of high-quality fine tableware in the same levels



65. Mitrou: excavated part of the impression of an EH III/MH I disintegrated wooden boat



66. Mitrou: balloon photo of NE excavation area

suggests the presence of a well-appointed residential area somewhere nearby. A special find is the horse bridle piece from the Balkans in a LH I destruction level (Fig. 67).

Following the LH IIIA2E fire destruction in the NE area, a reoccupation level of unknown extent is identified in building F and at least a partial resurfacing of the pebble street immediately adjacent to it and further N.

A new discovery in 2007 was an LH IIIC L occupation stratum in the NE area, including reoccupation of building F and new structures, buildings C and G. Poorer quality construction and a preference for sunken floors continue into EPGeo and MPGeo (building A).

After the LH IIIC L occupation (but possibly still within LH IIIC), the NE area, except for building B, became a burial ground for cist and pit graves. Most burials were disturbed and found empty, but some had pottery vessels, including a small EPGeo tripod cauldron in cist grave 42. Other finds are pins, faience and shell beads for one or more necklaces, and a tiny gold spacer bead.



67. Mitrou: horse bridle piece from the Balkans

The EPGeo construction date of the first architectural phase of apsidal building A is confirmed, along with the MPGeo date of the 2<sup>nd</sup> and a clear picture was obtained of the reuse of the apsidal area of building A as a courtyard of building E. Activities carried out in this courtyard included purple dye manufacture. A pithos had been sunk into the level of the courtyard for reasons unknown.

**Proerna acropolis**. Completion of work to conserve and present the acropolis area to the public, funded by the Third Community Support Framework, is marked by the publication of the booklet *The Acropolis of Proerna. Neo Monastiri in Phthiotis* (Lamia, Ministry of Culture/14<sup>th</sup> EPCA, 2007), describing the monuments of all periods and with updated plans.

**Byz Museum of Phthiotis (Hypati)**. A new museum guide is published in Gr and English editions: D. Zapheiropoulou, Βυζαντινό Μουσείο Φθιώτιδας (Athens, TAPA, 2007).

## THESSALY

Nomos of Magnesia (13th EPCA: 7th EBA)

Spartia-Latomeio (Sesklo). To Vima, Kathimerini (08/09/07), and Archaiologia 104 (2007), 104 cite (with illustration) a report by A. Doulgeri-Intzesiloglou (Director, 13th EPCA) and E. Stamelou (13th EPCA) on the study of finds from a small sanctuary on the hill of Spartia, including part of a rectangular (3m x 4 m) stone altar with much burnt animal bone. The discovery was made in 1999, but systematic study of the material has only now begun. Many Ar dedications were found in deposits marked by stone cairns around the altar, including iron weapons and tools, figurines, lead objects, many bronzes, including vessels and spearheads, the arm of a marble statue and much pottery. An Ar dedicatory inscription (retrograde, in local script) from one Telefilos to Herakles on a bronze bowl confirms the identity of the cult. Hel pottery and a lamp, plus a coin of Histiaia (3rd Ct BC-146 BC) combined with stratigraphical evidence indicate that the altar, as preserved, is a Hel construction within an earlier cult area. Epigraphical evidence of this period from Pherai refers to this sanctuary. Excavation here in 1911 by A. Arvanitopoulos produced, in addition to Neo remains, similar votives plus roof tiles. Arvanitopoulos inferred the existence of a 5<sup>th</sup>-4<sup>th</sup> Ct temple with a predecessor contemporary with the Ar votives (now confirmed by terracotta metopes and geison). Renewed excavation on the hill top also produced Neo pottery and stone tools, plus Ot pottery and tile. The strategic importance of this region, through which passed the road between Pherai and Pagasai, is emphasized. Presentation of the results of the new excavations at the 5<sup>th</sup> International Conference, Pherai - Velestino - Rigas, 4-7th October 2007, is reported (editor's note: this conference is usually published promptly and in full).

**Volos.** Ethnos and Eleutherotypia (26/04/07) cite V. Sismani-Adrymi in describing plans to roof the 15<sup>th</sup>-14<sup>th</sup> Ct BC tholos tomb at Kazanaki close to Dimini, after rainfall led a block bearing 7 Linear B characters to become dislodged. These inscriptions describe the number of those buried within (4 adults and 3 children). A sample of gold from a bead necklace has been sent to the Louvre for analysis of its provenance, with much speculation that it may have come from Colchis. Ethnos and Eleutherotypia (22/02/08) further report on the question of

the gold: first results of the analyses indicate that it came from a riverine deposit. Further tests, to compare with gold from Georgia, are awaited.

**Volos, Episkopi**. P. Androudis (*DeltChAE* 28 [2007], 85–98) publishes the architecture and sculptural decoration of the Byz Church of the Dormition. The original (ca. 13<sup>th</sup> Ct AD) church was probably a variant on the cruciform type: only the E wall survived rebuilding in 1639. The lower of 2 layers of wall-painting may date to the E16<sup>th</sup> Ct AD. The E and N fronts are richly decorated with anc. Gr and Byz spolia, among them reliefs from the sculptural decoration of the Byz katholikon of the Monastery of St John the Baptist at Portaria.

**Mount Pelion**. N.H. Andreasen (DAI) and A. Darlas (EPSVE) report on the  $2^{nd}$  season of the **Pelion Cave Project**.

Work in 2007 was focused S and E of Volos (municipalities of Milies, Artemida, Agria, Portaria, Makrinitsa and Volos), and on the Pelion foothills around Lake Karla (municipality of Karla). The main objective was to conclude the survey on the W part of the mountain. Seventy-five localities were surveyed (54 rock shelters, 20 caves and one artificial cave) and some localities surveyed in 2006 revisited.

The dense vegetation covering most of Mt Pelion (except the foothills around Lake Karla) leaves many caves and shelters unknown except to some local residents. Thus mod. rubbish and casual visitors do not impact noticeably on the material record left by the original users. There was a general low-level scatter of archaeological material on the surface of one third of the localities examined. Two hundred and eighty artefacts were collected from 24 caves and rockshelters, 5 of which had been visited and searched in 2006. This underlines how visibility can change from one season to another due to alterations in vegetation cover or disturbance of surface sediments. Pottery formed the numerically largest artefact group and was also the most frequently encountered artefact type. Half of the localities have an associated built structure, often a stone wall which confines an area in front of the cave. Some of these walls were very well constructed and reflect significant expenditure of effort. Direct evidence of repair or modification is rare.

Two archaeologists were employed to gather ethnographic and ethno-historical data related to husbandry practices and other cave uses with regard to their cultural and socioeconomic contexts. Semi-structured interviews with local informants as well as informal conversations in the field generated a wealth of information. Varying degrees of ethnographic information were obtained for about one third of the caves and rock shelters located; indeed, some of these features were located exclusively by using the accounts and guidance of informants.

The rock outcrops in most of the research area are mainly schists with marble intercalations. Although areas of karstic limestone/marble are likely to hold more caves, we have numerous examples of shelters and caves in areas dominated by schists. Caves from different altitudes up to about 1,000masl (and particularly below 600masl) are well represented. There were not equally detailed site-specific ethnographic data for caves or shelters on the upper part of the mountain from 1,000masl to its highest point at 1,624masl. This arises to some extent from the fact that the environmental carrying capacity drops at altitudes above 1,000masl. Consequently, human activity is more limited than on the lower slopes and there are fewer roads or paths.

Our results show that in the vicinity of regularly used areas, localities and travel routes in the landscape nearly all rock shelters and caves have been used. One such example is a

small cave on an important, regional trading route into the village of Makrinitsa. Various engravings on the cave wall have religious connotations, but there are also sketches of horses/mules and people dragging or riding these animals. Merchants may have made the carvings during overnight stays before entering or leaving Makrinitsa.

Nomos of Larisa (15<sup>th</sup> EPCA: 7<sup>th</sup> EBA)

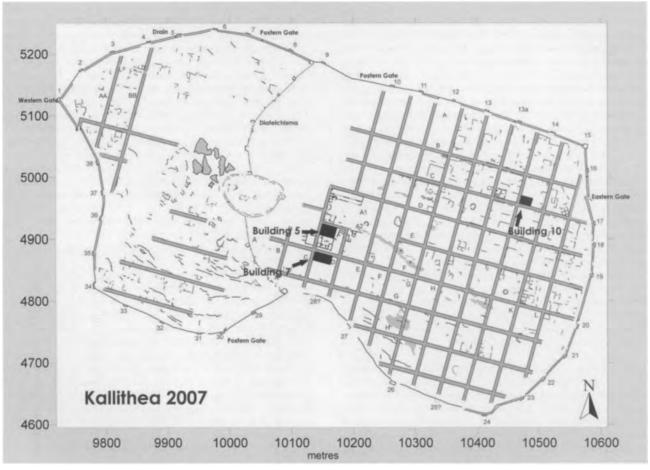
Kallithea (anc. Peuma). S. Karapanou (15<sup>th</sup> EPCA), M. Haagsma (Canadian Institute/Alberta) and S. Gouglas report on continuing excavation on the Kastro. Systematic excavation was begun in building 10, a possible domestic structure, and completed in building 5, a small temple near the agora (Fig. 68).

**Building 10** measures 19.45m x 14.60m. Excavation began in the W part (**Fig. 69**) in units A, B, C, D and E. The discovery of additional wall foundations caused revision of preliminary interpretations of the internal configuration of rooms and areas. The so-called *pastas* (unit E) is split into 2 – a room and a possible open area. The W area of the building (units A, B and C) can be divided into 3 or 4 different rooms. The exact location of the main entrance of the house is now clearer. It is not near unit A, directly opening to the street, as originally thought and as is usual in Gr houses, but probably on the E side

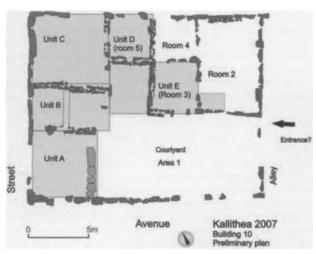
of the house, thus opening from the courtyard to an alley. This may be a local phenomenon, as there are similar entrances in Hel houses in nearby Pharsala.

Much of the superstructure of the house was built from irregular stone blocks. Very large worked limestone blocks, some 2m l., are set on top of smaller irregular foundations. In some areas this upper foundation layer includes spolia. In various rooms the walls were plastered in black, yellow, light blue, white and red. The 2006 test trench in room 2 yielded a lot of plaster, much of which was in situ. In unit A, near the first floor level, plaster mouldings were also found and it is clear that plaster 'pilasters' framed the doorways. In area 3, 2 Doric marble capitals were found lying on the first floor level. It is as yet unclear whether these belonged to a peristyle lining the courtyard of the building or whether they were used as original construction material in the walls. In close proximity to them was a large marble block with 3 breast-like protrusions, similar to that found in the entrance of building 5 in 2005. Stones like these occur locally, for example in the courtyard of houses at Pharsala and at Phthiotic Eretria, where they seemed to have functioned as votives in a sanctuary of Apollo. Their significance is unknown.

The test trench in room 2 yielded 2 distinct floor levels. The first, at ca 0.4m below the surface, contained roof tiles, architectural fragments and few finds; the floor itself was made of beaten earth. Ca. 0.5m below this level, a 2<sup>nd</sup> floor consisted of small limestone fragments. The fill above the



68. Kallithea: city plan of the kastro with the location of the excavations in 2007



69. Kallithea: preliminary plan of building 10

first floor level yielded many worn tile fragments and very little diagnostic material. A few pieces of combed ware indicate moderate EByz use. On this level were found 2, probably Byz, coins. No floor level could be associated with these finds.

The first floor level yielded many finds, some of which were datable. Many sherds of moulded ware were found in a variety of qualities. Some compare well to high-quality moulded bowls produced in Pherae during the  $2^{nd}-1^{st}$  Ct BC: various fragments depicted mythological scenes and had names (Polydeukes) in relief. A large fragment of a glass bowl from unit B suggests a post- $2^{nd}$  Ct date for this floor level. The lowest floor level was only reached in the test pit ( $2m \times 1m$ ) in room 2. The finds were very well datable: a coin of the Thessalian League ( $M2^{nd}$  Ct) and a distinct deposit of ashes, an unguentarium, a lamp, a small bowl, bones and astragaloi lying on top of a large roof tile. The lamp is an EHel type ( $3^{rd}$  Ct), while the unguentarium dates to the  $1^{st}$  half of the  $2^{nd}$  Ct. Apparently this habitation stage ended half way through the  $2^{nd}$  Ct BC.

**Building 5:** excavation of this small temple, begun in 2005, was completed (**Fig. 70**). The E room (anteroom) has internal dimensions of 4.63m (N-S) x 0.96m (E-W). At least the S part was paved with big slabs (as was at least part of the courtyard in front of its entrance). Excavation in this room reached the natural red soil with gravel which follows the natural N-S inclination. This room produced a bronze coin and 3 iron nails (possibly from the door).

The W room of the shrine has internal dimensions of 3.30m (E-W) x 4.62m (N-S) and was entered via a doorway 1.25m w. of which the threshold was in situ. The threshold's top surface had 2 levels and there are sockets for the doorposts and pivots. In the central and W part of the room were 15 iron nails, a few fragments of clay figurine (possibly a female figurine -Aphrodite to judge from a nude upper leg with part of a himation) and a clay thymiaterion. Perhaps the figurine(s) and the thymiaterion were placed on a wooden shelf on the W wall or on a table. A few fragments of charcoal in this area may come from such an item. There was also evidence of burning in the soil in this part of the room. In the main room were 7 bronze coins, a small shallow dish with black paint, a few sherds of other vases (a lamp included) as well as many roof tile fragments. Both rooms were covered by stone debris from the walls.

#### **EPIRUS**

Nomos of Arta (33<sup>rd</sup> EPCA: 18<sup>th</sup> EBA)

Anc. Ambrakia (Arta). Ta Nea (08/06/07) reports on the preparation of the new archaeological Museum of Arta.

Eleutherotypia and To Vima (08/06/07) report on the quickening pace of discovery of the anc. city of Arta following the creation of the 33rd EPCA (Director, G. Riginos), which covers Arta and Preveza. The results of recent work, including 14 rescue excavations in the city, were presented in a one-day colloquium. M. Karaba and A. Katsarou presented research into housing in the anc. city. Recent excavations have revealed, in addition to a range of public and private structures, Ar houses with 2-3 rooms and a courtyard oriented S, entered from the street. A form of blessing was made before houses were occupied (choes containing different forms of liquid, miniature vessels, figurines of animals, birds and humans, relief plaques, and miniature offering tables and furniture were placed, together with a sacrificed animal, in a small pit in a corner of the structure). The number of rooms increased in the Cl period and there was greater differentiation according to function, with particular attention paid to the andron, in which pebble pavements were laid with depictions of chariots, nereids, sea creatures and geometric and plant motifs (as well as one depiction of a young satyr), and the women's quarters, where large numbers of loomweights were found, as well as ceramic containers for jewellery or perfume. Houses now included provision for cooking and bathing. Other finds made over the past year include a stretch of the city wall, part of the E cemetery and evidence for the city's building plan. The grave monuments of this cemetery, the larger of the city's cemeteries, extended along both sides of a major road 12m w. Finds from these funerary periboloi include clay vases, glass and metal vessels, gold jewellery and stone grave stelae. Th. Kontogianni presented a synthesis of old and new findings to demonstrate that the city had a Hippodameian plan from the time of foundation, which continued into the Rom period. The W part was the residential and cult centre: the Doric Temple of Apollo Pythios Soter (founded ca. 500 BC), the tutelatory deity, held pride of place: 2 theatres and the city's prytaneion have also been found in the same area. A. Papadimitriou, A. Baladima and A. Chatzara discussed the course of the city wall, which is concealed beneath the Byz fortifications as well as mod. landholdings.



70. Kallithea: building 5 from NE

Nomos of Thesprotia (32<sup>nd</sup> EPCA: 8<sup>th</sup> EBA)

Thesprotia Expedition. B. Forsén (Finnish Institute/Helsinki) reports on the 4<sup>th</sup> field season, which consisted of intensive field survey, a geological survey, geophysical prospection and trial excavations at 3 sites. Palynological samples were taken from 3 lakes in the region. A total of ca. 4km² has been covered by intensive survey in 4 years. In 2007, the valley bottom E of the Kokytos river was surveyed. 13 new places of special interest (indicated by PS) were identified, most of which are to be considered as sites. This brings the total number of places of special interest within the 4km² to 49, i.e. ca. 12 sites per km².

Among those documented in 2007 was a cluster of MPal to Upper Pal lithics (PS 45) and a Mes site with a large spectrum of tools and flakes (PS 43). Several Cl to Hel sites were documented, with bg pottery and loomweights, as well as coarseware and roof tiles (PS 37, PS 44, PS 46, PS 48 and PS 49). One, PS 46, only ca.100m from the ElA site PS 36 (cf. AR 53 [2006–2007], 47), also produced EIA sherds as well as ERom terra sigillata. Finally, one MRom site (PS 41), 2 LRom sites (PS 38, PS 39) and at least one Emod. site (PS 47) were located.

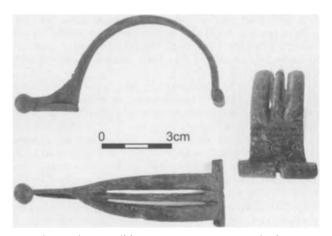
The first site at which trial trenches were opened had been located by field survey in 2004 (PS 12 near the village of Sevasto, on the lowermost slope of the Liminari hill facing SE). Its preliminary dating to the end of the Neo period was based on a few badly worn sherds found on the surface. Four small probes opened in 2007 confirm the existence of rich LNeo to EBA remains, and open the possibility that earlier Neo phases are also present. Clear cultural layers with dark soil, charcoal, burnt mud-brick and 4 spindle-whorls spanning the FNeo to the EBA were found in 2 of the probes.

The pottery consists mostly of badly fired medium-coarseware with occasional plastic applications in form of a taenia with finger impressions or conical lumps of clay (FNeo to EBA). Other general traits, such as medium-fine pottery with grey or dark surfaces, burnished or polished on the interior and plain on the exterior, indicate LNeo to FNeo, while some 'impresso' sherds might extend back into the ENeo-MNeo. A body sherd of corded ware, dating to L EH I-E EH II, represents a ware occurring throughout the Balkans down to Thessaly.

The 2<sup>nd</sup> site excavated, PS 29 near the village of Agora, was believed to be an LCl–EHel farmstead on the basis of surface and magnetometer survey results. Finds were located just below the plough zone and the actual find layer was only some 0.1m thick. No stone walls were found, but there was an extensive layer of roof tiles and some remains of mud-brick walls. The pottery consisted mainly of storage vessels such as pithoi, jugs and amphorae, but there was also a small quantity of late skyphoi and other drinking cups. Two handles of bronze vessels and a coin were found. Most finds date to the E4<sup>th</sup> Ct BC, but there are some earlier anomalies such as the unique find of a Laconian pithos rim, the lip of which is decorated with a bud chain, dating to 550–525 BC.

Another trial trench, ca. 4m from the poorly preserved remains of the farmstead, produced more substantial remains of another house. A clear layer of collapsed terracotta roof extended for ca. 15m. In addition, a 0.5m thick stone wall was traced for 3m. The find layer below the collapsed roof was only ca. 0.1m d. and held some pottery, including, e.g., bg sherds and a large piece of a perirrhanterion. The finds in this trench date to the EHel and indicate the existence of at least one other house close to the first one found.

The 3<sup>rd</sup> site excavated was the small acropolis of Ag. Donatos of Zervochori (PS 25), where the trench opened in 2006 was enlarged and continued. Finds were similar to those made in 2006, mostly dating to the 1st Ct AD and consisting of large amounts of terra sigillata, fibulae (Fig. 71), coins and other metal objects, glass, animal bones and shells. Coarse pottery, parts of a terracotta water pipe and roof tiles (some with stamps) were also found. Thus, the tower, which can be dated to ca. 300 BC, must have been extensively reused in the ERom period. Certain finds already made in 2006 date back to the L4<sup>th</sup>-E3<sup>rd</sup> Ct BC. Enlargement of the trench revealed the Rom floor level ca. 1.7m below the surface; this consists of a ca. 0.5m thick layer of gravel mixed with red clay that, through sedimentation, has become hard and cement-like. Beneath this, exposed along the S inner side of the tower, a 0.3-0.4m thick layer consisted of pockets of soil between protruding bedrock and contained charcoal and animal bones mixed with bg pottery, some coarse ware and a coin. These finds probably belong to the construction phase of the tower.



71. Thesprotia Expedition, Ag. Donatos, Zervochori: ERom bronze fibula (25 BC-5 AD)

#### Kassope

Publication: Th. Kontogianni, Κασσώπη: συνοπτικός οδηγός του αρχαιολογικού χώρου (English translation: D. Kazazis, Kassopi: a Brief Guide of the Archaeological Site) (Ioannina, 12<sup>th</sup> EPCA, 2006).

## Orraon

Publication: A. Angeli, Όρραον συνοπτικός οδηγός του αρχαιολογικού χώρου (English transl. D. Kazazis, *Orraon: a Brief Guide of the Archaeological Site*) (Ioannina, 12<sup>th</sup> EPCA, 2006).

EPIRUS-WESTERN MACEDONIA

**Pindos: Samarina, Smolika**. Ethnos tis Kyriakis (16/03/08) reports research conducted by N. Efstratiou (Aristotelian University, Thessaloniki) and P. Biatzi (Venice). Tens of 'gathering places' with concentrations of MPal stone tools have been identified along the length of the Samariniotikos river, above the ice deposits of the last 100,000 years. Similar Pal sites were also found at Smolika, at over 1,900masl.

#### WESTERN MACEDONIA

Nomos of Kastoria (29<sup>th</sup> EPCA: 16<sup>th</sup> EBA)

**Argos Orestikon (Diocletianoupolis).** Ch. Tsoungaris and G. Tsokas (29<sup>th</sup> EPCA and Aristotelian University, Thessaloniki) report (*AEMTh* 20 [2006], 923–29) on archaeological and geophysical investigation in the area of Argos Orestikon, aiming to locate the structure at which the inscribed base of an honorific statue of Claudius was erected. The lines of major constructions close to the Byz centre, but on a different alignment from Byz buildings, are noted: these likely belong to the Rom city. Trial trenches in one location 300m S of the previous excavation area revealed part of a Rom structure built of fieldstones and more than 300m *l*. E–W. Its size suggests a significant public building.

Dispilio. G. Stavridopoulos and T. Sianos report (AEMTh 20 [2006], 901-10) on excavation to trace the peribolos wall of the settlement, already known to extend along the N side of the island parallel with the lake shore. Two areas were investigated to trace its course to the W and N. Excavation at the W end of previous trials showed that the wall turned S and continued to the SW tip of the island, though differing in its construction both with the N wall and internally along its length. A further wall, not part of the peribolos, measures ca. 50m l. x 2-2.3m w. and is oriented N-S.  $C^{14}$  dates from burnt debris on the E side of the main wall are awaited. Neo pottery from a trial trench in the middle of the wall line gives a tpq for its construction. Trial trenches in the S and SE of the island located traces which may belong to the peribolos and require further investigation. Currently, the securely identified sections of peribolos indicate a l. of ca. 201m, increasing to ca. 360m if it continued to form a complete circuit. Among the small finds are a large number of coins dating from the Byz period onwards, with many Ot and mod. Among PH finds are many stone and flint tools, stone weights, loomweights, 2 bronze items and a headless figurine.

Nomos of Florina (29<sup>th</sup> EPCA: 16<sup>th</sup> EBA)

**Kleidi.** A. Strati and A. Sinakos (16<sup>th</sup> EBA) report (*AEMTh* 20 [2006], 931–40) on the rescue excavation of part of a LRom-ECh cemetery (M3<sup>rd</sup>–M4<sup>th</sup> Ct AD) in an area threatened by lignite mining. The adjacent settlement, next to the via Egnatia, produced Rom to post-Byz pottery on the surface. Within a single 20m x 20m trench, 15 graves were found – 12 pits and 3 cists. The dead were laid out in N–S orientation, accompanied by many grave goods including trefoil-mouthed oinochoai, bronze jewellery and coins. In addition to Charon's obol, hoards of 20–25 coins were found in certain cases, placed in the area of the head or the chest. Seven pits were also found. 20m S of the excavated area, a trial trench contained further human bones, tiles, sherds of wheelmade vessels, a loomweight and an iron object. Excavation here was abandoned for safety reasons.

Nomos of Kozani and Grevena (30<sup>th</sup> EPCA: 17<sup>th</sup> EBA)

**Ilarion dam.** G. Karamitrou-Mendesidi (Director, 30<sup>th</sup> EPCA) reports (*AEMTh* 20 [2006], 875–94) on research in the area due to be flooded for this dam. Surface survey revealed a further 7

sites (bringing the total known to 20), at 3 of which trial trenches produced significant results. At Longas (Elati) trenches opened in the known LBA-EIA and Hel settlement produced remains of buildings and other finds from all these periods. In addition to PH handmade pottery (mostly from storage vessels), finds include 2 rings (one with a female figure on the bezel), bronze sheet, iron nails, 21 loomweights, part of a clay sealing, 3 pestles, part of a hand-mill and stone tools. Just below the hill, illegal excavation had revealed cist tombs: this area was not investigated further as it is not scheduled to be flooded. No further information was uncovered to confirm the provenance of the 13<sup>th</sup>-12<sup>th</sup> Ct BC Myc bronze sword said to come from this site. At Gefyra (Panagia) remains of Hel buildings were discovered (a hearth and part of a floor, plus a destruction deposit), as well as handmade Macedonian mattpainted pottery of the LBA. At Keramario (Paliouria) sections of a large cemetery on 2 hills were excavated: graves on the E hill are Ar and Cl, while those on the W are Cl-LCl (mostly 4<sup>th</sup> Ct). 30 burials were excavated on the E hill, all but one of which had been looted: apart from one cremation, all were inhumations in pit graves. They contained weapons (spearheads, arrowheads and knives), jewellery, pottery, clothing accessories and cosmetic items similar to those in the cemeteries of Aiane, noting the presence of 'local' pottery (possibly from Aiane). In addition to 2 bronze bowls, sheet bronze in 10 further tombs indicates the presence of bronze cooking vessels. On the W hill were 33 burials (of which 3 were unlooted) containing 33 pots (mostly local), a bronze jug and kantharos, weapons, jewellery (including 3 electrum beads and 2 silver earrings) and other accessories. Two bronze mouth-pieces probably come from leather aryballoi, similar to finds from Aiane. Each grave was marked by one or more stones. The presence of earlier finds (a figurine, for example, and a skyphos of the L6th Ct) likely indicates destroyed Ar tombs. In addition, surface remains are noted at the following sites: Ag. Kyriaki (Paliouria) Neo-EBA settlement (handmade pottery, stone tools); Sioutsa Rema (Dimitra) BA handmade pottery and stone tools; Megas Ai-Giorgis (Dimitra) (a known Ar-Rom site) BA handmade pottery and stone tools; Keramario (Paliouria) BA handmade pottery; Ag. Konstantinos (Dimitra) (a known Hel-Rom site) spolia of an earlier church built into the church of Ag. Konstantinos, a Byz cemetery (revealed in illegal excavation) and surface finds of PH, mostly EBA, handmade pottery; Mikro Karperou a cist tomb cemetery of uncertain date. Trenches opened at Gorna Tsapa, Parakoustis and Plaka produced only a very little BA handmade pottery plus some wheelmade sherds.

**Keramario** (**Paliouria**). Apogevmatini (11/03/08) cites the report of G. Karamitrou-Mendesidi of the discovery of a further 39 tombs, bringing the total from this site to 102. Only 3 were undisturbed. Notable among the grave finds were the collection of local vases which provide good evidence for a local workshop, 2 bronze vases containing a bronze kotyle and kylix handle and 4 coins (one of Pharsalos, dating to the 2<sup>nd</sup> half of the 5<sup>th</sup> Ct BC, and 3 of Philip II).

**Ktio Diporou (Demos Chasion)**. Apogevmatini (11/03/08) cites the report of G. Karamitrou-Mendesidi of the excavation of settlement remains, including a large (Hel?) potter's kiln (5m x 3.5m). Products of the kiln include fragments of a large terracotta animal (perhaps an elephant) bearing 2 riders, which may be a votive. At neighbouring **Panagia Diporou**, 5 pithoi were discovered containing 6<sup>th</sup>-5<sup>th</sup> Ct BC child burials. Grave goods include a handmade kantharos, glass beads, bronze rings

and a bracelet, iron goods, a curved knife, a bronze horse figurine and a terracotta figurine of an obese dwarf. The site neighbours Ktio Diporou and likely formed part of the same functional complex.

**Palaikastro.** Ta Nea (18/04/07) reports the discovery by V. Velitzelos (Athens) of a petrified forest with a striking presence of quartz, dating back at least 2 million years. The extent of this forest remains unknown: a further part located by the Aliakmon river is to be excavated.

**Prionia.** Kathimerini (12/03/08) cites a report by G. Karamitrou-Mendesidi of the discovery of a  $6^{th}$ – $5^{th}$  Ct BC Sanctuary of Artemis in the course of construction work on the Egnatia Odos. Remains of animal offerings include Molossian hounds, ovicaprids, bovines and deer. Scattered votives include animal figurines and jewellery (one ring is inscribed KAIPE KAI  $\Sigma Y$ ). Two women's graves with rich goods indicate a prosperous settlement.

Milia Grevena. Ta Nea (05/07/07), Ethnos (25/07/07), Ethnos, Apogevmatini, To Vima (22/01/08), Ta Nea (28/01/08) and Archaiologia 104 (2007), 104, report the discovery by a team from the Aristotelian University, Thessaloniki, under E. Tsoukala of a pair of fossilized mastodon (Mammut borsoni) teeth near a sand quarry in this village. At 5.02m l., they are the largest yet found and must have belonged to an animal weighing more than 12 tons and ca. 4m h. The discovery was followed by a one-day colloquium discussing the material on 27/01/08. Kathimerini (16/10/07) also reports the discovery by the same team of parts of a fossilized horse skeleton in the same area. This is the 3-toed variety ancestral to the mod. horse, but of smaller stature. It dates to ca. 2.5-3 million years BC. Other species discovered in the course of 17 years of excavation in the area include the rhinoceros, tapir, macherodon, bear, deer, gazelle and wild boar.

Kastri (Polyneri/Alatopetras). S. Drougou (Aristotelian University, Thessaloniki) reports (AEMTh 20 [2006], 895–900) on continuing excavation on the acropolis, focusing on the area immediately W of the temple. The W wall of the temple was shown to have had strong foundations, even though much of the superstructure was likely burnt in the mod. lime kiln found just outside it. Inside the wall was a layer with much roof tile. An extensive burnt layer dating to the L4th Ct BC was uncovered just to the W of the W wall, continuing along its length. This contained many bg and plainware sherds, and fragments of metal items, and should be connected with the temple walls of the same date. A small Hel (3<sup>rd</sup> Ct) building was erected on top of this layer. Its function remains unclear, but the tile layer over it indicates that it was destroyed in the 2<sup>nd</sup> Ct BC as part of the general destruction on the acropolis. The area between the temple and the Hel building produced a large quantity of animal bone, especially in the burnt layer, along with numerous sherds. The extent of this pyre has not yet been traced. In the NW corner of the temple, which is founded on bedrock, foundations were located which appear to be extensions of the N and W temple walls and which require further investigation. Among portable finds, the large quantity of bg pottery characteristic of the first, 4th Ct, phase consists largely of small kylikes and kantharoi. Some have workshop stamps ( $\Pi APANIKA\Sigma$ , for example). Notable among the portable finds is an ink-well type lamp, coins (including one of Alexander) and a fragment of a bronze strip 0.1m x 0.6m, from the L4th Ct burnt layer, bearing part of a punched votive inscription.

## ] ΟΝΙΚΑΝΙΣΙΘ [ ] ΕΙΝΗΣΗΝΙΟΧΟΣΔΕΑΠΙΧΙΩ [ ] ΑΝΔΙΑΛΕΙΜΑΡΤΥΡΑΣ [ ] ΩΝΠΡΓ [

Siatista-Krystallopigi section of the Kozani-Kastoria road. G. Karamitrou-Mendesidi reports (AEMTh 20 [2006], 861-69) on the results of excavation at 15 locations along the course of this road, which produced mostly LNeo-EBA and Hel pottery. Finds of palaeontological significance include mastodon remains from Pera Raches (Kaloneri). Fuller reports are provided for 2 sites. At Stavros (Mikrokastro), a small excavation (ca. 1,025m<sup>2</sup>) within this known Ph and Cl-Hel walled site produced remains of LBA-EIA settlement, with much handmade and wheelmade pottery (and a Rom coin). At Kryopigadi (Aliakmon), LNeo-EBA settlement levels were excavated on 2 hills, noting also remains of Macedonian matt-painted pottery of the LBA. A LNeo-EBA pile-dwelling was discovered beneath an extensive destruction level containing burnt construction material (wattle and daub). Sherds were gathered from an area of ca. 770m<sup>2</sup>, together with 20 anchor-shaped figurines, stone and bone implements, loomweights and 4 spindle-whorls. Hel levels near the surface had been severely disturbed by levelling. Three unlooted Rom pit graves were excavated, containing, beside the head and feet, glass vessels, clay pots and 14 bronze coins which date the burials to the 4<sup>th</sup> Ct AD.

#### Aiane

E cemetery. G. Karamitrou-Mendesidi reports (AEMTh 20 [2006], 833-46) continued excavation, bringing the total of graves discovered here to 174. In 2006, 9 rows of pits, dug into bedrock and oriented NE-SW were found to contain 94 burials (91 inhumations and 3 cremations), only 2 of which survive unlooted. The majority date to the 3<sup>rd</sup> and 2<sup>nd</sup> Cts BC, with some from the 4<sup>th</sup> Ct and some from previous campaigns indicating continuing use into the 1st Ct BC. Bodies were laid in wooden coffins or on biers (represented by quantities of iron nails): with no consistent orientation of the head. In 2 cases (graves 106 and 141), quantities of carbonized material in the grave likely result from funerary rites. There is some evidence that pits were reused: part of a cranium and 2 iron offerings in grave 140, for example, represent an earlier displaced burial. Grave goods, set at the feet, consist mainly of pots, with a limited number of metal objects, notably spearheads set at shoulder level and iron and bronze strigils, as well as jewellery and, rarely, coins. The unlooted male burial in grave 108 was accompanied by an iron spearhead and strigil and 4 pots (a cutaway necked prochous and 3 drinking vessels - one with no handles - one bolsal and a one-handled vessel of the L4th-E3rd Ct with  $\Gamma E$  incised on the body and B on the base). Grave 140 (also an unlooted male burial) had an iron spearhead and 4 pots (a prochous, 2 skyphoi, of which one is a local bg imitation of an Attic shape, and a L4<sup>th</sup> Ct local rf askos). The male burial in the robbed grave 139, dated to the M3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct, is, together with grave 111 (which contained only a rf hydria), the earliest in the cemetery. It contained an iron spearhead and strigil and 5 Attic pots (a rf askos-strainer, a bolsal, a onehandler, a bowl and a squat lekythos of the E3<sup>rd</sup> quarter of the 4th Ct). The base of the one-handler is incised AMM, and the lekythos has a K at the centre base and 10 letters around the edge, of which A, M, H, A, K, and probably N are legible. Two bronze mouths of aryballoi (probably with wooden or leather bodies) are noted from graves 115 and 146. Of a total 89 pots discovered, 34 are skyphoid forms, 15 hydriae (mostly unglazed, with one rf), 10 prochoes and 8 oinochoai, with other forms in smaller numbers. The scarcity of the Macedonian amphora types noted in previous excavations may be due to tomb robbing. A bronze phiale is the only metal vessel preserved. Three bronze rings have on their oval bezels representations of a seated male figure, a griffin and a bird.

Apogevmatini (11/03/08), Kathimerini, Ta Nea and To Vima (12/03/08) cite G. Karamitrou-Mendesidi's report of continuing excavation in the E cemetery. 243 tombs of the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC include quantities of cosmetic items (jewellery containers, tweezers, perfume containers and 2 dove figurines, as well as pottery and gold jewellery), along with medical equipment. In a male burial, a shallow rectangular container made of a copper and lead alloy, with a handle and containing a small bowl, has 2 parallels in the Aiane area and one further counterpart in clay. These are conjectured to be for mixing different substances, perhaps for medical prescriptions.

**Kleitos.** G. Karamitrou-Mendesidi reports (*AEMTh* 20 [2006], 856–60) on resumed excavation at a site threatened by lignite mining. A small area in the NE part of the settlement (ca. 1,600m<sup>2</sup>) was investigated, revealing occupation in LNeo–LBA (with undisturbed EBA deposits) and Hel–Rom times.

Polymylos (anc. Euia). G. Karamitrou-Mendesidi reports (AEMTh 20 [2006], 847-56) on renewed site conservation and excavation following the redesign of a major road junction on the Egnatia Odos. Five of the Hel-Rom kilns plus surrounding buildings were conserved in situ and reburied, while the most monumental kiln was removed to the Archaeological Museum of Aiane. A total area of ca. 1,500m<sup>2</sup> was excavated, in 2 locations. At the first, trial trenches revealed tombs and the upper part of a marble funerary stele. Two retaining enclosure walls, 4.3m apart and with a stone fill between them, may in part utilize building material from earlier settlement (part of another marble stele was built into the northernmost wall). A LRom date for the construction is confirmed by domestic pottery, loomweights, iron and bronze shafts, bronze sheet and clasps, along with many fragments of glass and 5 coins. These walls were probably built in an attempt to stabilize ground eroded by water run-off. Further W and down-slope, 2 pit graves, belonging to a known ECh to post-Byz cemetery, contained the burials of very small children with no grave goods. In one case, the child was laid on a tile; the other tomb held 2 concentrations of bone. In the 2<sup>nd</sup> location, further W. were remains of LNeo-EBA settlement, possibly extending into the first phase of the MBA, with much handmade pottery, along with animal bone and stone tools. Hel housing was revealed in the E part of the excavation area. The largest of the 3 preserved rooms contained a large quantity of pottery and animal bone, plus a hearth and in situ pithos which date to a subsequent phase of remodelling. The area to the E was divided into 2 rooms, the N of which produced ca. 30 pots preserved especially in a destruction layer. Storage, food preparation and other daily activities are indicated by storage and cooking vessels, carbonized grain, some 50 loomweights, a stone hand-mill and stone mortars. Ca. 15m E of these rooms was a rubbish pit. Close by was the burial of an adult, with no grave goods. A 19m l. section of water main consisting of clay pipes (one stamped NIKAN $\triangle$ PO $\Sigma$ ) forms part of a supply network fed from springs in the foothills of Mt Vermion. A L3<sup>rd</sup>-2<sup>nd</sup> Ct BC date for the use of the complex is indicated by the pottery: after a violent destruction, with extensive evidence of fire, the area was not resettled.

**Perdikkas.** G. Karamitrou-Mendesidi reports (*AEMTh* 20 [2006], 860–61) on a small rescue excavation at the site of Strana, W of mod. Perdikkas, prior to the installation of a pylon

within this Neo settlement. Pottery of the E, M and LNeo was discovered, along with animal bones and stone tools. A small stone object of uncertain date, with relief figures (humans, horses and a dog) on all 4 sides, was found on the surface at the Gypedo (stadium) site on the W edge of Perdikkas, along with LBA handmade pottery.

Nomos of Pella (17<sup>th</sup> EPCA: 11<sup>th</sup> EBA)

**Arnissa** (Ostrovo). S. Zacharidis, F. Karagianni and G. Skiadaresis report (*AEMTh* 20 [2006], 741–52) systematic documentation of the remains of an Ot bath (hammam) on the NE shore of Lake Vegoritis, close to Arnissa, at a site formerly known as Ostrovo (prominent in M and LByz sources). The bath lies under an abandoned mod. house which severely damaged its structure: nonetheless, a full plan and architectural study is presented. It was likely built at the end of the 15<sup>th</sup> or E16<sup>th</sup> Ct AD and continued in use until the rising lake flooded the Ot settlement in the 1<sup>st</sup> half of the 19<sup>th</sup> Ct.

Arnissa. Apogevmatini (04/05/07), Kathimerini, Avgi, Ta Nea, To Vima (10/05/07) and Archaiologia 104 (2007), 104, report the discovery by A. Chrysostomou (17th EPCA) of part of an EIA cemetery in rescue excavation S of mod. Arnissa, in the Nautiko Omilo area where graves have previously been reported. Eight slab-lined cist tombs and 2 pithos burials were found, of adults and children. The male graves contained iron lances, knives and daggers, and paired bronze pins (all characteristic of warrior burials). Women received jewellery (bronze and iron bracelets, spirals and a Macedonian type round pendant). All graves contained vases of the 8<sup>th</sup> and 7<sup>th</sup> Cts (prochoi, amphoriskoi and an olpe). Outside the tombs, but in contact with them, were small ossuaries containing the remains of earlier burials. These, and the fact that further tombs remain to be excavated, suggest that the burials may all have been grouped within a tumulus. The discovery nearby of 2 fragments of inscribed Rom grave marker indicates the later use of this area.

Loutraki (Aridaia). E. Kabouroglou, D. Bouzas and T. Chatzitheodorou (EPSNE) present a final report (AEMTh 20 [2006], 673–84) on palaeontological and sedimentological research in cave A (see also AR 53 [2006–2007], 58). Dating evidence is discussed in detail. The presence of Ursus Spelaeus from ca. 14,000 bp is indicated in the bone record. Sporadic human use is indicated from the Neo period (ca. 5,200 BC), with hearths and a very few artefacts, although this was interrupted when an earthquake blocked the entrance. Limited sedimentation and a little pottery indicate later sporadic use.

Edessa. A. Chrysostomou (17<sup>th</sup> EPCA) reports (AEMTh 20 [2006], 713–26) on work undertaken in 2005–2006 to conserve and to present better the archaeological site. This included excavation down to stereo in areas 1 and 2, beside the main street. Five new pits for storage pithoi are added to the previous record in these areas and date to the earlier phases of habitation, as do walls I and III in area 1 and I–III in area 2. In both areas, wall I continues E into the area of the stoa, indicating that the building line in the earlier periods lay near the W edge of the main street. An iron lamp was discovered near the floor of the last phase in area 2. Trial trenches in the stoas and the main street yielded a LRom marble relief of the Dioskouroi from the W stoa, and, from the E stoa, 5 inscribed lead strips.

Edessa, S bypass. A. Chrysostomou (17th EPCA) reports (AEMTh 20 [2006], 727-39) on the discovery of 3 farmsteads on the plain S of the anc. city during rescue excavation preparatory to the construction of the bypass. Farmsteads 1 and 2 lie on the E of the plain and farmstead 3 on the W. At farmstead 1 (2km from anc. Edessa), limited habitation remains include a hearth with sherds of local storage vessels (pithoid shapes and amphoriskoi) and 4 loomweights scattered around it, and, to the S, a storage area with the remains of a large pithos and amphora sherds. The structure was roofed with Laconian tiles with red and black slip. Local and imported pottery includes a wide range of storage vessels, cooking vessels and tablewares, especially one-handled bowls and skyphoi, which date the earliest phase of habitation to EHel. A tpq for the last phase is provided by a Macedonian coin of the reigns of Philip V and Perseus. Farmstead 2, 2km N of farmstead I and 1.7km from Edessa, is a long, narrow building (rooms I-VI), with an approach road from Edessa entering at the NW and flanked by rooms VII-IX. The structure had a Laconian-tiled roof. Rooms I–VI produced few finds of Hel coins and pottery, along with loomweights with graffiti from rooms I and III (the former room containing a hearth and the latter the setting for a pithos). The majority of finds come from a courtyard S of rooms II–IV: these include a millstone and grinding stone, plus a wide range of storage vessels, cooking vessels and tablewares (notably Megarian bowls) which may have been discarded here, along with a few items of jewellery, glass beads and coins. A few ERom sherds, including a lead-glazed relief skyphos, also come from these rooms. A few 3<sup>rd</sup>Ct BC bg sherds may come from an isolated pit grave sunk into the natural soil in room VI (a room later used for storage). The latest use of the farmstead is established by a coin of Antoninus in room IX and LRom sherds in room VIII. Farmstead 3, 2.7km SW of anc. Edessa, consists of 2 long, narrow buildings (14.7m x 3.7m and 10.9m x 2.3m) in a poor state of preservation. A Rom date is indicated by the surviving pottery.

Rizospastis (21/04/07), Eleutheros Typos (22/04/07) and Eleutherotypia (23/04/07) report (with illustration) excavation just N of the farmsteads noted above, where a further ECh farmstead was investigated by the 11<sup>th</sup> EBA in 2007. Eight single burials were found in rock-cut cist tombs with cover slabs, dating from the ECl–EHel. Female burials contained vases and jewellery, whereas males had weapons (2 spearheads are illustrated), agricultural tools and vases linked to the symposium. The tombs lie close to the anc. road from Edessa to Imathia, which passed through the valley of Platani-Flamouria.

Finally, at Psili Vrisi, *Apogevmatini* (11/03/08) cites a report by A. Prokopidou, G. Skiadaresis and M. Cheimonidou of the discovery of part of a previously unknown monastery of the 1<sup>st</sup> half of the 13<sup>th</sup> Ct AD (1239–1252) and a LByz (13<sup>th</sup>–14<sup>th</sup> Ct AD) cemetery of at least 40 (mostly male) graves.

Giannitsa. S. Zacharidis, F. Karagianni and G. Skiadaresis report (AEMTh 20 [2006], 741–52) the discovery of an Ot bath (hammam) in rescue excavation at 32 Venizelou street. Part of the apodyterion was preserved on this plot, with the rest of the bath continuing into neighbouring plots. The base of a perirrhanterion was found in the S of the plot, in what was probably the centre of the room, along with 2 water channels. Niches in the E and N wall were likely for bathers' possessions. Stratigraphy and portable finds (including glazed pottery and many clay pipes) indicate that the bath was in use from the 15<sup>th</sup>–17<sup>th</sup> Ct AD, when it was destroyed by fire. It is identified as the bath of Achmet Bei mentioned by Evliya Çelebi on his visit to Giannitsa in 1668.

**Archontiko, Toumba**. A Papanthimou (Aristotelian University, Thessaloniki) presented the following report to a 2-day conference on archaeological research conducted by Gr universities organized by the Ministry of Culture (06–07/12/2007). While it partly duplicates earlier *AR* reports (43 [1996–1997], 74; 46 [1999–2000], 89–90), it presents a convenient summary of research at the site.

Two principal phases of PH settlement have been identified. The more recent, phase A, is dated by C<sup>14</sup> to ca. 1516–1414 BC: characteristic pottery has incised geometric motifs picked out in white paste. The older phase B spans the end of the EBA and the start of the MBA. This phase includes 3 settlement horizons (II, III, IV) and can be placed by a series of C<sup>14</sup> determinations ca. 2140–1780 BC, i.e., with continuous settlement for ca. 260 years.

Horizon II represents the most recent settlement in phase B, and is characterized by posthole constructions which have been badly damaged by later disturbance and water erosion. Nonetheless, it proved possible to recognize the ground plans of 3 buildings and a paved court. Even though these buildings have not been completely investigated, they seem to share the same NW–SE orientation, and to be broadly similar in size. They are a maximum of 6m *l*. and 3–3.5m *w*. Two of these buildings share a common wall. Mud-brick constructions, plain pottery and various portable finds were also located.

Immediately below horizon II lay the remains of an older settlement, horizon III, which was destroyed by fire. Information about the organization of this settlement is more confused, since much of the available architectural information consists of fragments of floor and postholes with no clear idea of arrangement. Only one residential unit has been identified to date, which follows its predecessor and successor in terms of form and orientation. Inside are 2 mud-brick structures set directly on the floor level, which slopes down markedly from E to W.

The next horizon, IV, again has well-preserved posthole constructions: the entire area is covered by a thick (0.3-0.35m) destruction deposit with signs of a fierce fire. This deposit contained much construction material and sealed the floor levels, preserving a large quantity of finds (Fig. 72). To date, 7 dwellings have been investigated (ca. 8m x 4m): that investigated to the fullest extent measures 8.8m x 3.5m. In general, these are range houses which are often united by a party wall and share a common NW-SE orientation – something which continues into later building phases.

Among the most interesting architectural discoveries in horizon IV are the clay structures erected in groups within houses and forming part of their internal organization. Some 60 such constructions have been found in horizon IV, of which 83% are preserved in good condition. These served to create hearths (Fig. 73), ovens, storage space, low platforms, etc. The variety of types and their distribution reinforce the likelihood of a special function in each case and suggest that they were used to organize space for different tasks connected with food preparation, cooking and storage. Analysis of the temperatures to which these clay structures were exposed, undertaken by NCSR Democritos (Y. Maniatis), will aid understanding of their function. Results obtained to date indicate that these temperatures did not exceed 650°C.

Almost every house contained a shallow pit grave, normally located in the NE part, under the floor and close to clay-built features. The state of preservation of the skeletal material allows only an estimate of age, not of sex. In one case, the burial was that of an infant of 12–18 months and in another, that of a newborn of less than 6–9 months. In some tombs the bones were placed within a vessel, while in others the skeleton was laid out in prone position or on its side: there were no grave goods.



72. Archontiko, Toumba: horizon IV, dwelling floor with complete pots

Among the pottery, a category of fine, polished, black or dark brown vessels can be distinguished. A typical form is the amphoriskos with very high handles. Also common are one-handled rounded cups, small jugs, large vessels with marked necks and lids, and pithoi with corded decoration. Investigation to date indicates that the majority of vessels are of medium or large size (basins, amphorae, pithoi, etc.).

Evidence for diet and subsistence activities is provided by animal bone, carbonized seeds and molluscs. Meat was largely obtained from ovicaprids, pigs and bovines, while deer hunting also played a significant role. Shellfish and fish were also consumed. Archaeobotanical research (T. Valamoti) demonstrated the variety of grains and pulses used in the preparation of foodstuffs such as gruels and breads. A large quantity of acorns was found, as well as seasonal fruits such as blackberries, figs, grapes and dogwood fruit. Lallemantia oil (a variety imported from the Caucasus) and flax oil was also used.

G. Deliopoulos presents (AEMTh 20 [2006], 685–702) an account of the pottery from the building with the stone foundation (phase A).

W cemetery: A. and P. Chrysostomou (17th EPCA) report (AEMTh 20 [2006], 703-12) continuing excavation focused on the W slope of hill 69. Ninety-nine further tombs were excavated (35 EIA, 49 Ar and 15 Cl-EHel), plus an Ar dog burial, bringing the total discovered to 787 in an area of 8 stremmata and confirming a peak of wealth in the Ar period. Graves were arranged in family groups with pathways between them. EIA graves, mostly pits with or without cover slabs (plus some cists), contained single inhumations in extended position. 19 had no goods: the remainder mostly had pottery, with other items (iron knives, gold and bronze jewellery, and biconical clay spindle-whorls) being less common. Female burials were distinguished by jewellery and spindle whorls, but no particular items were characteristic of males or children. Among female burials, details are given of 4 adult burials and one child burial, all with 1-2 pots and 1-4 items of jewellery (mostly bronze with a little gold), plus shells and a spindle-whorl in individual cases. Among the 49 Ar graves (last quarter of the 6<sup>th</sup> Ct-480), of which 9 were robbed to some extent, 20 are male burials, 23 female and 6 not attributable. The dead were interred in extended, prone position, in wooden coffins: women's heads were usually to the E (occasionally to the N or S, but never W),

while men's were usually to the W (occasionally to the N or S, but never E). Male graves contained mostly metalware, which allowed the distinction of classes of warrior as follows (noting also the report by A. and P. Chrysostomou of the 2006-2007 excavations in Eleutherotypia 06/03/08). (1) Ten burials with iron spears, arrowheads, knives and a few other items of jewellery and pottery vessels (3 adult and 3 juvenile cases are presented in detail). (2) Six burials with an iron sword, 2 spearheads and a knife, plus a large number of other items such as pottery vessels (including Attic and Cor imports), a few terracotta figurines and bronze phialai, miniature iron furniture and jewellery, mainly bronze and iron rings and pins, and gold mouth-plates (3 cases are described in detail). (3) Tombs with all these items in greater quantity, plus a helmet (one also had a gold wreath and several also gold eye pieces). Tomb 546 (last quarter of the 6th Ct), for example, contained a bronze helmet, iron sword, 2 spearheads and a knife, a gold mouth-plate with repousse decoration, a gold ring and 2 iron double pins, 3 iron curved objects, a bronze lebes and phiale, and 4 pottery vessels (2 local, a Cor exaleiptron and an Attic bf kylix). In tomb 587 (M6<sup>th</sup> Ct), partially robbed in the head area, surviving goods comprised a bronze helmet, iron sword, 2 spearheads and 3 iron knives, a gold mouth-plate with repoussé decoration, a ring, 2 rosettes and 11 mostly triangular sections of gold sheet decoration from a leather corselet and garments, miniature furniture and obeloi in iron, an iron hook, a bronze lebes and 2 phialai, 4 terracotta figurines and 4 vases (one local, 2 Attic and one Cor). Among the women's graves, 6 examples (4 adult and 2 child) are described in detail. All contain large quantities of gold and bronze jewellery and ornaments (mouth-plates, rosettes, as well as necklaces, pins, rings and earrings), vases



73. Archontiko, Toumba: horizon IV, hearth beside house wall

(local, with a few Cor and Ionian imports) and, in certain cases, also terracotta figurines, iron knives, miniature furniture).

In the context of discussion of Ar grave goods, one should also note the report in Eleutherotypia (06/03/08), which focuses on the rich gold jewellery found especially in Ar graves (cf AR 50 [2003-2004], 44). As this indicates, by the end of the 2006-2007 excavation season, the overall total of tombs had reached 872 (227 EIA, 409 Ar, 229 Cl-EHel and 7 undated). In addition to gold dress ornaments and diadems, 3 cases of women wearing gold face masks are noted (with illustration). Impressed decoration included in one case, 4-pointed sun/stars over the eyes with omphaloi below and, on the rhomboid mouth cover, a winged animal in the middle, dolphins above and below, and an Ionian wave motif at the corners. The report reiterates the division of male burials into warrior classes, but notes a 4th class of exceptionally rich warriors with a full panoply of offensive and defensive weapons (shield, helmet, one or more swords, spearheads and knives) of whom 5 had gold face masks and silvered bronze shields and 2 others bronze shields. A number of warriors wore a type of Illyrian-Cor helmet decorated with gold bands and engraved decoration which is likely to come from the royal workshop.

Returning to the AEMTh report, the 15 Cl-Hel pit tombs comprise 5 male and 8 female burials, plus 2 too disturbed to assign. Until the start of the 4th Ct, the orientation of the body followed Ar practice, but thereafter, women's heads were consistently turned to the W and men's to the E. Grave goods usually comprise one or more coins (of Macedon or the Thessalian cities) and at least one or 2 vases (amphorae, skyphoi, bolsals or lamps) among other items. Three male graves had iron spearheads and 5 others, silver, bronze and iron Three tombs of the first phase of this period are described in detail. Thus, for example, a tomb of a small girl (grave 590, M5<sup>th</sup> Ct) contained a gold necklace, a pair of silver earrings, 4 silver bow fibulae with iron pins, an Attic type A skyphos and a composite ritual vessel. Two male graves each contained one vase, 2 iron spearheads and 2 items of jewellery (in each case a bronze ring with stamped decoration, showing the first part of Aesop's fable of the fox and the stork and a maenad respectively) - in addition, one had a coin. Four representative examples from the latter part of the period (2 male and 2 female) are discussed, showing a similar range of goods.

Pella. M. Lilibaki-Akamati (Director, 17th EPCA) reports (AEMTh 20 [2006], 591-614) on site conservation and rescue excavation prior to the construction of a bypass around the site. The exact positions of the E and W city walls were determined, thus estimating the E-W w. of the city at 1,280m along the road near the Sanctuary of Darron and 1,320m S of the agora. Parts of 3 insulae and the roads separating them were investigated in the W sector: these include 2 of the westernmost insulae on the limits of the urban plan (noting that in the one fully preserved case, the w. E-W is narrowed from the usual 49m to 29m). A 7m w. road separates the outer insulae from the W city wall. At least 3 construction phases are identified: in the final phase of the SW insula, pottery kilns were installed. The walls of the N insula wall were robbed for the construction of tombs and periboloi in the Rom E cemetery, which extends into this area. Twelve Rom tombs (2<sup>nd</sup> half of the 2<sup>nd</sup>-1<sup>st</sup> half of the 3<sup>rd</sup> Ct AD) were investigated here - 9 tile graves, 2 cists with cover slabs and a pit. These all contained 1-2 pottery vessels, glass vessel fragments and 1-3 bronze coins, and, in 2 cases, gold, silver and bronze jewellery. Further graves from this cemetery, as well as Hel graves (including 6 looted chamber tombs, all beginning ca. 75m from the known limit of the urban area), were excavated in the N part of this area.

In the S city, remains of 3 ECh (1st-4th Ct AD) buildings were located in an area ca. 520m l. on the city's E-W axis. These demonstrate that the lines of the urban plan continued to be followed even after the widespread abandonment of the settlement following the earthquake of 90 BC. They include a Rom bath preserving the praefurnium, a caldarium complex of 3 rooms with hypocausts and a one-room tepidarium leading into a small pool. An outdoor swimming pool, with a water supply and drainage system and a small exedra, lay to the S and there was a cistern to the W. The bath buildings had mosaic floors and opus sectile decoration with coloured mortars: portable finds include clay, glass and marble vessels and many coins. Tests beneath the bath complex revealed many phases of occupation extending back into the Cl period. Cl and Hel remains were levelled, likely in the 2<sup>nd</sup> half of the 1<sup>st</sup> or the 1<sup>st</sup> half of the 2<sup>nd</sup> Ct AD, for the new buildings, which followed the former urban plan. These were subsequently destroyed by fire, and new buildings, including the bath complex, erected in the 2<sup>nd</sup>-3<sup>rd</sup> Ct: these were in turn destroyed in the 1st half of the 4th Ct AD, and the building materials used for the construction of roads in this area. To date, no remains of the Ch period have been located elsewhere and it is likely that activity was confined to the S part of the city, close to the

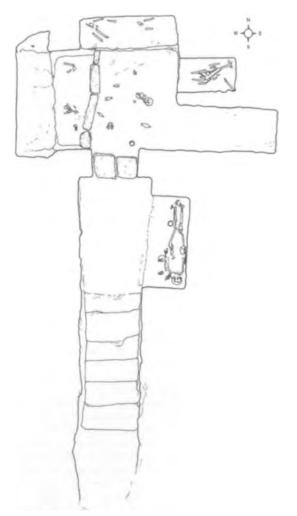
I. Akamatis (Aristotelian University, Thessaloniki) reports (AEMTh 20 [2006], 615-26) on a further season of excavation in the agora. Excavation in the S part of the E stoa was undertaken to assist in wall conservation, verify the floor levels and install a drainage system. In the lowest floor level a series of storage pits relates to the initial use of the rooms: one produced pottery and sherds of pseudo-Cypriot amphorae, giving a tpq of the L4th Ct BC for the construction and first use of the stoa. Pits in several rooms produced large quantities of figurines and figurine moulds. Lifting of part of the fabric of the road E of the agora, N and S of the central avenue, revealed part of the E wall of the agora, and the foundation trench and part of the wall of the insula to the E. The NE corner of the E stoa was located in situ, along with the corner of the neighbouring insula to the E. N of the avenue, previously located insula remains were cleaned and the angle of the next insula to the N revealed. Investigation of the road bordering the S edge of the agora continued. The road fabric included many metal items (keys, lead weights, etc., plus many craft tools) and a wide range of stamped amphora handles, including a large number of the Parmeniskos group. Pottery included much rf and sherds bearing graffiti, and there were also many moulds for figurines and relief altars, as well as elements of a roof, coins and a marble head of Herakles. The stratigraphy of a section of road between insula I/4 and the S stoa was investigated: this was shown to lie over part of a cemetery of the 1st half of the 4<sup>th</sup> Ct BC, previously located in the area. 23 additional tombs and a pyre were found in the W part of the road (2 enchytrismoi, 5 tile-covered graves and 16 rock-cut pits), likely covered by tumuli. Grave goods were generally few: squat lekythoi, bolsals, skyphoi, oinochoai, olpai and thilastra, rf vessels (especially lekythoi and pelikai), figurines, bronze, iron and silver fibulae, and jewellery placed at the relevant part of the body. By the hands of many men were farming tools, weapons and athletic equipment. In the S part of the previously excavated cemetery, within the road, was a well filled in the L3<sup>rd</sup> or E2<sup>nd</sup> Ct BC; this likely served the buildings in the area rather than the earlier cemetery. In the area of the road S of the agora, N of insulae I/2 and I/7, lay a metalworking establishment, with tools, moulds, hearths and other related equipment. Finally, 2 stretches of road, through the S stoa and the SW approach to the agora, were investigated.

Kathimerini (07/03/08) and Ethnos (15/03/08) report the discovery by M. Lilibaki-Akamati and I. Akamatis of a **Hel bath** complex of ca. 1,000m<sup>2</sup>. This had a large pool (7m x 4m) lined with waterproof cement and a changing room to the S. The first phase of construction dates to ca. 325–300 and the building was remodeled ca. 275–250, with 18 new individual and group baths, a tholos, and pebble and mosaic pavements. Under-floor heating was added in the M2<sup>nd</sup> Ct BC, with the additional creation of cold and hot baths, and the use of the tholos as a sauna.

Preparatory research towards the public presentation of the archaeological site of Pella is discussed by I. Akamatis (AEMTh 20 [2006], 627-39). Significant progress in documenting the road network and water system, and locating further insulae is reported. Nine further graves excavated along the main routes had been badly damaged by road construction: many were in slim pithoi and were likely marked with tumuli. The only offerings were a local EBA open vessel and an ECyc marble bowl. A fountain house was discovered by the road from the museum to the storerooms. Subsequently, Kathimerini (29/02/08) reported the discovery by I. Akamatis of more than 100 EBA burials, ca. 30% of which were enchytrismoi in large (1.5-1.6 m h.) pithoi and the rest pit burials or burials in stonelined structures. They were accompanied by marble bowls from the Cyclades (sometimes with red pigment), local handmade pottery and metal objects including jewellery, arrowheads and knives. Bodies were placed in contracted positions, women facing to the left and men to the right. Babies, infants and older children were also buried here. The full extent of the cemetery cannot be determined, as it continues beneath the later city: the graves so far investigated are relatively accessible beneath later roads and passageways. A settlement of the same period is assumed to be nearby and probably beneath the later city.

P. Chrysostomou (17th EPCA) reports on Hel and Rom graves discovered in rescue excavation in the W cemetery (AEMTh 20 [2006], 641-57, 659-71). A section of the new bypass road 250m l. and 22.5m w. produced: part of the Hel W city wall and the road dividing it from the outermost insulae; part of the proteichisma; further W, the SW edge of a LBA settlement (fills, deposits and a well containing pottery, stone tools and animal bone); part of a water channel with clay pipes (post-dating 168 BC) along the line of the new road. Part of an extensive cemetery, with 429 graves (39 Hel and 390 Rom), was traced along the length of the new road, inside and outside the wall and proteichisma, and for some distance further W. This remained in use from the L4th Ct BC to the 1st quarter of the 4th Ct AD. One tile grave contained a horse burial. The 39 Hel burials were scattered in front of the proteichisma growing denser further W. They were intact, although with modest goods, and consist of enchytrismoi (3), pits (10), tile graves (19) and rock-cut chamber tombs (7). Illustrative of the *enchytrismoi* is grave 243A (pre-M3<sup>rd</sup> Ct), a male cremation in a kalpis covered with a plate, outside which were 2 pottery tear-bottles and 3 iron strigils on a ring (2 bear a particular producer's stamp on the handle which appears elsewhere in the cemetery). Ten pit graves, mainly with child cremations, were found in the W part of the excavation. Among those described, grave 8 is a typical example. This contained a large number of astragaloi and terracotta figurines (notably Attis types and Macedonian youths), plus a tear-bottle. Pit grave 20 (a child cremation with a lead weight) had as a cover slab the reused 3rd Ct BC grave stele of Aristokleia, wife of Chairephanis. The 19 tile graves contained both cremations and inhumations, with metal and ceramic offerings. For example, tile grave 106 (cremation of a young girl) contained a silver ring with gold

bezel, silver hoop earrings and a bg pyxis (1st half of the 2nd Ct BC). Grave 266 (a female cremation, with iron nails preserved from the bier) had a bronze needle, 2 small iron hooks, a bg skyphos, a loomweight and 2 coins. Immediately W and outside the proteichisma was a rock-cut chamber tomb, with a simple chamber to the W and the stomion blocked with small stones. It contained a male inhumation on a bier, with 5 pottery vessels dating just before the M3rd Ct BC. Chamber tomb 1 is roughly similar; here a lead pyxis and 7 pottery vessels escaped the looters. Chamber tomb 5 is more elaborate: it had a long dromos and an entrance way which was originally blocked. The chamber held one inhumation damaged by the intrusion of a 3<sup>rd</sup> Ct AD tomb: a cutting in the E wall of the dromos held a cremation with 3 vessels of the M2<sup>nd</sup> Ct BC. The 4 remaining rock-cut tombs were low, underground chambers (2 with single chambers, 2 with double), all with individual internal arrangements. Fig. 74 shows the single-chambered tomb 4, with a stepped dromos: an inhumation in a rectangular niche on the E side of the dromos was originally protected by a wall. Pottery, lamps and figurines were scattered through the dromos fill. The chamber had couches on the W and N sides, a low wall demarcating a cist grave and 2 rectangular containers on the E side. Two niches in the S wall held lamps. Between 4 and 6 members of the same family were buried in this tomb, laid on wooden biers



74. Pella: W cemetery, chamber tomb 4

and with metal objects (bronze chest fittings, a gilded bronze mirror) along with ceramic vessels and figurines of the 2<sup>nd</sup> Ct BC. The rock-cut chamber tombs and their contents, all 2<sup>nd</sup> Ct BC, are described in detail. Tomb 6 is the most elaborate structure, preserving in its first chamber painted plaster with architectural decoration and, in its 2<sup>nd</sup>, an Ionic doorway with painted plaster ornament.

The Rom cemetery in the area of the Hel W cemetery served the Rom-ECh settlement in the S part of the earlier city and at Fakos, rather than the Rom colonial settlement 1.5km W. 390 Rom graves (including 7 cists, 31 pits and 346 tile graves) lay within the Hel city and further W beyond the walls. 246 contained goods. Graves were arranged in family groups with no consistent orientation: around one third (128) were child burials, and all infant and most child burials lacked goods, although some contained objects such as figurines, glass and There were 222 cremations and 168 ceramic vessels. inhumations. Most (but not all) cremations were primary. Cremation was the dominant rite from the Augustan era until the end of the 1<sup>st</sup> Ct AD, the 2 rites then co-existed during the 1st half of the 2nd Ct and finally inhumation dominated during the 2<sup>nd</sup> half of the 2<sup>nd</sup>-M3<sup>rd</sup> Ct. Almost all graves were intact, but only a very few contained valuable goods. A wide variety of ceramic shapes is represented, with oinochoai, amphorae, chytrae, cups, skyphoi, plates, trays, lekanides, tear-bottles and lamps most common. Many are plainwares: Latin and Gr workshop stamps are rare. Relief lamps are relatively common, including Ephesian types. Glass vessels are also common, but metal offerings are rare. Terracotta figurines are mostly found in child graves. Gold funerary coins were very rare; most were bronze, or occasionally silver, denarii. Coin hoards are also rare, excepting certain examples of the 1st half of the 3rd Ct AD when the custom was widespread in Macedonia. A number of tombs are distinguished by the presence of jewellery in gold, silver, bronze, iron, glass, jet and bone. Three prophylactic amulets are of particular interest. Common finds in female burials are iron and bronze fittings from wooden chests, pyxides in bronze and bone, cosmetic palettes and tools, mirrors, needles, bronze bells, bone buttons, and terracotta and bone spindle-whorls. Less common finds are bronze and iron strigils, bronze medical implements, pendants and toys. Bronze handles from biers or couches, and nails from biers on which bodies rested for cremation, are also noted. Only 2 marble grave markers were recovered: one had a seated man at left and a rider at right, the other, in secondary use as a cist tomb cover, depicted a mounted hero hunting a boar to right, toward an altar with a standing male and a tree round which was a snake. There is one unique case of an in situ limestone base for a marble funerary altar, the upper part of which (a marble pinecone) was found nearby. Part of an ERom honorific marble base bears a fragmentary inscription.

Among the *enchytrismoi*, grave 206A is described: this is an infant cremation in a kalpis, with a bronze coin, a ceramic tearbottle and 2 figurines. The 7 cist tombs show great variety in construction. Tomb 21, a male inhumation in a large cist lined with marble slabs, may be the grave of a city official. It contained a relief lamp, an iron prochous, a bronze strigil with engraved decoration, a denarius of Caracalla (198 AD), a necklace of 2 silver coins and a gold ring on a chain, and rolled gold sheet inscribed with the owner's name, Pontios Lykos, on all 4 sides. The pit graves showed great variety: 18 were simple pits and 21 had cover slabs or tiles, 26 held inhumations and 5 cremations. Among the 4 typical examples described, grave 22 (dated to the 2<sup>nd</sup> half of the 2<sup>nd</sup> Ct AD by 2 coins) held gold earrings, a silver bracelet, a bronze button, a glass vessel, a ceramic chytra and a terracotta horse and rider (**Fig. 75**). One

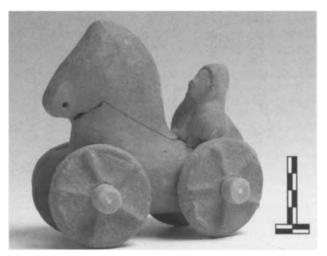
of its cover slabs, reused from a funerary monument, bore an inscription recording that Zosimos built for his fellow slave (*synkellarios*) the monument of Ingenua, slave of Veratius Camerinus.

Tile graves were the most common category: those inside the walls were deep and tightly arranged in family groups. W of the proteichisma many tombs were set inside a wide cutting in the rock. Pit and cist graves were often bordered on 2 or more sides with stones and/or tile and many had periboloi built from rocks and (mainly Hel) spolia. Some tile graves had sections of terracotta pipe set upright to receive libations. Grave goods (mostly terracotta figurines, lamps and vessels placed upside down) were often outside the tomb, indicating feasts and offerings for the dead. 33 examples are discussed in detail. Among these, we note tile grave 18 (a male inhumation) which contained one glass and 5 ceramic vessels, bronze fishhooks, a medical implement, a bronze sealing ring depicting a sphinx and an amulet in a gold setting. The oval semi-precious stone in this amulet was engraved on one face with an Egyptian mystical formula in Gr and a magic symbol in the centre, and on the other face with a coiled lion-headed snake identified by the inscription as Cnouphis (amulets with this image protect against stomach conditions). Goods in grave 47 included a hoard of 17 bronze coins and a gold ring worn by the young male deceased inscribed Είς Ζεύς Σέραπις, further evidence of this cult at Pella.

Publication: M. Lilibaki-Akamati, Κιβωτιόσχημος τάφος με ζωγραφική διακόσμηση από την Πέλλα (Thessaloniki, Ministry of Culture/17<sup>th</sup> EPCA, 2007).

Nomos of Imathia (17<sup>th</sup> EPCA: 11<sup>th</sup> EBA)

**Trilofos (Kazani)**. I. Graikos (17<sup>th</sup> EPCA) reports (*AEMTh* 20 [2006], 795–803) on the discovery of a LNeo settlement in rescue excavation for the construction of the new Veroia-Skydra road, at the site of Kazani. The site lies within an arc of settlement along the foothills of Mt Vermion. The extent of the site and the nature of its internal organization remain unclear (the area is disturbed by mod. quarrying and cultivation). It may be as large as 5 stremmata, but excavation could cover



75. Pella: Rom cemetery, horse and rider figurine from pit grave 22

only ca.  $800\text{m}^2$ . A stone-paved, likely open-air area, a vaulted channel, pits, oval stone structures, hearths and storage jars were located. Pottery finds include many open angular pots with flat bases, notably black-burnished and black-rimmed pots, with few examples of red-topped and other burnished wares. Other finds are few: they include stone tools, 3 clay figurines and a stone bead.

**Veroia.** 1. Graikos (17<sup>th</sup> EPCA) reports (*AEMTh* 20 [2006], 821–32) on the discovery of 2 clusters of graves dating from the L5<sup>th</sup>–L4<sup>th</sup> Ct BC during road-works at the S entrance of the anc. city. The older (L5<sup>th</sup>–M4<sup>th</sup> Ct) contains 10 pit graves and the later (M–L4<sup>th</sup> Ct) 11. All but one had wooden covers and all contained individual burials. The earlier group was oriented N–S and the later E–W. Pottery from the earlier group, notably bg skyphoi and exaleiptra, is closely related to Attic, whereas that from the later is closer to Hel. An individual burial of the M2<sup>nd</sup> Ct BC reused an earlier pit. The article assembles evidence for the topography of the cemeteries of Veroia (cf. *AR* 28 [1981–1982], 39–40 for previous finds in this area).

Kerdos (21/07/07), To Vima, Eleutherotypia, Ta Nea, Kathimerini (12/03/08) and Apogevmatini (13/03/08) report the discovery of 4 graves of the 3<sup>rd</sup> Ct AD during construction work on G. Seferis street. They belong to a larger cemetery of this period located in the 1960s in the extramural W part of the anc. city. Gold and bronze jewellery, weapons, coins, pottery vessels and glass cosmetic vessels were recovered. I. Graikos and the surgeon L. Pavlides are quoted as reporting signs of trauma from trepanation on the cranium of one young woman (ca. 25 years of age): the reason for this complex and skilled surgery remains unclear. The existence of clinical facilities in anc. Veroia has previously been attested in inscriptions.

Promithea Veroias. E. Psarra and S. Lioulias (17th EPCA) report (AEMTh 20 [2006], 805-20) on rescue excavation on the Savvas plot at 4 Aivaliou street. Four rooms from a Rom bath complex likely form part of a private establishment located outside the city boundaries, although the structure is too poorly preserved to be sure of its status. The walls include architectural spolia in secondary use. Along the E side of the plot lie the praefurnium and the hypocaust of the caldarium. To the W are 2 rooms with mosaic pavements depicting geometric patterns, room I (the northernmost) in mixed materials (pebbles, terracotta and other stones) and room II (the southernmost) in terracotta set in waterproof mortar (Fig. 76). Room I is likely the apodyterium and room II likely a swimming pool. Ceramic evidence indicates use during the 2<sup>nd</sup> and 3<sup>rd</sup> Cts AD, with some architectural adaptation in the course of that period. Notable among finds is a lamp imitating a product of the 3<sup>rd</sup> Ct Attic workshop of  $E \wedge \Pi I \Delta H \Phi O P O Y$ . The complex was destroyed and abandoned in the  $M3^{rd}$  Ct. Room II was reused as a store, containing pottery of the  $1^{st}$  half of the  $5^{th}$  Ct AD. A Cl child pit grave of the  $3^{rd}$  quarter of the  $5^{th}$  Ct BC was found between the N wall of the praefurnium and a water channel at the N edge of the plot. This contained a rf squat lekythos, a stone alabastron, a bg aryballoid lekythos with a sigmapatterned band, a Rheneia cup, nails from the child's bier and, at the feet, 2 bronze strigils and a terracotta figurine. At shoulder height were a glass alabastron, a lekythos of the workshop of the Megaira Painter and a glass trefoil-mouthed oinochoe. A silver coin of Alexander I served as Charon's obol. In general, the bath complex is set into the context of the hitherto limited (but growing) body of evidence for Hel and Rom activity NW of Veroia, outside the city boundaries. In addition to published evidence, a new Hel tomb at 43

Ambelokipon street (on the slopes of the hill of Profitis Ilias) is the most distant from the known Hel cemeteries yet discovered (*ADelt* B 59 [2004], forthcoming). At 7 Arygyropoulos street, part of a strong N-S wall of Hel date is reported (*ADelt* B 60 [2005], forthcoming).

**Vergina (anc. Aigai).** Ch. Saatsoglou-Paliadeli (Aristotelian University, Thessaloniki) reports (*AEMTh* 20 [2006], 753–57) on progress in a collaborative programme with the 17<sup>th</sup> EPCA to complete cataloguing, conservation and presentation of architectural and other finds.

Ch. Saatsoglou-Paliadeli and A. Kyriakou (Aristotelian University, Thessaloniki) report (AEMTh 20 [2006], 759-66) on continuing excavation at the palace and cemetery. Excavation at the tholos in the palace demonstrated that the exedra contains reused architectural members in its foundation and must thus post-date the Rom conquest in the M2<sup>nd</sup> Ct BC. It cannot, therefore, be connected with the palace, but it represents a continuity of ritual function in this area. The main conclusions of A. Kyriakou's 2005 doctoral thesis on the M4<sup>th</sup> Ct BC Stenomakri tomb (excavated in 1981 and 2003-2005) are presented. The oblong tumulus (43.75m x 24.75m) covered 3 burials – a pit grave in the centre (tomb A) and 2 cist graves to the N (tomb  $\Gamma$ ) and S (tomb B), each surrounded by its own In tomb B, attention is drawn to at least 10 polychrome hydriae, pierced to allow funerary libations, which are closely similar to polychrome vessels from the Aiane cemetery, as well as rich metal goods including horse trappings, and metal and ivory fittings for a wooden chest. Over tomb  $\Gamma$ a group of 15 hydriae pierced for libations differs in style from that in tomb B, being more closely influenced by metalwork. Notable among the grave offerings is a Kerch style acorn lekythos attributed to the Attic painter of the Vogell Group, but in non-Attic clay. Other offerings include 3 rf vases, metal weapons and jewellery, iron knobs from leather vessels, 2 wreaths and ivory decoration from a wooden chest and couch, as well as gilded terracotta plaques. In the central tomb A, a male burial is clearly attested and the tomb includes many weapons (notably a silver-inlaid sword), but there are also slight indications of a female burial. At the E side of the tumulus, a monument bore burial markers, of which survive the marble paw of a lion and a marble volute krater buried in the foundation. The tombs were looted and the monument destroyed by the Gauls in the 3rd Ct BC and the Romans in the 2<sup>nd</sup> Ct BC. Remains of pyres connected to the cist graves and rich weapons from the central grave indicate the status of the deceased.

S. Drougou (Aristotelian University, Thessaloniki) reports (AEMTh 20 [2006], 767–72) on excavation of the **Macedonian tomb with Ionic façade**. This focused on the dromos, which is shown to be lengthy (14m  $l. \times 6$ –7m h.), including a large courtyard (7m  $l. \times 6$ m w.) in front of the façade. A large wall of coarse stones protected the dromos from loose soil on the S side. A building dedication at the SE corner of the tomb contains mainly bg plates which date the tomb to the L4<sup>th</sup> Ct or ca. 300 BC.

A. Kottaridou (17<sup>th</sup> EPCA) reports (*AEMTh* 20 [2006], 723–80) on rescue excavation of building plots on the E side of Vergina, within the Ar cemetery. 90 graves have so far been excavated, spanning the 6<sup>th</sup> Ct BC: these are densely concentrated, apparently in groups (perhaps family groups) and arranged in rows. Within the city, excavation close to the NW gate revealed a large building complex (covering over 3 stremmata) with multiple phases, but on a different orientation from the palace and the Sanctuaries of Eurykleia and Kybele (confirming that, despite the efforts of Philip II, Aigai never



76. Promithea Veroias: mosaics from Rom bath complex

entirely conformed to a consistent grid). Finds include LAr pottery and a very few 5<sup>th</sup> Ct spolia used in a large 4<sup>th</sup> Ct structure. The building apparently continues W, with a large courtyard and a water channel running beneath. The building was remodelled before the end of the 4<sup>th</sup> Ct and, with various alterations, continued in use into ECh times when the town was abandoned. This is a longer period of use than the palace and the main sanctuaries, and the extent of construction in the 1<sup>st</sup> Ct AD is notable. To this later building phase belongs the large

peristyle court (ca. 1 stremma in area) which reshaped the entire complex. A rich destruction deposit covers the building. Documentation of the full extent and layout of the complex awaits future seasons.

Beside the W city wall, within the Palaiopanagia gully, lies a well-constructed building with pebble mosaic pavements similar to those in the palace. This was destroyed in the reign of Amyntas III, probably in a flood. It is speculated that the gymnasium of the city is to be found here. Further S, on the

Palaiochori hill, the discovery of the body of a marble statue of a seated deity surely indicates an extra mural sanctuary. An extensive area of settlement (ca. 70 stremmata) existed W of Vergina, including substantial remains previously reported. Fourth Ct houses and periboloi have been located here, as well as a cemetery of the reigns of Amyntas III and Philip II to the W. The remains of a Hel building lie further W, at Pournari near Rovia, where a settlement and cemetery of the L EIA and an anc. water channel are located. Further N, on the plain close to the Aliakmon at Varka, is a tumulus with EBA settlement remains, an EIA cemetery and a Cl-Hel settlement and cemetery. On the plain NE of the cemetery, is the Rom settlement (with ECh basilica) which replaced Aigai and just beyond the E city gate is another settlement area, with 2 more further E at Keramario. Here trial trenches revealed a house destroyed in the 2<sup>nd</sup> Ct BC and an Imperial Rom kiln. This evidence combines to support the picture of an urban structure

Eleutherotypia (07/09/07) reports on a programme of conservation and restoration of the palace. The completion of an architectural and finds database, and the first phase of a photogrammetrical study of the palace, is also reported by Ch. Saatsoglou-Paliadeli (Aristotelian University, Thessaloniki) (Apogevmatini, Ethnos [14/03/08], Ethnos tis Kyriakis [16/03/08]).

Ethnos (13/03/08) reports the results of analysis (by M. Vavelidis, Aristotelian University, Thessaloniki) of the provenance of precious metals used in the royal burials. Gold comes from the Aliakmon area and the Chalkidike, and silver from Lavrion.

A meeting celebrating the 30<sup>th</sup> anniversary of the discovery of the Royal Tomb by Manolis Andronikos, held in November 2007, is widely reported (*Kathimerini*, *Eleutherotypia*, *To Vima* and *Ta Nea* [09/11/07]), with attention given to a lecture by A. Kottaridou (17<sup>th</sup> EPCA) on the symbolism of the Europa mosaic in reinforcing Philip II's claims to be a European leader. Research into the symbolic representation of the Odrysian kingdom of Thrace on the frieze from the Tomb of Philip II (I. Seiradakis and D. Ignatidou) is also widely reported as forming part of a group of allusions to Philip's victories which reinforces the identification of the tomb (*Ethnos* [11/03/08 and 14/03/08], *Kathimerini* and *Eleutherotypia* [12/03/08], *Apogevmatini* [13/03/08]).

### CENTRAL MACEDONIA

Nomos of Pieria (27<sup>th</sup> EPCA: 9<sup>th</sup> EBA)

**Dion.** D. Pantermalis (Aristotelian University, Thessaloniki) reports (*AEMTh* 20 [2006], 567–75) on a further season of excavation and site conservation.

Trial trenches S of the Temple of Asklepios revealed no building remains, just an isolated sarcophagus, the presence of which is hard to explain.

In the sector of the Hydraulis, excavation continued in the NW part of the insula. The stoa and stylobate (revealed in previous years) were traced along the entire W side of the insula, demonstrating that the cardo of the city was a colonnaded street. Immediately E, the presence of a rectangular room precludes a cross-street: this room was likely used for the preparation of lime. Rooms discovered in this area date to the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD: a floor at a higher level dates to the 4<sup>th</sup> Ct AD, coinciding with evidence previously noted in the W part of the insula.

In the agora, the stratigraphical sequence W of rooms 11–13 was examined, revealing 3 Rom phases above Hel walls (reported in full by S. Piniatoglou, in *AEMTh* 20 [2006], 579–80). A potter's kiln in the NW part of the agora (discovered in 2001) was further investigated. This rectangular structure (3.7m x 3.5m) had 4 pairs of columns supporting the chamber; the exterior and chamber floor were finished in clay. Surrounding rooms were transformed into workshop space following the establishment of the kiln and the area probably served as a tile works – finished tiles, metal tools and masses of unbaked clay were found. The kiln was destroyed by fire and abandoned.

The House of Athena (noted from press reports in AR 53 [2006–2007], 67), close to the Villa of Dionysos, was further investigated. Four stoas surrounded the courtyard with the impluvium, with 2 rectangular rooms off each: one room on the E side served as the tablinium. The entire complex was built in the same Rom phase, and subsequently abandoned after flooding and not reoccupied. Portable finds include (in addition to pottery) a marble table and 2 malachite sealstones: the house takes it name from a relief depicting Athena with a snake. Cleaning of the central N–S road revealed a paved cross-road running E; this then turns S, at the same elevation as the road in front of the Villa of Dionysos.

The statue of Hera reported in AR 53 ([2006–2007], 67) as found built into a ECh wall, is discussed with illustration.

S. Piniatoglou (Aristotelian University, Thessaloniki) reports (AEMTh 20 [2006], 577–78) on the completion of excavation in the Sanctuary of Asklepios. E of the temple, 2 rooms of an Imperial Rom stoa were revealed, founded upon a Hel construction. Fragments of marble statuary include a crouching boy characteristic of sanctuaries of Asklepios and related deities. Piniatoglou concludes (580–86) with a summary of evidence for the Hel city.

Eleutherotypia (14/03/08) and Ta Nea (17/03/08) report plans for the creation of an archaeological park.

Methone. Ethnos (02/05/07) summarizes discoveries made by M. Besios (27<sup>th</sup> EPCA) at this Eretrian colony, including Ar monumental structures and probably the agora. Earlier occupation (LNeo–BA) is also noted, with decorated Myc fine pottery as well as glass, bronze and terracotta jewellery. Evidence for trading activities centred on the harbour is emphasized. A large basement storage area for wine awaiting shipment has been discovered: there is an exceptionally large collection of amphorae and other ceramic finds. Evidence for manufacturing demonstrates ivory and bone working, and the production of metal jewellery using stone moulds. Upper strata have produced bronze arrowheads linked to the siege laid by Philip II in 354 BC.

Nomos of Thessaloniki (16<sup>th</sup> EPCA: 9<sup>th</sup> EBA)

### Thessaloniki

Metro excavations. Since construction of the city's new metro system commenced in June 2006, the only analytical report of the associated rescue excavation to be published is that by Ch. Bakirtzis and N. Pazaras (9<sup>th</sup> EBA) in *AEMTh* 20 (2006), 431–66. The authors report on rescue excavation conducted in 2006–2007, when 58 trenches and pre-drilling tests were opened, of which 43 produced antiquities. Portable finds are noted as few, and mostly small quantities of post-Byz domestic pottery and Ot tobacco pipes, also ECh transport vessels, a few bronze coins and marble spolia. Disturbance to often shallowly

buried LRom and ECh remains from 19th and 20th Ct AD construction was generally severe. The authors present a useful series of tables setting out in detail the building remains and portable finds located trench by trench, according to construction area (Demokratias station, Demokratias-Venizelou line, Venizelou station, Venizelou-Ag. Sophia line, Ag. Sophia station, Ag. Sophia-Syntrivani line and Stavroupolis branch). Almost all architectural finds are sections of wall (rarely connecting into recognizable structures), water channel and paving: readers concerned with the LRom and ECh topography of the city are referred to these tables. Exceptional finds noted in their report (with additions as indicated from subsequent press coverage) are noted below. From 2007 onwards, as excavation has reached greater depths and the pace of work increased, press reports of new finds have become more The following account follows the geographical structure of Bakirtzis and Pazaras' report, with annotations from more recent press reports. As ever with such a major work in progress, preliminary conclusions and statistics should be treated with caution. Maps and useful updates on the construction can be found at http://www.ametro.gr.

**Demokratias station**: at Monastiriou 6 and Odysseus, just outside the W city wall, a mass of clay covered an area of ca. 2.2m x 1.1m. A potter's kiln was located and the authors cite internal reports of the 9<sup>th</sup> EBA on the discovery of further kilns in rescue excavation at the ChANTh (YMCA) football pitch and at 48 Giannitson street, to illustrate the popularity of locations on the fringes of the city for intallations of this kind.

**Demokratias-Venizelou**: at Egnatias 22 and Antigonidon, a LRom-ECh apsidal structure lay 0.25m below the mod. pavement, oriented N-S (wall w. 0.6m, maximum di. 1.25m).

Venizelos station (see also *Eleutherotypia* 12/04/07, *Ta Nea* 13/04/07): on Venizelou street (formerly Sabri Pasha avenue, within the Byz city wall), part of an Ot cemetery. Seven cist tombs were found in parallel lines, and 2 further freely-placed, indicating the continuing use of the cemetery (despite prohibition of intra-mural burial) until the end of the Ot period. Glazed and plain pottery from the area dates from the MByz–LOt and later. The cemetery was bounded to the E by a N–S wall, containing a marble threshold block. This wall follows the building line on the W of the former Sabri Pasha avenue, abutting a section of that avenue which has 6 street levels preserved, and which in turn had a water channel running alongside it.

Alcazar: Eleutherotypia (12/04/07) cites a 9<sup>th</sup> EBA report on the location at the Venizelos street station of a stoa joining the Bezesten market with the Hamza Bei temenos (the Alcazar). Eleutherotypia (14/03/08) reports in detail on a study (led by E. Marki of the 9<sup>th</sup> EBA) of remains of an ECh church below the Alcazar, noting 16 columns and capitals of the L5<sup>th</sup>-6<sup>th</sup> Ct AD reused in the later temenos. The decision to house portable finds and selected architectural features from the metro excavations in a new museum in the Alcazar is widely reported (e.g., Kathimerini [13/04/07 and 6/03/08], To Vima [06/03/08)].

**Agia Sophia-Syntrivani**: at Egnatias and Sokratous (before the church of Ag. Athanasios), part of a  $2^{nd}$  Ct AD table support 0.7m h. was found, depicting a (headless) male figure wearing a chiton. Traces of cement confirm that it was later built into a wall (*Kathimerini* [13/04/07] illustrates the piece).

Syntrivani: initial findings here were disappointing. By Spring 2008, *Kathimerini*, *To Vima* and *Eleutherotypia* (6/03/08) reported the discovery, in an area of ca. 502m², of 95 Gr–Rom and LRom tombs, of which only 5 contained goods. *Kathimerini* (13/04/07) had previously noted the discovery of a stele inscribed ΕΠΙΘΕΡΣΗΣ ΦΙΛΩΝΟΣ ΜΗΘΥΜΝΑΙΟΣ. Subsequently (*Avgi* [12/03/08]), the number of tombs rose to

109, with a further cemetery of 150 graves investigated in front of the Children's Refuge, by the planned perimeter wall of the station. This included graves of many types – notably 6 monolithic Rom marble ossuaries. At the road intersection for this station, Avgi (12/03/08) reports the discovery of a total of 637 tombs of which only 22 contained goods, plus remains of buildings. Kathimerini (10/06/08) reports with illustration a cremation containing a Hel gold wreath and a clay pyxis, plus a funerary building with a mosaic pavement.

Neos Sidirodromikos Stathmos: here too, following initial pessimistic conclusions *Kathimerini*, *To Vima* and *Eleutherotypia* (6/03/08) report the discovery in an area of ca. 255m² of 2 successive funerary enclosures in the same area. The later contained 15 Rom tombs and the earlier 9 graves with goods dating to the 3<sup>rd</sup> Ct BC. Grave goods consisted of gold coins, bronze jewellery, pottery vessels, lamps, glass items, pins, etc. A 5.5m *d.* well was also found. Four of these graves will be removed and preserved. *Kathimerini* (10/06/2008) reports the discovery of ca. 200 graves from the city's W cemetery in excavation for this station.

University Aristotelian Library: Kathimerini (10/06/2008) reports the discovery, in what has only recently been characterized as a poorer, lower class area of the city's cemetery, of a cist grave containing the burial of a woman laid supine on a wooden bier. This contained 4 gold olive wreaths (unusually placed, 2 at the feet and 2 at the head), gold earrings in the form of a dog's head, a bronze coin, a gold coin placed in the mouth of the deceased, a bronze mirror, 2 clay pyxides, and one bronze and 4 clay vessels. Anc. architectural remains were also discovered in this area. The report observes that some 800 graves from the city's extra-mural E cemetery have been discovered (no further details are available). M. Tsibidou-Avloniti (16th EPCA/chief archaeologist at the Panepistimio and Syntrivani stations) sets these discoveries into broader context, noting that over 2,000 burials have been excavated in the past 20 years, indicating uninterrupted use from the 4th Ct BC to at least the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct AD, and doubting the existence of poor areas.

# Thessaloniki, city centre

E cemetery (area of). M. Tsibidou-Avloniti, A. Kagiouli, A. Kaifa and E. Christodoulidou (16th EPCA) report (AEMTh 20 [2006], 285-97; cf. AR 53 [2006-2007], 60) on continuing excavation in the new city hall plot (Demarchikon Megaron, Vas. Georgiou and 3<sup>rd</sup> September streets). 63 tombs, 5 wells, 12 pits and the remains of 2 buildings were concentrated in the NE and S of the plot: the remaining area was severely disturbed by mod. construction. Tombs were arranged in rows in the NE, SE and S-central areas: orientation varied, but the majority were NW-SE, with the cranium to the SE. There were 2 enchytrismon, 15 tile graves, 4 uncovered cists, 37 cists covered with slabs, 2 marble box-cists and 3 stone-lined cists. Most were single burials, all inhumations, mainly in prone position (with 2 contracted). Five cases contain 2-3 members of the same family. There is one case of secondary use of a tomb (after an initial, Hel, cremation). Most graves had few or no goods. Coins from 9 graves date to the 1st half of the 3rd Ct AD, with one hoard of 6 bronze coins of Constantine I. Other goods include bronze earrings and rings, a pair of silver earrings and a few plainware pottery and glass vessels mostly placed at the foot of the deceased. Tile grave 6 (of a man and a woman) contained a clay mould, a pottery tear-bottle and cup, and 2 coins of Alexander Severus, making it one of the richest in the cemetery (along with tomb 5 which had a plain amphoriskos, and 2 - pottery and glass - tear-bottles of the M3<sup>rd</sup> Ct AD). Tomb 3 held a family (parents plus 2 infants and

a small girl at their feet): the girl had a gold earring and there was also a glass amphoriskos and an E3<sup>rd</sup> Ct AD bronze coin. The tomb was covered with marble spolia in secondary use, including an Ionic capital and a funerary stele decorated with a relief of an athlete and rider: the inscription from the reuse records an offering by Claudia Byzantia for her house-slaves. Grave goods (notably coins) indicate the use of this part of the cemetery in the 1st half of the 3rd Ct AD. Earlier use (3rd and 2nd Cts BC) is indicated by tomb finds and pottery (including bg and W Slope) in the rubbish pits and the wells which probably supplied water for funerary rites and other such purposes. The wells were excavated down to the water table: all but one lay in the S area, close to the tomb groups. They varied in di. from 2-3.5m and contained plain pottery, architectural spolia, fragments of inscribed stele and a few coins. Well 4, the largest, also contained many murex shells. Well 5 probably relates to 2 later structures W of the S tomb group: the first is a cistern, lined with waterproof cement and with a floor of reused marble slabs and a central settling basin. 6m N was a rectangular structure beneath a thick destruction layer: this had a mosaic floor and white plastered walls.

At 28–30 Perdikkas street, within the area of the E cemetery, part of a building complex was found which continues to the W beneath a mod. building. The NW–SE wall is best preserved (in *opus mixtum*, 1.1m thick, 15.3m *l.*, up to 3.57m *h.*), with parts of the 2 angle walls: only the foundation courses of the paved floor survive. Five 1m² stone piers projecting from the exterior of the long wall probably supported scaffolding for the construction of what was at least a 2-storey building (and the 2 side walls have one preserved on each). There are almost no portable finds, but the architecture suggests an ECh date. The previous discovery of funerary monuments in this area may indicate a similar purpose for this building too, perhaps as a mausoleuin.

In the course of rescue excavation in a plot on Oidipous street (in the Kifisias area, W of the Allatini tile works), part of a building complex was located, with 13 rooms preserved. This remained in use from the  $4^{th}$  Ct BC to the  $2^{nd}$  Ct AD. The N part of the complex was destroyed by large pits cut down into the rock during the 3<sup>rd</sup> Ct AD: these contained large amounts of domestic pottery, tile and stone slabs, as well as bones of large animals. Pit V also contained a large quantity of carbonized grain. Numismatic evidence dates the first construction phase to the reign of Philip II: this phase included most of the structures in the SE part of the plot (a series of rectangular rooms). Finds (amphorae and pithoi, plus bf and red glazed plates and skyphoi) indicate a storage function for this area. Millstones in other parts of the complex imply preparation of foodstuffs A stone base at the W wall of room 6 probably supported a ladder. W of room 6 was a paved court dating to the first construction phase, which was raised and repaved soon afterwards. In phase 2 (Hel), strong protective walls were added (one, with external piers, indicating a 2<sup>nd</sup> storey). The complex was extended to the W, with the addition of room Z in the EHel period: finds from this room include roof tile, a loomweight and a gilded glass seal depicting an Amazon with her horse. In the neighbouring room, at the edge of the excavation area, a large pithos in situ, repaired with lead sheet, and a 1.2m<sup>2</sup> clay hearth indicate food storage and preparation. In the 3<sup>rd</sup>, Rom, phase (1<sup>st</sup>-2<sup>nd</sup> Ct AD), existing rooms continued to be used, with some occasional additions. The area was cleaned in the M2<sup>nd</sup> Ct, depositing Hel and ERom pottery into the pits and the large storage pithos. The complex was destroyed (with widespread evidence of burning) and abandoned late in the 2<sup>nd</sup> Ct for reasons as yet unknown: hostilities may be indicated by 3 spearheads in an upper level.

One block S of the previous excavation, at the junction of Eurygeni and Kanellopoulos streets, rescue excavation revealed part of a Rom bath covering ca.  $20m^2$  and oriented E. Three tanks for individual use were found, heated by a hypocaust system and heat exchange via arched intercommunicating openings. Strong traces of burning in the chambers beneath the tubs indicate the proximity of the praefurnium and confirm the identification of the area of the complex discovered as the caldarium. The largest of these reservoirs was a rectangular room with an apse at the S end and its E side shaped into 2 rectangular individual tanks. On the bottom of the best preserved S tank, a layer of terracotta tiles preserves patches of the waterproof mortar for the marble floor: marble set in the same cement would also have decorated the wall. The other 2 tubs each preserved 9 square piers of the hypocaust on the underground chamber floor. A system of drainage channels and lead pipes removed foul water from the tank area. In the absence of many small finds, the complex is dated to the 4<sup>th</sup> Ct AD primarily by the existence of individual facilities. Extensive mod. construction in the area currently makes it impossible to trace the complex further.

E. Marki (9<sup>th</sup> EBA) analyses (AEMTh 20 [2006], 455-66) the results of rescue excavation at Egnatias 57 and Bakatselou, where a complex was revealed showing 15 building and repair phases. Remains of a 12<sup>th</sup>-13<sup>th</sup> Ct AD potter's workshop are noted. Attention is devoted to an ECh (6th Ct) public building: a room from this, 10.6m x 9.7m in size and with 2 entrances, had a marble floor and wall mosaics reminiscent of those in the Rotonda. Beneath this was a room with a 5th Ct mosaic floor. When this ECh structure was destroyed, the area became an open-air workshop, with 3 water channels and a metalworker's furnace. Beneath the ECh structure was part of a large 4<sup>th</sup> Ct AD building: a room 10.7m x 5.3m was traced, with a courtyard to the N and an underground storage area with a vaulted roof beneath. In a 2<sup>nd</sup> phase, this building was extended N to include the courtyard (which then acquired a marble floor with opus sectile inlay) and the staircase leading underground was clad in marble, integrating the 2 floors into a grand complex for formal functions. Earlier use of the site is indicated by the discovery of 2 Imperial Rom walls beneath the LRom complex and by Hel pottery (the height of the water table here does not permit the excavation of earlier levels).

- P. Asimakopoulou-Atzaka (AEMTh 20 [2006], 413-30) reviews the corpus of ECh mosaics in the city.
- F. Athanasiou, V. Malama, M. Miza and M. Sarantidou (*AEMTh* 20 [2006], 299–317) present a corpus of brick stamps from the Palace of Galerian.

Publication (DVD): Σωστική ανασκαφή αγωγού ύδρευσης: Θεσσαλονίκης ΙΙ (2000–2002) (9<sup>th</sup> EBA/Ministry of Culture, Committee for the Monitoring of Major Public Works, 2006).

# Thessaloniki, E of centre

**Kalamaria.** M. Tsibidou-Avloniti, A. Kagiouli, K. Kaiafa, E. Lykidou, M. Mandaki and S. Protopsalti (16<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 271–83) on rescue excavation at a number of sites in and neighbouring the deme of Kalamaria. At 21 Alex. Papagou street in Karabournaki, 4 cist graves and 5 rubbish pits immediately neighbouring the excavation site of Karabournaki were cleared. Only 2 graves contained goods: a probable male burial had a local 7<sup>th</sup> Ct BC red slip bowl and the 2<sup>nd</sup> burial had a prochous and phiale at the feet and a gold leaf-shape closing the mouth. The pits produced large quantities of

plain and decorated, local and imported (Attic, Euboean and Cor) sherds of all the standard types from EIA-Ar. The water table was encountered at a d. of 4m; where possible, a final metre was dug under water. At 9 Papagou street were 13 smaller cist graves cut into the clay soil, again going below the water table: they vary greatly in shape from elliptical or round to completely uncanonical. All contained plain and/or painted EIA-Ar pottery: much sea shell was also collected, including murex.

A series of building plots in the coastal zone on the NW edge of Kalamaria (bounded by Kath. Rossidou, Th. Sofouli, Paradimitriou and Kerasountos streets) provided evidence for large-scale harbour and warehouse installations. These were founded in the 1st quarter of the 4th Ct AD, developed through that Ct, and had a later building phase in the Ist half of the 6th Ct. At 4 Kouskoura street, 2 successive building complexes were located. The earlier had 3 rectangular rooms: 3 pit burials of children lay along the outside face of the exterior wall. A further 3 tombs in the NE corner, marked with tiles, produced very few goods (2 unreadable coins and a bronze ring). Part of a road paved with stone slabs interspersed with tile, and bedded on a layer of tile and small stones, was found in the NW corner of the excavation area and should be associated with this complex. The 2<sup>nd</sup>, slightly later, complex had 2 rooms, one of which had a white plaster floor and a basement: its continuation (Kath. Rossidou 4) was poorly preserved. Finds consisted of plainwares, lamps, glass vessels, a large quantity of shell and small metal items (e.g., a 4th Ct AD cross-bow fibula characteristic of the dress of a male official). 66 bronze coins date the complex to the reigns of Theodosius I and Arcadius. On the last plot, 2 building complexes were found, the earlier of which covered the W and S sides of the plot: 13 sections of wall in 2 lines separate very fragmentary rooms. In addition to domestic pottery and glass, a few red slip sherds with stamped motifs and a lamp date to the 5<sup>th</sup> Ct AD. In room A were 2 shallow rubbish pits with large quantities of shell of different species. The continuation of the paved road was uncovered for 12.2m in the NE corner of the plot: cleaning produced 17 coins dating the use of the road to the 4th and 5th Cts AD. In total, the excavation produced 436 coins of which the earliest related to the use of the first phase of buildings in the 2<sup>nd</sup> half of the 4<sup>th</sup> and the 5<sup>th</sup> Cts AD.

The later building A occupies much of the SW part of the excavation area. It is a rectangular structure with oblique corners, covering an area of ca.  $40\text{m}^2$ , of which only the foundations are preserved. The only preserved patch of fill produced amphorae, cookware and a little African Red Slip ware.

Excavation on the corner of Kath. Rossidou and Th. Sofouli street produced evidence of 2 narrow streets in the S and W of the plot, and traces of walling of the earlier building phase. Here too, 2 building phases,  $4^{th}$  and  $1^{st}$  half of the  $6^{th}$  Ct AD, were recognized: a destruction level of the L4th Ct contained much tile and shell. These same phases were traced in neighbouring building plots, with similar finds. Better preserved evidence comes from 22 Kouskoura street, very close by. Within an area of 150m<sup>2</sup>, was a complex with at least 3 phases and 3 infant burials (without offerings). As is generally the case, the upper construction level had the same orientation as the contemporary city plan, while those slightly earlier vary a little on the E-W axis. All 3 buildings are large, continuing beyond the boundaries of the plot. No destruction deposits were found, although there are traces of burning in many areas. Two large pits in the S part of the plot were perhaps clay workings. The fills contain the kind of material already noted: 251 bronze coins covered most of the Imperial reigns of the 4th Ct AD.

The neighbouring excavation plot (on the corner of Kouskoura and Argonafton streets) revealed 2 wells, 3 rubbish pits and 18 tombs (mostly tile covered and disturbed), all of babies or infants without goods (apart from 4 coins of Emperor Valens) and all single burials with the exception of one (tomb 5) which contained 2 *enchytrismoi* in amphorae. Five more child burials (2 tile graves and 3 *enchytrismoi*) were found at the W edge of the plot, with no goods apart from one clay cup. On this plot were more than 700 4<sup>th</sup> Ct bronze coins and much shell of the known types (especially murex).

An indication of the large size of the building complexes in this area is given by an excavation 2 blocks inside Kouskoura street, at 40 Papadimitriou street. Here the substantial walls of a building with 3 rooms (containing a destruction deposit datable to the reign of Justinian I) and a courtyard area were uncovered. Earlier foundations and a temporary floor with 800 associated coins date occupation of this area to the M4<sup>th</sup> Ct AD. A distinctive form of water channel made of 6 Spatheion-type amphorae (2<sup>nd</sup> half 4<sup>th</sup>-1<sup>st</sup> half 5<sup>th</sup> Ct) supplied the building. Finds were of the types noted above, including a cup containing pigments.

The name of this extensive settlement remains unknown: a connection with the Kellarion mentioned in Byz sources is possible.

### Thessaloniki, E environs

**Karabournaki**. M. Tiverios, E. Manakidou and D. Tsiafaki (Aristotelian University, Thessaloniki) report (*AEMTh* 20 [2006], 263–70) on continuing excavation in the anc. settlement.

Three trenches were opened on the hill top. Beneath mod. debris in the upper levels, all produced remains of housing, including 2 storage and food preparation rooms (Fig. 77). In trench 22-91a were part of a cooking hearth, with a small amphora by it, and 2 storage pithoi: next to the hearth were the stones of what is probably a wall and, beneath them, ash, Ar sherds and shells. Similar finds, including a hearth, came from trench 22-91b: this had a pebble floor, with LAr sherds and roof tile over it. Beside the wall in this trench was a pit, only partially excavated to date but with Ar sherds and pithos fragments. Among the relatively little pottery found in 2006, sherds ranged from the PGeo to Cl, with the majority Ar. EIA pottery included Thessalian and Euboean imports (pendant semicircle skyphoi), and all categories of 'local' pottery in quantity, including much silvered ware and EIA transport amphorae. E Gr imports included bird bowls, wild goat style, Chiot chalices, Ionian cups and plates (Fig. 78). Cor is rare,



77. Thessaloniki, Karabournaki: Ar houses with pithoi in situ



78. Thessaloniki, Karabournaki: selection of pottery from the excavation

with an MCor column krater and then more plentiful LCor aryballoi, exaleiptra, kotylai and olpai. Attic pottery is represented by a few sherds of L bf, a very few rf, the St Valentine Group and a little bg. Among the transport amphorae are Attic SOS and Chiot types. The small finds include bobbins and loomweights, pendants, grinding stones and a faience scarab.

Ethnos tis Kyriakis (16/03/08) also reports the discovery by M. Tiverios, E. Manakidou and D. Tsiafaki of an iron-working

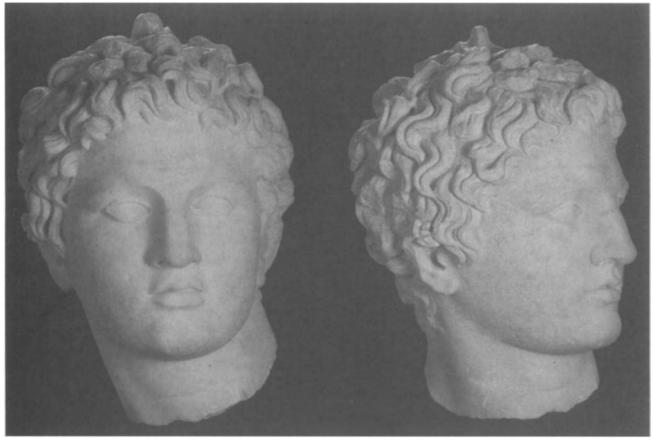
establishment. Within a pit, masses of iron were found in handmade, chytra-like vessels.

**Thermi.** Adesmevtos Typos (19/03/08) reports the presentation of E. Skarlatidou, Θέρμη – το αρχαίο νεκροταφείο κάτω από τη σύγχρονη πόλη (Demos Thermis/16<sup>th</sup> EPCA, Thermi, 2008). The book presents results of excavation from 1988 onwards, including tombs dating from the  $5^{th}$ – $4^{th}$  Ct BC to the  $20^{th}$  Ct AD (with illustrations of ceramics and jewellery) and more recent finds relating to refugee settlement in the Sedes area. Excavation in the cemetery (EIA– $10^{th}$  Ct AD,  $17^{th}$ – $18^{th}$  Ct AD), which had by 2006 revealed ca. 5,000 graves, continues.

Anc. Kalindoia. K. Sismanidis reports (AEMTh 20 [2006], 249–62) on research in room E of the Sebasteion, expanding the report cited in AR 53 ([2006–2007], 65; where it is termed room V). Room E is interpreted as the bouleuterion of the city, noting the inscription of 88 AD found immediately outside it, the topographical and prosopographical implications of which are considered.

ΕΤΟΥΣ Κ ΚΑΙ Ρ
ΑΡΡΙΔΑΙΟΣ ΚΑΙ ΚΟΤΟΥΣ ΟΙ ΣΩΠΑΤΡΩΥ ΚΑΙ
ΣΩΠΑΤΡΟΣ ΚΟΤΥΟΥΣ ΤΗΝ ΕΘΕΔΡΑΝ
ΚΑΙ ΤΟ ΒΟΥΛΕΥΤΗΡΙΟΝ ΚΑΙ ΤΗΝ ΣΤΟΑΝ
ΤΗΙ ΠΟΛΕΙ ΕΠΙ ΙΕΡΩΣ ΔΙΟΣ ΚΑΙ
ΡΩΜΗΣ ΚΑΙ ΑΥΤΟΚΡΑΤΟΡΟΣ ΚΑΙΣΑΡΟΣ
ΘΕΟΥ ΥΙΟΥ ΣΕΒΑΣΤΟΥ ΑΡΡΙΔΑΙΟΥ
ΤΟΥ ΣΩΠΑΤΡΟΥ

The head of Meleager noted in 2007 is discussed in detail (Fig. 79).



79. Kalindoia: head of Meleager

Ethnos (15/03/08) reports the recent discovery by K. Sismanidis of 3 statues, inscriptions and a base, among other finds, within a very small area during continuing excavation in the area of the Sebasteion. The over life-size head of a woman of Herculaneum type is illustrated. The discovery in 2007 of 2 almost identical headless statues of standing male figures wearing the himation is noted: these are probably cultural figures (philosophers, orators or poets).

Stavros. Ethnos (11/03/08) cites a report by K. Sismanidis and M. Violatzi (16<sup>th</sup> EPCA) of the discovery of 65 undisturbed LRom graves, of which ca. one third belonged to children or infants. 30 were cists and 35 tile graves. One grave contained a male and female intertwined. Grave goods were numerous and of high quality – e.g., gold earrings and rings (including one with the name Ioulia) among other jewellery, as well as silver coins in a cloth purse. Finds included a large variety of oinochoai, relief lamps, glass tear-bottles, funerary stelae reused as grave covers (including depictions of a household and of fishermen) and a total of 200 coins.

Nomos of Chalkidike (16<sup>th</sup> EPCA: 10<sup>th</sup> EBA)

**Epanomi (Byadoudi).** Th. Pazaras (Aristotelian University, Thessaloniki) reports (*AEMTh* 20 [2006], 515–26) on completion of the excavation of an ECh basilica previously reported (*AR* 47 [2000–2001], 88; *AR* 50 [2003–2004], 50). The existence of a 2<sup>nd</sup> narthex was confirmed, connected with other constructions to the W used for food preparation. Three building phases are identified. The earliest (5<sup>th</sup> Ct AD) saw the construction of the main basilica with the double narthex and the S extension buildings. During the 2<sup>nd</sup>, storage and food preparation areas were added along the W side of the exterior narthex. Finally, after the abandonment of the basilica (i.e., post-6<sup>th</sup> Ct and perhaps much more recently) a crude rectangular structure was erected further W.

## Petralona

Publication: G. Kouphos and E. Tsoukala, Πετράλωνα: ένα σπήλαιο, μια προ....ιστορία (Thessaloniki, Aristotelian University, Thessaloniki, 2007).

**Potidaia** (Kassandreia). D. Koussoulakou (Archaeological Institute of Macedonia and Thrace) and V. Misailidou-Despotidou (16<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 503–13) on a further season of excavation of 3 plots in the E sector and one in the SW of the mod. settlement.

In the E, 2 Hel complexes were investigated, on either side of a N-S road. Both are bounded to the N by an E-W wall and belong to an urban plan organized in insulae. The W consisted of a central courtyard containing a well and water channel, with rooms to the E and W. On the W side, 2 rooms were connected via a stone threshold in secondary use: the N room had a patterned pebble floor set in waterproof mortar. A similar pair of rooms on the E side, together with a passage way, is less well preserved: the main street entrance was on this side. Much E and MHel pottery was found in the courtyard, plus lamps and figurines. The E complex is larger (extending further S and beyond the excavation area): a large rectangular room in the NW is bordered by 3 adjoining rooms to the S. A pebble pavement preserved in the NW corner is later than the original construction (with a tpq of the 1st half of the 3rd Ct BC). Finds from the complex include figurines, Thasian and other amphora handles, and pottery including bg and W Slope. The absence of earlier fills or of pottery predating the L4<sup>th</sup> Ct suggests that both complexes were built very soon after the foundation of Kassandreia. A 2<sup>nd</sup>, LRom, building phase (5<sup>th</sup> Ct AD) was also traced and 3 buildings identified, all of which were destroyed by fire in the M5<sup>th</sup> Ct. Scattered pits containing 12<sup>th</sup> Ct AD pottery date the latest use of the area.

In the SW sector, close to the shore, a very limited excavation took place confined by mod. foundations. Traces of 6 building phases were found, dating to the Ar, Cl, Hel and Rom periods. The area was settled almost as far back as the foundation of the colony of Potidaia. Phase 1, containing pits and 2 graves without goods, dates to the Byz period. Phase 2 produced evidence of a building (of which 2 rooms, one perhaps a cistern, were investigated) built during the 1<sup>st</sup> half of the 1<sup>st</sup> Ct AD. Phase 3, with 4 rooms of a complex, is Hel in date (producing W Slope pottery). Phase 4 had a fragmentary Cl building and fills. Phase 5 is represented by a pithos from an older, LAr, building phase (with Attic and Cor pottery). No further building remains were found. Phase 6 is an ash layer containing Ar Cor pottery and debris from a bronze-working establishment.

V. Misailidou-Despotidou (16th Athytos (anc. Aphytos). EPCA) reports (AEMTh 20 [2006], 491-502) the completion of excavation of that part of the city cemetery on the land of A. Karagianni. 47 tombs of various types were found, dating from the end of the 6<sup>th</sup>/E5<sup>th</sup>-4<sup>th</sup> Ct BC: they include limestone sarcophagi, pits, cists and primary cremations, and belong to a part of the cemetery used for the burials of both adults and children. The choice of tomb type depended both on period and the age of the deceased: thus all 6 sarcophagi (all very carefully worked) hold adult burials of the 1st half of the 5th Ct and the 9 primary cremations are again probably of adults and date to the 2<sup>nd</sup> half of the 5<sup>th</sup>-4<sup>th</sup> Ct. Only 4 cist graves were found, all of the 5th Ct. Pits were used throughout: of the 28 excavated, 6 or 7 date to the end of the 6th-1st half of the 5th Ct and the remainder, child burials, in so far as it is possible to tell from grave goods, are split equally between the  $\hat{2}^{nd}$  half of the  $5^{th}$  and 4th Cts. This appears to be the peak of use of this part of the cemetery. Cremation is preferred for adults, while children are interred in pits or cists. Grave orientation varies and no significance can be seen in it. The presence of jewellery is seen as a criterion of female burial. There was great variation in the quality and quantity of grave goods: pottery predominates, along with bronze, iron and some glass vessels, strigils, figurines, silver mouth-plates and a spool. Ten child burials and one adult lack goods. The oldest burial (L6<sup>th</sup>-E5<sup>th</sup> Ct), of a girl child, contained 75 items, including a little jewellery and much pottery - 49 kotyliskoi, 9 hydriskoi, 2 miniature lekanides, a kotyle, a conical oinochoe and a bg kylix (all Cor, apart from the kylix). Many sarcophagi contained particularly rich goods. The burial of a young man in grave 12 (2nd quarter of the 5th Ct) contained 16 items, including a rf lekythos, a bg skyphos and lekythoi, a glass amphoriskos, a bronze lebes, a trefoil-mouthed oinochoe and a strigil, a silver mouth-plate and an ostrich egg. Tomb 30 (ca. 480-470) contained 14 items, mostly Attic pots (among which is a rf lekythos depicting a lyre player, probably of the Berlin Painter's workshop), Attic lekythoi, a Cor trefoil-mouthed oinochoe and a silver mouthplate decorated with a wheel in the middle and lotus flowers at either side. Bronze vessels in this tomb comprise an iron exaleiptron with bronze handles and lid, placed on a tripod with lion-paw feet, and a bronze lebes. The male burial in sarcophagus 20 (2<sup>nd</sup> half of the 5<sup>th</sup> Ct) is noted as the richest in the cemetery, with 53 items. 48 of these are pots (mostly Attic, bg, bf and rf lekythoi, also bf cups and 2 plastic vases in the form of korai), including a large (0.39m h.) rf lekythos by the Pan Painter showing Hermes preparing to kill Argos. There is also a bronze vessel and an iron exaleiptron.

The E part of the plot was not used for burials: here a walled, open area 21m x 5.5m was uncovered, which seems to have been used to hold waste items (undecorated and bg sherds of domestic and finewares including much bg and W Slope, lamps, figurine fragments, burnt clay, small metal items, loomweights and animal bone). This was probably originally a section of road serving the cemetery which was closed off after it went out of use. Thasian stamped amphora handles from this area include workshop names such as  $\Delta HMAK\Lambda H\Sigma$  and XAIPEAS, and names on sealings include BIQNOS, KANNIMAXOY, MIKI $\Omega$ NO $\Sigma$  and TIMAINETOY. Debris from a potter's workshop includes wasters and kiln supports. The variety of material found in this area indicates that it was part of a larger residential/craft area which contained a potter's workshop. Pottery dates largely to the Hel period, with some of the 4<sup>th</sup> Ct BC: coins range from those of Philip II to those of Thessaloniki of 187-168 BC. The exterior wall of a large structure was traced for 21m on the E edge of the plot, next to the waste-disposal area: it continues into the neighbouring plot. The NW corner of this complex seems to consist of small rooms: it does not communicate with the wastedisposal area, but material from fill within the rooms is similar in date and type to that dumped (and there is a further coin of Thessaloniki of the same date). The destruction of the complex is dated to the 2<sup>nd</sup> half of the 1<sup>st</sup> Ct AD by a hoard of 5 coins within the destruction level in one room. While too little of the complex has been excavated to determine its function, it is surely the source of the dumped material. These are the first Hel finds from anc. Aphytos and confirm the view that the city centre was largely abandoned after the 4th Ct BC earthquake and activity thereafter moved outside the Cl city limits.

**Megali Kypsa.** Angelioforos (22/05/07) reports continuing excavation by I. Papangelos ( $10^{th}$  EBA) of a LRom farmstead (AR 53 [2006–2007], 68). This complex was built in the  $4^{th}$  Ct. AD and remained in use, at least in part, into the  $8^{th}$  Ct. It was abandoned suddenly in the  $8^{th}$  or  $9^{th}$  Ct, perhaps due to Arab incursions. Three wells were found, 2 by the shore and one (2.8m di.) in the central courtyard: this last contained the skeleton of a bear at d. 3.5m. Mosaic pavements dating to the  $4^{th}$ – $5^{th}$  Ct AD with geometric and plant motifs have been found in 2 rooms (occupying ca. 40% of their 5m x 3m area).

Mikris Volvis. A. Lioutas and S. Kotsas (16th EPCA) report (AEMTh 20 [2006], 241–48) on rescue excavation within a Neo settlement on a hill 1.5km from the mod. village. In the E part of the excavation area was a L antique cemetery: W of this were pits containing Neo material, principally pottery. The estimated settlement area is ca. 200m x 150m. Only the small sector threatened by road construction was excavated (N-NE parts). 138 pits were located (0.5-1.8 m di. and 0.3-1.2 m d... one stonelined and another 2 possibly to be interpreted as house basements), scattered over the entire excavation area. Remains of 3 houses were also revealed. The function of the pits is hard to determine: finds come mostly from fill introduced when they were closed and they cannot be connected with any particular house. The houses were built with wooden frames coated in clay: 2 had hearths with stone frames. A tomb containing a single extended inhumation, but no goods, was located in the centre of the excavation area and is presumed to be contemporary with the settlement. Numerous sherds were collected from the settlement fills, mostly local plainwares (poorly fired, red or red-brown clay with limestone inclusions), but with some black

burnished ware: there was no painted pottery (although a few sherds with incised decoration). The best preserved pottery comes from the pits: the most common shapes are bowls and flat-bottomed basins, chytrae, cups, round-bodied closed vessels and pithoid jars: conical bowls are rarer. Small finds are mostly stone tools: other finds include stone axes, pestles and millstones with traces of use, a few figurines, 2 clay seals and 3 stone pendants (1 anthropoid and the other 2 geometric in design). The closest parallels for the pottery date to the earlier Neo phases.

The L antique cemetery contained 113 tombs arranged along common N-S walls, plus the stone foundations of a building of the same period. There were 98 cist tombs, 14 pits and a vaulted tomb (3.1 m x 3 m, 1.6 m h.), with a step down into the chamber). The vaulted tomb is built of flat stone sections set horizontally and cemented with lime mortar: the interior has a 0.01m thick layer of white plaster. All the burials in the cemetery were inhumations: 61 contained goods such as plainware oinochoai, lamps, ladles and bowls. Metalwork comprised silver and bronze coins and earrings, bronze rings, gold sheet, and glass, bronze and faience beads. Architectural remains and pottery contemporary with the cemetery were found during fieldwalking on a low hill N of the cemetery.

### EASTERN MACEDONIA

Nomos of Serres (28<sup>th</sup> EPCA: 12<sup>th</sup> EBA)

E. Kambouroglou (EPSVE) and K. Peristeri (Director, 28<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 209–16) on continuing survey to locate flint quarries and processing sites (*AR* 52 [2005–2006], 94), with the location of 7 new sites in the areas of **Therma**, **Choumniko** and **Langadi**. These bring the total of sites located by the survey to 12.

Argilos. D. Malamidou (28th EPCA) reports (AEMTh 20 [2006], 190-93) on rescue excavation in the E cemetery (site of Kallithea). A group of 4 tombs was found associated with an E-W retaining wall (finished only on the S side) which formed part of the landscaping of the cemetery into distinct levels. On the upper level was a tile-covered cremation containing an Attic squat lekythos of the last quarter of the 5th Ct BC, part of a Silen figurine, a silver coin of Argilos, an iron knife, a silver pin and bronze beads. In the fill over the tiles were a bronze strigil and a figurine of a papasilenus datable ca. 480-450. On the lower level was a tile grave without goods and 2 monolithic sarcophagi set parallel to each other within a 3m x 2m enclosure. Over the fill of these last tombs was a round limestone base, probably for the inscribed stele found in fragments S of the tomb. The text (in Ionic dialect), reproduced only in mod. Gr, reads: 'Stand at this stele and inscription, the grave marker to Philtis of Samos, [who died] far from his home soil'. The N sarcophagus contained 2 burials, with a local LAr Ionianising amphora set at the feet, an Attic lekythos (2nd quarter of the 5<sup>th</sup> Ct), an iron object set mid-body and a bronze bead. The 2<sup>nd</sup>, slightly larger sarcophagus, for the burial of a youth, had on the interior a relief stone pillow and rounded angle ornament, and contained a plainware amphora and an olpe placed at the feet, and a bronze strigil in the left hand. In the fill around and above the sarcophagi were sherds of an Attic lekythos (perhaps circle of the Diosphos Painter, ca. 470) and a rf lekythos with a Nike (perhaps circle of the Bowdoin Painter, ca. 475-470). E of the enclosure was a small pyre, perhaps for offerings, with a collection of small vases. From the surface of

a 2<sup>nd</sup> stone foundation, in the W part of the excavation area, came sherds of an Attic bf amphora depicting a procession of gods (ca. 530 onwards).

Amphipolis. K. Peristeri, E. Zografou and K. Darakis (28th EPCA) report (AEMTh 20 [2006], 165-74) on rescue excavation along the line of the road from the Byz tower at the NW entrance to mod. Amphipolis. Antiquities were found in 7 locations. (1) Part of a Hel house lay between the tower and the entrance to the village: part of a large paved courtyard was found. Coins and pottery (bg and rf skyphoi, kantharoi, a plate, lamp and figurines) from the floor and destruction level date to the 3<sup>rd</sup> Ct BC. (2) Halfway along the new road, a complex of 9 interconnecting rooms with earth floors leading into a courtyard (all under a destruction level) dates to the Hel period (coins and pottery of the 3<sup>rd</sup>-2<sup>nd</sup> Ct BC). The layout, and large quantity of pithos and (Thasian) amphora sherds in the destruction level, suggest a storage function. Pottery includes W Slope wares, lamps, plates, skyphoi, kantharoi and a few terracotta figurines. A large number of loomweights and spindle-whorls, iron spearheads and hooks relate to everyday activities. (3) A small section of a further construction was located exactly between these 2 sites, with finds similar to those from site (2). (4-7) A few metres further on towards the tower was a series of 4 rainwater cisterns, cut into the limestone and lined with waterproof cement. All produced a large quantity of pottery and figurines of the 3<sup>rd</sup> Ct BC (Thasian amphorae, fishplates, bg skyphoi, kantharoi with W Slope decoration, etc.). cannot at present be connected with any particular site.

E. Zografou (28<sup>th</sup> EPCA) reports (AEMTh 20 [2006], 175–84) the location by illegal excavation of a Macedonian tomb on a hill close to the junction of the national roads from Thessaloniki to Kavala and Thessaloniki to Drama in the area of **Amphipolis** (AR 53 [2006–2007], 70). The tomb had previously been robbed and may also have been entered in Rom times (noting 2 lamps in the prothalamos).

The tomb had a main chamber (3.08m x 3.05m), a prothalamos (3.08m x 1.58m) with entrance from the E and a vaulted roof: the 6m l. dromos was cut into bedrock. The masonry is isodomic, of local limestone: the façade is plain. Subsequent to the initial construction (when the main entrance was walled up as usual), a rectangular, probably roofed, stone structure was erected in front of the prothalamos, halving the length of the dromos. The roof was supported on 4 sections of reused Doric architrave from an unknown monument: on the white plaster covering it were traces of a red band and there were also traces of red applied directly to the limestone. The only indication of internal decoration in the tomb is the imitation of isodomic masonry in red paint on the W wall of the prothalamos (with an M incised on the corresponding tympanum). Human bone (plus a small red-slip flask) was found across the prothalamos, especially on the N side, probably displaced by tomb robbers. In the main chamber were 2 sarcophagi against the N and S walls and a small ossuary against the W, which contained the burial of an infant younger than 2.5 years. Their contents had been removed and scattered over the floor within a ca. 0.3m d. level with localized traces of burning. At least 6 skeletons (male and female) were found. and while the sequence of burials cannot be reconstructed, the roofed dromos structure may have been built to facilitate reuse of the tomb. Surviving grave goods indicate use from the E3<sup>rd</sup>-M2<sup>nd</sup> Ct BC. A little gold jewellery survives - bands, leaves and acorns - and, from the child burial, a pair of small earrings with lion-head terminals and a miniature gold coin for the deceased's mouth. Notable among the pottery is the range of pyxides, decorated and plain, and tear-bottles;  $3 L3^{rd}$ – $M2^{nd}$  Ct BC lamps were found on the threshold and by 2 crania outside the N sarcophagus, with further vessels placed here and on the threshold of the prothalamos. Numerous iron objects include miniature keys, strigils, blades and spearheads, and surviving bronze includes bands probably from a chest: bone items included 7 beads. Pottery found outside the built dromos included the most characteristic  $2^{nd}$  Ct forms (notably a large Megarian bowl).

Ennea Odoi. D. Malamidou (28<sup>th</sup> EPCA) reports (AEMTh 20 [2006], 186–90) on rescue excavation of Ar tombs over a wide area between hill 133 and Alepotrypa, which lead her to support the location of Ennea Odoi on hill 133. Ar tombs from the area of the Kasta hill are presented, most previously reported (see AR 51 [2004–2005], 81). At Mesolakkia, a 3<sup>rd</sup> cist grave is added to the 2 reported in AR 53 ([2006–2007], 70). This female burial contained 2 small bronze figure-of-8 fibulae at shoulder level, plus a larger one at the left shoulder, silver spirals in the hair, an iron pin, bronze ring, a biconical bronze bead at the throat, 2 bronze bracelets (one on each arm), and a plainware oinochoe and Phari type skyphos.

Radiocarbon dating of the wooden bridge of Amphipolis (Y. Maniatis, Y. Facorellis, D. Malamidou and Ch. Koukouli-Chrysanthaki, *Archaeometry* [forthcoming]) indicates a construction phase in the L6<sup>th</sup> Ct BC (550–480 BC), implying the presence of a road leading into the area of hill 133.

Domiros. K. Peristeri, E. Zografou and Th. Salonikios (28th EPCA) report (AEMTh 20 [2006], 229-36) on rescue excavation of a LAr-Hel cemetery and a LNeo clay extraction area. 39 tombs (18 cists, 18 pits, 2 tile graves and one exposed burial) were found in 3 groups. Group 1 (at Ydatodexameni): 4 cists of limestone slabs, 2 of which contained grave goods, the other 2 having been disturbed. A L6<sup>th</sup>-E5<sup>th</sup> Ct date is proposed on the basis of a Cor exaleiptron and 3 bronze bow fibulae. Group 2 (at Ydatopyrgos): a dense concentration of 20 tombs (2 almost entirely destroyed, 16 pits, of which 6 have tile covers, and 6 cists), of which 7 contained goods. These date from the L6<sup>th</sup>-E5<sup>th</sup> (based on a Cor exaleiptron) to the L4<sup>th</sup>-3<sup>th</sup> Ct BC (11 bronze coins in tomb 10): other grave goods noted are a hoard of 19 bronze coins of Philip II, a silver obol of the Alexander III type issued by Amphipolis, a bronze bow fibula, 2 alabastra and a necklace of glass beads. Group 3 (Melagia site): 16 tombs (10 cists, 5 pits and one open burial) constructed in the same way as the previous groups. Two were disturbed, but only 3 had no goods. The richest tomb, 23, was the burial of a young woman containing a squat lekythos, 5 pairs of silver and bronze earrings, 6 bronze fibulae, a silver ring with gold leaf decoration on the bezel, a necklace of bone beads, a bronze ear-pick and tweezers, and a terracotta female protome, all dating to the M4th Ct. One cist tomb contained the burial of a youth and a child; 3 silver Thasian coins were mingled with the bones of the youth, dating this burial to the L5<sup>th</sup> Ct, ca. 50 years before that of the child, which was accompanied by a squat lekythos, bronze bracelets and a ring, and silver earrings. One disturbed cist tomb (M4th Ct) contained gold earrings with lion head terminals, parts of a gilded wreath, a bronze ring, a coin of Philip II and a squat lekythos. Other goods from this area (all M4th Ct) include: plainware vessels (amphoriskos, lamp, oinochoe), squat lekythoi, a bg kantharos and a tear-bottle. The 2 LAr graves contained bronze bow fibulae. Thereafter there seems to be gap in use of the area through the 5th Ct, although only a fraction of the cemetery has been excavated. The location of the related settlement is unknown. One isolated child burial without goods was found located between groups 1 and 2.

At Melagia, 5 pits from clay extraction were investigated: LNeo pottery collected included incised and black-on-red ware. The chance find of a funerary stele of the 3<sup>rd</sup> quarter of the 1<sup>st</sup> Ct AD indicates later activity in the area.

Myrini. K. Peristeri, E. Zografou and Th. Salonikios (28<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 236–37) on rescue excavation of part of a PH settlement. Remains are very fragmentary: a 2.1m *di*. pit produced very little plain pottery, stone tools and shell. 20m from the pit was a LNeo occupation layer (storage and cooking vessels and burnished tableware, stone tools, bone and shell) with a little EBA pottery in the upper part. A posthole to the W contained burnt storage vessel sherds; to the E were shallow pits with stones. A small clay oven was found close by.

Alistratis (Cave of Orpheus). Apogevmatini (07/09/07) cites a report by G. Kontaxi (Ministry of Culture) of the discovery during excavation in the cave of household and storage pottery, stone tools and a floor level with traces of burning plus a hearth, all indicating use of the cave during the Neo and EH periods.

**Promachon-Topolnica**. K. Trantalidou and G. Gioni (EPSVE) report (*AEMTh* 20 [2006], 217–28) on analysis of the bucrania from the large underground chamber (Neo settlement, phase II).

Nomos of Kavala (18<sup>th</sup> EPCA: 12<sup>th</sup> EBA)

Via Egnatia. G. Karadedos and M. Nikolaidou-Patera (Aristotelian University, Thessaloniki) report (AEMTh 20 [2006], 139–50) on excavation in 2 locations, SE of the Rom arch at Philippoi and at Sravanaki. This revealed the anc. road fabric of the Via Egnatia and kerb stones which indicate that the road was ca. 5m w. At the latter site, remains of later walling was found across the road: S of the road here were found a marble larnax and a stele depicting a horseman and with the Latin funerary inscription of one Valerius Crescens.

Eleutherotypia (05/03/08) notes a report by D. Kaimari (Aristotelian University, Thessaloniki), in association with G. Karadedos, O. Georgoula and P. Patias, on the use of satellite technology to trace the route of the Via Egnatia and to identify likely archaeological sites along it, which were then tested with trial trenches. The 45km stretch from Amphipolis to Philippoi was traced in detail and 300 new sites identified along the length of the road.

**Dikili Tash.** Ch. Koukouli-Chrysanthaki (ASA) reports (*Ergon* [2007], 77) continuing study of finds from the Franco-Gr excavations and conservation of the Neo architectural remains, including renewal of the roof over Neo houses 1 and 2.

G. Kourtesi-Filippaki (*AEMTh* 20 [2006], 115–26) reports on her study of evidence for the chipped stone industry from the excavations of 1986–2001.

**Philippoi**. S. Provost (EFA/Nancy), G. Tirologos (ISTA-Besançon) and M. Nikolaïdou-Patera (18<sup>th</sup> EPCA) report on a 2<sup>nd</sup> season of survey.

Attention focused on the organization of the agricultural territory of the colony of Philippoi, with priority given to examination of areas where ditches, which might relate to the boundaries of the anc. land allotments, are visible on aerial photographs and old maps. The objective of the campaign was to verify the nature of these traces.

Cleaning of the Kiemer arch, built in the aftermath of the battle of 42 BC on the Via Egnatia, helped to define its size and orientation. Surface prospection in fields near the arch and in the gap separating them from the road confirms the presence of the Via Egnatia in the direction expected, with a deviation of ca. 45° E of the arch. A trench 15m x 1m, across the theoretical route of the road, showed that the stratigraphy consisted of a simple surface of stones laid flat and set into a ca. 0.6m d. layer of sandy clay. This surface may have been bounded by a stone kerb. Cultivation has destroyed the upper layers of paving, above the anc. surface, and possibly drainage ditches to the sides. The section of surface unearthed was ca. 7.4m, or 20 Rom feet, although this is not necessarily indicative of the width of the road surface: compare the width of the passage of the Kiemer arch (5.4m).

The earth rampart raised by the Republicans during the battle of 42 BC has long been identified via an elevation associated with a gap between the Mound of Alexander and around the Kiemer arch, which is detectable on aerial photographs. The structure stops 20m S of its theoretical intersection with the road and returns at right angles to the SE; it then runs parallel to the track that is detectable for 100 m. Three trenches showed the route of these Republican fortifications and confirmed the existence of a buried structure. A Vshaped gap was identified 2.6m from the surface and up to 2.7m w. The southernmost trench showed a significant difference in stratigraphy on the E side of the ditch, with a thick (0.4-0.5m)layer of clay and coarse white sand extending for some 2.5-3m. These are probably the remains of the raised land mentioned in the sources, and perhaps a grass rampart raised by Republican troops in 42 BC.

E of the city, the course of the Via Egnatia is known from a section of the old national road from Drama to Kavala. For nearly a decade it was assumed to be a cadastral axis. In 2007 this proposition was tested. The result is a first distribution map of remains that may relate to the existence of an anc. cadastral system.

Ch. Koukouli-Chrysanthaki and G. Karadedos report (AEMTh 20 [2006], 61–74, 99–114) on excavation in the **theatre** in 2002–2004 and 2005. Excavation covered the area of building in the S stoa and the paved square S of the theatre which post-dated the abandonment of the theatre as a place of performance. Three major building phases were confirmed in this area. S of the paved square, there were no traces of anc. or Rom buildings or roads, nor do the slight traces of ECh buildings imply planned development of this area. Further excavation and the results of ongoing geophysical survey will confirm whether or not the area was retained as open space.

In the central area of the S stoa of the skene building, inside the krepis, excavation in 2003 located a rock-cut sewer channel which ran beneath the krepis and the paved square S of the theatre and into a branch of the city's main sewer network.

Excavation in from the E edge of the hyposkenion towards the orchestra aimed to locate the foundation of the proskenion. At the E edge of the hyposkenion, a floor level related to the late use of the theatre as an arena was uncovered, and beneath that an extensive area of the earth floor linked to the Rom phase I construction. No evidence for the proskenion foundation was discovered, supporting the hypothesis that this was a wooden construction to which 4 postholes found in a square arrangement close to the E parodos might relate. Remains of the previous, LCI-Hel wooden skene building were also revealed: a corner stone with a cutting for a posthole was covered by the Rom phase I floor, and related to it was a beaten earth floor. No further trace of this phase remains, apart from a small part of the marble ramp of the E parodos.

Excavation beneath the orchestra revealed a rectangular rock-cut underground chamber (probably with a simple wooden roof) linked to the use of the theatre as an arena: this connects with the underground passage long recognized as the route by which wild animals were brought into the arena for spectacles, the end of which was presumably closed with grills. The rectangular space was divided into 3 parts: the central chamber was the largest and its floor was set lower (within it were a lead plaque and part of a statue of an eros on a dolphin which probably belonged to the sculptural decoration of the skene). Four cuttings on the floor held supports for a tower-like wooden structure, likely the support for a mechanism to raise animals into the arena. Three levels of wooden flooring are noted, to facilitate the safe circulation of men (including those working the hoist) and animals, and traces of wooden steps indicate ladders linking the levels. The construction of the underground chambers cut the drainage system of the Rom phase 1 orchestra. On either side of the chamber, cuttings in the arena floor held large posts which may have been supports for tightropes or other such acrobatic props.

The rainwater drains of the orchestra were a further target of research (in the hope of reusing them to obviate current drainage problems). The Rom phase 1 drainage channel was traced in its entirety and an earlier rock-cut channel, just inside the same line, probably related to the smaller LCl-Hel orchestra. In Rom phase 2, the section by the skene was narrowed by the construction of a limestone wall round the arena, with a wooden fence above (which continued round in front of the first row of seating in the koilon). Low openings in this boundary wall closed with iron grills allowed the passage of men and animals into the arena. Further modification accompanied a remodelling of the arena (Rom phase 3). Possible models for the transformation of the theatre into an arena are fully discussed.

Excavation in the NW part of the adjunct building revealed that it was symmetrical and axially aligned with the theatre. The covered perimeter walkway also had in the NW part spaces corresponding to those found in the NE, wedge-shaped rooms with beaten earth floors and connecting doors. This walkway connected with the koilon via 3 radial passages. New examples of the rock-cut reliefs belonging to the shrines located on the SE foothills of the city acropolis were discovered NW of the theatre and close to the adjunct buildings. Of known iconographical types, they include a female kourotrophos which is only the 2<sup>nd</sup> of its type discovered here. The construction of the adjunct building which extended the theatre complex N must have led to the destruction of many reliefs, since fragments are built into the walkway wall and some are almost in contact with the exterior of this wall. Excavation of the area by the exterior wall of the adjunct building revealed ECh and Byz houses which extend N and NW of it. Waterproof cement on the floor of one room in the NW part of the perimeter walkway, plus a small water channel, reveal that this space was used as a cistern. Destruction levels in this area, as for the houses S of the theatre and inside the E peribolos, date to the E7th Ct AD.

W of the W retaining wall, excavation began to locate the LCl retaining wall, which was of isodomic construction with rubble fill

G. Karadedos and Ch. Koukouli-Chrysanthaki (AEMTh 20 [2006], 75–98) report on work undertaken to conserve the site and present it to the public.

Apogevmatini (13/03/08) and Ethnos tis Kyriakis (16/03/08) cite a report by G. Gounaris (Aristotelian University of Thessaloniki) of a round structure (25m di.) and a large insula of shops. Part of the S range of shops and workshops was excavated, including a glass-worker's shop in the SW. Rooms

in the SE part were used as workshops and for storage: in one room 2 millstones were found. The excavated part of the complex likely dates to the reign of Justinian I (527–565 AD): its first phase, however, dates to the 4<sup>th</sup> Ct AD, with sections of geometric-patterned mosaic pavement preserved at a lower level. Its full dimensions are not yet known. Further E lay the larger round structure which seems to be older.

**E cemetery.** M. Nikolaidou, K. Amoiridou and I. Patera (18<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 127–37) on rescue excavation conducted in 2006 on the land of V. Lazaridis in Krinides. Construction work initially uncovered an undisturbed Hel cist tomb, made of well-cut marble slabs: inside was a large marble ossuary with lid and the remaining area of the tomb contained 5 pyxides and 5 tear-bottles. Inside the ossuary, the cremated bones must have been wrapped in cloth: 4 gold olive leaves and one trefoil leaf survive, also a lamp and a pyxis. The tomb date is notable in a mostly Rom–ECh cemetery. Subsequent rescue excavation revealed 50 tombs of several periods, but with no evidence of sequence or planning.

The majority (38) are Rom (M1st-E2nd Ct AD): almost all are inhumations in cist and tile graves, with 2 cases of primary cremation (tombs 41 and 42). Tile graves (9) contain no goods and are mostly child burials. Cist graves (22) are mostly simple pits with unworked stone covers (there are 2 instances of reused inscribed grave stelae and one of a reused relief pediment also from a stele). The most significant of this group are: tomb 23 (adult male) with 6 bronze coins (4 of Philippoi and 2 of Trajan); tomb 35 (glass ring, bronze coin of Philippoi and a sestertius of Trajan); tomb 45 (bone and bronze jewellery, plate, lamp, 11 bronze coins on the body's chest – 10 of Philippoi, one of Domitian - and 2 silver denarii of Trajan). Most of the remaining cists have no goods, or at most one or 2 coins or a lamp (including one from the workshop of FORTIS). In tomb 20, a coin of Trajan lay beneath the skeleton's spine, but the grave also contained a coin of Thessaloniki dating 187-168 BC. In all cases, the head was raised higher than the feet, sometimes using a stone. Other Rom burials include the enchytrismos of a child, and 2 wood and 3 stone-lined cists. Among these cists, only the stone-lined tomb 38 had rich goods, including 11 coins which date the burial to the M1st Ct AD. Tomb 15 held an apparently simultaneous double burial in a large built cist with dressed marble blocks in secondary use, which contained 2 3<sup>rd</sup> Ct AD glass vessels. All along the S side of this tomb were skeletal remains from an earlier burial pushed aside: this burial had 2 tear-bottles, bronze jewellery and, under the later bodies, gold leaves and sheet, all of the 2<sup>nd</sup> half of the 2<sup>nd</sup> Ct BC.

Two further Hel tombs were found: one child burial had 3 terracotta figurines, a bg tear-bottle of the 1st half of the 2nd Ct BC and 3 terracotta fruits. The other, tomb 21, was particularly rich. A large marble cist tomb (2.1m x 0.78m) with monolithic sides and a large cover (2.45m x 1.28m x 0.13m) contained the burial of a young girl with a large collection of cosmetic equipment in pottery, silver, bone, bronze and glass. These included bronze implements, a bronze mirror with the depiction of a Nereid, 2 figurines of hermaphrodites, a large collection of jewellery (earrings, rings, diadems, etc.), the gold coin from the mouth of the deceased and rich gold ornament with stone inlay probably from her dress or from a large necklace in 3 tiers. Her dress had gold embroidery in the chest area (a garland and Herakles knot) and gold ornament attached elsewhere too. The finds date to the 1st half of the 2nd Ct BC. In the fill around the earlier graves were an inscribed marble funerary stele, small vessels, lamps, pottery and bronze coins mainly of Rom but also Hel date. It is likely that more Hel burials were destroyed by Rom activity.

Among the Hel and Rom graves were 4 pits of which 2 each contained a single vessel (similar sherds were found in the fill between later graves). These date to the LNeo and are currently unique in E Macedonia.

**Karyanis (Kavala).** Ethnos (15/03/09) cites P. Malama's (18<sup>th</sup> EPCA) report of the discovery by the coast of a rectangular building of uncertain (but probably public) function, dating to the end of the 6<sup>th</sup> Ct BC.

**Pantanassa Philippiados**. A new site guide has been published: P. Vokotopoulos, Παντάνασσα Φιλιππιάδος (Athens, ASA, 2007).

**Lithochori.** V. Poulios and D.-D. Mengidis (18<sup>th</sup> EPCA) report (*AEMTh* 20 [2006], 151–63) on rescue excavation for the construction of the Egnatia Odos. The NW part of a large courtyard complex was found, the NE part having been destroyed previously by a rural road. On the SE side was a range of 5 rooms, the central 3 of which had lime-plastered floors: in the central, largest room were probable settings for storage vessels, and in room II next to it, part of an iron bridle and rings. Pottery and coins from the destruction level date the abandonment of this range in the M4<sup>th</sup> Ct AD, with its construction put at the end of the 1<sup>st</sup>-E2<sup>nd</sup> Ct AD. A marble column base in the NE corner of the excavation area likely belonged to a peristyle court. The complex is likely a rural residence, although a link with the neighbouring Via Egnatia is possible.

The area NW of the building served as a cemetery from the 5<sup>th</sup> Ct BC-4<sup>th</sup> Ct AD, with a gap in use from the 3<sup>rd</sup> Ct BC-1<sup>st</sup> Ct AD. From the 2<sup>nd</sup> Ct AD onwards, it was organized into 2 areas. In 2006, 20 tombs were excavated, containing 14 human burials (of which 5 are cremations), 4 horses and 2 horse plus human. In the earliest burial (tomb 21), the skeleton was laid prone on a bed of stones, oriented SW-NE and covered by a cairn: offerings consisted of a plainware amphoriskos and 2 silver obols of Abdera (ca. 500–425). Two tombs of the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct were side by side: in both cases the skeleton was laid on the ground and covered with a cairn, and as offerings one had a local skyphos containing 4 bronze coins of Orthagoreia, and the other a rf palmette, a bg skyphos and sherds of a kantharos. an undecorated lamp and 38 coins of Orthagoreia (23 held in the hands and the others placed in the skyphos).

37m NW of the W corner of the building lay the upper part of a horse-drawn vehicle (probably 2-wheeled) preserving all its attachments in bronze and iron. The upper part of the vehicle was decorated with a bronze relief. The central part of this relief depicted a Doric frieze (4 triglyphs and 3 metopes), with at each end a dolphin and a female head, the entire frieze being supported on 2 Doric columns. Each metope imitates the façade of a Doric naiskos with 2 columns and a pediment or arched roof, and relief depictions of a labour of Herakles (the Cerynaean hind, the Erymantheian boar and the Stymphalian birds). It is not yet clear whether this was a chariot or other form of vehicle. Slightly after the burial, a SW-NE wall was built, running over its SE corner but causing no disturbance. It marked the SE border of the planned cemetery where the horse burials were made: this was probably a complete enclosure wall, now lost or not located. Four intact horse burials were found in 2006, plus 2 more disturbed examples. The animals were stallions, mature cavalry horses, and, in a few cases, horse trappings were preserved. Two tombs (10 and 15) contained human and horse skeletons. In tomb 10 (Fig. 80), the horse was buried with full trappings in bronze and iron, with an iron sword on one side and the burial of a 40-50 year-old man on the other (placed prone and parallel to the horse): the man stood ca.

1.71m h. and was in robust health with no signs of trauma. In tomb 15, the presence of horse trappings and the arrangement and physical condition of the human, a 30–40 year old male, were similar. Outside the tombs, but in the general area of the vehicle and horse burials, were additional trappings and iron spearheads. Five further human burials were made NW of the enclosure wall: 2 contained coins of the 2<sup>nd</sup> quarter of the 2<sup>nd</sup> ruarter of the 3<sup>rd</sup> Ct AD and the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct AD (the latest burial yet found), 2 had no offerings and, in general, offerings consisted of a little pottery and, in one case, silver and glass jewellery. In cases where horses were buried singly, it is as yet unclear to which human burial they may belong.

A 2<sup>nd</sup> enclosure wall, built not long after the first, demarcated the 2<sup>nd</sup> cemetery area which contained only human burials. A large, near-semicircular peribolos was built beside the middle of this wall (internal di. 7.2m); in the centre of the enclosed area was the cremation tomb 3, which was spread out over it. The burial contained an iron chair (okladias), with 4 bronze lion heads and 2 simple bronze hemispheres on the upper terminals of the frame, and a bronze plastic vessel with a bust of Dionysos. Nearby, but outside the burial, were a red slip bowl, a bronze strigil, a handmade miniature vessel and an unknown bronze. Next to this peribolos was a smaller one (internal di. 0.1m) with a marble marker slab at the SE beside a niche for offerings. In the centre was a cremation (tomb 4) with part of a silver bracelet, 3 ivory pins and 3 silver denarii, a silver-plated denarius and 7 bronze coins, the latest of which (issued by a Gr city under Elagabalus) dates the burial to the 1<sup>st</sup> quarter of the 3<sup>rd</sup> Ct AD. The 5 burials outside the periboloi are all but one (a child grave) datable by coin evidence to the 3<sup>rd</sup> quarter of the 2<sup>nd</sup> Ct AD or the 2<sup>th</sup> quarter of the 2<sup>nd</sup>-1<sup>st</sup> quarter of the 3rd Ct. This part of the cemetery had 3 pits and 5 pithoi

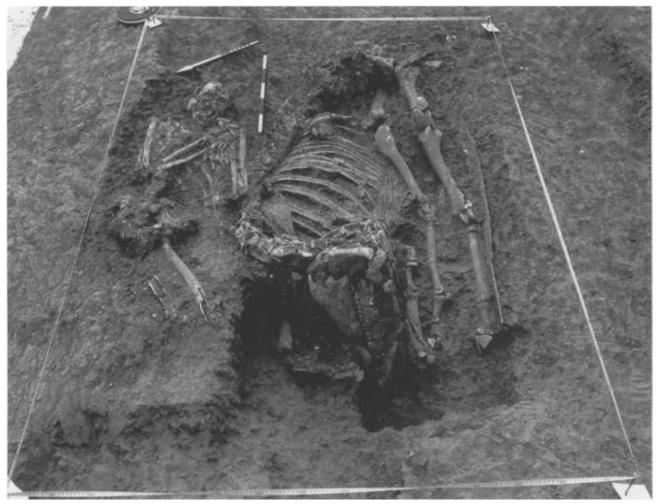
Apart from the 3 Cl and one 4<sup>th</sup> Ct AD burials, systematic use of the 2 burial areas dates from the L1<sup>st</sup> or E2<sup>nd</sup> Ct-1<sup>st</sup> quarter of the 3<sup>rd</sup> Ct AD, with the vehicle burial in the 2<sup>nd</sup> half of the 1<sup>st</sup> Ct. The cemetery is unlikely to have served the neighbouring house exclusively, but probably belonged to a community identified on a nearby hill. A few Thracian or PH sherds were found scattered across the area, indicating settlement in the vicinity: one Byz coin and a ring were also found. Ot burials were made in the neighbouring plot SW of the excavation area.

Kathimerini (12/06/08) reports plans to make the site accessible to visitors with finds displayed in situ. It quotes the 17<sup>th</sup> EPCA's report of its work in 2007 as stating that a 2<sup>nd</sup> vehicle has been discovered along with the horses that pulled it, with horse trappings and weapons (spearheads, iron bridles, a sword, etc.) and a small bronze shield at the rear of the horse.

# THASOS

(18th EPCA: 12th EBA)

Kastro Limenarion (Kambos). To Vima, Kathimerini and Ethnos (24/05/2008) all report the discovery by S. Papadopoulos (18th EPCA/Thrace) of rural dwellings and wine making facilities used from the Hel to LByz in this mountainous region (ca. 500masl). The most significant finds were monumental wine presses (one example exceeded 1m h.), of which 7–8 have been discovered, some located in a central point in the vineyard and others within the stone-built periboloi of residences. They may have been shared facilities. Complexes included the central area of the treading-floor, the collection vessel placed beneath and the hollow to drain off the must: the entire interior is lined with a waterproof mortar.



80. Lithochori: horse burial with chariot, tomb 10

### **Thasos**

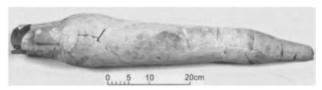
Area N of the Artemision. A. Muller (EFA/ Lille 3), F. Blondé (EFA/CNRS) and S. Dadaki (12<sup>th</sup> EBA) report on a study season following the 2006 excavations. The identification of Tunisian amphorae (Fig. 81) and a few sherds of Egyptian amphorae enhance the picture of Thasian external relations during EByz times. Many imprecisely datable forms existed around the last quarter of the 6<sup>th</sup> and the 1<sup>st</sup> quarter of the 7<sup>th</sup> Ct AD: the abundant material of the last phase of the villa will make a significant contribution to our knowledge of EByz ceramics.

The resumption of excavation in 2006 provided the opportunity to locate more precisely the 'monastery' unearthed in 1911 N of the Artemision. A plan of all known parts of this 'monastery', on the same orientation as the nearby EByz villa, was made on the basis of old photographs and visible remains. Identification of the building, which currently rests on the presence of a church and perhaps also on the fact that the land was a dependency of the Pantocrator of Athos, might be firmly established after further fieldwork.

The macellum. J.-Y. Marc (EFA/Strasbourg 2) reports on continuing excavation of areas between the courtyard of the macellum and the court of the hundred flagstones, and on architectural analysis of the remains (Figs 82, 83). The same

destruction layer was found in all areas explored, consisting of collapsed mud-brick mixed with elements of roofing. Excavation of the underlying layers confirms that the building housed workshops, at least during the most recent phases, mostly for glass and metal working. An important hoard of 22 denarii from the Republican era, buried shortly after the date of the last strike (48 BC, i.e. at the time of the Battle of Pharsala) was found in room P54. This discovery significantly backdates our knowledge of denarius circulation in N Greece.

It is now established that the SW building showed the same overall plan and internal organization from the beginning of the Hel period until the end of occupation in the E7<sup>th</sup> Ct AD. The general lines of the monumental centre of Thasos were laid out in the 1<sup>st</sup> half of the 3<sup>rd</sup> Ct BC, if not earlier: this involved not only the agora, but in a unified and contemporary conception, a



81. Thasos: the Artemision, Tunisian amphora 6<sup>th</sup>-7<sup>th</sup> Ct AD



82. Thasos: the Macellum, view from SW

monumental square to the S dedicated to economic activity. The ambition of this programme, very close to the major urban development of the metropoleis of Asia Minor, is now confirmed.

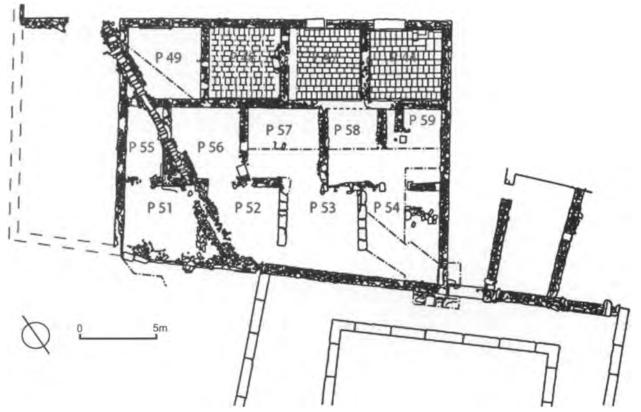
A special study was made of the different types of decoration in the complex – painted surfaces, cladding, *opus sectile* and mosaic. Just over 700 fragments of marble are now known, representing only a small proportion of the surface wall decoration between the Ionic passage and the passage leading to the courtyard of the hundred flagstones. Study proceeded room by room: a single room of P45, the centre of the SE wing of the macellum, produced a batch of almost 100 fragments of marble, remarkable for their extreme diversity (13 varieties in all).

Typological study permits the distinction of several types which relate to 2 different decorative sequences. In parallel, study of ceramics and industrial equipment continued. Ovenwares predominate, reflecting either culinary activity or a craft requiring such products; some such craft may also explain the abundant presence of an unparalleled type of pan or basin with a circular base and an oval opening. Large storage jars, pithoi or dolia, were scarce. A comprehensive inventory of equipment related to production was also made: this consisted mostly of artefacts from the production of glass and bronze. Iron working is poorly represented; silver production is also present.

**The rampart**. Y. Grandjean and M. Wurch-Kozelj (EFA) report on the 2007 study season.

Study of blocks from a set of 3 rooms which defended the access door to the sea, SW of the closed port, continued. Many fragments from a 2<sup>nd</sup> arrow slot were identified plus 2 fragments of a door lintel. Systematic survey of quarry marks covered a 55m section of wall E of the Herakles Gate. In total, 59 were registered, some contemporary with the construction of the wall in the E5<sup>th</sup> Ct BC, others related to renovation of the fortification in the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC.

**Epigraphy.** J. Fournier (EFA) and P. Hamon (EFA/Rouen) report (*AEMTh* 20 [2006], 51–60) on the publication of a new collection of Thasian inscriptions of the Cl–Rom periods discovered in excavations in the agora area since 2004. Three unpublished inscriptions are briefly discussed: a new fragment which joins the bottom of the 4<sup>th</sup> Ct BC Stele of the *Agathon*, a LHel decree honouring the benefactor Stilbon, and an inscription honouring Agrippa Postumus. The history of epigraphical research and publication on Thasos is reviewed.



83. Thasos: the Macellum, plan of SW wing

### **THRACE**

A new publication presents a valuable overview of evidence spanning the mod. Bulgarian-Gr border: H. Todorova, M. Stefanovich, G. Ivanov (eds), In the Steps of James Harvey Gaul 2. The Struma/Strymon River Valley in Prehistory: Proceedings of the International Symposium Strymon Praehistoricus. Kjustendil - Blagoevgrad (Bulgaria); Serres - Amphipolis (Greece) 27th September to 1st October 2004 (Sofia, Gerda Henkel Stiftung, 2007).

Nomos of Xanthe (19<sup>th</sup> EPCA: 12<sup>th</sup> EBA)

**Kimmeria**. Ethnos (08/03/08) cites the report of D. Makropoulou (Director, 15<sup>th</sup> EBA) of the discovery of a previously unknown ECh (probably 6<sup>th</sup> Ct AD) basilica (15m x 13m).

Nomos of Rhodope (19<sup>th</sup> EPCA: 15<sup>th</sup> EBA)

**Komotini.** Ethnos (08/03/08) cites the report of D. Makropoulou (Director, 15<sup>th</sup> EBA) of the discovery on Venizelos street of traces of a Byz cemetery and a cistern. Within the city, a previously unknown 14<sup>th</sup> Ct AD bath with a hypocaust has been located, the construction of which is perhaps to be attributed to Gazi Evrenos.

Maroneia. P. Tritsaroli (ASCSA, Wiener Laboratory) reports (AEMTh 20 [2006], 31-39) on analysis of the human skeletal remains from the extra-mural cemetery at ECh/Byz Maroneia (theatre area, Kabana region). The sample of 36 individuals included 32 adults of advanced age and 4 children (3 over the age of 4); different nutritional habits were traced according to age and sex. Attention focused on the discovery in tomb 5 (W parados of the theatre) of the cranium of a mature woman (over 30 years of age) which had been artificially deformed, probably by binding: the woman had also suffered multiple fractures of other bones. The tomb itself was archaeologically indistinguishable from the rest, but cranial deformation is not generally attested in Gr lands nor does it fit Ch tradition. The deceased may therefore have retained customs from her homeland perhaps adding evidence for the arrival of immigrants from the Caucasus or the Balkans (or W Europe) during the migration period (5th Ct AD onwards) as part of the mixed population of this major Byz trading centre.

Maroneia, Cave of Polyphemos. A. Panti and M. Myteletsis (EPSVE) report (AEMTh 20 [2006], 21-29) on excavation in the 2 main chambers as part of a programme to prepare the cave for public viewing. Two trenches were opened, revealing the same 4 strata in each. The top level, 1, dates to the L12<sup>th</sup>-13<sup>th</sup> Ct AD and contained a large quantity of glazed and plain pottery, plus animal bone (mainly bovine, implying use of the cave as a shelter). Prominent are cups and plates of Zeuxippos ware group II (including some probable local imitations, noting also many cups similar to those produced at Mikro Pisto in Rhodope), also many lamps. Two legible bronze coins among the 9 found are also of this date (one from Thessaloniki of Theodoros I Laskari [1204] and the other an imitation of Alexander III). Two more found outside the cave were a Latin imitation of Manuel Despotis (1204) from Thessaloniki and a Latin imitation of the small Constantinople type A. Level 2, disturbed and with traces of burning, contained LRom amphorae of types 4 and 7 (7<sup>th</sup> Ct AD), 1<sup>st</sup> Ct AD terra sigillata and some EH sherds. Level 3 was very slight, with a little Neo pottery in trench I and EH sherds in both trenches. Beneath a 0.1m lime crust, level 4 (ca. 0.05m thick) produced EBA akin to that of Sitagroi phase IV and a quantity of EH II, paralleled in Sitagroi phases Va and b (typical shapes include the kantharoid cup and prochous), also spindle-whorls and a serpentine axe. Two intrusive bg sherds of LAr kylikes represent the only evidence for use of the cave between EH II and the LRom period. In addition to excavation, a 3D scan of the cave interior is proposed.

Nomos of Evros (19<sup>th</sup> EPCA: 15<sup>th</sup> EBA)

Zoni (Mesimbria). P. Tsatsopoulou (19<sup>th</sup> EPCA) reviews (AEMTh 20 [2006], 1–7) the past 3 seasons of work in the territory of Zoni, identifying the main points of defence and discussing the potential identity of sites. W of the valley of Zoni, the valley of Petroton shows evidence of continuous occupation from the PH to the LRom period. This is the only area with a harbour capable of handling external trade. On the W side of the valley, the area of Mikros Elaionas (1,000masl) has traces of anc. settlement covering ca. 20 stremmata (rectangular buildings, roof tiles and Cl and Hel sherds). The site is protected to the W, NW and NE by 3 peaks which have evidence of fortification and sherds of Thracian pottery. Three main routes inland from the coastal plain around Zoni are discussed: a 200m l. stretch of wall ca. 3km from the sea is identified alongside one of them.

The plain around mod. Perama and Komaro is defended by 2 peak strongholds, both with traces of fortification and Hel and Thracian sherds. A 3<sup>rd</sup> peak defends the main route down to Zoni. The easternmost of these 3 peaks has direct visual connection with mod. Makri (anc. Sali), with traces of a PH peribolos.

A brief review of finds from Zoni itself, emphasizes the importance of the large collection of inscriptions in the Thracian language (2 on stone, plus a collection of 300 graffiti in Gr script on pottery from the Sanctuary of Apollo).

**Traianoupolis.** K. Tsouris presents (*DeltChAE* 28 [2007], 67–74) a detailed architectural study of the ruins of a small (11.25m x 6.15m) church. Its LByz (1<sup>st</sup> half of the 14th Ct AD) construction postdates the sack of 1206 and represents important evidence for continuing settlement at a time of major upheaval.

Tymbo Thyreas (Didymoteicho). Ethnos (02/08/07) cites the report of M. Koutsoumanis (19th EPCA) of the discovery of many PH tools dating ca. 5000-4500 BC during excavation of the mound, which lies ca. 8km from Didymoteicho. Seven stone axes, arrowheads, tens of other tools and pottery sherds are noted. Apogevmatini (06/02/08) reports the discovery, during excavation of the mound, of a Rom family tomb. This contained the cremations of a man and a woman, plus an animal (probably a horse), along with ceramic, glass, iron and bronze offerings, and a small amount of jewellery. Also found in the mound were Neo tools, such as axes and stone arrowheads. Finds are kept in Komotini Museum. Ethnos (15/03/08) further reports (with illustration) the discovery of a bronze lamp with a handle in the form of a swan's head from this area of later burials (2 pyres and the burial reported above are noted).

**Didymoteicho Kalé**. *Ethnos* (08/03/08) cites the report of D. Makropoulou (Director, 15<sup>th</sup> EBA) on the discovery during cleaning of rock-cut chambers used for worship.

### **SAMOTHRACE**

**Sanctuary of the Great Gods.** J. McCredie (ASCSA/New York) reports on the 2007 season of study and conservation.

Work continued on volume 9, The Monuments of the Eastern Hill, in the series Samothrace. Excavations Conducted by the Institute of Fine Arts of New York University, and on the catalogue of coins from the E hill (L. Gadbery). Documentation of the architectural blocks associated with the Milesian Dedication on the W hill continued.

# ISLANDS OF THE NORTHEAST AEGEAN

(20th EPCA: 14th EBA)

### Lemnos

**Hephaestia.** E. Greco (Director, SAIA) reports on continuing exploration of the area of the Isthmus wall. Trenches were opened at the foundation of the Ar wall corresponding to the walls of the LH settlement previously noted (**Fig. 84**). Among the oldest sherds (from the deep levels of the levelling fill over the sterile clay level) are classes dating back to LH IIIA2. The structures immediately following these first phases date to the LH IIICL.



84. Lemnos, Hephaestia: wall structures of the LH settlement

N of the boundary wall (of uncertain date), are 2 EByz rooms side by side set on the ridge of the Ar wall. Amphorae, storage vessels, terra sigillata and a coin date to the 6<sup>th</sup> Ct AD. One room contained architectural spolia.

Outside the boundary wall, close to the monument with limestone blocks, the NW corner of the westernmost room of the rectangular building with benches discovered in 2005 (AR 53 [2006–2007], 76–77) was also explored. Among Ar finds are many sherds of the karchesion shape (common in cult buildings excavated in the town). A new room belonging to the same complex was found in the W side, covered by a major L

Imperial dump. A test was made in the NE corner of the W room to investigate the foundations of the walls.

New investigations were made on the S limit of the town, in the N side and the SW corner of the L antique peristyle house, and in the road delimitating the house at the S. This permits reconstruction of a diachronic image of life in the area, from the LAr-E7<sup>th</sup> Ct AD. Further studies will be made of palaeobotanic remains recovered from the levels investigated and the raw materials used in the house construction.

### Lesbos

Mytilene (anc. city). H. Williams (Canadian Institute/British Columbia) reports on the study of finds from excavations on the acropolis and near the N harbour with special attention to the large numbers of terracotta figurines and lamps from the sanctuary and the extensive collections of Aeolic grey wares from both sites. The latter represent Ar, Cl and Hel deposits.

#### Chios

(20th EPCA: 3rd EBA)

Journal of Archaeological Science 35 (2008), 1169–76 publishes widely reported work (cf. Eleutheros Typos and Ta Nea 05/11/07) by B.P. Foley and M.C. Hansson (MIT and Woods Hole Oceanographic Institute) on DNA analysis of residues contained within 2 amphorae from the 4<sup>th</sup> Ct BC ship wrecked in the straits between Chios and Oinousses (AR 51 [2004–2005], 90; AR 52 [2005–2006], 97). The amphorae analysed contained oregano and olives: there are also indications of wine and possibly pistachio nuts.

**Kato Phana**. L. Beaumont (BSA/Sydney) reports on a further study season devoted to the conservation and cataloguing of LH IIIC-LRom finds from the 2005 excavation. The date and nature of the finds (fineware cups, figurines, objects of valuable metals) emphasize that this was a cult site as early as the LBA, and probably remained in continuous use until the LRom period.

I. Basiakos undertook quantitative chemical and morphological (microscopic and macroscopic) analyses of soil samples from the deep cores taken in 2006 in the archaeometry laboratory of NCSR Democritos. Preliminary results indicate that the sea, now some 300m W of the archaeological site, reached in antiquity to the foot of the sanctuary. This helps to explain the massive anc. peribolos walls which defined the low natural mound on which the sanctuary was established and were designed, not only to withstand the pressure of the earth fill behind them, but also to protect the sanctuary from the sea.

**Nea Moni.** A. Christofidou and A. Papanikolaou (Directorate of Restoration of Byz and Later Monuments, Ministry of Culture) report (*DeltChAE* 28 [2007], 41–54) on new architectural details revealed by consolidation and restoration work in the katholikon, which allow the secure identification of 6 construction phases.

# CYCLADES AND SAMOS

Nomos of Samos (21<sup>st</sup> EPCA: 3<sup>rd</sup> EBA)

### Samos

Publication: C. Hendrich, Samos 25. Die Säulenordnung des ersten Dipteros von Samos (Bonn, Habelt, 2007).

Nomos of the Cyclades (21st EPCA: 2nd EBA)

N. Brodie, J. Doole, G. Gavalas and C. Renfrew (eds), *Horizon:* A Colloquium on the Prehistory of the Cyclades (Cambridge, McDonald Institute for Archaeological Research, 2008) offers an invaluable overview of the region. Specific articles are noted below only when they present new data or significantly expand previous site reports.

N. Stampolidis and P. Sotirakopoulou, Aegean Waves: Artworks of the Early Cycladic Culture in the Museum of Cycladic Art at Athens (Athens/Milan, Museum of Cycladic Art/Skira, 2007).

#### Andros

**Palaiopoli**. In discussing a temporary exhibition in the Embeirikio Gymnasio marking 20 years of excavation by Athens University, *Ethnos* (08/08/07) reports geological research conducted in 2007 by N. Mourtza in the anc. harbour. Three changes of level are noted, with consequent raising of the mooring.

Publication: L. Palaiokrassa-Kopitsa, Παλαιόπολη 'Ανδρου: Είκοσι χρόνια ανασκαφικής έρευνας (Andros, 2007).

### **Tenos**

**Xobourgo**. N. Kourou (Athens) reports a further season of excavation in 2007.

On terrace E, a large building (building E) with 2 apparent phases, Ar and Cl, was investigated. Excavation concentrated in room E3, continuing beneath the Cl floor to which a large storage jar found broken *in situ* in the NE corner was thought to belong. However, this jar was in fact embedded in the Ar floor and its base firmly fixed in a well-built circular stone base. It remained in use also in the Cl period, when the floor of the room was set almost 0.2m higher than the Ar floor. This confirmed that the 2<sup>nd</sup> phase of the building consisted of a partial repair of walls or rooms: further stratigraphic excavation is needed to reconstruct the building's phases and use.

On terrace AA, excavation continued in the area of the eschara and bench (**Fig. 85**). The dimensions and form of the bench were the same in both periods of use, since the  $2^{nd}$ , LGeo, phase was simply an enlargement of the first with the addition of a new wall covered by plaques along its length. More pyre pits were revealed near the N edge of the bench and lower than the large ash deposit, suggesting that the area had distinct phases of use, with the bench and eschara belonging to a  $2^{nd}$  phase, when the use of pyre pits in this part of the terrace was replaced by other rituals at these 2 features. The small



85. Tenos, Xobourgo: Ar eschara and bench on terrace AA

building next to them on the E part of the terrace is a later construction built over the LGeo pits in the E7<sup>th</sup> Ct. Thus Xobourgo presents one of the fullest pictures of the evolution of an early, open-air cult into a cult related to a building.

### Syros

Chalandriani (Kastri). M. Marthari (ASA/Director, 21st EPCA) reports (Ergon [2007], 60-65) on a 2<sup>nd</sup> season of excavation on the Kastri acropolis, focused on the area inside and at the foot of the semicircular wall at the summit (see AR 53 [2006-2007], 83, fig. 99). Many slabs from the wall were found, indicating by their location the gradual collapse of the wall rather than a catastrophic destruction. Fill reached a d. of 0.7m, but mainly derives from decomposed vegetation; in places, the bedrock is only 0.1m below the surface. The h. of the wall in the ECyc was no greater than 2m, but was then raised in a different, less careful, masonry style. Pottery is L ECyc II, Kastri style, the same as that found in excavation of the lower fortification (both the proteichisma and the main walls with their towers), as well as in the settlement buildings within the walls. Several shapes can be recognized from the fragmentary sherds; black-coated storage pithoi with plastic decoration, amphorae with incised handles, conical cups with mat and leaf marks on the base, bowls and pyxides with stamped and incised decoration. In the same level (that of the abandonment of the wall) were obsidian blades and the debris of obsidian working in situ, stone grinders and pestles, and food remains including ovicaprine bones and shells.

Excavation confirmed that the fortification system of the settlement on the Kastri acropolis consisted of 3 curved walls or periboloi of the same date: the earliest and lowest is the socalled proteichisma, then close by is the wall with 6 (to date) apsidal towers, and the 3<sup>rd</sup> wall, smaller in extent, on the summit of the hill. The wall on the summit therefore formed part of the overall scheme of fortification from the beginning, and was the last line of defence in the case of attack from outside. The semicircular shape is due to the fact that the S side of the summit is precipitous and unapproachable. The space inside the wall was roofed and in use until the abandonment of the entire settlement. The large pithoi found here, at least 0.8m h., were used over long periods to store cereals. The amphorae with incised handles were also used for the storage and transport of liquid foodstuffs. The ovicaprine bones and shells confirm that the area was the dwelling of persons of particular status.

### Delos

Sanctuary of Apollo. R. Etienne (EFA/Paris 1) reports that work in the Sanctuary of Apollo had 3 main aims. The first concerned the development of the terrace in front of the Great Temple to accommodate a drop of 1.35m between the top layer of the marble seats and the paving of the 'Sacred Way'. The terrace is composed in front of the temple of a levelling course of 3.4m, followed by a first ramp: a 2<sup>nd</sup> ramp then met the 'Sacred Way'. The bases in place, and those discovered during the excavation, indicate the use of this area, and allow us to reconstruct, at least in part, the landscape in front of the temple. Secondly, difficulties in reconstructing the Temple of Apollo led to a re-examination of all the architectural members, which are scattered and few. Study confirmed G. Gruben's hypothesis of a tetrastyle façade: a date for the building in the L6<sup>th</sup> Ct BC fits its technical and stylistic characteristics. Finally, in collaboration with the Polytechnic in Athens, a programme of geophysical prospection and coring was undertaken in search of the anc. shoreline alongside the Sanctuary of Apollo and to determine the conditions in which the monuments were established.

**Aphrodision of Stesileos**. C. Durvye (EFA) reports on a post-excavation season focused on the study of ceramics and analysis of glass materials found in abundance (and probably redeposited) in oikos 2 and under the ramp beside it.

An initial assessment of the excavations of 2005–2006 leads to the restoration of 4 occupation phases in the area E of the sanctuary dating between Delian independence and the construction of an aqueduct in the ruins of the oikoi, after the abandonment of the area during the 1<sup>st</sup> Ct BC (**Fig. 86**). The first phase, dating from independence, is seen sporadically in oikoi 3 and 4; a 2<sup>nd</sup> phase, during Athenian dominance, consists of a general filling of the area for the construction of oikoi 3, 4 and 5; the 3<sup>rd</sup> phase, at the end of the Athenian period, is characterized by a levelling of the area which was furrowed by runoff to the W, and the construction between the oikoi and the temple of oikos 2 and a ramp along its length. Finally, after the abandonment of the area during the 1<sup>st</sup> Ct BC, the stanchion of an aqueduct was built in the ruins of the oikoi.



86. Delos: Aphrodision of Stesileos, oikos 2

Agora of the Competaliasts. C. Hasenohr (EFA/Bordeaux 3) reports that alongside analysis of the faunal remains retrieved in 1995–2003, research in this area was directed at study and restoration of the portico with engaged pillars at the S edge of the site. The 3 trenches opened did not allow the tracing of the foundations of this gateway any further, but did reveal evidence for the previous state of the area.

Atlas of Delos. J.-Ch. Moretti (EFA/CNRS et alii) report that survey towards the creation of an Atlas of Delos, begun in 2004, was completed in 2007. Two digital records were made. The first, at a scale of 1:2,000, covers the whole island, including field terraces and enclosure walls, via photogrammetry from a series of aerial photographs. The 2<sup>nd</sup>, at 1:200, details archaeological remains other than these terraces and enclosures.

Polychromy and the treatment of marble surfaces at Delos. P. Jockey (EFA/Aix-en-Provence) and B. Bourgeois (Centre de recherche et de restauration des musées de France [C2RMF] report that work conducted in 2007 under the polychrome programme (EFA/C2RMF) sought to restore in digital 3D the colours and gold on 5 Delian statues in Athens and Delos.

Storage at Delos. V. Chankowski (EFA) reports on a new programme of analysis of storage capacity in domestic and commercial spaces in the theatre district. For commercial spaces, analysis focuses on structural and functional links between shops, storage areas and houses, including for the first time places where the presence of vases encased in soil led to the identification of shops selling liquids or cereals. For domestic spaces, it aims to identify the different storage devices used in homes for domestic products. While there are no a priori means of identifying the different areas surveyed as places specifically designated for domestic storage, it was possible to identify spaces in houses which may have been so used. In addition, study of each house in the district identified numerous examples of enlargement of the space on the ground floor by the addition of mezzanines which may serve as storerooms.

Publication: P. Fraisse and J.-C. Moretti, Exploration Archéologique de Délos XLII. Le Théâtre, 2 vols. (Athens, EFA, 2007).

### Despotiko

Mandra. To Vima (28/10/07) and Archaiologia 106 (2008), 107 report the discovery by I. Kouragios (21st EPCA) of a further 3 buildings (making a total of 10 plus a walled complex of 2 structures) in the Sanctuary of Artemis and Apollo previously noted (AR 51 [2004–2005], 96; AR 52 [2005–2006], 101). The first inscribed Ar pithos was discovered in 2007 (ASTEONEIM). Inscriptions to APXHME or APTHME are also noted, in addition to those to Apollo. Cult began in the Geo period and reached a peak in the Ar before a catastrophic destruction in Cl times (spolia were reused in LCl and Hel structures). Ar architectural remains include parts of 2 gorgon acroteria, 2 column capitals, an echinus and part of the stylobate of the Doric temple. A Daedalic statue of a female deity (ca. 680-660 BC) is thought to be the cult image. The sanctuary continued into the Rom period: a small settlement here was established in L antiquity/Med.

A probable round tower on the peninsula before the sanctuary may control the entrance to the harbour of Despotiko.

**Zoumbaria.** To Vima (28/10/07) reports the discovery by l. Kouragios (21<sup>st</sup> EPCA) of settlement remains close to a cemetery discovered by N. Zapheiropoulos in 1959. It is conjectured that the harbour was in use from the ECyc period onwards.

**Tsimindiri.** To Vima (28/10/07) reports I. Kouragios'  $(21^{st}$  EPCA) account of ECyc cist tombs by the shore which had been robbed in antiquity (see AR 53 [2006–2007], 85, where Hel and Rom graves are noted).

### Naxos

**Tsikniades (Kato Sangri).** O. Philaniotou (Director, 20<sup>th</sup> EPCA) publishes (*Horizon*, 195–207) 122 graves from a partially excavated ECyc cemetery, the majority of which had been looted at various stages from antiquity to the present day. Most were slab-lined cists of various forms: some instances of 2-storey graves were noted, but recent damage was too great to

identify the practice more widely. Only 27 unplundered graves had (very few) offerings (mostly of obsidian, also clay and marble vessels, marble figurines and, in one case, a silver bowl), which are considered in detail. The absence of human bone in some unplundered graves supports the suggestion that they were deliberately removed to a special repository after a period of time.

Publication: A. G. Vlachopoulos, Η Υστεροελλαδική ΙΙΙΓ περίοδος στη Νάξο : τα ταφικά σύνολα και οι συσχετισμοί τους με το Αιγαίο. Τόμος Α: Τα Υστεροελλαδικά ΙΙΙΓ ταφικά σύνολα της Νάξου (Athens, Archaiognosia supp. 4, 2006).

## Ano Kouphonisi

Ph. Zapheiropoulou (*Horizon*, 183–94) presents in full 3 EBA cemeteries on the SW end of the island, excavated in 1969–1970 (*AR* 18 [1971–1972], 18; see also her preliminary reports in *ADelt* 25 [1970], *Chr* 428–30; *ADelt* 26 [1971], *Chr* 467). These cemeteries were in use during the period of the Kampos Group.

Agrilia cemetery (M. Simigdalas property): 72 intact rockcut graves (consisting of the chamber and forecourt), plus a further 20 disturbed, were excavated in an area of ca. 50m x 75m. All contained interments (contracted): some 50 had grave goods (obsidian blades, bronze needles, shell and always a clay pyxis lid, and, in 2 cases, marble vessels). Offerings were placed in the forecourt and covered with 2 layers of earth and stones: a crushed pot was usually placed on the upper layer. In addition to the types of object offered as grave goods, finds include carbonized seeds and fruits and stone amulets. The contents of rich tombs are reviewed: one (29) had a pyre in the large forecourt.

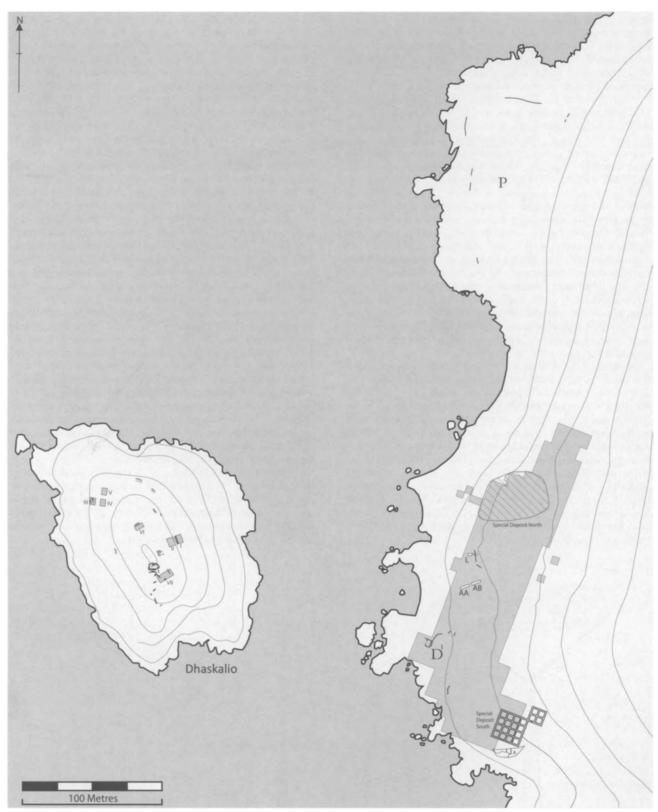
Tzavaris field: this cemetery lies on the peninsula between the Bays of Loutra and Parianos (the main PH fishing harbour), and had been the target of looters. On the highest level of the field were many pits cut into bedrock, some of which contained items such as marble bowls, bronze needles and daggers, and obsidian blades. An area of inhumations lay towards the foot of the hill: 2(?) bodies were laid out on the ground on a flattened area ca. 5.5m x 3m, with broken marble and clay vessels lying over and around them, and stones heaped over them, the whole area being enclosed with a wall to the N and E, and marked with a stone sema.

Skopelitis field, near Ano Mylos: this cemetery had been severely damaged by looters. Nine grave pits were identified with fragmentary grave goods, including marble bowls and figurines, scattered about.

### Keros

**Kavos-Dhaskalio**. C. Renfrew (Chairman, BSA/Cambridge) reports on the 2<sup>nd</sup> season of renewed excavation at **Kavos** and on the neighbouring islet of **Dhaskalio** (*AR* 53 [2006–2007], 86–89) (**Fig. 87**). The associate director was O. Philaniotou (EPCA) and the assistant directors N. Brodie and G. Gavalas.

Kavos: documentation of the extent of the Special Deposit South continued, extending its distribution somewhat to the N and W. Characterization of the Special Deposit South as the product of deliberate deposition at this spot was confirmed by geomorphological study (C. French), noting some areas of considerable surface stability, as well as the repeated excavation and back-filling of pits in the past, thus reworking the same 'special deposit' material. The whole soil profile is severely bioturbated, which would have helped to obscure other cut features in the 'special deposit', especially as the fill would essentially be of the same material. Beneath the dark brown



87. Keros, Kavos-Dhaskalio: plan

layer with the principal finds was an orange-brown silty clay loam, missing in places (the weathering product of the local limestone). This contained few special finds, which may have been inserted during the early phase of deposition of the high-status materials which characterize this deposit. It also contained a scatter of obsidian blade and flake fragments.

Finds included ca. 25,000 sherds, mostly EBA (plus some LCl, Rom and Byz). Among the ca. 25% of diagnostic material are the familiar Keros-Syros forms, including conical-necked jars and sauceboats. Other identifiable shapes such as jugs, 'multiple lamps', bowls, pyxides and basins appear in quantities of less than 5%. About ¼ of the diagnostic sherds are decorated, with incised or painted dark-on-light decoration, etc. Overall, the pottery is similar to that in the Special Deposit North. Also common were fragmentary stone vessels (studied by G. Gavalas), again with a shape range known from the Special Deposit North. Figurines divide into folded-arm figurines of canonical type and schematic figurines of the Apeiranthos type. The Spedos, Dokathismata and Chalandriani varieties are well represented. An exceptional find is the pelvic area of a folded-arm figurine of Spedos form measuring 0.17m across the max. w. of the thighs as they widen below the waist (Fig. 88). When complete this figure must have exceeded 1m h. A single obsidian bead was found; a lead pin was the only metal find. A number of 'spools' or 'pestles' of stone or shell may have served as balance weights.

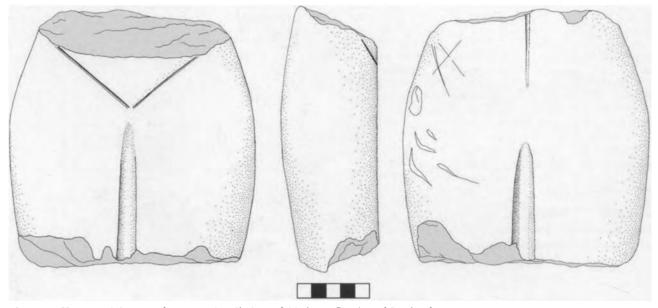
As noted in 2006, finds were very fragmentary: apart from a few small pestles, every object in the Special Deposit was deliberately broken and clearly some limestone pestles (and perhaps also the larger marble figurines) had been sawn. Some surfaces and breaks were in almost pristine condition, whereas others were heavily weathered: the juxtaposition of pieces displaying very different degrees of weathering confirms that breakage occurred before deposition. This was not done *in situ*, and no central locus for such breakage has yet been recognized on Keros. It therefore seems that the materials in the Special Deposit South (and probably the original Special Deposit North) were brought from elsewhere. So far, only one figurine join has been found within the Special Deposit South, confirming the conclusions of 2006.

Definitive interpretation of the Special Deposit South awaits the final field season in 2008 and full study of the finds. This will include study of marble provenance (Y. Maniatis) and petrological analysis of ceramics (J. Hilditch). The pottery certainly came from several islands: abundant sherds with a filler of blue schist possibly from Amorgos, stamped and incised decorated pottery from Syros and talc ware from Siphnos. Kouphonisi itself may be the source of multiple lamp vessels and the stone vessels and spools of local orange-pink limestone. Animal protomes on some sauceboats, possibly from the Corinthia or the Argolid, enlarge the catchment of Kavos as a 'symbolic attractor'. Nonetheless, the residue from deliberate artefact breakage has yet to be recognized on other islands and the presence of fragments of very large plain bowls also requires explanation, since they are not found elsewhere in the Cyclades.

In the central area between the N and S Special Deposits, 3 further trenches (AA, AB and AC) were opened close to trench L of 2006. Finds were few, but an EBA date for constructions here is confirmed by sherds associated with the wall in trench AB (and the absence of later material). At present this area shows few indications of structures beyond the building near the sea investigated in 1963 by Doumas.

Investigation was made of a system of rock fissures caused by faulting E of the site (M. Kersel and T. Kinnaird): limited soundings revealed no PH use. On the Kavos promontory, where metallurgical remains were investigated in 1987 and 2006, several small trenches were opened to secure better dating evidence and fragments of metallurgical ceramics selected for TL dating. M. Georgakopoulou reports results of her analysis of finds from the 1987 survey in this area: the small collection of metallurgical remains consisted primarily of copper slags but also included metallurgical ceramics. Two distinct copper production processes can be identified and cupellation of silver was also carried out.

J. Dixon and T. Kinnaird studied the geological history of the Kavos area. Y. Maniatis and D. Tambakopoulos investigated sources of the high-quality, fine-grained white marble used for the manufacture of marble bowls and figurines, and of the marbles and schists used as building materials on Dhaskalio and near the Doumas House on Kavos.



88. Keros, Kavos: pelvic area of an exceptionally large folded arm figurine of Spedos form



89. Keros, Dhaskalio: trench 1 dry-stone marble wall

Dhaskalio: in 2007 trenches were set across a wall which runs N-S for ca. 30m on the E slope of the island (facing Kavos). Trench I lay E and outside the wall; trench II W and inside. Trench I contained a well-built drystone wall in front of the long wall (Fig. 89). This was built of thin laminar pieces of non-local marble. Geological study of Dhaskalio (J. Dixon) showed that most of the building stone used here during the EBA, other than boulders of conglomerate limestone, was neither local nor from Keros or Kouphonisi: rather, it was brought from outcrops on SE Naxos (Y. Maniatis). This represents the shipment of large quantities of building material over considerable distances. Trench II, inside the wall, revealed a series of EBA constructions with at least 2 phases. Finds - domestic in character - include pithoid jars and neckless jars with the characteristic horizontal arched handle and numerous stone discs, mainly of marble or schist. Two trenches (IV and V) were opened on the W slope.

At the N end of the summit, W of a prominent curved wall, trench VI produced a lead 'spool' comparable to those from the 'special deposits'. Two complete Apeiranthos type figurines were found in the same area. In the relatively flat area S of the Med or later church, traces of several walls were visible on the surface (Fig. 90). Here trench VII contained a rectangular building ca. 8m l. (oriented E–W) whose W wall was overlain by later walling. The buildings so far examined yielded much pottery and other finds of domestic character, including querns and grinders and numerous stone discs of schist or marble 0.1–0.5m di.

Further areas at the summit were cleared to reveal walls and structures which will be examined further in 2008.

Publication: C. Renfrew, Ch. Doumas, L. Marangou and G. Gavalas (eds), Keros: Dhaskalio Kavos. Report of the Investigations of 1987–88 (Cambridge, McDonald Institute for Archaeological Research, 2007).

## Thera

Publication: Ch. Doumas (ed.), Ακρωτήρι Θήρας: δυτική οικία: τράπεζες-λίθινα-μετάλλινα-ποικίλα (Athens, ASA, 2007).

### Melos

**Rivari**. C. Televantou (*Horizon*, 209–23) publishes an account of the ECyc cemetery noted in *AR* 50 (2003–2004), 71.

### Phylakopi

Publication: C. Renfrew (ed., with N. Brodie, C. Morris and C. Scarre), *Excavations at Phylakopi in Melos 1974–77* (London, BSA, 2007).

### **Kythnos**

A. Mazarakis Ainian and Ch. Mitsopoulou (Thessaly) present ( $E\Pi A\Theta \Lambda ON$ , 253–57) an overview of evidence (from excavation and survey) from a sanctuary probably dedicated to Artemis and Apollo (see AR 49 [2002–2003], 75–76).

## **DODECANESE**

(22<sup>nd</sup> EPCA: 4<sup>th</sup> EBA)

A general synthetic work on the archaeology of the Dodecanese has been published: Αρχαιολογικές έρευνες και ευρήματα στα Δωδεκάνησα (Weilheim, Society for the Study and Promotion of Greek History, 2007).

### Kos

I. Baldini (SAIA/Bologna/Bari) reports on a survey and study of the EByz basilica of St Gabriel and the neighbouring baths, conducted in collaboration with the 4<sup>th</sup> EBA. The basilica has 3 aisles, with a 3-apsed presbytery, a narthex and annex along the S side, between which is a baptistery with a cruciform font. The building had at least 3 main construction phases.

#### Rhodes

Rhodes city (anc. Rhodos). E. Terezaki (13<sup>th</sup> EBA) and P. Triandafyllides (22<sup>nd</sup> EPCA) report (*Archaiologia* 106 [2008], 96–101) on the lifting and conservation of LRom mosaic pavements found in rescue excavation on the Karagianni plot, close to the military harbour and dockyards in the NE part of the anc. city. Here building remains of the 4<sup>th</sup> Ct BC-7<sup>th</sup> Ct AD included 2 LRom houses, the northernmost of which dates to the 4<sup>th</sup> Ct AD with reuse in the 6<sup>th</sup>-7<sup>th</sup> Ct AD. Around the courtyard in the W part of this house were remains of pavements in *opus tesselatum* and *opus vermiculatum*, of which 2, S and E of the court, were well preserved. The S pavement, preserved undamaged, must have belonged to a central room: it depicts a central image of Eros within a geometric design. The 2<sup>nd</sup> pavement, found in the E passageway of the courtyard, had 3 pictorial zones, but was damaged by ECh intrusion. Both date to the 4<sup>th</sup> Ct AD.



90. Keros, Dhaskalio: large building S of Med or later church

Ta Nea (18/12/07 and 24/03/08) reports on excavation by the EMA of a shipwrecked galley just outside the commercial harbour of Rhodes. The ship dates to the 13<sup>th</sup> Ct, likely to the period when the Knights of St John controlled the island. The presence outside the keel of a cannon, 3 swords and stone cannon balls is noted. Finds from the same area include anc. amphorae and pottery (some of Hel date), confirming that the harbour of anc. Rhodes was in the same position. The recent exposure of antiquities in the harbour is attributed to the effect of the propellors of large cruise ships in agitating the sand and thus increasing the d. of the harbour by 5–6m. Ta Nea (24/03/08) subsequently cites K. Preka (Director, EMA) in raising concern about the serious risk to the remains of the ship if left underwater.

Ta Nea (24/03/08) reports the discovery by the EMA of a hoard of 3,000 gold coins, plus jewellery and other vessels, in a 17<sup>th</sup>-18<sup>th</sup> Ct AD shipwreck inside the commercial harbour of Rhodes, in the same general area as the 13<sup>th</sup> Ct wreck noted above. The quantity of antiquities in the area is noted.

**Bastion of St George**. A.-M. Kasdagli and K. Manoussi-Della (4<sup>th</sup> EBA) present (*DeltChAE* 28 [2007], 115–30) new details of the architectural development of the bastion obtained from study in preparation for restoration as part of the 4<sup>th</sup> EBA's Programme for the Restoration of the Hospitaller Defences in Rhodes.

### Karpathos

Kathimerini (25/01/08), To Vima (07/02/08) and Archaiologia 103 (2007), 125 all report on the results of the University of Thrace's research in S Karpathos (area of Afiartis), led by M. Melas. In 2007, 21 M sites, 7 Neo, 11 Rom and many tens of mod. were located in an area of 7.5km². Neo and EH sites indicate small-scale rural installations, in the view of M. Melas dependent on hunting, gathering and fishing (finds of 2 arrowheads and stone tools are noted). The majority of sites are M, and many such palatial period settlements (1800–1500 BC) were destroyed by earthquakes. Their location very close to the sea reflects the protection given by Crete (see AR 53 [2006–2007], 96). Considerable attention is given to the project director's discussion of house layout and the possible demographic and economic interpretations of this evidence.

## **CRETE**

by Don Evely

For a resume of recent work on Crete by Gr Universities, see www.arxaiologia.gr/site/content.php?article=2539.

The Onassis Cultural Center, New York, hosted an exhibition in 2008: its catalogue is M. Andreadaki-Vlazaki, G. Rethemiotakis and N. Dimopoulou-Rethemiotaki (eds), From the Land of the Labyrinth. Minoan Crete, 3000–1100 BC (New York, Ministry of Culture, Archaeological Museums of Crete and the Alexander S. Onassis Public Benefit Foundation, 2008).

**EASTERN CRETE** (Prefecture of Lasithi) (24<sup>th</sup> EPCA: 13<sup>th</sup> EBA)

Demos Itanou

Palaikastro. L.H. Sackett (BSA/Groton) reports on study, conservation and publication connected with the M settlement. Work proceeds on 6 volumes concerning the individual buildings or blocks: J.A. MacGillivray et al., Palaikastro: Two Late Minoan Wells (London, BSA, 2007) opens the series.

On the identification of tsunami deposits associated with Theran volcanic ash, see H.J. Bruins *et al.*, 'Geoarchaeological tsunami deposits at Palaikastro (Crete) and the Late Minoan IA eruption of Santorini' *Journal of Archaeological Science* 35 (2008), 191–212.

Zakros. E. Platon (ASA) reports (*Ergon* [2007], 80–82) on this year's study season of the finds from N. Platon's excavations at the M Palace and town of Kato Zakros. In all cases the focus was on pottery. In the palace (S wing, excavated in 1966), the material from the workshops was studied: it included LM IB Marine and Floral style pieces, and part of a clay double-axe mould. From building N (NW hill, excavated in 1986), 3 connecting basement rooms in the S part yielded more LM IB and LM IIIA material, the latter of good quality. Protopalatial material was also encountered.

Work on frescoes from the Zakros palace and the villa at Epano Zakros was carried out.

Choiromandres. Kathimerini, Eleutherotypia, To Vima and Ta Nea (04/09/2007) all cite a report on this M habitation site by S. Chrysoulaki (Ministry of Culture); the work formed part of the Minoan Roads Survey and is a continuation of earlier campaigns here.

A series of structures has been revealed on a rocky outcrop within the valley. The earliest (Prepalatial) is a rural shrine, from which parts of clay human figurines of both sexes were recovered. This was replaced in the Protopalatial era by a 'guardhouse', small but impressively built with cyclopean walls. In the Neopalatial period the manner of occupation has élite overtones, with 2 sealstones (one with a lion, the other a wounded *agrimi*) and pottery of palatial quality. The knoll has a strong boundary wall with an entrance (on the E the wall is doubled and 200m l.).

Associated with the later structure is a work of engineering of the sort hitherto better observed on the LBA mainland, namely the use of substantial walls to divert and control water coming down the gorge, both for protection of the site and for agricultural/irrigation purposes.

**DEMOS SITEIAS** 

**Mochlos**. J. Soles (ASCSA/North Carolina) and K. Davaras (Athens) report on the 2007 season. The 3 volumes of *Mochlos* II are well advanced; with work continuing on the similarly divided triple volumes of *Mochlos* III (the metal merchant and block C of the Neopalatial settlement on the island), *Mochlos* IV (the manufacturing centre in block C) and *Mochlos* V (building B.2, the ceremonial building of the LM IB town).

Conservation work was centred upon the consolidation of part of the Prepalatial settlement and its reburial. The Prepalatial settlement remains are fragile and, being located beneath the LM IB remains, undermine the later buildings. The conservation of house C.2 in the Neopalatial settlement was completed.

**Papadiokambos**. S. Apostolakou (Director, 24<sup>th</sup> EPCA) and Ch. Sofianou (24<sup>th</sup> EPCA) report on the excavation of a M building in 2007.

Continuing work begun in 2004, 6 more rooms were investigated of this 2-storey structure (some 130m²; walls standing to 1.4m) of LM I date. Storage and household ceramic vases, sea shells, stone tools including a large stone mortar and obsidian blades were all found in the rooms; the yard yielded a whole bronze dagger and a clay basin full of limpet shells. The

sudden destruction of the building might be connected with the volcanic eruption on Thera as many pumice pieces were recovered in that horizon.

A 27m *l.* wall, noted in 2005, served as a protective embankment against the flooding of a nearby stream.

**Praisos.** J. Whitley (BSA/Cardiff) reports on the first season of excavation.

Work in 2007 concentrated within the fenced zone on the NW slopes of the first acropolis of Praisos, immediately to the W and N of the so-called andron or Almond Tree House, investigated by R.C. Bosanquet in 1901. Three trenches were opened. The smallest (A-100), immediately N of the andron, was defined by 2 of the surviving walls which Bosanquet had called 'earlier'. Two larger trenches were opened to the W of the andron, A-200 to the N and A-300 to the S. For recording purposes, the andron was itself considered a trench (numbered A-400).

A-100: this area, defined by 2 of Bosanquet's 'earlier walls' to the N of the andron, was not completely investigated this season. However, these 2 walls, though of inferior workmanship, clearly abut and are therefore later than the NW outer face of the andron. The walls do not underlie this monumental structure, as Bosanquet thought. To the W, cleaning the face of the outermost and lower wall revealed a layer of possible roofing debris underlying the wall, which was not excavated this season.

A-200: like its neighbour to the S (A-300), the most prominent feature in the upper levels of this trench was the Med-mod. (probably Ven) terrace wall (A-203). The upper layers below topsoil were rich in cultural material: large quantities of animal bone, tile and pottery of various dates from the BA until the present, with Hel and LCI material predominating. Some bases of LAr cups, together with some shoulders of what appear to be very thin-walled (and so probably Cl) high-necked cups could also be discerned. Small finds from these layers comprised numerous terracotta loomweights of all types (pyramidal, round/disc and bi-conical, with the former predominating) and one terracotta plaque of a young man.

Below were layers which, if not closed, were relatively undisturbed. To the E, a rock cutting formed the E extent of an anc. surface (almost certainly not a floor), below which were a number of small rock-cut pits and natural hollows, one of which contained a mass of animal bone and another a highnecked cup. This surface, which was probably an open-air space, was squared off to the SW by a stone setting and marked to the S by a rock cutting.

To the W ran a substantial anc. wall (A-210), at least 0.7m w, set almost against the vertical face of the bedrock. To the NW of this wall was a cross-wall (A-215) with a threshold in the NW corner and a rock-cut floor. The area behind this to the NW (A-213) contained numerous small finds – an iron and a bronze nail, an iron knife and a lead weight, a mysterious stone foot, a kernos and some pithos fragments. These seem to be associated with other terracotta weights which had fallen into the adjacent room (A-216), finds associated with further pithos fragments and the only (bronze) coin of the season. Excavation of this adjoining room proved particularly productive. While the NW of the room had been disturbed by a later pit (A-217), a layer of fragments of at least 2 pithoi which had fallen in situ were found in the SE corner (Fig. 91). In the centre of the room was a stone column base and to the SW a rectangular stone-built hearth with a setting of stones and a small amphora to the S. The stone setting is interpreted as a 'warming stone' and around this were masses of carbonized material.



91. Praisos: room A-216, pithoi in situ

A-300: the upper layers in this trench, opened up around the probable Ven terrace wall, contained material which was, in most respects, very similar to that found in the upper layers of A-200; masses of animal bone, pottery of all dates from the BA to the E20<sup>th</sup> Ct, with Hel material predominating. There were some slight differences however. First, there were about double the number of loomweights (one pyramidal example, stamped  $A\Delta$ ) and far fewer examples of Ar cup bases. Moreover, there was some possibly Rom ridged ware (about 5 sherds).

After the upper tumble was removed, at a d. of about 0.7m, a complex of walls was uncovered, some standing quite high. To the S of the trench, a pair formed 2 sides of a probable building whose inside was filled with tumble. Excavation concentrated on the N and NE corner, on either side of the extraordinarily well-preserved wall A-310, which ran broadly E-W (Fig. 92). This wall, with its well-defined stone door jambs, survives to a h. of about 1.8m above the original ground surface. Another wall, A-314, at right angles to and partly below this, clearly abuts (and is therefore later than) wall A-309. A partially rock-cut bench sits next to a possible window in wall A-314. To the W is another wall, A-315.

Excavation concentrated on the area immediately S of wall A-310, where a very large pithos had fallen onto an original ground or floor surface. This surface was in turn directly overlain with largish blocks (tumble). A bronze pin was found immediately adjacent to this pithos.

In sum, there is a complex of several walls in several phases, broadly datable to the Hel period. The working hypothesis is that these represent several phases of houses.



92. Praisos: doorway in wall A-310

A-400: the W face of the andron was cleaned, fully revealing a monumental façade in a clearly mainland style broadly characteristic of the 4<sup>th</sup> Ct BC. The structure is highly visible to anyone travelling along the route from the coast along the old *kaldirim* route from the mod. village of Maroneia past the Skalais cave.

No other areas were excavated, but several worked blocks from a large monumental structure were recovered. These do not seem to fit the so-called andron, and may indicate the existence of another large civic building in the vicinity.

The upper layers in trenches A-200 and A-300 comprise mixed deposits. The presence of residual BA (tripod legs and one probable MM III fineware sherd) and EIA (one PGeo sherd with compass-drawn concentric circles), Geo and Or (one pithos with a guilloche embossed on a raised band) materials confirm the results of the survey – they indicate E habitation further upslope on the first acropolis. Part of the upper layers probably represent Bosanquet's dump partly mixed with hillwash. That this dump comprised, in part, Ar and later drinking vessels and animal bone (with at least one jaw of a wild pig) is at least consistent with his hypothesis that the monumental building he also called the 'Almond Tree House' might, at some stage, have been an andron, i.e., a public area for communal dining and drinking.

In his description of this building and the adjacent structures which he excavated, Bosanquet did not remark how all the surrounding walls butt onto, and thereby partially obscure, this structure. He was probably right in thinking that its original purpose was not for processing olive oil: the olive presses must relate to a 2<sup>nd</sup> phase, when the use of the building was quite different. There are no parallels for such a monumental building on Crete in LCl or EHel times, and this provides a *prima facie* case for its being some kind of civic building, rather than a private house. The fact that it would have been so clearly visible to travellers coming from one of Praisos' ports makes it a very appropriate building for a public guest-house or koimitiria, and the large quantity of animal bone and drinking cups found in the upper layers are at the very least consistent with some kind of public dining.

The date of the final phase of occupation remains unsolved. Wall A-310 seems to be the latest of our walls; if one follows Strabo and the Moni Toplou inscription, it ought to date to the last building phase of the city, i.e., in the decades before 146 BC. But no clear destruction horizon exists, nor is there any layer of tile collapse or roofing debris consistent with a phase of abandonment. This last might be explained if the building of A-310 had been robbed of its tiles before the building fell in. Though we would like to date wall A-310 to the E2<sup>nd</sup> or L3<sup>rd</sup> Ct BC, we cannot rule out some kind of 'Hierapytnan reoccupation' in the latest Hel period. The absence of any quantity of Rom pottery rules out the notion that there was any serious Rom reoccupation of this part of the city.

**Pseira**. P.P. Betancourt (ASCSA/Temple) and K. Davaras (Athens) report on work conducted in 2007 towards the publication of block AF and on an investigation of stone quarries on the island.

Block AF is the most S section of the town, E of the harbour. The earliest architecture, predating MM II, is scanty: several rooms from a MM II house are preserved. More architecture from the next phase, destroyed in LM IA, is visible. This last building is of special interest because its destruction can be associated with the period of the eruption of Thera. After the damage, a foundation deposit consisting of Theran pumice, deep-water sea shells and one conical cup was placed on the floor before the next building phase was constructed.

The discovery of a new stone quarry in 2007 brings the total of known M quarries on Pseira to 3. This project studies the stone formations on the island, the way they were exploited to remove stones and the use of those same stones in the M town.

Off Pseira. Apogevmatini (23/04/2007), Ethnos (20/06/2007), Ethnos tis Kyriakis (01/07/2007) and Kathimerini (07/10/2007) all carry reports on the 5<sup>th</sup> season of underwater excavation carried out by E. Hatzidaki (EMA) on a MM IIB shipwreck. The tally of finds has risen to some 120, comprising 80 vessels (mostly amphorae, pithoi, jugs, cups and cooking vases: many with E Cretan parallels) and items of stone, lead and obsidian. It is hoped that parts of the wooden vessel may lie preserved in the sands.

## **DEMOS IERAPETRAS**

Gournia. L.V. Watrous (ASCSA) reports on the 2007 study season of the Gournia Survey Project. H. Blitzer studied the post-antique ceramics, identifying imports, comparing production of wheelmade and handmade ceramics in E Crete with systems of production elsewhere and completing the ware descriptions for publication.

**Azoria.** D. Haggis (ASCSA/Chapel Hill) and M. Mook (ASCSA/Iowa) report on the first season of study and conservation. For full details of the project to date, see www.azoria.org.

Vasiliki. Publications: A. Zois, Αρχαιολογική αδράνεια: η περιπέτεια του 1989 και του 1990: Ημερολόγια και εκθέσεις εργασιών της αρχαιολογικής αποστολής Βασιλικής Ιεράπετρας. 1989 και 1990 (Athens, Apodexis, 2006); Ch. Mortzos and A. Zois, Βασιλική ΙΙ: νέα αρχαιολογική έρευνα εις το Κεφάλι πλησίον του χωριού Βασιλική Ιεράπετρας: η κεραμεική των ανασκαφών Seager 1903–1906 (Athens, Apodexis, 2007).

## DEMOS AGIOU NIKOLAOU

Lato. A. Farnoux (EFA/Paris IV) and H. Würmer (EFA) report on the study season following the 2006 survey. In addition to specialist reports on matters of geology and hydrology, attention again centred on the site's topography, following the work of J. Demargne in 1901. In addition to achieving a better comprehension of the town's organization (by road, terrace and building), the focus was on the W quarter (and the construction of 2 cisterns). Further, of the several entrance gates proposed by Demargne, only that fortified at the W is justified in being so termed.

## DEMOS OROPEDIOU LASITHIOU

**Agios Charalambos Cave.** P. Betancourt (ASCSA/Temple) reports on the 2007 study season.

The pottery, numbering 15,000 sherds and vases, extends from FNeo-MM IIB, with less than 10 sherds from LM I-III. The bones, all disarticulated, and the offerings were in a mixed state within the cave. This pattern suggests that burials of an earlier date were put in the cave during MM IIB, and that the cave was closed by the end of the BA. The pottery includes both local vessels and pieces imported into Lasithi from other parts of Crete. The local wares are recognizable by their soft

red clay fabric, which has fragments of phyllite as inclusions. The imported sherds include pieces of Pyrgos Ware (EM I), Vasiliki Ware (EM IIB) and several MM styles. Among the MM pieces are goblets from central Crete, Chamaizi pots, vases with white spirals and polychrome sherds.

The human bones, of which over 10,000 have been catalogued to date, include those of children, as well as both men and women. Fragments of a single skeleton have been excavated from different levels and from different rooms. Many animal bones are also represented. Some of them have cut marks on them, showing that they are the remains of food offerings that accompanied the deceased. Animals include sheep or goats, cattle, pigs and smaller numbers of bones from dogs and cats. Hares and other wild animals are also present.

#### DEMOS NEAPOLEOS

Sissi. J. Driessen (Belgian School/Leuven) and I. Schoep (Leuven) report on the first season of excavations at the M settlement on Kefali tou Ag. Antoniou. Lying 4km E of Mallia on coastal routes, it has a strategic importance (Fig. 93).

Work in 2007 involved geo-radar inspection, aerial photography and survey, all designed to reveal the most promising areas for excavation. Ceramics collected in the survey date the earliest apparent occupation to EM IIA, with material from LM II being the latest; one fragment carries a Linear A sign. The excavation shows early burials by the seashore and at least one large structure (perhaps 35m x 25 m) on the summit: of EM III–MM IA construction, this was reused into LM I, reoccupied in LM IIIB and then finally destroyed.

Four areas were excavated (Fig. 94). Zone 1 (the lowest terrace by the sea at the N) was a burial area (EM III/MM IA and MM IIB) with rock-shelters and over 12 built 'housetombs': 2 rooms in one house-tomb yielded EM III-MM IA cups; near another such tomb was a MM I-II pottery deposit, consisting largely of pouring and drinking vessels. Zone 2, inland and on the terrace immediately above, is defined by a wall which could have served defensive purposes. There are at least 3 structures made from large stones (one investigated by C. Davaras in the 1960s): investigations between 2 of them show they were set on destruction debris of Neopalatial date; to the SW, redeposited burnt material of MM II lies under the 3<sup>rd</sup>. On the summit, in zones 3 and 4, are several discrete structures, some of which were visible on the surface (an impressive N-S wall to the NW, with threshold). This limits a room to the W in zone 3: a platform and storage jars on and set into the floor, a funnel and a deep bowl were covered by a destruction layer (burnt to the S) with much pumice intermixed. To the S were smaller rooms and corridors: one space held a pithos top, inverted and perhaps acting as a basin; another yielded a pithos, jar and decorated krater, to which a LM IIIB date can be assigned. In a 3<sup>rd</sup> trench to the E was a fine façade of limestone: running W-E, it turns to the N, and at its S end its position is influenced by a likely access route. Behind it were further remains of walls, the latest was built over a possible drain containing Neopalatial sherds (elsewhere material of this and the Postpalatial era has been eroded away). Internal partition walls marked the earliest construction here in EM III-MM I. Zone 4, further S, has a megalithic wall with 3 rooms associated. A fine limestone column base was retrieved, perhaps reused and of Protopalatial date: the pottery is all Postpalatial and includes Chaniote imports (a small stirrup jar, from the same source, was found in zone 3).

DEMOS MALLION

Mallia. M. Pomadère (EFA) reports on the 2007 excavation season in quartier delta of the M town (Fig. 95). The main focus was building  $\Pi$ . Less monumental than its neighbours, architectural studies nonetheless established 2 main phases of use in the Protopalatial and Neopalatial periods (with 3 subphases in MM III-LM I), but no later reoccupation. Room 4, with its flagstones, 2 column bases and red-paint decoration, is a small colonnade/portico; a pit to the SW contained many dozens of often complete vases, from some destruction. Rooms 10 and 11 (Fig. 96), like 14 and 15, are long spaces designed as storerooms. As often seen at Mallia, they may have cisterns set in or even replacing a wall - in this case at the E end. Lacking an obvious entrance, it is argued that these were entered from above; filled with destruction debris, they yielded vases of everyday use, but decorated and of good quality. Room 8 (5.7m x 4.9m) was perhaps partly open, its single pillar not being deemed sufficient to support the roof for the entire space; in its last phase it was subdivided, with a cistern set on its paved floor. Yet another specimen appears in the party wall of rooms 12 and 13; in the W sector of which were also found stone tanks (up to 0.45m across), sunken into the floor: one is filled with small stones and the other with broken pottery. Finds were scarce and mostly Neopalatial in date. Sondages show earlier occupation on the site: 4 sealstones and a steatite bead in the shape of a double-axe.

For a resume of recent work at Mallia, see www.efa.gr/seminaires/colloques2007/JOURNEESMALIOTESRE-SUMES.pdf.

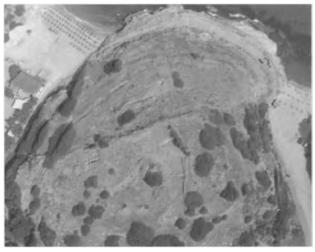
**CENTRAL CRETE** (Prefecture of Herakleion) (23<sup>rd</sup> EPCA: 13<sup>th</sup> EBA)

### Herakleion

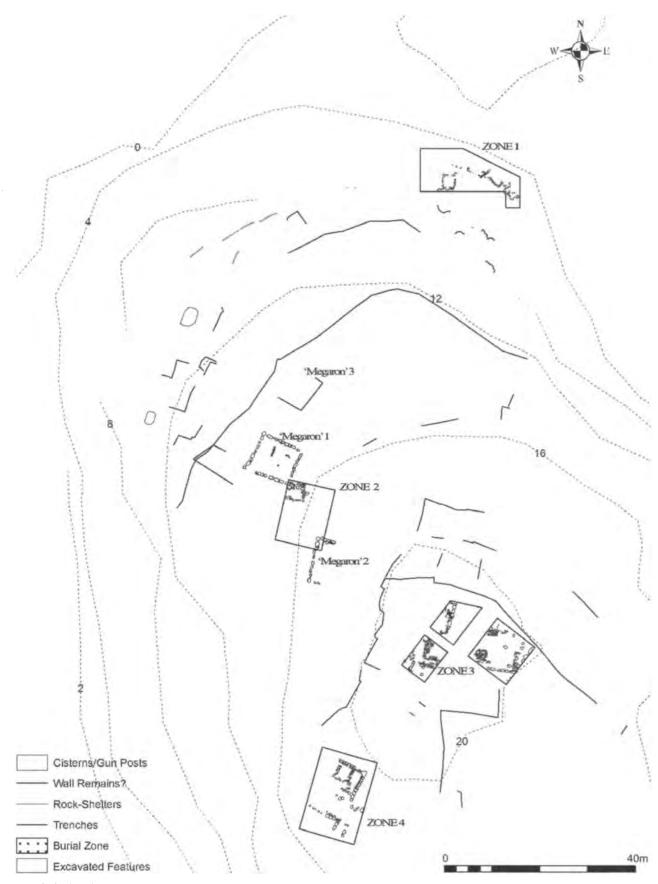
Publication: A. Ioannidou-Karetsou (ed.), Ηράκλειο : η άγνωστη ιστορία της αρχαίας πόλης (Herakleion, Νέα Κρήτη, 2008).

## Herakleion Museum

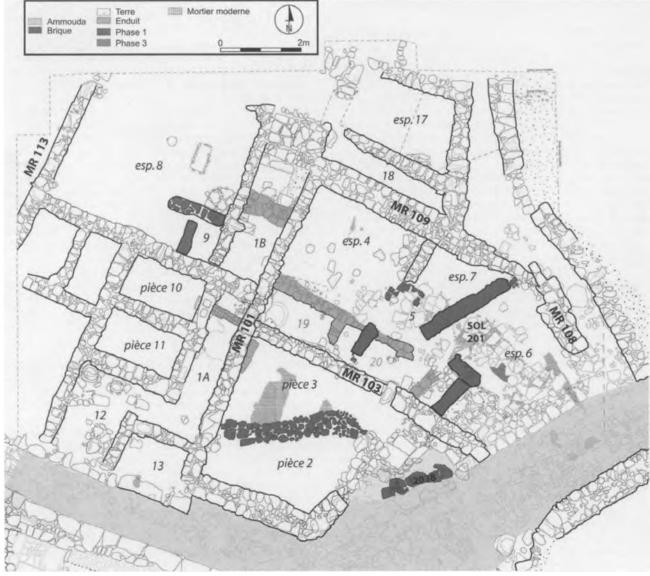
Publication: W. Müller and I. Pini, Corpus der minoischen und mykenischen Siegel 3: 1, 2. Iraklion archäologisches Museum: Sammlung Giamalakis (Mainz am Rhein, von Zabern, 2007).



93. Sissi: aerial view



94. Sissi: site plan



95. Mallia: plan of quartier delta, building ∏



96. Mallia: building ∏, rooms 10, 11

# **Demos Gouvion**

Borders of the nomos of Herakleion. Ethnos (06/07/2007) reports that, at an unnamed spot at the boundary of the demes of Gouves and Chersonissos, near the sea-shore, traces of a MM settlement have been found. Parts of a storage area (with pithoi) have been located.

## DEMOS HERAKLIOU

Isle of Dia. Eleutherotypia (02/04/2007) records the discovery of a Byz naval stronghold, belonging to the time of the recovery of Crete from the Arabs for Byzantium by Nikiphoros Phokas (ca. 960 AD). The site is impressively large, running out from the present shoreline into the waters to a d. of 22m. A little further out, in 30m of water, the reasonably well-preserved remains of a boat, possibly Byz, have been located. Other

underwater exploration off Dia has produced hundreds of amphorae of all dates: these and examples recovered earlier by Cousteau are being processed in the Ven fort in the old harbour of Herakleion.

#### Knossos

**Knossos Urban Landscape Project** (KULP). M. Bredaki (Director, 23<sup>rd</sup> EPCA), A. Vasilakis (23<sup>rd</sup> EPCA) and T. Whitelaw (BSA/London) report on the 3<sup>rd</sup> season of survey.

In 2005 the majority of the urban site, extending over some 1.5km², was intensively surveyed. In 2007 walking moved into the low hills surrounding the city, on which the city's cemeteries were located. A number have been identified and excavated, ranging in date from ca. 2000 BC to 800 AD. Particularly notable are the groups of rock-cut tombs, from the later BA, the EIA and the Rom period. These are complemented by less substantial burials in pithoi, larnakes, pits and tile graves, as well as built mausolea of Rom date. Cemeteries of all phases ring the urban site and flank the Kairatos valley down to the harbour town.

The areas of known tombs in the S of the valley were surveyed intensively, from the Kephala hill in the N to Spilia, and from Fortetsa in the W to the upper slope of Aï Lias to the E. Some 7,000 grids (20m²) were intensively investigated, covering the core of the protected Alpha zone (Fig. 97). An estimated 60,000 sherds were recovered; approximately 30% of the recovered material has been preliminarily processed.

When it became clear that survey had extended well beyond the boundaries of the urban site and surface densities had dropped considerably, the field strategy was modified to increase the speed of coverage and the likelihood of encountering now rare material. Two 20m transects were walked across each square, usually along the W side and down the centre, to ensure scanning of the entire unit for features. An area 1 m w, was scanned intensively along each transect for material, expanding to  $40 \text{m}^2$  the area in each unit actually searched, and increasing significantly the chances of encountering low-density material.

Excavations in the last Ct, both within the city and in the encircling cemeteries, have been quite patchy, with major work focusing in the area of the M palace, and rescue tests under the mod. villages and along the main road. This has left major areas of the site and the surrounding landscape uninvestigated. The excavations do, however, provide good data for areas not available for survey at the core of the site. Accordingly, the 2 investigation strategies are essentially complementary,

The area surveyed in 2005 extended to what was believed to be the probable boundary of the aggregate urban area; high densities of material were sustained up to that boundary on most sides (Fig. 98). Extending outwards, the 2007 fieldwork has defined more clearly the boundaries of the occupied area, as this shifted through time. Moving out into the hills, the continuous surface coverage serves to fill the significant gaps between the known clusters of tombs. Moderately dense distributions of ceramics, particularly to the W, on the acropolis and the S, up Lower Gypsadhes, suggest either that the fringes of the site shifted back and forth between occupation and burial in different phases, or that major areas of shallow burials, perhaps pithos cemeteries, have been destroyed by agriculture. These possibilities will be assessed through the detailed analysis of the nature of the assemblages recovered and may add a significant new element to the picture provided to date by the rock-cut chamber tombs which have been the focus of previous research.

In contrast to the material recovered in 2005, where 19.6% of the sample is represented by feature or decorated sherds, in the sample of 2007 material studied so far 27.8% of material

falls within these particularly diagnostic categories. This presumably represents the better preservation of material protected for at least part of its lifespan in tomb contexts.

Of the 2,842 readily diagnostic sherds collected in 2007 27% are PH, 21% EIA—Hel, 17% Rom and 35% post-Rom. For the 55,672 sherds recovered in 2005 on the city site the comparable distribution is 19% PH, 48% EIA—Hel, 29% Rom and 4% post-Rom. Considerably more material was encountered on the surface in 2007 than had been anticipated. PH items are relatively more abundant in the periphery, where they are not so effectively masked by overlying EIA—Rom material. The predominance of post-Rom material, essentially off-site scatter from the last millennium following the abandonment of the urban site, reflects to a large degree the protection afforded to material buried in the rock-cut chamber tombs so common throughout the use of the cemeteries.

Publications: M.-L. Nosch, *The Knossos Od Series: an Epigraphical Study* (Vienna, Österreichischen Akademie der Wissenschaften, 2007); M. Bietak, N. Marinatos and C. Palyvou (with A. Brysbaert), *Taureador Scenes in Tell El-Dab'a (Avaris) and Knossos* (Vienna, Österreichischen Akademie der Wissenschaften, 2007).

#### DEMOS AGHIAS VARVARAS

**Prinias.** The University of Catania and Consiglio Nazionale delle Ricerche, Catania, teams report on continuing excavation in the Ar area of the town (Patela) (**Fig. 99**). Three areas were investigated: the monumental building, the rooms immediately to its N and the area of temple A.

In the first, a structure with 2 small columns and a central pillar was revealed (**Fig. 100**). This can be dated to the first, LGeo, phase of the building, when the presence of votive offerings in its W room confirms that it was a cult place. In the Ar period the building experienced a secondary use for industrial purposes.

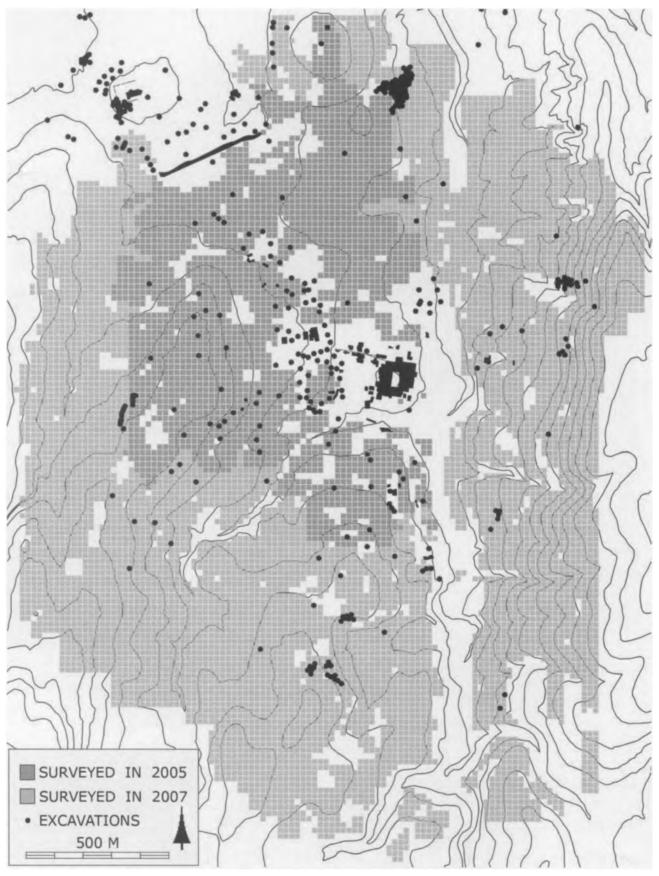
Work in the rooms between the so-called temple B and the monumental building concentrated on room VE, also part of a structure of some importance. Here a foundation deposit was earlier recovered, related to the construction of the nearby building.

In the area of temple A, excavation in the rooms immediately to its W revealed more and earlier building phases of LM/SubM date (Fig. 101). As previously, high-quality painted pottery was found inside. Finds also included fragmentary stone sculptures of a small bull and a seated sphinx.

### **DEMOS THRAPSANOU**

Galatas. G. Rethemiotakis (Herakleion Museum) reports on the 2007 season of excavation at the M palace and town of Galatas, focused on the Neopalatial building 6, W of the 'Court of the Baetyl', in particular its N wing. Rock cracks contain sherds of black-polished EM I–II wares.

The large structure (500m²) is better preserved to the E, but eroded to the bedrock at the W. The centre of attention was a M hall and adjacent rooms of moderate size. The hall (5m x 3.3m) has a pier and door system at its W, of 5 doors and limestone bases, as well as a portico with a single column set midway between the side walls. Two plaster floors were laid; at the SE corner was a stone-lined pit, with a foundation deposit of vases and a libation table fragment; at the SW, a stone-



97. Knossos Urban Landscape Project [(KULP)]: general plan showing areas surveyed and previous excavations



98. KULP: sherd densities in survey area



99. Prinias: centre of Ar city on Patela hill



100. Prinias: room VD, Geo tri-pillared structure



101. Prinias: W side of temple A

dressed pit apparently for libations. Pottery indicates an LM I (probably LM IA) date for the use of the room; a rectangular table of offerings, of serpentine, had fallen from an upper floor. The surrounding rooms are of moderate size, with one casement for a double staircase leading to the upper floor. Two rooms were located to the E and SE: the first had a single plaster floor, partly preserved. Its destruction deposit had many broken pithoi, part of a large chalice and a serpentine offering table. Its floor, as with the room to the S, was laid over a deep earth fill, small stones and quantities of MM IB sherds. In this, all known types of finewares and coarsewares appear: the prevalence of tumblers and carinated cups (all sizes down to miniatures) suggest drinking ceremonies were practised. A potential ritual aspect is suggested by certain cylindrical vessels, part of a triton shell and 2 animal figurines. The locus for such events could have been the 'Court of the Baetyl', where similar finds were re-encountered last year. Accumulations of vases and similar were swept away into rock

N of the M hall, at the E, was the placement for a staircase. Other than some ordinary vases, the main find was a steatite sealstone: lentoid in form, it has an 'ibex-headed woman' in the central position, dressed in a long skirt and with arms on the waist as if dancing. At her sides are birds: one by its long s-shaped neck might be an aquatic bird (?crane), the smaller is arguably a duck. Unparalleled as the design is, it yet must draw

upon the world of the divine – a nature goddess, a protector of horned animals and waterfowl perhaps. The next room to the W contained many and varied ceramic vases and a bronze axe of utilitarian sort. Under the Neopalatial floor, destruction debris for the first phase of building 6 dates to the MM IIIA.

Stratigraphically connected to this earlier phase, as well as architecturally, the following room to the W is of great interest: it is a lustral basin. All the essential physical characteristics are present: a short staircase of 2 flights, a floor below that of the surrounding rooms and a paved corridor that impinges on the E side (as that found at Chania a little while back). Here too much timberwork is associated (now carbonized), perhaps a railing; the floor and walls are plastered and painted (the floor yellow with a red band at the foot of the white walls). However, there are differences too from the full Neopalatial basins: the parapet of the stairs, of mud and small stones, is delicate, at only 18cm w. Probably it was a low partition on the inner side of the stairs. Again, there is no massive pillar terminating the stairs, merely a final post of wood, whose stone support slab remains. These variables are presumably due to its very early date - at the present, the earliest known, excepting something similar at Mallia in quartier mu. With typical pottery, mostly cups, from the fill go 2 beads: one an amygdaloid of reddish banded agate, the other a sphere of amethyst. Above the infilling of the basin come vases of the final use of the area: one has a typical LM IB scale pattern.

S of the M hall, 2 unusual structures were revealed: apparently enclosures with walls and artificial terracing inside dedicated to ritual actions. That which faces onto the 'Court of the Baetyl' is divided into 2, one lower than the other and containing many vases, mostly cups. The 2<sup>nd</sup>, to the W, has several small terraces giving access to an inner compartment: this last has a plaster floor, with a stone construction in its SE corner. It is arguably an altar: it has a stone set onto it – dressed and with a hollow suited to receiving liquids, as a jug found near it could indicate. All around, the space was packed with pottery: utilitarian and ritual alike. The latter include cylindrical vessels, miniatures (cups and an amphora), rectangular stands, as well as some human and animal figurines. A roofless house model is of interest: door openings are shown and perhaps horns of consecration at the upper edge.

**Galatas Survey Project.** L.V. Watrous (ASCSA) reports on the 3<sup>rd</sup> field season of the systematic survey around the palace of Galatas, under the supervision of P. Galanaki (23<sup>rd</sup> EPCA). The area surveyed in 2007 was focused between the villages of Galatas, Zinta and Arkalochori: 48 new sites, ranging in date from Neo to Ot, bring the total number to 172.

On return to the palatial site of Galatas, to determine better the size of this settlement during the Protopalatial and Neopalatial periods, it has become clear that Galatas grew dramatically in size in the latter period: a number of massive cyclopean structures at the edge of the site appear to have been built then. Three large M settlements were identified S of Galatas, i.e., Korakia, Kastellos and Paratiritirion. Korakia and Kastellos are the 2 most important M sites in the area of Zinta. Following the LM IIIB period, the local population during the EIA occupied defensible hilltop sites separated from one another by a km or more: a large number of Geo-Ar settlements were discovered. One, atypically, sits on the unprotected valley bottom.

Rom occupation around the Galatas palace appears scarce during the 1<sup>st</sup>-7<sup>th</sup> Ct AD. The survey uncovered 18 sites, 2 of which had only an E occupation, 9 with E and L occupation, and 7 with only a L occupation. Settlement did increase by the 4<sup>th</sup> Ct AD, but was even so not substantial.

Study of the Byz through to mod. periods revealed that the paucity of Rom settlement continued into the Byz period, as only 8 of this season's sites appear to have Byz phases. Ven sites are much more plentiful and typically continue into the Ot and mod. periods. These post-Byz sites often also display evidence for M phases, revealing that much of the land exploited in the M periods was not used again until the 13<sup>th</sup> Ct and later. Of particular note for the Ven period is the fortress surveyed near Meleses. A number of imports from Italy, N Greece and Cyprus have been observed.

The pattern of settlement in the area surveyed in 2007 differs in some respect from that of the previous 2 seasons. The earliest settlements are Neo and EM hilltop sites as before, but Protopalatial and Neopalatial settlement is largely nucleated on defensive locations away from valley bottoms . The dispersed Neopalatial pattern of settlement around the palace of Galatas does not seem to occur in the Zinta-Arkalochori area. Instead, such settlement is confined to large hilltop sites. While the population around Galatas moves to the site of Astritsi in the LM IIIC—Hel period, this pattern is not repeated in the 2007 survey zone. Here rather the EIA population remains dispersed on small and large sites. By the Cl period, several of these sites have been abandoned, presumably for larger settlements. Some evidence for assigning a Ven date for some 'soroi' has been gathered.

### DEMOS GORTINAS

## Gortyn

**Profitis Ilias settlement.** N. Allegro (SAIA/Palermo) reports on the 2007 season of excavation, involving sector B (W part,

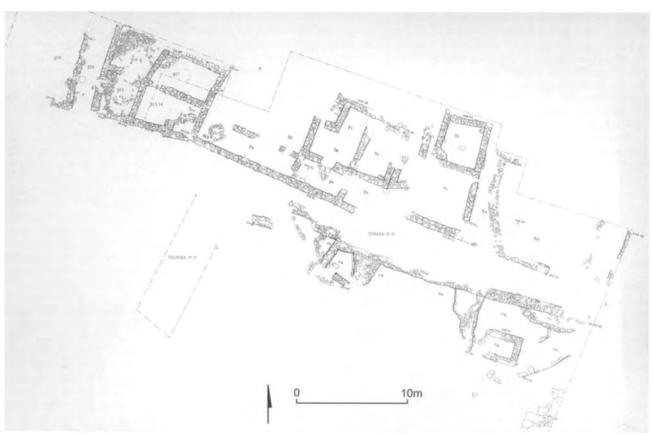
N of E-W road). Here a new Geo-Ar building (IV; 10m x 8m investigated) was uncovered adjacent to and to the E of building V, W of an alleyway and fronting the E-W road to the S; its N limit is outside the excavated area (**Fig. 102**).

One certain external entrance is known at the W, from the N-S alleyway. Inside, 4 rooms are known to date. The lack of communication between the W and E sides led the excavators to suggest there are in fact 2 simpler strip-houses. The shortage of tumbled stone inside the room interiors perhaps indicates a greater use of brick for the upper elevations. There are few finds and little furniture on the floors, which makes the function of the rooms unclear.

The E unit may have an opening onto the S road from room 13/14: its S and E walls have shelves made from stone slabs – potentially rests for pithoi to judge from the abundant sherds in the abandonment layers. Room 17 to the N has a structure in the NW corner composed of a bench of 3 limestone blocks and an arc of slabs. Inside this was part of a millstone; this could identify the structure as a grain mill.

The W unit rooms (15 and 16) are linked by a door 2m w. Room 15 to the S has a roughly central flat slab set in the earth floor: perhaps a support for a wooden post. In the NW corner is a quadrangular bench, built with rough stones. Room 16 has a few potential pot-stand bases of stone at floor level. Part of a later road-bed was seen over its NW corner, after the abandonment of the house in the 7<sup>th</sup> Ct BC.

Alley (B18) between this and building V on the E is 1.8m w. It runs off to the N from the E-W road, its surface a mix of earth and stone flakes; it might have had steps. Building V is little explored: it is entered from the W, from the alley B18, whose threshold has a pivot-hole for the door.



102. Gortyn: Profitis Ilias, Geo-Rom buildings

The settlement layout is well enough understood to discern that it had a pattern in its final phase (L8<sup>th</sup>-E7<sup>th</sup> Ct BC): an E–W main artery with alleyways off it defining the house-plots in between. This presupposes planning and political organization of a quite advanced nature.

Building S in the Byz quarter. G.M. Fabrini (SAIA/Macerata) reports on the excavation season of 2007. The position and nature of this structure, with its façade of large blocks on the W street, indicates that it originally served a public function (Fig. 103). Constructed in the LRom period, it was then used into EByz times when more domestic structures grew up around it. Its latest stages, until the destruction of Gortyn by the earthquake of 670 AD, still require elucidation.

Access was by a monumental entrance hall (with a door frame of limestone blocks and doorstep of reused marble) both long and narrow: on either side a small room exists, with 2 larger ones further from the road. Another room of similar dimensions lies at the NW. Research was focused on the large central space, room 53 (8.22m E–W x 5.75m N–S): its walls, set on the bedrock, were of a chalky material worked into blocks of varying size, in turn split and arranged in roughly horizontal courses, regulated at times by inserting smaller pieces of stone and brick. A well-made pavement of rectangular limestone slabs, fully preserved, was laid on the prepared bedrock. Two doorways, one each in the N and S walls, are accented by 2 double-layered niches.

The scanty material associated with this phase of construction dates it to the last decades of the 4<sup>th</sup> Ct AD – in keeping with the building techniques used. Room 53, and presumably all of building S, was reconstructed after a destruction, which is marked by the presence of huge blocks of sandstone and other recycled materials. The destruction was caused by the terrible earthquake of 670 AD, as indicated by the stratigraphy: a layer of ash and broken and charred beams contained many roof tiles and hundreds of iron nails, all from the collapse of the roof. In the same layer many differently shaped slabs of marble of varying sources and quality were recovered: these have been restored as a decorative upper flooring of geometric panels and polychrome strips. Small hexagonal bricks are associated, as well as a roundel of green serpentine.

Following the destruction, collapsed levels relate to other walls composed from reused material: fragmented sculptures and architectural fragments such as a small Cor-Italian sandstone column of the 2<sup>nd</sup>-1<sup>st</sup> Ct BC. Further collapses have been ascribed to the L7<sup>th</sup>-E8<sup>th</sup> Ct AD and beyond, culminating in abandonment.

Other work was undertaken N of the monument. When building S was begun, this was an open space. Later structures and walkways were added, culminating in the erection of rooms 47 and 47a. This stage produced material dating to the L8<sup>th</sup> Ct AD and later.

# The thermal baths to the S of the so-called praetorium.

G. Bejor (SAIA/Milan) reports on the excavation concentrated in the area between the frigidarium and the praefurnia of the baths. This sector was initially occupied by the hot rooms, but underwent an early collapse of the floors and subsequent caving in of the ground: in turn this permitted only simple construction.

The most significant area for understanding the anc. monument is the W range behind the frigidarium. A strip of original floor is preserved in the northernmost room. A door connected this room, which ought to be the caldarium according to its position, to room N, not yet excavated: the area was occupied by village houses in the 7<sup>th</sup> Ct AD. A 2<sup>nd</sup> room at

the centre is much better preserved: its construction is linked to the reconstruction of the frigidarium, already established as belonging to the 5<sup>th</sup> or E6<sup>th</sup> Ct AD. It was separated from the frigidarium by a newly-built wall that incorporated 2 earlier pillars. In the wall were a door and doorstep, inlaid in *opus sectile*. Inside were 2 basins of differing sizes, accessed by steps. Both were covered in the customary polychrome marble lining, many fragments of which remain. The N basin has a well-preserved floor with a black and white chequered mosaic, each motif made up of hundreds of marble tesserae.

Work was undertaken on the access-way to the SW bath complex. The existence of a large column base *in situ* here was previously noted; it appeared to have been covered by the outer wall of the baths which thereby conserved it. The top of the column base is visible, as well as a paved road relating to the square in front of it. These are the first traces of monumental construction in this area: they probably belong to the period of the nymphaeum which was subsequently transformed into the cistern for the bath complex. The square seems to cover an area of almost  $80\text{m}^2$ , delineating the S limit of the bath structure in the direction of the large baths accessed by the Megali Porta.

**The Byz quarter of the Pythion**. E. Zanini (SAIA/Siena) reports on the 5<sup>th</sup> excavation season.

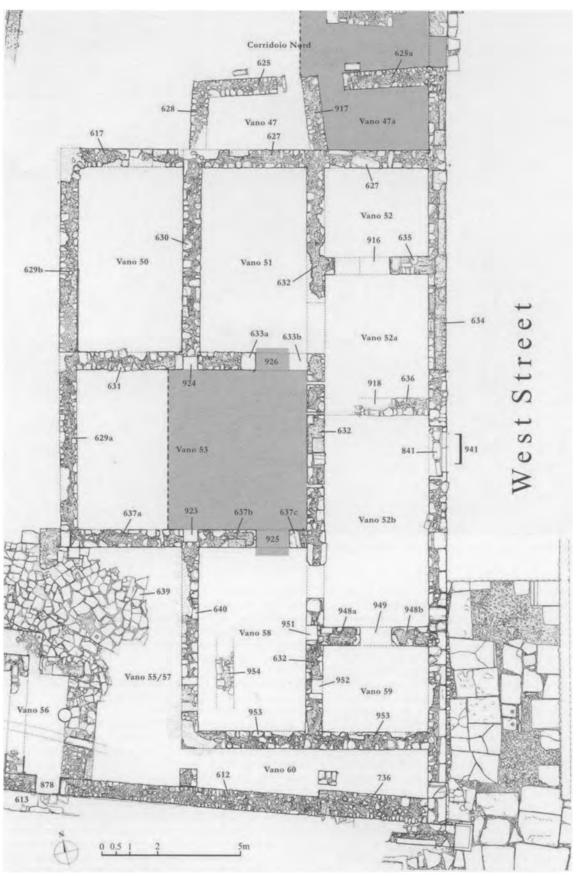
There were 3 goals in 2007: to the NE to clear the street that acted as the axial thoroughfare in all periods; to expand excavation to the N to include a large structure of EByz date; and to the W to unify a number of areas investigated earlier.

The axial street, running NE-SW, had assumed this role perhaps as early as the start of the 5<sup>th</sup> Ct AD; by the time of its abandonment in the 1<sup>st</sup> half of the 8<sup>th</sup> Ct AD it led through a landscape of ruins and decay. The EByz building had a central role in its district: of large size, it was well appointed with pavements and painted wall-plaster. Built in the L6<sup>th</sup>/E7<sup>th</sup> Ct, it underwent several complicated phases, with a series of internal spatial reorganizations. It was accessed from the street through a large entrance with a threshold of a slab probably reused from the Pythion. This led into a paved court with rooms off it. A large and well-planned drainage system, emptying into the sewers under the street, implies a large volume of water – initially perhaps for civic use (for baths?) and later used for artisanal purposes.

Finally, to the W and in front of the Pythion complex, a trial trench dug by Halbherr (in the E 1900s) was reopened. Mostly occupied by a Byz rubbish pit, filled in 2 phases (5<sup>th</sup> and 7<sup>th</sup> Cts AD), there was below a likely Rom structure showing a quality of construction consistent with that evident in known Rom phases in the temple. A structure 4.2m² encloses a circular room: the whole is entered from the W. Inside, though much robbed and rebuilt, a few original traces remained: clay lamps of the 2<sup>nd</sup>/3<sup>rd</sup> Ct, amphorae and jug sherds suggest a possible cult connection (**Fig. 104**). A similar conclusion is indicated by its direct alignment with the doorway of the Pythion.

The water supply of Gortyn. E. Giorgi (SAIA/Siena) reports on the 3<sup>rd</sup> season of investigation of the city's water supply in the Graeco-Rom and Byz periods.

Gortyn's main aqueduct is sourced ca. 15km away, from the springs at Zaros on the slopes of Mt Ida. The water feeds first into a capture tank, a rectangular chamber (37m x 5m) with walls of thick opus caementicum and a concrete vault. Thence it is transported in a rectangular-sectioned conduit (1m h. and 0.5m w.), at times set into rock cuttings and at others supported by a 2m h. wall. Once in the valley of the Mitropolianos (N of Gortyn), the line ran along the river bank and into the city.



103. Gortyn: Byz quarter, building S plan



104. Gortyn: Byz quarter, Rom circle-in-square structure near Pythion

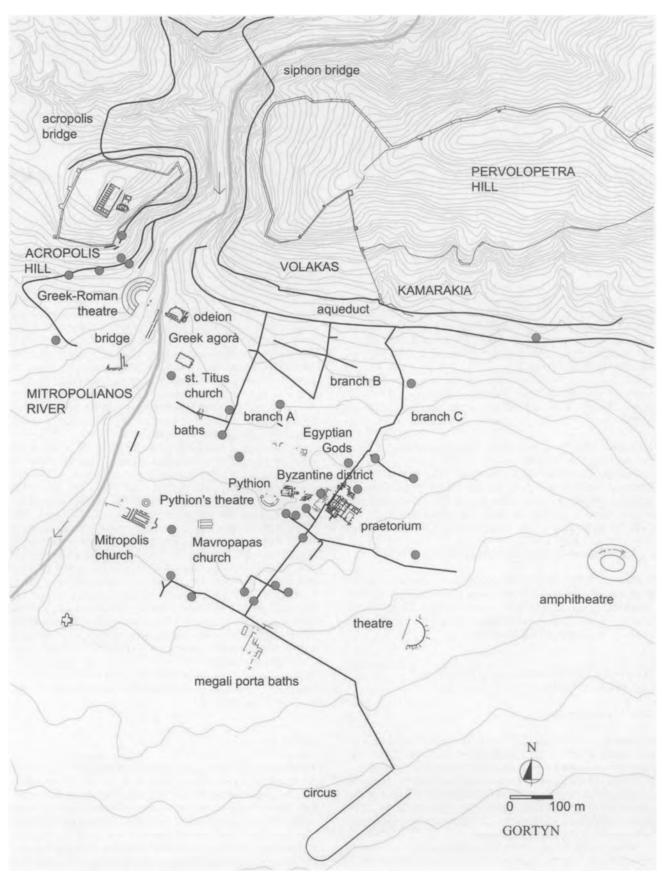
At least 4 phases have been identified. While a Hel predecessor has been conjectured, this currently lacks archaeological support. The first unequivocal presence of an aqueduct dates to the E Imperial period (2<sup>nd</sup> Ct AD). Two aqueducts directed the flow to the acropolis and the N side of Gortyn. In the city centre water towers fed a system of underground clay pipes. Near the praetorium, these pipes connect the monumental nymphaeum with the Rom baths; more are known beneath the Byz quarter by the Pythion. The system continued to the end of the 4<sup>th</sup> Ct, but then suffered detectable damage: the praetorium system went out of use around the turn of the 5<sup>th</sup> Ct AD.

The EByz phase (L6<sup>th</sup>-E7<sup>th</sup>) is best understood (**Fig. 105**). Outside the city the Rom system of delivery was maintained. Inside, innovations were made – some pipes were replaced by above-ground cistern fountains (51 known so far), mostly arranged in clusters by landmarks such as the acropolis, the praetorium and the Megali Porta baths. They are of different sizes, ranging in capacity from 48 to 62m<sup>3</sup>. Fed directly from the aqueduct, they were built of stone blocks and bricks (typical of the work of the time). They were rectangular in shape with a barrel vault, coated with hydraulic mortar and reinforced inside at the corners with ribs to counter the outwards thrust of the water. On the exterior, enlivened with geometric patterns in

the brickwork, niches were created (1–3 in number), carrying draw taps. In addition, 3–4 larger cisterns, in volume in the hundreds of m<sup>3</sup> range, were located at important places, such as the acropolis, the baths and the church of St Titus and that at Mitropolis. They were probably to hold emergency stores and could not be drawn on directly.

**The Hel temple**. E. Lippolis (SAIA/Rome) reports on renewed excavation (begun in 2005) of the temple in the block N of the praetorium gymnasium.

As well as new elements of the façade (Ionic half columns) and an inner fronton, an internal arch 7m w in ashlar is of particular interest: its lintel is decorated in sequence by an architrave, an Ionic denticulated frieze and a final cornice. Study suggests this arch, with its 2 side ante of 1m w., was set in the wall that divides the vestibule from the cella. This allows the entire cult hall to be visible from the entrance – a unique arrangement in the Mediterranean (though with some faint echoes of Syrian usage). It would also help explain another very rare aspect – the closed-in façade, with Ionic half columns, to the vestibule. Against the N wall of the vestibule once stood a rectangular arrangement of stone blocks, likely a monumental structure for offerings, although now robbed out.



105. Gortyn: water supply, EByz phase

Following the abandonment of the structure as a place of worship, excavation has revealed 2 L antique phases. Initially it became a public building, with a portico, and remained as such to the start of the 7<sup>th</sup> Ct; later, and into the 8<sup>th</sup> Ct, it was used as a manufacturing centre. Three cisterns against the N side yielded some valuable statuary: apart from small fragments, noteworthy are a head of a youth, the lower part of a man in a toga (a composite piece) and a large torso of a woman, a *peplophoros*. This last seems to be a 2<sup>nd</sup> Ct AD reworking of a Demeter Capitolina type.

## Lebena

Publication: M. Melfi, Il santuario di Asclepio a Lebena (Athens, SAIA, 2007).

## DEMOS TYMBAKIOU

**Phaistos.** M. Benzi (SAIA/Pisa) reports on a new project begun in 2007. This will consist of a survey of the hills surrounding Phaistos where many sites have been discovered through non-systematic exploration in recent decades. The focus of this year's work was identification, GIS-referencing and information gathering for sites in the area already known or suggested from the archives of the 23<sup>rd</sup> EPCA and the SAIA. PH ceramics and structures were located on the hill of Marathoviglia Petrokefali.

Field survey was accompanied by the recording of materials originating from Italian excavation in locations around the palace, in part kept in the Stratigraphical Museum of Phaistos.

**Kommos**. J.W. Shaw and M.C. Shaw (Canadian Institute/Toronto) report on the 2007 season.

Post-excavation activities continued. The final Kommos volume is being prepared: an in-depth study by M. Shaw of House X, providing studies of the architecture, stratigraphy and frescos, with a chapter on local and imported pottery by J. Rutter (including a new transitional LM IB/LM II phase which he has named LM IC).

See http://www.fineart.utoronto.ca/kommos/index.html.

Publication: P.P. Betancourt et al., Krinoi kai Limenes, Studies in Honor of Joseph and Maria Shaw (Philadelphia, INSTAP Academic Press, 2007): this contains many Cretan-based articles, including summaries of recent excavation work at Phaistos, Petras and Priniatikos Pyrgos.

**WESTERN CRETE** (Prefecture of Rethymnon) (25<sup>th</sup> EPCA: 28<sup>th</sup> EBA)

DEMOS GEROPOTAMOU

Mnemata. E. Tegou (25<sup>th</sup> EPCA) reports on a rescue excavation at one of the cemeteries of Eleutherna, resulting from road-works between Alpha and Eleutherna. Sited on the W slopes and terraces of a gorge to the N of the city, the site is extensive: the tombs investigated all lie within the zone of the works, with the mod. road marking its limits to the W. The cemetery has been mentioned in the literature for some time, but only now has it been investigated.

Before work began, traces of rock-cut cist tombs were observable in 6 places. Many more were found: 128 have been definitely identified, in 5 main groupings. All are orientated N-S, except for 11 which lie E-W. They are cut into the bedrock,

a soft limestone; some were executed carefully, others less so. Many were disturbed and damaged – the result of the road preparations, so that only 3 preserved in place their triple covering slabs. For many the sides were to be seen in outline as were the sockets cut to receive the cover slabs.

Pottery is the most numerous find: the 657 pieces recorded comprise several sorts of closed and small shapes – perfume bottles, lekythoi, jugs and oinochoai. Important for determining burial customs were 2 gold mouth covers, both inscribed. The burials can be dated broadly to the Hel period, with the earliest assigned to the L4<sup>th</sup>–E3<sup>rd</sup> Ct BC.

#### **DEMOS ANOGEON**

**Zominthos.** Y. Sakellarakis (ASA) reports (*Ergon* [2007], 66–76, supplemented by *To Vima* [25/11/2007] and *Eleutherotypia* [01/10/2007]) on the continuing excavation of the M settlement, conducted in collaboration with D. Panagiotopoulos (Heidelberg).

The M main building, of 2 or 3 storeys, covers ca. 1,500m<sup>2</sup>; its 2 entrances, good façade and frescoes establish its élite status. It was a working establishment, perhaps central to the exploitation of the upland terrain in which it is located. It had its own potter. Three chronological phases are distinguished: Prepalatial, Protopalatial and Neopalatial. Burnt after an earthquake, it was later replaced by a Myc structure. Some 50 pithoi have so far been located, among numerous other vessels, and bone and metal tools (knives, double axes). Over 30 types of seed have been found (barley, wheat, lentils, horse-beans), plus evidence of aromatic materials, and the bones of sheep, goat, hares and quantities of deer.

In the excavations of 2007, 5 rooms along the N face of the main structure were investigated. Room 7 had quantities of plaster and stones fallen from its upper storey/roof; wall-fresco pieces were still in place at their junction with the floor (thin coloured bands are detectable). Room 8 has a window (as have rooms 9, 14 and 15), plus more fresco in situ, 3 small vases, bits of wood and bronze, and some upright stones arrayed in arcs at the W that block an easy passage into the door with room 9, whose lintel still remains. Room 17 contained a fallen pithos and various clay vases including spouted jars, hemispherical and conical cups, and jars, as well as bones and burnt wood. Corridor 16 was partly blocked by a stone floor of schist and limestone fallen from above, partly by fallen vases, plaster and burnt wood. Room 15, a basement, has collapsed stones with a pithos and smaller vases, cooking pots, part of a set of Horns of Consecration, bones and burnt wood (Fig. 106).

Geophysical survey of the area of this M structure and its Myc successor revealed traces of a considerable number of walls. Environmental studies (animal bones) and conservation in the building continue.

# DEMOS ARKADIOU

**Eleutherna.** To Vima (21/10/2007) reports on the discovery by N. Stampolidis (Crete/Museum of Cyc Art) of 3 Geo pithos burials (ranging from the L8<sup>th</sup> to M-L7<sup>th</sup> Ct BC). The pithoi (ca. 2m h.) were set on their sides between 2 parallel stone walls and had stones arranged over them, forming a sort of false vault as they rested on the curve of the vases. The interconnection of the 3 was emphasized by their being laid so that the base of one closed the top of the other. All contained skeletons (at least one adult and some children) and grave goods. A marker further identified the spot.



106. Zominthos: room 15, collapsed basement

The earliest burial had 3 bodies: perhaps one interred before the other pair. The oldest person, a female, had a gold sheet diadem attached to the forehead by a now perished cord. Finds associated were gold pins, beads of rock crystal, carnelian and other stone, and a scarab with winged deities. An impressive bronze ladle had a deep bowl and a 0.5m *l*. handle with a bird terminal: by the mouth of the pithos was an 8<sup>th</sup> Ct Cypriot oinochoe. The 2<sup>nd</sup> pithos held a single skeleton associated with one gold and one iron pin. The last pithos too held one body, with a necklace of gold sheet rosettes, a gold relief bead with a head in EIA style and more pins of bronze and iron.

The goods in the first pithos resembled others found earlier in a pit grave which held the burnt remains of a 'warrior-prince'. The excavators surmise that there may be earlier BA burials in the area – perhaps the source of offerings such as sealstones and stone vases in Geo burials.

Also in this area is a Geo structure of the  $8^{th}$  Ct BC, partly sunk into the ground. It is not fully excavated, but has substantial walls  $(2m \ h. \ x \ 1.5m \ w.)$ , stone benches and tables inside and is equipped with kraters and many cups. The report speculates on a possible connection with rites for the dead.

Finally, 3 ash urns were found, similar to those associated with the warrior-prince pit burials; they had been closed by bronze bowls imported from Egypt or Asia Minor.

Ta Nea and Eleutheros Typos (05/02/2008) carry reports of a unique item that is compared with the Antikythera mechanism and interpreted as a Rom lock. Recovered in 2002, it has been subjected to extensive scientific examination at Rethymnon (D. Kalligeropoulos and S. Vasileiadou). It was recovered in a pottery store of a small Rom bath-house, the roof of which

collapsed in the 365 AD earthquake, killing at least one person. Probably once attached to a ceiling beam by its 10-link chain (0.53m *l.*), a potential key to it was located nearby. The mechanism is cylindrical, around 1kg in weight and of metal: it has further bands of bronze attached to the exterior. The interior was divided into 2, with 3 cogged wheels of iron set on a pin and a further ovoid plate.

**WESTERN CRETE** (Prefecture of Chania) (25<sup>th</sup> EPCA: 28<sup>th</sup> EBA)

**DEMOS KANDANOS** 

## Kavalariani

Publication: A. Lymberopoulou, The Church of the Archangel Michael at Kavalariana: Art and Society on Fourteenth-Century Venetian-Dominated Crete (London, Pindar Press, 2006).

KOINOTITA GAVDOU

## Gavdos

**Katalymata**. K. Kopaka (Crete) reports on continuing work on the building on the hill of Tsirmiri, in the interior of the island. The structure, of which several rooms have been excavated, is reminiscent of a M 'villa'. Probably associated is the M 2<sup>nd</sup> millennium pithos burial, reported in AR 53 ([2006–2007], 121).

## **DEMOS CHANION**

Chania. M. Andreadaki-Vlazaki (Director, 25<sup>th</sup> EPCA) reports on the 3<sup>rd</sup> season of excavations within the heart of the old town (Kastelli hill and Splantzia quarter) on the 'Katré 1' plot, adjacent to the S walls of the acropolis of anc. Kydonia. Opposite lies the 'Katré 10' plot, where J. Papapostolou revealed the Linear A archive in 1973.

Seven more trenches (EIA) were opened, towards the N and E; the architectural remains revealed again bear witness to the complex stratigraphy created by the site's long history. Apart from 2 mod. walls, the latest features date to the LRom period; ERom, Hel and Cl vestiges are localized to the S and E, and Ar, EAr and LGeo remains to the N and W. A big pit, containing many fine cups with matt black paint (6<sup>th</sup> Ct BC), probably for feasting, was dug in the W-central part. In PH times, and immediately afterwards, a large open-air space seems to have occupied the N part: here, an extensive layer of burnt pithos fragments and small stones of the LGeo (L8<sup>th</sup> BC) was revealed below the Ar and EAr remains.

Below comes a level with LM IIIC pottery, and deeper still one with quantities of shaped stones from well-built constructions, now lying on a floor with numerous animal bones found *in situ*. Among indisputable local LM IIIB pottery were quite a few LM IB sherds. Here a completely preserved LM IB roundel was found: it carries the Linear A ideogram for cloth on its upper surface and 15 impressions of one seal, depicting 2 couchant lions, on the periphery. Preserved by the conflagration of about 1450 BC, it is similar to examples already found in both the Katré 10 and GSE excavations, albeit having more impressions on its periphery than do the others.

N. Maravelaki has added further pieces of stucco of Hel, Rom and later date to his study concerned with establishing new dating techniques for structural remains.

## DEMOS KISSAMOU

**Kisamos.** S. Markoulaki (25<sup>th</sup> EPCA) reports on the continuation in 2007 of the excavation of a Rom town house or villa at the Stimadoraki plot. Situated on the W side of the anc. settlement, towards the harbour, only a part of this enormous structure, the largest of its sort yet uncovered here, lies within the plot's borders.

Set against the paved E-W road (decumanus) and entered from the same into a lobby (fauces), that part of the edifice excavated is divided into 2 zones by a N-S wall (24.5m l.) at right angles to the road. W of the wall lies the W wing and to

the E is the peristyle courtyard. In the W wing, parts of 8 rooms were revealed. Four to the S had earth floors and were relatively ordinary; 4 to the N had more splendid functions as the multi-coloured mosaic pavements show. As well as interesting geometric patterns, figured scenes exist. The southernmost has various symbols with masks and at the centre a Medusa; that to its N, larger still, shows the retinue of Dionysos. An E–W corridor comes next, permitting internal access to these reception room suites: though damaged, its use of glass-paste tesserae creates much colour – a man with a wreath and a Muse are depicted: 2 names survive, in their endings only. The last room at the N has a representation of Eros with garlands in a flower-filled meadow. Preliminary study places the mosaics in the L2<sup>nd</sup>–E3<sup>rd</sup> Ct AD on stylistic grounds.

The peristyle courtyard is bordered by a stoa, presumably with a garden (viridarium) at its centre. Parts of the W and S colonnade exist: 10 column settings (at intervals of 2.5m, reduced to 2m at the N) for the first, with one extant only at the S. The colonnade is 2.9m w. at the W and 3.5m at the S. Nothing of the columns is preserved (probably they were of wood), nor of their stylobates. They were set on stone blocks (0.5m²): lime plaster was poured fresh into square pits dug down below the floor before the blocks were positioned. Below the floor a lead pipe of small di. ran diagonally across the yard. The structure was probably built in the L2<sup>nd</sup>–E3<sup>rd</sup> Ct AD, although concrete evidence of coins or other firmly datable material is at present lacking as excavation has not gone deep enough.

The villa had a 2<sup>nd</sup> phase of use involving important alterations that mark its decline as a structure: cross-walls divide up the large yard so that more people could be accommodated, albeit at a lower standard of living. The columns were removed and their bases covered over when the earth floor was raised. A small opening in the large N–S wall allowed access to the W wing. A floor of clay plaques and a small oven are preserved on its interior. The room with the Muse and that with Eros are also given earth floors. The first became a cellar, connected to the peristyle yard, whose amphorae were smashed in the building's destruction: under a layer of fallen roof tiles was a human skeleton, with another located by a wall in the converted yard.

A coin hoard of sesterces of Gordian III was retrieved on a floor of the 2<sup>nd</sup> phase; other coins of the 2<sup>nd</sup> half of the 3<sup>rd</sup> Ct AD show the alterations to have been undertaken after the M3<sup>rd</sup> Ct.

The final destruction, responsible for the 2 fatalities, can be assigned to the general stratigraphical horizon associated with the massive earthquake of 365 AD. This levelled Kisamos.

# SOURCES OF ILLUSTRATIONS

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# ARCHAEOLOGY IN THE BLACK SEA REGION IN CLASSICAL ANTIQUITY 1993–2007

By Pia Guldager Bilde, Birgitte Bøgh, Søren Handberg, Jakob Munk Højte, Jens Nieling, Tatiana Smekalova and Vladimir Stolba With contributions by Alexandre Baralis, Iulian Bîrzescu, Diana Gergova, Valetina V. Krapivina, Krassimir Krusteff, Vasilica Lungu and Alexander A. Maslennikov

# **INTRODUCTION** (Fig. 1)

The last report, including the year 1992, (Hind 1992–1993) was published only 3 years after the fall of the Iron Curtain and the year following the collapse of the Soviet Union. This has been a decisive factor in the strongly renewed interest of Western scholars in the Black Sea region. In general since the last report, the Black Sea world has moved closer to the West. In 2004 2 of the Black Sea countries, Romania and Bulgaria, became members of NATO and on 1 January 2007 they joined the European Union. Turkey, since 1952 a member of NATO, is currently negotiating with the EU concerning the conditions of membership, and Georgia and Ukraine currently aspire to membership of NATO.

The fall of the Iron Curtain also proved to be the turning point after which many collaborative projects between Eastern and Western scholars were initiated. At the institutional level this led to the formation of Black Sea research groups at several Western universities and other research institutions. renewed interest is also reflected in several new periodicals dedicated to the Black Sea region, or at least part of it, as well as a series of publications that treat the Black Sea region from a holistic perspective and a number of international conferences and comprehensive exhibitions. Thus, knowledge of the Black Sea region in the West is decisively much better today than when the last report was made, and, as this report will show, many researchers have seized the new opportunities for East-West collaboration. However, a counter current can be observed in the new millennium. After the fall of the Iron Curtain, Western scholars were optimistic about the new possibilities for collaboration; however, due to strengthened nationalism in many Black Sea countries many East-West projects were given up after a few seasons. So in 2008, in fact, there are fewer running collaborative projects than was the case in the 1990s. This is an alarming development for the scientific investigation of the region.

The anc. world plays an increasing role in the formation of new national identities, which came out of the break up of the Soviet Union. However, the new emphasis on the region and its material remains also has its draw backs. First of all, the number of illicit excavations, especially in S Russia and Ukraine, has exploded as the result of, on the one hand, increased wealth among the region's many new wealthy people, who are interested in collecting Cl antiquities, and, on the other hand, the new Western focus on the region has provided growth for the international art market.

In the period covered by the present report several leading scholars in the field of archaeology of the Black Sea region passed away: Ja.V. Domanskij, A. Fol, O. Lordkipanidze, D.M. Pippidi, D.B. Šelov, V. Velkov, Ju.G. Vinogradov to mention only some of the most well known and highly esteemed in the West.

The authors would sincerely like to thank the contributors to the present report: Alexandre Baralis, Iulian Bîrzescu, Diana Gergova, Valetina V. Krapivina, and Krassimir Krusteff, Vasilica Lungu and Alexander A. Maslennikov. We also acknowledge our indebtedness to our colleagues at the Danish National Research Foundation's Centre for Black Sea Studies: Leif Erik Vaag and Kristina W. Jacobsen for their considerable

effort improving the text and to Jane Hjarl Petersen for procuring the first background material for the section on Bulgaria and Romania. The Centre's employees were responsible for the following sections: Introduction (PGB); Bulgaria (BB, PGB, D. Gergova, K. Krusteff); Romania (BB, PGB, I. Bîrzescu, V. Lungu); SW Ukraine (PGB, SH, V.V. Krapivina); W and Central Crimea (VS); E Crimea (JMH, TS, A.A. Maslennikov); Maiotis, Taman', N Caucasus (TS); Georgia (JN); Turkey (JMH). P. Guldager Bilde served as general editor.

## INSTITUTIONS

In 1995 the Eurasien-Abteilung of the DAI was established in Berlin. This research institution is engaged in the study of interrelations between the nomadic and sedentary cultures of Eurasia, and its work thus intersects with half of the Black Sea region. Currently, DAI carries out 3 archaeological field projects in the Russian part of the Black Sea region: investigation of Taganrog (from 2004; O. Dally, W. Rabbel, H. Stümpel, Ch. Müller, G. Wendt, M. Ullrich, A.O. Kozin, P.A. Larenok and V.P. Kopylov), of the Kislovodsk basin in the LBA and EIA (from 2006; S. Reinhold, D.S. Korobov and A.B. Belinskij) and prospection in the Taman' Peninsula (from 2007; H. Brückner, U. Schlotzhauer, H. Stümpel and D. Žuravlev). The Eurasien-Abteilung publishes the periodical Eurasia Antiqua. Zeitschrift für Archäologie Eurasiens; to date 13 volumes have appeared.

The British Institute at Ankara (BIAA) supports research focused on Turkey and the Black Sea littoral in all academic disciplines within the arts, humanities and social sciences. For 3 years they financed the British Academy Black Sea Initiative (BABSI) (2002–2005). Among other projects they co-finance is the joint British-Georgian Pichvnari Expedition established in 1998, partly published by the directors M. Vickers and A. Kakhidze (2004; Kakhidze 2007).

In 2000, Zentrum für Archäologie und Kulturgeschichte des Schwarzmeerraumes (ZAKS), an interdisciplinary research platform, was created by the archaeological institutes of the Martin-Luther-Universität in Halle-Wittenberg (directors: F. Bertemes and A. Furtwängler). ZAKS publishes the series Schriften des Zentrums für Archäologie und Kulturgeschichte des Schwarzmeerraumes. To date 11 volumes have been published.

The organization most recently established, which is dedicated to the Black Sea region, is the Centre for Black Sea Studies, University of Aarhus (Denmark), created in 2002 by the Danish National Research Foundation (director: P. Guldager Bilde). The centre works on a grant lasting until 2010. It publishes the series *Black Sea Studies* of which to date 7 volumes have been published. Six of these volumes are the proceedings of international conferences hosted by the Centre (http://www.pontos.dk/publications/books).

In 2003 F. Fless became Professor at Freie Universität in Berlin; since then a number of Black Sea activities have been hosted by that institution, such as the investigations of Alma Kermen (2003–2007; F. Fless and J. Zaycev) and Ak Kaja (2007; K. Moede and J. Zajcev) in the Crimea.



1. Map of the Black Sea region including major sites

In 2004 an American Research Centre was established in Sofia (ARCS), its first director being K. Clinton. The centre aims at facilitating academic research in Bulgaria for N American scholars and furthering collaboration between scholars from N America and the countries in SE Europe (http://www.einaudi.cornell.edu/arcs/index.asp).

## PRINCIPAL NEW PERIODICALS AND BOOKS

In the 1990s, a number of new periodicals, partly or fully dedicated to the Black Sea region in antiquity, came into being. The first was the French-Italian-Romanian periodical founded in 1994, Il Mar Nero. Annali di archeologia e storia (eds P. Alexandrescu and S. Papacostea), 5 volumes of which have appeared to date. Already mentioned is Eurasia Antiqua from 1995. Also in 1995 appeared the first volume of Ancient Civilizations from Scythia to Siberia. An International Journal of Comparative Studies in History and Archaeology (eds G. Bongard-Levin, G. Gnoli and A. Ivantchik). This journal covers the territory of the former Soviet Union and, in fact, much the same area as Eurasia Antiqua. To date 14 volumes have been published. One year later, the first volume of Colloquia Pontica, a series of publications on the archaeology and anc. history of the Black Sea area edited by G. Tsetskhladze appeared. So far 13 volumes have been published. In 1997 followed Archaeologia Bulgarica, a periodical edited by L.F. Vagalinski and published in English by the Archaeological Institute of the Bulgarian Academy of Sciences, Sofia. It comes out 3 times a year. It has no restrictions as to time and territory, but the emphasis is on the archaeology of SE Europe. Ancient West & East edited by G.R. Tsetskhladze is a journal devoted to the study of the peripheries of the anc. world and the relations between the Gree#ks and Romans and various local, 'barbarian' peoples. The first volume came out in 2002, and to date 5 volumes have been published. A very useful resource concerning the archaeology of Bulgaria and Romania is the multi-lingual and multi-period Fasti-online (http://www.fastionline.org/about.php). The site is a web-based GIS database that contains a basic record sheet for each site excavated.

The beginning of the new millennium witnessed the publication of several important studies providing a topographical overview of the Black Sea region. First to be mentioned is *The Barrington Atlas of the Greek and Roman World*, edited by R.J.A. Talbert (Princeton 2000). This is a comprehensive atlas spanning the entire period and space of Gr and Rom civilization from ca. 1000 BC to AD 650. The atlas includes a detailed listing of periods of cultural activity, mod. names and locations, and bibliographic citations for each feature. The Black Sea region is covered by maps 22–23, 52–53, 84, 86–88, and ca. 1,300 anc. sites are briefly catalogued.

Three years later, D.V. Grammenos and E.K. Petropoulos edited *Ancient Greek Colonies in the Black Sea* (Thessaloniki 2003) in 2 volumes. This was supplemented in 2007 by the same editors in the British Archaeological Reports International Series (Grammenos and Petropoulos 2007). Both publications are topographically organized but contain thematic chapters as well.

With a geographical approach also to be mentioned is M. Hermann Hansen and T. Heine Nielsen (eds), An Inventory of Archaic and Classical Poleis (Oxford 2004). Though the inventory is limited to the Ar and Cl periods, it provides a thorough up-to-date overview of all known poleis and similar units in the Black Sea region. Finally, at www.pontos.dk a gazetteer of anc. sites has been made available by the Danish Centre for Black Sea Studies featuring photographs of sites and finds as well as literary sources.

In 1995 volume 4 of the Lexicon of Greek Personal Names including the Black Sea region was published by P.M. Fraser and E. Matthews (2005). Curated by V.N. Zin'ko, the Demeter Foundation in Kerch has initiated a complete publication of the holdings of the Kerch Archaeological Museum. So far volumes on the sculpture (Zin'ko 2004), the coin hoards (Abramzon et al. 2006) and the Ar to EHel lamps (Žuravlev, Bykovskaja and Želtikova 2007) have appeared. To be mentioned also are the SNG volumes of the British Museum, W.M. Stancomb Collection and the National Museum in Krakow which are devoted exclusively to the Black Sea coins (Price 1993; Stancomb 2000; Bodzek 2006a). Three major contributions on amphorae have been published; 2 monographs on Gr and Black Sea amphorae found in the region (Monachov 1999; 2003), and one on late Hel and Rom amphorae of Black Sea production (Vnukov 2003). I.V. Tunkina has published a magisterial study on the research history of the old S Russia (Tunkina 2002). A sizeable resumé with major additions is published in English in BSS 1 (Tunkina 2003).

## INTERNATIONAL CONFERENCES

Since 1992 a number of open, international conferences have taken place, which merit to be mentioned. Two of these were in the outset aimed at discussing the Bosporan Kingdom, namely the Bosporan Phenomenon (Bosporskij Fenomen) held ca. every one and a half years in St Petersburg and the Bosporan Readings (Bosporskie Štenija), which is annual. Thematically both conferences have developed beyond the Bosporan Kingdom so today they cover the entire region along the N littoral of the Black Sea and the most important new discoveries of the current year are made public here. Substantial abstracts have been pre-published for both conferences and many of the contributions to the Kerch conferences have later been published in full in the series Bosporskie Issledovanija edited by V.N. Zin'ko (first volume in 2001; to date 20 volumes have been published as well as 3 supplementary volumes). Unfortunately, the volumes with conference abstracts are not available on the book market, but back issues can often be bought through the conference organizers.

The first St Petersburg conference on the Bosporan Phenomenon was held in 1998. It was a small, local enterprise organized on the initiative of V. Chršanovskij in the State Museum of the History of Religion and dedicated to the Bosporan Kingdom as a historical and cultural phenomenon. Since this first conference, 6 further conferences have been held: Gr culture in the periphery of the anc. world (1999); colonization of the region, establishment of poleis and the appearance of states (2001); funerary monuments and sanctuaries (2002); problems concerning chronology and dating of monuments (2004); problems of written and archaeological sources (2005); and sacred meaning of regions, sites and objects (2007).

The Kerch conferences are organized by V.N. Zin'ko and held in the month of May in the former capital of the Bosporan Kingdom, the first one in 2000. Only in recent years has a

thematic focus been chosen: in 2004 the theme was ethnic processes; in 2005 periods of destabilizations and catastrophes; in 2006 oikos; in 2007 sanctuaries and sacred objects; and the latest in 2008 focused on militaria.

Other international conferences have not at the outset been confined thematically to a historical phenomenon such as the Bosporan Kingdom. To these belong the recurring conferences at Vani that also pre-publish abstracts. After the conferences the proceedings have been published as monographs. Since 1992 5 volumes have appeared (Sur les traces des Argonautes [1990], 1996; La mer Noire, zone de contacts [1994], 1999; Religions du Pont-Euxin [1997], 1999; Pont-Euxin et commerce: la genèse de la 'route de la soie' [1999], 2002; Pont-Euxin et Polis: Polis hellenis et polis barbaron [2002], 2005). The publication of the 2005 conference is currently being edited.

In September 2001, The Second International Congress on Black Sea Antiquities was held in Ankara, Turkey, which still awaits publication. In November 2002, the conference Les cités grecques, les sociétés indigènes et les empires mondiaux dans la région nord-pontique culturelle: origines et développement d'une koinè politique, économique et culturelle (VIIe s. av. J.-C.-III s. ap. J.-C.), was held in Bordeaux, France. The conference proceedings were published in 2007 (Bresson, Ivančik and Ferrary 2007). In October 2004 the conference The Black Sea Region: Past, Present and Future was held in Istanbul, Turkey. It was published in 2007 (Erkut and Mitchell 2007). In September 2005 The Third International Congress on Black Sea Antiquities, The Black Sea Area and its Relationship with Ancient Central and Eastern Europe (1st Millennium BC-5th Century AD) was held in Prague. Abstracts are available on-line at http://www.fhs.cuni.cz/ conference/blacksea2005/default.asp?id=8. Contemporary with this conference, The 11th International Symposium on the Ancient History and Archaeology of the Black Sea Area was held in Vani, Georgia. In Batumi and Trabzon, in April 2006, the conference Production and Trade of Amphorae in the Black Sea, covering the expanding field of amphora studies, was held. On 18 March 2006, the Institute of Archaeology of the Jagiellonian University hosted the conference Pontica which was preceded by a photographic exhibition In Search of Treasures. Polish-Ukrainian Research at Koshary near Odessa at the National Museum in Cracow. Proceedings of the conference appeared under the title Pontika 2006. Recent Research in Northern Black Sea Coast Greek Colonies (Krakow 2008). In April 2008, the 2<sup>nd</sup> Pontika conference, Recent Research on the Northern and Eastern Black Sea in Ancient Times, took place in Cracow. Proceedings will be published in the BAR series.

Two major international conferences scheduled for 2008 have regrettably been cancelled: the 12<sup>th</sup> Vani conference and the conference on Paphlagonia and Pontus in antiquity and the EByz period to be held in Izmir. The abstracts of the latter conference, which was cancelled with a few days notice, are available on-line (http://www.cca.unimelb.edu.au/community/Events/PAPHLAGONIA-PONTUS-abstracts.pdf).

# **EXHIBITIONS**

In 2007, the State Hermitage Museum in St Petersburg closed down its Black Sea exhibition for a major renovation.

A number of large-scale exhibitions have made Black Sea antiquities known in the West since 1992. However, the picture promoted of the Black Sea cultures is rather biased, as the exhibitions mostly focus on gold objects found in the region.

In 1995 the exhibition *Unterwegs zum Goldenen Vlies* on Georgian antiquities was held in Saarbrücken (catalogue: Miron and Orthmann 1995). In 1998–1999, the exhibition *Ancient Gold – The Wealth of the Thracians: Treasures from the Republic of Bulgaria* toured the United States (catalogue: Marazov 1998). In 2000 Scythian gold was displayed in 2 competing exhibitions: *The Golden Deer of Eurasia: Scythian and Sarmatian Treasures from the Russian Steppes*, The Metropolitan Museum of Art, October 2000 to February 2001 (catalogue: Alekseev and Farkas 2000) and *Gold of the Nomads, Scythian Treasures from Ancient Ukraine* which travelled the United States from November 1999 to August 2001 and ended in Paris (catalogue: Reeder 2000). Also in 2001 the exhibition *Georgien – Schätze aus dem Land des Goldenen Vlies* was held in Bochum (catalogue: Gambashidze *et al.* 2001).

From February to July 2004 the exhibition Greek Gold -From the Treasure Chambers of the Hermitage celebrated the opening of the Hermitage Amsterdam, a dependency of the Hermitage Museum of St Petersburg on the River Amstel in Amsterdam. The exhibition Die Thraker - Das goldene Reich des Orpheus could be seen in the Kunst- und Ausstellungshalle der Bundesrepublik Deutschland at Bonn from July 2004 to January 2005 (Catalogue: Fol et al. 2004). From October 2004 to February 2005 the large exhibition Gold Treasures - Romania in 7,000 years was shown in Medelhavsmuseet, Stockholm (catalogue: Slej, Sörling and Popovici 2004). In connection with the Danish Queen Margrethe's visit to Bulgaria and the return visit of the Bulgarian president to Denmark, the rich finds made in Bulgarian tombs in 2004 and 2005, e.g., of the magnificent portrait probably of King Seuthes III (Fig. 6), were exhibited for a short period in April 2006 at the Danish National Museum.

While the Odessa Archaeological Museum was closed for refurbishment, a significant part of its holdings was exhibited in Cracow: Treasures from the Black Sea. Gold, Sculpture and Ceramics from the Museum of Archaeology in Odessa, National Museum in Krakow, March to June 2006 (catalogue: Bodzek 2006b). It was also the closure for renovation of the Black Sea exhibition in the State Hermitage Museum that made possible the encompassing exhibition Greeks on the Black Sea: Ancient Art from the Hermitage in the J. Paul Getty Museum at the Getty Villa, Malibu, June to September 2007 (catalogue: Trofimova and Kalashnik 2007).

Thus 2007 was a great year for Black Sea exhibitions. Apart from the previously mentioned exhibition in Malibu, 2 exhibitions could be enjoyed in Berlin: Im Zeichen des Goldenen Greifen – Königsgräber der Skythen (catalogue: Parzinger et al. 2007) and Griechen – Skythen – Amazonen, a joint exhibition by Freie Universität Berlin and the Staatliche Museen zu Berlin in the Pergamon Museum, June to October (catalogue: Kästner, Langner and Rabe 2007). In the Antikenmuseum Basel and Sammlung Ludwig the exhibition Die alten Zivilisationen Bulgariens – Das Gold der Thraker was open to the public from March to July in the same year (catalogue: Nikolov et al. 2007).

Crossing the Atlantic, the exhibition Wine, Worship and Sacrifice: The Golden Graves of Ancient Vani – Treasures from the Republic of Georgia was shown at the Smithsonian Institute in Washington DC from December 2007 to February 2008 (catalogue: Kacharava and Kvirkvelia 2008). From March to June 2008 it has been exhibited at the Institute for the Study of the Ancient World, New York University, and from June to September 2008 it was on display at the Museum of Fine Arts, Houston. The exhibition has foremost featured the finds from 4 newly found rich graves unearthed in Vani in 2004. This is the first time that archaeological finds from Georgia have been brought to the United States. Some of the finds have previously

been shown in Tblisi and are illustrated in the catalogue edited by D. Kacharava *et al.*, *Colchis – Land of Golden Fleece* (Tbilisi 2005). This smaller exhibition was earlier presented at 3 venues in Europe, in Berlin, Paris and Nice.

## **BULGARIA** (Fig. 2)

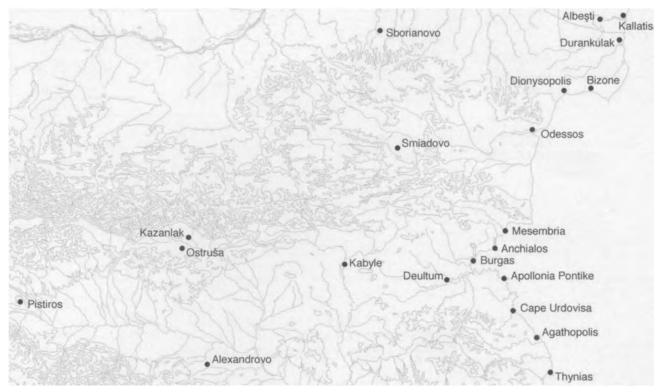
Since 1991, changes in the official governmental funding of archaeological research have lead to a decrease in the systematic excavations in Bulgaria, but due to increased building activities the number of rescue excavations has risen considerably (Cholakov and Chukalev 2008, 144). Thus, in 2006 rescue excavations amounted to half of the archaeological fieldwork carried out on the Bulgarian Black Sea coast (Cholakov and Chukalev 2008, 146).

## Institutions

The National Institute of Archaeology of the Bulgarian Academy of Sciences, with its museum (NIAM), coordinates the archaeological research over the entire territory of Bulgaria, and the Interagency Council of Field Research of NIAM appointed by the Minister of Culture issues permits for archaeological fieldwork in Bulgaria. The annual documentation of the archaeological investigations is kept in the Research Archives of NIAM. Presently this amounts to 812 collections covering sites investigated during the last 50 years. A National Automated Informational System 'Archaeological Map of Bulgaria' is also hosted at NIAM. The Centre for Underwater Archaeology in Sozopol organizes underwater investigations and the symposia *Thracia Pontica* and *Pontica Mediaevi*.

# Conferences and principal publications

Conference activity and publications have continued since 1993 with a growing international outlook reflected both in the number of international participants and the focus on Thracian interrelations with other cultures. The main conferences were: La Thrace et les societes maritimes anciennes, 1994 (Thracia Pontica 1997); Thracians and Phrygians: Problems of Parallelism, 1995 (Tuna, Aktüre and Lynch 1998); The Thracian World at the Crossroads of Civilization, 1996 (Roman 1997); Thrace and the Aegean, 2000 (Fol 2002) and The Culture of Thracians and their Neighbours (Bouzek and Domaradzka 2005). Various Bulgarian periodicals can be consulted for new archaeological finds in Bulgaria, the most important ones being published by the Bulgarian Academy of Sciences. Thus NIAM is responsible for Helis (vols 3-5), Arheologia and the annual reports of ongoing fieldwork in the country Archeologičeski Otkritija i Razkopki, as well as Razkopki i proucvanija and Izvestija na Archeologičeskija Institut (see more on their website http://aim.sofianet. net/main.php?lang=ENG) in addition to Archaeologia Bulgarica mentioned in the introduction, whereas since 1993 the Institute of Thracology (http://www.thracologia.org/ publice.html) in Sofia has published vols 10-17 of Thracia, vols 6-8 of Studia Thracica, vol. 10 of Thracia Antiqua (in Bulgarian) and vols 5-15 of Orpheus. For inscriptions, see the addendum to G. Mihailov's IGBulg (Banev et al. 1999; 2001). A survey of new developments in Bulgarian archaeology and an extensive list of references and publications can be found in Stoyanov and Lozanov (n.d.), and in Cholakov and Chukalev 2008 (concerning the year 2006). Detailed information on various Gr and Rom sites in Bulgaria and Romania (as well as other countries), including maps, discoveries made since 2000 and information about research teams, can be found at http://www.fastionline.org/.



2. Map of S Romania and Bulgaria with sites mentioned in the text

# Agathopolis (Ahtopol')

Sporadic rescue excavations in Ahtopol' have revealed the stratigraphy of the anc. town from the 5<sup>th</sup> Ct BC until the Med period. Part of the town's LRom and Med wall has been investigated (*AOR* [1990], 81–82; [1992], 62). The 1999–2000 excavations were directed by D. Gergova.

A tumulus with a rich burial of the Hel period and later burials from the 1<sup>st</sup>-2<sup>nd</sup> Ct AD near Sinemorec S of the town most probably belongs to the still unexcavated anc. town (*AOR* [1996], 40-41; [2007], 77-78; [2008], 233-34).

# Cape Urdovisa

Thracian and Gr pottery from the 5<sup>th</sup>–4<sup>th</sup> Ct BC, as well as from the 5<sup>th</sup> Ct AD and the Med period, has been found on Cape Urdovisa near Kiten (*AOR* [2008], 454–62). Archaeological surveys have been organized in the territory of the Ropotamo National park, where several Thracian sanctuaries have been localized (*AOR* [2003], 109).

# Apollonia Pontike (Sozopol')

During rescue excavations in Sozopol' new data about the town planning, the architecture and the stratigraphy of the town have been revealed (*AOR* [2007], 353–58).

The necropoleis of Apollonia Pontike are among the best studied on the entire W coast. To date 916 graves have been unearthed (Cholakov and Chukalev 2008, 167–68). We thank A. Baralis, A. Hermary, K. Panayotova and A. Riapov for the following information on the necropolis of Kalfata situated S of the city walls and dating from the M5<sup>th</sup>–M3<sup>rd</sup> Ct BC (Figs 3, 4). Two hundred and eighty graves and a large number of deposits with funeral artefacts have been found during the last 10 years. Most typical among the grave goods were fragrance vessels: Attic and local hydriai (Fig. 5), lekythoi, askoi, alabastra and unguentaria. Amphorae (mainly from Herakleia Pontike and

Thasos), jugs, oinochoai, dishes and lamps were also common. The grave goods were almost always ritually mutilated. Terracotta figurines were found together with strigils, mirrors, astragals and jewellery. In a few instances, reburial or cremation performed outside the graves could be documented (K. Panayotova, D. Nedev, A. Hermary, 2004 excavations, *Fasti-online*). Most common were the pit graves with inhumation burials. Traces of repeated post-burial rituals at the grave testify to the tradition of performing memorial rites for the deceased. More detailed information on the finds can be found in Panayotova 1998; Panayotova, Riapov and Baralis 2006; Hermary 2007; *AOR* (2007), 364–68.

Several tumuli from the Hel period on Cape Kolokita S of Apollonia reveal Thracian burial rites (*AOR* [2007], 234, 244, 307; [2008], 309–31).

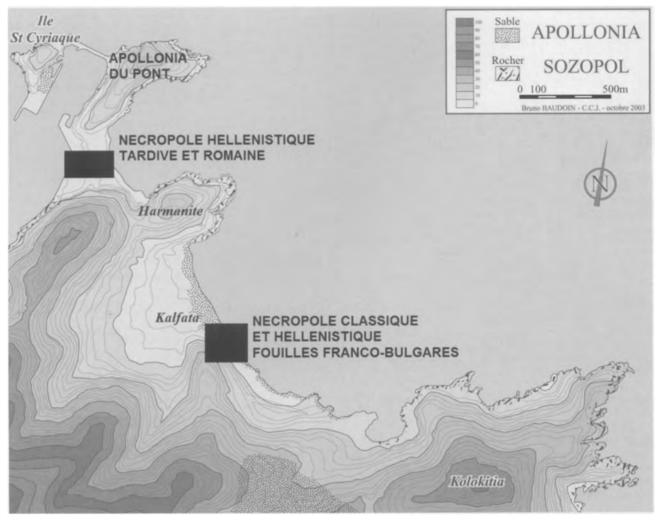
A number of Kyzikene silver coins have been found in different hoards in the region between Apollonia and Nessebar, all from the 4<sup>th</sup> Ct BC. In 1998 a hoard containing silver coins of Kyzikean origin was found in the chora of Mesembria, and in 2000 another hoard was found in Apollonia (Karayotov 2007).

## Deultum (Debelt)

Investigations of Deultum, founded by Vespasian, comprise excavations of the Rom and Byz fortress as well as excavations of the Thracian tumular necropolis. This necropolis was very long-lived with burials from the LBA and EIA, and the Rom period between the 1<sup>st</sup> and 5<sup>th</sup> Ct AD (*AOR* [2007], 241–42).

# Burgas

A Thracian fortress by Lake Mandra near Burgas has been studied, and materials from the EIA as well as from the 3<sup>rd</sup> quarter of the 4<sup>th</sup>-E3<sup>rd</sup> Ct BC have been found (*AOR* [2008], 308, 427-28).



3. Apollonia Pontike: map of the location of the necropoleis

Tumuli from the Rom period, 1<sup>st</sup>–4<sup>th</sup> Ct AD, have been studied near the village of Fakia (*AOR* [1995], 101; [1996], 45). Excavations of a Thracian cult complex by Manastir Tepe near the Burgas mineral baths have unearthed stone buildings, fireplaces, and Thracian and Gr pottery dated to the 3<sup>rd</sup>–2<sup>nd</sup> Ct BC (*AOR* [1995], 70–71).

# Anchialos (Pomorie)

Archaeological excavations preceded by geophysical prospection have been initiated in Pomorie. Part of the Rom city's street grid and several buildings, as well as Med structures have been found. Rescue excavations near the village of Medovo of a tumulus belonging to Anchialos' necropolis contained a cremation from the 2<sup>nd</sup> Ct AD (AOR [2005]).

## Mesembria (Nessebar)

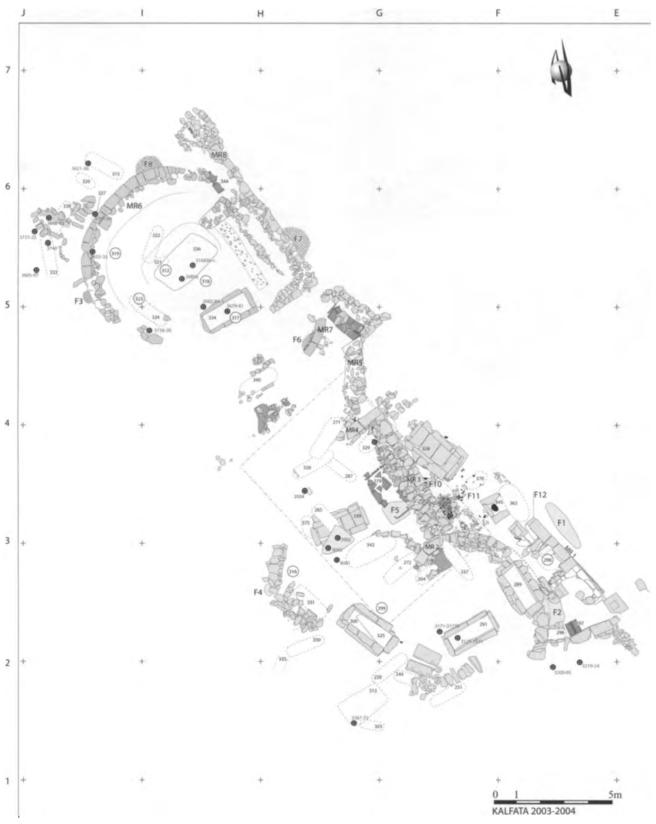
Buildings from the Cl, Hel and Med periods have been found, as well as new Gr inscriptions (AOR [2007], 273–75). The latest volume of the Nessebar series, Nessebre III, was published in 2005 after a long delay (Velkov and Karayotov 2005). This volume includes mostly finds from before 1993, but is recommended for giving a good overview of the excavated town which included temples of Zeus and Apollo, the city archive, a theatre and private houses.

Excavations in the necropolis continue. In 2007, a grave with a terracotta figurine, probably Kybele, was discovered. Other finds from this site are published in *AOR* 2007 and 2008

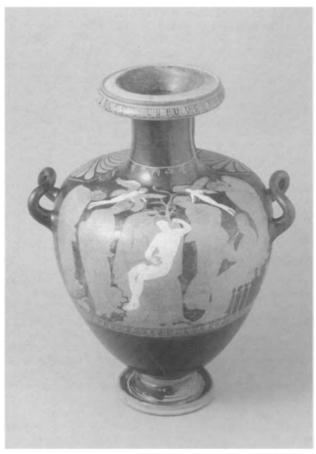
K. Krusteff kindly reports that an archaeological expedition in the municipality of Nessebar was organized by Prof. I. Karayotov and himself in 2006–2007. The expedition explored the valley of the River Hadžijka, situated in the territory of the Mesembrian chora and inhabited by Greeks and Thracians settled in numerous small katoikiai. Pottery, mainly pithoi and roof tiles, was found. A fortified site inhabited from the IA through to Hel times was found in the territory of the village of Orizare.

Another fortification from the Rom period was discovered 500m E, in which pieces of ceramic Rom pipes were found, possibly the remains of an aqueduct. On the left bank of the Poroy Reservoir, a small necropolis with 5 mounds was located. A coin hoard of 31 bronze coins minted in Mesembria was found in Snjagovo, in the region of Burgas, dating from 125–100 BC, and published by I. Karayotov in 2007 (Karayotov 2007, 148; *AOR* [2007], 304–05). Karayotov also published the gold and silver coinage of Mesembria (1994).

Archaeological survey in the area of Mesembria was carried out in 2000 (AOR [2001], 115).



4. Apollonia Pontike: plan of excavated tombs in the Kalfata necropolis



5. Apollonia Pontike: rf Attic hydria from the Kalfata necropolis

# Odessos (Varna)

Drilling sondages in the botanical garden of Varna in 2004 revealed a single course of a stone wall and 3 dolia arranged parallel to it. Three pits N of the dolia were excavated. The investigations seem to suggest that a Rom villa existed at this locality and most likely a small settlement appeared around the villa during L antiquity. Coins of Valentinian II (AD 375–392) and Theodosius II (AD 408-450) and small finds from the excavation indicate that the building was used from the 2nd half of the 4<sup>th</sup>-6<sup>th</sup> Ct AD (V. Slavchev, H. Kuzov Fasti-online). Near the Rom baths, excavations revealed the decumanus paved with slabs and a drain faced with slabs below it. A later street-covering consisting of rubble, sherds and fragmentary building terracottas was preserved in a few places over the slabs of the decumanus in which 4 bronze coins of the end of the 4<sup>th</sup> Ct AD were found. The decumanus had at least 3 construction phases during the Rom and the EByz periods. During the 2 earlier phases, the street was paved with slabs, while the drain belongs to the 2<sup>nd</sup> phase. Furthermore, remains of L antique buildings were discovered N and S of the street (H. Kuzov and K. Sokolova Fasti-online).

In August 2002, a shipwreck was identified off the coast of Odessos by a joint US-Bulgarian research expedition headed by D. Coleman and P. Dimitrov (http://news.nationalgeographic.com/news/2003/01/0110\_030113\_blacksea.html). A single amphora was recovered from the wreck, which contained bones of a large freshwater catfish species with

cutting marks and several olive stones. When found, the amphora was dated to the '5<sup>th</sup>-3<sup>rd</sup> Ct BC'. However, the organic material has reputedly been dated by radiocarbon analysis to between ca. 487 and 277 BC (Lund and Gabrielsen [2005], 164), but the amphora itself still awaits publication in order to confirm this dating, which is crucial as evidence of Black Sea maritime trade. According to the opinion of the amphora specialists M. Lawall and A. Opait, the amphora should be dated to the 2<sup>nd</sup> Ct AD.

## Dionysopolis (Balčik)

In the spring of 2006, a team of archaeologists uncovered the foundations of a Hel temple of Kybele on the fringes of the mod. city of Balčik. The preserved walls of the temple are at least 2.5m h., and the foundation of the building is large compared to other similar buildings of the same age. The excavations within the temple revealed several Kybele reliefs, a pediment with a bust of Helios, 2 statues of naked men, of a woman (possibly a priestess) and an near life-size statue of the goddess, as well as an altar. Several inscriptions were found dating from the time of the construction in the 4th Ct BC to the 4<sup>th</sup> Ct AD, including official documents and votive inscriptions, all currently being treated by N. Sharankov. The Kybele representations and epithets are in typical Hel style, except for the hitherto unattested appelation Kybele Pontia. The inscriptions reveal Gr, Thracian and Rom names. A limestone slab with a lion figure has also been found, as has a 0.5m h. Doric column with a well-preserved inscription addressed to the Rom emperor Licinius. The report on the finds is published in Lazarenko, Mirceva, Enceva and Sharankov in AOR (2008).

Rescue excavations of a tumulus at Taushan Yuk near Balčik have disclosed a stone tomb with a cremation. The tomb, dating to the L4<sup>th</sup>-E3<sup>rd</sup> Ct BC contained amphorae, lamps and weapons (*AOR* [2008], 300–01).

## Bizone (Kavarna)

During underwater investigations in the area of Kavarna's harbour, amphorae from the Hel, Rom and Byz periods, as well as lead anchors, were discovered (AOR [1994], 93-94; [2002], 80). Remains of a sunken quarter of Rom Bizone were discovered during underwater archaeological explorations in the harbour of Kavarna in 2004 (A. Salkin and P. Georgiev Fasti-online). A series of stone blocks were found 6m under the sea level as well as a well-preserved anc. millstone and other building remains. It is assumed that a large administrative building, storehouses or a harbour installation existed on this location during the Rom period (A. Salkin and P. Georgiev Fasti-online). Excavations at Cape Čirakman near Kavarna have revealed part of a large building from the 6<sup>th</sup>-E7<sup>th</sup> Ct AD. Fragmentary Hel and Rom pottery, Hel amphora stamps, a head of a terracotta figurine and coins of Dionysopolis minted in the 3<sup>rd</sup> and 2<sup>nd</sup> Cts BC were found within the EByz occupation level. Trial trenches on the E slope of Cape Čirakman revealed a fortification wall defending the lower suburb (I. Sotirov and I. Gatev Fasti-online). Another monumental building was discovered on the S slope of the cape. The amphorae found in connection with this stratum were imported from Thasos, Herakleia Pontike, Sinope, Rhodos, Knidos and Kos. The earliest strata contained fragments of local Grey Ware vessels and Gr pottery dated to the 4th Ct BC. Two other groups date to the same period: local brick-coloured ceramic vessels and Celtic pottery. This last group, and the fragmentary glass bracelets of Celtic type found during the previous excavations, raises the question of the presence of Celtic ethnic groups in the hinterland of Bizone (M. Tonkova, C. Landes, A. Salkin and M. Doncheva Fasti-online).

Excavations of the L antique fortress at Timum near Kavarna provide evidence for the existence of settlements from the Hel, EByz and Med periods (AOR [2008], 454–58).

A Thracian settlement with abundant finds of amphorae from the Hel period has been registered on a high plateau near the village of Topola (*AOR* [1995], 121).

Traces of a Thracian settlement from the EIA were found beneath a Thraco-Rom sanctuary and a church from the 4<sup>th</sup> Ct AD near Topola (*AOR* [2008], 498–501).

#### Durankulak

Durankulak, situated on the coast in the NE corner of Bulgaria, has been excavated for decades under the direction of H. Todorova. An overview of the research results from 1974–2005 can be found in Todorova 2007, which includes the finds from the Hel period, monuments, pottery, stamps, burials, etc.

## THRACIAN INLAND SITES

A good overview of the Odrysian Kingdom is provided in the recent monograph by Z. Archibald, *The Odrysian Kingdom of Thrace: Orpheus Unmasked* (Oxford 1998).

## Helis? (Sborianovo)

The investigations of the religious and political centre of the Getai, founded at the end of the 2<sup>nd</sup> millennium BC, began in 1982 under the direction of M. Cicikova and have been continued since 1996 by a team directed by D. Gergova. The site is of a dispersed type and consists of several sanctuaries from the IA, a Hel town, an EIA tumular necropolis, a Hel necropolis of more than 100 tumuli and several sacred places (Stoyanov 2002; 2003; Gergova 2004; Stoyanov et al. 2006; Cholakov and Chukalev 2008, 160-62; Helis 3-5; annual report in AOR). The city is situated on a plateau surrounded on 3 sides by the River Krapinec and enclosed by a massive fortification system (Cholakov and Chukalev 2008, fig. 20). The main fortification wall was about 1,400m l., built of large, roughly-worked blocks of local limestone. Two main gates have been found to the S and N. Three diateichismata with separate entrances have also been identified. In 1996 the inner fortification wall was investigated. The fortified area of the plateau was densely built over. Recently a residential quarter situated W and NW, as well as on terraces in front of the S wall outside the fortified area, was unearthed. There are 2 main phases of the city. It emerged in the last quarter of the 4th Ct BC and was destroyed by an earthquake around 250 BC. Seemingly life was resumed in the city, but on a more modest scale by the end of the 3<sup>rd</sup> or the beginning of the 2<sup>nd</sup> Ct BC until the 1<sup>st</sup> Ct BC.

Two sanctuaries on the high plateau of Kamen Rid in the courtyard of the Demir Baba monastery were founded towards the end of the 2<sup>nd</sup> millennium BC and reconstructed in the Hel period. Here ritual pits, clay hearths, stone circles and a small absidal building have been discovered, as well as abundant Thracian and imported pottery, cult objects, etc. (Balanska 1998; Gergova 2004).

The excavations of the Hel necropolis, initiated in 1982 with the discovery of the Sveshtari tomb, have continued till now. The 20 tumuli excavated since 1982 reveal a variety of stone tombs with sliding doors, cist graves, urns and a complex system of burial rites corresponding to a specific social hierarchy. The architecture of the tombs indicates the long distant contacts of the Getai with W Asia Minor, S Italy and Palestine. A Celtic sword, fibulae and bracelets testify to a Celtic presence.

## Pistiros (Vetren)

Since 1988, excavations of Pistiros have been undertaken by a team of Bulgarian, British (from 1992), Czech (1993) and French (from 1997) archaeologists under the direction of M. Domaradzki. Architectural remains of a fortified settlement dated to the 5th-2nd Ct BC have been unearthed. The name of the site became known as Pistiros, the emporion, thanks to a M4<sup>th</sup> Ct BC inscription in Gr found in 1990 (Velkov and Domaradzka 1994; SEG 43, 486). The inscription made shortly after the death of the Thracian king Kotys I in 359 BC records the rights which the Thracian authorities granted to the Gr resident traders living in the town. Seemingly the town was founded by merchants from the island of Thasos under the first kings of the Odrysian state, Teres or Sitalkes. Large amounts of Gr amphorae, as well as hundreds of bronze and silver coins, discovered during the excavations shed light on its internal and external trade contacts with the Odrysian rulers and the Gr centres on the Pontic coast and in the Mediterranean. In 1999, 552 silver and gold coins issued by Alexander the Great, Demetrios Poliorketes, Lysimachos, Lysimacheia and Seleukos I were discovered. The final destruction of the city is well dated by a large hoard of 561 coins, mainly minted by Lysimachos including his last issues, and by swords and spearheads of Celtic types and a late Duchcov fibula found in the destruction layers. They reveal that the city was completely destroyed by the Celtic campaign led by Kommontorios in 279/8 BC (Bouzek et al. 2002). No cultural layer post-dating the destruction has been discovered. Graffiti on Thracian and Gr pottery suggest that the inhabitants were of mixed ethnic origins.

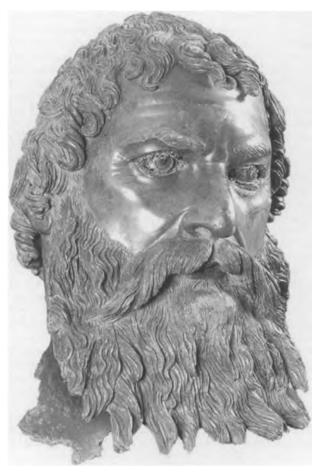
The results of the excavations are published in the series *Emporion Pistiros* in Bulgarian (3 volumes to date) as well as in the *Pistiros* series published in English and French (vol. I, 1996; vol. II, 2002).

# Kazanlak

The most spectacular find occurred in the so-called Valley of the Odrysian Kings near Kazanlak where in 2004 a large tomb was found, which has been identified as the mausoleum of Seuthes III (330–301 BC), the king who built the Thracian capital Seuthopolis. In front of the entrance of the tomb, a marvellous over life-size bronze portrait interpreted as Seuthes III was found (Fig. 6). Inside the tomb, where no human remains were found, a gold wreath, a helmet with the inscription  $\Sigma EY\ThetaOY$ , weapons, gold and silver vessels, etc. were found. An earlier tumulus, called Svetitsata, located not far from the one just mentioned, contained bronze armour, silver and bronze vessels, Gr pottery and a male funerary mask of solid gold weighing almost 700gr.

## Ostruša

Several new painted tombs have been unearthed. In particular, the L4th Ct BC tomb at Ostruša near Šipka will be mentioned, which was excavated in 1993 (Kitov and Krasteva 1994-1995; Valeva 2005). The complex consists of a rectangular monolithic burial chamber resting on a 3-stepped podium. Inside, against the N wall of the chamber, a stone-built kline with carved legs was still standing. The coffered ceiling of the chamber was carved and painted in imitation of wood and separated by painted coffer panels with scenes pertaining to the thiasoi of Achilles and Dionysos. The burial chamber was subsequently incorporated, perhaps soon after, into a rectangular, multi-room complex consisting of 3 rectangular chambers and a circular room, possibly a heroon. In one of the chambers a horse burial, iron weapons, silver harness fittings and silver and bronze vessels were found.



6. Kazanlak: over life-sized bronze portrait, perhaps of the Thracian king Seuthes III (330–301 BC) found outside a monumental tomb near Kazanlak in 2004

# Alexandrovo

One of the most important discoveries of Thracian tumuli was made at the village of Alexandrovo in the Chaskovo region in L1999 and it excavated between 2000 and 2003 (http://www. coe.int/t/dg4/cultureheritage/Regional/SEE/IRPPSAAH/FS/FS Bulgaria ThracianTomb Alexandrovo APP.pdf). In the dromos a frieze with 2 similar scenes depicts a horseman fighting a warrior on foot above a panel of marble imitation. In the W lunette of the small antechamber another image of a horseman fighting a standing figure is depicted. In the central chamber, the decoration of the walls and the dome consists of several horizontal bands in red, black, white and yellow, and 2 friezes with various scenes. The lower frieze is badly damaged and only 4 human figures taking part in a funerary or heroic feast with table and utensils are still visible. The upper frieze contains 4 hunting scenes, including 4 horsemen, 4 hunters on foot attacking 2 deer and 2 boars pursued by 9 dogs. Across the entrance a 2-line graffito was incised on the wall-paintings in Gr ca. 1.7m above the floor of the chamber in the style of a Gr funerary inscription reading: Kozimases chrestos (Kitov 2004; Sharankov 2005). The tomb is comparable to the Kazanlak tomb and it provides us with a new centre of painted Thracian élite tombs.

## Smiadovo

Very few Gr epitaphs have been found in the Thracian interior, but recently an epitaph written on an architrave of a monumental tomb in the surroundings of the village of Smiadovo, in the Sumen district, was discovered. The inscription dated to the L4<sup>th</sup>–E3<sup>rd</sup> Ct BC reads: 'Gonimaseze, wife of Seuthes' (Atanasov and Nedelcev 2002).

## Perperikon

Research in the Rhodope mountains in S Bulgaria, initiated in 2000, has identified Thracian Perperikon, a large multi-period site in use from the Chal period until the Middle Ages. The site is a fortified hilltop settlement. An unroofed, oval hall with a round altar carved out of the rock, niches, artificially made caves, basins, channels and rock-cut steps support the theory that this site functioned also as a sanctuary (Ovtcharov 2005; www.perperikon.bg).

## Kabyle

Kabyle, a Thracian settlement situated 70km from the coast, was established by Philip II as a Macedonian outpost; later it served as a Thracian royal residence until it was conquered by the Romans in the 1st Ct BC. Since it was never built over by a mod. city, it is an ideal site for excavations. Earlier research has revealed a Thracian mountain sanctuary and a Thracian city with town houses modelled after contemporary Gr standards (Archibald 1999, 441-44). In 2003, Bulgarian archaeologists excavated a building from the Hel period (sector V). The building lies below the foundations of a L antique horreum. It was built in the 3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct BC. After destruction by fire at the end of the 4th Ct BC, the building was reconstructed only to be demolished finally around the M3<sup>rd</sup> Ct BC. Attic pottery and amphorae from Chios, Herakleia, Thasos, Kos and Rhodes were found, as well as coins of Alexander the Great, Seuthes III, Antiochos II Theos and Mesembria (L. Getov, K. Rabadzhiev, I. Lozanov and S. Bakardzhiev Fasti-In 2007, a joint Australian-American-Bulgarian research team directed by S. Ross and A. Sobotkova began investigations at the site with the aim of determining the level of Gr and Rom impact on the indigenous population (see www.einaudi.cornell.edu/arcs/ARCSNEWSLETTER2007.pdf) and a systematic survey was conducted in the area around the settlement (AOR [2007]; [2008], 420-27).

# ROMANIA

During the period of reporting the number of excavations has increased considerably, partly because of rescue excavations. Romanian field archaeology has become the responsibility of the Ministry of Culture in consultation with the National Commission for Archaeology which consists mainly of museum employees. Since 2000 the reorganization of archaeological research in Romania has led to direct political involvement in its activity.

## **Publications**

Although generally delayed, archaeological academic periodicals have continued to appear and even more new periodicals have entered the international academic circuit. From the IAB, the periodicals Dacia. Nouvelle Serie, Studii şi cercetări de istorie veche şi arheologie (SCIVA), Thraco-Dacica, Studii şi cercetări numismatice (SCN) and Materiale şi cercetări arheologice (MCA) contain numerous contributions on Dobrudjan antiquity. Brief reports on rescue or research excavations have been published in Cronica cercetărilor

arheologice din România (CCA), edited by the Ministry of Culture and easily accessible on the internet (http://archweb.cimec.ro/scripts/ARH/ Cronica/selen.asp). Cronica is an internet database containing more than 2,000 archaeological reports on excavations undertaken between 1983 and 2006 at 703 archaeological sites in Romania, accompanied by illustrations and maps. Most of the contributions are in Romanian, but about a quarter of the reports have abstracts in English or French. The periodicals of the museums in Tulcea and Constanța, Peuce and Pontica, are especially important for the area under discussion. Pontica has recently been posted on the internet as well.

To a large extent Romanian archaeology has remained an auxiliary science to historical research. An overall synthesis for the period under discussion is missing, but 2 exhaustive studies stand out. One is the study of M. Oppermann (2004) about the W Pontic colonies and the indigenous world before the Rom conquest (7<sup>th</sup>-1<sup>st</sup> Ct BC), the other consists of the first 2 volumes of *Istoria Românilor* (2001), a collective study edited by the Romanian Academy (reviewed by A. Niculescu in *Dacia* [2004–2005]). Other studies are concerned with shorter periods, for example the 7<sup>th</sup>-4<sup>th</sup> Ct BC (Buzoianu 2001).

Papers on the founding, the organization and relations of the W Pontic Gr cities have increased in number (e.g., Avram 1996b; Nawotka 1997; Avram 1999a; Ruscu 2002; Avram, Hind and Tsetskhladze 2004; Ivantchik 2005; Petropoulos 2005). The same can be said about the later periods; there are a number of essays of historical synthesis (Zahariade 2006). Numerous studies focus on broader themes concerning the territory of Dobrudja, such as economic exchanges between the Greeks and the local population from the hinterland in the 7<sup>th</sup>–3<sup>rd</sup> Ct BC (Banari 2003), rural life in the 1<sup>st</sup>–3<sup>rd</sup> Ct AD (Baumann 1995a; Bărbulescu 2001), trade in the 1<sup>st</sup>–3<sup>rd</sup> Ct AD (Bounegru 2002), fortifications from the same period (Zahariade and Gudea 1997), LRom cities in the 4<sup>th</sup>–6<sup>th</sup> Ct AD (Sâmpetru 1994) and E Christianity (Lungu 2000a).

Only a few studies are concerned with archaeological themes exclusively, such as sculpture of the Rom period (Covacef 2002), Rom funerary stelae (Conrad 2004) or depictions of the Thracian rider (Oppermann 2006). Another category of studies is anthologies regarding the archaeology of the W Pontic colonies (Alexandrescu 1999; Avram and Babeş 2000) or N Dobrudja (Simion 2003). V. Cojocaru has published an epigraphical studiy of names in the W Pontic region (2004) and, in the field of numismatics, numerous publications concern the production and circulation of coins (e.g., Preda 1998; Vertan 2002; Poenaru Bordea 2004) and several catalogues have been published (SNG BM IX.1; SNG Stancomb).

# Conferences

Although having little international impact, the number of conferences has multiplied, and some of them are held annually. The *Pontica* meetings organized by MINAC held at the beginning of October unite Romanian specialists and lately also more and more archaeologists from abroad. Another annual meeting is the session for archaeological reports, organized by the Ministry of Culture in various places in Romania. A number of meetings have addressed specific subjects; thus numismatics is often discussed in the symposia organized by IAB at Chişinău in the Republic of Moldavia; the Museum of Tulcea has been involved in organizing colloquia on funerary archaeology; a colloquium on ethnicity and cultural exchanges was held 2005 in Iaşi, and another regarding the local production of ceramics in the W Pontic Gr colonies took place in Bucharest in 2004.

## Kallatis (Mangalia)

Kallatis is situated on the coast 10km N of the Bulgarian border. Since the city is located under the mod. city of Mangalia, only small-scale rescue excavations can be carried out. Even though the literary and epigraphical sources seem to agree on a foundation date towards the end of the 6<sup>th</sup> Ct BC, the archaeological discoveries made so far only provide evidence of a later date at the beginning of the 4th Ct BC. Building elements pertaining to cult buildings of Hel date have been unearthed (Pâslaru and Colesniuc 2004-2005b, 413-18). Rescue excavations have taken place in the Hel and Rom necropoleis (Pâslaru and Colesniuc 2004-2005a; Radu 2007). More than 100 tombs from the Hel necropolis of Kallatis have been published, the oldest of which date to the 3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct BC (Avram 2007, 243). In 2000, new excavations were initiated in the Rom-Byz necropolis of Kallatis. The 168 tombs found so far are published by M. Ionescu, N. Alexandru and R. Constantin (2002-2003).

A new corpus of Gr and Rom inscriptions from Kallatis (*ISM* III) has been published by A. Avram (1999), who has published extensively on several other subjects regarding the city (Avram 2007). A discussion on the topography is provided in Alexandru *et al.* (2004–2005); on the water supply (Papuc 2007). Avram has also written a monograph on the relationship between Rome and Kallatis and the foedus signed by the 2 cities just before 100 BC (Avram 1999a). A few studies on ceramics (Buzoianu and Bărbulescu 2004–2005) and amphora stamps have been published.

## Albeşti

Excavations have taken place at Albeşti, located in the W periphery of the territory of Kallatis (Rădulescu *et al.* 2002). It is a fortified settlement site with several large house complexes. Its centre is constituted of a rectangular fortification of ca. 40m x 40m, extended later to 45m x 45m, with a corner tower of 9m x 9m. Founded in the first half of the 4<sup>th</sup> Ct BC, the fortification has 3 main phases: the first 2 phases date to the 4<sup>th</sup> Ct BC; the 3<sup>rd</sup> phase, representing an extension of the fortified area to the S, dates to the 3<sup>rd</sup> Ct BC. The structures inside the fortified area date to the same centuries.

There are 2 periods of intense activity: the first one dating to the end of the 4<sup>th</sup> Ct and E3<sup>rd</sup> Ct BC, and the 2<sup>nd</sup> one dating to the 2<sup>nd</sup> half of the 3<sup>rd</sup> Ct BC. The inhabitants seem to have been of mixed ethnic origin (Buzoianu, Bărbulescu and Chelută-Georgescu 2000–2001; *Fasti-online*: Aşezarea fortificată de la Albeşti – La Cetate). Almost every volume of the periodical *Pontica* contains an article about discoveries from this site. The first monograph is currently in print (due to appear in 2008).

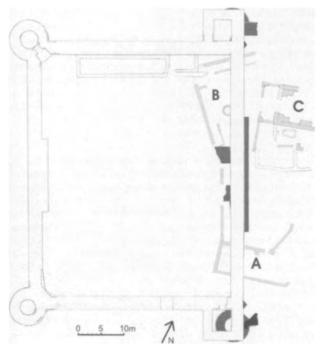
## Tropaeum Traiani (Adamclissi)

In the territory around Tropaeum Traiani settlements of the Rom and pre-Rom periods have been investigated, for instance a Hel settlement at Sipote (CCA [2008]).

## Tomis (Constanța)

The anc. city of Tomis is built over by the mod. town of Constanța. Increasing mod. building activities hinder systematic research of the anc. monuments. Numerous discoveries, e.g., of inscriptions, sculpture and ceramics, are published in *Pontica*. Dug-outs from the first half of the 5<sup>th</sup> Ct BC situated in the Cathedral Park have been unearthed. Among the main archaeological projects are excavations in the Hel (Bucovală 1995–1996), the Rom and LRom necropolis (*CCA* [2007]), the city wall with the main gate and Hel and Rom houses (*CCA* [2007]).

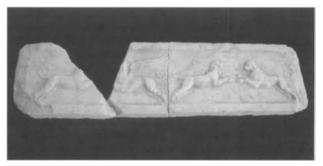
The extent of anc. Tomis and its chora has been compared to that of Istros to the N and Kallatis in the S, but unlike these, no systematic excavations have been conducted on the settlements in the territory (Buzoianu and Bărbulescu 2007). A quadriburgium (53m x 41.3m) from the 6<sup>th</sup> Ct AD has been investigated at Ovidiu, 10km N of Tomis (Fig. 7). The site lies on the coast and had a harbour. Several discoveries of LAr (Klazomenian transport amphorae) and Hel date indicate earlier occupation. During the 16 archaeological campaigns, the fortifications, a Ch basilica and several LRom houses have been excavated. In 2003, a hoard (named Constanta-Obor, hitherto unpublished) of 6,500 coins and 500 coin fragments was found in a ceramic vessel in a suburban area. The earliest coins date from the time of Licinius, the latest were issues of Valens and Valentinian, and the hoard was probably buried in advance of a Gothic attack in 378 AD (Buzoianu and Bărbulescu 2007, 320).



7. Tomis, Ovidiu: quadriburgium 2003

# Istros/Histria (Sinoe)

The archaeological site of Istros was discovered by V. Pârvan in 1914 and has enjoyed a long history of systematic investigations. In contrast to earlier times, archaeological research has recently been concentrated almost exclusively inside the city, and all the historical periods are attested. Since 1990 excavations at the site have been directed by P. Alexandrescu and A. Suceveanu (both IAB) and from 1999 by A. Suceveanu alone. The finds are published in the Histria series. Eight volumes of Histria have been printed since 1993: Avram 1996 (Histria VIII. Les timbres amphoriques 1 [Thasos]), Conovici 1998 (Histria VIII. Les timbres amphoriques 2 [Sinope]), Suceveanu 1999-2000 (Histria X. La céramique romaine des Ier-IIIe siècles ap. J.-C.), Domaneantu 1999-2000 (Histria XI. Les bols hellénistiques à décor en relief), Alexandrescu Vianu 2003 (Histria IX. Les statues et les reliefs en pierre), Alexandrescu 2005 (Histria VII. La zone sacrée d'époque



8. Istros/Histria: Hel marble relief from the sacred area 2002

grecque [fouilles 1915–1989]), Mărgineanu Cârstoiu 2006 (Histria XII. Architecture grecque et romaine) and Suceveanu 2007 (Histria XIII. La basilique épiscopale). Of these, Domaneantu 1999–2000 and Suceveanu 1999–2000 are available on-line at http://archweb.cimec.ro/Web-Histria/6bibliografie/bibliografie\_eng.htm. Several updates to previous studies have been made.

Regarding the excavations themselves, they have revealed numerous data from Ar until LRom times (Fig. 8). In the sacred area the aim was to find the S and W limits. To the SE of the Aphrodite temple a drop in the bedrock about 14m l., 7m w. and 3m d. was uncovered, on the bottom of which were 2 massive parallel walls dated to the 4th Ct BC (Fig. 9). The purpose of the structure is still unclear, but its location close to the temple indicates a relation between them. A new, possibly Ar sanctuary was discovered recently in the SE corner of the sacred area (CCA [2007]), reinforcing the idea of one large central sanctuary in this part of the city. Another goal concerning the Ar period has been to trace the city wall on the W side of the city (CCA [1995]). A Hel sanctuary of Kybele has been hypothesized in sector X on the so-called plateau (CCA [2006]). In 1994, A. Suceveanu and M.V. Angelescu reported the find of a Hel marble frieze from the end of the 2<sup>nd</sup> Ct BC depicting on its sides Helios and in the centre Apollo, Hephaistos, Poseidon, Eros, Aphrodite, Athena, Zeus, Hermes and, probably, Hera. It was found in a foundation ditch of a basilica restoration in the S part of the large square in 1994.



9. Istros/Histria: sacred area 2004

In the excavations from 1990-1997 in the villae quarters of Histria, normally referred to as the domus sector, a 4<sup>th</sup> villa of the 6<sup>th</sup> Ct AD was explored (Bounegru 2000–2001). The campaigns of 1996-1998 by a team of German archaeologists allowed a number of preliminary observations to be made on the topography of the anc. town. These included the location of the anc. harbour (Höckmann et al. 1998), the Rom defence system in the time of Hadrian, the enlargement of the defence wall towards the N, the extension of the Ar town in an E direction, the sacred zone including a Temple of Zeus, the socalled Temple A and the propylon (all functioning in Ar times), as well as the habitation area on the acropolis in this period. On the plateau, traces of urbanization were evident already from the 7<sup>th</sup> Ct BC, all supporting the theory that rational planning of the urban space was employed here already in Ar times (Alexandrescu 2000–2001, 198). In 2000, investigations began in the area outside the walls of the L city with the purpose of studying the ERom city - and possibly the Hel city. The 2000-2003 investigations have brought to light 3 buildings and a number of structures, most of them dated before 238 AD. During the 2004 campaign the team excavated part of an Ar building that was named casa no. 4, and a pit containing Ar pottery N of this building (http://www.cimec.ro/Arheologie/ web-histria/2cercetare/cercetarea eng.htm).

In 2002, after 21 seasons, excavations in the sector of the episcopal basilica of the 6<sup>th</sup> Ct AD ended (*Histria XIII*). Recently, excavations resumed at 3 other basilicas connected to the LRom settlement (*SCIVA* 54–56 [2003–2005]).

Although the excavations in the territory are scarce, the number of publications is considerable. They include papers published about previous research (Domăneanțu 1993; Suceveanu 1998; Teleagă and Zirra 2003) and essays on the understanding of Histrian territory from a broader perspective (Avram 1996; 2001).

## Orgame/Argamum (Jurilovka)

The settlement with its large necropolis is located on Cape Dolojman (Fig. 10). The site has been under excavation since the M1920s. In the earlier period of investigations it was foremost the city's LRom and Byz structures that were the focus (see overview of research history at http://www.archaeology. ro/argamum\_istoric.htm). Three basilicas have been found inside the LRom fortification, which protected a settled area of 2.5ha. Another basilica, basilica IV, was excavated outside the fortifications at the W border of the Gr necropolis.

During the last 15 years, the main archaeological objectives have been the necropolis of the Gr period, the Gr living quaters, the city wall as well as the LRom settlement. A tumulus, found in 1995, dating to around the M7<sup>th</sup> Ct BC is important evidence for the early settlement (TA 95) (**Fig. 11**). Compared with the average tumuli of the site's extended tumulus necropolis, this tumulus is monumental, having a *di*. of 42m (tomb of ktistes?). A ditch for offerings, in which ancestor or hero worship continued to take place until 200 BC, was dug around the tumulus (Lungu 2000c; Lungu 2000–2001b; Lungu 2007).



10. Orgame/Argamum: aerial view 1999



11. Orgame/Argamum: tumulus (TA 95) found in 1995 and dated to around the M7<sup>th</sup> Ct BC

Milesian pottery from the 3<sup>rd</sup> quarter of the 7<sup>th</sup> Ct BC and Middle Wild Goat I (Mănucu Adameșteanu 2000) found in other parts of the city support a foundation date towards the M7<sup>th</sup> Ct BC, the same as Istros. Ar, Cl and Hel houses were uncovered in the 1980s and published in 1999 (Lungu 1999a). The Ar ones of humble dimensions (ca. 3.5m x 2.5m) are similar to those from the Histrian plateau. Recently, the Gr fortification, built probably in the 5<sup>th</sup> Ct BC, has been excavated on the S slope of the promontory (Mănucu Adameșteanu 2005) (**Fig. 12**).

The necropolis, covering 120ha, has been excavated since 1988 under the direction of V. Lungu. Approximately 100 cremation tombs have been uncovered, most of them dating to the 4<sup>th</sup> and 3<sup>rd</sup> Cts BC (Lungu 1999a). A funerary stele from the Hel period, dedicated to Apollonis, wife of Apollodoros, was found in another tumulus (TB 95) in 1995 (Lungu 2004c). Due to the large number of anc. remains found in the necropolis area, it has been protected by national law since 1995, when it was made an archaeological preserve.

In 2005 the publication series *Orgame* was launched, with the first volume on the excavation notes of M. Coja's, who reopened the excavations in the 1960 (Mănucu Adameşteanu 2005). The volume appeared 7 years post-mortem. Another volume in the same series has published the papers from an international colloquium organized on the occasion of the celebration of 40 years of excavations at Orgame.

# Halmyris (Murighiol)

At Murighiol, a site located in the Danube delta, systematic excavations led by M. Zahariade have been conducted inside the city. The main goal has been the study of the Bishopric basilica and the buildings around it. Inside the crypt 2 skeletons were discovered, perhaps belonging to 2 Ch martyrs (*Il Mar Nero* [2006]). Other excavations have been undertaken in the area of the LRom city wall, where a tower has been almost entirely excavated. Pottery from this site has been published by A. Opait (2004).



12. Orgame/Argamum: Cl wall 2004

## **UKRAINE**

## SOUTHWESTERN UKRAINE

With the collapse of the Soviet Union in 1991, a large part of the classical archaeological sites of former S Russia, foremost the Crimea and the Bug, Dnieper and Dniester regions, came under Ukrainian jurisdiction. A very useful homepage, with short biographies and bibliographies of Ukrainian Black Sea scholars, can be found at http://www.fridmanbooks.netfirms.com/author\_ancient/antiq.htm.

#### Museums

At the Kerch Museum a major renovation was initiated in 2000 with the help of the Demeter Foundation. In 2003 the A.G. Leventis Foundation completed the architectural renovation and the museological refurbishment of the Archaeological Museum of Odessa. This was preceded by the publication of a catalogue of around 200 of the collection's finest Cypriot and other artefacts (Karageorghis and Vanchugov 2001). The Odessa Virtual Museum of Numismatics (http://www.museum.com.ua/), in Ukrainian and English, offers a useful introduction to the museum as well as to the coinage of the anc. cities of S Ukraine.

## Leuke? (Island of Zmeinyj)

In 1988 the Odessa Archaeological Museum initiated fieldwork on land and under water at the Island of Zmeinyj located E of the Danube delta. The island has for a long time been identified as Achilles' sacred island of Leuke. The fieldwork, which is ongoing, is directed by S.B. Ochotnikov and A.S. Ostroverchov. The finds from the investigations have been summarized in a short monograph, Svjatilišče Achilla na ostrove Levke (Ochotnikov and Ostroverchov 1993). Of great interest are the numerous finds of lead and stone elements pertaining to anc. anchors. No less than 9 stone anchors, 35 lead rods and 6 lead fastenings have been found, spanning the period from the LArc or ECl period until the Rom period (Ochotnikov and Ostroverchov 2002).

# Tyras (Bel'gorod-Dnestrovskij)

Between the 2 major poleis of the NW Pontic region, Istros and Olbia, are the 2 smaller cities of Tyras and Nikonion. The 2 sites are situated on opposite banks of the Dniester. Most parts of the city of Tyras are lost, either to nature (being under water) or to culture, because part of the anc. city has been covered by either the Med fortress of Akkerman or by the mod. city of Bel'gorod-Dnestrovskij. In 1996, T.L. Samojlova took over the direction of the excavations from I.B. Klejman, collaborating with the Romanian Institute of Thracology and Brail Museum. In 2002 the collaborators published a monograph on their investigations (Kožokaru et al. 2002). Most impressive are the remains of the city's fortification wall. It was first constructed in the L5<sup>th</sup>-E4<sup>th</sup> Ct BC, and through the Hel and Rom periods it was rebuilt and enlarged several times. A recent find of great interest is the fragment of an Attic black-glossed vessel dating to the L5<sup>th</sup> Ct BC with the graffito [Achil]lei Sky[thias] confirming the title of Achilles, Lord over Scythia (Cojocaru 2002).

Tyras' chora, on the right bank of the Dniester, extends between the village of Udobnoe 30km NW of the city to the village of Primorskoe 35km to the S. In this region approximately 25 settlements have been found. The richest settlements seem to be located in the immediate vicinity of Tyras itself, especially around the village of Šabo. S.B. Ochotnikov has recently published an overview of the settlement systems on both banks of the lower Dniester (Ochotnikov 2006).

## Nikonion (Roksolany)

Nikonion is among the least known of the anc. cities on the Pontic shore. Systematic investigations started as late as 1957. Currently, excavations are directed by N.M. Sekerskaja of Odessa Archaeological Museum (since 1995) in collaboration with archaeologists from the Polish University of Toruń. A comprehensive collection of articles published in 1997 as Nikonij i antičnyj mir Severnogo Pričernomor'ja (Ochotnikov et al. 1997) celebrated the 40<sup>th</sup> anniversary of the archaeological excavation of the site, as did a small booklet edited by M. Mielczarek, S.B. Ochotnikov and N.V. Sekunda published the same year (1997).

## Košary

Archaeological investigations have also been taking place in the stretch of land in the Gulf of Odessa between the 2 cities mentioned above and Olbia. Most important are the investigations at the large site of Košary located on a promontory on the right bank of the Tiligul' estuary. The excavation is directed by E.I. Diamant, E.A. Levina and E.F. Redina of the Archaeological Museum in Odessa. Recently, the Institute of Archaeology of the Jagiellonian University in Kraków, Poland, has joined the investigations (Papuci-Władyka, Chochorowski and Redina 2004). The site itself is around 10ha in size. It was defended by a wall to the W (trench III) and a rampart running NE-SW (trench VII). Outside the fortification is a 'suburb' with individual farms (trench VI). Excavations carried out between 1999 and 2004 revealed remains of the defensive wall. Apart from the extended necropolis, a large ash hill, zolnik, ca.  $20m \times 30m$  with a preserved maximum h. of ca. 2.5m, is currently (since 1998) being excavated. This is considered a cult place by the excavators. Pit houses constitute the majority of the buildings at the site. The settlement was short-lived from the beginning of the 4<sup>th</sup> until the first half of the 3<sup>rd</sup> Ct BC. There are annual reports in AVU. An overview of the Gr amphorae found at the site can be found in Papuci-Władyka and Kokorzhitskaia 2004. There are several articles on the site in the proceedings of the Pontika conference held in 2006 in Cracow (Papuci-Władyka 2008).

# Island of Berezan'

Scholars from the Institute of Archaeology of the Ukrainian Academy of Sciences and the State Hermitage Museum in St Petersburg have investigated the Island of Berezan' in the estuary of the Dniepr and the Bug rivers intensively during the last 15 years. The project is currently led by V.V. Krutilov and D.E. Čistov. Much new literature has appeared and the last decade, especially, has witnessed a growth in non-Russian publications, the most prominent of which is S.L. Solovyov's 1999 monograph (Solovyov 1999; see also Ksenofontov 2007 for the latest account). From June until September 2005, the State Hermitage Museum in St Petersburg held an exhibition devoted to the 120<sup>th</sup> anniversary of the archaeological exploration of the island. A catalogue and the release of the first volume of a planned series of 5 volumes devoted to the Berezan' material accompanied the exhibition (Solov'ev 2005a; 2005b).

The most significant fieldwork on the island has been the excavation of a temenos situated at the W boundary of the Ar settlement on the N part of the island, approximately 100m inland from the W coast (Nazarov 1997). The excavations conducted there from 1996 to 1999 under the direction of the late V.V. Nazarov revealed a small ante-temple measuring 5.72m x 4.25m and an accompanying alter surrounded by a temenos wall with 2 phases (Nazarov 1998; 1999a; 1999b; 2001b; 2007). The temple was constructed on top of previous dug-out structures from which the latest material can be dated

to the M6<sup>th</sup> Ct BC. The material associated with the temenos continues into the beginning of the 5<sup>th</sup> Ct BC and subsequent activity has not been proven so far (Nazarov, Pan'kov and Nazarova 2003). Most notable among the many finds from the temenos are the terracotta statuettes of seated and standing 'goddesses'. The assemblage can be compared to that from the Aphrodite sanctuary on the Zeytintepe at Miletos, where similar terracottas have been found. A terracotta of a standing 'goddess' holding a pigeon is of particular interest, because it can be associated with previously known *ostraca* from Berezan' with graffiti mentioning Aphrodite (Rusjaeva 1992, 100).

The hypothesis of metal working on Berezan' has recently been substantiated by extensive new evidence from the area of Osnovoj half way up the E coast (Domanskij and Marčenko 2003). This area had previously produced scant evidence for metal working, but the discovery in 1998–2000 of 2 copper workshops by the St Petersburg team testifies to metal working in the early period of the settlement. The workshops (building complex nos 6 and 13) were placed 12m apart and partially dug into the ground. Remains of kilns were found in both workshops, as well as 272 small copper droplets and one large ingot weighing 3kg (for previous finds see, Lapin 1961; Solovyov 1999, 36, 52–53).

The habitation quarters on the N part of the island have also been subject to investigation. The layout of the LAr houses situated in the flat N part exhibit a structured plan with an approximate orthogonal street grid (Solovyov 1999, 64–79; Nazarov 2001). The reconstruction of individual houses is, however, still a topic of debate (Kryžickij 2005).

Finally, mention should be made of the excavation in 2000–2002 of 2 pits containing ceramic wasters datable to the 3<sup>rd</sup> quarter of the 6<sup>th</sup> Ct BC (Nazarov, Pan'kov and Nazarova 2003). Among the wasters are red clay jugs, Grey Ware oinochoai and a rhyton, as well as fragments of painted jugs. The pits most probably functioned as waste dumps for a nearby potter's workshop. They are the first proof of pottery production on Berezan'. In addition, recent NAA analyses of pottery from Berezan' have possibly identified the chemical composition of the Berezan' pottery production (named BERa), one example of which includes an amphora imitating N Ionian pottery (Kerschner 2006, especially 151–54; Mommsen *et al.* 2006; Posamentir and Solovyov 2006).

Unfortunately, the island is still subjected to illicit excavation and plundering, as well as deliberate destruction of monuments, which continuously destroys valuable archaeological records. Despite the increase in the number of academic publications, few publications are concerned with contextual publication of assemblages, such as the many pits and wells (see, however, Domanskij *et al.* 2006).

## Olbia

An overall description of the city from the Ar period through to Rom times has been presented in the monograph published in German by Ju.G. Vinogradov and S.D. Kryzickij, Olbia – Eine Altgriechische Stadt im Nordwestlichen Schwarzmeerraum (Leiden 1995), in the comprehensive monograph by S.D. Križic'kij, A.S. Rusjaeva, V.V. Krapivina, N.A. Lejpunskaja, M.V. Skržinskaja and V.A. Anochin, Olvia. Antičnoe gosudarstvo v Severnom Pričernomorije (Kiev 1999), as well as in the volume of collected essays by Ukrainian, Russian and British scholars, Classical Olbia & the Scythian World from the Sixth Century BC to the Second Century AD, edited by D. Braund and S.D. Kryzhitskiy (2007).

In 2006, as a response to extensive illicit digging in the city and its necropoleis, Olbia, including the Island of Berezan', was made a national preserve.

In addition to the well-known dug-outs and semi-dug-outs of the upper city (sector AGD), a number of dug-outs have been found in sector R-25 (Krapivina and Bujs'kych 2006). They have also been found in the lower city (sector NGS), which, until now, was considered to be settled only in the Cl period, and thus later than the upper city, and, for the first time, remains of a LAr house with a dry stone foundation were excavated in the central part of the terraced city (Lejpuns'ka 2001).

In the S part of the upper city remains of a temple dating to the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC have been found, including large architectural elements of the Doric order. In 2000 a bothros was opened in its vicinity. Inside, vessels with dedications to Aphrodite and a unique terracotta relief with a female dressed in an ultra-short, transparent dress playing krotala next to a kline (a sacred prostitute?), were found (Fig. 13) (overview in Krapivina 2006b).

During recent decades, Rom and LRom Olbia, in particular, have become decisively better known, first of all through the investigations in the S part of the upper and the lower city of Olbia (sector R-25) (Fig. 14). Here, most of the structures unearthed during recent years have been dated to the end of the 3<sup>rd</sup>-4<sup>th</sup> Ct AD (Krapivina 2007, 608-09). A large civil building, which was built with lime mortar, of the 3<sup>rd</sup> Ct AD was excavated. Here, in 2004, a fragment of a Rom military diploma pertaining to a veteran of the classis moesica was found, the first military diploma found in Olbia and only the 2<sup>nd</sup>



13. Olbia: terracotta relief with a sacred prostitute? found in 2000 in a bothros with votives to Aphrodite in sector R-25



14. Olbia: sector R-25

one from the N Black Sea littoral (Krapivina and Bujskich 2006, 234; Ivantchik and Krapivina 2007). Three building phases can be distinguished in the 4<sup>th</sup> Ct AD. As in earlier periods, the slope was terraced and the houses were situated on the lower and on the upper terraces. They were rather large, rectangular in plan, sometimes with 2 floors, combining dwellings and workshops. Their courtyards often had stone paving with drains. A large metal workshop has been revealed, also dated to the 4<sup>th</sup> Ct AD (Krapivina 2006a; Krapivina and Bujs'kych 2004, 178).

Rescue excavations were carried out in sector L-1 N of the praetorium. Here a wide street of the 4<sup>th</sup> Ct AD was revealed. Under the N part of the road the remains of the paved courtyard of a house and ruins of a winery of the end of the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD were excavated (Krapivina 2008, 102). In the S part of the sector a tile paving made in the Rom opus spicatum technique was revealed. The pavement, made of fragments of tiles, is seen here for the first time in Olbia (Krapivina and Bujs'kych 2004, 181, fig. 6). Two wineries of the 2<sup>nd</sup> and 3<sup>rd</sup> Cts AD were excavated on the E slope of the Zajačja ravine (sector R-21) (Krapivina 2008, 103). In sector NGF-SV, situated SE of sector NGF, rescue excavations were also carried out. Two main levels of the Rom period were revealed: of the L2<sup>nd</sup>-3<sup>rd</sup> Ct AD and of the L3<sup>rd</sup>-4<sup>th</sup> Ct AD. The first phase is represented by 2 streets, a metal workshop and 2 rooms of a house, in which a large number of coins and bone objects were found. The 2<sup>nd</sup> phase is represented by the ruins of a large square, which covered the street and workshop of the previous phase. The square had a system of stone and terracotta drains and a cistern for gathering water (Krapivina 2008, 104). The material culture of the period has been summarized in a monograph by V.V. Krapivina (1993).

In 2003, the Danish National Research Foundation's Centre for Black Sea Studies initiated the publication project *The Lower City of Olbia in the 5<sup>th</sup> Century BC* –  $4^{th}$  *Century AD (Sector NGS)* in collaboration with the Institute of Archaeology of the National Academy of Sciences of Ukraine in Kiev (publication is due in 2009). Sector NGS is situated in the lower city in the northernmost part of the city near the city wall. This part of the anc. city has been excavated since 1985 during annual campaigns by Ukranian archaeologists directed by N.A. Lejpunskaja. In this sector, remains of 8 house blocks have been identified, 2 of which are now fully excavated. The house blocks range in size between  $522m^2$  and  $1,200m^2$  and each contains 4 to 7 living units (**Fig. 15**). The houses are relatively modest. They do not have any uniform plan, but they have a

number of common features such as 3 to 4 rooms grouped around a central paved courtyard and one or more well-built cellar. The cellars and the foundations of the walls were constructed of more or less well-dressed stones, whereas the upper part of the houses were built of mud-bricks. NGS was situated not far from the harbour, and it is quite evident from the finds in the houses that fishermen and artisans lived here. Net weights and fishing hooks attest to this, as well as small moulds for crafting simple metal jewellery.

The earliest activity detected in sector NGS seems to have taken place in the LAr period, when at least one hut was dug into the ground, as well as a number of pits. Plenty of 5<sup>th</sup> and



15. Olbia: plan of habitation quarter in the lower city, sector NGS

E4th Ct BC material testifies that the area was inhabited in the Cl period, but building remains of that period are scarce because they are situated below later houses. building phases belong to the LCl and EHel periods. In 331 BC, Alexander the Great's general, Zopyrion, besieged the city. This may have been the reason for a significant drop in activities in the city, as well as in NGS during the last 3rd of the 4th Ct, but already in the E3rd Ct extensive building activity had resumed. This came to an abrupt end sometime in the 2nd quarter of the 3<sup>rd</sup> Ct BC. This period was a time of crisis in the N Black Sea region, and during the next decades very little activity can be noted in NGS. At the end of the 3<sup>rd</sup> Ct BC, this sector of the city was partly reinhabited. The LHel period, until the 130s BC, was the last major habitation phase in sector NGS. It may have come to an end as a result of the Scythian King Skiluros' contemporary expansion policy. At least, this part of the city was almost completely abandoned in the 130s BC. In the 60s BC the contracted city was once more subjected to the region's larger powers, now the Thracian tribe, the Getai, under their king Burebista. Only during the Rom period did Olbia regain some kind of position. However, sector NGS was never rebuilt, even though there was occasional activity attested by a number of furnaces and tombs.

Fieldwork continues in the necropolis. In 1996, as a result of illicit digging, 4 tabellae defixionum were found, dated to the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC (Tochtas'ev 2000; *SEG* 50, 700). In 2004 in the W part of the necropolis a 4<sup>th</sup> Ct BC mansion was found, which existed before the westward expansion of the necropolis (Papanova and Ljaško 2005). A number of cult installations, altars of various designs and pits, were unearthed. In addition to the 2 epitaphs with Latin inscriptions previously found at the necropolis, 2 further fragmentary Latin inscriptions, dated to the 3<sup>rd</sup> Ct AD, were found, one in 1994 and one in 2002 (Zubar' and Kozub 2004). They testify to the continued presence of Rom soldiers and civilians in Olbia.

Concerning the cults of Olbia and its chora in general, 4 publications merit mention. One is the monograph by A.S. Rusjaeva, Religija i kul'ty antičnoj O'lvii (Kiev 1992). The same author also published the book Religija pontijskich ellinov v antičnuju epochu. Mify. Svjatilišča. Kul'ty olimpijskich bogov i geroev (Kiev 2005), which, though broad in scope, is primarily based on the evidence from Olbia, and thus supplements the previous monograph. The 3<sup>rd</sup> is the comprehensive publication of the W temenos, which was the subject of a monograph published in 2006, Drevnejšij temenos Ol'vii Pontijskoj (MAIET Suppl. 2). The last book to be mentioned is the volume edited by J. Hupe, The Cult of Achilles in the Northern Black Sea Area from the Beginning of Greek Colonization until the Roman Imperial Period. Contributions to the Field of Acculturation Research (Internationale Archäologie 94). In this volume, the main Achilles sanctuaries are discussed (Leuke: S.B. Ochtonikov; Tendra: I. Tunkina; Bejkuš at the mouth of the River Bug: S. Bujskich; Tyras, Neapolis Skythike and Olbia: J. Hupe). Hupe concludes that during the Rom period, the cult of Achilles Pontarches became the uniting religious force for the entire population in Olbia, of both Gr and Sarmatian descent.

It should also be mentioned that 3 sizeable collections of the characteristic Olbian small votive lead plaques have been published: first, A. Wàsowicz and W. Zdrojewska (1998), who based their study on the collections in the National Museum in Warsaw. More recent are 2 articles by K.I. Zajceva, the first of which is an overview article on the most common types (adorned heads of bulls and rams, as well as double axes) in the State Hermitage Museum, Warsaw, and other museums (Zajceva 2004a). The 2<sup>nd</sup> article contains a large number of the

more uncommon types from collections in Moscow and St Petersburg (Zajceva 2004b). Lead plaques, as well as moulds for producing such items, are recurrently found in the public areas, in the inhabited quarters and in the necropolis.

In 1996 L. Dubois published his Inscriptions grecques dialectales d'Olbia du Pont (Genève) presenting 110 different inscriptions and graffiti from Olbia organized according to function or type. Currently, A. Ivančik is working on the publication of the entire corpus of Olbian inscriptions. Some new inscriptions have been found in Olbia since Dubois' book was published: in 1991 a decree dated to the first half of the 4th Ct BC was found, which honours the Bosporan ruler Satyros with citizenship and celebrates a symmachia treaty between Olbia and Leukon. An inscription was found in sector NGS, dated to the 2<sup>nd</sup> Ct BC, with a dedication of the city wall made by Posideos, son of Dionysios, to the Eleusinian deities Demeter, Kore and Plouton, as well as to the Demos (Križic'kyj, Krapivina and Lejpuns'ka 1994, 29, fig. 15); according to a white marble base found in 2002 in the SE part of the upper city in the territory of the citadel of the Rom period (sector R25) another section of the city wall was dedicated to the Mother of the Gods by Diogenes, son of Thyaios, strategos and city governor under King Mithridates Eupator in the year 220 (78/77 BC) (Krapivina and Diatroptov 2005). A fragment of a marble relief with the image of Mithras killing the bull was found in sector R25 in 1993 (Križic'kyj, Krapivina and Lejpuns'ka 1994, 35, fig. 20). Recently 2 monographs on Olbian numismatics have been published (Karyškovskij 2003; Frolova and Abramzon 2005).

## WESTERN AND CENTRAL CRIMEA (Fig. 16)

After the stagnation of the early 1990s, an enormous spread of illicit excavations followed at nearly all known sites during the reporting period. Recently, however, W Crimean archaeology has experienced a revival in both fieldwork and publishing activity.

# **Publications**

Largely thanks to the efforts of the late M.I. Zolotarev, Chersonesskij Sbornik, which with vol. 6 was brought to a hold in 1961, was resumed in 1996 (to date 9 additional volumes have appeared). An important event was the appearance of a bilingual Russian-English edition, Ancient Greek Sites in the Crimea (Kiev 2004), which, among other sites, covers Chersonesos and its chora, Kerkinitis, Kalos Limen and the sanctuary at the Gurzuf Saddle Pass. Several new publication series were initiated in Simferopol, Bachčisaraj and Eupatoria (Archeologija Kryma [1: 1997], Archeologičeskie issledovanija v Krymu [1994; 1997; 2007], Krymskij Muzej [1: 1994; 2: 1996], Bachčisarajskij istoriko-archeologičeskij sbornik [1: 1997; 2: 2001; 3: 2008], Istoričeskoe nasledie Kryma [1-18: 2003-2007]). However, few of them survived more than a couple of issues. Although not always complete, a systematic reporting of the fieldwork conducted in W Crimea was given in Archeologični vidkryttja v Ukraini, succeeded in 2005 by Archeologični doslidžennja v Ukraini, as well as in Archeologičeskie Otkrytija (where only excavations conducted by Russian archaeologists are reported).

The formation of the Chersonesean state in W Crimea, its development and relations with Kerkinitis and indigenous populations have been surveyed by various scholars (Rogov 1999; 2005; Kutajsov 1995b; 1996; 2001c; 2002b; 2003b; Vnukov 2001; Zubar 2004a; Lantsov and Uzhentzev 2007). The anc. literary sources on the demography of Crimea in the



16. W Crimea

5<sup>th</sup>–2<sup>nd</sup> Ct BC are discussed by Stolba (1993a), who also addresses the economic history of the region in the EHel period (Stolba 2005c). Much attention has been given to various aspects of religious life, as well as to the study of particular cults: *general*: Bondarenko 2003; 2007; *Herakles*: Agrafonov 1998; Stolba 2004; evidence from Čajka: Popova and Kovalenko 1996; 1997; 1998; 2000–2001; evidence from Masliny: Latyševa 1997; *Parthenos*: Stolba 1996c; 2004; Guldager Bilde 2003; 2005; Braund 2007; *Demeter and Kore*: Hannestad 2002; *Apollon*: Ševčenko 1998; *Sabazios*: Šceglov 2000; *Sarapis, Isis and Anoubis*: Vinogradov and Zolotarev 1998; 2000; *evil eye beliefs*: Stolba 2007e; in press.

# Conferences

The conference *Chersones v antičnom mire. Istoriko-archeologičeskij aspect* was held in Sevastopol from 29 August to 1 September 1997 (abstracts of papers published under the same title). Since 1999, the National Preserve Tauric Chersonesos

has hosted international conferences organized annually in collaboration with the Institute of Religious Studies at the Jagiellonian University Cracow, and devoted to various philosophical, historical and archaeological aspects of religious life in the anc. Black Sea and the Mediterranean (II Crimean International Conference in the Study of Religion Problemy religij stran Černomorsko-Sredizemnomorskogo regiona, Sevastopol, 18-19 May 2000; materials published under the same title in 2001; M.I. Zolotarev [ed.], Chersones Tavričeskij u istokov mirovych religij: Materialy naučnoj konferencii [Sevastopol 2001] held in Sevastopol, 29–31 July 2000; IV Meždunarodnaja Krymskaja konferencija po religiovedeniju [Sevastopol, May 2002]; materials published as, Ju.A. Babinov et al. [eds], Vostok-Zapad: Mežkonfessional'nyj dialog [Sevastopol 2003]; V Meždunarodnaja Krymskaja konferencija po religiovedeniju [Sevastopol, May 2003]; materials published as Ju.A. Babinov et al. [eds], Kul'tovye pamjatniki v mirovoj kul'ture: archeologičeskij, istoričeskij i filosofskij aspekty [Sevastopol 2004]; VI Meždunarodnaja Krymskaja konferencija po religiovedeniju [Sevastopol, 16–20 May 2004]; materials published as Ju.A. Babinov [ed.], Simvol v religii i filosofii [Sevastopol 2005]). Materials of the 4 following conferences appeared in Sevastopol as the volumes of a new series, Sacrum et Profanum (I–IV; 2005–2008).

The Eupatoria Museum of Local Lore organized 2 conferences which focused on the archaeology and anc. history of W Crimea: *Antičnyj mir i archeologija*, dedicated to the 2,500<sup>th</sup> anniversary of Eupatoria, held on 27 August 2003 (Pridneva *et al.* 2004) and *Archeologija Severo-Zapadnogo Kryma* held on 18 August 2004 (published in vol. 4 of *Vestnik Evpatorijskogo Muzeja* under the title *Materialy naučno-praktičeskich konferencij* [Simferopol 2006]).

DISTANT CHORA OF CHERSONESOS

# Lake coring project

To study the impact of climatic and environmental changes on the ethno-political and economic history of the region, a Danish-Russian-Ukrainian multi-disciplinary project, Northern Black Sea in the 1st millennium BC: Human History and Climate Changes, has been initiated under the direction of V.F. Stolba. In 2005, the coring of 2 lakes, Saki and Džarylgač (Saki and Černomorskoe districts), was carried out by the joint team of the Danish National Research Foundation's Centre for Black Sea Studies (V.F. Stolba) and the Institute of Limnology, Russian Academy of Sciences, St Petersburg (D.A. Subetto, T.V. Sapelko, D.D. Kuznecov and A.V. Ludikova). Long sediment sequences were examined for lithostratigraphy, magnetostratigraphy and biostratigraphy (ostracod, diatom, malacofaunal and polen analyses). Along with a varve chronology, an independent AMS C<sup>14</sup> dating for the sequences was produced at the C14 Dating Laboratory, University of Aarhus (Neustrueva et al. 2007; Stolba et al. 2007; Subetto et al. 2007a; Subetto et al. 2007b; Subetto, Stolba and Sapelko 2007).

# Džarylgač Survey Project

In 2007 an interdisciplinary, multi-period (BA until E mod. times) survey project, the Džarylgač Survey Project, directed by P. Guldager Bilde (Centre for Black Sea Studies, University of Aarhus) and P. Attema (Groningen Institute of Archaeology), was launched. It aims at investigating the rural hinterland of the settlement of Panskoe I on both sides of Lake Džarylgač.

The methodologies applied have been systematic field-walking and collection of surface finds, augering, geomagnetic and other surface measurements, as well as GPS recording and trial excavations at selected sites. Already during the first season, the investigations have revealed a rich and complex settlement pattern covering the entire survey area from the coast and onto the hinterland slopes hitherto undetected by archaeologists working in the area. These startling results made apparent the urgent need for a large-scale revision of the settlement history of the NW Crimean landscape (Guldager Bilde *et al.* 2007).

## Masliny/Vladimirovka

No new investigation at the settlement has taken place since excavations terminated in 1986. Various groups of finds have been treated in a series of articles by the late V.A. Latyševa (1994: terracotta; 1996: handmade pottery; Latyševa and Tadenev 1992: 4 lead weights of the 3<sup>rd</sup>-2<sup>nd</sup> Ct BC).

#### Panskoe I

Situated 10km NE of mod. Černomorskoe, excavations commenced in 1969 by A.N. Ščeglov and continued on a systematic basis until the collapse of the USSR. Two major phases in the site's occupation have been recognized by this work: (1) Olbian: around 400 BC-ca. 360/350 BC; (2) Chersonesean: ca. 360/350-ca. 270 BC. The extra-mural house excavated at tower III of the early fort (area U7) in 1987 furnishes the earliest evidence for the Chersonesean presence (Stolba 1991). A private ceramic letter found just outside this building is written in Doric dialect and contains a mention of a cenotaph (ψευδάριον) (Stolba 2005a). Ju.G. Vinogradov's article on the graffito from U7 refering to Olbiopolitai is now available in German (Vinogradov 1997; for criticism, see Jajlenko 2001a; also in German 2001b). Complete publication of the monumental building U6, from the 2<sup>nd</sup> phase of the site's occupation, which was investigated from 1969 to 1977, is now available (Hannestad, Stolba and Ščeglov 2002).

At the settlement, excavation along its N periphery has targeted the area where soundings in 1987 disclosed a complex of household pits overlaid by a block of buildings (U2) of the L4<sup>th</sup>–E3<sup>rd</sup> Ct BC. House U2-2 (ca. 260m<sup>2</sup>) has been completely excavated, as was the NE part of an adjacent building, U2-3. Both structures are of a similar orthogonal plan with a courtyard, a row of household rooms at the NW side and 2 rows of living units ranged along the NE wall of the house. The pottery assemblage and human skeletons found in U2-2/rooms 14 and 19, as well as in U2-3/room 25, indicate a termination date at the time of a general destruction of the settlement in the first 3<sup>rd</sup> of the 3<sup>rd</sup> Ct BC (Stolba & Ščeglov 1995). To the same period belong the remains of 2 rooms excavated at U10 in the S sector of the settlement which proved to be part of a larger structure. One of these rooms produced fragments of terracotta figurines and a tymiatherion.

In 1994, which was the only excavation campaign in the period under report, the St Petersburg team of the Russian Academy of Sciences (under the direction of A.N. Ščeglov and V.F. Stolba) was working together with the Institute of Classical Archaeology, University of Aarhus, Denmark (L. Hannestad) (Stolba, Hannestad and Ščeglov 1995; Ščeglov, Hannestad and Stolba 1995; Ščeglov *et al.* 1995; Hannestad 1995). In the necropolis area, work was confined to clearing and rescue excavations of graves destroyed by robbers in 1991–1993. The complete publication of the investigations carried out at the necropolis since 1969 is now in print (Rogov and Stolba in print). An overview of rf and bg pottery from the Panskoe cemetery was given by Rogov and Tunkina (1998). Finds of beads, pendants and amulets, and their role in burial rites, are treated in depth by Stolba (2007b; in print).

Within the framework of the Džarylgač Survey Project, a geomagnetic prospection of the N, E and S parts of the settlement has been made by T. Smekalova in 2007 and 2008. The complete layout of the preserved part can now be reconstructed.

# Kalos Limen (Černomorskoe)

The West-Crimean Expedition (V.A. Kutajsov) continued excavation in the settlement and necropolis. The stratigraphy of the site has been defined with more accuracy, distinguishing 4 main horizons (A–D): (1) Gr: E4<sup>th</sup>–3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct BC; (2) Gr: last quarter of the 4<sup>th</sup>–1<sup>st</sup> half of the 2<sup>nd</sup> Ct BC; (3) Scythian: 2<sup>nd</sup> half of the 2<sup>nd</sup> Ct BC–1<sup>st</sup> half of the 2<sup>nd</sup> Ct AD; (4) Saltovo-Majak Culture associated with the Khazars: 8<sup>th</sup>–1<sup>st</sup> half of the 9<sup>th</sup> Ct AD. Excavations in 1988–1991 in the E part of the site, omitted in the previous report, unearthed a 40m *l*. section of the EHel defensive wall with gates and a tower (5.5m x 4.75m) attached from the outside to the already existing curtain

(Kutajsov and Užencev 1994). A burnt destruction layer of the 1<sup>st</sup> quarter of the 3<sup>rd</sup> Ct BC testifies to a destiny similar to that of rural sites in the territory of Chersonesos. In the Scythian period, along with the above-ground structures, pit shelters became a common type of architecture (Užencev 1994; 1997), although one such dwelling excavated in 1994 seems to date as early as the 3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct BC (Kutajsov *et al.* 1997; Užencev 2006). A 120m² large Scythian house built in the 1<sup>st</sup> Ct AD in the area of the former Gr citadel, and left by its inhabitants some decades later, is published by Užencev (2002).

Since 1992 excavations have mainly focused on the SW part of the site where a citadel was erected in the last third of the 3<sup>rd</sup> Ct BC. Tower 4, protecting the SW corner of the citadel, measures 10.2m x 9.2m and is the only one reinforced by an 'anti-ramming' belt. Three adjoining structures of orthogonal plan (complexes I-III), unearthed here in 1993-1995 and built over by the city wall, belong to the earliest phase of the site, the 1st to the 3rd quarter of the 4th Ct BC. Their interpretation as a winery was suggested, but is uncertain (Kutajsov and Užencev 1996; 1997; 2007; Kutajsov et al. 1997; Užencev 2004). Walls of the same period have also been traced inside the citadel where structures of the L3<sup>rd</sup>-E2<sup>nd</sup> Ct BC were studied, including a row of rooms adjacent to its N wall interpreted as barracks. The fortifications of the citadel are the subject of a separate study by Užencev (2004). Reuse of gravemarkers and architectural elements is recorded in their construction. One of the gravemarkers bears the name of Heronikos, son of Damis. This name must have been especially popular in W Crimea, as attested by several LGPN IV entries for Heronikos restricted exclusively to Chersonesos and Kerkinitis.

Smaller trenches were also dug in the central as well as in the NW parts of the settlement, where in 1997–1998 the Hel house 6 adjoining the N defensive wall was investigated (Kutajsov and Užencev 1999; Kutajsov and Kutajsov 2005). Worthy of mention is a find of the bone inlay of a box with incised representation of a Nereid riding a hippocampus. Redslipped pottery from the site is treated by Užencev and Trufanov (Užencev 1999; Užencev and Trufanov 2004). In the numismatic material, coins of Chersonesos by far predominate, other mints being represented by Pantikapaion, Kerkinitis, Olbia, Istros, Kallatis, Amisos, Dioskourias and Egypt. Užencev 2006 is a useful synthetic study bringing together both literary and archaeological evidence about the settlement of Kalos Limen.

Investigations in the tumular necropolis, SE and E of the settlement, were mainly of a rescue character (Kutajsov and Užencev 1994; Kutajsov and Pridnev 2007). Both mound burials and graves in the area between the tumuli have been unearthed, many barrows having been robbed already in antiquity. The location of the flat ground cemetery remains unknown. The earliest burials date to the 2<sup>nd</sup> quarter of the 4<sup>th</sup> Ct BC. No graves of the 2<sup>nd</sup> phase of the Gr occupation are so far recorded. Above-ground mud-brick cists have been excavated in tumuli 12, 26 and 31, the other types of burial structures being represented by simple trenches, slab lined graves, stone cists, etc. Gravemarkes are both of the classical and the anthropomorphic types, all found reused in the construction of the citadel.

## Karadža

The impressive site is located in the N outskirts of the village of Olenevka (Karadža). In 2005 V.A. Kutajsov initiated excavations, the first archaeological undertaking at the site since 1901, when 5 burial mounds were excavated by the local landowner A.I. Popov in the territory of his estate. The settlement, the size of which was estimated at ca. 3.2ha, has a

trapezoid plan measuring ca. 200m x 160m. A trench dug in its S part, exposed to erosion, revealed a terraced building with a complex stratigraphy and material no earlier than the 3<sup>rd</sup> quarter of the 4<sup>th</sup> Ct BC (Kutajsov 2006). A damaged fragment of a limestone sculpture of a male head was found in the stone debris on the upper terrace. Fragments of mouldmade bowls testify to occupation until the 2<sup>nd</sup> Ct BC. A 1<sup>st</sup> Ct BC-1<sup>st</sup> Ct AD dating is assumed for the upper stratigraphic horizon, although the material retrieved to date is insufficient to prove this.

## Džan-Baba

In 2002, the site situated 200m W of the mod. village of Mar'ino, together with the settlements of Terekly-Konrat, Beregovoe, Murzačok and Airči, were inspected by S.V. Pridnev (2004). Drawings of an 'anti-ramming' belt of a tower observable in the eroding cliff were made, as well as a surface sampling of pottery. No trenches were dug.

## Kul'čuk

A.S. Golencov excavated at the fortified settlement of Kul'čuk until 1994 (Golencov 1994; 1995). In 2006 work at the site was resumed under the direction of S.B. Lancov (Lancov et al. 2007). The main work has been carried out in the S, intensively eroded, part and in the E sector, where strata of the Gr, L Scythian and EMed periods have been recognized. A large building complex investigated in the E sector of the settlement (no. 2 in Lancov's numeration) is trapezoidal in plan measuring 38-40m x 25.6m with a tower (9.8m x 10.25m) reinforced by an 'anti-ramming' belt in its NW corner. An anti-seismic, rather than defensive, purpose of these belts is argued by V.M. Ivanov (2003). A destruction layer of the 1<sup>st</sup> Ct BC has been recorded in 2 rooms in the NE part of the complex. Several pit shelters unearthed by Golencov in the coastal part so far provide the earliest material which dates to the M or 3<sup>rd</sup> quarter of the 4th Ct BC. Presumed pottery kilns excavated in the same area date to the Scythian period and went out of use no later than the 1st Ct BC. Work has also involved excavations in the necropolis situated to the N of the settlement. Excavated burials date to the 1st Ct BC-1st Ct AD, but some reuse the tombs of an earlier period. Two bronze coins from Olbia and Amisos are reported among the chance finds. A 3<sup>rd</sup> specimen, which is said to be from Messembria (Lancov et al. 2007), belongs to Mytilene. Excavations in 2008 produced a limestone relief depicting a reclining Herakles (S.B. Lancov, personal communication). Similar reliefs have been found at the settlements of Čajka and Mežvodnoe (Stolba 2004). A brief account of the Chersonesean amphora stamps from the 1989-1994 excavations has been provided by Golencov (1999).

# Beljaus

Excavations at the settlement and necropolis of Beljaus, directed by O.D. Daševskaja, continued throughout the whole period under report (Daševskaja 1994; 1996; 1997a; 1997b; Daševskaja and Golencov 2005; 2007). Supplementary examinations have been undertaken in various parts of the site. By 2008 the entire area (amounting to 6,000m²) has been almost completely excavated. Fieldwork in the necropolis yielded 2 new burials of the Hunnic period (Daševskaja 1995; 2003). A fragment of a limestone relief with a representation of a funeral banquet, which was found in 1988 in debris of the 1st Ct AD Scythian house, has been studied by P.D. Diatroptov (1994).

# Zapadno-Donuzlavskoe

Daševskaja and Golencov (1999) have published an overview of the main results of excavations conducted in the period 1967–1988.

## Južno-Donuzlavskoe

The site on the S shore of Lake Donuzlav has not been investigated since O.D. Daševskaja's excavations in the 1960s–1970s. A brief account of amphora stamps has been given by Golencov (1999). Coins from excavations and chance finds are published by Stolba and Golencov (1999; 2000).

# Čajka

The settlement of Čajka, situated on the W outskirts of mod. Eupatoria, is one of a few sites in the distant chora of Chersonesos where investigations, since 1987 under the direction of E.A. Popova, have continued uninterrupted. The main results of these excavations were recently brought together in 2 volumes (Popova and Kovalenko 2005; Popova et al. 2007). A brief summary of the sites in the immediate vicinity of Čajka (the necropolis of Zaozernoe, Pesčanka, Majak, Mojnakskoe) can be found in Kolesnikov and Jacenko (1999).

In the period under report, excavation has been focused on 2 large EHel houses named *usad'ba* (farmhouse) 2 and 3, which, along with house 1 published in 1991 by Jacenko and Turina, were built at the spot of an earlier fortified emporion. House 2 (ca. 450m²) is of a Π-shaped plan with a courtyard and 11 rooms along the W, S and E walls of the building, its SW corner being reinforced by a tower. House 3, slightly smaller in size, partially adjoins house 2 on the SE. Unlike the previous building, it has 2 courtyards separated by a row of 4 rooms ranging from N to S. By the N wall of the house, a workshop for producing mud-bricks was uncovered (Popova and Kovalenko 2001). Built sometime in the L4<sup>th</sup> Ct BC, both structures were destroyed by fire in the 270s/260s BC as a result of a military attack.

Besides the strata of the Gr period, in 2004–2006, the structures of the L Scythian period were investigated in the NW part of the Scythian settlement where a section of the W defensive wall, as well as 3 rooms along the N defensive wall, were uncovered (Popova and Egorova 2005; 2007). Along with numerous finds of pottery, terracotta and metal artefacts treated in a series of articles (Jacenko 1993; 1994; Il'ina 2000; 2007a; Egorova 2000; 2004; 2005; 2007; Belovinceva and Popova 2007; Žuravlev 2007), the excavation yielded 2 limestone reliefs each with representations of a standing Herakles (Popova and Kovalenko 1996; 1997; 1998; 2000–2001). A large fragmentary terracotta statuette (in Eupatoria Museum) was originally identified as Herakles too (Popova and Kovalenko 1996, 68, fig. 5; 1997, 81, fig. 3), but it is now appropriately attributed as Dionysos (Il'ina 2007b).

Despite previous attempts to date the foundation of the Gr settlement to the L5<sup>th</sup> or E4<sup>th</sup> Ct BC, the material does not seem to substantiate this notion. The pottery assemblage from the well below the SW tower, as well as numismatic material, point to a considerably later date in the 360s BC.

## Kerkinitis

Excavations have taken place in the NW corner of the anc. city, but were restricted to small trenches because the site is totally built over by mod. Eupatoria. Soundings and excavations of 1993–1994 outside the earliest defensive line uncovered 2 ash hills of the 5<sup>th</sup> and 4<sup>th</sup> Cts BC. Remains of an EHel stone structure, which overlays these deposits, are said to post-date the expansion of the city's territory (Kutajsov and Pavlenkov 1994; 1999). Rescue excavations undertaken in the same area in 2000 unearthed a human cremation and remains of a round tower of the E4<sup>th</sup> Ct BC, which possibly belonged to a farmhouse built in the immediate vicinity of the city wall (Kutajsov, Pavlenkov and Pridnev 2001).

Kutajsov and Pridnev (1997) report on a rescue excavation in the necropolis area in 1994. Out of 10 excavated burials, there was only one cremation, the rest being inhumations, including 2 enchytrismoi in amphorae. None of these seems to post-date the 4<sup>th</sup> Ct BC.

Kutajsov (2004) offers an important synthesis of the history and archaeology of Kerkinitis. Paleoeconomical aspects of the city's history have been the subject of studies by the same author (Kutajsov 1999; 2001b; 2003a; 2006). The literary tradition about the city and the Bay of Kerkinitis has been examined by V.F. Stolba (2004). Despite attempts to find 2 different cities of the same name, both Karkinitis of Herodotos and Carcine/Karkina of the later authors refer to one and the same polis in W Crimea, merely reflecting different chronological strata of the source material available to them. The geographical confusion in the later tradition is likely to predate the lifetime of Mela in whose work it is first evident. Karkinitês kolpos might be an original name of what is now the bay of Eupatoria (Stolba 2004). Substantial scholarly attention has been devoted to the local coinage and coin circulation (Zaskoka 1995; Kutajsov 1995a; 2002a; Stolba 1996b; 2007a; 2007c). The spread of the cult of Artemis Epheseia to Kerkinitis is evidenced by 2 5th Ct BC dedicatory graffiti: APTEMI  $E\Phi E\Sigma HIH: H\Delta EA$  and APTEMI  $E\Phi E\Sigma H$  (Kutajsov 2001a; 2004, figs 70, 72). However, the attempt to make this an argument for the Ephesian foundation of the city seems far fetched (Kolesnikov 2004). In 1998 Anochin rejected Solomonik's reading of the letter of Apatourios (1987), offering instead his own, rather fantastic, interpretation of the text (Anochin 1998). An overview of around 860 amphora stamps found in the city in 1980-1987 has been provided by Machneva (1994).

## Kara-Tobe

S.Ju. Vnukov continues excavations of the fortified settlement of Kara-Tobe on the W outskirts of the mod. city of Saki, identified as the Eupatorion of Strabo (Vnukov 1994; 1997; 2000; 2007). The site's plan approaches a square measuring ca. 100m x 100m with a tower (12.9m x 12.2m) in the middle. Excavations of the tower, which began in 1992, are now completed. Whereas the earliest finds of pottery date back to the 4th Ct BC, no actual habitation layer prior to the 2nd Ct BC has been recorded. Soundings in 1993 N of the site uncovered catacombs and simple trench and niche-grave burials of the 1st Ct BC-1<sup>st</sup> Ct AD. The flat grave necropolis of the L Scythian period has also been discovered W of the site; some child burials were excavated inside the inhabited area, below the floor of room 15 and E of the central tower (Vnukov 2005; 2007; Vnukov and Lagutin 2001). Some groups of artefacts found at the settlement, including mouldmade bowls, coins, weapons, etc., have been the subject of special studies (Vnukov and Kovalenko 1998; 2004; Lagutin 1999). A unique golden stater of the Bosporan King Asandros, found in 2006 in pit 9/06, has the date H (the 8<sup>th</sup> year of Asandros' rule = 37/36 BC) (Vnukov and Kovalenko 2007). A fragment of an inscription bearing the name Aristonikos is interpreted as a dedication of a tropaion from the period of the Diophantos' campaign against the Scythians (Vinogradov and Vnukov 1997 = SEG 47, 1177).

# Sakskaja Peresyp'

The site is situated in the SE part of a sand bar separating Lake Saki from the sea. Rescue excavation undertaken by S.B. Lancov in 1986–1987 after the site began to be plundered covered an area of ca. 500m². A supplementary survey took place in 2007 (Lancov 2008). No convincing traces of aboveground structures have been recorded. Numerous fragments of

sculpture, dedicatory inscriptions, as well as pottery and coins prompt the interpretation of the site as a sanctuary which existed from the 2<sup>nd</sup> Ct BC to the 3<sup>rd</sup> Ct AD. One of the inscribed fragments bears the name of Artemis. A detailed description of the site and finds is given by Lancov (Lancov 2001a; 2003). Seventy-four coins confiscated from local schoolboys have been published separately (Lancov 2001b). Several hundreds more remain in a private collection in Simferopol, including a gold stater of Chersonesos struck in the year 119 (=AD 95) of the local era (Sidorenko 2001, 439, no. 7).

## Novo-Fedorovka

The site, situated 500m N of the mod. village of Novo-Fedorovka, was partly destroyed by systematic ploughing. The last year of excavation was in 1992 (Lancov 1994). The site is broadly dated from the L5<sup>th</sup>-2<sup>nd</sup> Ct BC, although the material seems to speak in favour of a somewhat later initial date (2<sup>nd</sup> quarter of the 4<sup>th</sup> Ct BC?). To the 1<sup>st</sup> half of the 4<sup>th</sup> Ct BC belongs a rectangular pit shelter measuring 2.4m x 2.1m. Above-ground structures are represented by remains of rubble stone sockles. Along with the sites of Kizil-Jar (Lancov 1989) and Vilino (Koltuchov, Zubar' and Myc 1992) found S of Lake Saki, this site fills the gap on the map of Gr settlements between Eupatoria and Sevastopol. A 4<sup>th</sup> Ct BC barrow with Gr material excavated between Lake Kizil-Jar and Lake Bogajly seemingly antedates the Chersonesean presence in the area (Koltuchov, Trufanov and Užencev 2005).

## HOME CHORA OF CHERSONESOS

The home chora of Chersonesos has maintained its importance for the study of anc. land use and management. Excavations of farmhouses and rural infrastructure have taken place at various locations. Earlier archaeological work on the Herakleian Peninsula, since the L18th Ct until 2000, is summarized by Zubar' (2005; 2006a; 2007). Of major importance is the appearance of 2 volumes by G. Nikolaenko, Chora Chersonesa Tavričeskogo. Zemel'nyj kadastr IV-III vv. do n.e. (1999; 2001), indispensable tools for anyone working in the area. S. Saprykin has published in English the results of excavations of farmhouses on plots 9, 10, 86 and 57 conducted in 1974-1990 by the late I.T. Kruglikova (Saprykin 1994). The fortified settlement on the isthmus of the Majačnyj peninsula identified as the παλαιά Χερρόνησος of Strabo (7.4.2) has been the subject of studies by A.N. Ščeglov (1994; 1997; 2001). Pottery of the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD from site 343 ('Twins') excavated from 1987 to 1990 is treated in detail by E. Klenina (2004). A brief account of the 1976-1987 excavations of the Moscow State University at plot 227 (no. 150 of the old numeration) has been given by Kuziščin and Ivančik (1998).

Since 1994 the major foreign collaborator with the National Preserve of Tauric Chersonesos has been the Institute of Classical Archaeology (ICA), University of Texas, Austin, which sponsored and participated in the excavation and restoration work in the chora of Chersonesos on the Herakleian Peninsula and in the city itself (J.C. Carter). This collaboration has also made it possible for the preserve to provide a comprehensive and highly useful homepage in 3 languages, Russian, Ukrainian and English (http://www.chersonesos.org). During the decade from 1994–2004, work of the joint Ukrainian-American expedition was restricted to sites 151 and Bezymjannaja. A well-preserved farmhouse excavated on plot 151, the plan of which parallels other sites in the nearby chora of Chersonesos, was fortified with a central tower surrounded

on 3 sides by a courtyard. The pottery assemblage and coins provide a date from the 4<sup>th</sup>-2<sup>nd</sup> Ct BC. A general overview of finds can be found in Carter 1998. Unlike plot 151, the stratigraphy of the farmhouse at Bezymjannaja, a full publication of which is underway, is more complex comprising strata of the Hel, LRom and EByz periods (Carter *et al.* 2000; Thompson 2000; Rabinowitz, Yashaeva and Nikolaenko 2002).

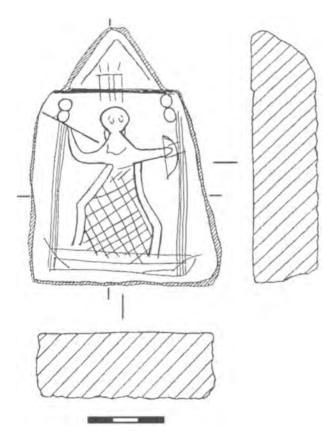
In order to obtain an idea about landscape transformation during the M-L Holocene, since 1997 archaeological work in the chora has been complemented by geomorphological, pale-obotanical and paleoenvironmental studies (Cordova and Lehman 2003; 2005; Cordova, Rybak and Lehman 2001; Cordova 2007).

In 1996, the Herakleian Expedition of the National Preserve under the direction of G. Nikolaenko resumed excavations of the settlement on the isthmus of the Majačnyj Peninsula, on the W coast of the Kazač'ja Bay. Except for the plan and photograph of the trench published by Nikolaenko (1999; 2006) and coin finds (Dem'jančuk et al. 2005, 438-46) information is scarce. The interpretation of the discovered structure as a temenos, proposed by the excavators (Nessel et al. 2006), is uncertain. An alternative interpretation is offered by Bujskich and Zubar' (2007) who argue for its profane character. In 1993, on plot 53a, Nikolaenko excavated a 2chambered structure, which was interpreted as a roadside shrine. Built of rubble, it measures 9.4m x 4.7m. Rock-cut pits were uncovered in the corners of one of the rooms and outside the building. The finds included pottery and coins of the L4<sup>th</sup> Ct BC, but no terracotta fragments have been reported (Nikolaenko 1997; 2001; 2006). Material of the L4<sup>th</sup>/E3<sup>rd</sup> Ct BC has been retrieved from the farmstead on plot 39, which was much destroyed by coastal erosion. A fortified multiperiod complex in the Berman ravine, where work was resumed in 1990, has continued to be excavated.

L.A. Kovalevskaja carried out excavations of the farmhouse on plot 341, which consists of a courtyard with the household and living units on 3 sides and a tower in its SW corner. Measuring 10m x 11.3m, the tower was reinforced by an 'antiramming' belt and contained 2 rooms, in one of which was a well, whereas the other served as storage space. The earliest find is represented by a single coin of Pantikapaion from the 4<sup>th</sup> Ct BC, the bulk of material belonging to the 2<sup>nd</sup> half of the 3<sup>rd</sup> Ct BC-3<sup>rd</sup> Ct AD (Kovalevskaja 1994; 1997; 2007). With interruptions, habitation on the site continued until the 13th Ct AD. A pottery assemblage of the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD is published by Kovalevskaja (1998). An outstanding find is a pentagonal limestone slab with an incised depiction of Parthenos as Promachos (Fig. 17) following the iconography of the goddess known from local coins of the 1st Ct BC-3rd Ct AD (Kovalevskaja and Ševčenko 2003). A limestone head found in 1995 in room 13 is likely to represent Herakles (Kovalevskaja 2007). Soundings on the W slope of the Sarandinaki ravine uncovered the ceramic pipes of a water duct, which could be traced for a distance of 3.5km (Kovalevskaja 1994). The other localities involved were farmhouses on plots 129, 130 and 297, but the information is scarce.

# Chersonesos (Sevastopol)

Several new guidebooks on the city have appeared (Zolotarev and Chapaev 2002; Soročan, Zubar' and Marčenko 2003). Of these, Crimean Chersonesos. City, Chora, Museum, and Environs (Austin 2003), edited by G.R. Mark and J.C. Carter, provides the most valuable and best illustrated introduction to the history and archaeology of Chersonesos and its environs, as well as to the finds. A substantially updated version of Saprykin's book, Gerakleja Pontijskaja i Chersones Tavričeskij



17. Home chora of Chersonesos: limestone relief with incised rendering of Parthenos as Promachos found in the farmhouse on plot 341

(1986), appeared in English in 1997. Several new monographs offer both popular and in-depth scholary treatments of various aspects of the city's history (Zubar' 1993; 1994; 2004a; Soročan, Zubar' and Marčenko 2001; Zubar', Bujskich, Kravčenko and Rusjaeva 2005). Economic and political relations with the Bosporan Kingdom in the 4<sup>th</sup>-2<sup>nd</sup> Ct BC were the subject of a study by Molev (2003). In 2002, *VDI* created a special section devoted to Tauric Chersonesos aiming at the publication of new finds and discussion of the main issues of its history and archaeology.

Virtually all parts of the anc. city have been subjected to archaeological investigations throughout the period under report. Since the untimely death of I.A. Antonova in 2000, excavation and conservation work have continued in the citadel and in the harbour area under the direction of S.B. Soročan. Built in the 3<sup>rd</sup> Ct BC (Zubar' and Antonova 2001), in the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD it accommodated a Rom garrison stationed in the city, and later on it was the location of the Byz praetorium. About 70% of its territory had been investigated by 2008. A full account of archaeological investigations hitherto conducted in the citadel has been provided most recently by Zubar' and Soročan (2008). The joint expedition of the Chersonesos Museum and the University of Kharkov (M.I. Zolotarev and S.V. D'jačkov) completed investigations of a large public building, the so-called barracks, near the SE gates of the city. Amphora stamps from this complex were treated by M.I. Zolotarev (1999) who suggested a construction date shortly after 350 BC. In Rom times, the N part of the building was converted into a winery which remained in use until the 2<sup>nd</sup> half of the 3<sup>rd</sup> Ct AD. In its S part, supposed remains of an earlier city wall, dated to the L5th or E4th Ct BC, were discovered in 1993-1994 (Zolotarev and D'jačkov 1994; Zolotarev 1995; Zolotarev, Korobkov and Ušakov 1997). 1n 2005 another approximately 5m l. segment of the city's early fortifications was discovered by Ryžov in the N sector of Chersonesos (2007a). His conjecture of their general outline challenges the reconstruction proposed by Bujskich (2005). The excavation at the basilika of 1935 in the N sector of the city, conducted by the Chersonesean Preserve in collaboration with the Macalester College in St Paul, MN and the University of Puget Sound in Tacoma, WA, within the framework of the project Diaspora Jews, Romans, Others in the Greek Style Cities of First Century Crimea (1993-1994), has revealed evidence for a Jewish presence in the city (MacLennan 1996; Overman, MacLennan and Zolotarev 1997; Edwards 1999). A large piriform cistern of the Rom period was cleared in block XCVI, NE sector. A valuable overview of the pottery assemblage from a Hel cistern unearthed in the same block in 1991 is offered by Zolotarev (2005). He also provides more detail on 14 pit shelters discovered in the NE sector in the L 1980s, which are thought to be the earliest dwellings of the city's inhabitants. Their size varies from 4m<sup>2</sup> to approximately 10m<sup>2</sup>. The material found in situ on the floors allows for a narrow date from the L5<sup>th</sup>-1<sup>st</sup> 3<sup>rd</sup> of the 4th Ct BC (Zolotarev 1998). In 2003, prior to the construction of the Packard Laboratory in the central area of the city, S.G. Ryžov and J.C. Carter excavated remains of an EHel house with foundations overlaying the graves of the earlier city's necropolis (Ryžov 2007). Some earlier burials have also been recorded in the N sector. Minor-scale rescue excavations have been conducted in the city's necropolis on both sides of Quarantine Bay (Ušakov 1994; Turovskij, Filippenko and Stupko 2007), as well as in the W cemetery where 11 graves of the Rom period were excavated (Magda and Dmitriev 1997). At curtain 13 of the S defensive wall, the Ukrainian-American team (L. Sedikova, P. Arthur, A. Rabinowitz) completed many years of investigations of a large, 18m x 13.5m water cistern of the LRom-EMed period (Sedikova 1994; 1997; 2007).

A new archaeological periodization of Chersonesean monuments was attempted by M.I. Zolotarev (2002). Drawing largely on the observations from his own work in the NE sector of the city (Zolotarev 1996; 1998), he distinguished 6 main periods: (1) LAr (528 BC–last quarter of the 5<sup>th</sup> Ct BC); (2) Cl (last quarter of the 5<sup>th</sup> Ct–ca. 330 BC); (3) Hel (last 3<sup>rd</sup> of the 4<sup>th</sup>-M1<sup>st</sup> Ct BC); (4) Rom (M1<sup>st</sup> Ct BC–E5<sup>th</sup> Ct AD); (5) Byz (E5<sup>th</sup> Ct–L13<sup>th</sup> Ct AD); (6) Post-Byz (from the 14<sup>th</sup> Ct AD).

The heated debate which broke out in the late 1980s about the foundation date of the city has developed further. The suggested date of ca. 528/527 BC for the city's establishment (Vinogradov and Zolotarev 1998a; 1999a; 1999b; Zolotarev 1993; 1994; 1995a; 1996) continues to be questioned by various scholars (Zedgenidze 1993; Saprykin 1998; Bujs'kych 2006; Tochtas'ev 2007; Stojanov 2007), who basically argue for a somewhat later date for the material. Monachov and Abrosimov's study of the pottery from old and more recent excavations on the necropolis (1993; with profile drawings and catalogue) is an important contribution to this discussion. Out of 58 analysed and catalogued vessels, which include amphorae and table ware, one 6th (9 items) prove to antedate 422/421 BC, the conventional date of the city's foundation proposed by J.H. Schneiderwirth (1882) and A.I. Tjumenev (1938). Finds of fineware from the earlier excavations in the necropolis have been revisited by Stojanov (2005). Several articles address the issues of the city plan and defences of the Gr-LRom period (Zolotarev 1995b; Antonova 1996; Zubar' and Antonova 2001; Bujs'kych and Zolotarev 2002).

Approximately 300 EHel grave stelae, their fragments and other architectural details, retrieved in the 1960s-1970s from tower XVII (of Zeno) and in the city wall, make up a central part of a publication project undertaken by J.C. Carter in collaboration with R. Pozamentir, P. Perlman, V.N. Danilenko and A.V. Bujskich (Carter 2006). Danilenko (1996) suggests that a large group of architectural elements from this collection may in fact belong to the construction of sarcophagi. A peculiar group of local grave-markers, the anthropomorphic stelae, the ethnocultural attribution of which remains obscure, has been discussed by Bujskich and Zubar' (2006; note also Pozamentir 2005; Rogov and Stolba in print). As with the anthropomorphic grave-markers, the interpretation of contracted burials, most of which come from the city's N cemetery and constitute another peculiarity of local burial rites, continues to be fiercely disputed. The suggested interpretations range from regarding them as the burials of the socially dependent population, presumably of slaves (Zubar' 1995), through to the idea of a Gr origin of the rite (Kadeev 1995; Zubar' 2006b), to an utter scepticism of finding any plausible solution to the problem (Stojanov 2002; 2003).

The organization of the Chersonesean mint, the metrology and chronology of the bronze and silver issues have been examined by S. Kovalenko (1999; 2003 [in Russian] = 2004 [in English]; 2005). His corpus of coins produced in the city in the LCl period appeared in the series Griechisches Münzwerk in 2008. Important observations on the typology and chronological sequence, and descriptions of new types have been made by Stolba and Turovskij (Stolba 1996c; Turovskij 1997a; 2003); Turovskij also offers a discussion of finds from the Herakleian Peninsula (1998). The coin-like pieces of lead, which some scholars consider tokens (Kovalenko 2002, 33-58; 2004b), while others interpret them as 'emergency' money (Turovskij 2005), have remained a matter of controversy, albeit the number of finds since their first description by Rostovcev (Tesserae plumbeae urbis Romae 1912) has increased signifi-The Mithridatic bronze coins from the city's excavations have been brought together by S. Saprykin (1996), who also gives an overall account of coin circulation in the chora (2004; 2005). For finds from particular sites, see Stolba and Golencov 1999; 2000; Vnukov and Kovalenko 2004; Kovalenko 2006. Gold coinage of the 1st-2nd Ct AD has been studied by Sidorenko (2001). The distribution and chronology of the Chersonesean coin hoards of the 4<sup>th</sup>-2<sup>nd</sup> Ct BC is the subject of a posthumous article by A. Gilevič (1999). Detailed description of 61 EHel coins from a hoard found in the 1970s on the SE slope of Mt Sapun is provided by Alekseenko (1998). Illicit metal detecting at the farmsteads of the Herakleian Peninsula brought to light 2 more hoards, as well as a number of new, previously unrecorded types (Šonov 2003; 2005; Sidorenko and Šonov 2006). Tense foreign relations seem to have affected coin circulation both in the chora and in the city. which resulted in a similar distribution pattern of hoards and stray finds (Stolba 2007c). Cessation of silver issues, systematic countermarking of circulating coins and deterioration of their alloy composition are likely indications of a crisis which struck the economy of Chersonesos and other major centres of the N Black Sea coast in the L4th or E3rd Ct BC (Stolba 2005c). Paleobotanical, limnological and archaeological data available to date prompt the suggestion that the monetary crisis, like the general economic decline, was rooted in substantial environmental changes (Stolba 2005d).

Finds of several new inscriptions sparked notable activity in epigraphic research as well. Eleven Gr inscriptions found in the excavations of the city in 1983–1991 have now been published by Solomonik (1996 = SEG 46, 923, 924, 927–28, 930–34, 936–37); for her no. 2 [= SEG 46, 923], a new reading

has been suggested by Makarov (2000; 2002). A dedication of a certain Charmippos, son of Prytanis, to Sarapis, Isis and Anoubis, found in 1993 in the NE sector of the city, offers a valuable insight into the religious life of Chersonesos in the 3<sup>rd</sup> Ct BC (Vinogradov and Zolotarev 1998b; 2000 = SEG 50, 691; Bricault 2005, no. 115/0302). Except for one earlier known document (IOSPE I<sup>2</sup>, 5) and one recently found fragment from Tyras (Ivančik and Samojlova 2007), it furnishes the only epigraphic evidence for the worship of the Egyptian triad on the N Black Sea coast in the Hel period. An extensive text containing 2 decrees honouring T. Aurelius Calpurnianus and his wife Paulina, which shed new light on relations between Chersonesos and Rome at the time of the Marcomannic Wars. was found by I.A. Antonova in the 1990 excavations in the harbour area (Antonova and Jajlenko 1995; Vinogradov 1996; Svencickaja 1996; Smyšljaev 1996; Jajlenko 1999; 2000; Haensch 2005; Demougin and Loriot 2005; BullÉp [1997], 425; SEG 45, 985). Saprykin (1998a = SEG 48, 999) has published the 2<sup>nd</sup> Ct AD honorary decree for the Sinopean citizen Gaius Valerius. In 1993-2001 6 more fragments of Rom period inscriptions from the city excavations were brought to light by Makarov (2006b; 2007).

IOSPE 1<sup>2</sup>, 355, 423 and 691 have been republished with Italian translations by F. Canali De Rossi (1999, nos 148-50). Multiple articles have offered commentaries and new interpretations of inscriptions of the *IOSPE* previously published: no. 343: Vinogradov 1997b (new dating and restoration; conjecturing an attack by the Sarmatians on the city environs already around 280 BC); no. 349: Avram 2002, 71-73; no. 352: Gavrilov 1996; Avram 2000, 152; S. Anghel 1999-2000, 92-93; Heinen 2001, 500-02; no. 353: Avram 2002, 69-70; no. 365: Saprykin 2002b, 72-84; no. 381: Makarov 2006b, 89-92 (adding a new fragment to the proxeny for the citizen of Amastria); no. 401: Botvinnik 1997; Gavrilov 1998 (on the term saster); Jajlenko 2001a; Jähne 2002 (dating); Dössel 2003, 179-96; Stolba 2005d (on the economical implications of the text); Bondarenko and Ivanov 2006 (on the term saster); no. 402: Heinen 2005; Højte 2005; no. 403: Turovskij 1992 (proposing a date in the 230s BC); Solomonik and Nikolaenko 1995 (a French version of their article published in 1990 in VDI); Bujskich 1998 (on the term hekatorygos); no. 404: Makarov 2003; no. 410: Makarov 2001 (proposing a new reading and arguing that the annual offices of the basileus and the priest of Parthenos were combined duties of one, not of 2 different officials); no. 418: Jajlenko 2001a; Zubar' 2004b (on the location of pedion mentioned in this inscription and IOSPE 12, 401); no. 597: an epitaph of the commander of the Armenian archers, can now be supplemented by the fragment found in 1971. Makarov (2005; also in French [2006a]), who republished both fragments, challenges the traditional notion arguing for Armenia Minor and Kolchis being subdued to Mithridates VI prior to his conquest of Scythia.

Along with the inscriptions on stone, a certain scholarly attention has been given to the inscriptions on pottery and other objects, such as loomweights, roof tiles, clay moulds, etc. (Solomonik 1993; 1994; 1995; Treister and Zolotarev 1993; Saprykin and D'jačkov 1994; Turovskij 1997b; Efremov 1998). Vinogradov and Zolotarev (1999b) substantially extended the list of ostraka from Chersonesos, which now amounts to 45 entries and almost doubles the number presented in an earlier article by the authors. Supposing a democratic government, they date the implementation of ostracism to the E5<sup>th</sup> Ct BC. The chronology of these ostraka has, however, most recently been revised by Tochtas'ev (2007). An exhaustive study of the typology and chronology of stamps on local transport amphorae and roof tiles was undertaken by Kac (1994; 2006; 2007). Consisting of 3 groups, his chronological sequence

embraces a period from ca. 325-179 BC. Different initial and terminal dates of the stamping, ca. 335/330 and ca. 150 BC respectively, have been proposed by Stolba (2005b), who also suggested a ca. 30-year gap in production in the 3<sup>rd</sup> Ct BC. Saprykin (1996b, the Russian version of this article being published in VDI [1996a]) argued, implausibly though, that enigmatic amphora stamps reading Skythikon, Taurikon and Athenaiou eis emporion refer to Chersonesean export to the Scythians and Taurians via Kalos Limen and Balaklava respectively. A discussion of stamps with eis emporion has also been undertaken by Garlan (1993). The numerous finds of amphora stamps of Chersonesos from the Lower Don and the Dnieper areas testify to an extensive flow of local Gr wine into the barbarian hinterland and to the existence of a well-established communication system (Zolotarev 2000; see already Stolba 1990). Stamped measuring vessels from Chersonesos have been published by Fedoseev (2005).

Several papers address the issues of onomastics and prosopography. A group of personal names which habitually was thought to be evidence for the presence of non-Greeks in the city's population is examined by Stolba (1993b; 1996a). Articles by Ščeglov and Gilevič (1996), and by Rusjaeva (2003) have investigated the careers of Bathyllos and Agasikles respectively, the city's officials in the 4<sup>th</sup>–3<sup>rd</sup> Ct BC, whose names emerge on local coins and amphora stamps, as well as in the inscriptions.

## Balaklava

An important discovery was made in the early 1990s in Balaklava, in the bay which anc. literary sources refer to as Symbolon Limen. Here, construction works disclosed the remains of a Rom building, presumably barracks, 9 rooms of which were unearthed in 1991-1992 by rescue excavations. The building was destroyed by fire sometime in the 1<sup>st</sup> half of the 3<sup>rd</sup> Ct AD. Among the roof tiles, about 70 fragments bear the stamps VEMI, VEM, LEXICL and CAI. A hoard found inside the building contained 57 Rom denarii, the youngest coin being struck under Alexander Severus (Savelja 1994; 1997). In 1996-1997, excavations conducted 170m NE of this area revealed remains of a sanctuary of Iuppiter Dolichenus related to the Rom garrison stationed here in the 2<sup>nd</sup> half of the 2<sup>nd</sup> and the 1<sup>st</sup> half of the 3<sup>rd</sup> Cts AD (Sarnowski and Savelja 1998; 2000; Savelja and Sarnovskij 1999; Kryžyc'kyj and Zubar' 2000). The Latin inscriptions found in the sanctuary in 1996 have been published by Zubar', Savelja and Sarnovskij (1997; also in German: Sarnowski, Zubar' and Savelja 1998), with illustrations of other finds too. Synchronous components of the Rom infrastructure are now found on the W coast of the Balaklava Bay (Ivanov 2002). The activities prior to the Genoese colonization of the area are also documented at the site of the Med fortress of Chembalo placed on top of the rocky Mt Kastron at the entrance to the Balaklava Bay, where coin finds of the Rom and Byz periods were made (Alekseenko 2007).

# Taurians

The Taurians of the anc. literary sources, traditionally associated with the Kizil-Koba Culture (KKC), occupied, according to Herodotus (4.99), the mountainous part of Crimea as well as the foothills all the way up to the city of Kerkinitis. The ethnocultural processes in this area at the turn of the LBA and EIA were the subject of a study by V.A. Kolotuchin, who argued for a genetic relationship between the KKC and the Sabatinovka and Belozerka Cultures of the LBA (Kolotuchin 1996). The

KKC was also a topic of 2 PhD dissertations defended in St Petersburg and Kiev (Senatorov 2002; Kravčenko 2008). S.N. Senatorov has offered a treatment of KKC pottery from excavations in Chersonesos (2000; 2003). The chronology of KKC has been reassessed by Vlasov (1997b).

Excavation continued at the settlement of Shpil', 1km SE of the village of Družnoe, Simferopol district. Here, no traces of continuous cultural layers or above-ground structures have been recorded, but 99 household pits, spread over an area of ca. 5,000m<sup>2</sup> and filled with the local handmade and imported pottery of the L5<sup>th</sup>-4<sup>th</sup> Ct BC, testify to the Taurian presence (Chrapunov and Vlasov 1995; 1996–1997). A similar situation was observed at the village of Tenistoe, Bachčisaraj district, where 20 household pits containing pottery of Kizil-Koba type and fragments of a bg Attic skyphos of the L5<sup>th</sup> Ct BC were disclosed (Zajcev 2007a). In the Sarandinaki ravine, in the territory of plot 338 of the Chersonesean home chora, such pits were related to the remains of a hut-like structure. One of the pits contained a double burial of a male and a female accompanied by 2 dogs. Given the material of the L5<sup>th</sup>-E4<sup>th</sup> Ct BC, the site must antedate the Gr land division. Contemporary sites with KKC material were also recorded in other parts of the Herakleian Peninsula near the Maksimova Dača, the English cemetery and the Laboratornaja ravine (Savelja 1994; 1997). Remains of a rectangular Taurian pit shelter, datable roughly to the same period, were recorded W of the Balaklava Bay at the site of Karan' 2 (Senatorov 1998).

An updated catalogue of the KKC sites on the Herakleian Peninsula can now be found in Kravčenko (2005). Recently she resumed excavations at the site of Uč-Baš in the vicinity of Inkerman. A full publication of the material from A.M. Leskov's excavations of 1956-1957 at ridge A of the Taurian necropolis of Urkusta I is now available (Leskov and Kravčenko 2007). The lower date proposed for the necropolis, the L3<sup>rd</sup> Ct BC, challenges the existing notion about the termination date of the KKC. The anthropological data from various Taurian cemeteries seem to indicate the prevalence of the mesobrachicranial, broad-faced type (Nazarova 1997). The emergence of ethnonymic hybrids such as Tauroskythai and Skythotauroi in the inscriptions and narrative of the Rom period is likely to reflect actual ethnic processes in the foothill and steppe zone of Crimea, which, having started fairly early, must have increased in the Mithridatic and post-Mithridatic periods (Stolba 1993a).

SCYTHIAN AND SARMATIAN SITES OF THE CRIMEAN STEPPES AND FOOTHILLS

The fieldwork conducted by the North Crimean Expedition of the Crimean Branch of the Institute of Archaeology in the N, NW and central part of Crimea has expanded substantially our knowledge of Scythian burials of the EIA. Published reports of the campaigns of 1981–1991 and 1991–1993 are now available (Koltuchov, Kislyj and Toščev 1994; Koltuchov, Kolotuchin and Kislyj 1994; Kolotuchin 2000). Along with the history of research in the field of Scythian antiquities (Koltuchov and Juročkin 2004), the fortifications of Crimean Scythia and the burial rites of its population in the LHel and Rom periods have been the subject of special studies (Koltuchov 1999; Puzdrovskij 2007).

# Scythian Neapolis (Simferopol)

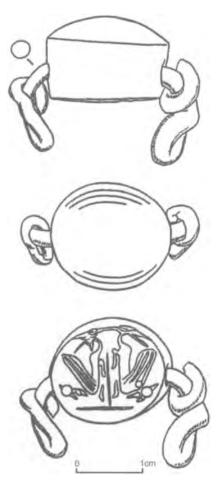
Scythian Neapolis, the presumed capital, or, rather, one of the capitals of the Scythian Kingdom, has been excavated systematically throughout most of the period in question. The main attention was given to finalizing the excavations of the so-

called Southern Palace, the supposed residence of King Skiluros (Zajcev 1994; 1997a). Ju.P. Zajcev has established 2 main stages in the history of this building with multiple subperiods, which correspond to stratigraphical horizons E and D of the site and cover a period from around 140 to ca. 112/108 BC (1995; 2005; 2007b). Excavations in 1999 of the SW part of the Southern Palace produced multiple fragments of a funerary epigram for Argotas, presumably a Scythian chieftain of the 2<sup>nd</sup> Ct BC (Vinogradov and Zajcev 2003), which must have decorated his heroon built in the immediate vicinity of the central gate. Anthropological data from the city's necropolis were treated by Nazarova (2005). A synthesis of the new research conducted at this site since the 1980s can be found in a monograph by Zajcev, in Russian and English (2003; 2004).

SITES OF THE LATE SCYTHIAN AND SARMATIAN CULTURES WEST AND SOUTHWEST OF SIMFEROPOL

The settlement of Bulganak, which some scholars identify with the Scythian royal fortress of the Chabaioi of the Diophantos decree (IOSPE 12, 352), has not been excavated since 1991. Several articles which have appeared in the period under report offer a discussion of its fortifications (Chrapunov and Mul'd 1993) and pottery assemblage (amphora stamps: Chrapunov and Fedoseev 1997; handmade pottery: Vlasov 1997a). In the same area, near the village of Kol'čugino, the University of Simferopol undertook excavations of 14 graves, some containing multiple burials, in the necropolis associated with the nearby Scythian settlement of the 1st Ct BC-1st Ct AD (Chrapunov, Masjakin and Mul'd 1997). The results of earlier excavations at the settlement and necropolis of Ust'-Alminskoe near the village of Pesčanoe, Bachčisaraj district, are now brought together by Vysotskaja (1994). In the reporting period, the expedition of the Simferopol Institute of Archaeology, headed by A. Puzdrovskij, continued excavation at the necropolis of this site, where 626 new graves in an area of ca. 5,000m<sup>2</sup> have been excavated. The earliest complexes, datable to the 1st Ct BC-1st Ct AD, often contain multiple burials, sometimes placed head to toe, in earthen vaults or simple trenches. Many graves of the 2<sup>nd</sup> half of the 1<sup>st</sup>-E2<sup>nd</sup> Ct AD contained richly furnished burials of the Sarmatian élite (Loboda, Puzdrovskij and Zajcev 2002; Puzdrovskij and Zajcev 2004). In particular to be mentioned are remains of Chinese lacquer boxes. Over 100 burials on the territory of ca. 1ha had been robbed near the village of Levadki, ca. 5km S of Simferopol. The excavations undertaken there in 1997 by the University of Simferopol and the Crimean Branch of the Institute of Orientalistics unearthed 12 Scythian graves which date from the 1st Ct BC-3rd Ct AD, and were left by the inhabitants of the nearby settlement of Zmeinoe (Chrapunov, Stojanova and Mul'd 2001). In 2003, rescue excavations took place at the necropolis associated with the L Scythian settlement of Balta-Čokrak, near the village of Skalistoe, Bachčisaraj district, where around 500 graves were destroyed by robbers in 2001-2002. Thirty-nine burials unearthed during these excavations, of which the majority is represented by niche graves, date to the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD. Anthropological data were retrieved from 15 burials (Zajcev et al. 2005b). Extensive robbing instigated rescue excavations at other locations too. Burials of the Rom period are reported from the necropoleis near the villages of Suvorovo (Belyj and Nenevolja 1994; Zajcev 1997b; Zajcev and Mordvinceva 2003), Krasnaja Zarja (Belyj and Nenevolja 1997; Nenevolja 2007; Vološinov, Masjakin and Nenevolja 2007), Cholmovka

(Trufanov, Puzdrovskij and Medvedev 2004) and Višnevoe (Turovskij 2002), and on the Kazan-Taš hill (Zajcev 1997b). Vdovičenko and Koltuchov (1994) have published 6 Sarmatian burials of the 3<sup>rd</sup> Ct AD, excavated by the Bachčisaraj Museum in 1986 near the village of Tankovoe. In 2004, the State Historical Museum, Moscow, resumed investigations near the village of Ljubimovka at the necropolis of Belbek IV, where during 1991-1996 over 300 graves had been destroyed by robbers (Žuravlev and Firsov 2004). publication of 331 burials of the 1<sup>st</sup>-3<sup>rd</sup> Ct AD, excavated there by the Moscow team in the period 1969-1991, has now been prepared by Guščina and Žuravlev. The Crimean Branch of the Institute of Archaeology, in collaboration with the Bachčisaraj Museum and the Freie Universität, Berlin, has undertaken rescue excavations of the Alma-Kermen settlement and the necropolis at the village of Zavetnoe, datable to the 1<sup>st</sup>-3<sup>rd</sup> Ct AD (Zajcev *et al.* 2005a; 2007). In grave 310 an Achaemenid intaglio of the 5<sup>th</sup>/4<sup>th</sup> Ct BC was found (**Fig. 18**). A treatment of red-glazed pottery from this necropolis is offered by E. Kühnelt (2007). At the settlement, a destruction layer of the 2<sup>nd</sup> Ct AD produced multiple finds of roof tile bearing the stamps LEXICL (Zajcev et al. 2007). The burial structures and grave goods from the previously excavated necropolis, Sovchoz 10, have been addressed in a number of articles by Vysotskaja (1998; 2000; 2001; Vysotskaja and Žestkova 1999).



18. Zavetnoe: Achaemenid intaglio from the late Scythian necropolis

SITES OF THE LATE SCYTHIAN AND SARMATIAN CULTURES EAST AND SOUTHEAST OF SIMFEROPOL

A complex ethno-cultural composition, including L Scythian, Sarmatian and Alanian burials of the 1<sup>st</sup>–4<sup>th</sup> Ct AD, was observed at the necropolis of Opuški, 15km E of Simferopol, and excavated by an expedition of the University of Simferopol in 2003–2004. In 1990–1994, the same team, headed by I.N. Chrapunov, explored the 3<sup>rd</sup>–4<sup>th</sup> Ct AD necropolis of Družnoe (Chrapunov 2002), SE of Simferopol in the immediate vicinity of the settlement of Zolotoe Jarmo, which Chrapunov excavated in 1990–1991 (Chrapunov *et al.* 1994).

Since 1996, the University of Simferopol has been involved in the excavations of the Rom necropolis of Nejzac (Neusatz) near the mod. village of Balanovo. Two consistent chronological horizons were established, which are associated with the Sarmatian and Alanian presence. Eight LBA burials found there among the graves of the Rom period were attributed to the Belozerka Culture (Chrapunov *et al.* 2004; Chrapunov and Muld 2005).

Surprisingly, a contemporary settlement of the 2<sup>nd</sup>-4<sup>th</sup> Ct AD, excavated in the Barabanovskaja ravine, just 200m away from the Nejzac necropolis, features a quite different material culture which was attributed to the L Scythian period (Chrapunov, Vlasov and Smokotina 2007).

In 1996, the Crimean Branch of the Institute of Archaeology started investigations of the Scythian aristocratic necropolis on the ridges of the Ak-Kaja and Beš-Oba hills, in the E part of the Crimean foothills, where 65 barrows have been located (Koltuchov and Myc 2001). Many of them date to the 4<sup>th</sup> Ct BC, containing occasionally intrusive burials of the Rom period. The context of the main burial in tumulus Beš-Oba IV/2 has been treated by Koltuchov (2007).

## KIMMERIAN BOSPOROS (Fig. 19)

The study of the anc. cities in Bosporos and the Bosporan Kingdom was particularly affected by the disintegration of the Soviet Union in 1991, as the 2 sides of the straits suddenly belonged to 2 different newly formed countries. Many of the Russian archaeological expeditions, which traditionally had been working on sites of the Gr and Rom period in S Ukraine, particularly in the Crimea, changed the regions of their investigations, focusing their efforts on S Russia instead. Despite the considerable difficulties of the 1990s it has proved possible for many scientific institutions to preserve their main staff and to obtain the necessary funds for conducting excavations.

## **Publications**

The periodical Drevnosti Bospora (Bosporan Antiquities) has appeared annually since 1998, and Bosporskie Issledovanija (Bosporos Studies), published since 2001, now numbers 20 volumes, many of which are monographs, while other volumes include longer articles from the Bosporan Readings. Bosporskij sbornik has appeared irregularly since 1992. Numerous monographs concerning Bosporan history and archaeology have appeared. To mention a few: S.Ju. Saprykin (2002a) addresses the E post-Mithridatic period; the Bosporan army is studied by M. Mielczarek (1999), V.A. Gorončarovskij (2003) and Ju.A. Vinogradov (2004); and N.I. Vinokurov (1999; 2007) offers an exhaustive treatment of wine making (and consumption). Further chapters of Rostovcev's unfinished study on Scythia and the Bosporos have been made available in German translation (Heinen 1993) and his book on the wall paintings of S Russia has been reprinted (Rostovtseff 1913-1914). The coinage of the cities in Bosporos and the Bosporan Kingdom are treated in several studies (Frolova 1997; Anochin



1999; Frolova and Ireland 2002; Frolova 2004; Abramzon et al. 2006). An illustrated new edition of Corpus Inscriptionum Regni Bosporani appeared in 2004 (Gavrilov et al. 2004). Although questions about the content of the volume have been raised, the accompanying CDs with illustrations provide a useful tool. Graffiti and dipinti have been collected by S.Ju. Saprykin and A.A. Maslennikov (2007).

# KERCH PENINSULA

# Athenaion (Kutlak)

At Kutlak, 8km SW of Sudak, excavations continued into the early 1990s, headed by S.B. Lancov (1999), and uncovered nearly the entire site of a single period fortress built under Asander (47–17 BC) and continuing no later than Aspurgos (8–37/38 AD). The site may be the Skythotauron Limen or Athenaion mentioned by later sources. A pentagonal structure covering more than 1,500m² has one large and 3 smaller towers, and rooms inside along 3 walls. In the court, a row of 6 rooms extends from the S wall. The pottery and the ethnic implications of the composition of the assemblage, consisting mostly of handmade ware, are considered in Lantsov and Yurochkin 2007.

# Theodosia (Feodosia)

The chora of Theodosia has been explored extensively by A.V. Gavrilov, and the number of known Gr and Rom sites now totals around 80. His monograph (Gavrilov 2004) includes a catalogue of sites and of coin finds, and also contains information on recent excavations carried out at rural sites, notably Novopokrovka 1 (5<sup>th</sup>-3<sup>rd</sup> Ct BC) and Uzun Syrt (6<sup>th</sup>-3<sup>rd</sup> Ct BC). Kuru Baš, a settlement founded in the 3<sup>rd</sup> Ct BC, discovered in 2003 after reports of coin finds in the area, apparently received a Mithridatic garrison in a nearby fort controlling the E approaches to the city after the area was incorporated into the Pontic Kingdom. At Tepe-Oba, 4km W of Theodosia, a single farmstead from the M6<sup>th</sup> Ct BC grew into a larger settlement in the 5<sup>th</sup> and 4<sup>th</sup> Cts. The material resembles Scythian and Kizil-Koba cultures (Bejsans *et al.* 1997).

A total of 1,262 amphora stamps has been recorded in the chora (Gavrilov and Fedoseev 2002), with the overwhelming majority being Herakleian (700) and Sinopean (446).

# Kimmerikon

After having been inaccessible for 50 years due to the presence of a military installation, exploration of the site of Kimmerikon at Mt Opuk was resumed in 1991. Results of recent fieldwork are offered by the late V.K. Golenko (2006; for a summary in English, see Golenko 2007). The exact location of the early town has not been established. Traditionally, it has been located on the SW slopes or on hill A to the SE, but walls and material from the L6<sup>th</sup> Ct BC to the Med period have been detected on the N slopes as well. In the citadel on Mt Opuk a section of the W curtain wall and proteichisma and 3 adjoining rooms, one of them with a kiln, were excavated. This enabled the dating of the fortification to not earlier than the E4<sup>th</sup> Ct AD, although the present structure probably overlies an earlier construction. The surprising find of a Runic inscription below the walls of the citadel has caused some debate (Golenko et al. 1999).

Investigations of the chora have revealed more than 30 rural settlements. Excavation and surface finds show that the sites closest to Kimmerikon began in the L5<sup>th</sup> Ct BC, while the whole territory flourished in the 4<sup>th</sup> and 3<sup>rd</sup> Cts until, by the 2<sup>nd</sup> Ct BC, only the larger sites remained.

#### Kytai

Excavations at Kytai, at the entrance to the straits, were continued by E.A. Molev until 1996 and again from 2005. In a ritual complex consisting of 4 houses of the 2<sup>nd</sup>-5<sup>th</sup> Ct AD, animal sacrifices, predominantly of dogs, took place (Molev and Moleva 2007). It has, furthermore, been possible to establish that the city was abandoned in the L6<sup>th</sup> Ct AD. Excavation at the necropolis has revealed further graves of the 3<sup>rd</sup> Ct BC and of L antiquity. Molev's monograph on Kytai is now in print.

#### Akra

In 1994, fieldwork resumed at the site of Akra, discovered on the seashore and below sea level near the village of Naberežnoe in the E 1980s (Kulikov 2007). Parts of the Hel city wall with towers have been traced both above and below sea level along with a number of Rom houses consisting of a courtyard and one or 2 rooms, dated to the 2<sup>nd</sup> and 3<sup>rd</sup> Cts AD, have been uncovered. The size of the double-faced foundation walls may suggest 2-storey buildings, which appear not to have had tiled roofs. One house has a primitive wine press. The finds at the site yield few clues as to the date of the foundation, but evidence from the chora indicates a date around 530–520 BC. Occupation on the site seems to have been continuous until the 5<sup>th</sup> Ct AD.

In the chora of Akra 10 unfortified rural sites have been identified. The largest of these was Zavetnoe 5 located 1.5km NW of Akra, which was excavated from 1999 (Šepko 2002). The only traces of the early occupation of the site in the  $L6^{th}-5^{th}$  Ct BC are more than 50 household pits. Two dug-outs with an associated threshing floor dated to the  $L4^{th}-E3^{rd}$  Ct BC belong to the latest period of occupation at the site.

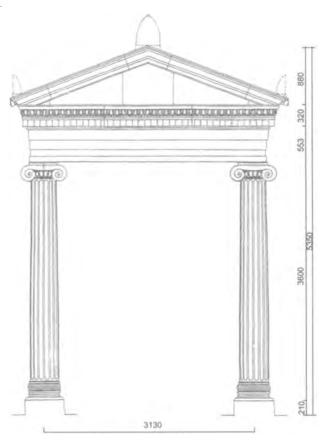
# Nymphaion

On the S slope of the city of Nymphaion, excavation of the temenos (sector M) has continued (Sokolova 2000). Of particular interest is the find of an Ionic propylon at the entrance to the temenos (Sokolova and Pavličenko 2002) (Fig. 20a, 20b). The 50-odd architectural fragments found, made of local limestone, were stuccoed with marble dust to resemble marble and painted red, blue and yellow. The structure carried a dedicatory inscription by the agonothetes Theopropides to Leukon I (393–353 or 387–347 BC), who is called archon of Bosporos, Theodosia, all of Sindika and of the Toretai, Dandarioi and Psessoi.

From 1994–1998, a Polish-Russian team excavated sector N in the SW part of town (Čistov and Domżalski 2002). A pit with LAr material indicates that the area was used from relatively early on. A large part of the excavated material belongs to the L5<sup>th</sup>–M4<sup>th</sup> Ct BC, with many Chian, Thasian and Herakleian amphora fragments. No Hel material was found, but the area came into use again during the Rom period, from when a number of storage pits has produced ample ceramic material. The final, 3<sup>rd</sup> Ct AD, phase revealed signs of irregular town planning.

In 1995 a refuse dump was excavated outside the city wall to the SE with a wide selection of Rom fineware, notably Pontic Sigillata, some of which was subjected to X-ray fluorescence analysis (Domżalski & Zin'ko 2000).

Excavation of the city's necropolis has continued uninterrupted (Solov'ev 2003), and the material from the large excavations in the 1970s has been published by Grač (1999). A number of articles concern the spectacular find in 1982 of the graffito of the ship *Isis*, notably those by Ju.G. Vinogradov (1998) and O. Höckmann (1998). In 1999 a conference on



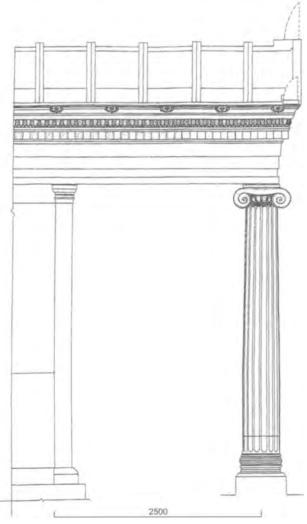
20a. Nymphaion: Ionic propylon at the entrance to the temenos

Nymphaion was held in St Petersburg in commemoration of the 60<sup>th</sup> anniversary of the expedition (Boriskovskaja *et al.* 1999). A full bibliography of Nymphaion has appeared (Kunina *et al.* 1995) with later *addenda* and *corrigenda* (*ArcheologiaWarsz* 46, 89–91; 50, 83–86).

Much work has been done in the chora of Nymphaion, particularly by V.N. Zin'ko (2003) and a Ukrainian-Russian-Polish collaborative project, and an archaeological map of the territory of Nymphaion has been produced (Scholl and Zinko 1999). Survey, geophysical prospection and trial excavations have identified 16 necropoleis and 42 settlements, some of which have been more fully excavated.

At Geroevka 2 on the seashore 4km S of Nymphaion (excavated in 1992–1994) 2 dug-outs yielding material of the L5<sup>th</sup>–L4<sup>th</sup> Ct BC were found. A small pit in the S part of the excavation revealed the earliest phase of the settlement in the L6<sup>th</sup>–E5<sup>th</sup> Ct BC. The dug-outs, the high percentage of handmade pottery present and the burial rites at the site suggest that the site may have been settled at least in part by the indigenous population. After long abandonment, a farmhouse built in the 6<sup>th</sup> Ct AD was occupied until its sudden destruction in the 8<sup>th</sup> Ct AD (Butjagin and Solovyov 2001). Generally the most extensive use of the chora occurred in the L4<sup>th</sup>–E3<sup>rd</sup> Ct BC.

An aqueduct, dated to the 4<sup>th</sup> Ct BC and consisting of ceramic pipes surrounded by stone masonry with stone observation shafts, was discovered 2km W of the town (Scholl and Zin'ko 1999, 107–12) (**Fig. 21**).



20b. Nymphaion: Ionic propylon at the entrance to the temenos



21. Nymphaion: 4th Ct BC aqueduct 2km W of Nymphaion

# Iluraton

Excavations at Iluraton, 17km SW of Kerch, continued until 2000 under V.A. Gorončarovskij (2007). To the N, a long underground tunnel, not unlike the ones encountered in Pontos, lead to a water supply outside the walls, and along the NE wall other water installations have been found. In the upper necropolis more than 200 predominantly inhumation graves, both pit and cist graves and chamber tombs, have now been excavated. A clear change is seen from the earlier 1<sup>st</sup> Ct AD pit graves closer to the city to the 2<sup>nd</sup>-3<sup>rd</sup> Ct AD cist graves and chamber tombs further away. Weapons, 'Sarmatian' mirrors and, particularly, the deformation of the skulls suggest that a new ethnic group became predominant around the turn of the 1<sup>st</sup> and 2<sup>nd</sup> Cts AD (Gorontcharovskiy 2007, 909–10). Many finds from the Hel period confirm the suggestion that Rom Iluraton was built on an already existing site (Chršanovskij 2003). A bone object found in tomb 211, with engravings, has been interpreted as a calendar (Moleva, Tul'pe and Chršanovskij 2004).

# Tyritake

In 2002, excavations at Tyritake, 11km SW of Kerch, were resumed by V.N. Zin'ko (Zin'ko, Ponomarev and Zin'ko 2004), opening a large section in the central part of the city (sector XXVI). This has revealed a Rom residential quarter, which also included storage facilities and a further fish salting installation consisting of 3 vats which functioned in the 3<sup>rd</sup>-E5<sup>th</sup> Ct AD. The area was partially built over in the Med period. Other sectors in the city have been re-excavated and preserved. NE of the city a L antique necropolis was excavated (Ermolin 2006).

#### Pantikapaion (Kerch)

The results of the last 20 years of excavation on the acropolis at Pantikapaion are summarized by V.P. Tolstikov (2002; 2003). On the W plateau of the first saddle, excavations of the basileia of the Spartokids has been completed (Fig. 22). The complex, built around the M4<sup>th</sup> Ct BC, covered an area of 1,350m<sup>2</sup>. The 2-storey building was centred around a rectangular peristyle courtyard. Under the basileia, remains of 4 houses of the L5<sup>th</sup>-E4th Ct BC were uncovered, one of which had a coloured pebble mosaic in the andron. In a well in the courtyard, a large marble head of a goddess was deposited. The excavators have identified her as Athena and dated her to the M4th Ct BC (Tolstikov 2002, fig. 19). A head covering, helmet or polos, was added separately in a different material. The style and technique suggest that she is rather a 2<sup>nd</sup> Ct BC acrolith. Immediately to the N of the basileia, the foundation (10.5m x 7.4m) and architectural fragments of a Doric temple in antis were found (Svitaševa 1999). The temple was built in the M4<sup>th</sup> Ct BC, and seemingly survived until destroyed by an earthquake, probably the one in 63 BC. Among the new epigraphic finds is a proxeny decree of Leukon I (Vinogradov, Tolstitov and Šelov-Kovediaev 2002).

On a plateau further to the W, another Doric temple *in antis* (8.4m x 3.8m) was found (Zin'ko 2001). Stamped roof tiles indicate an E3<sup>rd</sup> Ct BC date for the construction. The interior was covered with painted stucco on which graffiti had been scratched. The temple was apparently destroyed in a fire shortly before the M1<sup>st</sup> Ct BC. The rich finds (3<sup>rd</sup>–1<sup>st</sup> Ct BC) include amphorae, table wares, including mouldmade bowls and a lagynos, terracottas (mostly females), 48 coins, notably a gold stater of Mithridates VI, and a small marble head, possibly a portrait of Mithridates VI (Zin'ko 2004, 185).

Recently 2 workshops, a terracotta workshop of the 2<sup>nd</sup> Ct BC and a pottery workshop producing terra sigillata of the 1<sup>st</sup>–3<sup>rd</sup> Ct AD, have been excavated (Ermolin, Gecko and Kulikov 2007). On the N slopes of Mt Mithridates, a system of L antique catacombs has been investigated (Zin'ko and Bejlin 2005).

The 1<sup>st</sup> Ct AD Tomb of Demeter, with frescos showing the rape of Persephone and a medallion with the head of Demeter, found in 1895, was restored after serious danger of destruction (Zinko *et al.* forthcoming). In 1995 a hoard of more than 450 Bosporan copper coins was found by chance (Abramzon *et al.* 2006, 117–31). Two of the coins were struck in the final year of Bosporan coinage, 341 AD. Interestingly a coin of Kotys I (49–54 AD) was still in circulation around the M4<sup>th</sup> Ct AD. In light of new evidence, M.Ju. Trejster considers a Rom military presence at Pantikapaion evident (Trejster 1993).

#### Myrmekion

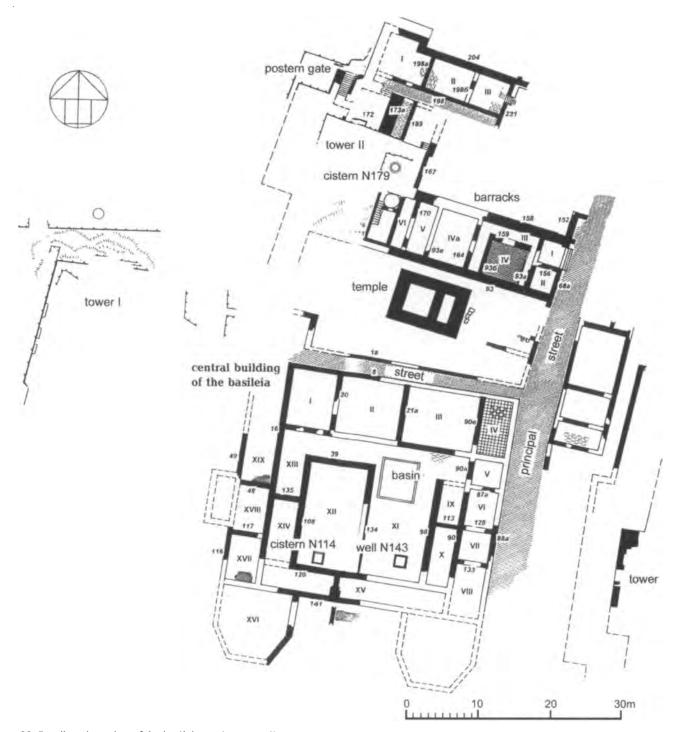
Excavations in the small town of Myrmekion, NE of Kerch, were continued by Ju.A. Vinogradov until 1994. A small LAr fort was unearthed on the W part of the site, along with the more substantial ECl city wall (Vinogradov and Tochtas'ev 1994). Fieldwork was resumed in 1999 in the SW part of the city (sectors S and T) and earlier excavations in the central Sanctuary of Demeter (sector I) were continued. In sector T, 2 fragments of marble inscriptions were found, one mentioning Demeter Thesmophore, the other an early manumission decree mentioning Aspourgos. A set of 74 loomweights had apparently been stored in a wooden box (Butjagin et al. 2004a). In sector I, excavations have clarified the chronology of the sanctuary. The house-like building with an altar erected in the 1st half of the 5th Ct was covered by an ash hill around 400 BC. Around 370 BC another house-like structure was built, which again was covered by an ash hill around 300-250 BC (Butjagin 2004). In 2003, a hoard of 99 Kyzikean electrum staters (53 different types) concealed in a bronze jug (Fig. 23) was found in the Sanctuary of Demeter (Butjagin et al. 2004b). The context indicates that the jug was placed in a pit in the corner of the sanctuary no earlier than 375-350 BC, possibly in connection with the ongoing struggle against Herakleia. Another hoard of 722 Pantikapaian copper coins of the 3<sup>rd</sup> Ct BC was found in sector S in 2002 (Abramzon et al. 2006, 31-37). An exhibition in 2006 at the State Hermitage Museum was devoted to the finds from Myrmekion (catalogue: Butjagin et al. 2006).

# Porthmion

Excavations at Porthmion, directed by M. Vachtina, were resumed in 2002 after an interval of more than 10 years. Investigations have been concentrated on the early phases of the town's existence. Houses with stone foundations and mudbrick walls dated to the 2<sup>nd</sup> half of the 6<sup>th</sup> Ct BC have been uncovered. So far no dug-outs have been found in Porthmion. From around the turn of the 6<sup>th</sup> and 5<sup>th</sup> Cts BC, there are clear signs of widespread destruction. It has lately been possible to locate the town's necropolis 300m to the W. Seven graves belonging to the 3<sup>rd</sup>-2<sup>nd</sup> Ct BC have been excavated. Two recently robbed crypts, both consisting of a burial chamber and dromos, contained multiple burials (Vachtina 2005).

# NORTHERN KERCH PENINSULA

Many rural settlements of the 4<sup>th</sup> Ct BC-3<sup>rd</sup> Ct AD have been investigated along the Azov Sea coast of the Kerch Peninsula by the Northern Crimean Archaeological Expedition since 1993, including General'skoe-Zapadnoe, Artezian (Vinokurov 1998), Pustynnyj Bereg, Zelenyj Mys and Il'ičevka, but fuller publication is still awaited for most (summary of results in Maslennikov 1998). A site hierarchy seems to have existed, with larger fortified sites, such as General'skoe-Zapadnoe, functioning as central collecting points for produce. At



22. Pantikapaion: plan of the basileia on the acropolis

Belinskoe in 2003, excavations at the necropolis discovered several crypts with material from the 2<sup>nd</sup> Ct BC–4<sup>th</sup> Ct AD (Zubarev, Lancov and Minaev 2007). Two new fish-salting installations at Salačik (excavated in 1987) and Zolotoe (in 1990) have been published (Vinokurov 1994), showing that the manufacture of fish products was not confined to the already known installations at Tyritake and Myrmekion. The 2 new complexes, dated to the 2<sup>nd</sup>–4<sup>th</sup> Ct AD, had somewhat larger tanks than the previously known examples.

During the last 2 decades, several rural sanctuaries have been identified. A.A. Maslennikov (2007) offers full publication of several of these sites for the first time. At the settlement of Poljanka (see also Maslennikov 2006), the uninhabited room 11 has been interpreted as a heroon. Most remarkable among the finds dated to the M1<sup>st</sup> Ct BC is a set of 33 terracottas, including Men, Kybele, Mithras, a Mithras-Attis horseman, a Thracian rider, a Dionysos mask, Aphrodite, an Apis bull and Herakles, indicating a strong foreign and, partic-



23. Myrmekion: bronze jug concealing 99 Kyzikean electrum staters

ularly, Pontic influence in the post-Mithridatic period. Also of note are 2 amphora-like incense burners. In the neighbouring rooms 4 and 11, 2 coin hoards were found in 1984 and 1985, and have now been published by Frolova (1998). The first consisted of 70 copper coins, mostly Bosporan but also several from Pontic cities. Coins of Asandros give a *tpq* for the hoard in the 3<sup>rd</sup> quarter of the 1<sup>st</sup> Ct BC, which also dates the destruction of the site. The 2<sup>nd</sup> hoard consisted of 1,140 copper coins predominantly from Pantikapaion.

On the flat summit above General'skoe-Vostočnoe, 2 ritual complexes were excavated. The W one consisted of a small square room (2.5m by 3m) and a larger rectangular room. In the smaller room several terracottas were found together with handmade incense burners along with lamps on tall stems and a small terracotta altar. The complex is dated to the 2<sup>nd</sup>-E3<sup>rd</sup> Ct AD, although finds of mouldmade bowls and a bronze arrowhead may indicate earlier use as well. The larger E complex consisted of a row of 5 rectangular shrines with one to 3 rooms, which all have the door opening to the E (Fig. 24). Each has a square or round altar in the centre of the largest room and what would appear to have been benches along the walls. No architectural details or roof tiles have been found. A large collection of mouldmade bowls and glass vessels was found, as well as numerous terracottas and incense burners. Most interesting is a votive relief, probably depicting deities of the Eleusinian circle. The sanctuary was constructed around the  $M3^{rd}$  Ct BC. After its destruction, possibly by the earthquake of 63 BC, it was reconstructed and continued functioning until the  $3^{rd}$  Ct AD.

Three further sanctuaries at the settlement of Sirenevaja Buchta (1<sup>st</sup>-3<sup>rd</sup> Ct AD), at Uščel'e Ved'm (cult debris of the 2<sup>nd</sup> Ct BC-2<sup>nd</sup> Ct AD) and at a cave on Mt Sjujurtaš (3<sup>rd</sup>-2<sup>nd</sup> Ct BC) have been published (Maslennikov 2007). Furthermore, ash hills (*zol'niki*) in the N Kerch Peninsula and a house sanctuary at General'skoe-Zapadnoe are considered by Maslennikov (2007).

A.A. Maslennikov (2003) has discussed the numerous ramparts running across the Kerch Peninsula, both the ones known for centuries and those more recently identified. Using trial trenches and C<sup>14</sup> dating, he has been able to date several of the ramparts more precisely. The large wall running from Lake Uzunlar to Kazantip Bay to the N dates to the 3<sup>rd</sup> Ct BC, with additions made in the 1<sup>st</sup> or 2<sup>nd</sup> Ct AD. The so-called Tyritake ramparts actually consist of 3 different sets of defensive structures, only one of which is dated to the Gr period. In addition, there were smaller ramparts enclosing Ak-Burun and the territory of Nymphaion.

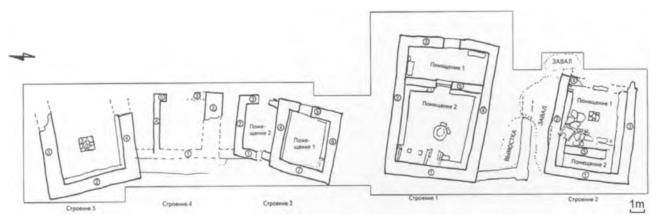
The chora of the Bosporan Kingdom as a whole and the rural settlements have been discussed by A.A. Maslennikov (1998), S.Ju. Saprykin (2004a) and V.N. Zin'ko (2007), while T.N. Smekalova and S.L. Smekalov (2006) have used aerial photographs and old maps to identify roads and anc. land-division systems. The plots of land detectable in many parts of the Kerch Peninsula are invariably square and measure 350m x 350m.

# **RUSSIA**

NORTHERN MAIOTIS

# **Taganrog**

Taganrog in the Don delta is the earliest Gr colony in the territory of Russia. It was settled in the L7<sup>th</sup> or E6<sup>th</sup> Ct BC. Investigations, which concentrated on the S shore of the river, were initiated in 2004 as a collaboration between the All-Russian Community of Surviving Monuments of History and Culture (VOOPIK) in Rostov on Don (A.O. Kozin and P.A. Larenok), the Paedagogical University at the same place (V.P. Kopylov) and the Eurasia Abteilung of the DAI (O. Dally and M. Ullrich) (Dally and Larenok 2002; Kopylov *et al.* 2005; Kopylov and Solov'ev 2005). A series of drillings and exploratory trenches reaching a *d.* of almost 7m has been carried out by the Geophysical Department of the Institut für



24. Northern Kerch Peninsula: plan of the rural sanctuary at General'skoe-Vostočnoe

Geowissenschaften der Christian Albrechts Universität Kiel (W. Rabbel, H. Stümpel and Ch. Müller) and by the Hydroacoustic Research Group of the Institut für Nachrichtentechnik und Informationselektronik (G. Wendt).

The settlement is partially submerged. EGr pottery is continuously washed from the site to the shore of the Don. To date, more than 20,000 pieces of pottery – of high quality and predominantly EGr – are known. A catalogue of pottery from the site, kept in Taganrog Museum, was published in 1994 (Kopulov and Larenok 1994).

#### Tanais

Investigations at Tanais took place during the whole period under review, from 1993 until today, the results of which have been summarized in several articles, as well as in a monograph (Arsen'eva et al. 2007). For more than 10 years, a Russian-German expedition investigated the S part of the town (Arsen'eva 1999). From 1993, the German archaeological team conducted excavations in sector XIX, where they extended the area to the N, E and S to explore the Hel and Rom agora (Arsen'eva, Fornasier and Ullrich 2002). From 2002-2005, the central square area was investigated. Two towers have been revealed in the central part of W fortification line. A Russian-Polish archaeological group, directed by T. Sholl, continued investigations of the W fortified line (Arsen'eva et al. 2006). The monograph Nekropol' Tanaisa. Raskopki 1981-1995 gg. summarized the results of the excavations conducted by the Lower Don Expedition of the Russian Academy of Sciences in the E and W necropoleis of Tanais for 15 years (Arsen'eva, Bezuglov and Toločko 2001). Excavations of the flat ground necropolis of Tanais were carried out between 2002 and 2004. They covered a wide chronological period - from the Hel to the Migration period. The last phase of the necropolis was dated to the 2<sup>nd</sup> half of the 5<sup>th</sup>-1<sup>st</sup> half of the 6<sup>th</sup> Ct AD (Arsen'eva, Bezuglov and Toločko 2005). The first volume of the Pontus Septentrionalis was devoted to the amphora dipinti (Böttger and Shelov 1998).

# Elizavetovskoe

The fortified settlement, situated in the delta of the River Don 3km NE of the mod. village of Elizavetovskoe, was one of the largest settlements of the N Pontic steppe zone in the EIA, serving as a nodal point in inter-tribal and 'international' trade. From the M4th Ct BC it could be considered as the 'capital' of the Lower Don region and perhaps even of the entire NE Azov area. Excavation of the site and its chora has been carried out since 1954 by the Southern Don Expedition of the Institute of the History of Material Culture (Russian Academy of Sciences, St Petersburg). Four main periods have been established. (1) 3<sup>rd</sup>-4<sup>th</sup> quarter of the 6<sup>th</sup>-5<sup>th</sup> Ct BC, lasting for about 100 years. During this period the site constituted the winter quarter of one of the nomadic tribes of the Lower Don region. (2) The entire 1st half of the 4th Ct BC. During this time the settlement became the largest trading centre of the NE Pontic region. (3) In the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC the site became a strongly fortified barbarian site with a separate Gr quarter. (4) The last period was brief, ca. 300-280s/270s BC. During this period an extended Gr settlement was located on the acropolis. The results of the investigations are summarized in the monograph by Marčenko, Žitnikov and Kopylov (2000).

The kurgan necropolis of Elizavetovskoe is one of the most fully investigated among the Scythian cemeteries of the N Pontic steppe. Weapons from the burials of the 5<sup>th</sup> Ct BC have been published by S.Ju. Jangulov (2008). An article by A.N. Kovalenko (2008) analyses funerary complexes of the 2<sup>nd</sup> half of the 4<sup>th</sup> Ct BC.

# Nižnegnilovskoe

A fortified settlement situated ca. 16km E of Elizavetovskoe was investigated by a Russian-Swiss expedition (Kopylov, Tomaševič-Buck, Ivanov and Kovalenko 2002). The site's necropolis was excavated in 2002 (Prochorova 2004).

#### TAMAN' PENINSULA

In 1993 the Taman' Expedition team of the IA RAS published an archaeological map of the Taman' Peninsula based on comprehensive investigations during the period 1931–1985. A detailed chronology of amphorae of the 6<sup>th</sup>–5<sup>th</sup> Ct BC was issued (Abramov and Paromov 1993; Paromov 2000) and P.A. Abramov published a compact handbook for the identification of amphora production centres based on analyses of archaeological assemblages from the Athenian Agora and N Black Sea centres (Abramov 1993).

The role of interdisciplinary research in Cl archaeology has increased considerably in recent years. Worthy of mention is the Russian-French Palaeoecological and Palaeogeographic Programme (1997–2000) with the participation of IA RAS, Moscow State University and the University of Paris 4 conducted with GIS technology. Since 2001, this programme has been running under the direction of Ju.V. Gorlov working both on the Taman' Peninsula (Gorlov 2007) and on the E Black Sea littoral (GP. Garbuzov, GV. Trebeleva and A.A. Porotov). Considerable attention has been paid to studies of the dynamics of changes in the climate and the Black Sea shoreline, as well as the identification and analysis of traces of the anc. land tenure, etc.

In 1998, in order to attract greater attention to the German-Russian investigations in N Maiotis, the Eurasia Abteilung of the DAI launched the bilingual publication series *Pontus Septentrionalis* in German and Russian. To date 3 volumes have been published.

# Patraeus

A.P. Abramov has contined excavations at the town site which may be identified with anc. Patraeus (Paromov 1993; Abramov et al. 2005). In 1993, Ja.M. Paramov published an archaeological topographic plan of the site (Paromov 1993a). V.N. Taskaev and A.G. Vasil'ev are conducting annual investigations in the bay near Patraeus. Noteworthy are the remains of an extensive dam embankment and a number of submerged wells and rooms. The results of investigations carried out in 1949, 1961 and 1966 at the rural settlement Kučugury 2, dating to the 6<sup>th</sup> Ct BC-6<sup>th</sup> Ct AD, have been published (Bonin 2005).

#### Kepoi

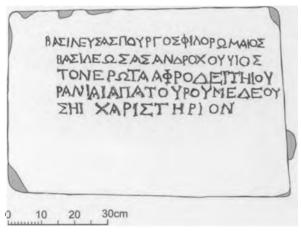
Ja.M. Paromov has published an archaeological plan of the kurgan necropolis of Kepoi (Paromov 2003). Close to Kepoi a 6m h. barrow with several burials of the Hel period was excavated in 2002 by A.P. Medvedev and N.I. Sudarev. In 1983, reliefs depicting a battle scene were found N of Kepoi (Savostina 1999; 2001).

# Phanagoria

In Phanagoria and its environs archaeological investigations, as well as remote and geophysical surveys, have continued uninterrupted, but in recent years the scale and intensity have increased considerably. Since 1993, the director of the Phanagoria Expedition has been V.D. Kuznecov. In 1993 a detailed topographical plan of Phanagoria with verified records of all the land plots investigated up to and including 1989 was published (Paromov 1993b). The results of the fieldwork of the late 1980s and the first half of the 90s have been published by

A.A. Zavojkin (1998; 2004a). The main efforts have been concentrated in the *Gorod*, i.e. the city, in the area of the upper terrace. In 1995, the Royal Holloway, University of London (C. Morgan) joined the expedition and a publication project with 3 planned volumes was set up as a supplement to the excavation activities. In 2004, the first volume devoted to the Attic fineware pottery of the site was published (Morgan 2004).

The most remarkable discoveries were made in 1999–2002 and 2004–2007 in the submerged area of the city. Here, the remains of a pier of the LCl period were revealed. Between the stone blocks used in its construction, a number of building fragments with fine architectural details, fragmentary sculptures and, most importantly, dedicatory building and grave inscriptions were found, along with pottery and coins. Special finds worthy of mention are: a marble stele of Hypsikrates; one of the wives of Mithridates VI Eupator; a dedicatory inscription for the cubicularius Julius Menestratos to the king of Bosporos, Sauromates II; a votive statue of Eros erected by King Aspourgos and dedicated to Aphrodite Ourania, the Lady of Apaturos (Fig. 25); a building inscription of 220 AD (Fig. 26) and a flagstone with a *tamga*, the family emblem of Sauromates II (Kuznecov 2005; 2006; 2007a; 2007b; 2007c).



25. Phanagoria: base of votive statue of Eros erected by King Aspurgos and dedicated to Aphrodite Ourania, Lady of Apaturos



26. Phanagoria: building inscription of AD 220 AD

Excavations have continued at the necropolis of Phanagoria during the period under consideration. Several dozens of burials of the 4<sup>th</sup> and 3<sup>rd</sup> Ct BC have been excavated at the W necropolis under the direction of T. Šavyrina. In 2005, excavations in the E necropolis were resumed under the direction of A.P. Medvedev. Here, at least the same number of graves of varying types and dated to the 5<sup>th</sup>-3<sup>rd</sup> Ct BC has been investigated. In 2003, a robbed but fairly well-preserved stone vault of the 4<sup>th</sup> Ct BC, with a stepped roof, was revealed in the S necropolis in the co-called Avenue of Kurgans. Near Phanagoria a lead plaque with a Gr inscription dated to the 3<sup>rd</sup>-2<sup>nd</sup> Ct BC was found accidentally (Saprykin and Maslennikov 2007b). It features a list of 7 male personal names, 5 Gr and 2 barbarian.

For a number of years, investigations using geospatial information system (GIS) technologies have been conducted in the vicinity of Phanagoria with the aim of finding traces of the anc. land tenure and land demarcation (Garbuzov 2007). In addition, rescue excavations of kurgans of the 4<sup>th</sup> Ct BC–2<sup>nd</sup> Ct AD have been carried out along the route of railway construction, as well as excavation at the Cl settlement of Vinogradnoe 7, headed by I.I. Marčenko.

# Hermonassa (Taman')

The site of anc. Hermonassa has been investigated by S.I. Finogenova and E.R. Ustaeva since 1988. During recent years excavations have been conducted in 4 main areas: the Nagornyj (mountainous), SE, N and NE areas. Strata dating from the present back to the 2<sup>nd</sup> quarter of the 6<sup>th</sup> Ct BC have been uncovered, and the limits of the city itself have been defined. Remains of a number of dwellings and possibly public and household buildings of various periods, as well as several streets, have been unearthed. In addition, a small extramural habitation block of the  $4^{th}$ – $3^{rd}$  Ct BC has been excavated. Due to the very thick cultural layers of up to 13m, it has so far only been possible to dig down to the bedrock in 3 of the areas. An inscribed grave stele was found in 2003 (Agafonov 2006). A cemetery of the EMed period was investigated on a limited scale by V.N. Čcheidze. Ja.M. Paromov (2002) has investigated the dimensions and composition of the kurgan burial ground around the town and published a topographical map.

# Gorgippia (Anapa)

The results of the studies of Gorgippia were brought together by E.M. Alekseeva (1997; 2002). During the last decade only small-scale excavations have been conducted, mostly as sporadic rescue investigations carried out by local archaeologists. Only in 2006 has a fairly large-scale excavation of 2,000 m² taken place, which revealed part of the necropolis in the form of 7 burials of the 5th-E4th Ct BC in the centre of the town (A.A. Kolesnikov). The necropolis was covered by urban strata of the 2nd quarter of the 4th-1st third of the 3rd Ct BC, and later by strata dating to the 1st-3rd Ct AD, with remains of several dwellings, household buildings, pits and pavements. A burnt stratum dated around 240 AD has been recorded, as well as a rich assemblage of pottery. The new inscriptions found here have been published (Smirnova 2002). The status of Gorgippia within the Bosporos Kingdom has been studied by A.A. Zavojkin (2002).

# Other Taman' sites

In 1996–1997 small-scale excavations were continued at the settlement site near Il'ič, known for its finds from the Cl period (A.A. Zavojkin). Since 1995, rescue excavations of the Tuzla necropolis and underwater surveys near Cape Tuzla and Cape Panagija have been conducted almost without interruption

under the direction of A.V. Kondrašev (Kondrašev 2005; Tsetskhladze and Kondrashev 2001). Slightly W of Patraeus, at **Beregovoe IV**, excavations of a settlement and a cult complex have been carried out by N.I. Sudarev and A.A. Zavojkin respectively (Zavojkin and Sudarev 2005). It has been established that the settlement area in its earliest phase covered at least 45ha. Remains of mud-brick structures, household pits and a necropolis of the L6<sup>th</sup>–4<sup>th</sup> Ct BC have been unearthed. The cult complex, which has also yielded rich and remarkable finds such as terracottas, lamps and votive objects, probably served for the worship of the Eleusinian goddesses (Zavojkin 2004b). Small rescue excavations were conducted by Sudarev's team at the neighbouring site of **Kamennaja Batarejka**.

In 1998 the Azov team of the Taman' Expedition (A.A. Zavojkin and N.I. Sudarev) carried out limited rescue excavations in the area of a cluster of settlements dated to different periods among which were the remains of a settlement of the L6<sup>th</sup>-1<sup>st</sup> half of the 4<sup>th</sup> Ct BC, **Priazovskoe 4**, situated near Cape Kamennyj of the Taman' Peninsula on the high shore of the Sea of Azov. In cooperation with the DAI (U. Schlotzhauer), in 2006 the State Historical Museum (D.V. Žuravlev) initiated excavations of a settlement at **Golubickoe 2** and interdisciplinary surveys were conducted along the coast of the Achtanizovskij Liman, including the Boris-and-Gleb mud volcano.

At Golubickoe magnetic surveys revealed the now partly excavated defensive ditch and rampart encircling the site to the E which were presumably constructed in the M5<sup>th</sup> Ct BC. The settlement itself was founded in the 2<sup>nd</sup> half of the 6<sup>th</sup> Ct BC, but was destroyed by a strong fire around the M3<sup>rd</sup> Ct BC. Finds from the fill of the ditch were fairly numerous and diverse, including bone objects, arrowheads, coins and fragmentary pottery with graffiti. After the fire, the settlement was reoccupied and continued until the turn of the 2<sup>nd</sup> and 1<sup>st</sup> Cts BC. Small-scale rescue excavations of burials were carried out by N.I. Sudarev in 2006–2008 near the townsite of Golubickoe situated further to the E along the Azov coast of the Taman' Peninsula.

Since 2004, a team of the State Historical Museum headed by G.A. Lomtadze has been conducting excavations of a stratified site NW of the mod. village of Achtanizovskaja (Achtanizovskaja 4). A detailed plan of the settlement and its surroundings has been produced. In one of the excavated areas, pottery of the oldest period of the site's occupation (1<sup>st</sup> half of the 6<sup>th</sup> Ct BC) was unearthed. Since 2006, the central fortified section of the site has been investigated, with remains of a strong defensive wall of the 2<sup>nd</sup>-1<sup>st</sup> Ct BC, dating to the period immediately before the destruction of the settlement. Numerous sites have been investigated, among which are BA kurgan burials near the mod. village of **Volna**. Among other finds unearthed in this area, remains of iron-smelting workshops are noteworthy.

Since 1998, the Bugaz team of the Bosporos Expedition of the Institute of the History of Material Culture, headed by Ju.A. Vinogradov, has practically completed the excavation of the settlement of **Artjuščenko 1**, dated to the LAr and Cl periods (Vinogradov and Lebedeva 2005; 2007). Another team of the same expedition, under the direction of E.Ja. Rogov and later S.V. Kašaev, has excavated the settlement of **Vyšesteblievskaja 11**, revealing remains from the Hel and Med periods, and the necropolis of Artuščenko 2, dated to the L6<sup>th</sup>–4<sup>th</sup> Ct BC. At Vyšesteblievskaja 11, a series of Jewish grave stelae is noteworthy. At the necropolis, a number of well-preserved burials with grave goods of the Cl period stands out (Kashaev 2005).

# Semibratnee

After a long interruption, excavations were renewed at this site in 2001 (V.A. Gorončarovskij). Remains of a defensive wall of the 5<sup>th</sup> Ct BC and the area of a temenos with an altar of the 3<sup>rd</sup> Ct BC were recovered (Goroncharovsky 2005). A team specialized in geophysical investigations and surveys, and directed by O.V. Sarov in 2004 and S.Ju. Vnukov in 2007, joined the investigations. In 2006 and 2007, T.N. Smekalova conducted magnetic surveys of a considerable area in the SW part of the town site. This technique has identified the outlines of the defensive wall with towers, and the orthogonal layout of the residential quarters, as well as separately standing monumental stone buildings (Fig. 27) (Smekalova and Gorončarovskij 2006; Smekalova, Gorončarovskij and Djukov 2007). In 1994, a base fragment of a grey-ware cup with the stamp ATI in a circle was found on the surface, indicating that it functioned either as a ritual or a votive vessel (Novičichin 2006).



27. Semibratnee: aerial photo and magnetic map of the site

# NORTHERN CAUCASUS

Since 1998 the Gelendžik-Novorossijsk Expedition has been headed by A.A. Malyšev, who conducts annual excavations at the **Raevskoe** settlement, one of the key fortresses on the River Kuban (Malyšev 1995; 2000; Malyshev 2007). From 2000–2007 archaeological investigations of the defences of Raevskoe were conducted. A survey in the valley of the River Bedrička, S of Raevskoe, revealed a system of settlements. In addition, investigations of the **Krasnobatarejnoe** and **Borisenkov Liman** settlements were initiated. Magnetic surveys at Raevskoe and Krasnobatarejnoe by T.N. Smekalova revealed the defensive walls and a tower with traces of a strong fire (Aleksandrovskij *et al.* 1999). In collaboration with A.V. Dmitriev, A.A. Malyšev has conducted surveys and excavations

of the necorpoleis of various periods in the Cemesskaja Valley and surroundings of Novorossijsk, including the long-lived site and necropolis of Myschako (jointly with A.N. Gej and E.I. Savčenko, 1990–1991, 2000). Myschako is the largest of the Gr-period sites in the area between Anapa and Gelendžik. An expedition of the Novorossijsk Museum (A.V. Šišlov) has conducted rescue excavations of a Cl and Byz flat grave necropolis near the village of Južnaja Ozerejka. In 2008, surveys and small-scale rescue excavations were carried out by a team of the East Bosporos Expedition at a number of Grperiod sites in the region of Gelendžik (N.I. Sudarev and O.D. Čevelev).

# GEORGIA (Fig. 28)

In the first years of the period under discussion, Georgia suffered from civil war and, consequently, shortage of fuel, food and other basic necessities. This affected the archaeological community, so that almost no major excavations or publications could be undertaken.

The main institution conducting archaeological fieldwork is the Otar Lordkipanidze Centre for Archaeological Research of the Georgian Academy of Sciences, which carries out work in several counties. The Georgian National Museum is the head of a network of museums, which take care of the cultural heritage of Georgia. The current director is D. Lordkipanidze, the former excavator at Dmanissi. Teaching of Cl subjects is the responsibility of Tbilisi State University's Department of Classical Studies, with Prof. R. Gordesiani as its Director. See the institute's homepage (www.greekstudies.caucasus.net) for further information.

In general, archaeological fieldwork has followed the lines given in the previous report (Kacharava 1990–1991). Most of the local archaeologists have continued their projects until now. The later 1990s saw several collaborations between Western and Georgian researchers. A notable example is the Pichvnari

Project, led by A. Kakhidze (Batumi) in collaboration with M. Vickers (Oxford). The German universities of Halle and Tübingen have conducted excavations at EIA sites in E Georgia (Furtwängler and Knauß 1997; Furtwängler, Knauß and Motzenbäcker 1998 for Ciskaraant Gora and others; Korfmann et al. 1999; 2004 for Naomari Gora). From 1998 onwards, new local publications have appeared, mostly written in Georgian, but regularly furnished with short summaries in Western languages. The construction of the Baku-Tbilisi-Ceyhan oil pipeline in 2002-2005 made a series of rescue excavations necessary along its route. The pipeline project offered a substantial amount of money to Georgian archaeology. This and the improved economic situation led to a much needed reconstruction of archaeological museums and sites. important attempt to write a general survey of the Gr and Rom history of Georgia was made by D. Braund in 1994 (Braund 1994).

# New periodicals

Since 1999, Dziebani - Journal of the Centre for Archaeological Studies has been issued roughly twice a year. This journal, with supplementary volumes, provides the quickest and most complete insight into Georgian archaeological projects and fieldwork. Thus, it has replaced the series PAI (Polevye Archaeologičeskie Issledovanija) from the 1970s and 1980s, covering all PH, antique and Med periods. The articles are written in Georgian, but due to figures and summaries in international languages, Dziebani is a most important working tool. Since 2004, and published completely in English, the Journal of Georgian Archaeology is a supplement to Dziebani. Since 1999, the Department of Classical Studies of the Tbilisi State University has published the international journal PHASIS, accompanied by the journal LOGOS since 2003. In 2000, the Batumi Museum, Batumi being Georgia's most important Black Sea port, released its own series of reports, Batumi Archaeological Museum. The Works. The articles are written in Georgian, with English or Russian summaries.



# Eshera

From 2003–2006, excavations at the settlement of Eshera N of Suchumi were carried out by the expeditions of the Abkhazian Institute for Humanities Research (Suchumi) and the State Museum of Oriental Art (Moscow) (Erlich *et al.* in print). A layer of construction debris dating to the 1<sup>st</sup> quarter of the 6<sup>th</sup> Ct BC was found. The pottery contained a number of E Gr vessels including some in Wild Goat Style. Nearby, a L Kolchian necropolis dating from the end of the 5<sup>th</sup>–1<sup>st</sup> half of the 4<sup>th</sup> Ct BC was investigated. Constructions from the Hel period in the E part of the fortified site have been examined. An indigenous settlement on the nearby Vereščagin hill was also investigated. Both sites were destroyed by fire in the 1<sup>st</sup> Ct BC and ceased to exist.

Remains of a rich warrior burial dated to the Ar period were discovered SE of Eshera by Kutyšcha in 2005. The assemblage contained a very interesting cuirass consisting of a breast-piece made from a hammered bronze sheet and 3,000 oval bronze scales, each with 2 holes. This is the first find of its kind in the region. Together with the cuirass, an iron axe, an *akinaks* dagger and arrowheads of iron were found. Fragments of 2 E Gr rosette bowls were found in the tomb, suggesting a date in the 1<sup>st</sup> half of the 6<sup>th</sup> Ct BC (V.R. Erlich *et al.* http://www.arcaucasica.ru/index.php3?path=\_english/publication\_report&source=erlikh elite assemblages).

# Phasis

The Gr colony of Phasis was founded probably towards the end of the 7<sup>th</sup> Ct BC by Milesian colonists. Several missions have tried to find remains of the city, but have failed due to the very complicated maritime and alluvial conditions in the coastal wetland of mod. Poti and the mouth of the River Rioni. The best suggestion for the city's location is still the bank of Lake Paliastomi or somewhere underneath its waters, where ruins of the L antique period have been found, as already reported by D. Kacharava (1990–1991, 79).

# Pichynari

Excavation in the necropolis of Pichynari, foremost dated to the 5<sup>th</sup>-4<sup>th</sup> Ct BC, has been continued as a joint venture between the Batumi Archaeological Museum and the Ashmolean Museum, University of Oxford. A bilingual publication was issued in 2004 (Vickers and Kakhidze 2004). Following the traditional interpretation, 2 geographically separated parts of the necropolis have been identified as different burial areas for a Kolchian and a Gr community at the site. As the differences between the grave goods are not very strict and the internal structure of the large settlement itself remains practically unknown, this interpretation has met with some criticism. Nevertheless, the documentation of 300 burials from the Cl, Hel and LRom periods offers the best material for social studies so far available in the region. The most recent additional volume to the one cited above refers to the results of 20 years of excavation prior to 1987 (Kakhidze 2007). Unfortunately the text is mostly written in Georgian.

# Apsaros (Gonio)

In a joint Georgian and German project (University of Jena) the Rom fortress of Gonio near Batumi, Apsaros in Cl and Byz times, has been explored and excavated (Plontke-Lüning 2005, 133). The most important outcome of the project is the accurate mapping of the fortress and its surroundings. The site was settled from the 8<sup>th</sup>-7<sup>th</sup> Ct BC until Ot times, but certainly had its heyday from the Neronian period onwards, when the castrum was built as part of the E Rom defence system. To date, the main publications of the recent fieldwork are those by A. Geyer and S. Mamuladze (2002); and A. Plontke-Lüning (2005).

# Vani

During the period under report, excavation was carried on at the major Kolchian site of Vani. Several exceptional richly furnished burials excavated earlier witness the administrational and probably religious importance of the site from the 5<sup>th</sup> Ct BC onwards. In 2004, another spectacular burial, grave 24, was discovered in the settlement of Vani (Kacharava and Kvirkvelia 2008, 175) (Fig. 29). It can be dated to the later 4<sup>th</sup> Ct BC by a Pantikapaian coin providing a tpq after 330. According to the position of the grave goods and skeletal remains, 5 individuals and a horse can be distinguished. An enormously richly equipped 'lord' was followed by 4 'servants' into the grave. He was clad in a garment adorned with gold appliqués and innumerable glass beads. Additionally, he wore a large collection of granulated golden jewellery and bracelets in the Persian style. A silver belt decorated with a symposium scene and an iron spearhead lay near the corpse, as well as a collection of silver, bronze and Gr clay vessels designed for aristocratic banqueting. A Neo-Babylonian seal is a particularly remarkable object that witnesses the connection of the deceased to the Achaemenid imperial administration. Governmental practices of the Persian Empire were certainly imitated in Kolchis. The precious new finds underline the position of Vani as an independent indigenous centre with strong contacts to the Greeks and even more so with the Persian world. It is important to note that Vani was neither a Gr colony nor part of the Persian Empire. The prosperous period of the 4<sup>th</sup> Ct BC just predates the transformation of the, until then, wooden settlement into a sanctuary site with impressive stone architecture.



29. Vani: the rich grave 24 dated to the later 4<sup>th</sup> Ct BC discovered in the settlement in 2004

# Atskuri

Under the direction of V. Licheli, excavations have continued in the complicated site of Atskuri in S Georgia (Licheli 2007, 55). Only graves dating to the 7<sup>th</sup>–E6<sup>th</sup> Ct BC and the 4<sup>th</sup> and 3<sup>th</sup> Cts have been observed so far. Architectural remains are restricted to the period of the 6<sup>th</sup>–4<sup>th</sup> Ct, which corresponds roughly to the Achaemenid period, and occur again in later Hel and Rom times. Most remarkable are a number of grave goods that copy prestigious Persian items in cheaper materials, such as clay copies of an Achaemenid phiale and an ovoid flask originally designed in precious metal, as well as several locally made seal stones with indigenous motives. Obviously, the inhabitants of the upper Kura Valley, which sits at a major connection route between the Black Sea and the Persian province in E Transcaucasia, attempted to use Persian symbols and customs

at the lowest imaginable level. Nevertheless, they had access to a little Gr bf and bg pottery as well, brought in from the Kolchian coast.

#### Mzkheta

In 2001, the remarkable grave of an elderly woman in her 50s was discovered under the foundations of the Svetitskhoveli Cathedral in Mzkheta, the anc. capital of E Georgia. By her signet ring bearing a portrait, title and name she has been identified as a queen. Bestowed in the grave with her were golden jewellery, cosmetic vessels made of jade and a unique, large silver-gilt pencil case. On its front it shows the 9 Muses in high relief and on its back Homer, Menander and Demosthenes decorate a balcony-like pocket in which the golden ink pot was inserted. The flat body of the case, with silver quill pens inside, can be closed by a golden lid with an inscription worked à jour. The inscription informs us that the object belonged to the kings Ustamos and Eugenios who are otherwise unattested. The burial can be dated roughly to the 3<sup>rd</sup>-4<sup>th</sup> Ct AD, even if some objects are certainly older. Unfortunately the grave has not entered international publication yet. Preliminary information is available at www. magticom.ge/magazine/2002-4/2002-4-7.html.

#### Gumbati

In 1996, a team from the University of Halle excavated a unique 40m x 40m mud-brick building at Gumbati near Gurjaani in E Georgia. Its characteristic plan and fragments of at least 5 bell-shaped column bases suggest a genuine Achaemenid residence probably built for a minor local governor (Fig. 30). According to the architectural style and the dating of the pottery finds, the small palace was probably constructed at the end of the 5<sup>th</sup> or the beginning of the 4<sup>th</sup> Ct BC. Similar and even much larger structures have been discovered at Sari Tepe and Qaradjamirli in Azerbaijan, as well as at Benjamin in Armenia (Knauss 2006, 104). Together with the Achaemenid palaces at Eribouni (Erevan) and Argishtichinili (Artvin), they form the administrative network of the 13<sup>th</sup> Persian district mentioned by Herodotos (3.93).

#### TURKEY

N Turkey still remains one of the least explored parts of the Black Sea area. However, while very few investigations were carried out throughout much of the 20<sup>th</sup> Ct, things have begun to change over the past 15 years when a number of excavation and survey projects have been initiated. In addition to the coastal cities, a number of inland sites have been included in this report since the area in the Hel and Rom periods clearly formed part of the same political entity.

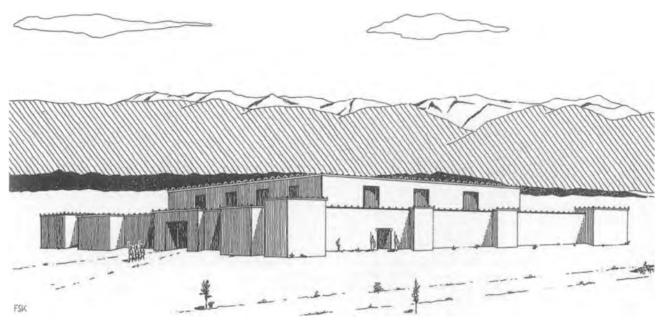
Three important monographs on the Pontic Kingdom and Mithridates VI in particular have appeared (Ballesteros-Pastor 1996; Saprykin 1996d; Erciyas 2006). The first 2 mainly treat the literary sources, while the latter incorporates archaeological material and recent survey results.

The bibliography by O. Tekin (1993) includes previous numismatic studies in N Turkey. F. de Callataÿ's (1997) study of the coinage of Mithridates VI has revealed a clear correlation between the frequency of issues and military activities during the Mithridatic Wars. Callataÿ (2005) has also made important contributions to the study of the bronze municipal coins of the Pontic cities, adding new types to Imhoof-Blumer's classification and proposing a new dating scheme. Coins of the Gr cities are included in the publications of the British Museum (Price 1993) and the Stancomb Collection (Stancomb 2000), while the Rom coin types appear in the ongoing *Roman Provincial Coinage* project (online database: http://rpc.ashmus.ox.ac.uk/).

A fine, well-illustrated introduction to Rom rule in the provinces of Pontus and Bithynia is offered by C. Marek (2003), who has also made an in-depth study of the cities and their territories (1993). The Bithynian Kingdom is treated by Gabelko (2005).

# Trapezous (Trabzon)

Salvage excavation in the city has revealed architectural elements dated to the 2<sup>nd</sup>-4<sup>th</sup> Ct AD: bases, architraves, friezes and a Corinthian capital (Kaya 1999). The most interesting find is an over life-size Hel bronze statue of a young male, identified by the excavator as Hermes.



30. Gumbati: reconstruction of the Persian palace

The area E of Trabzon has been surveyed to record the surviving structural evidence for the Rom and EByz military presence in the area (Crow and Bryer 1997). It was established that the most likely site of Hyssos Limen, visited by Arrianos, was at Araklı Kalesi.

#### Komana Pontike

In 2004, investigations under the direction of D. Burcu Erciyas were begun around the supposed site of Komana Pontike, located at Hamamtepe 9km NE of Tokat. The visible remains on the hill have been mapped, and a geophysical survey has been conducted to determine the extent of buildings not visible on the surface. Surface finds are Byz or later, but investigations of a looter's trench also yielded Rom material. In the vicinity of the hill, Rom necropoleis were identified and a hexagonal pool also dating to the Rom period. The area is also rich in Byz remains; among these 2 basilicas (Erciyas, Sökmen and Kalaycı 2007; www.komana.org). A corpus of the Rom coins of Komana has been prepared by M. Amandry and B. Rémy (1999).

# Amaseia (Amasya)

Throughout the 1990s, D. French has considered different epigraphical aspects related to Amaseia in his 'Amasian Notes'. Of particular interest is no. 5 (French 1996) concerning the temenos of Zeus Stratios at Yassiçal. The site was first described by Cumont in 1901, but French offers the first sketch drawing with the location of the 32 inscriptions, mentioning regions and villages, which, according to French, belonged to the territory of Amaseia exclusively. The site has a perimeter wall of 150m di. with an entrance to the NE. In the centre is what appears to be a large 40m x 40m podium that probably held a monumental altar similar to the one seen on the coins of Amaseia. No finds prior to the Rom period were found at the site.

At several places around the city, the museum has undertaken rescue excavations of the Rom necropoleis. The most common type is the vaulted chamber tomb, sometimes with frescos, but cist graves occur as well. The associated finds date to the 2<sup>nd</sup>-4<sup>th</sup> Ct AD (Eski Şamlar: Yüce 1995; Uygur: Yüce and Özdemir 2000; Kurşunlu: Doğanbaş 2002).

From 2002, R. Fleischer has led a small team investigating the royal tombs above the city. Elevations, plans and sections have been made, and, based on the cuttings in the rock, it has been possible to establish the original appearance of the tombs (**Fig. 31**). The 5 tombs numbered A-E from right to left had:



31. Amaseia: reconstruction of the earliest of the royal tombs

(A) a hexastyle portico with pediment; (B and D) tetrastyle porticos with pediments; (C) a portico without columns and rounded top; and (E) a portico without columns and archivolt at the top. The chronological sequence of the tombs seems to be A, C, B, D and E. Somewhat surprisingly, the architectural development seem to move from a purely Gr style in the 3<sup>rd</sup> Ct BC to a more local style in the 2<sup>nd</sup> Ct, when the Pontic Kingdom became increasingly Hellenized (Fleischer forthcoming).

Fleischer (2005) has furthermore managed to solve finally the puzzle of the inscriptions on the Mirror Tomb (Aynali Mağara) outside Amasya. The 2 inscriptions, the original above the entrance and the one from later use of the tomb below, read: Ths |  $\dot{\alpha}$ pxi-|iepeús and kaì 'Hyáθεος | Me[ν]άνδρου.

S. Ireland (2000) has published the extensive collection of coins from the museum in Amasya, which was reopened in 2006 after renovation.

# Euchaita (Beyözü)

In 2007, a survey project around anc. Euchaita was initiated under the direction of J. Haldon and H. Elton. During the first season a number of spolia, including inscriptions, were recorded in the city, and survey in the vicinity revealed scatters of pottery from the PH to the LRom period.

# Amisos (Samsun)

A history of Amisos, in Turkish with a summary in English, covering also recent archaeological work, was published by S. Atasoy (1997). On the acropolis of Karasamsun, trenches were opened within the military base in the 1990s, revealing further mosaics and pottery from the LCl to LRom period.

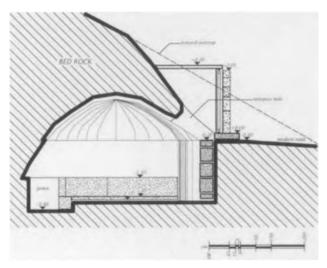
Undoubtedly the most spectacular find in Amisos is that of a rich undisturbed tomb discovered during road construction in 1995 (Erciyas 2006, 67–115). The tomb chamber, measuring 5m x 5m, was cut into the limestone and had 5 rectangular graves cut into the bedrock along 3 walls. Access to the chamber was through a hole on the E side of the roof, where a retaining wall with a door marked the entrance (Fig. 32). Remains of only 3 skeletons were found, probably interred in wooden chests. The grave goods, datable to the E3<sup>rd</sup> Ct BC, comprised alabastra, a glass bowl and phiale, an inkwell type lamp and incense burners, but, most remarkable, is the extraordinarily fine gold jewellery, including a wreath, necklaces, earrings with figures of Eros and Nike, several bracelets and cloth appliqués (Fig. 33).

Although few have turned up in controlled excavations, Amisos evidently had a large production of terracottas in the Hel period, as shown by the study of L. Summerer (1999). Dionysiac themes and theatrical masks are clearly among the most favoured motifs. This may reflect the use of Dionysos in the propaganda of Mithridates VI, who took the epithet 'Neos Dionysos'.

Several extensive surveys and site visits have been carried out in the central Black Sea region around Samsun (briefly presented in Belli 2001 with bibliographies), but the projects focus primarily on the PH period and only offer sporadic comments on the Gr and Rom material.

# İkiztepe

At İkiztepe near Bafra, a tumulus with a dromos and 2 chambers, dated to the 1<sup>st</sup> half of the 3<sup>rd</sup> Ct BC, has been excavated. The tomb had been robbed, but a Lysimachean posthumous Alexander gold stater and Hel pottery were recovered. The excavation also revealed LIA pottery similar to that found at Akalan (Bilgi 1999, 27–54).



32. Amisos: tomb found in 1995

# Sinope (Sinop)

In the vicinity of Sinop, several amphora workshops have been excavated. On Boztepe between 1993 and 1997, Y. Garlan and the director of the museum, İ. Tatlıcan, excavated 2 kiln sites at Zeytinlik, recovering hundreds of stamps all belonging to the E3<sup>rd</sup> Ct BC. In 1996, another kiln, with material of the L3<sup>rd</sup> and E2<sup>nd</sup> Ct BC, was revealed at Nisiköy, 3km from the city (Garlan and Tatlican 1998). Following a geophysical survey, excavations at Demirci 14km S of Sinop were conducted from 1994-1997 (Kassab-Tezgör 1996; Kassab-Tezgör and Tatlıcan 1998) and again in 2000 (Kassab-Tezgör and Dereli 2001), revealing several kilns. Apart from a small workshop active in the later 4th Ct BC, the workshops functioned from the 3rd Ct AD and possibly into the 6<sup>th</sup>. Rescue excavation in the city has uncovered LRom polychrome mosaics, one of which had a diamond-shaped panel with a female bust labelled TPYOH (http://www.cca.unimelb.edu.au/community/Events/PAPHLA GONIA-PONTUS-abstracts.pdf).

In 1996 the Sinop Regional Archaeological Project was initiated under the leadership of O. Doonan (2004). Extensive survey and investigations at Sinop itself were made, and from 1997–1999 intensive survey was carried out in the Demirci Valley, the Karasu Valley and on Boztepe. More than 170 sites dating from the Neo to the Ot period were recorded. The settlement pattern shows a contraction of sites in the coastal area in the IA and Cl period, while the Hel period and particularly the Rom period are characterized by extensive use of the agricultural lands in the valleys for the cultivation, presumably, of olives.

The inscriptions from Sinope have been published by D. French (2004). The most important new addition is a stele with a nearly complete 33-line inscription of a treaty between Sinope and the tyrant family of Herakleia, dated 353/352–346/345 BC. Stamped amphorae from Sinope have received considerable interest from scholars, most notably Y. Garlan (2004), N. Conovici (1998) and N. Fedoseev (1999), who propose a novel dating scheme.

After several years of renovation, the local museum reopened in 2006.

At Çiftlik, 10km S of Sinop, an EByz (4<sup>th</sup>-5<sup>th</sup> Ct AD), 3-aisled basilica with geometric mosaics, in danger of being washed away by the sea, was surveyed, excavated, protected and studied from 1993–2000 (Hill 1998).

# Pompeiopolis (Tasköprü)

In 2006, investigations at Pompeiopolis were initiated under the direction of L. Summerer. A topographical map of the plateau of Zimbilli Tepe, NW of the mod. city, was produced, showing that the city extended much further than the LRom fortress. Geomagnetic survey has identified the forum, measuring 80m x 100m with porticos surrounding it. Next to the forum is a building with 2 building phases, possibly a gymnasium and an odeion. To the W, excavations revealed part of a bath with hypocaust and, to the E, part of a villa with mosaics dating to the L4<sup>th</sup>-E5<sup>th</sup> Ct AD. Although plenty of stray finds testify to activity in the 1st and 2nd Cts AD, the stratified structures excavated all belong to the L antique period. Three new honorary inscriptions have been found, one for Gn. Claudius Severus, the son-in-law of Marcus Aurelius, and another honouring a member of the Severan dynasty. The last, on a pillar monument inscribed on at least 3 sides, honours a Paphlagoniarch, an office previously unattested. The inscriptions on the sides seem to be an account of expenditures in connection with a festival (http://www.klass-archaeologie. lmu.de/Pompeiopolis/pom index de.html).

# Hadrianopolis (Eskipazar)

Between 1997 and 2001, R. Matthews led extensive and intensive surveys in the Çankırı and Karabuk provinces, with the aim of establishing the long-term settlement patterns. Project Paphlagonia identified about 300 sites, many of them with Gr and Rom material. Particularly, the Rom period had a widespread settlement pattern across the entire landscape, and a clear hierarchy of sites, ranging from small hamlets to large towns such as Hadrianopolis and Antoninopolis, which has been located at Kızıllar (Matthews, Pollard and Ramage 1998).

At Hadrianopolis an EByz basilica (B), with 6<sup>th</sup> Ct AD mosaics showing personifications of 4 biblical rivers, was excavated by the museum in 2003. Since 2005, excavations led by E. Laflı have revealed a large LRom bath building and a basilica (A) with well-preserved 6<sup>th</sup> Ct AD geometric mosaics with depictions of animals in square frames. Two inscriptions give the name of the dedicator.

At Kimistene, now identified through inscriptions, 10km to the NE of Hadrianopolis, monuments were recorded. Trenches from illegal excavations around the podium of the Rom temple have revealed Phrygian Grey Ware pottery (http://web.deu.edu.tr/paphlagonia/index.html).



33. Amisos: gold bracelet found in the tomb

#### Tieion

In 2006 and 2007, S. Atasoy conducted excavations in the city centre, the necropolis, the theatre and on the acropolis, and surface and geomagnetic surveys have also been carried out. Sherds of black and red figured ceramics were recovered on the acropolis, and in the city centre 2 Rom baths and 3 paved streets were uncovered.

#### Amastris (Amasra)

Investigations in Amasra, initiated in the late 1980s, were continued. The Hel foundations of the city wall, consisting of courses of squared blocks of limestone, were identified in several places. Rescue excavation was carried out in a large Rom bath and 2 pools with associated hypocausts were found. In the W harbour 2 sets of quays at different levels were identified, indicating a sea level rise of ca. Im between the Cl and the LByz period. As the Byz quays are at the mod. level, there seem to have been little change since then. Also, an outlet for a water channel was exposed, possibly the one described by Pliny the Younger (Hill 1994). In 1993, 4 marble statues, one of them a cuirassed imperial statue, possibly Hadrian (Fig. 34), the others of local dignitaries, were found during construction work.

# Herakleia (Ereğli)

No excavations have been carried out at Herakleia, but 2 monographs on the city have appeared: S. Saprykin (1997), an English translation and adaptation of his book in Russian from 1986; and A. Bittner (1998), which also features a German translation of Memnon and an appendix of the pre-Rom coin types. Furthermore, the anc. remains, predominantly architectural fragments and stelae, have been catalogued by T. Akkaya (1994). The inscriptions of Herakleia have been published by L. Jonnes (1994), with a prosopography by W. Ameling. Surprisingly, no inscriptions seem to have survived prior to the Rom period. The stamped amphorae from Herakleia have been studied by Kac (2003; 2007), who offers a revised chronology.



34. Amastris: marble statue, possibly Hadrian

ABBREVIATIONS		IGBulg	Mihailov, G. 1956–1966. Inscriptiones Graecae in Bulgaria repertae. Sofia.
AA ABulg	Archäologischer Anzeiger. Berlin. Archaeologia Bulgarica. Sofia.	IGSK	Inschriften Griechischer Städte aus Kleinasien. Bonn.
ACSS	Ancient Civilizations from Scythia to Siberia. Leiden.	IOSPE	Latyshev, V. 1885–1901. Inscriptiones antiquae orae septentrionalis Ponti
Acta Hyperborea	Acta Hyperborea. Danish Studies in Classical Archaeology. Copenhagen.	IranAnt	Euxini Graecae et Latinae. Petropolis. Iranica Antiqua. Leiden.
ADU	Archeologični doslidžennja v Ukraïni. Kiev.	ISM I	Inscripțiile din Scythia Minor grecești i latine I. Histria și împrejurimile.
AIK	Archeologičeskie issledovanija v Krymu. Simferopol.	<i>ISM</i> III	Bucharest 1983.  = Avram 1999b.
AMA	Antičnyj mir i archeologija. Saratov.	JASc	Journal of Archaeological Science.
Anatolia antiqua	Anatolia antiqua. Eski Anadolu. Istanbul, Paris.	KSIA	Kratkie soobščenija instituta archeologii AN SSSR/RAN. Moscow.
AO	Archeologičeskie otkrytija. Moscow.	KSIAKiev	Kratkie soobščenija instituta
AOR	Archeologičeski otkritija i razkopki.	RDI/IRIC V	archeologii AN URSR. Kiev.
non	Sofia.	LGPN	= Fraser and Matthews 2005.
ArchDos	Archeologični doslidžennja v Ukraïni.	MAIET	Materialy po archeologii, istorii i
111011200	Kiev.	MILLI	etnografii Tavrii. Simferopol.
ArcheologiaSofia	Archeologia. Sofia.	MatCercA	Materiale și cercetări arheologice.
ArcheologiaWarsz	Archeologia. Rocznik Instytutu	Marceren	Bucharest.
meneologia nursz	archeologii i etnologii, Polskiej	MBAH	Münsterische Beiträge zur antiken
	akademii nauk. Warsaw.	MBIIII	Handelsgeschichte. St Katharinen.
ArcheologijaKiiv	Archeologija. Kiev.	MCA	Materiale și cercetări arheologice.
ArchVesti	Archeologičeskie vesti. St Petersburg.	111 011	Bucharest.
AVU	Archeologični vidkryttja v Ukraïni.	MINAC	Museum of National History and
	Kiev.		Archaeology Constanța.
BachčSbor	Bachčisarajskij istoriko-archeologičeskij	MinEpigrP	Minima epigraphica et papyrologica.
_ *************************************	sbornik. Simferopol.		Rome.
BAR	British Archaeological Reports. Oxford	MNIR	National Historical Museum, Bucharest.
Bosplssl	Bosporskie issledovanija. Simferopol,	NumChron	The Numismatic Chronicle. The Journal
- oop 100.	Kerch.	Train Chi on	of the Royal Numismatic Society.
BospSbor	Bosporskij sbornik. Moscow.		London.
BSS	Black Sea Studies. Aarhus.	NumEpigr	Numizmatika i epigrafika. Moscow.
BullÉp	Bulletin épigraphique, in RÉG, 1888-	PAV	Peterburgskij archeologičeskij vestnik.
CCA	Cronica cercetărilor arheologice din		St Petersburg.
	România. Bucharest.	PIFK	Problemy istorii, filologii, kul'tury.
Chiron	Chiron. Mitteilungen der Kommission		Moscow, Magnitogorsk.
	für alte Geschichte und Epigraphik des	REA	Revue des études anciennes. Talence.
	Deutschen Archäologischen Instituts.	$\stackrel{-}{REG}$	Révue des etudes grecques. Paris.
	Munich.	RossA	Rossijskaja archeologija. Moscow.
ChSbor	Chersonesskij sbornik. Sevastopol.	SCIVA	Studii și cercetări de istorie veche și
Epigraphica Anatolica	a Epigraphica Anatolica. Zeitschrift für		arheologie. Bucharest.
	Epigraphik und historische Geographie	SCN	Studii și cercetări numismatice.
	Anatoliens. Bonn		Bucharest.
EurAnt	Eurasia antiqua. Mainz	SEG	Supplementum Epigraphicum Graecum.
Historia	Historia. Zeitschrift für Alte Gesch-		Leiden.
	ichte. Erfurth.	SNG BM IX.1	= Price 1993.
Нур	Hyperboreus. Studia classica. St	SNG Stancomb	= Stancomb 2000.
	Petersburg, Munich.	VDI	Vestnik drevnej istorii. Moscow.
IAB	'Vasile Pârvan' Archaelogical Institute	VMGU	Vestnik Moskovskogo Gosudarst-
Y / Y / Y / Y	of the Romanian Academy.		vennogo Universiteta. Moscow.
IAIAND	Istoričesko-archeologičeskie issle	ZAKS	Schriften des Zentrums für Archäologie
	dovanija v g. Azove i na Nižnem Donu.		und Kulturgeschichte des Schwarz-
	Azov.		meerraumes. Langenweißbach.
IA RAS	Institute of Archaeology, Russian	ZPE	Zeitschrift für Papyrologie und
T 0000	Academy of Sciences.		Epigraphik. Bonn.
ICEM	Institute of Eco-Museal Research		· -

Tulcea.

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# RECENT ACQUISITIONS AND CONSERVATION OF ANTIQUITIES AT THE URE MUSEUM, UNIVERSITY OF READING 2004–2008

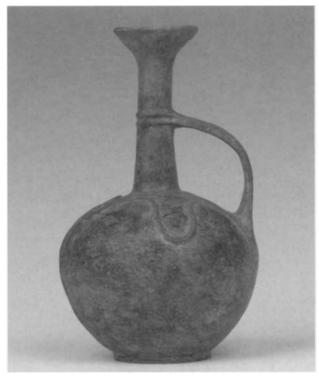
The Ure Museum of Greek Archaeology, in the Department of Classics at the University of Reading, has experienced something of a renaissance in the 3<sup>rd</sup> millennium. It acquired status as a registered museum in 2001 and accreditation in 2008. It has boasted a bespoke web-accessible database since 2002 and a professionally designed website since 2004 (www.reading.ac.uk/ure). Finally, in 2005 its physical display was completely redesigned. While the existence of the Museum and some of its collections have long been well known to scholars of Gr vases - thanks to the tireless efforts of Percy and Annie Ure in the first half of the 20th Ct, including their 1954 publication of Corpus Vasorum Antiquorum. Great Britain 12. University of Reading (London, Oxford University Press, 1954), AR 9 (1962-1963) and some listings in Beazley and Trendall's volumes (see J.D. Beazley, Attic Red-figure Vase-painters, 2nd ed. [Oxford, Clarendon Press, 1963], A.D. Trendall and A. Cambitoglou, The Red-figured Vases of Apulia [Oxford, Clarendon Press, 1978-1982], A.D. Trendall, The Red-figured Vases of Lucania, Campania and Sicily (Oxford, Clarendon Press, 1967) - much of the collection remains unknown. Even in the 1960s, after all, the publication of fragments, lamps and Cypriote ceramics remained unfashionable. And the Ures, experts in Gr pottery, were little interested in publishing the Egyptian artefacts (approximately a 5<sup>th</sup> of the displayed collection) and other non-ceramic artefacts. As part of the Ure Museum's renaissance, University of Reading staff and students are researching and gradually publishing its hidden treasures: A.C. Smith, Corpus Vasorum Antiquorum. Great Britain 23. Reading Museum Service (Reading Borough Council) (Oxford, Oxford University Press, 2007) documents more than 150 vases, most in the Ure Museum, from the Reading Museum Service (Reading Borough Council); a forthcoming fascicule of the Corpus of Cypriote Antiquities will catalogue the Cypriote holdings in the Ure Museum; and another volume of Corpus Vasorum Antiquorum will detail approximately 200 holdings of the Ure Museum that are hitherto unpublished. The items discussed below, however, are those that have been acquired by the Ure Museum since 2004, as well a sample of the 19 Coptic textile fragments, which have been brought out of storage, conserved by the Textile Conservation Centre in Winchester and are now displayed in the Ure Museum (since 2005).

# RECENT ACQUISITIONS

**2004.10.1** (Figs 1, 2). Handmade Cypriote jug. *H.* 21.2cm; maximum *di*. 12.6cm. Base ring I ware, ca. 1300–1100 BC (LCypriote II). Formerly in the collection of R. Crowhurst; donated by the Chichester District Museum.

The shape, with flaring lip, tubular neck, ribbon handle attached from the middle of the neck to the shoulder, bulbous body and short ring base, anticipates the higher footed and smaller base ring ware flasks. Plastic decoration consists of 2 rings around the middle of the neck, 2 stylized snakes across the shoulder, terminating in pointed heads (each with 2 round eyes) on either side of a vertical loop enclosing a wavy vertical line. The latter element recalls the stylized (and meaningless) 'cartouches' that the Phoenicians copied from the Egyptians in the 12<sup>th</sup> Ct. If such a Phoenician Egyptianizing element might have been borrowed by the Cypriotes, then this might argue for a later date in the range provided above.

The brownish-black slip (which lends itself to the alternate terminology, 'black ware', used by H.B. Walters in the Maroni tomb lists – H.B. Walters, Excavations in Cyprus (Notes and Tomb-Lists) 1895–97. Maroni Excavations 1897 [London, British Museum, Department of Greek and Roman Antiquities, Manuscript 65a]) has been severely eroded from the surface. Some fingerprint marks are still visible above and below the snakes, indicating areas where the craftsman would have applied the plastic decoration to the body.



1. Right side view of handmade Cypriote jug (2004.10.1)



2. Detail of the front of handmade Cypriote jug (2004.10.1), showing applied snakes on either side of a 'cartouche'

For parallels, see M. Fortin, Les collections d'antiquités chypriotes de l'Université Laval et du Musée de l'Amérique française (Québec, Canada). Corpus of Cypriote Antiquities 16. Studies in Mediterranean Archaeology 20.16 (Göteborg, P. Åström, 1996); J. Johnson, Maroni de Chypre. Studies in Mediterranean Archaeology 59 (Göteborg, P. Åström, 1980), pl. 17.70; P. Åström, The Late Cypriote Bronze Age. Swedish Cyprus Expedition 4.1c (Lund, Swedish Cyprus Expedition, 1972), 153, fig. 49.2.

**L.2005.7.1** (Figs 3, 4). Paestan rf stemless cup. *H.* 4.6cm; *w.* across handles 25.4cm. LCl, ca. 350–325 BC; attributed to the early Apulianizing Group. On loan from Sally and Terry Fox.

The shape – stemless cup with bowl separated from rim at a carination and elaborate squared handles – and clay – micaceous reddish-brown – are typically Paestan. Yet the style is strongly Apulianizing in terms of: characteristic subject matter includes a hovering Eros on the interior and on one exterior side, and a rushing maiden on the other exterior side, each figure with curly hair emerging from a sphendone; vegetal decoration; treatment of drapery; and frequent use of wg, some with added yellow.



3. Paestan cup (L.2005.7.1)



4. Detail of exterior of Paestan cup (L.2005.7.1), showing woman



5. Core-formed glass alabastron (2005.9.1)



6. Obverse of silver tetradrachm (2006.6.1), showing the head of Herakles wearing a lion skin



7. Reverse of silver tetradrachm (2006.6.1), showing Zeus, enthroned

**2005.9.1** (**Fig. 5**). Core-formed glass alabastron, decorated with blue and white zigzags in a counter-clockwise trail. *H.* 12.6cm. EHel, ca. M4<sup>th</sup>–L3<sup>rd</sup> Ct BC. Said to have been found in Egypt. Formerly in the Mustaki Collection. Purchased from Charles Ede Ltd, through a bequest from Rosemary Chapman and an anonymous donor.

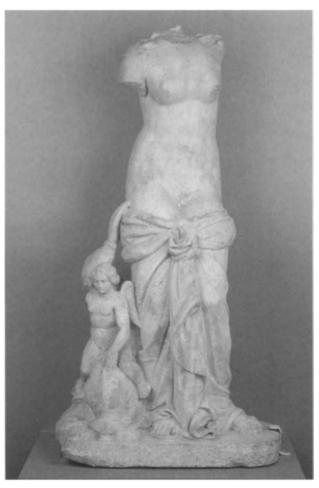
The alabastron has an applied broad horizontal rim disk that slopes sharply to a cylindrical neck, with a downward taper and an angled join with convex shoulders, at the top of a cylindrical body, broadening to a rounded bottom. Two lug handles, each with longish trails, are applied unevenly to the sides. This shape corresponds to Mediterranean Group II.1, as articulated by D.F. Grose, Early Ancient Glass (New York, Hudson Hills Press in association with the Toledo Museum of Art, 1989), 127, following D.B. Harden, Catalogue of Greek and Roman Glass in the British Museum (London, British Museum Publications, 1981), 100–21.

2006.6.1 (Figs 6, 7). AR tetradrachm. Di. 2.5cm. Minted at Amphipolis. EHel, 315–294 BC. Obv: head of youthful Heracles to right, wearing a lion-scalp headdress. Rev: Zeus seated on a throne in ¾ view to left, with an eagle perched on his right hand and sceptre in his upraised left hand. Kantharos (or amphora?) under throne. Inscription in right field: AΛΕΞΑΝΔΡΟΥ. Formerly in the collection of R. Crowhurst; donated by the Chichester District Museum.

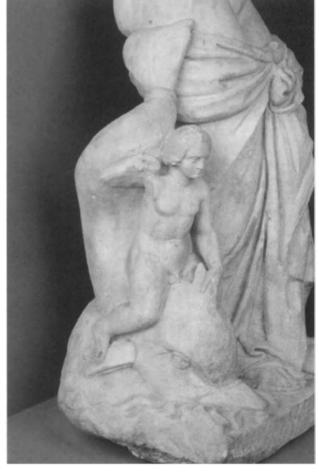
**L.2005.10.3** (BM 1418) (**Figs 8, 9**). Statue of bathing Aphrodite and Eros. *H.* 0.94m, *h.* including plinth 1.07m. Rom, probably 2<sup>nd</sup> Ct AD. Found in 1861 at the Sanctuary of Aphrodite at Cyrene in the excavations of R. Murdoch Smith. On loan from the British Museum.

Half-draped Aphrodite, bent at the knees, turned slightly to the left. Her (missing) arms would have reached up to her (missing) head. At her right side is Eros astride a dolphin. The dolphin, waves lapping around her feet and fish (behind the dolphin) suggest Aphrodite's marine associations, such as her birth from the sea (Hes. Theog. 173ff), or her role as Aphrodite Euploia (cf. Paus. I.1.3), which was appropriate at the Gr harbour colony at Cyrene. See A.H. Smith, A Catalogue of Sculpture in the Department of Greek and Roman Antiquities, British Museum 2 (London, British Museum, 1900), 237, no. 1418; S. Reinach, Répertoire de la statuaire grecque et romaine 2 (Paris, E. Leroux, 1899), 357, fig. 9; J.J. Bernouilli, Aphrodite (Leipzig, Engelmann, 1873), 263; R.M. Smith and E.A. Porcher, History of the Recent Discoveries at Cyrene (London, Day and Son, 1864), 96, 102, no. 51, pl. 72.

2006.5.2 (Fig. 10). Roof tile antefix decorated with a palmette. Medium-grained pinkish-red terracotta. H. 13.8cm; maximum w. 18.8cm; maximum d. 17.8cm. Undatable. Purchased in Tunisia before 1918. Gift of Mr David Stafford.



8. Front view of marble statue of Aphrodite with Eros on dolphin (L.2005.10.3)



9. Detail of marble statue (L.2005.10.3), showing Eros on dolphin and a fish



10. Roof tile antefix from Tunisia (2006.5.2)



11. Glazed ceramic tiles from Tunisia (2006.5.3-7)



12. Glazed ceramic tile from Tunisia (2006.5.5)

**2006.5.3–7** (**Figs 11, 12**). Five glazed ceramic tiles, with yellow, blue and green vegetal decoration. Maximum *l*. 15.5cm; maximum *w*. 15.7cm; maximum *d*. 2.2cm. 18<sup>th</sup> Ct AD. Purchased in Tunisia before 1918. Gift of Mr David Stafford. Cf. Couleurs de Tunisie. 25 siècles de céramique (Paris, Institut du monde arabe, 1994), no. 193.

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# RECENTLY CONSERVED LATE ROMAN AND BYZANTINE TEXTILES

In 2005, 6 textile fragments from the collection of LRom and EMed Egyptian textiles at the Ure Museum were conserved at the Textile Conservation Centre at Winchester. These, in common with the rest of the museum's collection of textiles, have not hitherto been published. According to an accompanying note (undated but presumed to be 19th Ct), they were acquired from archaeological sites in Egypt in the L19<sup>th</sup> Ct, with several pieces coming from Akhmîm (the Rom and Byz city of Panopolis) on the E bank of the Nile in S Egypt. This area was subject to several L19th Ct excavations and antiquarian pursuits (see, for example, R. Forrer, Die Graeber und Textilfunde von Achmim-Panopolis [Strasbourg, E. Birkhäuser, 1891]). Most of the pieces were previously in the possession of the Rev. Greville John Chester (1830–1892), a well-known collector of Egyptian antiquities. Many of the Egyptian textiles now in the collections of major British museums, including those in the British Museum, the Victoria and Albert Museum, the Ashmolean Museum, Oxford, and Liverpool Museum, were acquired by Chester in Egypt in the 1880s whilst the cemeteries were being opened. The Ure Museum's textiles had apparently left Egypt by 1888, but it is not clear how they came to be in the possession of the Ure Museum, the University of Reading not being established at that date. It is most likely that they were part of a variety of 'unconsidered trifles' given by the British Museum to the Ure Museum in the 1930s. Unfortunately, no record exists of the precise contents of the British Museum's gift; similarly, there is no record of the provenance of the other pieces in the collection. Their closest parallels, however, are from cemetery sites, such as Antinoë and Akhmîm itself.

It is well known that the dry, sterile conditions in the Egyptian deserts have preserved many thousands of anc. and Med textiles, which often emerge from the earth in excellent condition. The initial rediscovery of these textiles coincided with the growing interest in Egyptian archaeology by 19th Ct antiquities collectors and amateur archaeologists, many of whom travelled to Egypt for the opening up of newly rediscovered cemeteries there. Thus, for more than a century many thousands of LRom and Byz textiles have been preserved in museum collections throughout Europe and N America, as well as elsewhere, and have become the subject of a burgeoning scholarly literature. Unfortunately, the methods by which these textiles were excavated and recorded were often poor, even by the standards of the day, and fell far short of modern-day acceptable standards of archaeological excavation and recording.

**Dating methods.** On exceptional occasions it is possible to date such textiles with reference to stratified archaeological deposits, but far more often they are dated according to art historical and technical criteria, as well as by comparison with other media, such as wood carving or architecture. These methods have come under much scrutiny in recent decades and 'textile archaeologists' are now likely to exercise extreme caution when dating a textile that has no parallel from stratified archaeological layers.

The development of AMS radiocarbon dating, permitting the testing of very small samples of material, has proved extremely helpful in dating Egyptian textiles, although few textiles from museum collections have, as yet, been sampled. AMS radiocarbon dating tends to be reserved for textiles extracted from the ground with mod. archaeological excavation methods, where they are potentially useful diagnostic tools for the dating of other materials. In most cases where radiocarbon

dates have been obtained they have rarely challenged conventional thinking on the broad date ranges of the textiles. In fact, the increased use of AMS radiocarbon dating has facilitated the trend towards greater latitude in matters of dating, insofar as calibrated radiocarbon dates give a range of equally possible dates, rather than favouring one precise date over another. For these reasons, it was decided not to subject the textiles in this collection to AMS radiocarbon dating.

As the technical analysis of such textiles has come to the fore of the field, a vast array of new information on spinning and weaving methods has also become available. Egyptian textiles were usually woven either from linen or wool (or a combination of both) during the LRom and Byz periods. All manner of household cloths were woven, including curtains, pillowcases and other bedding. It is likely that most of the textiles in the Ure Museum comprise items of clothing. Wool was dyed a variety of colours, but linen was usually left unbleached and would have appeared an off-white colour, although most extant examples now appear as cream or beige.

Textile art and L Antique costume. The main burial rite during this period was inhumation and the body was usually dressed in everyday clothes, sometimes wrapped in a shroud. Emperor Theodosius I banned mummification of the dead at the end of the 4th Ct and the archaeological record suggests that it became increasingly rare thereafter. Occasionally, bodies were wrapped in curtains or other items of household textile, presumably in the absence of a designated shroud. Complete garments - usually tunics - do survive, but the vast majority of LRom and Byz textiles from Egypt are in the form of fragments, usually comprising dress ornamentation of some kind. Garments were often highly decorated, with motifs and decorative bands and borders being incorporated into the cloth during the weaving process. Sometimes separately produced decorative bands were sewn onto a base fabric (e.g., 2005.7.4); sometimes bands were removed from one garment to decorate another.

Simple linen tunics with slits for neck openings appear to have been woven in one piece on the loom and then sewn together along the arms and length of the body. Decorative borders in tapestry weave were often produced around the ends of the sleeves and the neck opening, with bands of ornamentation running vertically down the length of the garment on either side of the chest, from the shoulder to either the waist or hem. These ornamental vertical bands are known as clavi and are almost always produced as tapestry (e.g., 2005.7.4, 10). They sometimes terminate in a leaf or an arrow motif and vary in thickness. Decorative roundels (orbiculi) or squares (e.g., 2005.7.1) were sometimes placed at the shoulders or at the base of the garment at the opening. These, as with most forms of dress ornamentation, were usually produced in a tapestry weave, woven in a combination of unbleached linen and coloured wool wefts on warps of unbleached linen.

Art historical dating categories. The range of colours and motifs used was extensive, although a repertoire can be discerned and monochrome designs were particularly popular between the L3<sup>rd</sup> and 5<sup>th</sup> Cts AD. Several pieces in the Ure Museum collection comprise simple motifs such as wreaths and vine scrolls woven in brown-purple wool against a background of unbleached linen (e.g., 2005.7.1, 4). Other variants of purple are also represented, including 'optical purple', where red and blue yarms are plied together to produce the effect of purple (e.g., 2005.7.12). 'True' purple, that is, purple dye produced from the shells of murex whelks, has rarely been identified in Egyptian textiles.<sup>4</sup> The use of interlace was particularly popular (e.g., 2005.7.1).

From the 5<sup>th</sup> Ct onward, monochrome designs appear with more reference to figurative art, seemingly reflecting a stronger Gr-Rom influence, and include allegorical figures, huntsmen, riders and so on, as well as animals and birds. The use of polychrome figurative motifs was also popular in Egypt from an early date, although these are not represented in the Ure collection. From the 6<sup>th</sup> and 7<sup>th</sup> Cts, the rendering of figurative and zoomorphic motifs in textiles is generally argued to have become more and more stylized, possibly in response to contacts with Central Asia and the Far East. The contrast with the naturalistic figures of Gr-Rom art is now more pronounced and on textiles from this later period human figures are often depicted in frontal pose, with the head out of proportion to the body.

In general terms, these chronological divisions are still accepted by textile historians and archaeologists, although the overlap between the phases of transition is probably greater than much previous scholarly work has allowed, and there now is more readiness to acknowledge the co-existence of various styles of textile production and decoration. Where a linear and hierarchical relationship between 'folk' and 'official' textiles was once posited, this is now much more open to debate, if such categories can be used at all meaningfully.

Are the textiles 'Coptic'? There is still widespread usage of the term 'Coptic textiles' but, while not wholly inaccurate, this terminology has increasingly been challenged. In the main, this is because the term 'Coptic' refers to the linguistic and religious identity of the Christian population of Egypt, which flourishes down to the present day, rather than to a discrete chronological period. The official establishment of the 'Coptic' Church dates to 451, when it separated from the rest of the Orthodox Church following its refusal to accept the tenets of the Council of Chalcedon.<sup>5</sup>

Therefore, the use of the term 'Coptic' as a blanket term for post-Pharaonic Egyptian textiles has served to separate – in analytical terms - the textiles from the Rom, Byz and Islamic worlds of which their weavers and owners were an integral part. They are usually accepted as having a date range between the 3rd and 10th Cts AD, and as such span the LRom, Byz and immediately post-Byz (E Islamic or Umayyad) periods. Moreover, although some textiles were clearly produced for an ecclesiastical 'market', most give no indication of the religious beliefs of their producers, sellers or consumers. For these reasons, therefore, the textiles published here are described as 'LRom and Byz' (and, where appropriate, 'Arabic'), rather than 'Coptic'. The term 'Coptic' may be appropriate as a descriptor for the religious identity expressed in the textile, especially where religious identities are explicit. Although not perfect, 'Arabic' is a less problematical term for describing postconquest textiles than 'Islamic', which obfuscates political, religious and cultural identities.

Weaving processes and the use of tapestry as a decorative technique. Like many tapestry motifs and bands of this period now in museum collections, these fragments have been severed from the garments into which they were once incorporated. Nevertheless, it is still possible to ascertain the ground weave (or background textile) in most cases. This is usually a plain (or 'tabby') weave in unbleached linen, into which the tapestry design is incorporated. Tabby is the simplest of weaves, one in which the shuttle carrying the weft (the transverse threads) passes over and under alternating single warp strands (the longitudinal threads) on the loom whilst travelling in both the 'outward' and 'return' directions. On the 'return' passage of the shuttle it travels over and under the opposite warp threads to

those that it encountered on the 'outward' passage. Each completed 'outward' and 'return' journey is a 'pass', made up of 2 'picks' of weft.

After each pass, the wefts are beaten down or packed together before the shuttle is passed over and under the warp threads again. The pressure with which the wefts are packed together, along with the spacing of the warp threads, determines whether the cloth will be 'weft-faced' (with only the weft threads showing on the surface) or 'warp-faced' (where the weft threads are scarcely apparent and the warp threads dominate the surface of the cloth). The textiles published here have ground weaves where the proportion of warp threads to weft threads is approximately equal, and the resulting cloth is a plain tabby that is only slightly warp-faced or slightly weft-faced, if it is either. Identifying which are the weft threads and which are the warp threads is made straightforward if there is a selvedge. However, since most of these fragments (with the exception of 2005.7.13) have no selvedge, the warps and wefts have to be presumed.

The tapestry technique is a variation of plain weave, although the term is sometimes erroneously applied to all pictorial weaving. In this technique, discontinuous wefts are employed to build up a, sometimes extremely complex, design. In other words, the same weft thread does not necessarily travel from one selvedge to the other. Instead, it may be passed backward and forward over a select number of warp threads, whilst wefts of different colours are passed backward and forward over other warp threads, as necessary for the design. The wefts are packed closely together so that the warp threads are not usually visible, and the result is a weft-faced textile with areas of design. In tapestry areas the wefts are usually woven on 2 or 3 warp threads.

A variety of techniques was employed to secure the discontinuous wefts and to permit the weaving of a durable piece of cloth. The textiles in this collection display several of these techniques, including single and multiple dovetailing, where adjoining wefts of different colours are alternately looped around the same warp thread (e.g., 2005.7.1, 4). This enables straight or almost straight vertical lines to be woven into the design without compromising the strength of the cloth. An alternative way of achieving this effect is to use 'slit tapestry', where discontinuous wefts are not looped around the same warp thread, but around adjacent warp threads instead (e.g., 2005.7.1, 4, 12). This technique can also be used to build up curves, by staggering the looping of the wefts around successive warp threads. 'Slit tapestry' was perhaps used principally because it permits the weaver to focus on building up the design in one area of the textile before moving onto another. By contrast, the dovetailing technique, which results in a stronger piece of cloth (that is, one without potentially large and weakening slits in it), requires the weaver to focus at all times on the overall design rather than one part of it. This is because if discontinuous wefts are alternately looped around the same warp the weaver has to work with all the relevant wefts simultaneously, rather than simply concentrating on the use of one single weft at a time.

The basic tapestry weave was often supplemented by other methods of ornamentation. Some of the textiles in this collection display 'inlaying', where additional weft threads, usually in a different colour, are laid at regular intervals between the wefts of the ground weave (e.g., 2005.7.11, 13). Whereas the ground weave wefts may pass over and under every alternate warp thread, the inlaid weft may pass over 4 warp threads, say, before passing under a single warp thread. A variation on this method has inlaid weft pass over and under the warp threads with less attention to regularity, e.g., passing over 5 threads, under one thread, over 3 threads, under 4 threads, over 2 threads, before finally passing under 5 threads.

Some of the textiles have decorative features that resemble fine stitches of embroidery overlying the main tapestry woven design. These 'stitches' are usually produced in a single thread of undyed flax against a much darker background colour. They are not actually embroidered, but produced as an integral part of the weaving process by the introduction of a thin weft thread that 'floats' diagonally over the rest of the tapestry. The procedure is known as the 'flying shuttle' technique (also known as 'flying thread brocading' or 'weft brocading') and was used to add detail to designs and to highlight patterns and forms. Where the same technique is used to produce a thin vertical line over the tapestry areas it is known as 'vertical weft brocading'.

The direction in which yarn is spun has, in recent years, been the subject of much research, and it has been noted that textiles originating from the E Mediterranean are usually woven from wool or flax spun in the 'S-direction', as opposed to the 'Z-direction', which is more commonly associated with the W in this period. The 'S' and 'Z' designations refer to the letter of the alphabet formed by the twist in the yarn. 'S-direction' spun yarns were spun to the left (anti-clockwise), with the whorl mounted on the top of the spindle. The strongest yarns are those spun in one direction and then plied in the other, the most common in the E Mediterranean world being 'S-direction' spun yarns being plied in the 'Z-direction'. Most examples of yarns spun with this technique date from the L6<sup>th</sup> Ct onward. The yarns published here are spun in the 'S-direction', as might be expected.

**2005.7.1** (Fig. 13). Tapestry square (tabula) with *canthares* and foliate design, made of unbleached linen and dyed wool. 220mm x 220mm. From Akhmîm, Egypt,  $4^{th}-6^{th}$  Ct AD.

This is a tapestry square cut-out with a design principally executed in russet-coloured wool on an unbleached linen background. The only deviation from this is a small central circle in yellow wool, probably intended to represent gold. The design comprises a central square (84mm x 84mm) with 4 decorative borders.

The central yellow circle (di. 7mm) is framed by an octagon or star formed by the roots of 4 stylized trees. Each tree trunk runs at 45 degrees to the corners of the square and each tree has



13. Tapestry square with canthares and foliate design (2005.7.1)

3 trefoils (representing leaves), extending to the limits of the square. The roots of the trees emerge from 4 ornamental vases (*canthares*), one of which is located centrally along each side of the square.

The square itself is bordered by a solid russet-coloured line. This, in turn, is bordered by a 4-strand interlace or cable border in the flying shuttle technique. Another solid russet-coloured line frames this interlace border. Finally, the whole design is bordered by 4 vine scrolls with alternating trefoils and tendrils, one on each side of the square. Each vine scroll protrudes from a *canthare* similar to those found within the square itself.

The textile is produced in finely spun linen and wool and does not appear to be shrunken, although the weave is slightly distorted in places. The square is intact, although approximately ¼ of the wool wefts are worn completely away, leaving a triangular area comprised only of unbleached linen warps and wefts.

The canthare with vine tendrils emerging from its neck is a very common motif in textiles from Egypt. Analogous tapestry squares, also from Akhmîm, are found in several museums, with a close comparison at the Textile Museum in Washington DC (71.119): J. Trilling, Roman Heritage: Textiles from Egypt and the Eastern Mediterranean, 300 to 600 AD (Washington DC, The Textile Museum, 1982). The same overall design can also be found superimposed on another square, so as to form an 8-pointed star, as, for example, at the Ashmolean Museum, Oxford (1888.744) and the Cluny Museum, Paris (13162): A. Lorquin, Les Tissus coptes au Musée national du Moyen Age, Thermes de Cluny: catalogue des étoffes égyptiennes de lin et de laine de l'Antiquité tardive aux premiers siècles de l'Islam (Paris, Réunion des musées nationaux, 1992), 76, no. 11. In the latter example the canthare motif is almost identical in form and size to those forming the central part of this fragment. In other cases, a much more simplified version appears, as in an example in the Victoria and Albert Museum (203-1891): A.F. Kendrick, Catalogue of Textiles from Burying-Grounds in Egypt I (London, HMSO, 1922), 120, no. 281. The canthare also appears as a motif in its own right, as, for example, in the Österreichisches Museum für Angewandte Kunst in Vienna (T. 661-1883): P. Noever and A. Völker, Fragile Remnants: Egyptian Textiles of Late Antiquity and Early Islam (Vienna, Österreichisches Museum für Angewandte Kunst, 1994), 140,

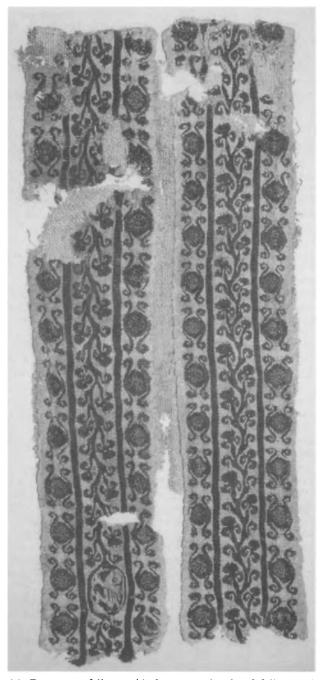
Technical details. Base fabric. None.

A. Ground weave. Warp: unbleached linen, S-direction spin, approximately 14 threads per cm. Weft: unbleached linen, S-direction spun, approximately 15 threads per cm. Weave: simple tabby (1/1).

B. Tapestry areas. Tapestry weave. Warp: unbleached linen, S-direction spin, approximately 20 threads per cm. Weft: unbleached linen, S-direction spin. Russet-coloured and yellow wool, S-direction spin. Ribs per cm: 7. Weave: weft-faced tabby; tapestry woven on 3 warp threads. Special techniques: interlace design and finer details of the *canthares* produced by the 'flying shuttle' technique in one single thread of unbleached flax; 'split tapestry'; dovetailing; wrapping around one warp thread and vertical weft brocading

**2005.7.4** (**Fig. 14**). Fragment of linen with 2 tapestry bands (*clavi*) of foliate and zoomorphic design, made of unbleached linen and dyed wool. 117mm x 290mm. From Akhmîm, Egypt; probably  $5^{th}$ – $7^{th}$  Ct AD.

The textile fragment consists of 2 matching tapestry bands (clavi) stitched parallel to each other on a base fabric of plain tabby weave in unbleached linen. Each band incorporates a central row of repeating vine scroll with alternating trefoils and



14. Fragment of linen with 2 tapestry bands of foliate and zoomorphic design (2005.7.4)

tendrils in brown-purple and brown-black wool. These are flanked on each side by a solid line, one of brown-purple wool and the other of brown-black wool. The solid lines are, in turn, flanked by a row of repeating small brown-purple circles, each enveloped by 2 brown-black scrolls and each filled with a small brown-black dot.

The patterns of the 2 bands are almost identical to each other, suggesting that they were woven as one piece. A stylized zoomorphic motif (possibly a bird) enclosed in an oval appears on one of the bands. The oval merges at each end into the main vine scroll. This band also has 2 possible slits (up to 20mm *l*.)

spaced 150mm apart and placed perpendicular to the long side of the band. These are 67mm and 217mm respectively from the hemmed edge. In other respects the 2 bands are identical.

The main design is produced in 2 shades of wool, now appearing brown-purple and brown-black, on a background of unbleached linen. In addition, the lips of the stylized zoomorphic motif are comprised of some 3 or 4 stitches in fine red wool.

The tapestry bands are stitched to the backing in such a way that the horizontal vine scroll pattern runs in opposite directions. The longest sides of each band have been turned under at their edges and tacked to the base fabric with a loose running stitch, before being secured with a simple left-slanting overstitch. On one short side of the fragment the ends of each band are turned under and fastened to the backcloth with overstitch, forming a simple hem. There is no indication of similar hemming on the base fabric itself.

The fragment is produced in extremely fine wool and linen threads. It is in good condition, although some fibres are heavily stained, possibly with body fluids. The weave is distorted.

A vine scroll design analogous to that on the Ure piece, albeit without accompanying zoomorphic motif, is found on a fragment of band, dated to the 5<sup>th</sup> Ct, which is now at Bologna (487): F. Ghiggini, *Tessuti Copti: La Collezione del Museo Storici Didattico della Tappezzeria* (Bologna, CLUEB, 2000), 64–65, no. 30. Yet more examples, this time with zoomorphic motifs, can be found in the Victoria and Albert Museum (T41-1936) and the Brooklyn Museum (08.480.52): D. Thompson, *Coptic Textiles in the Brooklyn Museum* (New York, The Brooklyn Museum, 1971), 34, no. 12. A crudely-executed design of a vine scroll incorporating a zoomorphic motif inside an oval can be found at Bargello (596D/F): P. Peri (ed.), *Tessuti copti nelle collezioni del Museo del Bargello* (Florence, Associazione amici del Bargello, 1996).

It is possible that the tapestry band is older than the base fabric on which it is stitched and that the fragment is an example of the reuse of textiles in dress ornamentation. Such practices are known from Byz Egypt, although it is unlikely that the tapestry bands would be more than a few decades older than the base fabric to which they were stitched.

Technical details. Base fabric. Dimensions: approximately 117mm x 290mm. Warp: unbleached linen, S-direction spin, approximately 13 threads per cm. Weft: unbleached linen, S-direction spin, approximately 17 threads per cm. Weave: simple tabby (1/1).

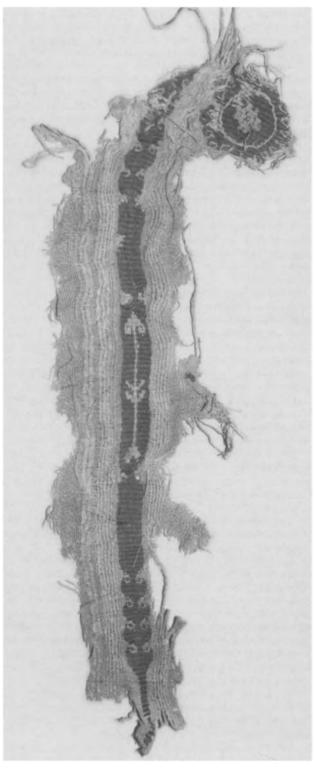
A. Ground weave. None.

B. Tapestry areas. Tapestry weave. Warp: unbleached linen, S-direction spin, approximately 16 threads per cm. Weft: unbleached linen, S-direction spin. Purple and 'brown-black' wool, S-direction spin, Z-direction ply. Weave: weft-faced tabby; tapestry woven on one or 2 warp threads. Ribs per cm: 14. Special techniques: flying shuttle technique; dovetailing.

**2005.7.10** (Fig. 15). Fragment of linen textile incorporating a small medallion motif and band, made of unbleached linen and dyed wool. Approximately 170mm x 35mm. Provenance unknown; probably 5<sup>th</sup>-6<sup>th</sup> Ct AD.

A fragment (probably from an unbleached linen tunic) comprising a narrow band (*clavus*) and a medallion (possibly part of another *clavus*) on a ground weave of plain tabby executed in finely spun unbleached linen thread.

The band comprises a series of 3 elongated lozenges joined by narrow necks. These are worked in red wool against a plain unbleached linen background. At each end of the fragment the band takes the form of 4 red trefoil motifs, each joined to the other. The central lozenge is decorated with 2 small white motifs: a heart and a trefoil. They are joined by a thin white (unbleached linen) line with 2 arrows at its centre. The small red medallion has a wave crest border, also in red wool, and a leaf motif in unbleached linen in its centre.



15. Fragment of linen textile incorporating a small medallion and band (2005.7.10)

The ground weave has areas of 'self-banding' (also in unbleached linen threads) on either side of the red wool band. This technique was often used in LRom and Byz weaving to draw attention to adjacent areas of decoration or to the edge of a garment without the introduction of colour. It involves multiple picks of weft being inserted without changing the position of the heddle. Ordinarily, in plain tabby weave the position of the heddle would be changed after every passage of the shuttle. In this example thicker weft threads have also been inserted to produce more variety and texture in the design.

The piece is in fair condition; the medallion is attached to the rest of the fragment by only a few threads.

Analogous textiles are held by the Musée de Mariemont (DM96) and the Textile Museum, Washington DC (72.165). See A. Azzam and M.-C. Bruwier, Égyptiennes Étoffes coptes du Nil (Mariemont, Musée de Mariemont, 1997), 176, pl. 58; J. Trilling, Roman Heritage: Textiles from Egypt and the Eastern Mediterranean, 300 to 600 AD (Washington DC, The Textile Museum, 1982), 34, pl. 5. See also A. de Moor (ed.), Coptic Textiles from Private Flemish Collections (Zottegem, Provinciaal Archeologisch Museum van Zuid-Oost-Vlaanderen, 1993), 198. Another comparative piece was excavated from grave 433 at Antinoë in the first decade of the 20th Ct and is now in Haute-Alsace (965.157.1-8): M. Rassart-Debergh, Textiles d'Antioé (Égypte) en Haute-Alsace (Colmar, Muséum d'Histoire Naturelle de Colmar, 1997), 95, 141, fig. 120.

Technical details. Base fabric. None.

A. Ground weave. Warp: unbleached linen, S-direction spin, approximately 21 threads per cm. Weft: unbleached linen, S-direction spin, approximately 22 threads per cm. Weave: simple tabby weave (1/1). Other features: the *clavus* is flanked on one side by a narrow (3mm) area of 5–6 self-bands in unbleached linen.

B. Tapestry areas. Tapestry weave. Warp: unbleached linen, S-direction spin, approximately 18 threads per cm. Weft: unbleached linen, S-direction spin. Red wool, S-direction spin. Weave: tapestry weave; tapestry woven over 2 warp threads. Ribs per cm: 9. Special techniques: dovetailing; self-banding; wrapping around one warp thread.

**2005.7.11** (**Fig. 16**). Fragment of textile with darned areas, made of dyed wool and unbleached linen. Approximately 150mm x 110mm. Provenance unknown; probably  $8^{th}$ – $10^{th}$  Ct AD.

This is a fragment of weft-faced tabby comprising brownyellow wool and blue-red wool wefts woven over unbleached linen warp threads. It is possible that the blue-red wool is a form of 'optical purple'.

The piece incorporates areas which appear to have been strengthened or repaired by darning, achieved with inlaid threads. These are thicker weft threads laid over the top of pre-existing weft threads, so that they are visible only on the front of the textile and do not appear on the reverse side except where there is a change in their direction. The inlaid threads are comprised of 2-ply yellow-brown wool, spun in the S-direction and plied in the Z-direction, so as to produce an optimally stable and durable thread.

The extant fragment appears to have been part of a much larger textile and it is not possible to reconstruct the pattern, although it appears to have been comprised of a series of rectangles or squares. It is in good condition.

Published comparisons are rare, but this may represent the tendency of museums to accept and to publish those pieces with higher art historical than archaeological value. The appearance of fragments analogous to this may have caused them to be

selected against and thus to appear missing from the published record. An exception is the child's tunic in the Whitworth Art Gallery, which has darning in at least 10 different colour threads (T.8505): F. Pritchard, Clothing Culture: Dress in Egypt in the First Millennium AD (Manchester, Whitworth Art Gallery, 2006), 40, fig. 3.14.

Technical details. Base fabric. None.

A. Ground weave. Warp: unbleached linen, S-direction spin, approximately 9 threads per cm. Weft: blue-red wool, S-direction spin, Z-direction ply. Brown-yellow wool, S-direction spin, Z-direction ply. Weave: weft-faced tabby; tapestry woven over one warp thread. Ribs per cm: 9.

B. Darned areas. Warp: yellow-brown wool, S-direction spin, Z-direction ply. Weft: yellow-brown wool, S-direction spin, Z-direction ply. Special techniques: inlaid threads or darning.

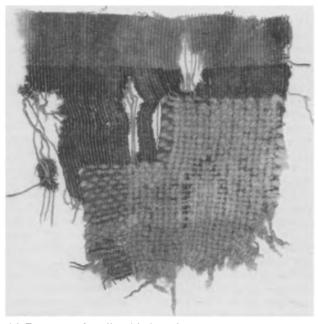
**2005.7.12** (Fig. 17). Fragment of purple tapestry with geometric design, made of unbleached linen and 'blue-purple' wool. Approximately 120mm x 125mm. Provenance unknown; probably  $7^{th}-9^{th}$  Ct AD.

Fragment of a probable band (clavus). The ground weave is worked in a blend of blue and red wool, plied together to produce the effect of purple. This is a well-known technique, with a resultant effect often described as 'optical purple'. Different coloured yarns were regularly combined to produce a greater variety of shades. The use of blue dyed wool in background weaves has also been associated with Persian or Persian-influenced textiles.

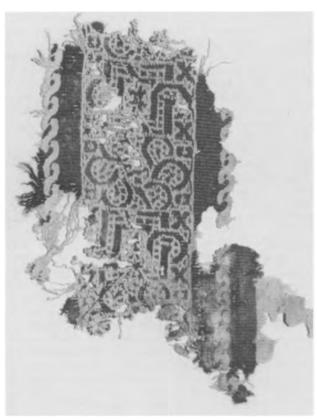
The central design on this fragment comprises a series of interconnecting circles and scrolls, sometimes linked by vertical lines executed in vertical weft brocading. A running wave crest motif in unbleached linen thread borders one length of the band.

There is an analogous textile fragment in the Ashmolean Museum, Oxford (1956.702), also worked in a blend of blue and red wool that combines to produce the effect of purple. This fragment, too, is without provenance.

Technical details. Base fabric. None.



16. Fragment of textile with darned areas (2005.7.11)



17. Fragment of purple tapestry with geometric design (2005.7.12)

A. Ground weave. Warp: blue-red wool, S-direction spin, Z-direction ply, approximately 10 threads per cm. Weft: blue-red wool, S-direction spin, Z-direction ply, approximately 18 threads per cm. Weave: weft-faced tabby. Other features: none.

B. Tapestry areas. Tapestry weave. Warp: unbleached linen, S-direction spin, approximately 8 threads per cm. Weft: unbleached linen, S-direction spin. Blue-red wool, S-direction spin, Z-direction ply. Weave: weft-faced tabby; tapestry woven over one warp. Ribs per cm: 8. Special techniques: wrapping around one warp thread.

**2005.7.13** (**Fig. 18**). Fragment of tapestry with geometric design, probably from a band (*clavus*) or square, in brown-purple wool and unbleached linen. Approximately 35mm x 156mm. Provenance unknown; probably 7<sup>th</sup>–9<sup>th</sup> Ct AD.

A solid line in unbleached linen appears on 3 sides of the fragment. On one side of the line there is a zigzag motif, while on the other there is a geometric design consisting of diagonal lines and small flowers or petals of red wool. The design is executed in unbleached linen threads on a brown-purple background.

There is one selvedge edge, indicating that this is the transverse edge of the textile as woven on the loom. A zigzag motif runs alongside the selvedge, bordered by the solid line in unbleached linen.

The side of the fragment running perpendicular to the selvedge has been turned under and hemmed with whiplash or overstitch. A single stitch in pink-red wool is appended to this edge, suggesting that the fragment was, at some stage, sewn to a pink-red textile of unknown form and size.



18. Fragment of tapestry with geometric design (2005.7.13)

Comparisons include a fragment of tapestry in the Victoria and Albert Museum (481-1889) and another in Liverpool Museum (56.20.799): A.F. Kendrick, Catalogue of Textiles from Burying-Grounds in Egypt I (London, HMSO, 1922), 85, no. 85; M. Seagroatt, Coptic Weaves: Notes on the Collection of Coptic Textiles in the Merseyside County Museums (Liverpool, Merseyside County Museum, 1965), 37, pl. 18; M. Seagroat, 'The Coptic textile collection' Liverpool Bulletin 10 (1961–1962). Both of these were excavated in the Fayum area, although an origin in Syria or Anatolia has been suggested for the Victoria and Albert Museum textile. The Louvre has more comparative pieces. See P. du Bourguet, Catalogues des étoffes coptes du musée du Louvre (Paris, Éditions des musées nationaux, 1964), 337 (F239). A fragment of tunic from Antinoë in the Museo Nazionale di Ravenna has a cuff bordered in an analogous tapestry weave, albeit with a slightly different decorative pattern (2465): C. Rizzardi, I Tessuti Copti del Museo Nazionale di Ravenna (Ravenna, Istituto Poligrafico e Zecca dello Stato, 1993), 108-09, pl. 44. This might suggest a similar purpose for the Ure fragment. Another comparative fragment from Antinoë is now in Haute-Alsace (Eg. Cpt.176): M. Rassart-Debergh, Textiles d'Antioé (Égypte) en Haute-Alsace (Colmar, Muséum d'Histoire Naturelle de Colmar, 1997), 160, fig. 253.

Technical details. Base fabric. None.

- A. Ground weave. None.
- B. Tapestry areas. Tapestry weave. Warp: unbleached linen, S-direction spin. Brown-purple wool, S-direction spin, Z-direction ply. Approximately 16 threads per cm. Weft: brown-purple wool, S-direction spin, Z-direction ply. Weave: plain tabby; tapestry woven over 2 warp threads. Ribs per cm: N/A. Special techniques: 'inlaid' or 'floating' wefts.

# **NOTES**

- Exceptions include textiles from private collections in Belgium and the Whitworth Art Gallery at the University of Manchester: M. van Strydonck, K. van der Borg and A. de Jong, 'The dating of Coptic textiles by radiocarbon analysis' in A. de Moor (ed.), Coptic Textiles from Private Flemish Collections (Zottegem, Provinciaal Archeologisch Museum van Zuid-Oost-Vlaanderen, 1993), 65–71; F. Pritchard, Clothing Culture: Dress in Egypt in the First Millennium AD (Manchester, Whitworth Art Gallery, 2006), 13–25.
- <sup>2</sup> A. Paetz gen. Schieck, *Die Koptischen Textilien: Gewebe und Gewänder des ersten Jahrtausends aus Ägypten* (Cologne, Kolumba, 2005), 10.
- <sup>3</sup> M. van Strydonck, K. van der Borg and A. de Jong, 'The dating of Coptic textiles by radiocarbon analysis' in A. de Moor (ed.), *Coptic Textiles from Private Flemish Collections* (Zottegem, Provinciaal Archeologisch Museum van Zuid-Oost-Vlaanderen, 1993), 65–71
- <sup>4</sup> J. Wouters, 'Dye analysis of Coptic textiles' in A. de Moor (ed.), *Coptic Textiles from Private Flemish Collections* (Zottegem, Provinciaal Archeologisch Museum van Zuid-Oost-Vlaanderen, 1993), 53–65.
- <sup>5</sup> O.F.A. Meinardus, *Two Thousand Years of Coptic Christianity* (Cairo, The American University in Cairo Press, 1999), 9.

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# **ABBREVIATIONS**

Chrono	logy:								
Ar	Archaic	H	Helladic		E	early	L	late	
BA	Bronze Age	Hel	Hellenisti	c	M	middle	F	final	
Byz	Byzantine	M	Minoan		anc.	ancient			
CA	Cypro-Archaic	Med	Medieval		mod.	modern			
CC	Cypro-Classical	Mes	Mesolithie	c					
CG	Cypro-Geometric	Myc	Mycenaea	ın	Also used in combination, e.g.:				
Chal	Chalcolithic	Neo	Neolithic		PGeo	Proto Geometric			
Cl	Classical	Or	Orientaliz	ing	MBA	Middle Bron	nze Age		
Ch	Christian	Ot	Ottoman	U			J		
Cor	Corinthian	P	Proto		Potterv	decoration:			
Cyc	Cycladic	Pal	Palaeolith	ic	bf	black figure			
ΕĬΑ	Early Iron Age	PH	Prehistori		bg	black glaze			
Geo	Geometric	Rom	Roman		rf	red figure			
Gr	Greek	Ven	Venetian		wg	white groun	d		
<b>0.</b>	51 <b>5</b> 01		. • •		8	William Brown	_		
Special	ized Ephoreias:				Compass points:				
EBA	Ephoreia of Byzantine Ar	ntiquities			NSE	W and combin	ations thereo	$\mathbf{f}$	
<b>EMA</b>	Ephoreia of Maritime Antiquities								
<b>EPCA</b>	Ephoreia of Prehistoric a	nd Classi	ical Antiqui	ties	Measurements:				
EPSNE	Ephoreia of Palaeoanthro	pology a	nd Spelaeol	logy for	asl	above sea level			
	Southern Greece				d.	depth/deep			
EPSVE Ephoreia of Palaeoanthropology and Spelaeology for					di.	diameter			
	Northern Greece				h.	height/high			
					ha	hectare			
Instituti	ions:				l.	length/long			
ASA	Archaeological Society a	t Athens			m	metre			
ASCSA	A American School of Clas		dies at Athe	ns	w.	width/wide			
BSA	British School at Athens								
DAI	Deutsche Archäologische	Institut			Other:				
EFA	_					century			
SAIA						terminus ante quem			
TAP	Archaeological Receipts				taq tpq	terminus post quem			
					7.7	<i>p</i>	<b>.</b>		
	raphical:								
AA	Archäologischer Anzeiger AR				Archaeological Reports				
AAA	Athens Annals of Archaeology BCH			Bulletin de correspondence hellénique					
ADelt	$Archaiologikon\ Deltion\ (Chr = Chronika) \qquad BSA$				Annual of the British School at Athens				
AE	Archaiologiki Ephemeris	Deltion tis Christianikis Archaiologikis							
	MTh Archaiologiko Ergo sti Makedonia kai Thraki					Etaireias			
AJA	ů Si					Jahrbuch des Deutschen Archäologischen			
AKunst	AKunst Antike Kunst Instituts								
AM	AM Mitteilungen des Deutschen Archäologischen JHS .					Journal of Hellenic Studies			
	Instituts, Athenische Abteilung PAE					Praktika tis en Athinais Archaiologikis			

# Greek place-names:

The spelling of anc. site-names usually follows the standard transliteration of ancient Greek:  $\alpha/a$   $\beta/b$   $\gamma/g$   $(\gamma\gamma/ng)$   $\gamma\kappa/nk$   $\gamma\xi/nx$   $\gamma\chi/nch)$   $\delta/d$   $\epsilon/e$   $\zeta/z$   $\eta/e$   $\theta/th$  t/i  $\kappa/k$   $\lambda/l$   $\mu/m$   $(\mu\beta/b$   $\mu\pi/b)$   $\nu/n$  o/o  $\pi/p$   $\rho/r$   $\sigma,\varsigma/s$   $\tau/t$  t/u (or y)  $\phi/ph$   $\chi/ch$   $\psi/ps$   $\omega/o$ . Exceptions to the rule are made where anglicised place-names are very well established. By contrast, transliterations of modern Greek personal- and place-names follow the modern convention.

Etaireias

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