15km away, with the superstructure in brick and covered in plaster made from a mixture of Theran earth (used here for the first time), lime and grit, with a variety of colours including blue, red and ochre. The marble threshold blocks of the entrance were preserved in situ; stone members collapsed from above, which imitate window shutters and Ionic columns, permit a full reconstruction of the façade, including the 1st floor which must have held the women's and sleeping quarters. The roof was tiled in the Corinthian system. A separate block held the kitchens and related facilities. Construction began in 350 BC and is believed to have taken 10-12 years, forming part of a wider building programme under Philip II which also included, for example, the theatre. Dr Kottaridou develops a case for the identification of Pytheos as the architect of the building, noting comparisons with the Mausoleum at Halikarnassos and the Temple of Athena at Priene: the impact of Pythagorean mathematics on the design of the building is emphasized.

CENTRAL MACEDONIA

Nomos of Pieria (27th EPCA: 9th EBA)

Adrianos, Kastro. S. Gimatzidis (27th EPCA) and R. Jung (DAI) report (Pierikoi Antilaloi [11/04/08]) on a trial excavation on this extensive (ca. 1.4ha) multi-period hill settlement by the river Mavroneri (anc. Aison), close to Katerini. Three cemeteries probably related to this settlement are noted: one at Adrianos (Cl-Hel), another ca. 2-3km to the W (of the same period) and the third very close by, which is probably EIA in date. Excavation in the settlement revealed EBA activity in the lowest levels (on the basis of pottery, some datable to EHII, rather than architecture), followed by LBA (with handmade pottery of fine quality, burnished and matt-painted, although no evidence of production in the Myc tradition). Architectural remains appear in the EIA: in the lower part of the settlement, an artificial terrace (more than 0.5m d.) may have been intended to support large pithoi. Above this was a wall (of mud-brick on a stone foundation), inside which were found more than 10 loomweights. While the pottery found in these levels does not permit close dating, both the terrace and the wall can be generally characterized as LPGeo-SubPGeo. Scattered sherds indicate that activity continued in the later phases of the EIA, and the surface level (which lies directly over the LPGeo features) includes pottery and coins of the LAr-Hel period, when it seems that settlement was on a large scale. A very few Byz sherds and coins were also found.

Finally, the authors note the chance discovery in 2005, during the opening of a water channel, of a closed EIA tomb assemblage at **Moschochori**, 5km W of the Kastro by the river Mavroneri. The burial was reported to be an extended inhumation, and to contain, in addition to a handmade kantharos, gold spirals and a large quantity of bronze jewellery (fibulae, beads, pendants and 3 bracelets). The assemblage has been handed over to the local authorities.

Nomos of Thessaloniki (16th EPCA: 9th EBA)

Thessaloniki, metro excavations

A Ministry of Culture press release (11/09/08), which details progress to date on the excavation programme conducted by the 16th EPCA under the direction of L. Acheilara, is widely cited in the Greek press: see, for example, *Eleftherotypia* (28/09/08),

To Vima, Ethnos and Apogevmatini (12/09/08). The following synopsis is drawn directly from this press release: the grave totals cited below thus update those given for the same sites in AR 54 (2007–2008), 74.

Work is reported at: the Neos Sidirodromikos Stathmos (i.e. the metro station linked to the city's New Railway Station); the Sintrivani, Panepistimio and Eukleides metro stations; and the interchange for Sintrivani station which is located S of the central library of the Aristotelian University. In total, 1,414 tombs from the E and W cemeteries of the city have been uncovered since the start of excavation in 2007, of which 21.3% include grave goods; architectural remains (walls, water channels, floors and kilns) have also been found. Archaeological findings so far confirm the current understanding of the topography of anc. Thessaloniki as based on previous rescue excavations conducted by the 16th EPCA and on preparatory work for the metro.

Neos Sidirodromikos Stathmos. Excavation initially focused on the E part of the station boundaries (an area of 1,350m²) and specifically on the area of the entry shaft for the tunnel-boring machine. Ninety four tombs were revealed, bounded to the N by 4 distinct peribolos walls oriented NW-SE, which were revealed at a d. of 3–5.5m beneath the mod. surface. A rich variety of tomb types was revealed (funerary monuments, built-chamber tombs, cist and pit graves, tile graves, enchytrismoi and altar-like structures of unworked stones which mark graves), which mostly contain inhumations, with a few instances of cremation and secondary reburial. Fifty eight of these contained ceramic or glass vessels, bronze coins, gold and bronze jewellery, gold danakes, and bone and metal artefacts. This part of the W cemetery was in use from the Hel–LRom period.

Excavation in this area is now complete. A further area of ca. $2,500\text{m}^2$ has been opened in the W part of the station area, at the front of the station forecourt. At a d. of 2-2.8m, 4 potters' kilns were found, with a dump area for broken tiles, wasters and discarded clay. This area, outside the W city wall, was known as the Potters' Field due to the presence of many ceramic workshops. (Further details are noted in *Eleftherotypia* [22/08/08], without attribution to source: the largest kiln, 5m l. and 3.5m w, is dated to the ECh period and described as used for the production of tiles and bricks; a smaller kiln nearby is dated to the 4^{th} Ct AD.)

Agia Sophia. *Ta Nea* (08/04/08) reports the decision by the Central Archaeological Council to rebury a mosaic pavement discovered close to this station.

Sintrivani. Excavation took place in 3 areas, revealing tombs of the Hel-LRom period.

During removal of the network of public utilities outside the station boundary, 109 tombs were uncovered, of different types (chamber tombs, tile graves, pit graves without covers, enchytrismoi, vaulted tombs, stone- or brick-built cists, altarlike constructions of unworked stones which mark simple pits or orthogonal repositories and a group of 5 vaulted chambers). Inhumation is the dominant rite, though there are several instances of multiple inhumations, secondary reburial and cremation. Forty five tombs contained grave goods (pottery and glass vessels, bronze coins and gold danakes, terracotta figurines, bone pins, daggers, and gold and bronze jewellery). In the same area were found sections of wall and water channels.

During construction of the perimeter wall of the station, in front of the Children's Refuge, a total of 178 tombs were found, of various types (chamber tombs, tile graves, pit graves, enchytrismoi, vaulted tombs, stone-built tombs, altar-like structures and cists), including 6 small monolithic marble



90. Thessaloniki, metro excavations: Sintrivani station interchange, cemetery.

sarcophagi or ossuaries of Rom date. Inhumation was the dominant rite, but there were also examples of double and multiple burials, secondary reburial and cremation. Seventy tombs contained grave goods (clay and glass vessels, bronze coins, gold, silver and bronze jewellery, and terracotta figurines). Part of a building with a mosaic pavement and partially preserved sections of wall and water channel were also recovered. The density of the tombs and the fact that they encroach on each other indicate the intensity of the use of this area over a long period of time, from the 3rd Ct BC to the 4th Ct AD.

At the Sintrivani station interchange, S of the Aristotelian University library, an area of 2,842.75m² was opened, revealing a total of 1,028 tombs, the most from any metro site (Fig. 90). Types include pits without covers, free burials, tile graves (in simple form or with cover tiles), cists, vaulted tombs and enchytrismoi. In addition, building materials from one construction and parts of others, and storage pits of mod. times were found. The most common forms of grave are free burials and pits either covered with schist slabs or uncovered. One hundred and twenty eight graves (12.5%) contained goods, consisting of clay vases and tear-bottles, bronze coins, bronze and gold jewellery, shells, bone and glass astragaloi, and iron and bronze items. The majority is Rom, but 35 items date to the Hel period. Among the Hel graves are noted: a stone ossuary (Tφ746) which held the burnt bones of a human and a small mammal, a gold wreath of oak leaves and a clay tear-bottle; and a cist grave $T\phi 840$ (previously reported in AR 54 [2007–2008], 74) which contained the remains of a wooden bier, plus 4 gold wreaths of olive leaves, jewellery, a gold danake, gold thread, a bronze coin, bronze mirror, and 1 bronze and 7 pottery vessels.

At 2 further stations, work is in preliminary stages. At **Panepistimiou** station, work to move the network of public utilities was completed without encountering archaeological remains. At **Eukleides** station, between Constantinoupolis Street and Papanastasios Street, initial work to move the network of public services and sink 3 boreholes revealed partially preserved building remains of the LOt period and, in one of the boreholes, a marble architectural member. Landscaping of the general area of the work-site revealed part of a mod. building (walls and water pipes), probably a stable, of the L19th–E20th Ct.

Angeloforos (01/02/09) reports the discovery by the 9th EBA at the **Venizelos** station, at a *d.* of 4.1m below the mod. surface, of MByz–LByz (12th to first half of the 15th Ct AD) levels containing building remains (floors, walls and wells) and much pottery.

Thessaloniki, city centre

Eleftheros Typos (05/08/08) and Ta Nea (06/08/08) report analyses conducted by C. Papageorgopoulou (Zurich) on the body of a woman in a sarcophagus dating to ca. 300 AD, discovered in 1962 in the E cemetery of the city. The body, of a tall woman 50–60 years old and of high status (covered by a purple-dyed, gold-ornamented silk cloth), was embalmed using a mixture of resin, myrrh, olive and aromatic substances – the earliest attestation of this practice in Greece. The body was then placed in cotton and linen wrappings and laid on a wooden palette inside the sarcophagus. Shreds of skin, hair, reddish eyebrows, arm muscle etc. are preserved in very fragile condition, in addition to the skeleton.

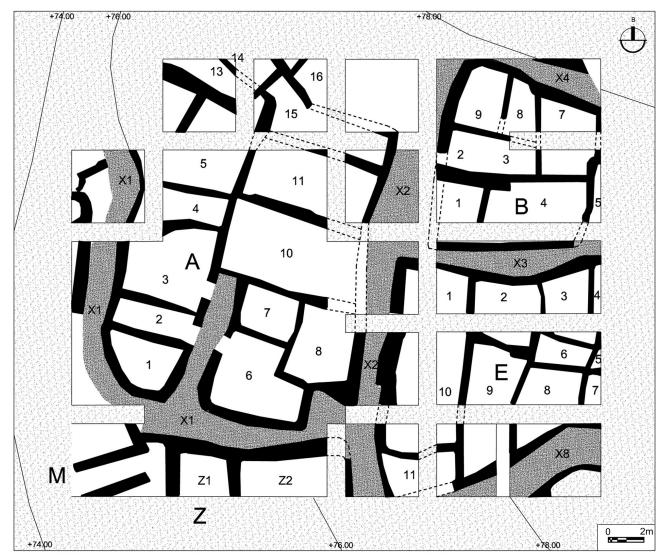
Thessaloniki, E. of centre

Thessaloniki, Toumba. S. Andreou (Aristotelian University, Thessaloniki) presents an overview of continuing study following excavations which took place between 1984 and 1998, and again from 2006–2008. The goal of the latter phase of excavation was a close understanding of the settlement from the end of the BA and the transition to the EIA.

Study of old excavation material revealed that the earliest occupation on the slopes of the Toumba spans the MH period (building phases 14–9) and is characterized by monochrome pottery in a significant variety of shapes. With the start of the LH (phases 8–6), settlement was confined to the upper terraces, and the pottery enriched with a small number of decorated vases (with incised decoration in phase 7 and in phase 6, incised and matt-painted examples and one LHII Myc sherd). Primary studies of the pottery are: K. Psaraki, Υλική και κοινωνική διάσταση του στιλ της κεραμικής: η χειροποίητη κεραμική της εποχής χαλκού από την Τούμπα της Θεσσαλονίκης (PhD thesis, Aristotelian University, Thessaloniki 2004; http://cds.lib.auth.gr//archive.shtml?base=Griza&id=gri-2004-444); S. Andreou and K. Psaraki,

'Tradition and innovation in the Bronze Age pottery of the Thessaloniki Toumba', in M. Stefanovich, H. Todorova and G. Ivanov (eds), *The Struma/Strymon River Valley in Prehistory. Proceedings of the International Symposium 'Strymon Prehistoricus'*, 27 September to 10 October 2004. Blagoevgrad (Sofia, Gerda Henkel Stiftung 2007), 397–420.

The plan of the settlement on the top of the Toumba (**Fig. 91**), with narrow cobbled streets between multi-roomed mudbrick complexes, remained stable throughout the later stages of the LBA (phase 2A). LHIIIB wheelmade vessels remained few in phase 5, but wheelmade pottery was much more common in phases 4–2A (LHIIIC E and M in the 4 subphases of phase 4, LHIIIC M and L and perhaps SubMyc in phases 3 and 2B, and EPGeo with concentric circle decoration in phase 2A). See S. Andreou, 'Stratified wheelmade pottery deposits and absolute chronology of the LBA to the EIA transition at Thessaloniki Toumba', in S. Deger-Jalkotzy and A. Bächle (eds), *LH III C Late and the Transition to the Early Iron Age. International Workshop Organized by the Österreichische Akademie der Wissenschaften.* 23-24.2.2007 (Vienna, Österreichische Akademie der Wissenschaften forthcoming), 15–40.



91. Thessaloniki, Toumba: the settlement on top of the tell.

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From 2006 onwards, excavation focused on uncovering building complexes B and E on the E part of the hill, of which only small parts were previously known. The aim was a better understanding of changes in the organization of the settlement and in these particular complexes during phases 4–2A, via comparison between the 2 new buildings and complex A, which was almost completely excavated between 1985 and 1998 (this consists of more than 15 rooms and covers an area of some 230m²). A further aim of this excavation was better understanding of the transition to the EIA through the location of stratified assemblages of phases 3, 2B and 2A, which are rare or completely absent from complex A and the other areas of the previous excavations.

Non-joining parts of well-built stone foundations which are associated with fill containing Ar and Cl pottery, domestic material and animal bone, although with no secure link to particular floor levels, were partially uncovered in the surface level. This appears to be the abandonment and destruction layer of 2 or 3 houses which were built during the 2nd half of the 6th Ct and into the M5th Ct. An irregularly shaped pit (maximum di. 5m, d. 1.5m), which was perhaps intended to hold material with which to make brick for later houses, destroyed older walls and fills back to the end of the LBA in the SE part of building B. It contains building material and pottery of the end of the 5th and the E4th Cts.

The walls of the Ar and Cl periods sit directly on, or have partially destroyed, the walls and fills of the later phases of complexes B and E, complexes which are bounded on 3 sides by roads which divide them from each other and from the other buildings located to the S and N (Fig. 91). The building techniques, and the extent and spatial organization of complexes B and E (to date, 7 and 11 rooms or spaces, respectively, have been excavated), show similarities with complex A. Successive rebuilding, floors and stratified fills of the end of the LBA and beginning of the EIA have been located in both complexes (phases 2A–4A).

The fills associated with the latest construction phase of the foundations of complex B are disturbed. However the floors in rooms B7–B9 are preserved (ca. 2.15–2.20m d.), as well as part of the fill of the immediately preceding phase, which is linked to the first appearance of several EPGeo closed vessels and skyphoi decorated with concentric circles (phase 2A), the presence of bone and stone tools, and the debris of stoneworking. A large pithos stood in situ in room B9 and room B7 contained traces of constructions for heating. Remains of this period were less well preserved in rooms B2–B4, which had previously been partially excavated.

A floor of the immediately preceding phase (2B) with LHIIIC L wheelmade pottery, which can be easily distinguished in rooms B2/3 of the older excavations, was traced only in area B9. This is due to the fact that in the course of phase 3, the NW part of the building complex (B9) was demolished and reused only in the 2nd half of phase 2B (traces of use are found at a d. of ca. 2.5m). Notable fills of phase 3 (floors at a d. of ca. 3.3m) have so far been located only in the S part of the building (B4), where 2 very regular shallow pits probably indicate the existence of 2 more baskets next to one of which traces were clearly visible in the 1990 excavation, plus a pithos which remained in position from phase 4. A notable quantity of fragmentary murex shells, which must be linked to the production of purple dye in B2/3, complete the picture from the older excavations of phase 3. For a study of this dye production, see R. Veropoulidou, S. Andreou and K. Kotsakis, 'Small scale purple-dye production in the Bronze Age of Northern Greece: The evidence from the Thessaloniki Toumba', in C. Afrano and L. Karali (eds), Vestidios, Textiles y Tintes. Estudios Sobre la Produccion de Bienes de Consume en la Antiguedad. Actas del II Symposium Internacional Sobre Textiles y Tintes del Mediterraneo en el Mundo Antiguo (Atenas, 24 al 26 de Noviembre, 2005) (Valencia, Universitat de València 2008), 171 - 80.



92. Thessaloniki, Toumba: grave offerings from the pithos burial in area B9.

A large pithos lay exactly below the later one in B9, while in the W part of B7, a layer was located with large pithos sherds and red clay. Large pithos sherds and red clay also covered and went partially under the skeleton of an adolescent male which had been carefully placed, extended, face down, and with the arms by the sides, partially in the opening in the N wall of the room and partially in the road outside. The deceased, who was perhaps placed inside a pithos, was accompanied by a spondylus shell, a whetstone and 2 LBA handmade vessels (Fig. 92), while a bronze knife which was found slightly further inside the room could also belong to the same assemblage. The burial was probably placed here and covered with clay at the end of phase 3 or at some point in phase 2B, in the course of which the N part of building B seems to have been unused. Excavation continued down further into the fills of phase 4 only in the unexcavated parts of rooms B2/3 and B4. To the significant number of pithoi located in rooms B1 and B2/3, should be added one more in B2/3 and one in B4.

Only fills of phases 3 and 4 were preserved in building complex E, since the more recent levels had been destroyed by Ar and Cl construction. The fills and floor of phase 3, with LHIIIC M pottery, were themselves partially disturbed by more recent building activity, while it is likely that part of the complex was abandoned in phase 2B. There was a bin or basket in E8, while quantities of fragmentary murex shells, part of a metallurgical crucible and traces of burning in room E3 are associated with the production of purple dye and with metalworking inside the complex, similar to those activities located in other buildings. See M. Vavelidis and S. Andreou, 'Gold and gold working in Late Bronze Age northern Greece', Naturwissenschaften 95 (2008), 361-66. The beginning of phase 3 and phase 4A are characterized by particularly intense activity, with many and frequent relaying of floors. To phase 4 belongs a structure made of stone slabs with a flat top which may be linked to food production (B9) and an oven (B7) which continued in use into phase 3 and is associated with a thick layer of ash rich in archaeobotanical remains. In the E part of the complex, which had been partially excavated previously, there is a striking presence of storage spaces with quite large pithoi in situ. From this view, building complexes E and B reinforce the picture of centralized, large-scale storage which is plain in building complex A in phase 4, but which stands in contrast to the small-scale and dispersed storage of phases 3, 2B and 2A in the 2 recently excavated complexes.

Nomos of Chalkidike (16th EPCA: 10th EBA)

Agios Mamas (Olynthos)

Publication: C. Becker and H. Kroll, Das Prähistorische Olynth. Ausgrabungen in der Toumba Agios Mamas 1994–1996. Ernährung und Rohstoffnutzung im Wandel (Rahden, Leidorf 2008).

EASTERN MACEDONIA with MOUNT ATHOS

Nomos of Serres (28th EPCA: 12th EBA)

Mt Menoikio. *Ethnos* (25/10/08) reports the chance discovery by cavers of rock art in the entrance of a cave in the area of Nea Zichne, outside the village of Anastasia. This horizontal cave, ca. 0.4–0.5m *h.*, was flooded after the first 350m. Within the cave was a network of water courses in use from antiquity until

recent decades. Ca. 500m inside the cave was an area of ferrous metal extraction ca. 150m *l.* A human skeleton discovered here may date to the Civil War.

Publication : P. Malama and K. Darakis, Νεκροταφείο Ρωμαϊκών Χρονών στα Νέα Κερδύλλια Σερρών (Thessaloniki, 18th EPCA/Archaeological Institute for Macedonia and Thrace 2008).

Nomos of Drama (18th EPCA: 12th EBA)

Piges tou Angiti, Cave. K. Trantalidou (EPSNE), V. Skaraki (2nd EPCA) and E. Kara (1st EPCA) publish (AAA 39 [2006], 107-38) the pottery assemblage from the interior of this cave. The site lies at the source of the river Angitis (the W tributary of the Strymon river), in the S foothills of Mt Falakrou, 25km W of Drama and at an elevation of 129m. The cave is an almost horizontal, gallery-like karst formation, estimated at 9–12km *l.*, which widens occasionally into chambers and through which the river Angitis flows. Traces of sporadic human occupation have been located in the first chamber, through which the complex is entered: 2 small steps were cut in the SE area. The PH fill covered an area of ca. 100m^2 , to an average d. of 0.3m. Four round hearths, located on 2 small level areas and bounded with unworked limestone blocks, were foci of human activity. Small pits for ash and rubbish were associated with them. In total, 3,456 sherds, 9 terracotta weights, an undecorated miniature vessel, 757 animal bones of domesticated and wild species, 4 tools and items of shell ornament, and a necklace of wild-boar teeth were found. The pottery is mostly monochrome (with burnished, smoothed and incised surface treatment), thick-walled and made of local clay. Mostly household shapes are represented: the monochrome wares divide into shallow open (35.7%), deep open (4.5%), open storage shapes (47.6%) and closed vessels (9.2%). Only ca. 1% of the pottery bears painted, linear decoration (3 rims of open vessels, a handle of a closed shape and 23 body sherds of open and closed shapes). One sherd of an open light-on-dark ware vessel was found. Ceramic shapes and painted decoration show influences from a wide area, from the Danube, Aegean Thrace, the plain of Drama, the Strymon valley and as far as E Thessaly. Pottery indicates seasonal occupation from the LNeo/FNeo-EH period.

Nomos of Kavala (18th EPCA: 12th EBA)

Krinides. Apogevmatini (04/07/08) cites a report by T. Salonikios (18th EPCA) of the discovery, in the course of the construction of an extension to the water supply network to the village of Krinides, of 5 unlooted Rom tombs, plus funerary monuments which had been opened and some Byz artefacts. The tombs are cist graves with tile covers. The site lies close to anc. Philippoi: the mod. village of Krinides is built over the anc. city of the same name.

Dikili Tash. P. Darcque (EfA/CNRS) and Ch. Koukouli-Chrysanthaki (ASA) report on the first season of a 3rd programme of collaborative excavation, which aims to bring together information enabling reconstruction of the birth of the tell in the Neo period and its evolution into mod. times. During this first campaign, research was confined to 3 sectors where new findings could be obtained to answer the main research questions posed (**Fig. 93**).