

Cover: Restoration work on a vault in danger of collapse in a room of the Great Caldarium in the Baths of Faustina at Miletus

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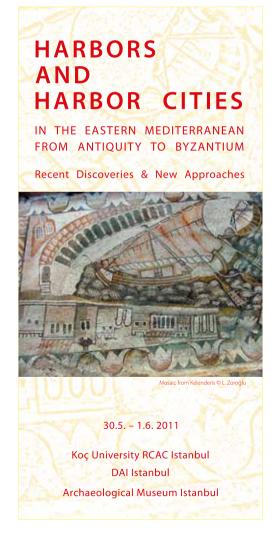
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### Events and developments

One of the chief concerns of the Istanbul Department of the DAI is to provide a forum for the ongoing discussion of research in archaeology and classical studies and thereby contribute to the formulation of new research objectives. Thanks to the spectacular discoveries surrounding the Byzantine harbors of Istanbul during the Marmaray Project, the city is currently at the forefront of interest among those studying the harbors and port cities of antiquity and the Byzantine period. This is a topic of research – sited at the interface of geography, historical science and archaeology – which has only recently been formulated, and which is enjoying great attention at the present time. Indeed, in cooperation with Koç Üniversitesi, the Austrian Archaeological Institute and the Roman-Germanic Central Museum in Mainz, a three-day symposium with more than forty speakers from ten countries was organized on the subject of Harbors and Harbor Cities in the Eastern Mediterranean from Antiquity to Byzantium.

The symposium, held at the end of May, was generously supported by the Fritz Thyssen Stiftung. At the event, presentation of the latest excavation and survey findings from Egypt, Israel, Lebanon, Turkey and Greece was combined with the discussion of overarching themes relating to the economy, urban development, maritime infrastructure and their geographical preconditions during the period in question. This resulted in numerous contacts for future research projects in which the Istanbul Department will also be taking part.

This brochure presents a selection of our ongoing projects. We have been able to further extend our range of activities in Istanbul with new investigation into the urban development of the district of Tophane, which has experienced gentrification and the social tensions that entails. The DAI has clearly demonstrated its ever growing commitment to the preservation of cultural heritage by initiating conservation projects at Pergamon, Hattusha and other sites. The same purpose is served by the newly established publication series entitled MIRAS, dedicated to projects concerning the preservation and maintenance of ancient monuments.



Leaving the Istanbul Department this year are Dipl.-Ing. Verena Stappmanns, Eric Laufer M.A., Dr. Ralf Becks and the head of Byzantine Archaeology, Dr. Philipp Niewöhner. Andreas Huth M.A. has been involved in the restructuring of the archives of the Istanbul Department, doing so on a voluntary basis since the middle of 2011. We have received further support from Anna Diegmann and Sophie Rölle, who came to the Istanbul Department as part of the *kulturweit* programme, an international cultural voluntary service conducted by the German UNESCO Commission and sponsored by the Foreign Office. Like many other interns, they have been actively involved in the various spheres of work at the Istanbul Department. We thank them for their committed and successful work in Istanbul. And we would also like to extend our thanks to the foundations and sponsors, whose generous assistance contributed very substantially to the success of our activities in 2011, just as in previous years.

Felix Pirson

### The staff of the department in 2011

Prof. Dr. Felix Pirson (director of the department)

Dr.-Ing. Martin Bachmann (deputy director)

Division heads: Dr. Philipp Niewöhner (until Sept. 30), PD Dr. Andreas Schachner, Dr. Jürgen Seeher, Dr. Anja Slawisch

DAI scholarship holders: Dr. Ralf Becks (until Sept. 30), Dr.-Ing. Katja Piesker

DFG-financed staff member and Gerda Henkel Stiftung scholarship holder: Ludwig Meier M.A.

Research assistants: Johanna Fuchs (until Jan. 31), Eric Laufer (until Febr. 14), Verena Stappmanns (until June 30), Alexandra Wirsching Editor: Dominique Krüger

Library: Gudrun Walter, Ali Akkaya, Banu Doğan

Photo dept.: Nurhan Özgenler, Secda Saltuk, Ahmet Aydın

Archive: Andreas Huth M.A.

19 graduate interns were employed in the photo department, the library and in Pergamon for several weeks

Office: Hülya Çatak

Administration: Carmen Hamburger, Hülya Çötelioğlu

Technical staff: Sinan Nesil, Hacı Özel (from Jan. 3), Coşkun Parmak, Nezahat Saraç, Ali Topkaya

### Sponsors of our work

General support of the department:





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Prof. Martin Ferguson Smith, John Fraser, The Charlotte Bonham-Carter Charitable Trust, Seven Pillars of Wisdom Trust, Stiftung Altertumskunde der Universität zu Köln, Kim Hee-Kyung Stiftung für europäische Kultur- und Geisteswissenschaften

### Research work of the DAI in 2011

In this issue, DAI research staff report about the projects they direct on the following pages: **Boğazköy/Hattuša** (Çorum Province) p. 10-11, **Pergamon** (İzmir Province) p. 14-16, **Oinoanda** (Muğla Province) p. 17, **Germia** (Eskişehir Province) p.18 and **Istanbul** (p. 19-20). Other DAI projects or projects with DAI involvement took place at **Göbekli Tepe** (Urfa Province) p.8, **Didyma** (Aydın Province) p. 12 as well as at

**Priene** (Aydın Province): In the 2011 campaign, excavation work and construction research was carried out in and around the temple of the Egyptian gods, at two fairly small ritual sites on the slope north of the residential district, in the Upper and Lower Gymnasium, in the western residential quarter including the Hellenistic house in Insula D 2 as well as in the southwest section of the city wall. Substantial new information about the city layout was obtained above all at two places. Firstly, discovery of a presumably early Hellenistic building above the entrance shaft to an underground watercourse within the city walls is further evidence of intra-urban water resources. Secondly, on the north side of the "Athena Street" south-west of the temple of the Egyptian gods, a series of rooms probably to be interpreted as a row of shops has been discovered; they date from the high to late Hellenistic period (director: Wulf Raeck, Institute of Archaeological Sciences, Goethe University Frankfurt a. M.)

Miletus (Aydın Province): A prime focus of the 2011 campaign in Miletus was finishing off the research and restoration work in the Baths of Faustina, which again was carried out by the Berlin Project group under the on-site direction of M. Maischberger and P. Schneider. A major task here was the re-securing of a vault in danger of collapse in a room adjacent to the Great Caldarium (see illustration on the title page). In the still largely unexplored north-east district of the city (Humeitepe) a new project – directed by H. Bumke (Halle) – was launched in the area of the harbour discovered there by geophysical prospecting in 2003 (see p. 13). A. Herda continued his excavations and field research at the Delphinion. As part of the archaic programme the major part of the work concerned the preparation of various publications. M. Kerschner and his group continued working on the inventorying of material from the excavations in the archaic temple of Artemis Khitone on Kalabaktepe (overall direction: Volkmar von Graeve).

### Public relations of the department

A series of evening talks has been arranged for the six winter months, at which members of the public can hear domestic and foreign researchers report about their ongoing projects. An additional series of talks, the House Colloquia, offer primarily young researchers the opportunity to present their latest findings for discussion. Furthermore, in early summer, regular tours of districts, monuments and collections in Istanbul will be offered by Institute personnel. Information on the various programmes can be found at our website: www.dainst.org/istanbul.

### Publications of the Department in 2011

The annual journal 'Istanbuler Mitteilungen' serves as a general forum on topics related to archaeology in Turkey. We also publish three series of monographs under the title 'Istanbuler Forschungen', 'Byzas' and 'Miras', and independent publications appear as well.

#### ISTANBULER MITTEILUNGEN 60, 2010

Birgit BERGMANN, Bar Kochba und das Panhellenion. Die Panzerstatue Hadrians aus Hierapytna/Kreta (Istanbul, Archäologisches Museum Inv. Nr. 50) und der Panzertorso Inv. Nr. 8097 im Piräusmuseum von Athen

Ruth BIELFELDT, Wo nur sind die Bürger von Pergamon? Eine Phänomenologie bürgerlicher Unscheinbarkeit im städtischen Raum der Königsresidenz

Eva CHRISTOF – Gabriele KOINER, Ein kaiserzeitlicher Rankenfries und früh- bis mittelbyzantinische liturgische Ausstattungsteile aus Tavium

Barbara HOREJS – Mathias MEHOFER – Ernst PERNICKA, Metallhandwerker im frühen 3. Jt. v. Chr. – Neue Ergebnisse vom Çukuriçi Höyük

Fahri IŞIK, Das Leto-Heiligtum in Asarcık am Xanthostal. Zur sog. »Akkulturation« in Lykien anhand seiner frühen Tempelbauten. Mit einem epigraphischen Beitrag von Recai Tekoğlu

Mehmet IŞIKLI – Mahmut Bilge BAŞTÜRK, Bronze Axes from the Erzurum-Kars Region: An Elementary Corpus

Sarah JAPP, Die sog. Gilded Ware – eine mutmaßlich frühbyzantinische Keramikgefäßgruppe in Pergamon

Ibrahim Hakan MERT – Philipp NIEWÖHNER, Blattkapitelle in Konya. Lykaonien zwischen Sidamaria und Binbirkilise

Philipp NIEWÖHNER, Der frühbyzantinische Rundbau beim Myrelaion in Konstantinopel. Kapitelle, Mosaiken und Ziegelstempel. Mit Beiträgen von Jenny Abura und Walter Prochaska

Philipp NIEWÖHNER – Wolfgang RABBEL – Harald STÜMPEL – Roman PAŠTEKA – Şerif BARIŞ, Eine neu entdeckte byzantinische Kirche in İznik/Nikaia Jürgen SEEHER, Zur Wasserversorgung und Wassernutzung in der Unterstadt von Hattuša

Karl STROBEL – Christoph GERBER, Tavium (Büyüknefes, Provinz Yozgat) und seine Region. Bericht über die Kampagnen 2006–2009. Mit einem Beitrag von G. Koiner/U. Lohner-Urban/P. Scherrer

Kurzmitteilungen

Eric LAUFER, Nachtrag zu »Ein Wasserspiel in Labyrinthform im Museum von Manisa – römisch oder islamisch?«, IstMitt 58, 2008, 187–195

ISTANBULER FORSCHUNGEN 52: INA EICHNER, Frühbyzantinische Wohnhäuser in Kilikien. Baugeschichtliche Untersuchung zu den Wohnformen in der Region um Seleukeia am Kalykadnos (2011)

BYZAS 11: ALEXANDER VON KIENLIN (Hrsg.), Holztragwerke der Antike (2011)

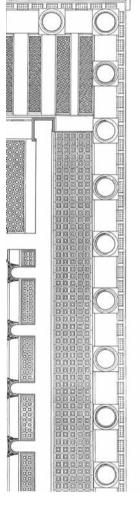
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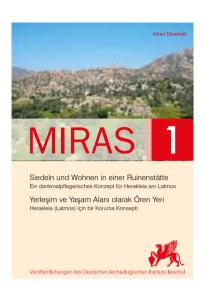
### ISTANBULER MITTEILUNGEN 61, 2011

ISTANBULER FORSCHUNGEN 53: MÜREN BAYKAN, Ionische Kapitelle auf Prokonessos. Produktion und Export römischer Bauteile

BYZAS 12: THEKLA SCHULZ (Hrsg.), Dipteros und Pseudodipteros

BYZAS 13: FELIX PIRSON (Hrsg.), Manifestationen von Macht und Hierarchien in Stadtraum und Landschaft





### A new publication series

Today, the scientific investigation and the protection of archaeological sites are inextricably linked. When it comes to the long-term preservation and maintenance of ancient monuments, however, archaeological institutions are frequently confronted with challenges that exceed their capabilities and competences. In addition to the natural processes of decay and weathering of architectural remains once they have been exposed, another factor is the dynamic development of the country concerned, which has begun to exert increasing pressure on archaeological sites. It is therefore necessary to develop a plan of management that responds to the specific features of each particular site. This presupposes the ability to call on a wide knowledge base of case studies reflecting previous experience in this field from a range of sites.

The Istanbul Department of the German Archaeological Institute has consequently decided to launch a new series of publications in which such case studies can be presented and discussed: MIRAS, which stands for "Management, Instandsetzung und Restaurierung an Archäologischen Stätten in der Türkei" (Management, Maintenance and Restoration at Archaeological Sites in Turkey). Specifically, what is envisaged is a collection of data that brings together a host of archaeological preservation projects along with site management planning and development strategies for archaeological sites. Given such a focus, the series is intended to create a forum for the exchange of experience in the field of heritage conservation and planning so as to provide stimulation and inspiration in the task of dealing with the great conservation challenges at hand at archaeological sites in Turkey. The volumes in the series, to be published intermittently, will appear in Turkish as well as German.

The first volume, edited by Albert Distelrath, presents a plan for the development – and conservation – of the ancient city of Herakleia under Latmos, part of which is now covered by the village of Kapıkırı. At Herakleia, as at many other ancient sites with similar constellations, efforts have been made towards resettling the inhabitants and clearing the entire site of buildings of recent date. While measures of this kind may appear to be in accordance with the interests of preservation and research, seldom do they in fact offer any potential for the lasting and effective protection of archaeological monuments. A truly fruitful symbiosis of careful restoration, commercial exploitation through tourism, and modern urban development requires the involvement of the local population and a more subtly integrated strategy that directs the future development of a site and its surrounding area in an orderly way. The means to achieve this is presented now in Albert Distelrath's work – and it would certainly be of huge benefit to Herakleia under Latmos if his conclusions were to be taken to heart by those responsible for planning the future development of the site.

Martin Bachmann, Felix Pirson

### Inventory in the photo archive

The photo archive of the Istanbul Department contains a wide spectrum of historical images from the 1850s onward – important for both art and cultural history – including, in particular, works from James Robertson, Sébah & Joailler, the Frères Abdullah and Guillaume Berggren, in addition to collections accumulated from various photographic missions to sites and museums across Anatolia.

In August 2011, an inventory was compiled of all the photographic objects in the archive for the first time. The holdings are impressive both in terms of quantity and quality: the departmental photo archive contains 10,235



glass plates, 44,182 roll film negatives, 40,665 small-format negatives and 2,213 large-format negatives. The Pergamon archive, which is organized separately, holds a further 3,440 glass plates, 48,567 roll film negatives, 62,297 small-format negatives and 182 large-format negatives. Hence, the two archives hold a total of 211,781 images.

At the same time we recorded the state of preservation of the plates and negatives, and separated "nitrates" (10,957) and "acetates" (252 are damaged, 1156 are under observation) from the remaining film stock. Photographic material manufactured with nitrate (nitrocellulose negatives) is classed as explosives under the German Explosives Act, since they can self-ignite at temperatures over 38° centigrade. Acetate based negatives (triacetate negatives), on the other hand, pose a threat to other negatives because they release acetic acid and can destroy themselves in what is known as an autocatalytic reaction.

Through the ongoing digitization of the glass plates and negatives, and the recently completed normalization of the database, a large portion of the stock will be available for research online from the portal www.arachne.uni-koeln.de before the end of the year. The high number of requests shows the undiminished interest in photographic images of high quality, not only for research purposes but also, for instance, in planning restoration and preservation of historical monuments in Istanbul.

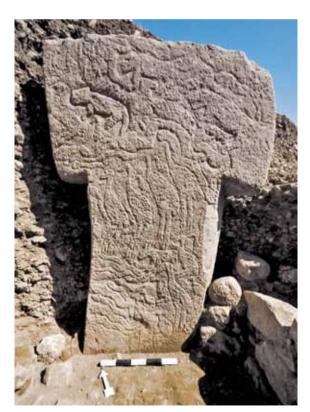
Anja Slawisch



### The latest from Göbekli Tepe

In the 17<sup>th</sup> excavation campaign, archaeological research concentrated on the north-west hill, where we have been working since 2009. Six T-shaped pillars were found *in situ*, belonging to two new circular enclosures. Particularly noteworthy is the combination of pictorial motifs entirely covering one of the pillars (Fig. below): an apparent *horror vacui* not observed before in this intensity.

Archaeometric analysis once again focused on the archaeofauna, which is being analysed by the Institute of Palaeoanatomy and Domestication Research at the University of Munich. The fauna is exclusively wild, with gazelles, aurochs and wild donkeys as important attested species. Among the avifauna, which is equally well represented, there is a notably high proportion of corvids, cranes, birds of prey and songbirds. Promising first results have been provided by aDNA and isotope analyses. The anthropological investigations have yielded clear evidence of artificial manipulation, suggesting intensive post-mortal treatment of human skeletal material. Investigations into the provenance of the obsidian raw material have established an unexpectedly wide spectrum of sources of raw materials which also includes central Anatolia.



New radiocarbon dates permit the dating of Enclosure D in particular to be fixed in the period around 9500 BCcal (early PPNA). A peculiar feature consists in the bones of a fox tail discovered in front of the western central pillar of the enclosure. Together with the pairs of holes which are repeatedly to be observed on the edges of the pillars, this feature indicates that the pillar was decorated with a fox tail or fox fur; and that, as part of cult activities, the pillars were decorated over and above their abundant repertoire of carved images, as is known from later Mesopotamian idols.

Klaus Schmidt

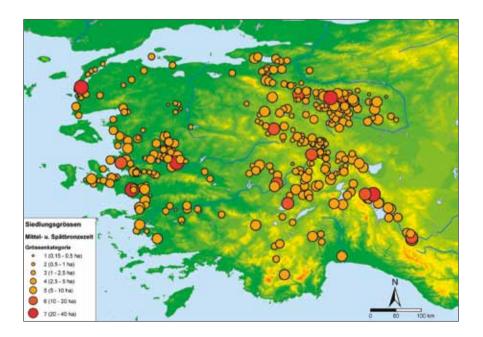
## Settlement structures from the second millennium BC in western Asia Minor

A research project carried out as part of a DAI foreign exchange scholarship is concerned with investigations in settlement geography and architectural history in western Asia Minor during the Middle and Late Bronze Age.

Compared to the well researched regions to the west and east, i.e. the Aegean region with the remains of the Minoan and Mycenaean cultures, and central Anatolia with the Hittite culture and its predecessors, western Anatolia is a region about whose cultural development during the second millennium BC little is known to this day – save for a few exceptions. In order to fill in the gaps in knowledge at least partially, information on all Bronze Age settlement sites from the many surveys and excavations conducted in western Asia Minor was systematically collected in a database. These data were then analyzed from the point of view of settlement archaeology using a geographic information system (GIS). What became apparent was that in western Anatolia various geographical landscapes (coast, riverine plain, highland plain) were utilized as settlement zones, and in them various settlement forms (settlement mound, flat settlement, hill-top settlement) each with specific locational features are encountered. Based on the size of settlement, it is possible to distinguish multilevel, hierarchized settlement systems which are separated from one another by natural borders, thus forming territorial units. Moreover, from the temporal perspective, changes in settlement density and spatial relocations of settlements can be observed.

These findings represent a solid settlement-archaeological basis upon which further-reaching studies like historical geography may build.

Ralf Becks





### Around Kesikkaya

The high outcrop of rock known as Kesikkaya ("cleft rock") dominates the southern part of the old town of the Hittite city. Given its prominent location in the urban topography, our work is concentrating on this specific area. North-west of the rock, we followed above all the Middle Bronze Age construction layer further, with the result that we have now almost completely exposed a house of that period yielding a rich inventory that moreover contains indications of metal handicraft (Fig. above). The Hittite strata in this area have been substantially disturbed by later intrusions. Nevertheless, excavations in the western part at the entrance to one of the posterns – a tunnel running inside the city wall – have revealed that the entrance was walled up in Hittite times.

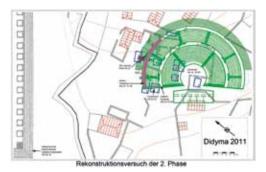
To the south-east of Kesikkaya, we had actually intended to extend further southwards our excavation of a monumental Hittite building exposed last year. To this end the trenches were considerably enlarged. This brought to light a series of large Iron Age buildings which entirely cover the Hittite building. Not only are the size and the solid construction of these buildings remarkable, but above all an iron standard about 1.85 m long (Fig. opposite page) that was found on the floor of the youngest building shows that this must have been buildings with a special function. These finds and features afford a first glimpse of the structures of the social elites of the late Iron Age in Boğazköy.

A second focus of the campaign consisted in restoration work in the valley at the foot of Sarıkale, where, after completion of the excavations a few years ago, the ground plans of some structures were rebuilt to give visitors an impression of the unusually carefully planned and executed architecture that stood here in the second half of the 16<sup>th</sup> century BC.

Andreas Schachner









## The newly discovered theatre of Didyma

The project "Kulte im Kult" conducts investigations at the sanctuary of Apollo in Didyma funded by the Academy of Sciences and Fine Arts (NRW) since 2009. They aim to expose the ancient topography of the famous oracle site by targeted excavations. Today, our knowledge of ancient religious structures in the centre of the sanctuary is essentially dominated by the monumental temple of Apollo.

However, this year's excavations have brought to light the – albeit scanty – remains of another large edifice, located to the south of the Temple of Apollo. It is a theatre, opening westwards with a diameter of approximately 48 m. Preserved are the lower layers – measuring 34 m – of the north supporting wall and the north-western parodos wall, as well as the stairs of a side entrance (Fig. below right) and rounded seats of the auditorium. According to the archaeological evidence, the theatre was built in the second half of the 1st century AD. In this phase the theatre was able to host about 2,500 spectators. In the first half of the 2nd century the cavea was enlarged to provide seating capacity for over 3,000 people. Probably architectural blocks of a long known aedicula facade (Fig. below left) can be connected with the stage area of the second building phase. According to a surviving inscription on these blocs, an unknown donor dedicated the building to Apollo and the Emperor Hadrian.

Further inscriptions, dealing with artistic competitions and performances at the great ritual festival – the Didymeia – point to the existence of a theatre at Didyma. Since no evidence for a suitable venue had been found before, the former excavators supposed that these contests might have taken place in the city-theatre at Miletus.

Helga Bumke, Jan Breder









### Excavations in the area of the east harbour of Miletus

Geomagnetic mapping on the east flank of the north district of Miletus – the hill known as Humeitepe (Fig. above) – has revealed that one of the city's so far unknown harbours must have been located here. Preliminary excavations of the Ruhr-Universität Bochum financed by the Mercator Foundation were launched in 2011. In the course of the first surface survey a rather long section of the defensive wall (the so-called Goths' Wall), which has been erected in the 3<sup>rd</sup> century AD, was discovered in the north-east of the area. It still has a height of up to 3.50 m. Its existence confirms Philipp Niewöhner's assumption that the defensive wall also encircled the Humeitepe, and that the latter must have been much more important than supposed so far.

The excavations additionally verified the older city wall, 3.80 m thick, and one of the entrances to the harbour, which in Roman times was furnished with a marble gateway (Fig. below right). Among the finds from the gate area a late Hellenistic caryatid (2 m high) is notable (Fig. below left). This sculpture is probably a personification of the city; it may have been one of a pair re-used in the decoration of the gateway. Furthermore to note is a Hadrianic inscription attesting that an association of Milesian ship owners possessed a building in the vicinity of the east harbour. Other architectural structures that have been excavated to the north-west of the gateway may be the remains of a stoa. The complex could have covered a large area like the North Market at the Lion Gate according to the geomagnetically detected structures. Further excavation in the area of the gate was not possible due to the high groundwater level as a result of flood irrigation.

Helga Bumke, Aylin Tanrıöver







## Pergamon's graves and necropoleis

Graves and necropoleis provide valuable information not only about mortuary ritual but also about the social structure and living conditions of ancient towns. This being so, it is highly surprising that the cemeteries of Pergamon, one of the best known Hellenistic-Roman cities of Asia Minor, remain to a large extent uninvestigated. These gaps are now to be filled by a project - funded by the German Research Foundation (DFG) and conducted in cooperation with the University of Cologne - which will review past excavations and finds relating to the necropoleis. This will be accompanied by new field research at the many grave mounds in Pergamon and the surrounding area. In October this year, jointly with Bergama Museum we investigated a tumulus about 8 km south-west of the ancient city. The grave mound had been repeatedly visited by grave robbers. Unlike the tumulus on Iliyastepe, probed last year (see DAlistanbul 9/2011), we were not able to retrieve any burial remains here, but we were rewarded with the discovery of unusually lavish architecture: two chambers arranged one above the other, accessed via an anteroom and a corridor (see illustration on the next page). The floor and ceiling of the chambers consist of giant limestone slabs weighing in some cases more than 10 tonnes. This architectural demonstration of power suggests that the grave belonged to one of the princelings who ruled the territory around Pergamon in the 5th-4th cent. BC. Inside the principal chamber we conducted measurements with the georadar (Fig. below left), which revealed however that no further burials lie underneath the massive floor slabs.





Several burials brought to light by excavations in the area of the south-east necropolis of Pergamon date from the Roman imperial period (1st - 3rd cent. AD). Here, archaeologists and anthropologists are working together closely in a project funded by the Gerda Henkel Foundation which is analyzing grave forms, burials and grave goods with the aim of gathering the maximum possible amount of information about mortuary ritual and about the geographical and social origin and living conditions of the individuals buried. The projects mentioned will be continued in the coming years.

Felix Pirson





# Restoration work at Pergamon – activity at many critical points

The German Pergamon Excavations acknowledge their responsibilities regarding the many monuments of the ancient city and are striving to fulfil them. Consequently, the campaign to restore the Red Hall was extended in 2011 to include a range of supplementary activities. For example, careful conservation measures were undertaken with regard to the ceremonial gateway ('Festtor') that is part of the substantial ruins of the gymnasium (Fig. below right). In the process the Hellenistic gate was returned to its state during excavations and a dangerous breach in the medieval city wall next to it was closed. On the Trajaneum the ground underneath the ruins was extensively investigated in order to prevent the occurrence of damage due to dampness, and in the lower rotunda of the Asklepieion three large openings in the Roman barrel vault were sealed. Now it is safe to visit the building once again.

In the Red Hall a paramount task was the restoration of the large vaulted substructure in the south-east corner of the temenos. Here the east wall with the large arch opening was carefully restored so that it will be able once more to bear the thrust of the vaulted substructure which has partly collapsed (Fig. below left). The wedge-shaped stones of the arch, having entirely disappeared, had to be made by hand. Also, large sections of the ashlar facing of the Roman-era masonry had to be replaced. The arch and the wall have now been consolidated in a durable fashion, ready for the partial reconstruction of the vault.

Considerable progress has been made in the restoration of the large supporting figure in the south court of the Red Hall, reconstruction of which is being undertaken as part of a project of several years' duration generously supported by the Studiosus Foundation (Fig. left). The upper part of the figure, fashioned from Proconnesian marble, has now been finished and the stepped substructure of the socle of the statue has been installed. A high-definition laser scan of the parts of the statue made it possible to produce a 3D model of the reconstruction, whose details and overall appearance can now be checked before being put in place.

Martin Bachmann







### Oinoanda - physics by the metre

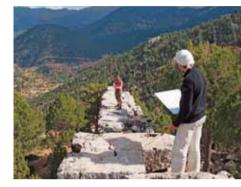
In the documentation of the ruins at Oinoanda in northern Lycia a milestone has been achieved in 2011 with the complete, stone-by-stone documenting and drawing of the Hellenistic city wall, of which a section over 60 m long is preserved. The monument, which lies at the southern extremity of the acropolis, can be regarded as one of the most signifi-

cant specimens of defensive architecture in Asia Minor in antiquity. Overhanging wall-walks, shooting loops with precisely calculated angles, and a sophisticated construction technique are among the features that have now been documented, allowing a more exact classification in Hellenistic architecture

However, as in previous campaigns, the main focus of the work at Oinoanda this year was Diogenes' inscription. More than fifty fragments of the philosophical inscription, some of them weighing up to 500 kg, were salvaged from the terrain and moved to the depot built for them the previous year. Thus more than half of the known fragments are now safely stored in the building. During the salvage operation and the surface surveys, a further 16 new fragments of the inscription came to light. One of the newly discovered pieces on the subject of physics fits together with existing fragments, resulting in a continuous sequence of text now nearly 5 m long which can be read in its entirety for the first time (Fig. below).

Surface surveys resulted in the discovery of new fragments from the city's non-philosophical inscriptions, including a memorial plaque which allows us to date the older of the two municipal thermae precisely to the year 73 AD. Furthermore, it proved possible to fill in blank spaces on the topographical map of Oinoanda, which is one of the chief objectives of this research project. Among these are, firstly, the settlement known today as Kemer arası, at the foot of the hill, which began to eclipse Oinoanda in importance in late antiquity, and secondly an extra-urban sanctuary. These discoveries allow us to better understand important chapters in the history of the city of Oinoanda.

Martin Bachmann









## A newly discovered basilica at the pilgrimage site of the Archangel Michael at Germia (Galatia)

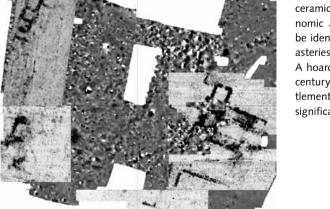
In 2011, the Germia survey achieved another highlight with the discovery of a hitherto unknown basilica. The church lies outside the settlement on higher ground with a view of the

> 2000 m high Dindymon mountain range. A significant quantity of marble was found at this site, including fragments of acanthus-leaf decoration. which suggested a building of elaborate architecture. This has now been confirmed by geophysical prospection (Fig. below) that was conducted by E. Erkul and H. Stümpel (Kiel).

> In the elevated eastern half of the survey area, a three-aisled basilica has been detected. A broad central nave terminates in an apse to the east; narrower and shorter side aisles end in square rooms adjoining the apse. At the opposite western end lies a narthex that is wider than the basilica, a feature not uncommon in the region.

> To the west, below the church, a large rectangular open space can be made out in the left half of the survey area. It appears to be enclosed on all sides by rows of rooms. The rooms along the west side show particularly well and seem to flank a central passage. The latter lies in the axis of the complex opposite the church and would have formed the main entrance. The symmetrical layout indicates that the entire ensem-

> > ble of buildings was jointly planned. A substantial quantity of early Byzantine ceramics suggests residential and economic activity, and the complex may be identified with one of several monasteries that are attested for Germia. A hoard of 47 gold coins from the 7th century found in the centre of the settlement bears witness to the continued significance of the pilgrimage site.



Philipp Niewöhner

### Tophane/Istanbul Contributions to the history of urban development

As the main point of landing and embarkation and a "vestibule" to Pera in Ottoman times, Tophane is rarely missing in descriptions by Western visitors to Istanbul. Named after and dominated by its cannon foundry, the suburb was perceived as "Turkish" in contrast to the "European" quarters of Galata and Pera. At the beginning of the 19th century it was praised for its lively and exotic atmosphere. It was, however, gradually transformed into a military area modelled after "Western" examples in



the second half of the 19<sup>th</sup> century. The stone clock tower built in 1848/49 – a significantly "European" element and the first of its kind in Istanbul – served as a landmark.

Having been abandoned after the First World War, almost all of the military installations were demolished in the 1950s in favour of a new main traffic artery in order to "modernize" the city – with the significant participation of the German town planner Hans Högg. At the same time, however, single monuments that were considered "historic" – e.g. the Tophane fountain and the foundry – were "reconstructed" with the help of old engravings. The clock tower was kept but somehow vanished into no man's land.

Today Tophane again faces huge pressure to change, namely from the large-scale project Galataport and the struggles which it entails.

The quarter provides a good example of the dramatic changes to the urban fabric of Istanbul – especially since late Ottoman times – and the related, more or less intensive discussions about contemporary (mostly European) ideas and (local) identities and traditions.

Katja Piesker





## The double konak – wooden houses on the Princes' Islands

The Istanbul Department's research into the city's wooden houses, which for some time has been concentrated on the Princes' Islands, has been further intensified this year (2011). For a wooden building on Büyük Ada, documentation of which began last year, a meticulous construction and restoration record has been produced (as part of a degree dissertation at Munich Technical University) in addition to a plan for the building's preservation. In the western part of the island, documentation of a double house revealed a new type in the colourful array of Istanbul's 19<sup>th</sup> century wooden houses: one that is indebted to specimens of the Colonial style of North America.

Begun in 2010, documentation of the building Çınar Meydanı 35 (Fig. above), erected in 1880, was completed this year and the work was developed into a degree dissertation at Munich

Technical University. The very thorough documentation not only records the current state of the building but also illuminates its eventful biography in many details. A piece of Istanbul's urban history thus becomes materially tangible in the microcosm of a petit bourgeois, wooden house. Since the dissertation also contains many suggestions as to how to preserve and maintain the structure, we have grounds to hope that it may be saved.

The twin house, Sulyoti İkiz Evleri (Fig. below), is a few years younger and was probably built in around 1900. Placing two identical, autonomous houses side by side so that they mirror one another was an economical way to create the impression of a grand residence; and in spite of the affordability of this manner of construction, it is likely that it satisfied the desire of the time for a sophisticated and prestigious outward appearance. The concept is one that is encountered fairly frequently on the Princes' Islands and it derives from the North American Colonial style. The documentation of the building, now in a very poor state of repair, was carried out in cooperation with the Karlsruhe Institute of Technology (KIT).

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