ISAP News

the newsletter of the International Society for Archaeological Prospection

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A note from our chairman

One year after the foundation of our society in Cracow during the 5th International Conference on Archaeological Prospection in September 2003 we are happy to have a list of nearly 150 members.

The ISAP committee has been kept busy during the last year. Many technical things have been solved by their work and their extra time was required for things such as the organization of many important administration problems which are necessary to run our Society. We have to say extra thanks to our English colleagues of Bradford, English Heritage and GSB-prospection.

During the last 12 months there were a couple of meetings with the topic "archaeological prospection". Among many others and without making a valuation I want to pick out some of them. One is - as every year since more than 10 years, with an extra session on "archaeological prospecting" - the meeting of the European Geosciences Union (the former European Geophysical Society). For the geophysicists among us the EGU conference is one of the most important annual conferences. Unfortunately it was not possible to avoid, that the archaeological prospection session is placed under the subject area of the "Magnetism" or "Rock Magnetism" session. Obviously I was not able to explain the organizers of the EGU that archaeological prospection consist not of magnetometry only. However because of that I would to animate colleagues not to hesitate to give their papers in this session even when their focus is resistivity- or radar- or seismic-prospection, or other survey methods.

The aerial archaeology conference of the AARG in Munich has a special topic on Neolithic studies but moreover gave a wide overview on new developments in aerial archaeology in Europe and in remote sensing techniques. The meeting of the Geological Society in Burlington House, London on December 15th and the archaeological prospection conference in Beijing (October 2004) is furthermore a proof of the ever-growing interest on the topic.

For the future I would wish a closer cooperation with the Aerial Archaeology Research Group, not only because it is the most successful prospection method with regard to the rediscovery of archaeological sites, but also because it should be regarded as a fundamental survey method and therefore play an important role in our society. I would wish also to encourage aerial archaeologists for more contributions in the Journal Archeological Prospection.

J. Fassbinder

The Roman Town of Neuenstadt am Kocher, Germany: First results of combined geophysical mappings

Harald VON DER OSTEN

We present first results of geophysical mappings of an archaeological site of the roman period near Neuenstadt am Kocher (Germany). It is assumed that this site was a roman centre of administration. Because of different soil conditions within the archaeological area it was necessary to perform combined geophysical prospections, using magnetic and electric mappings and GPR surveys. Moreover this combination of different methods enabled us to give some statements on the state of conservation of the archaeological objects, which was now proved by an excavation.

1. The site

Neuenstadt am Kocher is situated approximately 60 km NNE of Stuttgart, (Germany), the roman structures are north to this city and next to the river Kocher. Aerial pictures (fig. 1, the arrows indicate the structures discussed in this paper) demonstrate a variety of roman buildings within an area of approximately 20 hectares. At least some of the roman structures are known since about 400 years: The first excavation was performed in 1597.

Fig. 1: Aerial picture of a part of the roman centre of administration. North is approximately to the top. The buildings investigated in autumn 2004 by three different geophysical methods are indicated by arrows. Photo by Otto Braasch, January 2003.

Today, this site is of increasing interest to the archaeological community, because archaeologists believe that this site was a roman centre of administration which they were looking for since many years. To improve this thesis we started with geophysical surveys in autumn 2004. The aim of these surveys is to get a complete geophysical map of the total area within the next years. The next years will see also some excavations, based on the results of the geophysical surveys.

2. The surveys

In September 2004 we started with GPR surveys, using the SIR-2 system of GSSI and a 200 MHz antenna. This antenna was used because some tests on the site showed that the results using the 500 MHz antenna (normally used for surveys on roman structures, which are clearly showed by aerial archaeology and which are therefore not very deep below the surface) compared to the results using the 200 MHz would be rather poor. But this system broke down (because of a small but effective explosion within the electronics), so that we had to continue with a SIR-2000 system. The spacing between parallel profiles was set to 0.5 m, a survey wheel controlled the sample interval of 0.05 m along each profile. It seems that GPR will be the only suitable geophysical method in large parts of this archaeological site, because several farmers told us that on many places they have covered the area with up to 1.5 m thick layers of humus and rubble.

Magnetic mappings are performed with traverse and sample intervals of 0.25 m, using a FM36 of Geoscan Research. But also this instrument broke down after 17 years of excellent work, so that we had to continue with a FEREX instrument (Foerster Group, Reutlingen) and were able to finish the surveys presented here with Roger Walker's new FM256.

Twin probe electrical resistance mappings are performed using Geoscan's RM15. Traverse and sample intervals were chosen to 0.5 m, the interval of the mobile probes to 1.0 m.

3. Analysis of the results

The magnetic image of the northern building indicated in fig. 1 by an arrow is poor (fig. 2). The position of walls is partly indicated by very weak magnetic anomalies. The exception of this is a small room (6.5 m by 8.5 m) north of the building. The result of the electrical resistance mapping however clearly indicates the ground-plan of this building (fig. 3). The western, southern and eastern walls of this archaeological object were excavated in the early 20th century, and because of the intensive farmer's work this building seems to be nearly destroyed. This is also indicated by the results of the GPR survey. The more or less rectangular structure within this roman building, which can be clearly identified in the aerial picture, seems to be invisible for GPR and for magnetic surveys. The size and geometry of this structure as seen by the aerial archaeologist is quite different to the results of the electrical resistance mappings.

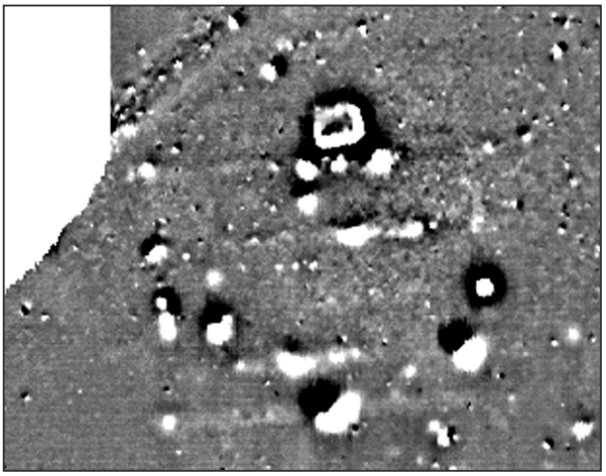


Fig. 2: Magnetogram of the northern roman building. The area covered by the geophysical survey is 77 m by 60 m. North is to the top. Dynamics: -3 nT/+3 nT

The magnetic map of the second roman structure discussed in this paper (fig. 4) enables us to sketch a nearly complete ground-plan of this building. Again, intensive influence of the farmer's machines and additional geologic erosion in this area seems to have destroyed especially the western part of this building significantly. This assumption is confirmed by the results of the electric resistance mapping (fig. 5).

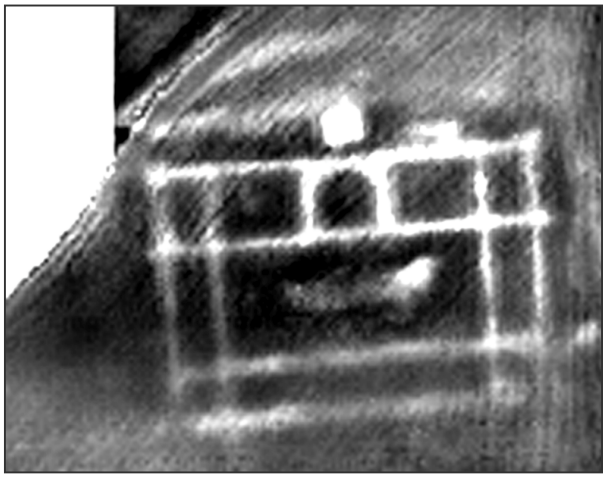


Fig 3: Electrical resistance map of the building presented in fig 2. Dynamics: 94.2 Ohm.m / 157.1 Ohm.m

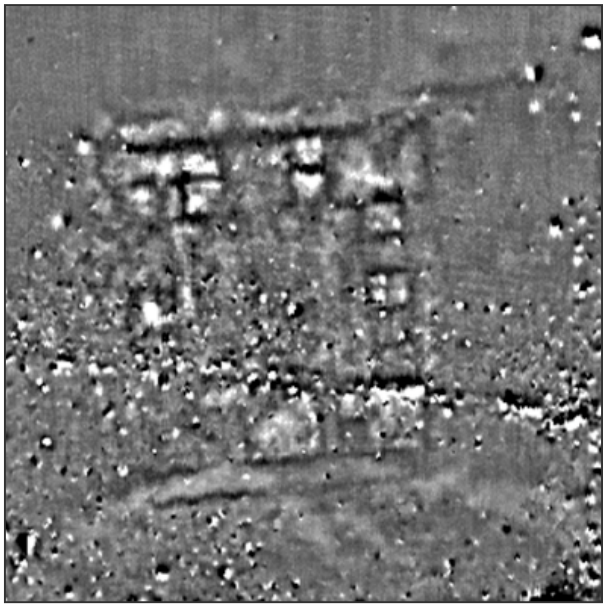


Fig. 4: Magnetic image of the southern roman building. North is to the top, the area covered by the geophysical survey is 80 m by 80 m. Dynamics: -3.6 nT / 4.2 nT

The best results, however, were achieved by GPR (fig. 6) and are suitable for a reconstruction of this palatial building. But the time-slices demonstrate also the bad conservation of the roman walls especially in the western part of this building. Because of this an excavation of this area is planned for 2005.

Fig. 5 (right): Electrical resistance map of the area presented in fig. 4. Dynamics: 125.6 Ohm.m / 219.5 Ohm.m

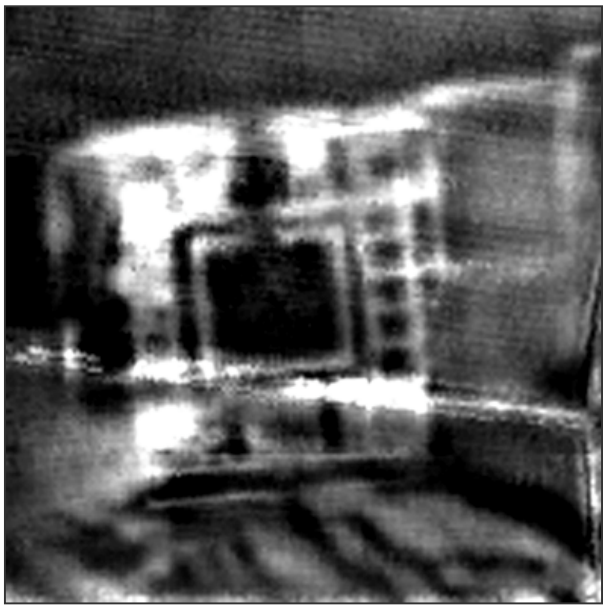
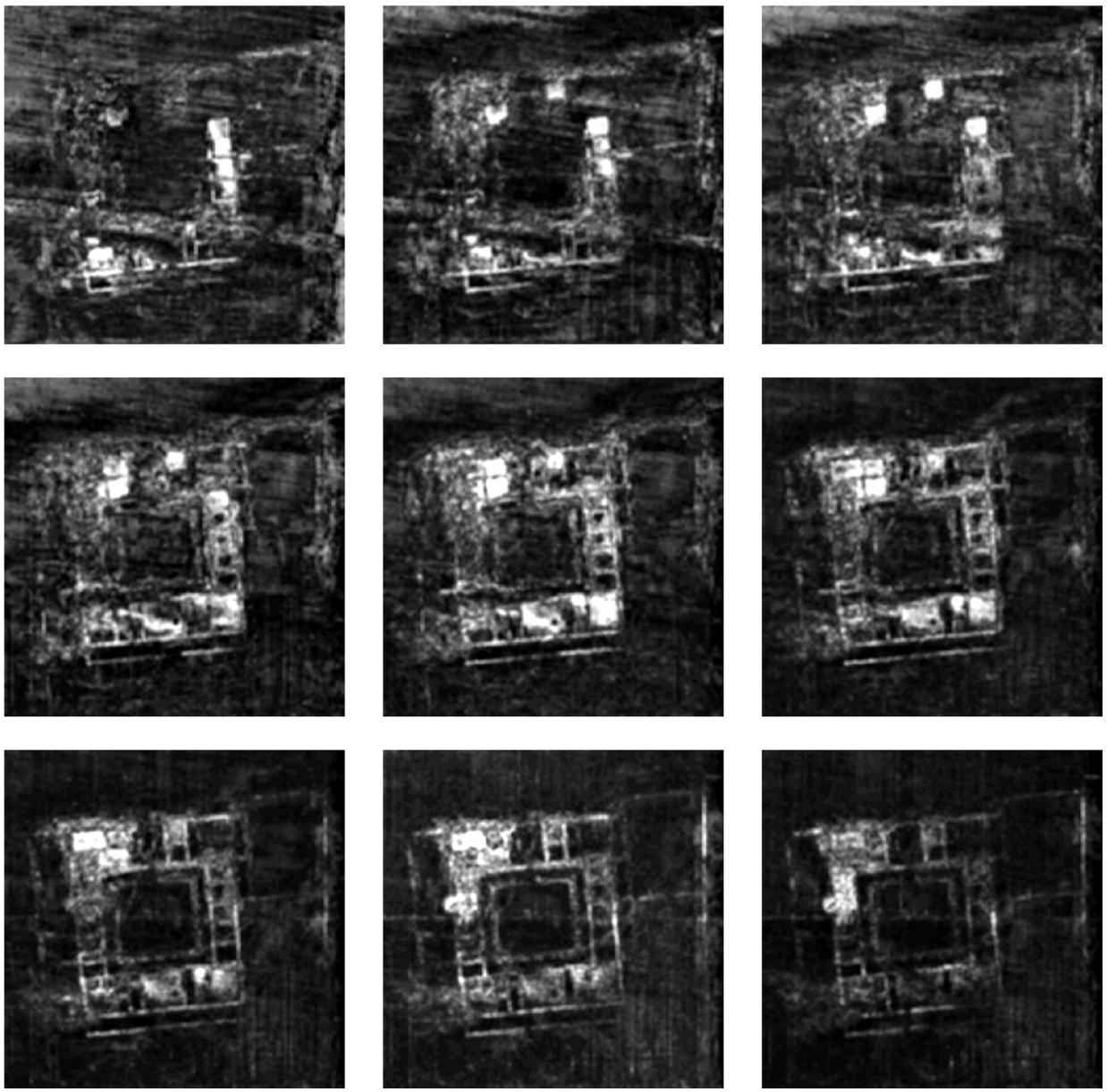


Fig. 6 (below): GPR time-slices of the roman villa presented in fig. 4 and fig. 5. Estimated depths: 0.60 m (top left) to 1.40 m (bottom right) with 0.10 m intervals. Each time-slice covers an area of 80 m by 80 m, north is to the top.



Aerial Archaeology Research Group – Munich 2004 & the online archive

Toby DRIVER

In early September 2004, AARG held its first independent annual conference on the European mainland, at the offices of the Bavarian State Department for Monuments and Sites in the centre of Munich. Ever since AARG collaborated with Archaeological Prospection in a joint meeting in Vienna in 2001, the Research Group has been looking for a way to hold further European meetings close to a great proportion of its members, and not to be confined to meeting in the United Kingdom. In the event, nearly 80 delegates attended along with some new faces and members of the ISAP.

AARG 2004 Munich. Delegates assembled in the courtyard of the Bayerisches Landesamt für Denkmalpflege, Munich. © BLFD. Photograph: Eva Leitner.

The Munich conference was held in close cooperation with the Bayerisches Landesamt für Denkmalpflege and the Neolithic Studies Group. Because it fell close to the tenth anniversary of the seminal meeting, 'Aerial Archaeology in Central and Eastern Europe', held at Kleinmachnow, Brandenburg in September 1994, it was felt that some celebration of the achievements of pan-European aerial archaeology, particularly over the last decade, should be made. The Munich location also allowed awareness to be raised about the current funding crisis in Bavaria, particularly towards archaeological survey and remote sensing. For these reasons a special one-day colloquium, Revealing Neolithic Europe, was included in the conference, organised by Dr Kenneth (Kenny) Brophy and Dr Gordon Barclay. This first day of papers by Alex Gibson, Michael Doneus, Ralph Schwarz, Martin Gojda and others, covered diverse aspects of the Neolithic in Europe, from the Upper Severn Valley of Wales, to surveys in Norfolk, Bohemia, lowland Poland and Italy, and included some stunning new work by the Vienna Institute of Prehistory on their Kreisgraben monuments. The second conference day, European Advances, featured papers from Slovenia, Italy, Ireland, Turkey, Armenia and Romania and elsewhere. The book of abstracts from the conference has been placed on the AARG website (http://aarg.univie.ac.at/ Follow 'Events') where it can be read in detail. There are plans to publish the papers from the Neolithic day as a monograph.

The conference enjoyed stunning late summer weather in Munich; AARG meetings have become notorious for being held during the sort of weather most aerial photographers have been waiting all summer for. The final day was spent on a field trip to Kelheim on the river Danube, where delegates enjoyed a Bavarian Breakfast of sausages and beer at 10.00 am, followed by a walk through a wooded oppidum to the

Weltenburg Monastery in the spectacular Danube Gorge, where more beer and discussion followed. The success of the three day meeting was largely due to the organizational skills of Dr Jörg Fassbinder and Peter Weinzierl in Munich, and Fiona Small, the AARG meetings secretary, in the UK.

The Aerial Archaeology Research Group hopes to repeat the success of Munich 2004, with its 2005 Annual Conference in Leuven, Belgium, between 19th-21st September. Although details are still being finalized, it will incorporate a day on 'interpreting the Roman landscapes of Europe from the air'. This meeting will be followed by a specialist day school in London, UK, on Saturday 29th October 2005, on Clayland Archaeology. Further details of both meetings will be announced in due course. The AARG committee looks forward to welcoming as many of you at one or both meetings as possible!

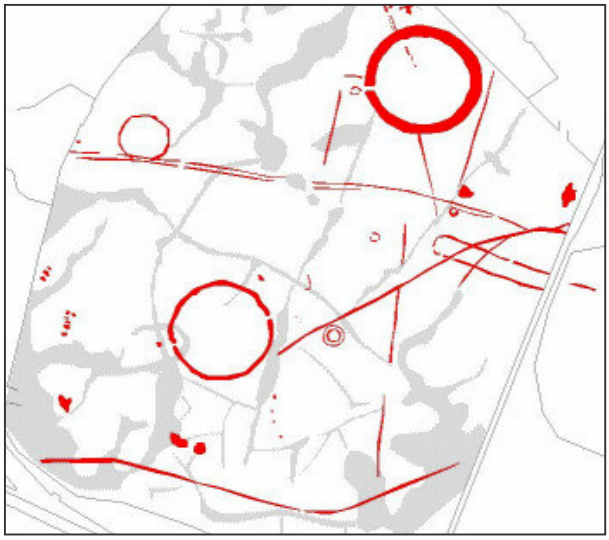
Heavenly place: Thirsty delegates making the boat crossing on the Danube to the Weltenburg Monastery, and its famous brewery. © Rog Palmer DSCN8296.

Decade of Aerial Archaeology Research Launched On-line

The Aerial Archaeology Research Group (AARG) has just launched its first decade of bi-annual newsletters on the Internet, at http://aarg.univie.ac.at/ making freely available 20 issues of worldwide news and research, comments and discussion from 1990-2000. Each newsletter is fully available online to view or download, revolutionising access to papers dealing with archaeology, aerial photography, remote sensing and landscape archaeology covering the United Kingdom and Europe, and worldwide countries including New Zealand. For students, archaeologists and practitioners especially, this will represent a vital resource for European archaeological research.

The period covered by the newly launched newsletters, 1990-2000, has been a period of revolutionary change in the field of aerial archaeology, particularly in Europe. With the fall of the Iron Curtain, and the continual demise of historic legislation forbidding free aerial survey and photography across many European countries, this decade has seen more advances in our knowledge about the extent and types of plough-levelled prehistoric landscapes across the European continent than at any other time since the start of the Second World War.

At the same time, pioneering aerial archaeology training schools and workshops in Hungary, Poland, Italy and Finland have begun to equip local archaeologists and students with the tools to conduct their own aerial reconnaissance and mapping programmes, leading to great changes in the way archaeological landscapes and site survival are perceived in those countries. The growing pan-European exchange of expertise and ideas will gather further momentum over the next 3 years through a Culture 2000 project of the European Commission, involving 15 countries in research, exploration and conservation of the European landscape heritage.



Aerial Mapping of Llandegai Henges, North Wales © RCAHMW

Update from the Near East

Tomasz HERBICH

In Egypt, the number of sites prospected with the aid of geophysical methods is growing by the year.

Helmut Becker, working with the expedition of the Free University of Berlin at the Old Kingdom necropolis at Dashur (east of the Red Pyramid), discovered several hundred of shaft-tombs and different types of mastabas. Due to his total field caesium-magnetometry Smartmag SM4G-Special system, he was able to identify remains (only one or two layers of mudbrick) of mastabas at the depth of 2 m. In January 2004, Becker has continued research, as part of an international team directed by Hourig Sourouzian, on the temple of Amenhotep III in West Thebes (Luxor). In the latter case, the standing objective is to reconstruct the plan of a temple, the best known standing remains of which are the famous colossi of Memnon. Work at Qantir, which is the first ever effort to produce a magnetic map of an ancient town several square kilometres in area (15 sq km to be precise, based on team director's Edgar Pusch's estimates), was unfortunately interrupted and the future of this project looks clouded for the present.

Ian Mathieson's expedition from the National Museums of Scotland continued its work at Saqqara – their momentous discoveries, including a complex of hitherto unknown mastabas of Early Dynastic date and a Hellenistic architectural complex, were presented at the December conference in London.

Hellenistic fortifications were studied in Alexandria by Christophe Benech and his team, working for the Centre d'Etudes Alexandrine. Benech is currently prospecting the Hellenistic and Roman harbour site of Taposiris Magna west of Alexandria.

Last September, the University of Liverpool commissioned Christian Schweitzer to conduct a magnetic survey of the Ramesside (New Kingdom) fortress at Zawiyet Umm-el Rakham located on Egypt's Mediterranean coast close to Marsa Matrouh, some 320 km west of Alexandria. Ditches ca. 10 to 12 m wide protecting the fortress walls were revealed to the south and west and the interior plan was made more apparent, proving the fortress to have been a major defensive structure rather than a small and poorly defended outpost at the western edge of Egypt's Mediterranean zone of control.

The group of geophysicists from the **National Research Institute of Astronomy & Geophysics** (known from their publications in the *Archaeological Prospection Journal)* has also continued projects around Egypt. Hatem Odah's team has concentrated on the pyramids, conducting magnetic prospection on the site of the workers' settlement. Mud-brick structures were also recorded at Dashur, using a combination of magnetic, electric resistivity and radar methods.

For Tomasz Herbich 2004 proved to be a record year with 12 different projects in Egypt and one in Syria; all in all, he has spent 180 days in the field. The chief method used was magnetic prospection (2 FM36 gradiometers); electrical resistivity came into play twice, at Luxor and Saqqara. The season started with a magnetic survey at Khargah Oasis (see Newsletter 1). Then, at Abydos South (Pennsylvania University expedition) a hitherto unknown necropolis, presumably of Middle Kingdom date, was discovered south of the temple of Sesostris III. Working next for the Louvre team at Saqqara, Herbich attempted a series of electrical-resistivity soundings to trace the "Dry Moat", which is a sizeable ditch surrounding the Djeser pyramid complex. In Deir al-Barsha, a Middle Kingdom necropolis in Middle Egypt excavated by Catholic University at Leuven (Belgium), Herbich identified a series of shaft tombs, some of them with no doubt not robbed in modern times. Next came Tell Daba (ancient Avaris) where a mapping project of this East Delta town for the Austrian Institute in Cairo was continued in cooperation with Christian Schweitzer (who was using the Smartmag system). Schweitzer's mapping of a Middle Kingdom settlement appears to be a milestone in studies on the history of Avaris. At Middle Abydos (with an expedition from Michigan University) another fragment of a chiefly Middle Kingdom burial ground was mapped. (The survey was conducted in June-July in temperatures reaching 51°C in the shade and the FM36 operated without fail!)

Paweł Gan joined Herbich for the autumn season, which started with a survey for the Polish Center of Archaeology of the 3rd millennium BC site of Tell Arbid

in Northwest Syria. However, only a complex of pits from the Hellenistic period was recorded. Prospection for a Louvre Mission working at Bawit, a Coptic town in Middle Egypt, founded in the 6th century AD and abandoned seven centuries later, permitted the architecture of the northern districts of the town to be traced over about one-fifth of the estimated total area of 50 ha. Research will continue until the town is mapped in its entirety. At Buto, another fragment of the Saite-period town architecture (1st millennium BC) was mapped for the German Archaeological Institute in Cairo project, while the prospection for the French team produced further sections of a map of the industrial district, where an important pottery-manufacturing center had functioned in Roman times. An industrial district of Ptolemaic and Roman date was also the objective of mapping work done for J.-Y. Empereur's Centre d'Etudes Alexandrine at Marea near Alexandria. Research on Neolithic sites along the eastern edge of Karanis lake needs to be viewed as a fiasco (although we should perhaps reserve judgement until excavations are concluded). On the other hand, surveying a Roman-period site previously unknown to archaeologists and apparently not pillaged by the local inhabitants – pottery and huge quantities of bronze coins were the sole traces on the surface - gave highly promising results. An entire city was revealed complete with streets, architectural districts, and a temple. A UCLA expedition plans to open excavations on the site this autumn.

Ch. Benech's team is also active in Syria, doing magnetic prospection at Tell Masaikh in Syria, a city of Neo-Assyrian date, and continuing work at the Hellenistic and Roman garrison site of Dura Europos on the Euphrates. The outcome of the first stage of this project, revealing the urban plan in exhaustive detail, was presented already at the conference in Cracow.

Preview of the next issue of Archaeological Prospection

The articles range from challenging environments to perfect results; competing views on how GPR can be analysed; prospection in specific environments; Neolithic to Industrial; Albania to USA. Something for everyone and available to all ISAP members at a vastly reduced rate of £75 sterling – see ISAP Newsletter 2 or the membership benefits section of the ISAP website www.archprospection.org.

Maillol, Ciobotaru & Moravetz
Electrical and Magnetic Response of Archaeological Features at the Early Neolithic Site of Movila lui Deciov, Western Romania

Gaffney, Patterson, Piro, Goodman & Nishimura
Multimethodological Approach to Study and Characterize Forum-Novum (Vescovio - Central Italy)

Bescoby, Cawley & Chroston
Enhanced Interpretation of Magnetic Survey Data Using Artificial Neural Networks: A Case Study from Butrint, Southern Albania

Kulessa, Chiarulli and Haney
Geophysics in Support of Industrial Archaeology in a Challenging Environment: Shade Iron Furnace, Pennsylvania, USA. Research

Linford, Neil
From hypocaust to hyperbola: ground penetrating radar surveys over mainly Roman remains in the U.K. Research

Aalbersberg & Kattenberg
Archaeological prospection of the Dutch perimarine landscape by means of magnetic methods

Ruffell, Geraghty, Brown & Barton
Ground-penetrating Radar Facies as an aid to Sequence Stratigraphic Analysis

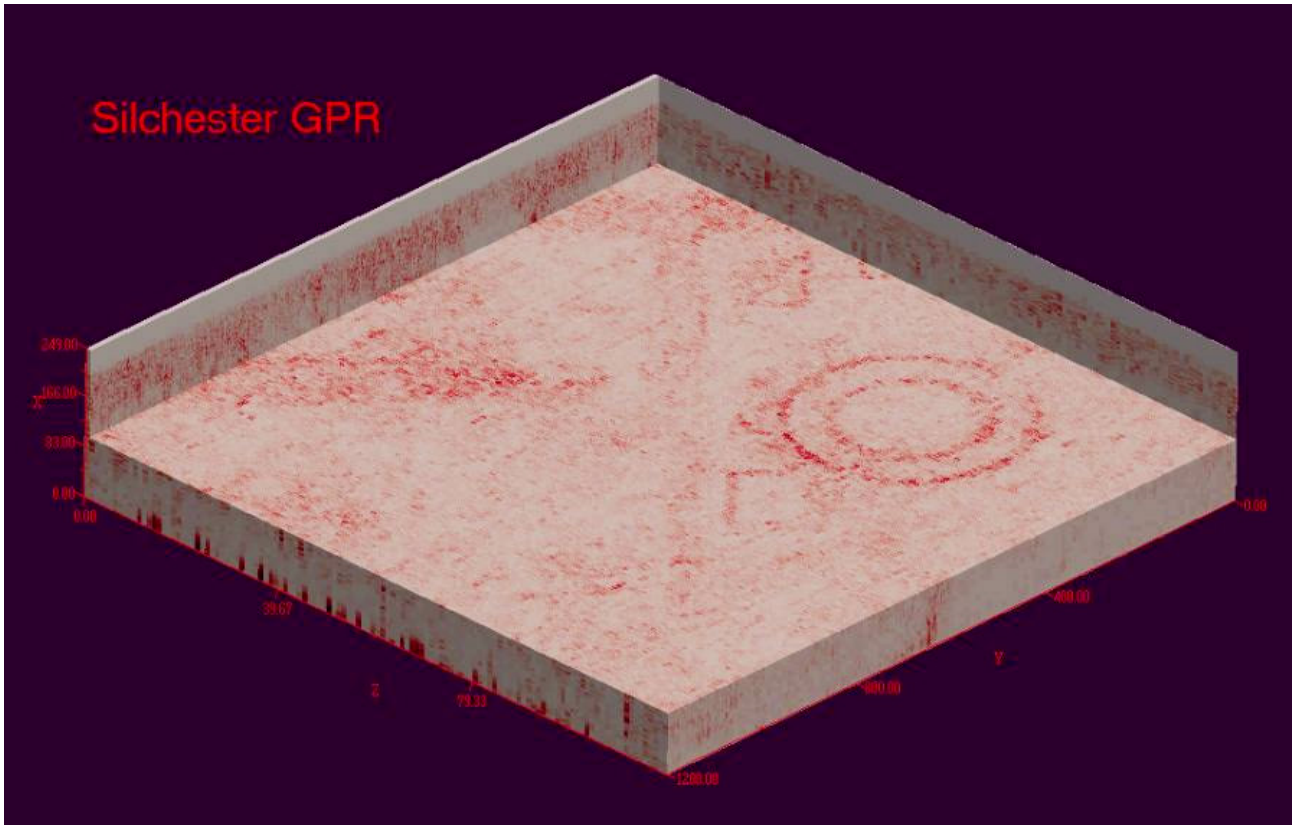


Illustration courtesy N. Linford

Chris Gaffney

A Report from Korea: Symposium on Archaeological Prospection and the joint GPR survey at Wolseong castle in Gyeongju

NISHIMURA Yasushi, Dean GOODMAN & OH Hyun-Dok

Symposium

The first ever Korean symposium on the Geophysical Technology Applied to Subsurface Imaging of Archaeological Properties, was held August 27-28, 2004 in Daejeon. The event was co-sponsored by the Korean Society of Exploration Geophysicists and the National Research Institute for Cultural Properties and was the first occasion to organize a joint conference designed specifically for archaeological prospection in Korea. The symposium contained both oral and poster presentations on August 27th and a field demonstration survey followed on the next day.

Prof. Keisuke Ushijima and Dr. Dean Goodman, both from APSJ (Archaeological Prospecting Society of Japan) gave presentations in the morning session, as invited speakers with the titles "3D Imaging of Keyhole Tomb by Electrical Prospecting" and "Advances in Imaging of Subsurface Archaeology using GPR" respectively. An afternoon session was addressed by all Korean speakers except for one report given by an Egyptian citizen. The event was primarily designed as a domestic symposium in order to introduce archaeological prospection as well as to initiate cooperation between Korean universities, government institutes and commercial companies involved in geophysical surveys.

GPR Survey

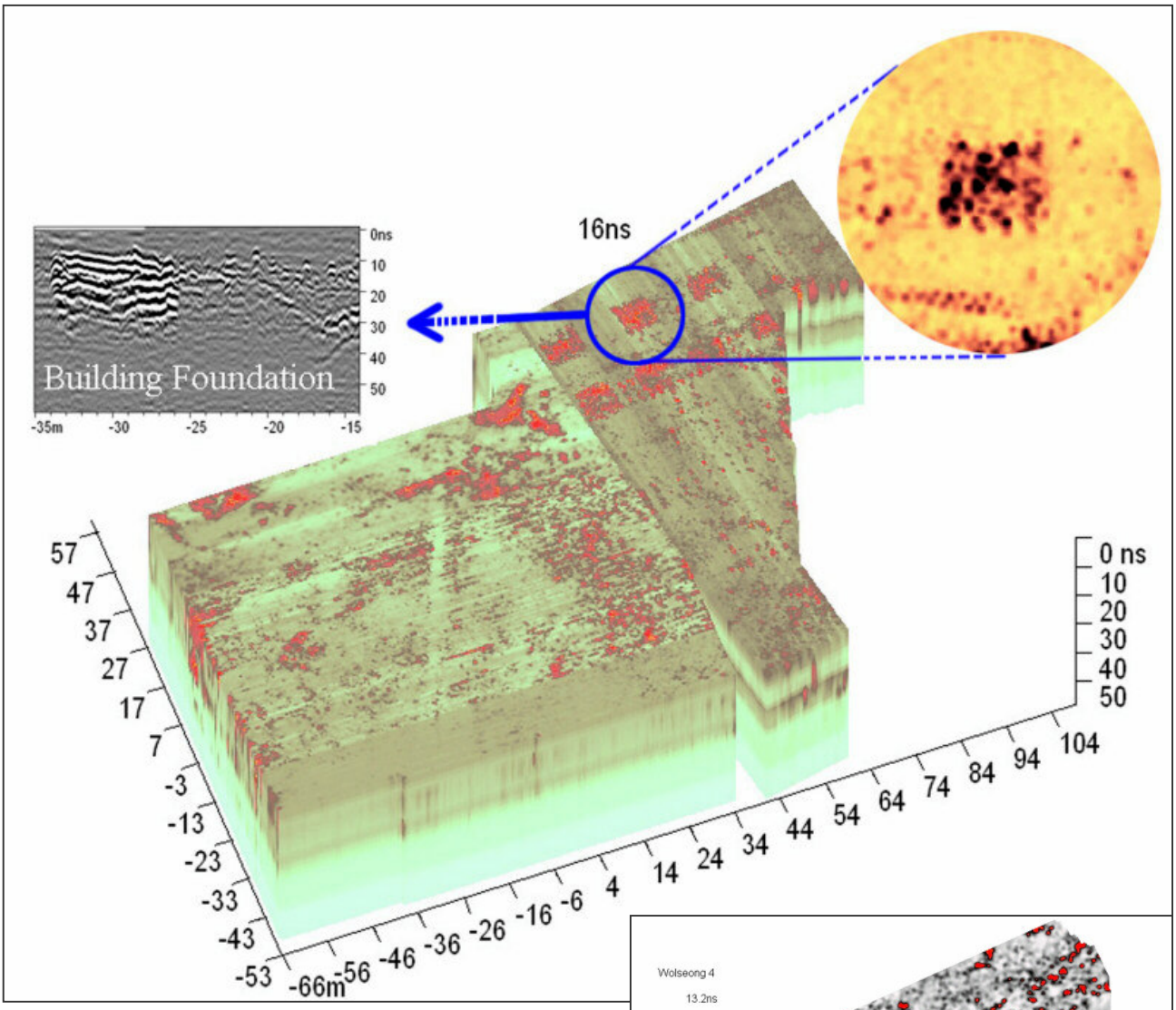
During our stay in Korea, we (GOODMAN and NISHIMURA) had an opportunity to make a joint field GPR survey in Gyeongju area with Dr. Hyun-Dok Oh and Dr. Shin Jong Woo of the National Research Institute for Cultural Properties. The target area called Wolseong is the part the palace site of the Silla Dynasty (B.C. 57 - 935 A.D.) and continued through the Koryo Dynasty (935-1392 A.D.). Wolseong - meaning half moon - takes it name from shape of the natural hillside on which the 16 hectare (800m x 200m) castle was constructed. Several buildings that are still standing include the well known Seokbinggo Ice Storehouse which was built in 1741 A.D. and is located in the central part of the site.

At almost all vantage points within the castle grounds, one can still see surrounding tall and broad earthen ramparts consisting of soils and pebbles. Most of the flat areas at Wolseong are now open spaces other than for some patches of trees and tall grass. Some areas are currently being used to train athletes in the skills of ancient Korean archery.

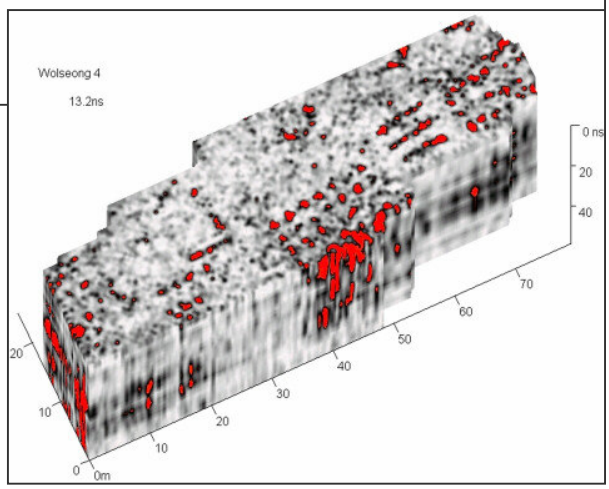
Several flat areas at Wolseong, even though covered by grass, were inviting us to find out what might be lurking just below with GPR. It was also a good opportunity to work off the excessive amounts of great kimichi (hot spiced vegetables) and meat barbeques that were resting in our stomachs. And of course, we also had an excuse should the data be poor, and could always blame the results on the tall grass!

Several previous GPR surveys had already been carried out by Hyun-Dok Oh and Shin, Jong Woo in the central part of Wolseong castle, in a series of research projects which will eventually encompass the whole of area by GPR. According to these latest investigations, base stones for buildings, ditches, and also several garden like features including a pond were found, giving great assurance that the GPR survey would be a very effective means for discovery at Wolseong. Also, deduced from these earlier GPR surveys were many rectangular shaped anomalies that were in alignment with each other, and most likely corresponded to store houses for food and/or palace articles.

Joint GPR surveys in August of 2004 were conducted at one corner of the castle, where a 25 x 78 m area was chosen just adjacent to the eastern rampart. Profile spacing of 50 cm was employed and most of the important reflections occurred very shallowly, within 40



ns of the ground surface. At the southern edge of the site we could clearly see base stones on the ground surface, suggesting the possible existence of castle buildings at this location. Although the base stones that could be visually seen above ground appeared along straight lines, because of their varying heights and inclinations, suggested that they were probably tampered with and had been rearranged. However, time slice images of areas adjacent to the exposed base stones, revealed several lines of subsurface reflections along the southern edge of the site which follow along similar straight rows at perfectly spaced intervals. Archaeologists believe that these orderly reflections indicate continuation of subsurface base stones, which are probably part of the most important building at the Wolseong castle - the emperor's quarters. The site is the farthest removed from the main castle entrance and is protectively flanked by the large earthen rampart with falls off sharply into a deep river below.



Data analysis was made with GPR-SLICE© Imaging Software (www.GPR-SURVEY.com). The results shown in a 2D image map as well as in 3D volume slice image clearly indicate a regular pattern of small closely spaced reflections which presumably correspond to base stones for buildings. Several different building types can also be ascertained by rectangular reflections which may correspond to either trenches, or continuous lines of stonework delineating heating infrastructure for the ancient castle.

Since the turn of the century, two GPR surveys in Wolseong castle area have been carried out in the central part, and this latest joint survey on the eastern flank of the castle, prove once again the effectiveness of geophysical surveying. We are looking forward to have another opportunity to investigate the castle area by GPR and other geophysical methods. We also hope that the successful investigations at Wolseong by geophysical methods so far, will encourage future use of these methods not only at the remaining castle areas, but at many other archaeologically important sites over the entire Korean peninsula.

News in Brief

Orkney College is delighted to have set up an Archaeological Geophysics Unit, the first of its kind in Scotland. The geophysical survey work is primarily archaeological but will extend to environmental applications as well.

The Unit, while based in Orkney, will offer services throughout the Highlands and Islands and further a field. The Geophysics Unit is housed within the Archaeology Department at Orkney College, and will in part serve to extend the range of archaeological services offered by project officers on a commercial and research basis. The Unit is also involved in the teaching of UHI students.

The set up of the Archaeological Geophysics Unit is a 3-year project funded by Highlands and Islands Enterprise, ERDF/EAGGF, Orkney Enterprise, Orkney Islands Council, Shetland Enterprise, Orkney Archaeological Trust and Orkney College. Funding was granted under measures to develop research and commercialisation as an important part of the UHI, in recognition of the application of highly sophisticated technology in the understanding of how our ancestors lived in the Highlands and Islands.

Dr Susan Ovenden has been appointed as Director of the Geophysics Unit, and James Moore as her Assistant. Dr Ovenden has worked for many years as Senior geophysicist with GSB Prospection in Bradford - the largest archaeological geophysics unit in Britain - as well as undertaking teaching and research at Bradford University.

Susan Ovenden

The 9th International Congress for Egyptology took place in Grenoble, France from September 6th-12th. Scholars from all around the world attended. The panel held on "Egypt in 2004" contained two papers on satellite remote sensing projects in Egypt by Jonathan Van Lepp (JPL/NASA) and Sarah Parcak (Cambridge University), while another panel had papers by Ian Matheison (Scotland National Museum) and Dan Lines (Birmingham University) discussing geophysical survey at the pyramid site of Saqqara. Van Lepp's paper discussed the use of ASTER and SIR-C imagery for subsurface detection of a potential new city near the ancient site of Abydos, while Parcak's paper discussed the potential of satellite remote sensing in for Egypt's floodplain archaeology. The Saqqara geophysical survey turned up the previously unknown presence of some large temples, accompanied by a number of tombs and a mixture of large and small dwellings. Egyptologists are excited by the potential of different remote sensing platforms and many projects are now including remote sensing aspects in their archaeological and survey projects.

Sarah Parcak

The EIGG day meetings ('Recent Work in Archaeological Geophysics' and 'Forensic Remote Sensing') on 15th and 16th December went well, with a good turnout and an interesting variety of presentations. Thanks are due to the organisers and all those who contributed.

The first ISAP award for the best poster presentation was won by Ian Mathieson for the display of work at Saqqara. The posters were of a high standard and a commendation was made to Dan Shiel for the poster about work on the Orkney World Heritage Site.

More in the next newsletter…

Anne Roseveare

Noticeboard

AGM

The Annual General Meeting was held on 14th December – details will follow either by the members' e-mail list or in the next newsletter.

Logo Competition!

After much deliberation, the Management Committee decided on two winners, which were announced at the AGM. The chosen logo is a combination of a design by **Bronwen Russell** and one by **Klaus Loeckner**. Congratulations! Armin Schmidt is organising your prizes of free membership for a year. Many thanks to those who entered – elements of all the designs appealed and made the decision a difficult one. The logo will make its appearance on the web site & newsletter shortly.

Courses

Announce your courses or training programmes here (for free!)

National Park Service workshop 2005

Current Archeological Prospection Advances for Non-Destructive Investigations in the 21st Century
16th – 20th May 2005, Hopewell Culture National Historical Park, Ohio, USA

This will be the fifteenth year of the workshop dedicated to the use of geophysical, aerial photography, and other remote sensing methods as they apply to the identification, evaluation, conservation, and protection of archaeological resources across this Nation. The workshop this year will focus on the theory of operation, methodology, processing, interpretation, and on-hands use of the equipment in the field. Special topic for this year is the introduction of geophysical techniques in archeological excavations.

There is a tuition charge of $475.00. Application forms are available on the Midwest Archeological Center's web page at http://www.cr.nps.gov/mwac/.

For further information, please contact Steven L. DeVore, Archeologist, National Park Service, Midwest Archeological Center, Federal Building, Room 474, 100 Centennial Mall North, Lincoln, Nebraska 68508-3873 USA; tel: +1 (402) 437-5392, ext. 141; fax: +1 (402) 437-5098; email: steve_de_vore@nps.gov

Conferences

Topical conferences and meetings coming up around the world – if there's something happening you think we ought to know about, send me the vital information for inclusion.

Archaeological Science 2005

13th – 16th April 2005, Department of Archaeological Sciences, University of Bradford, UK
web: www.bradford.ac.uk/archsci/archsci2005/

Archeometrie 2005

19th – 22nd April 2005, Saclay, France
INSTN Saclay, web: www.ladir.cnrs.fr/GMPCA2005/
Anne Morel, Lab. Pierre Sue, Bat 637, CEA Saclay, 91191 Gif sur Yvette, France fax: FR (0)1 69 08 69 23

International Workshop on Recording, Modeling and Visualisation of Cultural Heritage 2005

22nd – 27th May 2005, Centro Stefano Franscini, Monte Verita, Ascona, Switzerland
web: www.ascona2005.ethz.ch/index.html
e-mail: ascona@geod.baug.ethz.ch

EAGE Near Surface 2005

5th – 8th September 2005, University of Palermo, Sicily, Italy web: www.eage.nl/conferences/

Archaeological Prospection 2005

14th – 17th September 2005, Rome, Italy
S. Piro/ D. Verrecchia, ITABC – CNR, PO Box 10 - 00016 Monterotondo St., Rome, Italy
Fax: +39 06 90672373
web: www.archeo2005.itabc.cnr.it/
e-mail: archeo2005@itabc.cnr.it

AARG 2005

19th – 21st September 2005, Leuven, Belgium
- see article p6

Membership

For enquiries about membership and subscriptions, go to the ISAP web site www.archprospection.org or contact Hon. Secretary Armin Schmidt (e-mail A.Schmidt@Bradford.ac.uk) Dept. of Archaeological Sciences, University of Bradford, West Yorkshire, UK.

The PayPal system has generally proved efficient for people using it and for checking who has paid their membership fee. Members wishing to pay by electronic transfer are requested to ensure their name is put as the reference for the payment, otherwise it can be difficult to establish whose has been received.

Advertising in ISAP News

From the first issue of 2005, **ISAP News** will carry adverts for products and services to the discipline. If you are interested in advertising the equipment, software or services you provide to the archaeological prospection community, contact me for further details (see below).

Contributors to ISAP News No. 3

The Editor wishes to thank those who contributed to this issue:

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Contributions for the next issue

Issue 4 of the newsletter is planned for release in February 2005 - the deadline for submission of contributions will be **31st January 2005**.

Contributions of all types are welcomed and if you would like to be a regional correspondent, please contact me.

I look to forward to hearing from you.

Please follow these guidelines for contributions:
- text as MS Word doc, up to 2 pages or 1000 words
- photos as .jpg or .gif, data images as .tif
- label e-mail attachments clearly
- try to keep the overall size of emails down by zipping files or sending multiple e-mails (I don't have broadband).

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