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- Μάιος 2009 -

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ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

INTERNATIONAL WORKSHOP: LATE ANTIQUITY GLASS IN ANATOLIA (A.D. 4TH TO 8TH CENT.) OCTOBER 26-28, 2009 / IZMIR, TURKEY

First Circular - Call for Papers

Dear Colleagues,

We are glad to inform you that an international conference on the glass from Anatolia dating to the Late Antiquity period (A.D. 4th to 8th cent.) will take place on October 26th-28th, 2009 at the Faculty of Arts and Sciences of the Dokuz Eylul University (DEU) in Izmir, Turkey. We warmly invite contributions by scholars and graduate students from a variety of disciplines related to this subject. Both the excavated finds as well as museum pieces are the subject of this workshop that is offering a firm base for the support of future research in Turkey concerning ancient glass studies. Therefore glass experts as well as museum curators from Turkey and neighbouring countries are kindly welcome. This two-day workshop with a one-day excursion will contain both lectures of 20 min. as well as poster presentations.

The aim of this meeting is to report on the state of research concerning the Late Antiquity glass from Anatolia between the 4th and 8th centuries A.D., or thereabouts. The geographical areas concerned are Turkey, Greece, Cyprus, Egypt, Syria, Israel, Lebanon, Jordan, the rest of the Near East and the Black Sea countries. The focus is, however, Asia Minor. The quantities of Late Roman/Early Byzantine glass which have come to light on numerous sites, as well as recent research on the various collections from the geographical area concerned, now permit us to make significant additions to the archaeological evidence, thanks to recent progress in glass research in western Europe. Concentrating on unpublished finds or collections from Anatolia and the Eastern Mediterranean, the colloquium aims to tackle a series of questions which can be grouped as four principal interlinked and overlapping themes: production, trade-distribution, function and chronology.

The glass groups under consideration are as follows: vessels, lamps, window panes, slabs, glass tesserae and other items. Also historical, philological and epigraphic papers dealing with glass will be considered in this workshop. All approaches and methods likely to enhance our knowledge on these themes and questions are of course very welcome:

archaeology, archaeometry, history of art, philology, cultural anthropology, industrial history etc. Most welcome are papers from excavations in Asia Minor and the rest of the Eastern Mediterranean producing glass and other stratified finds (pottery, small finds, coins etc.) that will help us to build up a more precise chronology.

Papers and oral presentations can be given in English, French, German, Italian, Greek or Turkish, but English will be the preferred language for oral presentations. We would be delighted if you could consider contributing to this conference. If you wish to participate, please fill out the form below and send it to one of the organizers. Please submit an abstract of no more than 300 words together with the attached registration form before June 1, 2009 by e-mail (if possible) to: ergun.lafli@deu.edu.tr, or by fax to: +90.232.453 41 88.

Issue number 29 (July 2006) of the journal *Instrumentum* is planned as a special issue containing the workshop abstracts.

Entry to the workshop is free of charge for all; accommodation and travel expenses will be paid by the participants, who should also arrange their own accommodation as necessary. The organizing committee will make a shuttle service available for participants to take them from the city centre to DEU-Campus in Buca and back every morning and evening. A post-conference excursion on October 28 is planned to three glass collections in Izmir. The proceedings of the workshop is planned to be published in 2011. Along with the workshop an exhibition of current Turkish and international archaeological literature from various publishers will be displayed at the Hall of Faculty of Arts and Sciences.

Also another exhibition with original Late Antique glass finds from Hadrianoupolis (Paphlagonia) is planned.

The organizers seek to widen participation at this conference, and would like to encourage colleagues from all parts of the world to attend. The conference committee kindly requests that you alert any persons within your research community who would be interested in participating at this conference, either by forwarding our e-mail, or by printing this circular and displaying it in your institution.

We hope that you will be able to join us at Dokuz Eylul University, and look forward to seeing you in Izmir!

Contact Addresses for the Workshop

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International Workshop: Late Antique Glass in Anatolia (A.D. 4th to 8th Cent.)

October 26 -- 28, 2009 / Izmir, TURKEY

Registration Form

Please fill in the form and send it back before June 1, 2009. Speakers, please send us an abstract of no more than 300 words by e-mail, fax, or mail, by the same date to : [<ergun.lafli@deu.edu.tr>](mailto:ergun.lafli@deu.edu.tr) or per fax to the number: +90.232.453 41 88.

Type of Participation:

Lecturer / Poster presentation:

Observer:

Family Name:

Name:

Academic Title:

Student:

Graduate:

Undergraduate:

Institution:

Complete Professional Address:

Telephone:

Fax:

E-mail:

Title of Your Lecture:

Joint Authors:

Abstract:

NB: one illustration can be included, if necessary; it should be sent by e-mail in .tif or .jpg format.

LIVING THE LUNAR CALENDAR:
TIME, TEXT AND TRADITION, THE
BIBLE LANDS MUSEUM JERUSALEM,
JANUARY 30TH - FEBRUARY 1ST, 2010
TU B'SHVAT 5770

Call for Papers

The "Living the Lunar Calendar" Conference -- held under the full moon of the Jewish festival of the New Year for Trees-- will investigate the place of calendar reckoning in human society and culture. Focusing on the Moon as a marker of the passage of time, the conference will address a wide variety of issues regarding the application of astronomical and calendrical rules to everyday life, and beyond to the shaping of cultural identity.

The lunar calendar with its irregular pattern of 29/30 day months, requiring an uneven number of months to match the passage of an annual solar/stellar cycle brings with it a measure of uncertainty. It can be observed that the Moon is at one and the same time both constant and unpredictable, leading civilizations to adopt divergent modes of reflection on the stable and unstable components of their existence in time. With the Moon, time does not only exist in nature, but needs to be regulated by man. Human measures of day, month, and year, must live with these uncertainties. In cultures that use the lunar calendar, one must find answers to such mundane questions as: "When does the month, the year, begin? How are salaries and interest to be calculated over months of uneven length and years of unequal months? Is the date in one city the same in all cities?"

More generally, cultures had to account for the apparent anomaly in nature, defining just how much human involvement is required in fixing the central concepts of time. This ideological dilemma joined forces with the political and societal conflicts in antiquity, both within the great empires as well as smaller ethnic and cultural entities. The calendar thus participated significantly in the formation of civilization and identity.

We will gather at the Bible Lands Museum Jerusalem (BLMJ) and the site of Qumran on the shores of the Dead Sea, to address these types of issues in sessions covering the cuneiform Ancient Near East, Egypt, Ancient Israel, The Greco-Roman World, Judaism, Christianity, Islam, the Far East, Africa, and Mesoamerica. Central focus will be given to the ancient world, but with an open eye towards later periods. Papers are invited by scholars on the following general topics:

* Everyday Life in Lunar Regulated Societies

* Calendrical Principles, especially in regard to harmonizing the Lunar Calendar with other systems such as the Egyptian civil calendar, the Julian Calendar, the Jewish sectarian system of 364 day years.

- * Cultural Statements about the Moon, the Sun, the Stars and the concept of Time.
- * Anthropological, Sociological, and Philosophical trajectories of the above.

Submission of papers are invited by the Academic Organizing Committee:

Jonathan Ben-Dov (Haifa University), Wayne Horowitz (The Hebrew University), John Steele (Brown University), Filip Vukosavović (BLMJ), and should consist of a title and abstract of no more than 200 words.

Papers relating solely to issues of chronology will not be considered.

Presentations will be between 25-45 minutes including time for questions, and are to be delivered in English. Papers from the conference will be published in electronic form. The deadline for submissions is 31st July, 2009.

The conference will be held under the auspices of the Bible Lands Museum Jerusalem and The CAENO Foundation, and will include three days of sessions and events at the Museum, with an afternoon and evening at Qumran. Technical details will be provided at a later date. For further information and submission of abstracts, please contact curatorial@blmj.org.

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AGENDA DES MANIFESTATIONS DE L'HALMA-IPEL

Bonsoir,

N'oubliez pas de vous connecter sur notre site et découvrir les manifestations de ce mois et à venir auxquelles nous vous attendons, comme à l'habitude, très nombreux.

Consultez l'ensemble des manifestations sur [le site de l'UMR](#).

Actualités du mois

* 3e colloque International de Pathographie du **3 au 5 avril 2009** (resp. Ph. Charlier)

* Atelier de recherche sur l'Archéologie des espaces économiques : 2e séance le **jeudi 9 avril 2009** (14h30), A. Tichit, Halma-Ipel, *Le commerce des vases en Grèce archaïque (VIe s. av. J.-C.) : quels espaces pour la vente des coupes à boire ?*

* Séminaire mensuel du **jeudi 16 avril 2009** : S. Toron, E. Wyremblewski, Halma-Ipel, *Chevincourt. Fouilles 2007-2008*

* **Séminaire 2009** *Histoire, Archéologie et Littérature mythologique en Scandinavie ancienne et tout spécialement en Islande* (resp. P. Guelpa)

À venir

* Symposium international des **3-5 décembre 2009** : *Femmes et Guerre dans l'Antiquité: la perspective féminine* (resp. J. Fabre-Serris) - dans le cadre d'un réseau européen de Gender Studies dans l'Antiquité

* Symposium international des **16-17 décembre 2009** : *Archéologie des espaces économiques : la concentration spatiale des activités et la question des quartiers spécialisés* (resp. A. Esposito, G. Sanidas) - dans le cadre d'un BQR Archéologie des espaces économiques des mondes grecs et hellénisés.

VISITEZ NOTRE SITE :

<http://halma-ipel.recherche.univ-lille3.fr/>

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RADIOCARBON 2009 ORAL SESSIONS **SCHEDULE**

Hello all,

Here is the link to the Oral sessions schedule for the Radiocarbon 2009 conference:

http://www.radiocarbon2009.org/Oral_sessions.pdf

Poster session information will be online soon. The poster session is scheduled for Tuesday, June 2nd, from 5:30 to 8:30 pm, with posters divided into two sessions of 90 minutes each, Session A and Session B. Posters will remain in place until early Friday morning.

Poster boards can accommodate posters up to 4 feet by 4 feet (1.20 m x 1.20 m), so a standard size poster of 3 feet by 4 feet will easily fit the space.

Oral sessions must be provided in MS PowerPoint 2003 or 2007 format.

Also, one last reminder that today is the final day to register at the early registration price.

More info to come...

We look forward to seeing you all in Kona,

The Radiocarbon 2009 Organizing Committee; Prof. Timothy Jull, chair

WRITING AS MATERIAL PRACTICE: SUBSTANCE, SURFACE AND MEDIUM **FRIDAY 15 – SUNDAY 17 MAY 2009**

We would like to bring your attention to the upcoming conference "WRITING AS MATERIAL PRACTICE: Substance, Surface and Medium", an interdisciplinary, international conference sponsored and hosted by the University College London's Institute of Archaeology on Friday 15 May - Sunday 17 May 2009.

Pre-papers will focus on the artefactual nature of writing—the ways in which materials, techniques, colour, scale, orientation, visibility, etc. inform the creation of inscribed objects and structure subsequent engagement, perception and meaning making.

Pre-papers will be pre-circulated 2 weeks in advance (from 1 May) via PDF download on the conference website. Participants will be expected to read a good proportion of papers beforehand as session time will be dedicated primarily to discussion.

Please visit the conference website

(<<http://www.homepages.ucl.ac.uk/%7Etrnkep/Registration.html>>) to download the registration form and to find other information. The registration fee prior to 1 May is at a discounted rate of £50 for ordinary delegates and £15 for student delegates. Abstracts are now available and the provisional programme will be posted shortly.

We hope you can join us and look forward to welcoming you to the UCL Institute of Archaeology in May!

Best wishes - Dr. Kathryn E. Piquette and Prof. Ruth Whitehouse

WRITING AS MATERIAL PRACTICE: Substance, Surface and Medium Friday 15
– Sunday 17 May 2009

Organisers: Dr. Kathryn E. Piquette and Prof. Ruth Whitehouse

UCL Institute of Archaeology,
31-34 Gordon Square, London WC1H 0PY
materialityofwriting@googlemail.com
www.ucl.ac.uk/archaeology/events

WORKSHOP AND A SESSION OF EXPERIMENTAL KNAPPING LITHIC PRODUCTION IN CONTEXTS OF CRAFT SPECIALIZATION, THURSDAY, MAY 7, 2009

Organizers: Isaac Gilead, Jacob Vardi and Angela Davidson Special Guest: Dr. Jacques Pelegrin (CNRS)

Thursday, May 7, 2009

Kiryat Tuviyahu Campus (Beit Hayas), Building H4, Room 10 Ben-Gurion University of the Negev, Beer Sheva, Israel

09:00-09:30

Reception

Session A

The craft and the specialist: Ghassulian sickle blade workshops

Chair: Steve Rosen

09:30-09:50

Isaac Gilead

The Beit Eshel workshop in context: a brief overview

09:50-10:10

Jacob Vardi

The Insert and the Haft: new insights from the analysis of sickle blades from three Ghassulian sickle blade workshops

10:10-10:30

Angela Davidzon

Refitting the Beit Eshel workshop: results and implications

10:30-10:50

Ron Shimelmitz

Continuity of blade production from the Chalcolithic period to the Early Bronze Age: does it exist?

10:50-11:20

COFFEE BREAK

Session B

Lithic production and craft specialization,

Chair: Ran Barkai

11:20-11:40

Ofer Marder and Nigel Goring-Morris

Shortening microliths: reflections on the use of the microburin technique in the Epipalaeolithic in light of refitting studies in the Negev

11:40-12:00

Hamudi Khalaily, Omry Barzilai, Ianir Milevski and Nimrod Getzov Blade production and the evolution of the naviform technology at the PPNB site of Yiftahel

12:00-12:20

Omry Barzilai

Craft specialization and bidirectional-blade production during the PPNB period in the Southern Levant

12:20-13:30

LUNCH

Session C

Experimental knapping

14:00-15:30

Jacques Pelegrin

Production of blades: demonstration of experimental knapping and analysis

15:30-15:50

Nigel Goring-Morris:

Concluding remarks

Via Ianir Milevski

ianirmilevski@gmail.com



STACHEM REGIONAL WORKSHOP ON **ARCHAEOLOGY, XANTHI, GREECE,** **MAY 8, 2009**

Dear Colleague,

The Cultural and Educational Technology Institute / 'Athena' R.C., the Department of Archaeology / University of Athens, and the Cyprus Institute are organizing the 1st STACHEM regional workshop on Archaeometry. The workshop will focus on the material and natural sciences for archaeology infrastructure and its development in the Eastern Mediterranean. It foresees the participation of the directors of leading Eastern Mediterranean institutions such as research centers, national museums, and antiquities authorities (c. 15-20 invited participants), engaging in round table discussion and presentations focusing on their vision for the regional needs for Science and Technology in Archaeology, and the development of relevant infrastructures. Some sessions will be open to further interested researchers.

The workshop will be held in Xanthi, Greece, on May 8, 2009, and you are cordially invited to attend it.

Looking forward to welcome you to the STACHEM workshop in Xanthi.

On behalf of the organizing committee,

Nestor Tsirliganis

Please find below further information relating to the STACHEM project.

SCIENCE AND TECHNOLOGY FOR ARCHAEOLOGY AND CULTURAL HERITAGE IN THE EASTERN MEDITERRANEAN (STACHEM)

Type of funding scheme: Support action (SA) Work programme topics addressed: INFRA-2008-3.2: Studies, conferences and coordination actions supporting policy development, including international cooperation, in all S&T fields.

STACHEM Project Director: Prof. Franco Niccolucci (STARC, The Cyprus Institute)

STACHEM Scientific Coordinator: Dr Kirsi Lorentz (STARC, The Cyprus Institute)

An overview and goals of the project follow:

"Although the Eastern Mediterranean region, including Greece, Asia Minor, Cyprus and the Levant, is probably one of the richest areas of the world as far as archaeological heritage is concerned, and undoubtedly one of the most investigated, scientific analysis of finds and documentation, preservation and communication services lack a regional strategy. There are excellent research centers in the region (some of which are members of the present partnership) and certain elements of advanced research infrastructure, but coordination and policies are indeed lacking. This has several adverse effects, such as duplication of efforts, lack of interoperability

at the data level, and in general missed opportunities for collaboration among research institutions. In addition there is a clear shortage of scientific and technical resources, such as laboratories of applied chemistry and physics for archaeology, multimedia communication centers, digital libraries, etc., so that analyses and data processing very often have to be carried out far away from the region. In this context, the Cyprus Institute has launched the Science and Technology for Archaeology Research Center (STARC), which is designed to become a significant scientific and technological resource for the regional archaeology and cultural heritage communities. It is important to ensure that, from its earliest design and planning phase, STARC is adapted to the needs and demands of these communities, and that its development is integrated in European and regional strategies for the build-up of research infrastructures in the relevant fields. The goal of this project is to contribute to a regional strategic plan for research infrastructures devoted to archaeological sciences and digital heritage in the Eastern Mediterranean, and simultaneously to support and complement the design and planning process of STARC, ensuring that it is embedded in the said strategy, closely adapted to the regional needs and integrated in the Euro-Mediterranean environment of archaeological sciences and digital heritage. The outcomes of the STACHEM project will include suggestions for joint trans-national activities, based on the exploration of opportunities for synergies and coordination, as well as a user-led assessment of needs, guidelines for good practices and directions for further infrastructure development. It will involve the build-up of a community of users, with periodic workshops for continuous monitoring and update. In addition to its benefits on the European and regional scales, the project will also have an impact at the national levels for the medium and long-term strategy of the institutions involved in the project and their partners. The proposal therefore brings a unique opportunity for STARC's design and planning to receive significant input from various studies relevant to its development, and more generally for the archaeology and cultural heritage communities in the region to progress towards a regional strategic plan. Contributing to such a plan is an essential objective of the project, and will in addition be immediately tested through a built-in implementation concerning STARC and the other partners, rather than be limited to theoretical statements.

The project leaflet can be viewed at:

<http://starc.cyi.ac.cy/files/STACHEM%2009%20LEAFLET.pdf>

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FITCH-WIENER LAB SEMINAR SERIES
ON “SCIENCE-BASED
ARCHAEOLOGY”

WEDNESDAY, 6TH MAY, 5:30 P.M.

Dr. Rosalia Christidou

(Wiener Laboratory, ASCSA)

will introduce the topic:

“Working with bones: materials, tools and actions”

*The seminar will take place at the Fitch Laboratory of the British School at Athens.
Entrance from Ioannou Patera 53 (BSA) or Souedias 54 (ASCSA). Tel: 210-7217482*

MINOAN SEMINAR (ATHENS), THE NE AEGEAN AND MINOAN CRETE IN THE MIDDLE BRONZE AGE

Thursday 30 April, 18.30, Archaeological Society, Panepistimiou 22

Dimitris Matsas

Ministry of Culture, 19th Ephorate of Prehistoric & Classical Antiquities

The NE Aegean and Minoan Crete in the Middle Bronze Age

Abstract

The archaeological evidence from Mikro Vouni, Samothrace, apart from indicating the operation of a Minoan administrative system in the context of an emporium (administrative documents in clay, a weight, sealings with hieroglyphic signs, Linear A), also suggests a broader Minoan cultural presence, which can be identified both in religious ideology and in everyday life (domestic vases, weaving). Based on the above, we attempt a more general assessment of the Minoan and minoanizing finds in the NE Aegean and their dating, and we examine the way that Cretan Palaces worked in the area. Our conclusions are, however, provisional, and they need further support from future targeted excavations, particularly in the islands of Lemnos, Imvros and Samothrace.

'FOOTPRINTS OF INDUSTRY' **CONFERENCE, 3RD - 7TH JUNE, 2009, UK**

Dear Colleagues

Following an earlier call for papers, here is a reminder that the 'Footprints of Industry' conference is taking place from 3rd to 7th June 2009 to commemorate the 300th anniversary of the first successful commercial use of coke to smelt iron.

This is an appropriate moment to consider the impact of the industrial revolution on the modern world. The last half century has seen a dramatic expansion of research into the processes of industrialisation, coupled with overwhelming public support for the conservation of its material remains. The wide range of disciplines involved: archaeology, history, metallurgy and conservation, have themselves developed in response to the challenges of understanding this often fragile heritage. Big themes and issues arise which have tremendous relevance to the world today: environmental change, social transformation, technological progress, leisure as industry and industry as leisure.

This conference provides an exciting opportunity for inter-disciplinary debate, discussion and analysis.

Please find the draft programme below, and visit

<http://tinyurl.com/c8jstb>

To download a booking form. Please book now to ensure your place! If you have any questions or queries please reply to this email!

I look forward to welcoming you to Coalbrookdale in June

All the best

Paul

Paul Belford BSc MA FSA MifA
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DRAFT PROGRAMME

DAY ONE

THURSDAY 4TH JUNE 2009

THE ORIGINS OF INDUSTRIALISATION AND THE INHERITANCE OF ABRAHAM DARBY

Farms to Forges: early medieval industrialisation in Europe Ronald A. Ross (Wilfred Laurier University, Ontario)

Iron, glass, and castles: the medieval industrial landscape in southern Germany Gerhard Ermischer (Archaeologisches Spessart-Projekt, Germany)

Ancient copper and lead pollution records from peat bogs in Central Wales and Scotland Tim Mighall et al. (Universities of Aberdeen, Cambridge, Westminster, Leeds and Edinburgh)

Monastic Scotland not Quaker Coalbrookdale?: Salt and the 'long Industrial Revolution'
David Cranstone (Cranstone Consultants)

The early iron industry in the English west midlands Peter King (Independent Researcher)

Before the Lunar Society: the evidence for early post-medieval industrialisation in Birmingham Chris Hewitson (University of Birmingham)

Some Brayon and Walloon interventions at Coalbrookdale Brian G. Awty (Independent Researcher)

The Industrial and Social Impact of John Wilkinson Vin Callcut (Independent Researcher)

Industrialisation: Some thoughts on Archaeological Evidence from the Manchester Region Mike Nevell (University of Manchester)

Keynote lecture
David Crossley

DAY 2

FRIDAY 5TH JUNE 2009

TOWARDS BRAVE NEW WORLDS: TECHNOLOGY, SOCIETY AND GLOBALISATION

C'est en forgeant qu'on devient forgeron: cognitive archaeology and metalworking
David Dungworth (English Heritage)

Religion, science and technology in the sixteenth, seventeenth and eighteenth centuries Paul Belford (Ironbridge Gorge Museum Trust)

Puddling: A Metallurgical Perspective
Merton C. Flemings (Massachusetts Institute of Technology)

Advancing the work of Prometheus - the impact of artificial light in the workplace and beyond Ian West (University of Leicester)

New men on the block - Sheffield steelmen in the Cutlers' Company Joan Unwin (Company of Cutlers in Hallamshire)

Living through the industrial revolution: disease and death in 18th and 19th century Birmingham Megan Brickley (University of Birmingham)

Smelting works, chapels, churches, institutes and houses Stephen Hughes (Royal Commission on the Ancient & Historical Monuments of Wales)

Bound to the Margins of Society: West Yorkshire Workhouses of the Industrial Age Charlotte Newman (University of York)

The Shock of the New: technology and change in London's East End Emma Dwyer (Museum of London Archaeology)

Bath in the Industrial Revolution: the Harmony of Tourism, Trade, and Innovation C. J. Axon (University of Oxford) and Stuart Burroughs (Museum of Bath at Work),

Steel Away - the Trenton Steel Works and the Struggle for American Manufacturing Independence Richard W. Hunter and Ian C. Burrow (Hunter Research Inc.)

Keynote lecture
Marilyn Palmer

DAY 3

SATURDAY 6TH JUNE 2009

UNDERSTANDING, MANAGING AND INTERPRETING THE HERITAGE OF INDUSTRIALISATION

Detritus or Waste? Approaches to preservation and presentation of 19th and 20th century industrial workshops William Mitchell (University of Birmingham)

It's not just the Buildings: Approaches to improving appreciation of Ironworks in their landscapes in South Wales Andrew G Marvell (Glamorgan-Gwent Archaeological Trust)

The Clee Hills: concrete heritage, missed opportunities and an extraordinary landscape.
Roger White (University of Birmingham)

Industrial Heritage in the Greater Region Norbert Mendgen (HTW des Saarlandes)

Industrial heritage in Spain: national plan and concrete examples Pablo Sánchez (University of Valladolid / Lámpara Association)

Apocalypse Soon: a seedbank of technologies as part of the human survival package?

David Cranstone (Cranstone Consultants)

So much archaeology, so little time: archaeological technique and Industrial remains

Helen Gomersall (West Yorkshire Archaeology Advisory Service)

Concluding lecture

Bringing Back The People

Sir Neil Cossons

THE 7TH INTERNATIONAL CONGRESS **ON THE ARCHAEOLOGY OF THE** **ANCIENT NEAR EAST**

FINAL CALL FOR PAPERS

Many thanks to those of you who have already submitted abstracts.

This email is the final reminder that the closing date for the submission of paper proposals is 30th April 2009.

It would be much appreciated if you could forward this reminder to any interested colleagues and students.

Proposals should consist of a 300 word abstract and can be submitted online at:
<<http://7icaane.intrabench.com/?showBookEvent1&EVENTID=5030&TID=38>>

Papers for the Fieldwork session and posters only may be submitted by 30th September 2009. The extended deadline is to allow for the inclusion of papers on fieldwork undertaken during the summer.

ISLAMIC SESSION

Islamic papers should be sent to Dr Alison Gascoigne (A.L.Gascoigne@soton.ac.uk), and copied to the administrator (admin@7icaane.org).

This year, we would like to encourage the submission of papers on Islamic archaeology within the main 7ICAANE sessions; www.7icaane.org

Research lying outside these themes will be collected into one or more dedicated Islamic sessions.

Details of Islamic Archaeology at 7ICAANE can now be found on the website:
<http://www.7icaane.org/islamic.html>

7ICAANE REGISTRATION - PAYMENT

You can pay for your 7ICAANE tickets online with a credit or debit card at:
<<http://7icaane.intrabench.com/?showBookEvent1&EVENTID=5035&TID=39>>

To pay by cheque or bank transfer please download a form from the same page.

We look forward to seeing as many of you as possible in London next year.

Helen Taylor

7ICAANE Administrator,
7th International Congress on the
Archaeology of the Ancient Near East,
London, 12th-16th April 2010
e-mail: admin@7icaane.org
website: www.7icaane.org



ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –
JOB VACANCIES/FELLOWSHIPS

FULBRIGHT OPPORTUNITIES IN
ARCHAEOLOGY

From March to August 1, 2009, U.S. faculty and professionals are invited to apply for *Fulbright scholar grants at www.cies.org <blocked::http://www.cies.org/> . For monthly updates, write us at outreach@cies.iie.org <mailto:outreach@cies.iie.org> for a complimentary subscription to *The Fulbright Scholar News*, an electronic newsletter.

**The Fulbright Program, sponsored by the U.S. Department of State's Bureau of Educational and Cultural Affairs, is the U.S. government's flagship international exchange program and is supported by the people of the United States and partner countries around the world. Since 1946, the Fulbright Program has provided more than 286,000 participants from over 155 countries with the opportunity to study, teach and conduct research, to exchange ideas and contribute to finding solutions to shared international concerns. For more information, visit <http://fulbright.state.gov/> <blocked::http://fulbright.state.gov/> .*

Fulbright Scholar Program for US Faculty and Professionals for 2010-2011 is open

The Fulbright Scholar Program offers **six grants in lecturing, research or combined lecturing/research awards in archaeology, including one Fulbright Distinguished Chair**. Even better, faculty and professionals in archaeology also can apply for one of the **144 "All Discipline"** awards open to all fields.

What does Fulbright offer in archaeology? Here are a few of the awards for 2010-2011:

Middle East and North Africa – Award #0417 – Middle East and North Africa Regional Research Program – 3-9 months in two or more countries

France – Award #0251 – French studies, arts and humanities

Mauritius – Award #0080 – museum and heritage studies

Taiwan – Award #0181 – Southeast Asia and North America

The application deadline is August 1, 2009. U.S. citizenship is required. For a full, detailed listing of all Fulbright programs and other eligibility requirements visit our website at www.cies.org <http://www.cies.org/>, or send a request for materials to scholars@cies.iie.org.

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**RESEARCH ASSISTANT/RESEARCH
ASSOCIATE, NERC RADIOCARBON
FACILITY (ENVIRONMENT),
SCOTTISH UNIVERSITIES
ENVIRONMENTAL RESEARCH
CENTRE (SUERC), EAST KILBRIDE**

**Salary: £25,623- £28,893 (grade 6)/£31,513-35,469 (max appointment will be £32,458) (grade 7) per annum
REF: 00000**

A Radiocarbon Scientist/Analytical Chemist is sought by the Natural Environment Research Council Radiocarbon Facility (NRCF) - Environment. NRCF-Environment is a component of the Scottish Universities Environmental Research Centre (SUERC) in East Kilbride and provides radiocarbon analytical support for projects approved by NERC for UK based scientists, which may include international collaborations. Research themes include palaeoclimatology/ecology, oceanography, geochemistry, geomorphology and carbon cycling. In-house research and development of methods to meet the evolving needs of NRCF's user community are important components of the facility's work.

You will be responsible for providing radiocarbon analyses and scientific advice for NRCF's earth and environmental science community, for broadening the laboratory's analytical capabilities, with emphasis on small samples and compound specific/compound group radiocarbon analysis and for developing your own research areas. You will be encouraged to establish collaborative links with external scientists and with on-site colleagues including the AMS group. This will require a strong aptitude for analytical work, good interpersonal skills and the ability to develop ideas and publish research findings. For appointment at level 7 you will have a relevant PhD and postdoctoral experience. Scientists with experience in some or all of the following are preferred: radiocarbon science, organic geochemistry, analytical chemistry of small samples, vacuum techniques, quality control, dating method(s), isotope ratio mass spectrometry.

The post is available for 3 years in the first instance. Informal enquiries should be directed to Dr Charlotte Bryant (c.bryant@nercrl.gla.ac.uk) tel: + 44 1355 260037).

Apply online at www.glasgow.ac.uk/jobs

If you are unable to apply online please contact us on 0141 330 3898 for an application pack.

Closing date: 26 June 2009

A 12-MONTH JOB WITH ENGLISH HERITAGE

English Heritage has a 12-month vacancy for a Regional Science Advisor, based in either London or Northampton.

The primary purpose of the post is to increase the level and quality of archaeological science at regional level, and to promote the protection, better understanding and public appreciation of the historic environment, especially in relation to development and to developer-funded archaeology, and the work and policies of regional agencies such as the Environment Agency. In doing this, the RSA acts as a single-stop source for information and advice, while maintaining close communication with the national archaeological science teams at Fort Cumberland, seeking their guidance when needed.

For full details and application form look on <http://www.english-heritage.org.uk/server/show/nav.18437>.

The closing date is 15th May 2009.

Dr Justine Bayley
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FITCH LABORATORY BURSARY AWARDS 2009-2010

Applications are invited from graduate students or young scholars for an award to support research at the Fitch Laboratory, British School at Athens (BSA) for up to 3 months in the academic year 2009-10 in any of the fields in which the Laboratory is active (e.g. inorganic material analysis, geophysical prospection, zooarchaeology, archaeobotany, soil micromorphology, ethnoarchaeology, landscape archaeology, archaeology of technology; normally in the context of Aegean/Mediterranean archaeology). Preference may be given to research on bioarchaeology and soil micromorphology. At least two awards are expected to be offered. The Bursary includes a monthly stipend (500€), BSA membership and accommodation at the BSA Hostel in Athens and, if required for research purposes, also in Knossos. The award holder will be required to submit a report on her/his research at the Laboratory to the Laboratory's Subcommittee and Director.

The successful applicant will be expected to use the facilities of the Fitch Laboratory (including analytical equipment and reference collections) as well as the BSA library to further on-going work, in the context of a postgraduate degree or postdoctoral research. The award carries no other formal obligation, although involvement in the academic life of the BSA (for example in the form of a seminar) is welcome.

Applications should include a covering letter (indicating the preferred length and period of stay), a Curriculum Vitae, a statement of the proposed programme of research and the names and contact details of two referees. The successful applicant will be responsible for acquiring on time any required permits for study and transfer of archaeological material to the Fitch Laboratory. Applicants are also advised to contact the Laboratory Director if the use of analytical facilities is necessary for the proposed research.

Applications and reference letters should be submitted by **Friday 12th June 2009**. They can be sent via e-mail (bsa@sas.ac.uk) or post to: The Secretary, The British School at Athens, Senate House, Malet Street, London WC1E 7HU, UK.

Potential applicants may contact Mrs H. Fields, the BSA London Secretary (bsa@sas.ac.uk), or Dr E. Kiriati, the Laboratory Director (fldirector@bsa.ac.uk), for further information. Additional details about the School and the Laboratory can be also found at <http://www.bsa.ac.uk/>.



FITCH LABORATORY WILLIAMS FELLOWSHIP IN CERAMIC PETROLOGY

Applications are invited for the post of the Williams Fellow in Ceramic Petrology at the Fitch Laboratory, British School at Athens (BSA). The Fellow should hold a PhD degree or be close to acquire one and be suitably qualified to undertake research on the provenance and technology of archaeological ceramics using petrographic analysis with thin sections (optical microscopy). The Laboratory undertakes a range of collaborative research into ancient ceramics and the Fellow is expected to work on Laboratory projects and/or, subject to the approval of the Fitch Laboratory Committee, pursue his/her own research initiatives. Applicants should be archaeologists with training and practical experience in ceramic petrology or geologists/material analysts with experience on the analysis of archaeological ceramics. Previous experience in Greek/Aegean archaeology is highly desirable but not a requirement.

The salary will be £17,000-20,000 per annum, depending on qualifications and experience. In addition, the School will provide annual return airfare from the UK, health insurance and also membership of the USS pension scheme (available to UK residents only). For those who do not qualify for this or UK National Insurance, alternative arrangements will be made. An additional annual travel bonus of £1,200 will be provided to cover travel expenses for conferences, meetings etc.

The fellowship is for three years and can be renewed for an additional year. The successful candidate will be expected to take up the post from 19th October 2009. He/she will be appraised every year by the Laboratory Director.

The Fellow is encouraged to reside in the Hostel of the School in the first instance. Applications should include a covering letter, a Curriculum Vitae, the names and contact details of two referees and a proposal for a potential research project (up to one page) matching both the interests of the applicant and the Laboratory.

Applications and reference letters should be submitted by **Friday 29th May 2009**. They can be sent via e-mail (bsa@sas.ac.uk) or post to: The Secretary, The British School at Athens, Senate House, Malet Street, London WC1E 7HU, UK. Interviews will be held in London in late June.

Potential applicants may contact Mrs H. Fields, the BSA London Secretary (bsa@sas.ac.uk) or Dr E. Kiriatzi, the Laboratory Director (fldirector@bsa.ac.uk), for further information. Additional details about the School and the Laboratory can be also found at <http://www.bsa.ac.uk/>.



FITCH LABORATORY SENIOR VISITING FELLOWSHIPS 2009-2011

Applications are invited for Senior Visiting Fellowships at the Fitch Laboratory, British School (BSA) at Athens for up to 3 months in the academic years 2009-10 and 2010-11, for research in any of the fields in which the Laboratory is active (e.g. inorganic material analysis, geophysical prospection, zooarchaeology, archaeobotany, soil micromorphology, ethnoarchaeology, landscape archaeology, archaeology of technology; normally in the context of Aegean/Mediterranean archaeology). One or two Fellows will be appointed in each year depending on requests for the Fellowship duration. The Fellowship covers a monthly stipend (800€), accommodation and airfare (up to 500€), as well as limited research expenses (up to 1000€). Fellows will be required to submit a report on their research and a short general report on their time at the Laboratory to the Laboratory's Subcommittee and Director.

The Senior Visiting Fellows should be established scholars or scientists (normally at least 5 years beyond receipt of the Ph.D.). Fellowships are intended to enable scholars in post to spend a period of research leave in Greece, for example, during sabbatical. Fellows will be expected to reside at the School and base their research at the Laboratory, for a period of between 1 and 3 months, preferably during the academic year (between October and June). During this time they should conduct a programme of original research either independently or in collaboration with Laboratory staff members. Fellows are also expected to give one public lecture or an open seminar at the BSA.

The Fellowship covers BSA membership and accommodation at the BSA Hostel in Athens and, if required for research purposes, also in Knossos, while accommodation is also offered to an accompanying spouse/partner, who is most welcome, at a nominal daily rate. Regrettably, children cannot be accommodated. Preference may be given to employees of UK HEIs, Museums and other such bodies.

Applications should include a covering letter (indicating the preferred length and period of stay), a Curriculum Vitae, a statement of their proposed programme of research (up to 500 words) and the names and contact details of two referees. Applicants are advised to contact the Laboratory Director if the use of analytical facilities is necessary for the proposed research.

Applications and reference letters should be submitted by **Friday 12th June 2009**. They can be sent via e-mail (bsa@sas.ac.uk) or post to: The Secretary, The British School at Athens, Senate House, Malet Street, London WC1E 7HU, UK.

Potential applicants may contact Mrs H. Fields, the BSA London Secretary (bsa@sas.ac.uk) or Dr E. Kiriatzi, the Laboratory Director (fldirector@bsa.ac.uk), for further information. Additional details about the School and the Laboratory can be also found at <http://www.bsa.ac.uk/>.

ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

OXCAL V4.1 RELEASED

I have finally released OxCal v4.1 which has been under test for over a year.

The main differences in the new version are the addition of outlier analysis, and a more efficient approach to interpolation of P_Sequence models.

There are also changes to the user-interface. The main thing you will notice is that the input and output windows are now integrated - so you should not have as many problems with popup windows. You can swap between the the input and output of an analysis using two blue buttons (<) and (>) at the top of the browser window.

The downloadable version should work on PC, Mac or Linux.

More details are available at: http://c14.arch.ox.ac.uk/oxcalhelp/hlp_develop.html

the program is available for use online, or for download at:

<http://c14.arch.ox.ac.uk/oxcal.html>

Two papers are in press in Radiocarbon which explain the new features in more detail.

Christopher Ramsey

christopher.ramsey@rlaha.ox.ac.uk

ARCHAEOLOGICAL GLOSSARY

Dear All

A glossary of archaeological terms is now available on the Historical Metallurgy Society Website

http://www.hist-met.org/arch_comm.html

Please note that the glossary is incomplete and we invite contributions, corrections and comments from the archaeological community.

Thanks

David

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INTERNET SITES

**ΙΣΤΟΤΟΠΟΣ ΜΝΗΜΕΙΩΝ ΑΧΑΪΑΣ ΚΑΙ
ΑΙΤΩΛΟΑΚΑΡΝΑΝΙΑΣ**

Please visit the site: <http://monuments.hpclab.ceid.upatras.gr/>

RARE BOOKS ONLINE

Please visit the site: <http://www.wdl.org/en/>

THE MINERALOGY DATABASE

The Mineralogy Database was last updated on 3/8/09 and it contains 4,442 individual mineral species descriptions with links and a comprehensive image library.

Each mineral has a page linked to tables devoted to crystallography, crystal structures, X-Ray powder diffraction, chemical composition, physical and optical properties, Dana's New classification, Strunz classification, mineral specimen images, and alphabetical listings of mineral species. There also are extensive links to other external sources of mineral data and information.

Please visit the site: <http://www.webmineral.com/>

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

THE COLOR OF LIFE: POLYCHROMY IN SCULPTURE FROM ANTIQUITY TO THE PRESENT

Bryn Mawr Classical Review 2009.04.55

Roberta Panzanelli, Eike D. Schmidt, Kenneth Lapatin (ed.), *The Color of Life: Polychromy in Sculpture from Antiquity to the Present*. Los Angeles: J. Paul Getty Museum: The Getty Research Institute, 2008.

Pp. xiv, 186. ISBN 9780892369188. \$49.95 (pb).

Reviewed by Mark Bradley, University of Nottingham

(mark.bradley@nottingham.ac.uk)

Word count: 3460 words

[Authors and titles are listed at the end of the review.]

The first decade of the twenty-first century represents the latest phase in a long series of periodic attempts by classical art historians stretching back to the late eighteenth century to convince the world that Greek and Roman marble sculpture was, on the whole, originally coloured. Since 2003, high-profile exhibitions of painted Greek and Roman casts, painstakingly studied and reconstructed by experts from across Europe, have made their rounds across more than ten international venues, attracting extensive media coverage and sparking a renewed interest in sculptural polychromy in both popular and academic circles.¹ This truly international initiative has been the first major exhibition of the subject in over a century, setting the scene for a number of important projects addressing the archaeological identification and reconstruction of pigments, as well as the art-historical importance of colour on ancient sculpture.² This is not to say that sculptural polychromy has had the last word: the provocative exhibitions have met with some stubborn resistance, and the exhibits themselves attest as much to the limitations of our knowledge and understanding about sculptural polychromy as they do to the fact that colour on sculpture completely transforms the artifact on artistic, iconographic and psychological grounds.³

The present volume, produced to accompany a homonymous exhibition at the J. Paul Getty Museum in 2008, represents the most successful and compelling effort yet to put sculptural polychromy on the map. Unlike the other exhibitions, 'The Color of Life' juxtaposed many of the painted classical reconstructions to a wide variety of medieval and modern polychrome sculptures, and so integrated different strands of art-historical research that had previously, on the whole, been kept separate. Panzanelli's volume is an extraordinary tour de force of colour in western sculpture from Old Kingdom Egypt, ancient Greece and Rome, through to medieval Europe and the modern world. Typically of Getty publications, it is beautifully illustrated with nearly two hundred illustrations (mostly in colour), providing - at a very reasonable price - some of the best images publicly available for the study of polychrome

sculpture. It comprises five comprehensive essays on different periods and aspects of polychrome sculpture written by experts from various fields, followed by a catalogue of forty artifacts displayed in the exhibition, representing the full range of sculpture types and materials and spanning more than 2,500 years of sculptural polychromy in western art. The essays and catalogue entries are written by individuals from a range of backgrounds, principally curatorial staff, as well as some distinguished academic names (Mary Beard, Paolo Liverani, Alex Potts). The volume also contains a comprehensive index and a useful selected bibliography. *The Color of Life*, then, is an outstanding piece of work both for its art-historical scope and its detail, and ought to be a first port of call for students and scholars alike approaching the aesthetics of colour in western sculpture.

The volume opens with a substantial introduction by the editor addressing the general contribution of sculptural polychromy to western art. This is a wide-ranging essay which, although it moves around rather freely among ancient, medieval and modern sculpture and offers a largely ahistorical picture of artistic developments, identifies a number of important patterns, regarding both the principal functions of polychromy (vivacity/ heroicism/ artistic impact, mimesis, legibility) and aesthetic responses to colour. Panzanelli, Senior Research Specialist at the Getty, is particularly shrewd in her analysis of the modern reception of polychrome sculpture and the aesthetic role of monochromy in Renaissance and neo-classical art: for example, her notion of the effect of time and weathering on ancient sculpture for providing a 'topcoat of "good taste"' (p. 7) is neatly connected to a modern aesthetic preference for incomplete, sullied and monochrome art, and she does a competent job of outlining the Renaissance disjunction between sculpture and painting which contributed to the growing distaste for sculptural polychromy. She also points to a number of important themes that are picked up later in the volume: artistic collaboration between sculptors and painters; the difference between natural and applied colour in sculpture; the role of colour in physiognomical accuracy; intentional partial polychromy versus full polychromy with partial losses; and Winckelmann's aesthetic of pure unadulterated whiteness.

V. Brinkmann, the author of the second contribution, is one of the leading pioneers in the study of ancient sculptural polychromy and has done more than any other individual in recent history to advance research into the identification and reconstruction of pigments on classical sculpture. His essay on the polychromy of ancient Greek sculpture provides an excellent summary of the history of scholarship on the subject and begins judiciously with a cautionary note about the limitations of our knowledge, a theme which is reiterated several times in the volume. There follows an outline of the various scientific methods of identifying and analysing pigment traces, a set of processes to which Brinkmann has devoted more than twenty years of research, and a compelling statement about the importance of experimental reconstruction. Less well developed is his interpretation of the function of colour on Greek sculpture, which focuses principally on realism and legibility: 'the goal of the artist was to give life to his work' (p. 24). This is all fair and good, but has limitations as an approach: it ignores the ideas explored in B. Ridgway's important essay 'How: the role of color' in her *Prayers in stone: Greek architectural sculpture ca. 600 - 100 B.C.* (Berkeley, 1999) - surprisingly not referenced by Brinkmann - about unrealistic uses of colour on Archaic statuary and the fundamental differences between legible colours and realistic colours. Brinkmann also fails to engage with some of the most

pivotal recent studies of classical sculpture which stress the importance of the ambiguity inherent to the relationship between art and life, particularly in the domain of religious imagery and the representation of 'super-natural' figures; recent work on the deployment of colour on Greco-Roman sculpture could make an important contribution to this approach.⁴ Nonetheless, this essay is useful for its introduction to the palettes of polychrome sculpture, painting techniques, patterns of colour usage, as well as the use of metal attachments (which, quite rightly, should be integrated under the same heading). Significantly, Brinkmann argues against the usual line that earlier sculpture was painted in simple and underdeveloped ways, and that sculptural polychromy became more sophisticated over time. This has to be right: the idea of an evolutionary development of artistic techniques is over-simplistic - although I suspect that Brinkmann could have developed a rather stronger case for the patterns of archaic sculptural polychromy than simply connecting it (as he does) to the general tropes of Homeric ekphrasis. There follows a concise and interesting summary of developments in later Classical and Hellenistic periods and an excellent discussion of polychromy on the Alexander Sarcophagus, although - and this is an endemic shortcoming of recent scholarship on the subject - the author (p. 36) is dismissive of the capacity for the underlying stone to enhance and enrich the visual effects of the pigments.⁵ Brinkmann ends by pointing to the continuity between Hellenistic and Roman techniques and patterns, so providing a useful bridge with the paper that follows.

J. Østergaard's essay is an engaging and thoughtful overview of the history, archaeology and aesthetics of Roman polychrome sculpture, and provides an original and much-needed discussion of a period of ancient sculptural polychromy that is comparatively neglected. Østergaard begins with an astute and sensitive discussion of the reception of polychrome sculpture in art-historical and archaeological circles across the last two hundred years, and offers a useful *état de recherche* on the study of Roman sculpture, pointing to the limitations of Reuterswård's classic 1960 monograph. He discusses continuities not only from Greek and Hellenistic patterns, but also from the rich polychromy of Etruscan terracotta sculpture. One of this essay's particular strengths is its engagement with the bigger questions and issues that concern the volume as a whole: the limitations of our knowledge and understanding; the importance of experimental reconstructions; modern resistance to polychromy; the erosion and decomposition of pigments and restoration. The essay then considers the significance of Campanian wall-paintings as sources of information about painted sculpture, although not taking advantage of P. Stewart's sensitive discussion of the same examples in his splendid *Statues in Roman society: representation and response* (2003), where ambiguity is at the centre of sculptural representations, and colour is critical to the complex interface between art and life. Like Brinkmann, Østergaard touches upon the problematic relationship between the innate colour/ texture of the stone and coloured coatings (e.g. at pp. 46-47 he discusses the painting of the Parian marble *Venus Lovatelli* at Pompeii), but does not really explore the possibilities available to the painter to exploit the crystalline structure of the marble. Østergaard goes on to discuss the shifting aesthetics of Roman marble copies of Greek bronze originals, as well as the corruption of pigments and surfaces over time and the important question of how polychromy might be restored. On bronzes, the author might have made use of two excellent discussions of artistic mimesis in variegated bronze statues and ancient ekphrasis by S. Descamps-Lequime and M. Muller-Dufeu in A. Rouveret's 2006 volume *Couleurs et matières dans l'antiquité: texts, techniques et pratiques* (Paris), which demonstrate that ancient bronze polychromy may have

been rather more complex and sophisticated than we might expect. Østergaard goes on to consider the effect of the architectural setting on polychrome sculpture and discusses artistic developments in Rome in the middle and late-imperial periods, and finishes by pointing to the need for further research, particularly for the Roman material. In this respect, the significance of his own project on sculptural polychromy in the Copenhagen Glyptotek, currently underway, is not to be underestimated.

The fourth essay by M. Collareta on sculpture in the Middle Ages and Early Modern times is a wide-ranging diachronic study of evidence for polychromy on wood, terracotta, wax and marble church sculpture, and, through a discussion of the increasing disunion of painting and sculpture, offers a useful background to Renaissance preferences for monochrome sculpture. It is a shame that the editor was unable to incorporate into the volume an essay on colour in Byzantine art (on which some seminal work has been done by L. James, though not specifically focused on sculpture), as it would have been useful to consider the nature of developments in this intervening period, which must be critical to understanding the continuity of artistic practice. Nonetheless, by surveying both visual and literary evidence, Collareta offers an interesting analysis of the relationship between intellectual thought and sculptural practice in the period he examines, interpreting artistic preferences as the product of various political and religious developments in Europe. Of particular interest is the author's discussion of the relationship between colour and holiness (an idea that chimes with work on Byzantine art), as well as the increasing use of precious materials for sculpture which contributed to aesthetic preferences for the materiality of sculpture rather than just its capacity to imitate life. This growing preoccupation with sculptural materiality, Collareta argues, alongside Renaissance rediscoveries of classical pieces devoid of colour, contributed greatly to the movement towards sculptural monochromy.

A. Potts's 'Colors of Sculpture', which focuses on modern polychrome sculpture, is a well-written and engaging closing piece, and presents some of the most pertinent and sophisticated theoretical considerations in the volume. Potts begins with the important observation that 'all sculpture is colored, in a literal sense' (p. 78), and offers a compelling interpretation of the role of monochrome sculpture in modern art. He argues that the plasticity and monochromy that characterise modern sculpture are a result of the differentiation of painting and sculpture, an aesthetic that appeals as much to the tactile senses as to the visual. Potts then makes a number of important observations about modern resistance to polychrome sculpture and the subversive character of recent coloured (i.e. non-white) sculpture that challenges conventional boundaries between art, life and materiality. He goes on to discuss three historical phases when issues of colour particularly came to the fore in modern western sculptural practice: neoclassicism in the late eighteenth and early nineteenth century when colour first became an aesthetic principle rather than a matter of practice or convention (with polychromy expressly rejected by thinkers such as Herdel, Hegel and Joshua Reynolds); the reaction against the classicizing aesthetic at the turn of the nineteenth century, where neoclassical 'purism' was challenged by bold, experimental artists such as Canova, John Gibson and Jean-Léon Gérôme, in part responding to new archaeological discoveries of ancient polychrome sculptures; and the breakdown of traditions surrounding sculptural art between the 1960s and 1980s, marked by a deliberate confusion of painting and sculpture and bold experimentation with unorthodox sculptural materials and colours. Throughout all three phases, Potts

emphasizes the guiding significance of individual protagonists and his account of artistic developments is therefore predominantly prosopographical. Nonetheless, Potts puts his finger on a number of broader cultural and aesthetic trends, and offers a compelling interpretation of the relationship between sculpture and colour in the modern world. He ends (p. 95) with the claim that 'we live in a world where both possibilities [monochrome and polychrome sculpture] are a distinct reality, and no particular virtue any longer attaches to either alternative'. While there has certainly been a recent shift in modern sensibilities about sculptural polychromy, the passionate responses still sometimes elicited by exhibitions of painted classical casts, and the continued stubbornness of classical art historians to approach sculptures such as the Prima Porta Augustus (however aesthetically unpleasing its painted reconstruction might be) as polychrome artifacts, suggest that Potts's claim -- at least in classical circles -- is an optimistic one.

The splendidly illustrated catalogue of forty artifacts that concludes the volume is no less worthy of note than the essays themselves. As in the exhibition itself, these are not presented in strict chronological sequence; instead, ancient, medieval and modern are loosely interspersed. As Panzanelli points out, this was deliberate, so as to 'probe aspects of the more universal urge to create sculpture that more closely imitates life' (p. 14). This idea (virtuous as it is) of exploring a common universal approach to sculpture is not as well developed in the volume as it might be, and readers may feel as I did that a chronological ordering would have better helped to identify historical shifts and developments in the deployment of sculptural polychromy, to complement the emphasis of the essays. Nonetheless, the catalogue does present the full range of sculpture types, periods, materials and subjects that are discussed throughout the volume, and is complemented by brief insightful descriptive and analytical entries on each artifact written by a team of twenty experts from a range of different backgrounds.

Significant themes raised by the catalogue include: the erosion and distortion of surviving pigments (esp. catalogue entries 1, 7-10, 12-13, 18, 34); limitations of knowledge about original location (1, 10, 24); use of colour for realism (1, 6, 12-13, 25, 28-29, 36, 38-39); use of colour for surrealism (20, 40); use of colour for idealization/ stylization (2, 5, 7, 10, 19, 37); use of colour for visibility/ legibility/ differentiation (12-13, 23); association of polychromy with precious materials (5-6, 27, 31); precious materials as a rationale for monochrome/ unpainted sculpture (23, 26, 32); experimental nature of reconstructive work (8, 9, 10, 14-16, 18, 22); use of binders/ patinas (8, 10); use of complementary attachments (10, 12-14); periodic restoration (10, 27); sophistication of polychrome art (9, 11, 27); and the artifact's provocative reception (14, 25, 28, 30, 33, 38). A digest of themes along these lines might have assisted the editor in justifying the particular order and juxtaposition of artifacts chosen, as well as fleshing out some of the more universal issues and tropes that characterise polychrome sculpture.

Entries of particular note in the catalogue include the two painted replicas of the head of Caligula from the Glyptotek at Copenhagen (catalogue 8-9), which expose the limitations of our understanding of ancient painting techniques and the possibilities offered by experimental reconstruction. Then there is the painted cast of the Peplos Kore in the Museum of Classical Archaeology at Cambridge (catalogue 14), whose creative and provocative polychrome reconstruction in the 1970s, M. Beard tells us,

already occupies an important and complex position in the history of museum display and reception. Another fascinating piece is the early sixteenth-century Venetian chalcedony Madonna and Child with an Angel (catalogue 24; cf. 26), where the artist took advantage of natural colours and impurities within the stone to render polychrome effects; the sophisticated use of polychrome marbles in antiquity for similar purposes is, unfortunately, not explored in this volume. El Greco's painted wood Epimetheus and Pandora (c. 1600; catalogue 25) elicit the suggestion that polychromy in early modern Spanish sculpture may sometimes have been used provocatively to allude to pagan ideals. Another notable piece is the eighteenth-century interactive wax Anatomical Venus (catalogue 30), one of the most spectacular and sophisticated exhibits in the Museo di Storia Naturale at Florence, which is a splendid example of the hyperrealistic potential of particular types of polychrome sculpture, as well as the significance of collaboration between experts in the production of sculpture (in this case, anatomists and waxmakers). The astonishing prevalence of sculptural polychromy in post-Renaissance Portugal, Spain and the Spanish colonies that features so prominently in this catalogue merits particular attention, as does the proliferation of hyperrealistic uses of polychrome wax in Florence from the seventeenth century onwards (catalogue 28, 30). For what historical reasons, one may well ask, did certain parts of Europe maintain continuity of practice with the past, while others developed new modes of sculptural expression? This would certainly be a fertile area for further research.

One particularly striking example of recent polychrome sculpture in the catalogue is J. De Andrea's rendering of the Dying Gaul (1984; catalogue 38), a reinterpretation of the classical marble piece using polyvinyl with oil pigment and acrylic hair that is so lifelike that viewers could mistake it for a living man. Are we to imagine that the original Dying Gaul, when painted, was so realistic? Is this what the professional sculptors of antiquity aspired to in creating their colourful 'breathing images' (*spirantia signa*), as the Romans sometimes described them? 'Probably not' is surely the answer, and one may reasonably argue that the original piece needed to look like a work of art; this said, we should not trick ourselves into thinking that the Prima Porta Augustus looked like the unsightly painted Vatican reconstruction (catalogue 10) either. By considering polychrome sculpture from different periods side-by-side, Panzanelli's volume forces us, quite rightly, to consider a full range of possibilities concerning the appearance, function and reception of ancient polychrome sculpture.

Finally, then, what is missing? The volume discusses an impressive range of material and manages to integrate the different artifacts and sculpture types very well under the umbrella of western polychrome sculpture. In this respect, it makes an outstanding and original contribution to the study of sculptural polychromy. It is perhaps a shame that there is no consideration of non-western polychromy (with the exception of Egypt - although its cultural status in this respect is contentious). Some important work in recent years has been carried out into near-Eastern, Indian and Chinese polychrome sculpture (take for example the 8,099 painted figures of the terracotta army buried with the Chinese emperor Qin Shi Huang), as well as Mayan painted stucco sculptures and ceramics and other examples from even farther afield. This begs some important questions with which the volume does not directly engage: is the development of sculptural polychromy in western art the result of the dissemination of ideas and cultural influences across the Mediterranean world, or part of a much broader anthropological development in the history of art? Is the use of colour on sculpture an

integral part of a universal dogma about artistic 'realism'? Do all societies and cultures employ 'hyper-realistic' colours to render the sacred and the divine? Are some artistic systems more inclined to monochrome sculpture than others? And do they all evaluate and respond to sculptural polychromy in the same way? Although Panzanelli's volume provides an excellent platform for addressing these questions, these are some of the principal lines of enquiry, I suspect, that need to concern scholars engaging in research in this area in the future.

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c. 1. Roberta Panzanelli, 'Beyond the pale: polychromy and western art', pp. 2-17 c. 2. Vinzenz Brinkmann, 'The polychromy of ancient Greek sculpture', pp. 18-39 c. 3. Jan Stubbe Østergaard, 'Emerging colors: Roman sculptural polychromy revived', pp. 40-61 c. 4. Marco Collareta, 'From color to black and white, and back again: the Middle Ages and Early Modern times', pp. 62-77 c. 5. Alex Potts, 'Colors of sculpture', pp. 78-97 Catalogue, pp. 98-177

Notes:

1. The initial exhibitions of painted casts were: Bunte Götter, Munich (2003-2004); I colori del bianco, Rome (2004); ClassiColor, Copenhagen (2004). Versions of the display have also been exhibited in Basel, Amsterdam, Istanbul, Athens, Hamburg and Frankfurt, and in America as Gods in Color (Arthur M. Sackler Museum, 2007-8) and part of The Color of Life exhibition (J. Paul Getty Museum, 2008). All the above exhibitions released an accompanying catalogue, which included (by and large) the same essays translated into the appropriate language, with the exception of The Color of Life, whose catalogue is the subject of this review. An important symposium, 'Rediscovering color: new perspectives on polychrome sculpture' was held at the J. Paul Getty Museum at Malibu in May 2008.
2. The leading pioneer of this research, and a key mover behind the exhibitions, is Vinzenz Brinkmann, whose seminal *Die Polychromie der archaischen und frühklassischen Skulpturen* (Munich) was published in 2003. Jan Østergaard (Curator of Ancient Art, Ny Carlsberg Glyptotek) has established the interdisciplinary 'Copenhagen Polychromy Network Project' (2008-10) in order to analyse a representative selection of classical sculptures in the Glyptotek with a view to identifying pigment traces and attempting reconstructive work, and similar work is being carried out by the British Museum, the Louvre and researchers in the US. My article 'The importance of colour on ancient marble sculpture' (*Art History* 32(3), June 2009) provides a comprehensive overview of the state of this research, and attempts to identify the contribution made by colour to the interpretation of Greco-Roman sculpture.
3. See, for example, M. Beard's sceptical blog post 'Were ancient statues painted?' (December 2007), and the responses it elicited.
4. See esp. Gordon, R. (1979) 'The real and the imaginary: production and religion in the Graeco-Roman world', *Art History* 2: 5-34; Tanner, J. (2001) 'Nature, culture and the body in Classical Greek religious art', *World Archaeology* 33 ('Archaeology and Aesthetics'): 257-76. I have test-run some of these approaches for the study of sculptural polychromy in my article 'The importance of colour on ancient marble sculpture' (*Art History* 32, 2009).
5. There remains, unfortunately, little constructive collaboration between scholarship on coloured marbles and scholarship on sculptural paint. On the choice, colour and

associations of marbles for ancient sculpture, see Schneider, R. (1986) *Bunte Barbaren* (Worms); De Nuccio, M. & Ungaro, L. (2002, eds.) *I marmi colorati della Roma imperiale* (Exhibition Catalogue) (Rome). I have discussed some of the possibilities in my article 'Colour and marble in early imperial Rome', *Proceedings of the Cambridge Philological Society* 52 (2006): 1-22.

Please visit the site: <http://bmc.brynmaur.edu/2009/2009-04-55.html>

DIGITAL RESTORATION OF ANCIENT PAPYRI

At <http://arxiv.org/ftp/arxiv/papers/0903/0903.5045.pdf> is a downloadable pdf of:

DIGITAL RESTORATION OF ANCIENT PAPYRI

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Italy

[From <http://arxiv.org/abs/0903.5045>]

"Image processing can be used for digital restoration of ancient papyri, that is, for a restoration performed on their digital images.

The digital manipulation allows reducing the background signals and enhancing the readability of texts. In the case of very old and damaged documents, this is fundamental for identification of the patterns of letters. Some examples of restoration, obtained with an image processing which uses edges detection and Fourier filtering, are shown. One of them concerns 7Q5 fragment of the Dead Sea Scrolls."]

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Lyudmil Vagalinski, editor

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X-RADIOGRAPHY OF TEXTILES, DRESS AND RELATED OBJECTS (CONSERVATION AND MUSEOLOGY) BY SONIA O'CONNOR; MARY BROOKS

X-radiography of textile objects reveals hidden features as well as unexpected components and materials. This non-destructive technique throws light on construction, manufacturing techniques, use, wear, repair, patterns of decay and dating. X-radiography improves artefact documentation and interpretation as well as guiding conservation approaches by enhancing understanding.

This book explores techniques for X-raying textiles. It describes approaches to image interpretation and explains how, through digitisation and digital image manipulation, maximum information can be realised. Case studies include archaeological, ecclesiastical and ethnographic textiles, items of dress and accessories, upholstery, quilts, embroideries, dolls and toys. Museum professionals will find this stimulating book an essential guide for developing their own practice or commissioning textile X-radiographs.

- * Innovative treatment of X-radiography for textile study and conservation
- * Accessible case study approach provides inspiration for future projects
- * Includes section on digitization and digital image processing

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NUMERICAL AND METROLOGICAL GRAPHEMES: FROM CUNEIFORM TO TRANSLITERATION

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Christine Proust, CNRS, Paris
"Numerical and Metrological Graphemes: From Cuneiform to Transliteration"

Keywords: mathematical cuneiform texts, numerical notation, positional notation,
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From Madeleine Fitzgerald
madfitz@gmail.com

INTERNATIONALE ARCHÄOLOGIE -
ARBEITSGEMEINSCHAFT,
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KLAUS LEIDORF

Approaches to early ceramic production: Case studies from the Balkans and the Levant.

Proceedings of the round table at Nanterre, Maison de l'Archéologie et de l'Ethnologie, 28th of February 2006.

Laurence Astruc, Alain Gaulon and Laure Salanova (Eds.)

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The conference publication contains a foreword of the editors and nine papers presented at a „table ronde“ in the Maison de l'Archéologie et de l'Ethnologie at Nanterre on 28th Feb. 2006. The research areas widely differ as to geography, climate, conservation conditions, occupation, inhabitants, and chronology. In the Near East, coarse, plain pottery emerges as the ultimate element of the Neolithization process around 6900, while on the Balkans, richly decorated pottery was present from the very beginning and formed a fixed component of the „Neolithic package“, which set in around 6500. Apart from classical research topics such as typology and stylistic analysis the studies deal with technological questions from the obtaining of raw materials to the use of finished products, e.g. the selection of tempering materials, the fabrication of thrown and handmade pottery, decoration techniques, analyses of residues for the definition of function etc. Additionally, consideration is given to preconditions of pottery production, to the necessary expenditure of knowledge, skill, and time, to development tendencies, the social value of pottery as well as mechanisms of distribution, adoption, and imitation.

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EΙΔΗΣΕΙΣ - NEWS RELEASE

GIZA PYRAMIDS ALIGN TOWARD CITY OF SUN GOD ROSSELLA LORENZI, DISCOVERY NEWS

March 24, 2009 -- Some of Egypt's most magnificent pyramids were deliberately designed to follow a pattern of invisible diagonal lines, an Italian study has concluded.

According to Giulio Magli, professor of archaeoastronomy at Milan's Polytechnic University, these invisible lines would connect most of the funerary complexes raised by the kings of the Old Kingdom between 2630 and 2323 B.C.

"Following these diagonals, it appears clear that the arrangement of the monuments was carefully chosen in order to satisfy a number of criteria, which include dynastic lineage, religion and astronomical alignments," Magli told Discovery News.

Published on the Cornell University physics Web site arXiv.org, the study examined the chronology and geographical location of all the pyramids of the Fourth and Fifth Dynasties, from the Step Pyramid of Djoser (2630-2611 B.C.) to the now-collapsed pyramid of Unas (2356-2323 B.C.), both in Saqqara.

"Our starting point was the so-called 'Giza diagonal,' an ideal line which connects the southeast corners of the three main pyramids and points to Heliopolis. This was an important religious center sacred to the sun god," Magli said.

While the pyramids of Khufu, the second pharaoh of the Fourth Dynasty, and his son Khafre were easily aligned along the diagonal, the pyramid of Menkaure, Khufu's grandson, had to be built very far into the desert to sit on the line of sight toward Heliopolis.

"But there is more. As a consequence of this intentional alignment, the second smaller pyramid becomes invisible from Heliopolis, its mass being covered by Khufu's larger pyramid," Magli said.

Why would Khafre position his pyramid so that it becomes invisible from the city sacred to the sun god?

According to Magli, the illusion might indicate a sign of respect for the sun god, and it might also have also launched a "symbolic invisibility" model which governed the planning of the pyramids up to the end of the Fifth Dynasty.

"Under this model, the funerary monuments of the pharaohs stand one after another, marking the dynastic link with the preceding pharaoh," Magli said. "They are linked by a diagonal which points to Heliopolis."

Attaching new pyramids to the "Giza diagonal" became increasingly difficult as the line extended far into the desert.

"It wasn't by chance that a new pyramid field rose in Abu Sir. This is the first available location in the south from which Heliopolis is not visible, although a diagonal can be drawn to link it to the city of the sun," Magli said.

The northwest corners of three chronologically successive pyramids in Abu Sir -- those identified with the tombs of Sahure, Neferirkare and Neferefre -- align on a diagonal similar to that of Giza, said Magli.

Again, the line points to Heliopolis, though the view is blocked by the rock outcrop which today is occupied by the Cairo citadel.

"Although of topographical-dynastical origin, these diagonals probably also included a deep astronomical meaning," Magli added.

He found that the Abu Rawash, Giza, and Abu Sir diagonals point to three stars -- Sirius, Crux-Centaurus, and Canopus, respectively.

These stars sat in alignment over the pyramids when viewed from Heliopolis.

"This is an interesting and thought-provoking study," said David Jeffreys, senior lecturer in Egyptian archaeology at the University College London and an expert on the topography of Heliopolis.

"I am not necessarily convinced that celestial observations were of paramount importance, but Giulio Magli may have a point," Jeffreys told Discovery News.

Please visit the site: <http://dsc.discovery.com/news/2009/03/24/giza-pyramids.html>

'JESUS OSSUARY TRIAL' STALLED AFTER MORE THAN THREE YEARS, THE JERUSALEM POST, MATTHEW KALMAN

One of Israel's best-known antiquities dealers said this week he was the innocent victim of a "witch-hunt" initiated by the Antiquities Authority aimed at destroying his career and reputation.

Robert Deutsch, 58, has been on trial at the Jerusalem District Court since September 2005 on six charges of faking and selling priceless antiquities. He is the owner of the Archeological Center, with shops in Tel Aviv and Jaffa, and runs twice-yearly antiquities auctions that attract the world's top collectors of ancient Judaica.

Deutsch's co-defendant, leading antiquities collector Oded Golan, is charged with faking the burial box of Jesus's brother and an inscribed stone attributed to King Jehoash that once adorned the First Temple, plus dozens of smaller items.

As Deutsch took the stand this week for the first time after more than three years in court, 120 witnesses and 8,000 pages of testimony, he said the charges against him were "lies and hallucinations."

Golan, Deutsch and three others were indicted in December 2004 on a total of 18 counts of forgery and fraud. The indictments were announced amid great fanfare, with the police and Antiquities Authority officials claiming they had uncovered a grand conspiracy on an international scale in which fake items had been unwittingly bought by museums around the world. They said the five accused were just the beginning.

Shuka Dorfman, director of the Antiquities Authority, described the charges against Golan as "the tip of the iceberg."

"These forgeries have worldwide repercussions," Dorfman said when the indictments were filed. "They were an attempt to change the history of the Jewish and Christian people."

"This was fraud of a sophistication and expertise which was previously unknown," said the Israel Police's Cmdr. Shaul Naim, who headed a two-year investigation. "They took authentic items and added inscriptions to make them worth millions."

But more than four years later, no one else has been charged and no one has been prosecuted over a single fake item from any museum. Charges against two of the five original defendants were dropped, and one man was found guilty on a minor charge.

"They fabricated this entire indictment, the whole thing, from A to Z," said Deutsch, who tried to dismiss his lawyer earlier this year because of spiralling trial costs.

Deutsch is one of the world's leading experts on deciphering ancient Hebrew and other semitic inscriptions. Of the 1,000 known seal impressions from ancient Israel, he has published about half.

According to the Antiquities Authority, Deutsch and Golan conspired to forge an ancient decanter, several inscribed pieces of pottery and dozens of seal impressions - known as bulae - some bearing the names of Israelite kings mentioned in the Bible. They are accused of publishing scholarly papers on the items to enhance their value, and then selling them for thousands of dollars to unsuspecting collectors.

After Deutsch was indicted, he was fired from a teaching post at the University of Haifa and dismissed as a supervisor at the Megiddo excavations.

"I have never faked anything in my life," said Deutsch. "I'm the first person to call something a fake, because it pollutes the profession that I have made my expertise."

On the witness stand, Deutsch said he knew Golan, his alleged co-conspirator, only through business. He said the Antiquities Authority and police had failed to find a single e-mail between the two men, or any evidence linking him to forgery despite repeated raids on his home and shops.

Deutsch said the trial was an attempt to shut down the licensed trade in antiquities in Israel, even though it is legal and he has held a license from the authority for the past 30 years.

"The Antiquities Authority thinks we are no better than antiquities thieves," he said. "They believe that our legal trade is worse than theft because we are encouraging the robbers."

"They went to the Knesset and tried to pass legislation banning trade in antiquities and they failed. Now they are using this trial to destroy our business," he said.

"I don't know how much lower they can get, the people who cooked up this trial," he said. "They misled the prosecution, they misled the press and they came up with all sorts of stories with no basis in reality."

One charge against Deutsch and Golan is that in 1995 they conspired to inscribe an ancient decanter with a text linking it to the Temple service and sell it to billionaire collector Shlomo Moussaieff.

"To increase the significance of the decanter and enhance its price," the indictment charges, "Defendant No. 2 published the decanter in a volume of archeology which he authored on the subject of Hebraic inscriptions from the First Temple period."

But Deutsch produced the book in court - exhibit No. 4 - and showed that it was already at the printer in 1994, by which time the decanter was already in the Moussaieff collection. The book cannot have been used to enhance the sale price.

In addition, Deutsch and Golan have both produced compelling evidence to show that the decanter, like the rest of the items, is authentic.

The prosecution, which took nearly three years to present its case, has had difficulty proving the alleged conspiracy. When Oded Golan took the stand last year, he produced plausible explanations for the all the apparent evidence of forgery found in repeated raids on his home, business premises and storage facilities.

Expectations that the prosecution would produce an Egyptian craftsman it alleges actually faked most of the items were dashed when he refused to come to Israel to give evidence.

The star prosecution witness, Tel Aviv University's Prof. Yuval Goren, was forced to recant some of his testimony based on scientific tests that showed the patina - the encrustation that adheres to ancient objects - to be a modern concoction. Further scientific evidence based on isotopic analysis of the patina looked increasingly unconvincing after other scientists tested the same items and came to the opposite conclusion.

Last October, the trial appeared close to collapse after Judge Aharon Farkash advised the prosecution to consider dropping the proceedings.

"After all the evidence we have heard, including the testimony of the prime defendant, is the picture still the same as the one you had when he was charged?" the judge pointedly asked the prosecutor. "Maybe we can save ourselves the rest."

"Have you really proved beyond a reasonable doubt that these artifacts are fakes as charged in the indictment? The experts disagreed among themselves" Farkash said.

The trial continues.

Matthew Kalman is the Jerusalem correspondent of the San Francisco Chronicle. His stories on the forgery trial can be found at jamesossuarytrial.blogspot.com.

Please visit the site:

<http://www.jpost.com/servlet/Satellite?cid=1238423655087&pagename=JPost%2FJPArticle%2FShowFull>

CT SCAN REVEALS HIDDEN FACE **UNDER NEFERTITI BUST, BY** **PATRICK MCGROARTY**

BERLIN (AP) — Researchers in Germany have used a modern medical procedure to uncover a secret within one of ancient Egypt's most treasured artworks — the bust of Nefertiti has two faces. A team led by Dr. Alexander Huppertz, director of the Imaging Science Institute at Berlin's Charite hospital and medical school, discovered a detailed stone carving that differs from the external stucco face when they performed a computed tomography, or CT, scan on the bust.

The findings, published Tuesday in the monthly journal *Radiology*, are the first to show that the stone core of the statue is a highly detailed sculpture of the queen, Huppertz said.

"Until we did this scan, how deep the stucco was and whether a second face was underneath it was unknown," he said. "The hypothesis was that the stone underneath was just a support."

The differences between the faces, though slight — creases at the corners of the mouth, a bump on the nose of the stone version — suggest to Huppertz that someone expressly ordered the adjustments between stone and stucco when royal sculptors immortalized the wife of Pharaoh Akhenaten 3,300 years ago.

"Changes were made, but some of them are positive, others are negative," Huppertz said.

John H. Taylor, a curator for Ancient Egypt and Sudan at the British Museum in London, said the scan raises interesting questions about why the features were adjusted — but that answers will probably remain elusive.

"One could deduce that the final version was considered in some way more acceptable than the 'hidden' one, though caution is needed in attempting to explain the significance of these changes," Taylor wrote in an e-mail.

The bust underwent a similar CT scan in 1992. But the more primitive scanner used then only generated cross sections of the statue every 5 millimeters — not enough detail, Huppertz said, to reveal the subtlety of the carving hidden just 1-2 millimeters under the stucco.

Egyptologist Ludwig Borchardt discovered the bust in 1912 and added it to Berlin's Egyptian collection on Museum Island, a cluster of five neoclassical art halls that make up one of the city's most familiar landmarks.

Currently on display at the Altes Museum, the bust will move next door when the Neues Museum reopens in October after a lengthy restoration by British architect David Chipperfield.

In 2007, Wildung denied a request from Egypt's antiquities chief to borrow the bust for an exhibition, saying it was too fragile to transport. Huppertz said the results of his scan added credence to that claim.

Taylor, the British Museum curator, said the better understanding of the bust's structure will also help preserve it.

"The findings are particularly significant for the information they shed on the constructional process and the subsurface condition of the bust, which will be of value in ensuring its long-term survival in good condition" Taylor said.

Please visit the site:

<http://www.google.com/hostednews/ap/article/ALeqM5iq4wJzkw8bqbVEG0t3tPVMx5J8jgD979731G4>

[Go there for pix!]

QUEST FOR THE TOMB OF MONTHEMHAT IN EGYPT

Using Georadar technology, a team of specialists from the Terranova and In situ Testing enterprises have explored all the enclosures of a funerary complex, in order to identify hidden rooms which might hold the sarcophagus of the fourth prophet of Ammon and Governor of Upper Egypt (670- 648 B.C.).

The Terranova and the In Situ Testing companies are taking part in an archaeological dig taking place to the west of Thebes (Luxor), Egypt, in one of the largest funerary complexes of the area. It involves the tomb of Monthemhat, the fourth prophet of Ammon and Governor of Upper Egypt (670-648 B.C.).

The team of professionals from both firms are contributing evidence to finding the sarcophagus of the mummy of this important civil servant, still remaining undiscovered, but suspected to lie under the funerary complex. Based on these clues and the characteristics of the place where the sarcophagus of one of his offspring was found (using a camera to access a 7 metre-deep shaft which had been uncovered on excavating one of the stone steps), all the surface area of the complex was analysed with the geophysical technique of Georadar.

This technique enables the extrapolation of a complete, in-depth profile of the terrain, and is identical to that employed for the detection from Earth of objects navigating in space. Its operation is based on the emission of high-frequency electromagnetic waves that penetrate the material to be analysed and the reflection signal of which enables the detection of changes in the material, cavities or peculiarities in the interior of the terrain of up to 30m depth. The team is made up of a control unit, an aerial and a control screen that moves across the surface along a determined alignment. The technique has numerous advantages in the field of archaeology; its non-intrusive nature, its relatively low cost and its great speed, all of which enable extensive surface areas to be investigated at costs and within deadlines adjusted to planned projects.

Over four days, using this technology, the joint Terranova and In Situ Testing technical team carried out a geophysical reconnaissance of the 57 rooms and the two monumental courts of the funerary complex, exploring the roof, walls and floors of each space. To receive the data a 400 MHz aerial was used and 265 profiles undertaken in the basement of the rooms and on their walls and roofs, with a maximum investigating depth of 3.9m, under highly difficult conditions (the complexity of access, the existence of multiple shafts and ramps, lack of ventilation and the sensitivity required in all this type of research). From this field work and from the processing of data a number of radargrams were obtained for each one of the emplacements, and with which the interior of the terrain is visualised, so that the targets can be analysed and interpreted to establish final conclusions about the existence of hidden rooms.

The result of the technical work appears to provide important indications to continue the search, having defined the existence of 3 anomalies associated with the presence of cavities. Based on this locating of spaces, subsequent stages of research will take us once again to the

interior of the complex in order to carry out localised perforations at these points, enabling progress in the results to take place. Moreover, advances in obtaining complete geological information about the subsoil can be made in order to generate a three-dimensional model of the interior.

Please visit the site:

http://www.basqueresearch.com/berria_irakurri.asp?Berri_Kod=2148&hizk=I

INSCRIPTION FROM THE TIME OF ALEXANDER THE GREAT - FOUND IN BAKTRIA, LAND OF ORIGIN OF ANCIENT BULGARIANS

Baktra. Unique marble slab with the image of Alexander the Great and a passage of an inscription was discovered in archaeological excavations in the ancient Baktriya, Baktriya Press Agency informed.

The slab represents an ancient king on a horse heading Macedonian cavalry and Macedonian phalanx at the background.

An inscription written in an ancient language different from ancient Greek or ancient Egyptian languages, on which were written a large part of the stone inscriptions at the time of Alexander is placed from the right of the military arena. According to other assumptions the words of Alexander of Macedonia are written in baktrian language protolanguage of today's Bulgarians.

According to archaeologists from the museum in the town of Balh – the baktrian language is a language, which had been spoken by the soldiers of Alexander of Macedonia, which had unified languages and dialects in his multinational army. Found fragments of ancient Greek inscription at the same site, suggest a possible parallel text.

Please visit the site: <http://www.focus-fen.net/index.php?id=n176236>

PHILIP II'S PALACE REVEALED

The restoration works on the palace of Aigai at the archaeological site of Vergina of northern Greece have provided archaeologists with additional information on the impressive construction, described as in league with the Parthenon atop the Acropolis in central Athens and three times as large.

The recently completed three-million-euro initial restoration phase was funded by the 3rd Community Support Framework (CSF) and according to findings presented at the 22nd scientific meeting on archaeological excavations and work the Macedonia and Thrace provinces, restoration works have helped to document many facts on the building's ground plan.

Construction work on the palace of King Philip II of Macedon began in 350 BC and was completed in 336 BC providing important information on ancient Macedonian architecture, because it was completed without interruptions and posterior interventions or alterations.

The restoration of the two-storey gallery (stoa) in the building's front section was a "revelation" for archaeologists' studying ancient architecture, as it contradicted earlier beliefs according to which such galleries were a later practice, dating in the 2nd century BC.

The galleries' architectural sections are built based on the "golden mean" ratio (1 to 1.6).

Archaeologists believe that Pytheos was the palace's architect, who had also designed the mausoleum of Halicarnassus, while the mausoleum's sculptor Leocharis had also worked on the palace of Aigai.

Please visit the site:

<http://www.ana-mpa.gr/anaweb/user/showplain?maindoc=7472140&maindocimg=7471646&service=102>

VARIATIONS ON AN ENIGMA

Recent discoveries at the Valley of the Kings on Luxor's west bank have changed the understanding of one of the most intriguing archaeological sites in Egypt, says Nevine El-Aref

Conservators restoring the newly discovered pots

The Valley of the Kings is one of the richest and most fascinating archaeological sites in the world. It was here that in 1922 Howard Carter found the tomb and treasures of Tutankhamun, perhaps the most sensational discovery in the history of archaeology. In 2005, a team from the University of Memphis in the United States located the first new tomb found in the valley since Tutankhamun, bringing the number of known tombs to 63, of which 26 belonged to kings. Yet, although explorers and archaeologists had been combing the Valley of the Kings for centuries, not a single tomb had been found by an Egyptian. Not, that was, until early last year, when the first all-Egyptian archaeological mission ever to work at the Valley of the Kings opened a new chapter of discovery. The team has recently made several important and revolutionary discoveries that are helping to solve some of the enigmas surrounding the site.

Although several important discoveries were made there in the 19th and 20th centuries, there are still a number of Pharaohs and other royals who were probably buried in the Valley of the Kings but whose tombs have not yet been found. The resting places of Ramses VIII, Tuthmosis II, and the queens and princes of the 18th Dynasty are still unknown.

"There are still many treasures left to be discovered in the valley," says Zahi Hawass, secretary-general of the Supreme Council of Antiquities (SCA), who led the excavation team.

Excavation work by the team focussed on three different areas at the valley; The first is between the tombs of Merenptah and Ramses II on the northern side of the central valley; the second in the area to the south of the tomb of Tutankhamun; and the third in the western part of the valley, where the tombs of Amenhotep III and Ay are located.

At the area in the cliffs between the tombs of Ramses II and Merenptah, a man-made drainage channel that probably helped prevent the flooding of the royal tombs in the vicinity has been found. Along with masses of stone piled near a man-made wall at the base of the cliff which appears to represent a collection area for runoff, it provided protection from the occasional rains in the high desert that have inundated the Valley of the Kings since ancient times. Hawass says the area at the base of the channel is probably the location mentioned in an ostrakon as the site where a sacred tree once grew, and the "tears of the gods" were collected. A small, sheltered area off to the side of the channel, where the team found a stone basin that may have held food and water, probably served as a resting place for the workmen.

In the central part of the valley, south of the tomb of Tutankhamun, the team has found the remains of small structures made of stone.

"These buildings were probably used for storage, perhaps of food and other items intended for offerings or of embalming materials," Hawass suggests. The team also uncovered a number of workmen's huts, which were identified but never excavated by Howard Carter, and a cave cut into the rock to the south of the tomb. "This cave was probably used as a shelter by the workmen," Hawass says, adding that the excavation area is in the vicinity of the Amarna-period tombs KV63 to the southeast and KV55 to the northeast. "It is possible that if important figures from this era, such as Nefertiti, for instance, were reburied in the Valley of the Kings after the city of Akhetaten [Amarna] was abandoned, their tombs would be in this area," Hawass says.

The mission also worked in the area north and east of the tomb of Seti I, where they have found traces of cutting in the bedrock underneath the modern rest house which may lead to a previously unknown tomb.

Unfortunately, as Hawass points out, it would be necessary to remove the entire building in order to explore this area, so they will not be able to do so in the immediate future. A radar survey of the central valley was recently conducted that identified a number of areas of interest, and further analysis of the data may reveal features that warrant archaeological investigation.

Hundreds of graffiti, most of them previously unknown, have been uncovered. One unique example tells that the vizier Userhat built a tomb for his father, the vizier Amonnakht, in the place known as set- maat, or "place of truth". An inscription mentioning a previously unknown queen, the first part of whose name reads "Weret". This woman bore the title of "god's wife", an important religious office held by royal women beginning in the early 18th Dynasty. A beautifully painted ostrakon showing a queen presenting offerings was also discovered, in addition to inscriptions of the cartouches of Ramses II and Seti I.

Pieces of beautiful painted pottery dating to the New Kingdom have been also unearthed.

In the western valley, known as the Wadi Al-Quroud, or "valley of the monkeys", where the tombs of Amenhotep III and Ay are both located, the mission has carried out excavation work in an attempt to find Queen Tiye's tomb.

Hawass said that Queen Tiye, the mother of Akhenaten, was the wife of Amenhotep III and possibly the sister of Ay. If she was buried in the Valley of the Kings, her tomb might have been carved out near that of her husband, and if Ay was in fact her brother it would be all the more appropriate for her tomb to be near his as well. "It will be interesting to see what excavations in this area will reveal," Hawass says.

Please visit the site: <http://weekly.ahram.org.eg/2009/941/he2.htm>

AN EMBALMING BED DISCOVERED IN LUXOR

AN EMBALMING bed used by ancient Egyptians to prepare the deceased for mummification has been discovered by chance in Luxor, Nevine El-Aref reports.

Following weeks of restoration work, a number of wooden plaques that were found inside a jar unearthed in tomb KV63 at the Valley of the Kings on Luxor's west bank have proved to be the remains of a mummification bed.

The pieces have been identified as a plain, 170cm-long bed with a head rest and two carved heads of a lion and a lioness at the end. It slopes downwards 5cm from head to toe in order to help drain bodies being prepared for mummification. Bodies had their organs removed as soon as possible after death, including the brain, which was thrown away as it was thought to serve no purpose in the afterlife. The heart was left in the body, with other organs cleaned, perfumed and preserved in jars to be buried with the mummy. Afterwards, the corpse spent 40 days on the bed to drain the fluids, and another 15 days while it was bandaged.

"It is really a very important discovery, which confirms that KV63 is not a tomb for an individual but a storehouse for materials and objects used in mummification," SCA Secretary-General Zahi Hawass told Al-Ahram Weekly. He explained that in 2005, when the American-Egyptian mission found the tomb, it was empty apart from 28 clay jars of different sizes, seven anthropoid coffins and some embalming materials such as resin, oils, herbs and linen wraps. On opening one of the jars the mission found the wooden plaques and they did not know what they were, what their function might have been or why they were stored in a jar. "But with the help of Egyptian conservator Amani Nashed, the team was finally able to reassemble the pieces to form a bed of the type used in the ancient Egyptian mummification process," Hawass said.

**Please visit the site: <http://weekly.ahram.org.eg/2009/941/he1.htm>
[Go there for pict.]**

MESOPOTAMIAN GROG

The first cocktail arose in Mesopotamia 5,000 years ago. A sort of grog was probably drunk by Etrurians, a population that knew vine before than Greek arrived in Italy by T N

A particular archaic blend of wine, beer, apple juice and honey. This is the composition of a sort of Grog, as Patrick McGregor says, an archaic drink that has been recently market in USA and named “Midas Touch”.

McGovern, professor at the Pennsylvania University, Philadelphia, studied the evolution of viticulture in the East and West, finding some earthenware along the Tigris river showing traces of tartaric acid (an element which is characteristic of the grape fermentation), honey, apple juice and brew barley (a sort of beer ante litteram).

It is noteworthy that probably this grog was drunk also by Etrurians, as it can be infer by analyzing some pottery from South Tuscany. As a matter of fact, it is assumed that the domestication of vine in Etruria was previous than the diffusion on Greek wine in the South coastlines.

According to Osvaldo Failla, researcher at the Milan University, it is possible that the wild vine domestication took place in circumscribed areas, and not only after the introduction of external vines. This was probably possible thank to the care that men took to their environment, improving in this way the genetic variability and plant breeding.

In the context of the Vinum research project, it was analyzed the genetic characteristics of various wild vine found at different archaeological places in Maremma (Tuscany) with some vines present in non anthropized places. These studies demonstrated that, where the men were in contact with wild vines, the local genetic variability grew.

It was also possible to genetically distinguish the populations of wild vines deriving from anthropized zones in respect to non-anthropized areas.

Please visit the site: <http://www.teatronaturale.com/article/345.html>

BLOODY STONE AGE: WAR IN THE NEOLITHIC

The perception that much of prehistory was relatively peaceful is changing. New research has identified evidence of violent assault in the Neolithic. What does this tell us about Stone Age life as a whole?

Forensic archaeologist Martin Smith explains.

Whilst many Neolithic burials have been excavated during the last 150 years, they have received only limited study. Modern analysis of these remains by osteo-archaeologists is revealing shocking evidence for violent assaults involving clubs, axes, and arrowshot about 5,500 years ago. Arrowheads.

Recent years have seen growing interest in conflict archaeology.

Warfare has gone from being a subject rarely mentioned by archaeologists to one that is widely debated. Current world events may have something to do with this, but it is also linked to advances in our ability to recognise evidence of violence, and a drive towards new theoretical approaches for making sense of it.

Most research of this kind has usually been concerned with more recent periods, but lately consideration is also being given to prehistory.

In particular, we now have a growing body of evidence for aggression between groups and individuals during the Neolithic, most of which comes in the form of skeletal injuries. The fact that acts of violence sometimes occurred in this period now seems indisputable. However, assessing what this tells us about Neolithic life as a whole is harder.

Many injuries to the skeleton are difficult to interpret, as there may be a number of ways in which a particular injury could be incurred.

Fractured ribs, for example, can be sustained in various ways, mostly through accidents such as falls. It is generally impossible to be specific about the origin of these kinds of fractures in archaeological bone.

Some types of injury, however, may be more consistent with a particular cause. Fractures of the skull are a good example. Head injuries inflicted with weapons often produce patterns of fracture that are more easily recognised as such than wounds to other parts of the skeleton. Improved understanding of the properties of bone fracture has led to our recognition of a growing number of Neolithic head injuries consistent with violence, many of which might previously have been interpreted as damage after burial.

Such signs of violent assault are apparent throughout much of Europe, and not least in Britain. These include a number of healed head injuries apparently inflicted with blunt, club-like implements, as well as unhealed fractures inflicted very close to (if not actually

at) the time of death. The latter include a mixture of sharp-force and blunt-force trauma, possibly inflicted with stone axes.

Then there are projectile wounds. This category is particularly unequivocal where fragments of arrowheads remain embedded in bone, although recent experimental research has revealed that it is sometimes possible to recognise such injuries even where the ‘murder weapon’ is no longer present. In a recent research project examining evidence of cranial trauma, Mick Wysocki, Senior Lecturer in Forensic Archaeology and Anthropology at the University of Central Lancashire, and Rick Schulting, Lecturer in Scientific and Prehistoric Archaeology from Oxford University, produced a conservative estimate (based on the view that some examples might be misdiagnosed) that 26 out of 350 crania examined (7.4%) displayed traumatic injuries.

Please visit the site: <http://www.archaeology.co.uk/articles/bloody-stone-age-war-in-the-neolithic.htm>
[Go there for pix.]

PRESS RELEASE - NEWS FROM THE TEMPLE OF TAPOSIRIS MAGNA

A radar survey of the temple of Taposiris Magna, west of Alexandria, Egypt, was completed last month as part of the search for the tomb of Cleopatra and Mark Antony. The Supreme Council of Antiquities (SCA) expedition excavating the temple and its surrounding area is headed by Zahi Hawass, Secretary General of the SCA, and Dr. Kathleen Martinez, a scholar from the Dominican Republic.

[A view of the temple of Taposiris Magna. (Photo: Supreme Council of Antiquities)]
A view of the temple of Taposiris Magna. (Photo: Supreme Council of Antiquities)
Dr. Hawass stated that the cooperation between Egypt and the Dominican Republic for the excavation of the temple has been ongoing for about three years. The recent radar survey is the most significant step taken by the team to date. It was carried out by an Egyptian radar team, with American expert Dr. Roger Vickers serving as a consultant. The radar revealed 3 possible spots of interest where a tomb may be located. The expedition has received the results of the survey, and will begin excavating each of these three spots next week.

The most important recent development at Taposiris Magna has been the discovery of a large, previously unknown cemetery outside the temple enclosure. The expedition has found 27 tombs. 20 of them shaped like vaulted sarcophagi, partly underground and partly aboveground. The remaining 7 consist of staircases leading to simple burial chambers. Inside these tombs, the team has found a total of 10 mummies, 2 of them gilded. The discovery of this cemetery indicates that an important person, likely of royal status, could be buried inside the temple. It was common for officials and other high-status individuals in Egypt to construct their tombs close to those of their rulers throughout the pharaonic period. The style of the newly discovered tombs indicates that they were constructed during the Greco-Roman period.

[Mummies in one of the newly discovered tombs outside the temple.
(Photo: Supreme Council of Antiquities)] Mummies in one of the newly discovered tombs outside the temple.

(Photo: Supreme Council of Antiquities)

Dr. Martinez stated that the expedition has excavated a temple at Taposiris Magna dedicated to the goddess Isis, and discovered coins depicting the face of Alexander the Great. They have found a number of deep shafts inside the temple, three of which seem to have been used for burials. It is possible that these shafts were the tombs of important people, and the team's leaders believe that Cleopatra and Mark Antony could have been buried in a deep shaft similar to those already discovered inside the temple.

Dr. Hawass said that the expedition has so far found a beautiful head of Cleopatra, along with 22 coins bearing her image. The statue and coins show her as a beauty, contradicting the idea recently suggested by an English museum curator that the queen was quite ugly. The finds from Taposiris reflect a charm that could have captured the hearts of Julius Caesar and Mark Antony, and indicate that Cleopatra was

in no way unattractive. Moreover, the features of the sculpted head show no sign of African ancestry, contradicting a recently advanced theory.

The team has also found many amulets, along with a beautiful headless statue dating to the Ptolemaic Period. Among the most interesting finds is a unique mask depicting a man with a cleft chin. The face bears some similarity to known portraits of Mark Antony himself.

Please visit the site: <http://www.drhawass.com/blog/press-release-news-temple-taposiris-magna>

ANCIENT TEMPLE IS DISCOVERED IN TURKEY

Canadian archaeologists say they have discovered a well-preserved monumental temple in Turkey that presents new facts about the so-called Dark Ages.

Discovered by the University of Toronto's Tayinat Archaeological Project last summer, scientists said the temple is thought to have been constructed during the time of King Solomon in the 10th or 9th centuries B.C.

Researchers said the discovery casts doubt upon the traditional view that the transition from the Late Bronze Age to the Early Iron Age was violent, sudden and culturally disruptive.

"Our ongoing excavations have not only begun to uncover extensive remains from this Dark Age, but the emerging archaeological picture suggests that during this period Tayinat was the capital of a powerful kingdom, the 'Land of Palastin'," said Professor Timothy Harrison, the project's director. "Intriguingly, the early Iron Age settlement at Tayinat shows evidence of strong cultural connections, if not the direct presence of foreign settlers from the Aegean world, the traditional homeland of the Sea Peoples."

The temple's inner sanctuary -- also known as its "holy of holies" -- will be the focus of the project's 2009 field season, which begins July 1.

**Please visit the site: http://www.upi.com/Science_News/2009/04/16/Ancient-temple-is-discovered-in-Turkey/UPI-15001239905530/
website at <http://www.utoronto.ca/tap/2003.htm>**

PAINTED MUMMIES FOUND IN ANCIENT EGYPT NECROPOLIS

Mission finds dozens of mummies in 53 rock-hewn tombs dating to Egyptian Middle Kingdom.

CAIRO - Archaeologists working in an Egyptian oasis have found a necropolis containing dozens of brightly painted mummies dating back as far as 4,000 years, the country's antiquities chief said on Sunday.

"The mission found dozens of mummies in 53 rock-hewn tombs dating to the Middle Kingdom" from 2061-1786 BC, Zahi Hawass said.

"Four of the mummies date back to the 22nd Dynasty (931 to 725 BC) and are considered some of the most beautiful mummies found," he said.

The linen-wrapped mummies are painted in the still-bright traditional ancient Egyptian colours of turquoise, terracotta and gold.

The necropolis was uncovered near the Ilahun pyramid in Fayoum oasis south of Cairo.

Abdel-Rahman el-Ayedi, who headed the mission, said that a Middle Kingdom funerary chapel with an offering table was also found, and that it was probably used up to the Roman era which lasted from 30 BC to 337 AD.

The team also found 15 painted masks, along with amulets and clay pots, Hawass said.

Please visit the site: <http://www.middle-east-online.com/english/culture/?id=31444>

THE BRAND NEW KALYMNOS **MUSEUM OF ARCHAEOLOGY** **OFFICIALLY OPENS ON 10TH APRIL**

For the first time the breathtaking collection of Kalymnos marble statues found in 2001 will be on public show, along with the magnificent bronze figure of the 'Lady of Kalymnos' trawled up from the sea bed by a Kalymnian fisherman. Other exhibits represent all periods of Ancient Greece, from Paleolithic and Neolithic to Minoan, Mycaean, Archaic, Classical, Hellenistic and Roman.

This museum contains displays of far greater importance than would normally be found on an island of this size and tells a new story of the significance of Kalymnos in both the ancient and modern world.

Download the official informative printed matter:

<http://www.kalymnos-isl.gr/en/images/stories/museum/museum.pdf>

For more information about the museum, statues and especially the unique Archaic kouros, visit www.kourosgreece.org.

Please visit the site:

http://www.kalymnos-isl.gr/en/experience/events?task=view_detail&agid=2&year=2009&month=04&day=10&catids=64

[Go there for pdf notice.]

MOTHER COMPLEX, BY RAN SHAPIRA

The Egyptian researchers who, in early January, entered the burial room in the latest pyramid to be discovered in Saqqara, south of Cairo, labored for five hours before they could lift the lid of the sarcophagus within. Inside was a mummy wrapped in a flax shroud. In addition to pottery shards, gold wrappings were also found in the sarcophagus, which apparently were used to cover the fingers of the mummified body. Although no inscriptions were found in the tomb, the researchers assume, with a high level of probability, that it contains the body of the mother of the founder of the Egyptian Sixth Dynasty: Pharaoh Teti.

The pyramid in which the queen, Sesheshet, was buried, was discovered in November 2008 - it is the 118th found in Egypt. Its discovery in Teti's burial compound surprised the researchers to some extent, since the site had been thoroughly combed through over the past 150 years. In addition to the pyramid where the king himself was buried, two "satellite pyramids" were found, the tombs of his two principal wives: The one belonging to Iput I was discovered about 100 years ago; the second, of Khuit, was discovered in 1994.

Advertisement

Information about the queen herself is very meager.

In a papyrus document that includes medical prescriptions, her name is mentioned alongside a request for a preparation that was supposed to strengthen thin hair. Nevertheless, it is possible that the "pharmacists" used her name to lend a bit of prestige to the prescription, and did not necessarily prepare it for her. Another inscription mentions her as being the mother of the king, and in several reliefs of the same area the name "Sesheshet" appears. However, these do not contribute substantial information about the king's mother. Scholars believe she played a very important role in her son's ascent to the throne, thanks, among other things, to her success in mediating between two rival factions within the royal family.

Dr. Deborah Sweeney, an expert on ancient Egypt from the archaeology department of Tel Aviv University, says researchers assume that Sesheshet belonged to the close circle of the last king of the Fifth Dynasty, Unas. He had no sons to inherit the throne and Teti may have been his grandson. Since it is not known when she died, researchers can only guess that the pharaoh's mother was alive during almost 20 years of his reign, which extended from 2323 to 2291 B.C.E.

"Queens were identified with the goddesses that accompany the sun god, protect him and give him strength," Sweeney explains. "The king needed a queen at his side. There were periods when the queens played a political role, but that was an exception. There was a need for that, for example, when a king ascended to the throne as a child. Usually in those cases there was a queen mother, who took charge of governing until her son grew up."

Dr. Rachel Shlomi-Chen, of Hebrew University's department of Ancient Near Eastern history, says Manetho, a Greek historian from the 3rd century B.C.E., wrote about a conspiracy in Teti's court. Furthermore, archaeologists excavating the cemetery near Teti's pyramid in Saqqara have found evidence that may point to a plot: The inscriptions on the tombs of high-ranking officials in the court were damaged, in what does not seem to be a random way, scholars claim: It may have been deliberately done to the tombs of officials belonging to the conspiracy.

The queen mother may have helped Teti in his struggle against the conspirators, but in any case, according to Manetho, he was murdered by his bodyguards not long after she died. His dynasty, the Sixth, ruled Egypt until 2184 B.C.E., almost 1,000 years before the period of Rameses II, the king during whose reign the Exodus from Egypt took place.

Egyptian scholars, headed by Dr. Zahi Hawass, secretary general of the country's Supreme Council of Antiquities, stress that Sesheshet's pyramid is more impressive in terms of its dimensions than the structures usually built by ancient Egyptian rulers for their wives and mothers. Discovered beneath seven meters of sand, this pyramid in its prime was 14 meters high and the width of its square base was 22 meters.

There is no question that Teti wanted to express respect for his mother by building the structure, but this in itself was not so unusual, Shlomi-Chen emphasizes: In ancient Egypt, the royal family also played an important religious role, and its members were considered to be the earthly incarnations of gods. The pharaoh was identified with Horus, god of the sky and the sun. The queen was both the spouse of the most important god and the mother of the god-king who was to succeed him. She was also identified with the goddess Hathor, the mother of Horus and the wife of the sun god, Ra. One of Hathor's symbols was a noisemaker, which is called sistrum in Greek and sesheshet in Egyptian.

A step up

The transition between the Fifth and Sixth Dynasties was accompanied by significant changes in religion and ritual. Dr. Sweeney explains that the kings of the Fifth Dynasty built their pyramids at Abu Sir rather than Saqqara. Alongside their pyramids, in addition to pyramids for their wives and mothers, they also built a sun temple, symbolizing their belief in Ra. During the Fifth Dynasty, the cult of Ra constituted the state religion, but there were changes during the reign of the last two kings in the dynasty: Alongside the pyramids of Unas and his predecessor, there were no sun temples, nor were there any in the burial compound of Teti and his family.

"It is possible that Teti and Unas built huge temples in the capital city of Memphis, but nothing remains of them," Sweeney suggests.

Unas also built his pyramid in Saqqara, which shows that after living elsewhere, he returned to the ancient burial site where the most famous type of step pyramid, that of Djoser, was constructed. Another innovation relating to Unas' pyramid, according to Shlomi-Chen, is the fact that the walls bear inscriptions - spells designed to accompany the king in the Land of the Dead. In the inscriptions, Unas is identified for

the first time with Osiris, king of the Land of the Dead, and not only with the sun god. The Osiris cult, which came to symbolize the resurrection of the dead and was identified with the cycles of nature, had been started two generations earlier by the nobility.

Teti ascended the throne on the backdrop of profound changes in Egyptian religion and culture, and became part of them. Further research into his mother's tomb will likely shed more light on him and on the events of that period of antiquity.

Please visit the site: <http://www.haaretz.com/hasen/spages/1077147.html>

RUSSIAN ARCHEOLOGISTS DISCOVER GOLDEN-MASKED MUMMIES IN EGYPT

MOSCOW, April 8 (RIA Novosti) - Russian archaeologists working at Egypt's Fayoum Oasis have uncovered a number of mummies wearing golden masks, as well as other artifacts of historical value, a Russian Egyptologist said on Wednesday.

A group of Russian archaeologists has been working in the Fayoum province, some 80km southwest of Cairo, since 2003. It has been carrying out excavations at the Deir Al-Banat necropolis for the past two years.

"It is a huge necropolis," said Alexei Krol, deputy chief of the Russian Academy of Sciences' Egyptology center. "Despite the fact that the site was badly robbed in the early Christian period, the Coptic era and in the 1960s-1970s, we are still managing to find mummies with golden masks," he said.

The Deir Al-Banat necropolis contains burial sites from three periods of Egyptian history - Ancient Egypt, Roman Egypt and Christian Egypt. Apart from traditional Egyptian mummies, scientists have also found several so-called Fayoum mummy portraits from the Roman Egyptian period, realistic portraits of a deceased person made on a piece of wood and attached to a mummy.

The scientist added that several findings made at the necropolis challenged the existing theory, based on early Christian literature, that pagans and Christians in Egypt had a long and bitter feud at the dawn of the religion.

"They could live in the same city and pray to different gods," Krol said.

Russian archeologists have also been carrying out underwater research of the ancient part of Alexandria and excavations in the ancient Egyptian capital of Memphis.

Please visit the site: <http://en.rian.ru/science/20090408/120990444.html>

ANCIENT MEDICINES WERE ALCOHOLIC, BY VICTORIA GILL, SCIENCE REPORTER, BBC NEWS

A team of researchers in the US has discovered traces of a medicinal alcoholic drink in bottles that are more than 5,000 years old.

The scientists extracted wine compounds and plant-derived ingredients from a jar taken from the tomb of one of the first pharaohs of Egypt, Scorpion I.

This is the earliest sample of a human-made medicine.

The researchers report their findings in the journal Proceedings of the National Academy of Sciences.

Patrick McGovern, professor of anthropology at the University of Pennsylvania, led the research.

The vessels that he and his team tested came from excavated tombs in southern Egypt - the earliest of which dates from 3150BC.

"This is the earliest Egyptian vessel ever found to have wine in it," Professor McGovern told BBC News.

"It shows that, by trial and error, humans were discovering remedies over 5,000 years ago, and that alcoholic beverages were a key part of the discovery process."

Designing medicine

The team used organic solvents to extract residues from inside the jars.

With extremely sensitive chemical techniques, they were then able to separate the different compounds within the residue.

The jars tested positive for tartaric acid - a reliable chemical marker for grape and wine in the Middle East.

The scientists also found compounds from a number of herbs, some of which have known medicinal properties, and from tree resin.

Professor McGovern pointed out that alcoholic drinks would have been ideal for dissolving these plant-derived substances.

"As well as adding flavour, these compounds were likely to have been used with a medicinal aim in mind," he said.

His team also tested residue from inside a later Egyptian jar, or amphora, dating from between the 4th and 6th Centuries.

He now wants to find out if some of the ancient remedies he found could be revived.

Professor McGovern has started a collaboration with researchers at the University of Pennsylvania's Abramson Cancer Center, testing compounds found in ancient fermented beverages from China, including the earliest chemically confirmed alcoholic beverage in the world, dated to 7000BC.

Please visit the site: <http://news.bbc.co.uk/2/hi/science/nature/7992575.stm>

PASCO KUZMAN: ALLEGATION FOR FOUND TOMB OF ALEXANDER OF MACEDONIA IS INCORRECT, FOCUS NEWS AGENCY

Skopje. Macedonian archaeologist Pasco Kuzman comments to FOCUS News Agency information released by online Macedonian edition and drawn from Serbian blog, which says that the tomb of Alexander the Great has been found at the Greek-Macedonian border with the following words:

"If it is true – it is a big lie. If it is a lie – it is a great truth. Multiplied, it is equal to zero."

That was the answer of the question whether it is late April's joke.

Macedonian Cyrillic edition published today, a text set out in Belgrade blog City Magazine, which contains a "stunt" for the discovery of the tomb of Alexander of Macedonia, which would have changed the history. Macedonian Edition offers readers the text on the matter stating that perhaps it's a fictional story of a blogger.

"During reconstruction works on Visie border checkpoint between Macedonia and Greece / officially there is no such border checkpoint – FOCUS notices/, construction workers from " Build " company uncovered one of the biggest mysteries of antiquity. The discovery has been found in digging of geodesic markers, and then with the permission of building inspectors it led to further construction activities. It was necessary to remove a large stone to dig further in order to make analysis on the ground. After the stone was removed, a granite slab appeared. Thinking that it was a buried wealth from the time of the Ottoman Empire, driver of the excavator began to dig together with his colleagues. Two hours later it became clear that it was a marble building, 30 meters long and four wide, the edition reads further.

After descriptions of the finding the Director of the General Inspectorate of the Republic of Macedonia Goce Micevski from the National Museum /there is not such a museum – FOCUS notices/ and experts stated in a joint statement that in the Crypt was found well preserved skeleton with full outfit with gold-bronze armor and shield and mask, which was engraved with the name Alexander.

Journalists were promised to have a press conference in the afternoon, and meanwhile the text quoted the words of the workers involved in the excavations. /The text didn't mention a date or even a day of a week – FOCUS notices/

FOCUS New Agency recalls:

Pasco Kuzman is Macedonian archaeologist, director of the Institute for the cultural heritage of Macedonia. He took part in restoration works of the historical complex Samuilova fortress in Ohrid.

Please visit the site: <http://www.focus-fen.net/index.php?id=n177761>

THE CURSE OF THE PHARAOHS: TRUTH, MYTH OR MICROBIOLOGY?

TRACY MORRIS

For only the second time since their discovery, some of the treasures of Tutankhamen are visiting United States Soil. Wherever they go, the treasures of Tutankhamen inspire wonder. But when they were first discovered in 1922 they also inspired a little bit of fear – fear of a pharaoh’s curse.

The idea of a pharaoh’s curse didn’t originate with King Tut. The tombs of many pharaohs have carried warnings against thieves who would steal – a common and significant problem in Egypt, where ancient Egyptians buried their royalty with treasures in the belief that the wealth could be taken into the afterlife.

But as the discovery of the undisturbed tomb of “the boy king” created mummy mania around the world, a kind of morbid fascination with curses fueled rumors that the archeologists who opened King Tut’s tomb would soon meet with mysterious fates.

Journalists reporting on the find weren’t above embellishing the truth in an effort to tell a good story. Before the tomb was formally opened, reporters were filling their dispatches with accounts that the pharaoh’s seal contained warnings of death coming on swift wings.

But the morbid fascination with the mummy’s curse really took off several months later with the death of Lord Carnarvon, the expedition’s chief financier. Carnarvon had been present at the opening of King Tut’s tomb where, so the popular story goes he received a mosquito bite which he later nicked while shaving. The wound became infected, and Carnarvon died of blood poisoning on April 5, 1923.

Shortly thereafter, Carnarvon’s death became linked to a series of almost supernatural events. Supposedly, at the time of his death, all the lights of Cairo went out. At his estate back in England, Carnarvon’s dog is said to have howled and then died at the exact moment that he did.

As further proof of a curse, it was said that head archeologist Howard Carter’s pet canary was eaten by a cobra on the day the tomb was opened. Journalists noted that a cobra was often portrayed as sitting on the brow of the pharaoh in protection.

The story of the pharaoh’s curse gained steam with the sudden and unexpected death five months later of Lord Carnarvon’s brother. A handful of other people who either visited the tomb or worked around it also sickened and died, including two workmen and financier George Jay Gould I.

As the years have passed, nay-sayers scoff at the idea of a curse, particularly after compiling a list of the alleged victims of the curse. If there were a curse, why didn’t

either Carter or Carnarvon's daughter, Evelyn die as well? Both were present at the opening of the tomb.

But more recently, scientists are starting to believe in the curse --or at least in an explanation for why the series of curse-like coincidences could have happened.

Here's a recipe for a curse: Take one coffin filled with human remains. Add in enough food and drink to sustain a person in the afterlife. Bury it in a tomb and let it sit for several thousand years. The result? Deadly, toxic mold and bacteria.

The idea of deadly bacteria fueling a pharaoh's curse isn't a new one.

Sir Arthur Conan Doyle (who was also responsible for popularizing the story of the Mary Celeste) speculated that ancient Egyptians may have deliberately put harmful gasses or diseases in the pharaoh's tombs in retribution for tomb robbers.

Scientists have recently explored newer tombs and found that harmful bacteria and mold is present there. And while the toxic mold and bacteria might not be in levels that would harm most humans, they pose a threat to someone with a compromised immune system – such as someone who may have an infected mosquito bite.

Fortunately, you can see the treasures of King Tut's tomb (along with several other tombs) without risking a curse, bacterial or otherwise.

Two exhibitions are in the United States for limited engagements. Tutankhamen and the Golden Age of the Pharaohs will remain in Dallas through May 17 before traveling to San Fransisco, and Tutankamun The Golden King and the Great Pharaohs will also conclude in Atlanta in May and then move to Indianapolis.

Please visit the site: <http://firefox.org/news/articles/2724/1/The-Curse-of-the-Pharaohs-Truth-Myth-or-Microbiology/Page1.html>

3,000-YEAR-OLD TEMPLES **DISCOVERED IN EGYPT ONE TEMPLE** **COULD REWRITE THE HISTORICAL** **AND MILITARY SIGNIFICANCE OF** **CITY**

BY HADEEL AL-SHALCHI

CAIRO - Archaeologists exploring an old military road in the Sinai have unearthed four new temples amidst the 3,000-year-old remains of an ancient fortified city that could have been used to impress foreign delegations visiting Egypt, antiquities authorities announced Tuesday.

Among the discoveries was the largest mud brick temple found in the Sinai with an area of 77 by 87 yards and fortified with mud walls 10 feet thick, said Zahi Hawass, chief of Egypt's Supreme Council of Antiquities.

The find was made in Qantara, 2 1/2 miles east of the Suez Canal. These temples mark the latest discovery by archaeologists digging up the remains of the city on the military road known as "Way of Horus." Horus is a falcon-headed god, who represented the greatest cosmic powers for ancient Egyptians.

The path once connected Egypt to Palestine and is close to present-day Rafah, which borders the Palestinian territory of Gaza.

Archaeologist Mohammed Abdel-Maqsoud, chief of the excavation team, said the large brick temple could potentially rewrite the historical and military significance of the Sinai for the ancient Egyptians.

The temple contains four hallways, three stone purification bowls and colorful inscriptions commemorating Ramses I and II. The grandeur and sheer size of the temple could have been used to impress armies and visiting foreign delegations as they arrived in Egypt, authorities said.

The dig has been part of a joint project with the Culture Ministry that started in 1986 to find fortresses along the military road. Hawass said early studies suggested the fortified city had been Egypt's military headquarters from the New Kingdom (1569-1081 B.C.) until the Ptolemaic era, a period lasting about 1500 years.

In a previous find, archaeologists there reported finding the first ever New Kingdom temple to be found in northern Sinai. Studies indicated the temple was built on top of an 18th Dynasty fort (1569-1315 B.C.).

Last year, a collection of reliefs belonging to King Ramses II and King Seti I (1314-1304 B.C.) were also unearthed along with rows of warehouses used by the ancient Egyptian army during the New Kingdom era to store wheat and weapons.

Abdel-Maqsoud said the fortified city corresponded to the inscriptions of the Way of Horus found on the walls of the Karnak Temple in Luxor which illustrated the features of 11 military fortresses that protected Egypt's eastern borders. Only five of them have been discovered to date.

Please visit the site: <http://www.egyptology.blogspot.com/>

IS UNESCO DAMAGING THE WORLD'S TREASURES?

It's supposed to be the gold standard for conservation. But is Unesco's World Heritage project harming the very places it seeks to protect?

Simon Osborne investigates

In 1991, Dubrovnik, a fairytale fortress of Titians, Renaissance palaces and lemon-scented cloisters, was shelled by Serb and Montenegrin forces. Appalled by the siege of a city described by Lord Byron as the "pearl of the Adriatic", the international community sprung into action.

Unesco, the United Nations organisation responsible for education, science and culture, called meetings, co-ordinated fundraising, and mobilised armies of experts. Not long after the dust of war had settled on scores of razed buildings, Croatia began restoration work.

In a matter of a few years, Dubrovnik, designated as a World Heritage Site in 1979, rose from the ashes.

That's how the system is meant to work. Since its inception, 37 years ago, Unesco World Heritage has become a global brand whose seal is slapped on the planet's most precious places. The Taj Mahal is on the list, alongside the Pyramids of Giza and the Grand Canyon. These are the man-made and natural wonders considered to be of such outstanding value to humanity that their importance transcends borders, politics – and even economics. They are deemed deserving of the ultimate layer of protection – to be placed beyond the reach of polluters, developers, looters, bombers, and the ravages of time. The World Heritage seal is a guarantee of preservation.

Related articles

* Clean, safe and a little bit dull... the world's most liveable cities

At least that's the perception. But now many within the conservation community are convinced Unesco is failing. They say the moribund organisation is teetering on its once sound foundations as its principles and priorities crumble under the weight of bureaucracy and outside influence. The World Heritage emblem has come to represent a grandiose marketing tool – fodder for "things to see before you die" coffee-table books.

Just last week, a row erupted over St Kilda, a remote, Unesco-protected island in the Outer Hebrides. When plans were announced to open a visitor centre on nearby Harris, St Kilda's local guardians, the National Trust for Scotland, feared an influx of World Heritage Site-bagging tourists could damage the site. Elsewhere in the world, less scrupulous custodians desperate for tourist dollars campaign to be included in Unesco's sacred list without preparing for the inevitable hordes.

At its worst, its most vocal critics say, World Heritage is a lame duck in a straitjacket, incapable of protecting the world's truly endangered places.

To understand what World Heritage has become, we must trace its utopian origins. The spirit of reaching across borders to protect places of global importance was inspired by the rescue of the 13th-century BC temples of Abu Simbel in Egypt. In 1954, Cairo announced plans to build a dam at Aswan that would flood the temples, so Unesco launched an international fundraising campaign to relocate them, brick by brick. The success inspired a string of projects – in countries as diverse as Italy, Pakistan and Indonesia. Finally, at a UN conference in Stockholm in 1972, that spirit of conservation was crystallised as the World Heritage Convention. The first World Heritage Sites were named in 1978

Today there are 878 of them, in 145 countries. Dubrovnik is one of dozens of success stories – others include the diversion of a proposed road near the Pyramids and the halting of an aluminium plant near Delphi. But it is in Japan that we gain the clearest insight into the way Unesco is failing.

The Iwami Ginzan silver mine was at the heart of a boomtown in the south-west of Honshu Island in the 1600s. But then its fortunes faded and a nearby forest drew in after the mine closed in 1923. By the 1970s, Iwami resembled a ghost town, and might have been forgotten, but for the Yen signs in the eyes of the tourist authorities. In 2007, after intense lobbying in Tokyo, a hole in the ground, of which most Japanese were entirely unaware, joined the ranks of the Taj and the Great Wall of China as a World Heritage Site.

So how did Iwami ever make the list? How does any site get "inscribed", to use Unesco-speak? If there is one fatal flaw in the whole process it is that countries submit their own nominations for inclusion. So when local businessman Toshiro Nakamura made it his life's mission to turn Iwami into a tourist attraction, the suits at the local prefecture were all ears. They used their links with diplomats in Tokyo to make a case for Iwami within Unesco's World Heritage Committee.

Unesco, it must be stressed, has strict selection criteria. New sites, which are named every summer, must prove they are of "outstanding universal value" by meeting at least one of 10 criteria. For example, a site must "bear a unique testimony to a cultural tradition" or "represent a masterpiece of human creative genius". Japan argued that Iwami passed not one but three of these tests. But the International Council on Monuments and Sites, which advised the World Heritage Committee, disagreed, stating that Iwami satisfied none of the 10 criteria. But the campaigning from Japan continued, and Iwami was inscribed.

In the following year, almost 1 million people brought their cameras shoes, picnic baskets – and wallets – to Iwami. Before that, visitor numbers mostly comprised curious locals, and averaged about 15,000 a year. Tourists were bussed into a site without a suitable facilities; in one news report, a weary resident recalled returning home to find three visitors sitting on his sofa, having mistaken his house for part of the tour. Many tourists, apparently expecting a site to rival the Pyramids, left disappointed.

It's easy to see why businesses and tourism officials are so desperate to get the Unesco stamp. As Iwami demonstrates, mention of the magic words "World Heritage Site" in guidebooks can send visitor numbers rocketing. As one conservationist responsible for a British World Heritage site, who preferred not to be named, put it: "A site that will not be of interest to paying visitors isn't going to be a priority. Unesco wants people to go there. They call it public education. We call it tourism."

The Tower of London is one of Britain's 28 World Heritage Sites. Others include Maritime Greenwich, Hadrian's Wall and Canterbury Cathedral. On a grey Wednesday morning, on the cobbled road between the Thames and Traitor's Gate, where Anne Boleyn and Sir Thomas More were delivered to the fortress prison, hundreds of tourists are forming a queue. Most aren't even aware of the Tower's Unesco status – the biggest sites don't need help drawing visitors – but Jim and Rachel Smucker, an American couple from New Jersey, are preparing to tick the tower off their list of World Heritage Sites. "We've must have been to dozens by now," says Jim. "It's nice to know the place you're going to is going to be worth seeing and has good protection."

Many tourists go a step further, seeking out "sightings" like wildlife enthusiasts on safari. Ten years ago, a Dutch woman called Els Slots set up Worldheritagesite.org, a portal for "WHS-baggers". In an email from the United States, where she is adding to her list of 310 sites, she explains the attraction. "We do it because it's a list of things you can tick off, like bird-watching or plane-spotting. I'm not interested in birds or planes, but have always been fascinated by foreign lands and their cultures and history."

That's fine if a site can cope, but for every Tower of London there is an Iwami silver mine, or, if the Hebridean visitor centre takes off, a St Kilda. And it's not just small sites that struggle with the tourist hordes. Angkor is among the most spectacular of all World Heritage Sites. The sprawling Cambodian complex of stone temples, which includes the magnificent spires of Angkor Wat, is a jewel in South-east Asia. A World Heritage Site since 1992, Angkor now receives more than 2 million tourists a year. The neighbouring town of Siem Reap has been transformed into a concrete mass of hotels, restaurants and an international airport. Meanwhile, the ancient stones at the temples are being slowly worn away by millions of flip-flops and walking boots.

Even Unesco admits it was caught "off guard" at Angkor. "All our efforts were focused on restoration because Angkor was in a poor state when we inscribed it," says Francesco Bandarin, the director of Unesco's World Heritage Centre. "Nobody looked at the urban explosion that was happening in Siem Reap." Bandarin says Unesco now has a commission dedicated to site management at Angkor but, as he concedes, "we only have moral power. We advise and recommend action, but these are light guns – it's up to Cambodia to listen."

Unesco's "light guns" draw a lot of criticism. "They only have limited tools for scaring governments," says Jeff Morgan, executive director of the Global Heritage Fund, an American non-profit conservation group. "And they rarely use them". Unesco's ultimate sanction is to remove a site from its list. But in almost 40 years,

during which it has inscribed almost 900 sites, the organisation has only pulled the trigger once. The Arabian Oryx Sanctuary was struck off in 2007 when oil exploration swallowed up 90 per cent of the reserve.

Short of expulsion, Unesco can place sites on its World Heritage In Danger list. Dubrovnik made an appearance soon after the shells breached its red-tiled walls. Today, 30 sites appear on the list.

Those in Jerusalem, Iraq and Afghanistan are to be expected, but a notable inclusion is Germany's Dresden Elbe Valley. In 2006, a proposed new bridge that would damage the integrity of the valley, which is dotted with palaces and remnants of the industrial revolution, led Unesco to declare it "In Danger".

The German example exposes yet more flaws in Unesco's operation. If World Heritage is the biggest brand in conservation, then tourists and others can reasonably expect its "In Danger" list to comprise the world's most threatened sites. "It's just not true," says Morgan. "Who cares about a bridge in Dresden when you could go to Cambodia and see unprotected sites being looted as we speak? You're looking at a dismal picture."

Monte Albán, which casts a shadow over the ancient city of Oaxaca, is one of the most important Zapotec metropolises in Mexico, with a history that spans 13 centuries. Its pyramid-like remains are adorned with rare script. Much of the site has been conserved but it is now under threat, as exposed carvings documenting an ancient civilisation are eroded by the elements. Recent civil unrest in Oaxaca has resulted in looting and vandalism and, in 2006, smoke and ash from a nearby fire damaged the remains. Inscribed in 1987, Monte Albán is a worthy World Heritage Site. But, despite damage and the threat of destruction, it does not appear on Unesco's "In Danger" list.

It's not alone. Every year, The World Monuments Fund (WMF), a non-governmental conservation group based in New York, publishes a "watch list" of the world's 100 most-endangered sites. Tellingly, only three places – in Iraq, Afghanistan and Tanzania – appear on its most recent list, published last year, as well as Unesco's "In Danger"

list. Seventy-nine of the WMF endangered sites are not even inscribed by World Heritage. Most worryingly for those on the ground who devote their lives to preserving sites in peril, 18 of WMF's at-risk sites, including Monte Albán, are World Heritage Sites but do not appear on Unesco's list (see box, below).

Because countries submit the sites they want to be inscribed, often to boost tourism, Unesco has no power to step in to protect places nobody else cares about. Unesco insists it "has most of the important sites", but does not claim to have a monopoly on preservation. It also says comparisons with other organisations are unfair. "Sometimes I envy my friends at WMF, who can do what they want because they don't have 86 member states. It's like comparing a government ministry to an NGO."

But it gets worse. If "light guns" mean countries can push the boundaries of the Heritage Convention without real risk of reproach, who's making sure that sites that

do fall under the Unesco umbrella are properly managed? On paper, they should be, but the reality on the ground can be different. "If you go to a lot of World Heritage sites and ask for management plans with budgets and priorities, they don't exist," says another conservationist, who asked not to be named. "I've been to places in Guatemala, Pakistan, India and Iraq that don't even have basic maps. I've also seen plenty of sites where modern cement and unskilled techniques are being used for restoration. And this is in 2009."

Unesco insists all its sites adhere to strict rules about management and planning, but could it be that the task facing the organisation – effectively to protect the planet – has become so daunting as to be impossible? If it has, the man in charge must have one of the toughest jobs in the world. Speaking from his Paris office, Francesco Bandarin admits it's a tall order. "Sometimes you feel it's impossible to control everything, especially when you look at our founding principles," he says. "Our list is growing and the number of requests is growing, and it seems like the more work you do the more you get.

It's a very big job – too big."

Bandarin suggests a solution would be to maintain a central committee, but to break some of the bureaucracy by handing partial autonomy to an "effective network of heritage institutes". Unesco has launched a review of its practises and Bandarin expects big changes by 2012, when World Heritage turns 40. "It's the only way we can cope with the crazy volume of work," he says.

Some critics don't believe in reform because the idea of "world heritage" is philosophically flawed. Robert Adam is one of Britain's leading traditional architects and has attended Unesco conferences. He calls the organisation's heritage body a "monster quango" and a "cabal". "Who owns heritage?" he asks. "We're moving to a system of governance by groups of unelected experts – Unesco helps to generate policy that goes into national government that often runs contrary to the wishes of citizens. But it's communities that own heritage."

Jeff Morgan at Global Heritage does not support such a radical view, but believes bigger changes than those proposed by Bandarin are necessary. The biggest problem, he says, is Unesco's failure to tap philanthropists and corporations. "If you're Coca-Cola, you don't want to sink money into the Unesco bureaucracy," Morgan says. He cites the case of Dan Pallotta, the author of *Uncharitable*, published earlier this year. Pallotta shook up the American charity sector by staging mass cycling events to raise more than \$300m for health charities. But criticism from other charities about profits drove him out of business and good causes saw funds dry up. "Pallotta showed that charities are screwed up because they can't run like businesses," Morgan says. "He couldn't criticise from the inside, so had to write a book. That's the situation Unesco finds itself in. They can't rock the boat because if they start showing all the damage that's being done to many of their sites, they'll look bad."

Morgan says Unesco is woefully under-funded, but that the entire heritage industry lacks cash. "If you add up the funds available to the main players in preservation, you're looking at \$100m a year. It's pretty abysmal if you compare that to nature

conservation, where you're talking billions." Until balance is restored, Morgan insists Unesco could direct funds to more worthy places by ditching what he calls a bias for religious buildings and glamorous sites in the developed world. "Do we really need another cathedral preserved?" he asks. "I'm not worried about Stonehenge or Dresden when you look at the hundreds of major sites in poor countries that are deteriorating to the point of non-existence."

Morgan ends with a "school report" for Unesco. "Their mission is in three parts," he says. "First, they manage the list, for which they get a B-plus – there are some weird sites but they do a pretty good job. Then they monitor and enforce. I'll give them a B for monitoring, but a D for enforcement because they have no teeth. Finally, they preserve, which you can't even score them for because they have no money. The bottom line is that you need a strong network of conservation groups, led by Unesco, to provide a safety net for the most endangered sites in the countries with the least resources."

Unless Unesco pulls up its socks, the price of failure could be more damaging to the cause of world heritage than the bombs that battered Dubrovnik.

Please visit the site: <http://www.independent.co.uk/travel/news-and-advice/is-unesco-damaging-the-worlds-treasures-1675637.html>

RESEARCHERS AT THE UNIVERSITY OF PORTSMOUTH BELIEVE THEY HAVE SOLVED AN ANCIENT MEDITERRANEAN MYSTERY, BY DAVID HURLEY

The mystery of how 2ft deep tracks were cut into the rock of Malta has been a puzzle for years.

Now Professor Derek Mottershead, of the university's geography department, has followed generations of scholars to unravel the mysteries of the Maltese

The tracks, or ruts, were almost certainly caused by carts because the rock was not strong enough to support the wooden wheels of loaded carts.

They are up to 2ft deep and more than 30km of them run in pairs criss-crossing the island.

Professor Mottershead's team came up with a design of a cart to fit the field evidence, estimated its weight and calculated the stresses involved.

They discovered that in some places the rock was so soft that after heavy rain a single passage of a cart could cause the rock to fail.

Professor Mottershead said: 'The ruts have been studied and talked about for centuries and though it is obvious they are related to vehicles nobody understood how they were made or even when.

'The underlying rock in Malta is weak and when it's wet it loses about 80 per cent of its strength.

'What is unique to Malta is the sheer number of ruts. For years they have attracted the attention of archaeologists but until now we didn't have a convincing explanation of the mechanics of how they could have been formed.'

The team included Dr Alastair Pearson and Martin Schaefer, also of the University of Portsmouth. Their research was published in the journal *Antiquity*.

Please visit the site: <http://www.portsmouth.co.uk/newshome/Researchers-solve-Maltateaser.5193890.jp>

ROMAN-ERA CATACOMBS **UNEARTHED NEAR BETHLEHEM** **UNIVERSITY**

Bethlehem – Ma'an – Roman-era catacombs were unearthed in Bethlehem Saturday during construction in an empty lot beside Bethlehem University.

The small underground cave system opens facing north, and held four stone coffins with engravings on each, housed in two separate dug out burial areas.

Head of Antiquates department in Jericho Wael Hamamrah estimated the artifacts, complete with skeletal remains and some pottery are between 1,800 and 1,900 years old.

Construction workers preparing to lay pipe in the yard called Palestinian tourism and antiquates police when they went to investigate the sudden collapse of earth in an area they had been digging in that morning.

The underground hall leads to two rooms, one 70x28 centimeters and the other 40x24 centimeters,

Head engineer at the site Mohammad Al-Quraji said the crew was very surprised when the earth collapsed, and stunned when they peered into the underground tombs. They left the scene untouched until antiquities experts arrived, and helped remove debris as experts investigated the site.

Please visit the site:

<http://www.maanneews.net/en/index.php?opr=ShowDetails&Do=&ID=37371>
