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Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

- Ιανουάριος 2013 -

*Painting is silent poetry, and poetry is painting that speaks
(Plutarch)*

Newsletter of the Hellenic Society of Archaeometry

- January 2013 -

Nr. 142

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ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

6TH SYMPOSIUM OF THE HELLENIC SOCIETY FOR ARCHAEOLOGY, “CRAFT- BASED CULTURAL INFLUENCES IN THE MEDITERRANEAN”, MAY 16 - 18, 2013 - ATHENS

The Hellenic Society for Archaeology (HSA) is organizing its 6th Symposium under the title “Craft-based Cultural Influences in the Mediterranean”.

In due consideration of the economic situation in Greece and in order to facilitate a more convenient arrival of the participants - a major part of them is expected to be based in the larger region of Athens – the Organizing Committee decided for the change of the symposium location. The symposium will take place in Athens eventually.

Sessions

The science-based study of cultural heritage is usually focused on the examination and analysis of material remains, discovered at archaeological and historical sites. The technical examination of these remains, in the laboratory, provides information about raw materials and their sources, production technology, dissemination and the use of materials, preservation and weathering mechanisms. The archaeometric approach to archaeological sites and their surrounding landscape has concentrated on geophysical prospection, remote sensing and 3-D visualisation of monuments and historic buildings.

However, apart from the material culture that constitutes the main component of our cultural heritage there also exists, the intangible cultural heritage, which includes, among others, living traditions, knowledge and skills associated with individual crafts. Ethnographic studies of traditional crafts has been one approach in revealing insights in this intangible cultural heritage, while experimental archaeology into traditional practices has offered another. From the point of view of archaeolandscape studies, the intangible aspect thereof involves our sensory perception of it and constitutes a relatively new area of research.

The Scientific Committee of the 6th Symposium for Archaeology, in an attempt to address

a) the debate on crafts and craftsmen and their contribution to both the material and intangible cultural heritage and

b) the broader issues associated with archaeolandscape studies within the context of the Mediterranean, will be pleased to receive abstracts relating to the following Thematic Sessions:

Integrated studies on provenance and technology of material remains

Investigating landscapes and intangible cultural heritage within
Conservation science and technology
Biomaterials and archaeology

Organising Committee

The Council of the HSA with the generous contribution of Academic Institutions in Crete (to be announced). Further information will be available soon at www.archaeometry.gr as well as in the 2nd call.

For correspondence please contact us at: conference@archaeometry.gr

**INTERNATIONAL CONFERENCE “MINING
FOR COPPER: ENVIRONMENT, CULTURE
AND COPPER IN ANTIQUITY”, TIMNA
PARK, ISRAEL, APRIL 22-25, 2013**

The organizers of the international conference “Mining for Copper: Environment, Culture and Copper in Antiquity” would like to invite you to submit abstracts by the final deadline of January 6th 2013.

Dedicated to the memory of Professor Beno Rothenberg, the conference will take place at the Timna Park (Israel, April 22-25 2013), the focus of Rothenberg’s life-long research into the archaeology and history of copper production and one of the hubs around which the archaeometallurgical discipline has developed.

For more details and updates please visit:

<http://www.parktimna.co.il/?categoryId=81028&itemId=205472>

Γ΄ ΕΠΙΣΤΗΜΟΝΙΚΟ ΣΥΜΠΟΣΙΟ **ΝΕΟΕΛΛΗΝΙΚΗΣ ΕΚΚΛΗΣΙΑΣΤΙΚΗΣ** **ΤΕΧΝΗΣ, ΕΝΗΜΕΡΩΤΙΚΗ ΕΓΚΥΚΛΙΟΣ**

Το Τμήμα Θεολογίας της Θεολογικής Σχολής του Εθνικού και Καποδιστριακού Πανεπιστημίου Αθηνών, σε συνεργασία με το Τμήμα Αρχιτεκτόνων-Μηχανικών του Πανεπιστημίου Πατρών και με ειδικούς επιστήμονες -μέλη ΔΕΠ άλλων Πανεπιστημιακών Τμημάτων, διοργανώνει το Γ΄ Επιστημονικό Συμπόσιο Νεοελληνικής Εκκλησιαστικής Τέχνης, που θα πραγματοποιηθεί από 22 έως 23 Νοεμβρίου 2013.

Στο πρόγραμμα του Συμποσίου θα συμπεριληφθούν επιστημονικές ανακοινώσεις, που θα αναφέρονται σε θέματα της νεοελληνικής εκκλησιαστικής τέχνης (19ος αι. έως και σήμερα). Ως θεματικές ενότητες του Συμποσίου ορίζονται οι ακόλουθες: α) αρχιτεκτονική, β) ζωγραφική, γ) γλυπτική, δ) μικροτεχνία και ε) μουσική. Οι ανακοινώσεις θα πρέπει να είναι πρωτότυπες και η διάρκειά τους να μην υπερβαίνει τα 15 λεπτά της ώρας. Στόχος και επιδίωξη της Οργανωτικής Επιτροπής θα είναι η έκδοση των Πρακτικών του Συμποσίου.

Σύγχρονοι δημιουργοί θα προσκληθούν να καταθέσουν τις προτάσεις τους με πρωτότυπα έργα ή ανακοινώσεις τοίχου. Οι προτάσεις αυτές θα παρουσιασθούν σε έκθεση, η οποία θα λειτουργήσει παράλληλα με τις εργασίες του Συμποσίου.

Για όλες τις ανακοινώσεις - παρουσιάσεις θα γίνονται δεκτές δηλώσεις συμμετοχής, με καθορισμό του τίτλου του θέματος και περίληψη, μέχρι την 31η Μαΐου 2013. Στο κείμενο της περίληψης, που δεν θα υπερβαίνει τις 500 λέξεις, το ονοματεπώνυμο του ομιλητή και ο τίτλος της ανακοίνωσης θα προηγούνται με κεφαλαία γράμματα. Η γραμματοσειρά που θα χρησιμοποιηθεί θα είναι η Times New Roman. Οι δηλώσεις συμμετοχής και οι περιλήψεις θα σταλούν σε ηλεκτρονική μορφή με επιβεβαίωση λήψης.

Η Τιμητική Επιτροπή του Συμποσίου αποτελείται από τον Μακαριώτατο Αρχιεπίσκοπο Αθηνών και Πάσης Ελλάδος κ.κ. Ιερώνυμο Β΄, τον Ομότιμο Καθηγητή κ. Ε. Κωνσταντινίδη, τον Ομότιμο Καθηγητή κ. Χ. Μπούρα, τον Ομότιμο Καθηγητή κ. Ν. Ζία, τον Ομότιμο Καθηγητή κ. Ε. Τσιγαρίδα, τον Ομότιμο Καθηγητή κ. Γ. Στάθη και την Καθηγήτρια κ. Μ. Καρδαμίτση-Αδάμη.

Η Οργανωτική Επιτροπή του Συμποσίου αποτελείται από την Πρόεδρο του Τμήματος Θεολογίας του Πανεπιστημίου Αθηνών Καθηγήτρια Β. Σιδέρη-Παπαδοπούλου, την Επίκουρη Καθηγήτρια του Τμήματος Θεολογίας Ι. Στουφή – Πουλημένου, τον Επίκουρο Καθηγητή του Τμήματος Θεολογίας Γ. Κόρδη, τον Επίκουρο Καθηγητή του Τμήματος Αρχιτεκτόνων-Μηχανικών του Πανεπιστημίου Πατρών Στ. Μαμαλούκο, τον Επίκουρο Καθηγητή του Τμήματος Ιστορίας και Αρχαιολογίας της Φιλοσοφικής Σχολής του Πανεπιστημίου Αθηνών Δ. Παυλόπουλο, τον Αναπληρωτή Καθηγητή του Τμήματος Μουσικών Σπουδών της Φιλοσοφικής Σχολής του Πανεπιστημίου Αθηνών Α. Χαλδαιάκη και τον Δρ. Θ. Ι. Φριλίγκο.

Παρακαλούμε τους Προέδρους των Τμημάτων και τους Διευθυντές των Τομέων των ΑΕΙ, καθώς και τους Διευθυντές των Εφορειών Αρχαιοτήτων, των Ερευνητικών Κέντρων και των Μουσείων να ενημερώσουν τα μέλη τους.

Οι δηλώσεις συμμετοχής και οι περιλήψεις θα αποστέλλονται στις ηλεκτρονικές διευθύνσεις: istoufh@theol.uoa.gr ή istoufh@hotmail.com

Τηλ. 210 7275758, 6936846068 (Ι. Στουφή-Πουλημένου)

FAX: 210 7275758

210 72775729, 6847949950 (Γ. Κόρδης)

2106132821, 6944849909 (Στ. Μαμαλούκος)

Η Οργανωτική Επιτροπή του Συμποσίου

**CONFERENCE 'IRON AND STEEL 2013:
RUST, REGENERATION AND ROMANCE',
THE IRONBRIDGE GORGE MUSEUM TRUST
AND THE UNIVERSITY OF BIRMINGHAM,
CALL FOR PAPERS**

Dear all,

The Ironbridge Gorge Museum Trust and the University of Birmingham have recently announced a call for papers for a conference titled 'Iron and Steel 2013: Rust, Regeneration and Romance' <http://ironandsteel2013.wordpress.com/>.

I would be grateful if people would have a look and/or pass on to someone that they think might be interested.

Best wishes and Merry Christmas,

Shane Kelleher

Archaeology and Monuments Officer
Ironbridge Gorge Museum Trust

ITALY PRESERVATION FIELD SCHOOL - BUILDINGS, CERAMICS, PAPER, BOOKS AND ART

I would like to inform you about our summer 2013 field school, the San Gemini Preservation Studies Program, now in its 14th year, which is dedicated to the preservation of cultural heritage and offers students the opportunity to study and travel in Italy. The courses offered are listed below:

Building Restoration* (May 26th thru June 22nd, 2013)
Introduction to Art and Building Restoration in Italy
Surveying and Analyzing Historic Buildings

Ceramics Restoration (May 26th thru June 22nd, 2013)
Introduction to Conservation of Archeological Ceramics
Workshop on Ceramics and Ceramics Conservation

(NEW) - Book Bindings Restoration* (May 26th thru June 22nd, 2013)
Introduction to the Restoration of Book Bindings
Workshop on the Restoration of Book Bindings

Paper Restoration* (July 7th thru August 3rd, 2013)
Introduction to Restoration of Paper in Books and Archival Documents
Restoration Workshop – Paper in Books and Archival Documents

Traditional Painting Materials & Techniques (July 7th thru August 3rd, 2013)
Traditional Painting Methods and Techniques in Italy, including Issues of Weathering and Aging Painting Workshop – Traditional Painting Methods and Techniques in Italy

Preservation Theory and Practice in Italy (July 7th thru August 3rd, 2013)
Restoration in Italy – Issues and Theory

*Field Projects:

Restoration of the Porta Burgi (12th Century city gate in San Gemini)
Surveying the 12th Century San Giovanni Battista Church complex
Archaeological survey of the public baths in Carsulae
San Gemini Historic Archives Project (restoration and digitalization of 16-18 Century archival material)

To find out more about our programs and review the syllabi, please visit our website <http://sgps-po.org/>.

Our courses are open to students from various disciplines, both undergraduate and graduate. All lessons are taught in English.

If you know any students, scholars, or others interested in this type of study, please inform them about our program. We would appreciate it if you could list our program on your organization's website as an available educational resource.

We have a 2013 flyer that you may wish to post on your department notice board or forward to interested parties. You can print this from our website, on our About Us page. Please let us know if you have any problem printing and we can email you the PDF.

Thank you very much.

Cordially, Max Cardillo
Director
San Gemini Preservation Studies Program



TEXTILE TRADE AND DISTRIBUTION IN
ANTIQUITY - INTERNATIONAL
CONFERENCE - 9TH & 10TH APRIL 2013,
PHILIPPS-UNIVERSITÄT MARBURG,
GERMANY

Organizer: Dr. Kerstin Droß-Krüpe

The interdisciplinary conference "Textile trade and distribution in antiquity" aims at providing new insights about the dynamics and extent of the distribution of textiles in antiquity. The main objective is to re-evaluate the ancient economy – using textiles as the key element. Other declared targets of this conference are making textile knowledge an integrated part of research in the Humanities, broadening scientific perspectives and joining methodological forces.

Humanities and Textile Research alike can clearly benefit from the integration of Economic and Life Sciences – so fibres, dyes, textiles, written sources and economic theories can be interlinked to form new parameters for the explanation of the economics of ancient environments.

Though ancient textile production has received more and more attention during the last decades, trading and distribution textiles is still largely unresearched. This is even more astonishing as the qualitative and quantitative evaluation concerning the distribution levels and patterns of goods in ancient times has been heavily debated for more than a century within Classics. The distribution of textiles provides a highly promising field of the research of the underlying economic principles because textiles are a basic human need, but additionally can convey and symbolize the gender-related, social, occupational or political status of a person. Apart from that textiles are well suited for trading over long distances as the ratio between transporting costs and profit is particularly low. Besides the finished gown, almost all other intermediate steps of production can be easily traded and merchandised. Using data about the textile trade from different parts of the Mediterranean will make it become possible to gain new insights and thus provide a new interpretation of the complex nature of the ancient exchange of goods and open up new interdisciplinary research avenues. So this conference will bring together different disciplines and methodological approaches to analyse textile material traded, textile traders and the forming and operating of institutions to ensure a smooth running of all textile exchange processes alike.

Moreover, the conference will also include examining the cultural and technological transfer in so-called "contact zones" and ancient trading routes.

There will be five non-parallel sections:

- The economics of textiles
- Textiles in the Greek and Roman world
- Textiles between East and West
- More than texts – (New) Analytical methods
- Make it seen – Visualisation of professions and fashion in textile contexts

Conference languages will be English and German.

Internationally renowned scholars from seven European countries declared their willingness to attend and contribute to this conference – covering a wide range of disciplines. Their papers will focus on ancient written sources, archaeological remains or Natural Sciences to shed light on the functionality of ancient textile trade from Bronze Age to Late Antiquity from very different angles.

The conference organizer is delighted to have the following confirmed speakers and chairs in place (in alphabetical order):

Dr. Wim Broekaert (Universiteit Gent)
Dr. Dominique Cardon (C.N.R.S., Lyon)
Dr. Miko Flohr (Oxford Roman Economy Project, University of Oxford/Universiteit Leiden)
Dr. Karin M. Frei (Centre for Textile Research [CTR], Københavns Universitet)
Dr. Margarita Gleba (University College London)
Prof. Dr. Hans Rupprecht Goette (Deutsches Archäologisches Institut [DAI], Berlin)
Prof. Dr. Herbert Graßl (Universität Salzburg)
Dr. Mary Harlow (University of Birmingham / Centre for Textile Research [CTR], Københavns Universitet)
Dr. Eivind Heldaas Seland (Universitetet i Bergen)
Dr. Berit Hildebrandt (Leibniz Universität Hannover)
Dr. Cécile Michel (C.N.R.S, Nanterre)
Prof. Dr. Marie-Louise Nosch (Centre for Textile Research [CTR], Københavns Universitet)
Prof. Dr. Robert Rollinger (Universität Innsbruck)
Prof. Dr. Kai Ruffing (Philipps-Universität Marburg)
Prof. Dr. Oliver Stoll (Universität Passau)
Dr. John Peter Wild (University of Manchester)

A final programme and short abstracts of the lectures will be posted on this website as soon as they are available.

Apart from the lectures given there will be a poster session presenting research projects of junior and senior colleagues doing research in the fields of ancient textiles or ancient economic history. Proposals for conference posters are invited (Deadline: 15th January 2013). Further information is given in the call for posters (please follow this link).

Registration is now open for this event. If you would like to attend please send an email to textiletrade2013@staff.uni-marburg.de. There will be no registration fee.

The conference is funded by Deutsche Forschungsgemeinschaft (DFG), Pasold Research Fund, Marburger Universitätsstiftung and Ursula-Kuhlmann-Fonds.

Please visit the site:

http://www.uni-marburg.de/fb06/alte_geschichte/textiletrade2013/textiletrade2013_engl

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –
JOB VACANCIES/FELLOWSHIPS

FELLOWSHIPS: FROM TRINITY COLLEGE
DUBLIN

The Department of Classics at Trinity College Dublin is pleased to offer the following two studentships for new entrants to the PhD register in 2013-14.

A. G. LEVENTIS SCHOLARSHIP IN HELLENIC STUDIES

This new 3 year studentship for PhD research (2013-16) is generously funded by the A. G. Leventis Foundation, to which the Department is most grateful for their ongoing support of our activities.

The award will be made in any area of Hellenic Studies (including archaeology, history, language and literature, philosophy) The studentship is worth €16,000 per year plus fees (EU and non-EU).

COLLEGE POSTGRADUATE RESEARCH STUDENTSHIP AWARD

This 3 year studentship for PhD research (2013-16) is offered by Trinity College Dublin. The award will be made in any area of Classical scholarship.

The studentship is worth €8,000 per year plus fees (EU and non-EU).

Further information;

http://www.tcd.ie/Graduate_Studies/prospectivestudents/awards/studentships/index.php.

HOW TO APPLY

Candidates should apply for acceptance onto the Ph.D. register using the standard College online application system:

<http://www.tcd.ie/courses/postgraduate/research/schools/histories-humanities.php>.

Candidates must apply for the College Research Award during the online application process.

There is no special application form for the A.G. Leventis Scholarship.

When you have submitted your on-line application please contact Ms Winifred Ryan ryanw1@tcd.ie in the Department of Classics, indicating that you wish to be considered for this award.

Candidates are required to submit a recent essay, thesis chapter, or other piece of written work. Submissions should be made in hard copy AND electronically to: Ms Winifred Ryan, Department of Classics.

Trinity College, Dublin 2, Republic of Ireland email: Ms Winifred Ryan

To this address applicants may also submit any further supporting materials (e.g. personal statement) they wish to draw to the attention of the panel of assessors. Continuation of these awards will be subject to satisfactory progress.

All applications must be received no later than 5.00 pm on Friday 19 April 2013.
More information on the Department and the research interests of the staff:
<http://www.tcd.ie/Classics/index.php>

Informal academic inquiries should be addressed to Dr Christine Morris cmorris@tcd.ie
or Professor Anna Chahoud chahouda@tcd.ie

SCIENTIFIC RESEARCH COLLABORATOR
IN CONSERVATION, THE HAUTE ECOLE DE
CONSERVATION-RESTAURATION ARC,
SWITZERLAND (NEUCHÂTEL)

The Haute Ecole de Conservation-Restauration Arc, Switzerland (Neuchâtel) is seeking for its applied research team:

A scientific research collaborator in Conservation

Activity of employment : 50 %

Responsibilities

Under the responsibility of the head of the department and the research coordinator and in association with the members of the research team:

- Initiation of research projects, in the field of conservation-restoration.
- Conducting research projects.
- Participate in research projects.

Required competences

- Master or equivalent degree in conservation-restoration.
- Solid experience in conservation.
- Solid experience in conservation research.
- Excellent social and organisational skills.
- Autonomy, flexibility.
- Good written and spoken English skills (German is an advantage).

Contract duration: 1 year, renewable

Deadline of application: 31.01.2013

Beginning of contract: as soon as possible

The full application (CV, motivation letter, copies of titles + complements when needed) is to be emailed to Régis Bertholon, Head of studies and research : conservation-restauration@he-arc.ch.

For more details : Isabelle Rérat, Human Resources administration: isabelle.rerat@he-arc.ch, +41 32 930 1921.

LATEST POSTING OF CNRS POSITIONS

Daniel Stoekl Ben Ezra <stoekl@msh.univ-aix.fr> has reviewed the latest posting of CNRS positions (<http://gestionoffres.dsi.cnrs.fr/fo/offres/default-en.php>) and lists those most promising below. Go there for details.

Section n°31 : Humankind and environments: evolution, interactions

N°31/01 - 6 Senior scientists 2nd class. Competitive entry is open for research themes pertaining to Section n°31.

N°31/02 - 2 Associate scientists 1st class. Competitive entry is open for research themes pertaining to Section n°31.

N°31/03 - 5 Associate scientists 2nd class. 2 of them preferably with a focus on :
- Extra-European archaeology ;
- Palaeoenvironments and exploitation of plant and animal resources in the Near and Middle East or in the eastern Mediterranean (Neolithic period, Metal Ages).

Section n°32 : Ancient and medieval worlds

N°32/01 - 6 Senior scientists 2nd class. Competitive entry is open for research themes pertaining to Section n°32.

N°32/02 - 3 Associate scientists 1st class. Competitive entry is open for research themes pertaining to Section n°32.

N°32/03 - 5 Associate scientists 2nd class. 4 of them preferably with a focus on :
- The pre-Roman Mediterranean (Near East; Africa);
- History and archaeology of the Roman World ;
- Gender history in ancient or medieval times ;
- Cultural history of the non Western medieval worlds.

Section n°33 : Modern and Contemporary Worlds

N°33/01 - 5 Senior scientists 2nd class. Competitive entry is open for research themes pertaining to Section n°33.

N°33/02 - 2 Associate scientists 1st class. Competitive entry is open for research themes pertaining to Section n°33.

N°33/03 - 5 Associate scientists 2nd class. 3 of them preferably with a focus on :
- history of the Americas or Atlantic history ;
- history of Central and Eastern Europe or of the Balkans ;
- economic history : spaces, actors and practices.

Section n°34 : Language Sciences

N°34/01 - 4 Senior scientists 2nd class. Competitive entry is open for research themes pertaining to Section n°34.

N°34/02 - 1 Associate scientist 1st class. Competitive entry is open for research themes pertaining to Section n°34.

N°34/03 - 3 Associate scientists 2nd class. 2 of them preferably with a focus on :

- Cognition, semantics and pragmatics ;
 - Modelization and automatic language processing.
-

NEW ARCHAEOLOGICAL RESEARCH
NETWORK FOR INTEGRATING
APPROACHES TO ANCIENT MATERIAL
STUDIES, A MARIE CURIE INITIAL
TRAINING NETWORK,
FP7-PEOPLE-2010-ITN

Dear all,

Please find below the announcement for a NEW Experienced Researcher position within the framework of the FP7 Marie Curie ITN project "New Archaeological Research Network for Integrating Approaches to ancient material studies (NARNIA)". I kindly ask you to circulate the announcement among your colleagues and other possibly interested individuals.

Many thanks in advance,

Maria Dikomitou-Eliadou

-NARNIA-

New Archaeological Research Network for Integrating Approaches to ancient material studies

A Marie Curie Initial Training Network

FP7-PEOPLE-2010-ITN

Experience Researcher Fellowship Announcement

Fellowship Title and ID code

Marie Curie Experience Researcher Fellowship (ER4) at the Department of Conservation Science, Queen Rania Institute of Tourism & Heritage, The Hashemite University (Jordan)

Title of Research Project

"Assessment and quantification of damage on the building materials from three desert castles in Jordan".

Fellowship Description

The aim of this research project is to assess and quantify the damage observed on the building materials of three desert castles in Jordan. These castles are made with different

building materials and they are adorned with wall paintings and mosaics. The study will extend to evaluate all the internal and external factors leading to the decay of these sites. The main scope is to produce a comprehensive plan for the conservation and management of these sites, which will take into consideration all the active decay mechanisms. The research thus will not only provide solutions for the necessary practical remedial and preventive practices for preservation of the monuments, but it will also be a conceptual management plan for the sites.

Academic Requirements

Eligible applicants for this Experienced Researcher Fellowship (equivalent to a post-doctoral position) must either be in possession of a doctoral degree, irrespective of the time taken to acquire it, or have a Master's degree and at least four years of full-time equivalent research experience in the field of archaeology, or materials science, or chemistry, or conservation. Their total research experience must not exceed 5 years after obtaining their Masters' degree.

Marie Curie ITN programs mobility requirement

At the time of selection by the Hashemite University, researchers must not have resided or carried out their main activity (work, studies, etc.) in Jordan for more than 12 months in the 3 years immediately prior to their recruitment.

Duration of fellowship

22 months - starting in February 2013

Closing date for applications

2nd of January 2013

Submitting an application

Applicants should send via e-mail a CV, a covering letter including brief description of their research activities and the names and contact details of two referees, and a copy of a relevant publication to Dr Fadi A.Y. Bal'awi (E-mail: fadi.balaawi@gmail.com) and Dr Maria Dikomitou-Eliadou (E-mail: m.dikom@ucy.ac.cy) using the indication NARNIA ER4 to the e-mail's subject field. Deadline for Fellowship application: 2nd of January 2013

Financial regime

In line with the FP7-PEOPLE-2010-ITN, the total cost for the project for the annual salary is 39480 Euros before being subject to local national taxation. In addition to the monthly salary, mobility, travel and career exploratory allowances will also be provided.

Contact person

Dr Fadi A.Y. Bal'awi (E-mail: fadi.balaawi@hu.edu.jo)

Assistant Professor in the Department of Conservation Science, Queen Rania Institute of Tourism & Heritage, The Hashemite University (Jordan)

OR

Dr Maria Dikomitou-Eliadou (E-mail: m.dikom@ucy.ac.cy)

NARNIA Project Manager, Archaeological Research Unit, University of Cyprus

More information on NARNIA:

<http://www.ucy.ac.cy/data/archreun/narnia%20information.pdf> www.narnia-itn.eu

More information on the Hashemite University: <http://www.hu.edu.jo/>

Dr Maria Dikomitou-Eliadou

Project Manager

New Archaeological Research Network for Integrating Approaches to ancient material studies (NARNIA)

FP7 - PEOPLE - Marie Curie European Actions

<http://www.narnia-itn.eu> > www.narnia-itn.eu

Research Fellow

Archaeological Research Unit

Department of History and Archaeology

University of Cyprus

P.O.Box 20537, CY-1678, Nicosia, Cyprus

email: m.dikom@ucy.ac.cy

tel. +357-22-893573

fax: +357-22-674101



ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

The poster features a central graphic of a stylized shell or spiral in shades of beige and grey. At the top, there are logos for 'COSTA NAVARINO', 'ΔΙΕΘΝΕΣ ΒΡΑΒΕΙΟ ΑΡΧΑΙΟΜΕΤΡΙΑΣ', and the 'Εργαστήριο Αρχαιολογίας' (Archaeology Laboratory) of the University of Ioannina. The main text is in Greek, announcing the award ceremony. At the bottom, the date and location are provided, along with the logos of 'XANITHI' and 'AEGEAN'.

COSTA NAVARINO ΔΙΕΘΝΕΣ ΒΡΑΒΕΙΟ ΑΡΧΑΙΟΜΕΤΡΙΑΣ Εργαστήριο Αρχαιολογίας Πανεπιστήμιο Ιωαννίνων

Τελετή Απονομής
ΔΙΕΘΝΟΥΣ ΒΡΑΒΕΙΟΥ ΑΡΧΑΙΟΜΕΤΡΙΑΣ
COSTA NAVARINO

Παρασκευή 18 Ιανουαρίου 2013, 7 μ.μ.
Αμφιθέατρο Πανεπιστημιακής Σχολής Καλαμάτας

XANITHI AEGEAN

MASTER OF SCIENCE - FACULTY OF
SCIENCE INSTITUTE OF
ARCHAEOLOGICAL SCIENCES -
UNIVERSITY OF TÜBINGEN

STUDY PLAN

The study course consists of 180 credits. As shown above, most modules –except for the project and the master thesis– consist of 6 credits. Each student chooses one of six subfields of specialisation (archaeometry, archaeobotany, geoarchaeology, paleoanthropology, paleogenetics and zooarchaeology) and is required to complete four modules in this field.

COURSE OF STUDY

CONTACT

Contact for study advise and general questions: Dr. Katleen Deckers

University of Tübingen

Faculty of Science

Institute of Archaeological Sciences

Rümelinstraße 23 · 72070 Tübingen

<http://www.geo.uni-tuebingen.de/arbeitsgruppen/ur-und-fruehgeschichte-und-archaeologie-des-mittelalters/forschungsbereich>

katleen.deckers@uni-tuebingen.de

Institute director: Prof. Nicholas Conard

nicholas.conard@uni-tuebingen.de

1st semester

Theory and methods in archaeology 6 CP

Zooarchaeology/Paleoanthropology 6 CP

Archaeobotany/Geoarchaeology 6 CP

Archaeometry 6 CP

Specialisation I 6 CP

2nd semester

Environmental archaeology 6 CP

Specialisation II 6 CP

Specialisation III 6 CP

Specialisation IV 6 CP

Practical in field archaeology 6 CP

3rd semester

Scientific writing 6 CP

Statistics 6 CP

Project 12 CP

Research design 6 CP

4th semester

Master thesis 30 CP

CP: Credit Points

ARCHAEOLOGICAL SCIENCES @ TÜBINGEN

Although the Institute for Archaeological Sciences was founded in 2007, the University of Tübingen has a long tradition of excellence in this field. Already in 1896 Ernst Koken taught human evolution and prehistory as part of the Mathematics-Science Faculty. Since then, many courses in scientific archaeology have been offered in Tübingen. Over decades, Tübingen was the only German university with archaeologists housed within a faculty of natural science. For many years sciencebased archaeology was closely associated with the chair of Early Prehistory and Quaternary Ecology and the professorship for Bioarchaeology. In recent years, scientific archaeology has expanded, with improvements in laboratory facilities and the hiring of additional professors and staff members.

The University of Tübingen

Innovative. Interdisciplinary. International. Since 1477. These have been the University of Tübingen's guiding principles in research and teaching ever since it was founded. With this long tradition, the University of Tübingen is one of the most respected universities in Germany. Recently, its institutional strategy was successfully selected for funding in the Excellence Initiative sponsored by the German federal and state governments, making Tübingen one of Germany's eleven universities distinguished with that title of excellence. Tübingen has also proven its status as a leading research university in many national and international competitions – in key rankings Tübingen is listed among the best universities for the Humanities and Social Sciences as well as for Science and Medicine.

PROFILE

M.Sc. in Archaeological Sciences This two-year, in-depth interdisciplinary program provides students with a detailed understanding of the human past, focusing on a combination of disciplines in the natural sciences. Students specialize in one of six subfields and tailor courses and research with top scientists on staff. Students acquire practical and theoretical knowledge using cutting-edge tools and gain experience in the lab and the field. An early integration in ongoing research projects and the development of scientific skills allows students to undertake projects of their choice, in consultation with their advisors, to investigate current questions in any field of archaeology.

RESOURCES

- Laboratory for ancient DNA
- Laboratory for organic petrology and micromorphology
- Sedimentological and soil science laboratory
- Paleoanthropology "Imaging" Laboratory
- Paleoanthropology High Resolution Computer Tomography Laboratory
- Radiocarbon and luminescence dating facilities (Curt-Engelhorn Zentrum Archäometrie Mannheim)
- Archaeobotanical laboratory
- Zooarchaeology laboratory
- Human Osteology laboratory
- Large comparative collections for human and animal osteology and botany
- Geochemical Isotopy laboratory (Curt-Engelhorn-Zentrum Archäometrie Mannheim)
- Measurement laboratory for trace elements and isotopy (Curt-Engelhorn Zentrum Archäometrie Mannheim)

- Facilities for X-ray fluorescence analysis (Curt-Engelhorn Zentrum Archäometrie Mannheim)

CAREER PERSPECTIVES

Students in the M. Sc. program in Archaeological Sciences will be able to select a specialisation in a particular field of scientific archaeology, thereby making them more competitive on the job market. Graduates of the M. Sc. program are ideally qualified for jobs at research institutes, universities, and cultural resource agencies.

All students within the M. Sc. program are required to complete field work, providing real-world experience on archaeological excavation. Additionally, modules on scientific writing and research design will give students practical knowledge that will be useful in further stages of their careers.

REQUIREMENTS

There are several prerequisites for acceptance into the M.Sc. program depending on the applicants intended subfield (see general regulations of the study course). In principle, the Institute of Archaeological Sciences is looking for outstanding students with a Bachelor's degree in archaeology or natural sciences, with additional knowledge of archaeological sciences.

Skills in written and spoken German are helpful but not required since most courses are taught in English.

If you have questions, please contact the person responsible of your field of interest:

Archaeobotany: PD Dr. Simone Riehl

simone.riehl@uni-tuebingen.de

Archaeometry: Prof. Dr. Ernst Pernicka

ernst.pernicka@uni-tuebingen.de

Geoarchaeology: Jun.-Prof. Dr. Christopher Miller

christopher.miller@uni-tuebingen.de

Paleoanthropology: Prof. Dr. Katerina Harvati

katerina.harvati@ifu.uni-tuebingen.de

Archaeo- and paleogenetics: Jun.-Prof. Dr. Johannes Krause

johannes.krause@ifu.uni-tuebingen.de

Zooarchaeology: Dr. Britt Starkovich

britt.starkovich@uni-tuebingen.de

APPLICATION

Application forms and other information can be found at the following link:

www.uni-tuebingen.de/en/international

The completed application forms must be sent to the central administration by July 15th:

Universität Tübingen · Studentensekretariat

Wilhelmstraße 11 · 72074 Tübingen

Online Details of the Course of study @

<http://www.geo.uni-tuebingen.de/index.php?id=2838&L=0>

Registration fees:

There are no tuition fees, but the university charges a registration fee of 103 Euro per semester.

INTCAL LAB SURVEY

Dear Colleagues,

As part of efforts to a) raise funds for on-going IntCal calibration curve work and b) demonstrate the commercial value of that work, Paula Reimer and I would like to make an estimate of the number of radiocarbon samples being dated each year worldwide. To this end, we would be most grateful if those running radiocarbon labs would be willing to answer the following questions.

- 1) How many ^{14}C samples of unknown age do you analyse each year by radiometric methods (gas, LSC etc.)?
- 2) How many ^{14}C samples of unknown age do you analyse each year by AMS?
- 3) Do you produce graphite for AMS analysis elsewhere? If so, how many samples of unknown age do you process in this way each year?

Please send answers to c.e.buck@sheffield.ac.uk by 21 Dec if possible. Estimates and guesstimates as well as exact figures could be useful, so long as you make it clear which they are. Returns after 21 Dec will be useful for b) above but not the immediate need for a) so please do send them as you are able to collate the info. In your email, please let us know which lab you represent. We will not use this info in anything we make public, but we want to be able to identify duplicate responses should they occur.

Many thanks,
Caitlin

Prof Caitlin E. Buck
Director of Postgraduate Research
School of Mathematics and Statistics
University of Sheffield
Hicks Building
Hounsfield Road
Sheffield
S3 7RH
Tel: +44 114 222 3715

VIDEO FOR ORTHODOX LITURGICAL GARMENTS- ATEI OF IONIAN ISLANDS

Dear colleagues,

in trying to implement an educational video for the Orthodox Liturgical Garments within the framework of History of Textiles module in the Department of Protection and Conservation of Cultural Property (Technological Educational Institute of Ionian Islands) with the collaboration of the Holy Metropolis of Zakynthou & Strofadon, our student Ms. Ilona Ntelianidou, create the attached video in Greek with English and Russian subtitles:

Orthodox Liturgical Garments

Please visit the site: <https://www.youtube.com/watch?v=ml93qmng-dE>

INTERNET SITES

DEAD SEA SCROLLS DIGITALLY LAUNCHED AS NEVER SEEN BEFORE

Finally, the Dead Sea Scrolls have been made available through high resolution spectral imaging for the public and scholars alike to view and study.

Dead Sea Scrolls Digitally Launched As Never Seen Before By The Public

The Dead Sea Scrolls, arguably the greatest archaeological discovery of the 20th century, have now been placed online for anyone to freely view them in unprecedented high resolution detail.

Launched the middle of December, 2012, the Leon Levy Dead Sea Scrolls Digital Library is the brainchild of a collaboration between the Israel Antiquities Authority (IAA) and the Google Research and Development Center in Israel. The objective is to eventually place the entire collection of about 930 manuscripts, comprised of thousands of Dead Sea Scroll fragments and representing the complete known archive of the world-rekknowned ancient documents. Already, hundreds of images have been placed online for view and study by anyone interested.

What makes the achievement notable is the application of the science of spectral imaging, which not only enhances clarity but also reveals script that cannot be seen by the naked eye, affording a more complete view of the ancient texts. Using a product called MegaVision, the process produces digital images of the scroll fragments in various wavelengths. Specifically, the fragments are imaged on both sides using 12 wavelengths, 7 within the visible range and 5 in the invisible, infrared range, enabling viewers to even "see" images, such as characters of script, where the ancient ink has faded away or disappeared from site.

"You can really see into the inside of the parchment," said Pnina Shore, Curator and Head of the Dead Sea Scrolls Project at the IAA.

The IAA hopes that the new spectral imaging results will lead to new readings and interpretations of the text, helping scholars to continue their research and shed additional light on the meaning of the scrolls, an endeavor that is expected to go on for decades to come.

Said Shore of the Project: "The idea behind it is first of all, to preserve the scrolls for future generations [reducing physical handling for research and thus conserving the scroll fragments] and secondly, but just as important, to open the scrolls online to the public and the scholarly world alike."

The Dead Sea Scrolls, discovered between 1946 and 1956 in caves near the ancient site of Khirbet Qumran adjacent to the Dead Sea in what is today the West Bank, consist of both biblical manuscripts of the Hebrew Bible and extra-biblical texts. They are significant in that many of the texts represent the earliest known surviving copies of biblical and extra-biblical documents, and have opened a window on the diversity of late

Second Temple Judaism and possibly the foundations for the emergence of Christianity. They were penned in Hebrew, Aramaic, Greek, and Nabataean on parchment, with some of them on papyrus and bronze. They have been dated to between 408 BCE and 318 CE.

To view Dead Sea Scroll fragments that have already been placed online using the new technology, go to the Leon Levy Dead Sea Scrolls Digital Library.

Please visit the site: <http://popular-archaeology.com/issue/december-2012/article/dead-sea-scrolls-digitally-launched-as-never-seen-before-by-the-public>
[\[Go there for links\]](#)

AROURA WEBSITE UPDATE (SURVEY AROUND GLA)

Dear friends and colleagues,

It may interest you to learn that the website of Archaeological Reconnaissance of Uninvestigated Remains of Agriculture (AROURA) of the plain around the Mycenaean fortress of Gla(s), October 2010 through November 2012, has lately been updated.

New content includes

** The third and final report, 2012 (with color figures)

See <http://www.umbc.edu/aroura/reports.htm>

** A new historical and archaeological synopsis

See <http://www.umbc.edu/aroura/index.htm>

** Screenshots of our planned GIS database interface, which we expect to finalize in the spring of 2013

See <http://www.umbc.edu/aroura/events.htm>

(also mention of Dr. N. Zacharias' installation of OSL dating dosimeters, the results from which we expect very soon.)

We will redesign the website in the next few months too. (It is currently optimized for Google Chrome.) Questions or comments are welcome, naturally.

With best wishes, especially during these holidays,

Michael Lane

Dr. Michael Franklin Lane

Co-Director, AROURA

Ancient Studies Department

University of Maryland, Baltimore County Fine Arts Building, Room 452 1000 Hilltop
Circle Baltimore, MD 21250, USA Tel. +1-410-455-6265 / Fax +1-410-455-1660

Skype: barrenador

<http://www.umbc.edu/aroura>

PRINCETON ARCHAEOLOGICAL **ARCHIVES**

The archaeological archives consist of unique photographic and textual documentation generated by over 100 years of expeditions and excavations conducted and sponsored by Princeton University. In addition to the primary corpus of photographs, glass plate and film negatives, drawings, there are supplementary materials such as journals, field notebooks trench reports and other ancillary records.

Together these collections form a singular archive manifesting Princeton's continued participation in and sponsorship of excavations, a tradition that began in 1899 with Howard Crosby Butler's first expedition to Syria and continues with the excavations at Balis in central Syria.

Tents

RUDOLF-ERNST BRÜNNOW AND ALFRED VON DOMASZEWSKI ARCHIVE
1897-1898 Photographs of the Roman province of Arabia, including such sites as Amman, Bosra and Petra, to provide illustrations for *Die Provinz Arabia* published from 1904-1909. Princeton retains drawings, the original glass negatives and an accompanying set of mounted photographs. The collection also holds the complete set of the earliest panoramic photographic documentation of Mshatta's facade, made by Rudolf-Ernst Brünnow in 1898. Catalogue of photographs....please be patient Butler

HOWARD CROSBY BUTLER ARCHIVE American Archaeological Expeditions to Syria 1899-1900 Princeton University Archaeological Expeditions to Syria 1904-1905 and 1909 Photographs of secular buildings, fortifications, churches and monasteries, dating from the first to the seventh centuries A.D., in northern and southern Syria. In addition to the primary corpus of photographs, negatives and drawings, there are journals, diaries and personal sketches. Catalogue of photographs...please be patient Sardis

AMERICAN SOCIETY FOR THE EXCAVATION OF SARDIS 1910-1914 Photographs and negatives of the excavation of the ancient Lydian capital of Sardis taken during the seasons of 1910 – 1914. The collection includes extensive documentation of the excavation of the Temple of Artemis, as well as photographs of architectural details and other objects found at the site. Catalogue of photographs...please be patient Antioch

COMMITTEE FOR THE EXCAVATION OF ANTIOCH-ON-THE-ORONTES 1932-1939 Photographs and negatives from the excavation of this late antique site and its objects. The archive, most noted for its extensive documentation of mosaics, also includes inventories, field notebooks, diaries, trench reports, drawings and other ancillary records.

Catalogue of photographs....please be patient Morgantina

PRINCETON ARCHAEOLOGICAL EXPEDITION TO MORGANTINA 1955 – 1963 and 1966-1967 Photographs, negatives and slides from the excavation of this prehistoric - Early Roman site. The collection also includes an extensive set of architectural drawings, trench notebooks and field books.

Polis

PRINCETON ARCHAEOLOGICAL EXPEDITION TO POLIS 1983 – PRESENT
Photographs, negatives, and slides, from the excavation of the archaic and classical city
of Marion in Cyprus. The collection includes drawings, trench notebooks, field books,
and other ancillary records.

Please visit the site: <http://www.princeton.edu/researchphotographs/archaeological-archives/> [Go there for embedded links]

TOP 10 DISCOVERIES OF 2012 - VOLUME 66 **NUMBER 1, JANUARY/FEBRUARY 2013**

Any discussion of archaeology in the year 2012 would be incomplete without mention of the much-talked-about end of the Maya Long Count calendar and the apocalyptic prophecies it has engendered. With that in mind, as 2013 approaches, the year's biggest discovery may actually be that we're all still here—at least that's what the editors of *Archaeology* continue to bet on.

However, you won't find that story on our Top 10 list. We steered clear of speculation and focused, instead, on singular finds—the stuff, if you will—the material that comes out of the earth and changes what we thought we knew about the past.

Here you'll see discoveries that range from a work of Europe's earliest wall art to the revelation that Neanderthals, our closest relatives, selectively picked and ate medicinal plants, and from the unexpected discovery of a 20-foot Egyptian ceremonial boat to the excavation of stunning masks that decorate a Maya temple and tell us of a civilization's relation to the cosmos.

Then there are the discoveries that just made us wonder. What drove someone to wrap their valuables in a cloth and hide them almost 2,000 years ago? And why were people in Bronze Age Scotland gathering bones and burying them in bogs?

The finds span the last 50,000 years and cover territories from the cradle of civilization to what is today one of the world's most populous cities. These are a few of the discoveries that speak to us of both our record of ingenuity and our humanity. The enduring question is always: Were the people behind the evidence anything like us?

—The Editors

Please visit the site:

http://www.archaeology.org/1301/features/el_zotz_el_sidron_templo_mayor_bar_ko_khba.html

ATTIC INSCRIPTIONS ONLINE (AIO)

Welcome to Attic Inscriptions Online (AIO), a website designed to make available the inscriptions of ancient Athens and Attica in English translation.

Background

Inscriptions on stone are the most important documentary source for the history of the ancient city of Athens and its surrounding region, Attica. Dating from the 7th century BC through to the end of antiquity, Greek texts are available to scholars in Inscriptiones Graecae (IG) I (up to 403/2 BC) and II (after 403/2 BC) (website), updated annually by the Supplementum Epigraphicum Graecum (SEG) (website), and in the Packard Humanities Institute (PHI) Greek Inscriptions website. However, until now, very few of the inscriptions have been available in English translation, whether in print, or online. This site is intended to rectify this situation, beginning in 2012 with the inscribed laws and decrees of Athens, 352/1-322/1 BC, of which new texts have recently been published as IG II3 1, 292-572.

Please visit the site: <http://www.atticinscriptions.com/> [Go there for links and for more details]

THE SIRKELI HÖYÜK EXCAVATION PROJECT OF THE UNIVERSITY OF BERN

The Sirkeli Höyük Excavation Project of the University of Bern is happy to announce the relaunch of its website. It features information on the site and its exploration, historical information on the region of Cilicia, a full list of publications of the project, and a contact section.

The website can be found at: <http://www.sirkeli.unibe.ch/>.

Alexander Ahrens
alexander.ahrens@iaw.unibe.ch

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS
ARCHAEOLOGIA BULGARICA

1. Archaeologia Bulgarica XVI 2012 #1

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Edited by Lyudmil Vagalinski, Nicolay Sharankov, Sergey Torbatov 526 pp, hard-cover, Sofia 2012, ISBN 978-954-9472-16-5

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GEOPONIKES

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The text of the Geoponica reads like an organized compilation of information concerning farming, wine growing, tree growing, gardening, and so forth. Much of this information can be traced back to ancient Greek written sources, whether Classical or proto-Byzantine. In its definitive state the text falls into the range of encyclopedic works composed at the behest of Byzantine Emperor Constantine VII Porphyrogenitus. Since its edition, it has continually attracted the attention, first of copyists, then of publishers and translators.

While previous translations have rightly emphasized the links connecting the Geoponica to the traditions of Antiquity, including Latin ones, this edition seeks to highlight the Byzantine character of the Constantinian compilation. The text combines farming and agronomic experience with magical practices – without necessarily putting them on a par and thus exemplifies an encyclopedic mindset bent on leaving out no information, even implausible. In this sense the Geoponica are of interest not only to philologists and historians but also to agronomists and anthropologists.

Please visit the site: <http://www.achcbyz.com/achcbyzV2/infoPublication-84.html>

DOCUMENTA PRAEHISTORICA XXXVII **(2010)**

Göbekli Tepe – the Stone Age Sanctuaries. New results of ongoing excavations with a special focus on sculptures and high reliefs Klaus Schmidt Deutsches Archäologisches Institut, Orient-Abteilung, Berlin, DE kls@orient.dainst.de

ABSTRACT – The transition from non-food producing to farming societies first took place during the Pre-Pottery Neolithic (PPN) of the Near East. It happened immediately after the end of the Pleistocene, between the 10th to the 8th millennium BC. One of the main questions that have exercised the minds of generations of archaeologists is why people first gave up a hunting and gathering way of life and start to domesticate plants and animals. In other words, why did the Neolithic Revolution take place? The new discoveries at Göbekli Tepe have turned up evidence for explanations that differ from the generally accepted wisdom on this issue.

Please visit the site: <http://tinyurl.com/d5prcop> is posted the pdf of the following article: [Go there for fuller abstract and to download]

ARCHAEOLOGY FROM HISTORICAL AERIAL AND SATELLITE ARCHIVES

Hanson, William S.; Oltean, Ioana A. (Eds.) 2013, 2013, XXIV, 341 p. 113 illus., 28 in color

Hardcover: \$129.00 (eBook \$100.00)

-uses declassified military reconnaissance images for archaeological research -explains the "how-to" of using and accessing historical archived military data -includes photographs from WWI to the present day

Major international historical archives of declassified military reconnaissance photographs and satellite images, combined with a range of national collections of vertical photographs, offer considerable potential for archaeological and historical landscape research. They provide a unique insight into the character of the landscape as it was over half a century or more ago, before the destructive impact of intensive land use and development. Millions of such images are held in archives around the world, yet their research potential goes largely untapped.

Archaeology from Historical Aerial and Satellite Archives draws attention to the existence and scope of these historical photographs to encourage their use in archaeological and landscape research. Not only do they provide a high-quality photographic record of the pre-modern landscape, but they also offer the prospect of the better survival of archaeological remains surviving as earthworks or cropmarks. These sources of imagery also provide an opportunity to examine areas of Europe and beyond whose skies are still not open to archaeological aerial reconnaissance.

Featured in the coverage:

The archaeological potential of The Aerial Reconnaissance Archives in Edinburgh and the archive of declassified intelligence satellite photographs of the United States Geological Survey.

First World War aerial photography and medieval landscapes.

Second World War and post-war aerial photography in multi-period archaeological research in Britain, Hungary, Italy, Jordan, Portugal, Romania, Russia, Spain and Uruguay The archaeological exploitation of declassified US satellite photography in Armenia and Syria.

The integration of historical aerial and satellite photography for archaeological landscape research in Cambodia and Romania.

By describing this massive resource, providing examples of its application to archaeological/landscape questions, and offering advice on access, Archaeology from Historical Aerial and Satellite Archives demonstrates its huge potential and encourages its further use, stimulating a new approach to archaeological survey and the study of landscape evolution among archaeologists, historians, social scientists, preservationists, and cultural heritage specialists.

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Please visit the site: <http://tinyurl.com/aurso24>

MORE INSIGHT FROM PHYSICS INTO THE CONSTRUCTION OF THE EGYPTIAN PYRAMIDS, H. J. DE HAAN

<http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4754.2012.00726.x/abstract> the article below is for purchase: Archaeometry © University of Oxford

More Insight from Physics into the Construction of the Egyptian Pyramids H. J. de Haan
Article first published online: 30 NOV 2012 | DOI:
10.1111/j.1475-4754.2012.00726.x

Archaeological aspects of the various building methods are reviewed, paying special attention to the construction method described by Müller-Römer (2011) and the reason behind the stepped shape of Menkaure's pyramid. The main purpose is to present an alternative description of the building process according to this method, based on the physical principles of force and power. It is shown that this approach leads to results that are generally applicable and permits adjustment of the transportation capacity of the proposed system by adjusting the slope of the ramps.

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Please visit the site: <http://onlinelibrary.wiley.com/doi/10.1111/j.1475-4754.2012.00726.x/abstract> the article below is for purchase: Archaeometry © University of Oxford

EΙΔΗΣΕΙΣ - NEWS RELEASE

DIGGING INTO 2012'S ARCHAEOLOGY, BY LOUISE ILES UNIVERSITY OF CAMBRIDGE

As much as science looked to the future this year in fields ranging from particle physics to planetary exploration, 2012 also gave us a rich view into the past. Here's a month-by-month view of what excited archaeologists through the year.

Please visit the site: <http://www.bbc.co.uk/news/science-environment-20795347> [Go there for a month to month account]

ARCHAEOLOGISTS FINISH EXCAVATION OF ROMAN ARTS CENTRE

Archaeologists who have completed the excavation of a 900-seat arts centre under one of Rome's busiest roundabouts are calling it the most important Roman discovery in 80 years.

The centre, built by the emperor Hadrian in AD123, offered three massive halls where Roman nobles flocked to hear poetry, speeches and philosophy tracts while reclining on terraced marble seating.

With the dig now completed, the terracing and the hulking brick walls of the complex, as well as stretches of the elegant grey and yellow marble flooring, are newly visible at bottom of a 5.5 metre (18ft) hole in Piazza Venezia, where police officers wearing white gloves direct chaotic traffic like orchestra conductors and where Mussolini harangued thousands of followers from his balcony.

“Hadrian's auditorium is the biggest find in Rome since the Forum was uncovered in the 1920s,” said Rossella Rea, the archaeologist running the dig.

The excavations, which are now due to open to the public, are next to a taxi rank and squeezed between a baroque church and the Vittoriano, an imposing monument to Italy's defunct monarchy, which is nicknamed the Typewriter by locals.

The complex was only unearthed thanks to excavations to build a new underground railway line which will cross the heart of Rome. “We don't have funds for these kind of digs so this has come to light thanks to the new line,” said Rea.

Archaeologists keeping a careful eye on what gets dug up have proved to be a mixed blessing for railway engineers, who have had to scrap plans for two stations in the heart of the centre of Rome when it was discovered their exits to the surface cut straight through Roman remains.

With the discovery of Hadrian's complex at Piazza Venezia, the line risked losing its last stop in the centre and being forced to run into the heart of Rome from the suburbs and straight out the other side without stopping. But Rea said the station and the ruins could coexist.

“I believe we can run one of the exits from the station along the original corridor of the complex where Romans entered the halls,” she said.

The site sheds new light on Hadrian's love of poetry – he wrote his own verse in Latin and Greek – and his taste for bold architecture – an 11-metre-high (36ft) arched ceiling once towered over the poets in the central hall.

Today the performing space is riddled with pits dug for fires, revealing how after three centuries of celebrating the arts, the halls fell into disrepair with the collapse of the Roman empire and were used for smelting ingots.

At the centre of the main hall, like a prop from a disaster movie, is a massive, nine-by-five-metre chunk of the monumental roof which came crashing down during an earthquake in 848 after standing for seven centuries.

Please visit the site: <http://tinyurl.com/afv8ocv>

FORTRESS IN THE SKY BURIED CHRISTIAN EMPIRE CASTS NEW LIGHT ON EARLY ISLAM, BY MATTHIAS SCHULZ

Archeologists are studying the ruins of a buried Christian empire in the highlands of Yemen. The sites have sparked a number of questions about the early history of Islam. Was there once a church in Mecca?

The commandment "Make yourself no graven image" has long been strictly followed in the Arab world. There are very few statues of the caliphs and ancient kings of the region. The pagan gods in the desert were usually worshipped in an "aniconic" way, that is, as beings without form.

Muhammad had a beard, but there are no portraits of him.

But now a narcissistic work of human self-portrayal has turned up in Yemen. It is a figure, chiseled in stone, which apparently stems from the era of the Prophet.

Paul Yule, an archeologist from the southwestern German city of Heidelberg, has studied the relief, which is 1.70 meters (5'7") tall, in Zafar, some 930 kilometers (581 miles) south of Mecca. It depicts a man with chains of jewelry, curls and spherical eyes. Yule dates the image to the time around 530 AD.

The German archeologist excavated sites in the rocky highlands of Yemen, an occupation that turned quite dangerous recently because of political circumstances in the country. On his last mission, Yule lost 8 kilograms (18 lbs.) and his equipment was confiscated.

Nevertheless, he is pleased, because he was able to bring notes, bits of debris and bones back to Heidelberg. Yule has concluded that Zafar was the center of an Arab tribal confederation, a realm that was two million square kilometers (about 772,000 square miles) large and exerted its influence all the way to Mecca.

Even more astonishing is his conclusion that kings who invoked the Bible lived in the highland settlement. The "crowned man" depicted on the relief was also a Christian.

Conquerers from Ancient Ethiopia

Yule has analyzed the mysterious, robed figure in a report for the academic journal *Antiquity*. He is barefoot, which is typical of Coptic saints. He is holding a bundle of twigs, a symbol of peace, in his left hand. There is a crossbar on his staff, giving it the appearance of a cross. In addition, he is wearing a crown on his head like the ones worn by the Christian rulers of ancient Ethiopia.

All of this suggests that the man with a strange, round face is a descendant of the conquerors from Africa who succeeded in making one of the boldest landing operations in ancient times.

In 525 AD, the Negus, or king, of Aksum dispatched a fleet across the Red Sea. Soldiers and fighting elephants were ferried across the water to the East on un-tarred, raft-like ships to spread the gospel. In the ensuing decades, his army captured large parts of Arabia.

The first spearhead was targeted at the capital Zafar. Like a fortress in the sky, the town was perched on an extinct volcano, at an altitude of 2,800 meters (9,184 feet) above sea level. Its walls, riddled with towers and alarm bells, were four-and-a-half kilometers long. About 25,000 people lived in Zafar.

According to Yule, between the 3rd and the 5th century the confederation managed to complete a "meteoric rise" and become a superpower. Its merchants traded in sandalwood from Ceylon and valerian from Persia. The state controlled the port of Aden, where the ships of spice traders from India docked. Frankincense, which was made in Arabia, was also traded. It was a place of luxury. Yule found wine amphorae, the remains of precious fish condiments and palaces decorated with sphinxes and lions.

A Peaceful Multi-Cultural Community

The social structure in Zafar also appeared to be unique. The city had a large Jewish community, as evidenced by a seal with a Torah niche.

Hebrew inscriptions were discovered. Zafar's residents also included Christians, who built a church there in 354 AD. Arabs who worshipped old idols lived in the alleys.

But this peaceful, multicultural community soon came to an end, as tensions began to mount in the 5th century, and Arabia was transformed into a front.

The Byzantine Empire, bristling with weapons, operated in the west, and its vassals kept making inroads toward the desert. They were accompanied by Christian missionaries, who brought the doctrine of the Holy Trinity to the shepherds on the edge of the Rub' al Khali, the sand desert that makes up much of the southern third of the Arabian Peninsula.

These Sacred Heart imperialists confronted the Persian realm of the Sassanids, with its archers and armies of bearded soldiers clad in heavy metal armor. The Jews, who lived by the tens of thousands in the oases, were to some extent aligned with this power.

It was a confrontation between east and west, and everyone was forced to choose a side.

This also applied to Zafar. To stop the advance of Christianity, individual Arab kings initially converted to Judaism. The entire ruling class of the realm eventually followed suit. From then on, people were given names like Yehuda and Yussuf.

Then they took up arms. In approximately 520 AD, they attacked the Christian colony of Najran, where there were churches and monasteries.

Countless Christians were slaughtered. The shocking news traveled all the way to Europe.

A 'Puppet King'

Now the spiral of violence began turning more rapidly. The furious Byzantines and their allies from Africa were out for revenge. Kaleb, the Aksumite king of Ethiopia (who wore gold jewelry in his hair and had himself driven around in an elephant carriage) went on the counter-offensive.

If the sources are correct, his first naval maneuver was a miserable failure. In 525 AD, with the help of additional warships provided by the Byzantines, he successfully completed the crossing to the other side of the Red Sea.

The relief of the "crowned man" from Zafar was apparently created during this period of invasion. Yule interprets it as a representation of the Christian "puppet king" of the Ethiopians.

The invaders continued their attacks. Southern Arabia's holy warrior, Abraha, had taken control of large areas before long. He even attempted to free bishops being held prisoner by the Persian enemy in Nisibis (in modern-day Turkey), some 2,500 kilometers away.

The man embarked on a religious crusade at the same time. He rebuilt the churches that had been destroyed in Najran, and he had new ones built in Marib and Aden.

His most beautiful church was in Sanaa. It had gilded doors and a throne made of ebony and ivory. In the morning, the rays of the sun shone through an alabaster panel in the dome. The Byzantines supported the project, sending craftsmen, marble and mosaics.

The result was an architectural miracle, the likes of which all of Arabia had never seen before.

Year of the Elephant

After the triumph of Islam in the 7th century, the church was torn down and stripped of its treasures, and a mosque was built on the site. As Barbara Finster, an archeologist from the Bavarian city of Bamberg, discovered, some of the columns in the mosque came from the wrecked church, while some of the church's magnificent mosaics were sent to Mecca, essentially as booty.

The enmity between Sanaa and Mecca apparently smoldered from the start. Medieval Koran scholars report that Abraha built his magnificent church to lure the pilgrims away from the Kaaba, Islam's most sacred site.

Another Islamic source describes how the dispute eventually escalated:

An angry native of Mecca relieved himself in the Sanaa church, prompting the furious Abraha to dispatch his warriors, mounted on elephants, to destroy the Kaaba. In the interpretation of Sura 105 of the Koran, the only reason he was unsuccessful was that Allah had armed a flock of birds with clay balls that rained down on the Christian army like bullets.

Are these nothing but religious myths? There is historical evidence, in the form of a rock inscription, that Abraha conducted large-scale raids against defiant Arab tribes near Mecca in 552 AD. A few Western historians consider this to be the true year of

Muhammad's birth. The scholar Ibn Ishak, who wrote the first biography of the Prophet, states that the proclaimer of the Koran was born "in the year of the elephant."

Oddly enough, the scrawled rock inscription could be interpreted to mean that the tribe of the Kuraish, to which the Prophet belonged, sometimes fought for the Christians. Were they allies? Was Muhammad born in a city that stood under the banner of the cross?

Hard Times

There are indications that this could be true. For instance, a Christian cemetery is mentioned in the oldest history of Mecca, written by the Arab historian Asraki.

What a mess. In ancient Arabia, the three Abrahamic world religions intersected in confusing ways. But the Koran prevailed in the end.

But many things are still unclear. Our perspective is complicated by the fact that the birth of Islam occurred at a time of severe hardship. Climate data obtained from limestone caves in Oman prove that there was a terrible drought in the southern part of the Arabian Peninsula in the middle of the 6th century. There was also a plague epidemic that began in 541 and afflicted the entire Orient. Other, smaller epidemics followed, causing thousands upon thousands of deaths.

It was these horrors that probably triggered the demise of Zafar. Yule suspects that the drought devastated the "fragile ecology of the highlands." Cattle died of thirst and barns remained empty.

Are the archeologist's suspicions correct? Even Muhammad, as a young child, was threatened by disease and hunger. According to Ibn Ishak, his wet nurse was deeply concerned when she was told to bring the little boy back to his native city.

The reason, he writes, was the "plague in Mecca."

Translated from the German by Christopher Sultan

Please visit the site: <http://www.spiegel.de/international/world/buried-christian-empire-in-yemen-casts-new-light-on-early-islam-a-874048.html#ref=rss>

2000 BC CEMETERY DISCOVERED IN OMAN, BY SUNIL K. VAIDYA

The site that spans over three kilometers dates back to the Wadi Souq period, experts say.

Muscat: A discovery of graves by Royal Oman Police (ROP) while digging for the new border check post in the Aswad area of the province of Shinas in northern Oman has led archaeologists to the discovery of a settlement dating back to 2000 BC, according to a senior archaeologist at the Ministry of Heritage and Culture.

“The check post will be built at the spot but the archaeology site will be protected,” Sultan Al Bakri, Director of Antiquity Department at the Ministry, told Gulf News.

He said that after the ROP informed the department about the discovery of some graves at the site, Omani archaeologists, some of them Sultan Qaboos University (SQU) graduates and some trained by the ministry, began working on the site.

“The team has unearthed a settlement and an archaeological cemetery that dates back to 2000 BC, which is also called the Wadi Souq period,” the ministry official said referring to a period between 1900 BC and 1100 BC.

He added that the team had completed the work on a site that spans over three kilometres and next season further surveys will be carried out to see if there are similar sites around the area.

The settlement, of which only round stone foundations remain, was discovered in the course of digging to build a border check post at the site.

The subsequent excavation works by archaeologists included a number of tombs of the Wadi Souq period. “The oval, rectangular tombs look like the letter ‘U’,” he added.

The tombs include body remains, arrow heads, daggers, knives, needles, brass necklaces, local and imported beads from neighbouring cultures, clay utensils and soapstone.

Al Bakri said that this was the second such discovery of a 2000 BC site in northern Oman after similar finds in the coastal city of Sohar about 231kms north of Muscat.

“These discoveries further establishes proof of northern Oman being a vital copper trade link during the bronze age between the Harappa civilisation, Bahrain’s Delmon civilisation and Iran’s civilisation in Mesopotamia,” the senior archaeologist said.

Please visit the site: <http://gulfnews.com/news/gulf/oman/2000-bc-cemetery-discovered-in-oman-1.1125531>

ANCIENT CITY OF TROY REBRANDED ITSELF AFTER WAR

EVEN ancient cities knew about rebranding. Troy was destroyed by war about 3200 years ago - an event that may have inspired Homer to write the Iliad, 400 years later. But the famous city rose again, reinventing itself to fit a new political landscape.

Troy lies in north-west Turkey and has been studied for decades. Pottery made before the war has a distinct Trojan style but after the war its style is typical of the Balkans. This led archaeologists to believe that the locals had been forced out and replaced by populations from overseas.

But when Peter Grave at the University of New England in Armidale, Australia, and his colleagues examined the chemical make-up of the pottery, they realised that both pre and post-war objects contained clay from exactly the same local sources, suggesting the same people were making the pots.

"There is substantial evidence for cultural continuity," says Grave. So if the Trojans never left the city, why did their pottery style change?

Journal of Archaeological Science
Available online 12 November 2012
<http://www.sciencedirect.com/science/article/pii/S0305440312004785> [Go there for purchase]

Cultural dynamics and ceramic resource use at Late Bronze Age/Early Iron Age Troy, northwestern Turkey

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Before the sack of Troy, the city looked east towards the powerful Hittite Empire. But this political powerhouse collapsed around the time that Troy was destroyed. Grave says the post-war pottery is Balkan in style because the Trojans were keen to align themselves

with the people there, who had become the new political elite in the region (Journal of Archaeological Sciences, doi.org/js8).

Please visit the site: <http://www.newscientist.com/article/mg21628964.200-ancient-city-of-troy-rebranded-itself-after-war.html>

THE REAL DEAL: HOW THE MAYAN CALENDAR WORKS, BY STEPHANIE PAPPAS

With chatter about the Mayan apocalypse intensifying as Dec. 21 approaches, you may have seen that while the ancient Mayan calendar "ends" on that day, the Maya themselves would not have seen that as the end of the world. But how does the Mayan calendar work, anyway?

It's not as confusing as it might seem. The ancient Maya kept time in a very different way than we do today, and their hieroglyph-heavy calendar can seem daunting at first glance. But the basic principle is simply that the Maya were counting the days.

"That's somewhat different from our own calendar, which is really tied to the length of the solar year," said Walter Witschey, an archaeologist and Maya expert at Longwood University in Virginia.

Three calendars

The first thing to understand is that the Maya used three different calendars. The first was the sacred calendar, or Tzolk'in, which lasted 260 days and then started over again, just as our 365-day calendar refreshes once it hits Dec. 31. This calendar was important for scheduling religious ceremonies.

The second calendar was the Haab', or secular calendar, which lasted 365 days but did not account for the extra quarter-day it takes the Earth to revolve around the sun. (The modern calendar accounts for this fraction by adding a day to February every four years, the reason we have leap years.) That means the calendar wandered a bit in relation to the seasons.

The final calendar was the Long Count Calendar — the recording method that has caused all of the doomsday brouhaha of 2012. On Dec. 21 (approximately), the calendar completes a major cycle, which has triggered doomsday fears and mystical rumors about the end of an age.

The Maya shared our culture's fascination with calendar mile-markers and would have likely considered the date important, Witschey told LiveScience. But they did not make any doomsday predictions about the date. The only two carvings ever found referring to the date depict contemporary kings and their predicted long-lasting legacies, Witschey said.

"Suppose I said to you that George Washington is so important that we will still consider him a revered national leader in the year 3000," Witschey said. "So now you've got the rollover of the zeros, you've got an important contemporaneous figure, and you're looking forward to the future." That's what the Mayan carvings are trying to accomplish, he said.

How the Long Count Calendar works

The Long Count Calendar may not predict doomsday, but it is good at covering long periods of time. Here's how it works: Dates are written out as five numbers separated by four periods, such as 13.0.0.0.0.

(The ancient Maya represented these not with numerals, of course, but with their own hieroglyphs.)

The right-most position is called the k'in, which counts single days:

13.0.0.0.1, for example. The k'in counts up to 19 and then flips back to zero, with counting picked back up by the next position, the uinal.

So 13.0.0.0.19 would become 13.0.0.1.0, much like a car odometer.

Each uinal is thus a block of 20 days. The k'in position then picks back up, counting up to that 20, which then gets added to the uinal.

So the day after 13.0.0.1.0 would be 13.0.0.1.1 and then 13.0.0.1.2, all the way up to 13.0.0.1.19 and finally 13.0.0.2.0.

The uinals count upward as well. While the Maya generally use a base-20 counting system, Witschey said, they modify this slightly for the uinal, which only counts up to 17 before rolling over to the third position, the tun. Each tun is thus 18 blocks of 20 days, or 360 days — approximately a year by the solar calendar.

Tuns, in turn, count up to 20 before rolling over into k'atuns. As 20 blocks of 360 days, each k'atun translates into 7,200 days, or just less than 20 years. The k'atun place then counts up before rolling over into the final digit, the b'ak'tun.

If that word sounds familiar, it's because Dec. 21, 2012, on our calendar marks the end of the 13th b'ak'tun of the Mayan Long Count Calendar. In other words, it's the day the count will read 13.0.0.0.0.

On Dec. 22, it will read 13.0.0.0.1.

Each b'ak'tun is 144,000 days long, or a little less than 400 years.

To the ancient Maya, 13 b'ak'tuns represented a full cycle of creation; one carving refers to a god associated with calendar changes returning that day. There are no apocalyptic prophecies, however. In fact, the Maya had several rarely used units that were even larger than b'ak'tuns, giving them the capacity to count millions of years into the future, Witschey said.

"That, actually, is one of the lines of evidence that they didn't think their world was ending at 13.0.0.0.0," Witschey said.

Another hiccup for Mayan doomsday believers: Although many scholars agree that Dec. 21 is the proper date on our calendar matching the end of the 13th b'ak'tun, there is some uncertainty over this, because some Mayan calendar units may have clicked over at sunset and others at sunrise. Some researchers have suggested that Dec. 23 or 24 may be a more accurate fit, Witschey said. Either way, however, the Maya would not have been running for their doomsday bunkers.

"You'll get up in the morning and go forward, and the Maya cycles will have clicked over another day," Witschey said.

Please visit the site: <http://www.livescience.com/25662-how-mayan-calendar-works.html> [Go there for pix]

KING RAMESSES III'S THROAT WAS SLIT, ANALYSIS REVEALS, BY MICHELLE ROBERTS

Conspirators murdered Egyptian King Ramesses III by slitting his throat, experts now believe, based on a new forensic analysis.

The first CT scans to examine the king's mummy reveal a cut to the neck deep enough to be fatal.

The secret has been hidden for centuries by the bandages covering the mummy's throat that could not be removed for preservation's sake.

The work may end at least one of the controversies surrounding his death.

Precisely how he died has been hotly debated by historians.

Ancient documents including the Judicial Papyrus of Turin say that in 1155BC members of his harem attempted to kill him as part of a palace coup.

But it is less clear whether the assassination was successful. Some say it was, while other accounts at the time imply the second Pharaoh of the 20th dynasty survived the attack, at least for a short while.

Shrouded in mystery

The Judicial Papyrus tells of four separate trials and lists the punishments dished out to those involved in the plot, which included one of the king's two known wives, called Tiye, and her son Prince Pentawere - potential heir to the throne.

We were very surprised by what we found. We still cannot be sure that the cut killed him, but we think it did”

Dr Albert Zink Lead researcher

It says Pentawere, the only one of Ramesses III many sons to revolt against him, was involved in the conspiracy, found guilty at trial and then took his own life.

To find out more, Dr Albert Zink, a paleopathologist at the Institute for Mummies and the Iceman in Italy, and colleagues set out to examine the mummy of Ramesses III and the unidentified remains of another body found in a royal tomb near the Valley of the Kings in Egypt that was believed to be the king's son Pentawere.

Working out of the Egyptian Museum in Cairo where the bodies are now housed, the team ran some CT scans and DNA tests on the mummies.

Scans of Ramesses III revealed a deep, 2.7in (7cm) wide wound to the throat just under the larynx, which the medical scientists say was probably caused by a sharp blade and could have caused immediate death.

Amulet discovery

Dr Zink said: "Before now we knew more or less nothing about the destiny of Ramesses III. People had examined his body before and had done radiographs but they didn't notice any trauma. They did not have access to the CT scans that we do.

The mummy believed to be Prince Pentawere has unusual marks around the neck

"We were very surprised by what we found. We still cannot be sure that the cut killed him, but we think it did.

"It might have been made by the embalmers but this is very unlikely. I'm not aware of any other examples of this."

They could see a Horus eye amulet embedded in the wound - a charm most probably inserted by the ancient Egyptian embalmers during the mummification process to promote healing.

The DNA tests showed that the unidentified body of the young man, who was aged about 18 when he died, was a blood relative of Ramesses III, and in all probability the king's son Pentawere.

Dr Zink said: "From our genetic analysis we could really prove the two were closely related. They share the same Y chromosome and 50% of their genetic material, which is typical of a father-son relationship."

When they examined the body of the young man, they found he had unusual compressed skin folds and wrinkles around his neck as well as an inflated chest.

Although these changes might have occurred post-mortem in the mummy, it could indicate that the man was strangled to death, says Dr Zink.

The body was not mummified in the usual way - and was covered with a "ritually impure" goatskin - which might have been an ancient punishment in the form of a non-royal burial procedure.

"He was badly treated for a mummy," said Dr Zink.

Please visit the site: <http://www.bbc.co.uk/news/health-20755264>

NASH PAPYRUS - PART OF THE HEBREW MANUSCRIPTS COLLECTION

The Nash Papyrus is a second-century BCE fragment containing the text of the Ten Commandments followed by the Šema'. Prior to the discovery of the Dead Sea Scrolls it was the oldest known manuscript containing a text from the Hebrew Bible. The manuscript was originally identified as a lectionary used in liturgical contexts, due to the juxtaposition of the Decalogue (probably reflecting a mixed tradition, a composite of Exodus 20 and Deuteronomy 5) with the Šema' prayer (Deuteronomy 6:4-5), and it has been suggested that it is, in fact, from a phylactery (tefillin, used in daily prayer). Purchased from an Egyptian dealer in antiquities in 1902 by Dr Walter Llewellyn Nash and presented to the Library in 1903, the fragment was said to have come from the Fayyum.

Please visit the site: <http://cudl.lib.cam.ac.uk/view/MS-OR-00233/1> is a digital display of the Nash papyrus. Go there for instruction on download and manipulation.

MOSAIC FLOOR UNEARTHED IN DIDYMOTEICHO, BY NICKY MARIAM ONTI

A series of well-preserved archaeological finds have been discovered during this year's excavations at what has been identified as the ancient Plotinopolis, situated in the outskirts of modern-day Didymoteicho, northeastern Greece. Plotinopolis was a Roman city founded by the Roman Emperor Traianus, who named it after his wife Plotini.

The hill of Aghia Petra, just outside Didymoteicho, has been the focus of archaeological interest since before World War II, while in 1965 a golden forged bust of Roman Emperor Septimius Severus was found there.

From 1965 onward, the 19th Ephorate of Prehistoric and Classical Antiquities has been conducting systematic excavations in the area.

The mosaics unearthed, form part of the floor of a typical Roman triclinium, the formal dining room in Roman houses. Monstrous ichtyocentaurs and Nereids are depicted in the mosaic unearthed, along with portrayals of the God of Eurus River and Plotini.

The leader of the excavations, archaeologist Matthaios Koutsoumanis, describes the findings as: "both (creatures) are seated on a dolphin, and one of them is holding a scarf over the head like a 'peplos'. It is certain by now that the scene with the Eurus River and Plotini is not the only one, as a second panel is coming to light. (...) Next year's excavation has a lot of surprises in store for us." That could make Plotinopolis one of the biggest excavations in the region of Thrace. (source:Greek News Agenda)

Please visit the site: <http://greece.greekreporter.com/2012/12/14/mosaic-floor-unearthed-in-didymoteicho/> [Go there for pix]

RESTORATION OF ROMAN TUNNELS GIVES **A SLAVE’S EYE VIEW OF CARACALLA** **BATHS**

In the middle of a patch of grass amid the ruins of the Caracalla baths in Rome, there is a staircase that takes visitors deep into the ground to a world resembling the lair of a James Bond villain.

This article titled “Restoration of Roman tunnels gives a slave’s eye view of Caracalla baths” was written by Tom Kington in Rome, for guardian.co.uk on Tuesday 11th December 2012 18.55 UTC

“This is our glimpse at maniacal Roman perfection, at incredible hydraulic technology,” said archaeologist Marina Piranomonte, as she descended and waved at a network of high and wide tunnels, each measuring six metres (20ft) high and wide, snaking off into the darkness.

The baths, on a sprawling site slightly off the beaten track in a city crowded by monumental attractions, hold their own against the nearby Circus Maximus, its shattered walls standing 37 metres high, recalling its second century heyday when it pulled in 5,000 bathers a day.

But for Piranomonte, it is the three kilometre, triple-tiered grid of tunnels that lies under the site – the first tract of which will open for visits this month – which really shows off how seriously the Romans took their sauna time.

An army of hundreds of slaves kept firmly out of sight of bathers scurried along the tunnels feeding 50 ovens with tonnes of wood a day to heat water surging through a network of underground channels that arrived via aqueduct from a source 100km away. Below that, massive sewers, which are now being explored by speleologists, flowed towards the Tiber.

“It’s the dimension and the organisation that amazes – there is no spa as big as this anywhere in the world today,” said Piranomonte.

Upstairs, Romans would kick off a visit with a session in one of two gyms, then enjoy a sauna and a spell in a hot tub in the 36 metre (120ft) wide, domed caldarium – slightly smaller than Rome’s Pantheon.

The tepidarium then beckoned, before a cool down in the frigidarium, a space so elegant its design and dimensions were copied at Union station in Chicago.

“The side room at the station where the shoot-out on the stairs is set in The Untouchables actually contained a large cold bath here,” said Piranomonte.

To complete the experience, a pool 50 metres long and a garden complete with lending library flanked the baths. “The emperor Caracalla was cruel, but he built beautiful things,” said Piranomonte, who is charged with the site’s upkeep.

A thousand years after it was built, the ghostly ruins of the massive buildings were overgrown and abandoned. “Because it was on the outskirts of Rome, no one built on top of it and the tunnels were simply forgotten, probably sealed by undergrowth,” she added.

Following their rediscovery at the end of the 19th century, Mussolini strengthened the tunnels when he decided to stage operas amid the ruins overhead, but Piranomonte was less than impressed with his handiwork.

“Look at the rain water trickling through; that’s Mussolini’s bricks leaking while ours are fine,” she said, pointing to the perfect Roman brick arches disappearing into the gloom.

The reopening of a short stretch of the tunnels on 21 December caps a clean-up of the baths. The opera, which used the remains of the caldarium for a stage and kept a stage-set workshop in one of the saunas, has been shunted back into the gardens.

A €450,000 (£360,000) restoration programme also resulted in the reopening this month of an underground temple at the baths, linked to the tunnel network and dedicated to Mithras, the deity whose popularity soared just before Christianity took hold in the Roman empire. Entering the temple, which boasts black-and-white floor mosaic and is the biggest of its kind in the Roman empire, Piranomonte points to a frieze of Mithras holding a globe but missing his head. “Probably taken off by the Christians,” she said.

A chamber flanked by space for spreading out on during banquets centres on a large pit where a drugged bull was placed on a metal grill and butchered. Below the grill is a small niche where an initiate to the cult would crawl to be drenched with litres of bull’s blood. “It was a cruel cult, for men only, so you understand why Christianity got the upper hand,” said Piranomonte.

Emerging from the temple, the archaeologist turns left and pauses before what she describes as her favourite part of the baths – an authentic Roman roundabout. A large arch leads to the entrance of the tunnel network, where carts carrying tonnes of logs would queue to enter to feed the ovens. Now fully excavated and restored, the tunnel starts with a roundabout that circles a guard’s kiosk to stop traffic jam.

“A Roman spa with a roundabout,” said Piranomonte, “That I find really fascinating.”

Please visit the site: <http://www.rawstory.com/rs/2012/12/11/restoration-of-roman-tunnels-gives-a-slaves-eye-view-of-caracalla-baths/>

EVIDENCE NOAH'S BIBLICAL FLOOD HAPPENED, SAYS ROBERT BALLARD, BY JENNA MILLMAN, BRYAN TAYLOR AND LAUREN EFFRON

This ark, located an hour south of Amsterdam, is a replica of Noah's Biblical boat. Underwater archaeologist Robert Ballard is in Turkey, looking for evidence that the Great Flood happened. (ABC News)

The story of Noah's Ark and the Great Flood is one of the most famous from the Bible, and now an acclaimed underwater archaeologist thinks he has found proof that the biblical flood was actually based on real events.

In an interview with Christiane Amanpour for ABC News, Robert Ballard, one of the world's best-known underwater archaeologists, talked about his findings. His team is probing the depths of the Black Sea off the coast of Turkey in search of traces of an ancient civilization hidden underwater since the time of Noah.

Tune in to Christiane Amanpour's two-part ABC News special, "Back to the Beginning," which explores the history of the Bible from Genesis to Jesus. Ballard's track record for finding the impossible is well known. In 1985, using a robotic submersible equipped with remote-controlled cameras, Ballard and his crew hunted down the world's most famous shipwreck, the Titanic.

Now Ballard is using even more advanced robotic technology to travel farther back in time. He is on a marine archeological mission that might support the story of Noah. He said some 12,000 years ago, much of the world was covered in ice.

"Where I live in Connecticut was ice a mile above my house, all the way back to the North Pole, about 15 million kilometers, that's a big ice cube," he said. "But then it started to melt. We're talking about the floods of our living history."

The water from the melting glaciers began to rush toward the world's oceans, Ballard said, causing floods all around the world.

"The questions is, was there a mother of all floods," Ballard said.

According to a controversial theory proposed by two Columbia University scientists, there really was one in the Black Sea region.

They believe that the now-salty Black Sea was once an isolated freshwater lake surrounded by farmland, until it was flooded by an enormous wall of water from the rising Mediterranean Sea. The force of the water was two hundred times that of Niagara Falls, sweeping away everything in its path.

Fascinated by the idea, Ballard and his team decided to investigate.

"We went in there to look for the flood," he said. "Not just a slow moving, advancing rise of sea level, but a really big flood that then stayed... The land that went under stayed under."

Four hundred feet below the surface, they unearthed an ancient shoreline, proof to Ballard that a catastrophic event did happen in the Black Sea. By carbon dating shells found along the shoreline, Ballard said he believes they have established a timeline for that catastrophic event, which he estimates happened around 5,000 BC. Some experts believe this was around the time when Noah's flood could have occurred.

"It probably was a bad day," Ballard said. "At some magic moment, it broke through and flooded this place violently, and a lot of real estate, 150,000 square kilometers of land, went under."

The theory goes on to suggest that the story of this traumatic event, seared into the collective memory of the survivors, was passed down from generation to generation and eventually inspired the biblical account of Noah.

Noah is described in the Bible as a family man, a father of three, who is about to celebrate his 600th birthday.

"In the early chapters of Genesis, people live 800 years, 700 years, 900 years," said Rabbi Burt Visotzky, a professor of Talmud and Rabbinics at the Jewish Theological Seminary in New York. "Those are mythic numbers, those are way too big. We don't quite know what to do with that. So sometimes those large numbers, I think, also serve to reinforce the mystery of the text."

Some of the details of the Noah story seem mythical, so many biblical scholars believe the story of Noah and the Ark was inspired by the legendary flood stories of nearby Mesopotamia, in particular "The Epic of Gilgamesh." These ancient narratives were already being passed down from one generation to the next, centuries before Noah appeared in the Bible.

"The earlier Mesopotamian stories are very similar where the gods are sending a flood to wipe out humans," said biblical archaeologist Eric Cline. "There's one man they choose to survive. He builds a boat and brings on animals and lands on a mountain and lives happily ever after? I would argue that it's the same story."

Catastrophic events of this kind are not unique to the Bible. Some contemporary examples include the 2004 tsunami that wiped out villages on the coasts of 11 countries surrounding the Indian Ocean. There was also Hurricane Katrina, described as the worst hurricane in United States history.

Scholars aren't sure if the biblical flood was larger or smaller than these modern day disasters, but they do think the experiences of people in ancient times were similar to our own.

"If you witness a terrible natural disaster, yes, you want a scientific explanation why this has happened," said Karen Armstrong, author of "A History of God." "But you also need

to something that will help you to assuage your grief and anguish and rage. And it is here that myth helps us through that."

Regardless of whether the details of the Noah story are historically accurate, Armstrong believes this story and all the Biblical stories are telling us "about our predicament in the world now."

Back in the Black Sea, Ballard said he is aware that not everyone agrees with his conclusions about the time and size of the flood, but he's confident he's on the path to finding something from the biblical period.

"We started finding structures that looked like they were man-made structures," Ballard said. "That's where we are focusing our attention right now."

At first Ballard's team found piles of ancient pottery, but then they made an even more important discovery. Last year, Ballard discovered a vessel and one of its crew members in the Black Sea.

"That is a perfectly preserved ancient shipwreck in all its wood, looks like a lumber yard," he said. "But if you look closely, you will see the femur bone and actually a molar."

The shipwreck was in surprisingly good condition, preserved because the Black Sea has almost no oxygen in it, which slows down the process of decay, but it does not date back as far as the story of Noah.

"The oldest shipwreck that we have discovered so far of that area is around 500 BC, classical period," Ballard said. "But the question is you just keep searching. It's a matter of statistics."

Still, Ballard said the find gives him hope that he will discover something older "because there, in fact, the deep sea is the largest museum on Earth," he said.

Ballard does not think he will ever find Noah's Ark, but he does think he may find evidence of a people whose entire world was washed away about 7,000 years ago. He and his team said they plan to return to Turkey next summer.

"It's foolish to think you will ever find a ship," Ballard said, referring to the Ark. "But can you find people who were living? Can you find their villages that are underwater now? And the answer is yes."

Tune in to Christiane Amanpour's two-part ABC News special, "Back to the Beginning," which explores the history of the Bible from Genesis to Jesus. Part one airs on Friday, Dec. 21 and part two on Friday, Dec. 28, both starting at 9 p.m. ET on ABC.

Please visit the site: <http://abcnews.go.com/Technology/evidence-suggests-biblical-great-flood-noahs-time-happened/story?id=17884533&singlePage=true#.UMZiq4PNbG4>

OLDEST PHARAOH CARVINGS, **REDISCOVERED IN EGYPT, MAY BE FROM** **REIGN OF NARMER, BY STEPHANIE** **PAPPAS**

The oldest-known representations of a pharaoh are carved on rocks near the Nile River in southern Egypt, researchers report.

The carvings were first observed and recorded in the 1890s, but only rediscovered in 2008. In them, a white-crowned figure travels in ceremonial processions and on sickle-shaped boats, perhaps representing an early tax-collecting tour of Egypt.

The scenes place the age of the carvings between 3200 B.C. and 3100 B.C., researchers report in the December issue of the journal *Antiquity*. During that time, Egypt was transitioning into the dynastic rule of the pharaohs.

"It's really the end of prehistory and the beginning of history," in Egypt, study researcher Maria Gatto told LiveScience.

Look closely -- standing on the top of this boat is a crowned figure who may represent Narmer, the first pharaoh to rule unified Egypt. Oarsmen propel the boat along.

Scenes of a ruler

Gatto, a Yale University researcher, led the archaeologists who rediscovered the site in 2008. Archaeologist Archibald Sayce first sketched the carvings, found at the village Nag el-Hamdulab, in the 1890s, but the only record of Sayce's discovery was a partial illustration published in a book. [See Images of the Egypt Carvings]

The site was then forgotten until the 1960s, when Egyptian archaeologist Labib Habachi took photographs of the carvings, which he never published. It wasn't until one of these photos resurfaced in 2008 that Gatto and her team started searching for the site, which many people assumed had been destroyed in the interim.

Some of the carvings have indeed been vandalized since the 1960s, but Gatto and her team found the etched rocks in a natural amphitheater west of Nag el-Hamdulab. They then compared the carvings to Habachi's 1960s photographs.

There are seven carvings scattered throughout the area, and many are tableaux of boats flanked by prisoners. One of the most extensive carvings shows five boats, one of which houses the white-crowned pharaoh, his fan-bearer and two standard-bearers. Falcon and bull insignia on the pharaoh's boat symbolize royalty, further emphasized by the four men with ropes standing alongside that boat, likely towing it along the Nile.

A hieroglyph labels this scene a "nautical following," a likely reference to the following of Horus, Gatto said. In this periodic royal jaunt across Egypt, the pharaoh cemented power and collected taxes. Thus, not only do the carvings represent the oldest known vision of a pharaoh, they may also show the oldest Egyptian tax campaign.

Other carvings include a scene of people and dogs herding cattle and a cluster of animals, two of them apparently some mythical part-lion beasts. The other animals are familiar native African species, including two ostriches, an ibex and a bull. Another scene shows the brewing and drinking of beer, perhaps a reference to a festival.

First king?

The style of the carvings and hieroglyphics place the creation of the images around 3200 B.C. to 3100 B.C., Gatto said. This would have been the reign of Narmer, the first pharaoh to unify Upper and Lower Egypt.

Based on the symbols of power and control in the carvings, Gatto and her colleagues believe the artwork came from the first part of Narmer's reign, before he unified both parts of Egypt.

"It seems that for Narmer it was important first to settle the situation in the South, to control the South, and then apparently move to the North, and at that time he unified Egypt and we have the first dynasty," Gatto said.

The next step for researchers, Gatto said, is to protect the site. That presents a challenge, not only because of the carvings' outdoor location, but also because of recent political upheaval in Egypt.

Please visit the site: http://www.huffingtonpost.com/2012/12/10/oldest-pharaoh-carvings_n_2271909.html [Go htere for pix]

DISCOVERED: THE LOST PORT OF ANCIENT ROME

French and Italian archaeologists have found the remains of a grain port that played a critical role in the rise of ancient Rome,

France's National Centre for Scientific Research (CNRS) said on Thursday.

Cores drilled at a location at the mouth of the River Tiber have revealed the site of a port whose existence has been sought for centuries, it said in a press release. The port lies northwest of Ostia, which was established by Rome as a fortress gateway to enable trade to pass upriver towards the city and prevent pirates and marauders. The evidence points to a port established between the fourth and second century BC and had a depth of six metres (20 feet), making it accessible to sea-going vessels, the CNRS said. Rome emerged as the prime power of the Mediterranean thanks in part to trade. It imported huge amounts of wheat, especially from Egypt. In the first century AD, the grain port at Ostia was superseded by a giant installation covering 200 hectares (500 acres) at Portus.

Please visit the site: <http://phys.org/news/2012-12-lost-port-ancient-rome.html>

AN ANCIENT STATUE, RE-CREATED - THROUGH TECHNOLOGY, MUSEUM AUGMENTS SHARDS OF CERAMIC LION, BY ALVIN POWELL

As part of a repair job 3,300 years in the making, Harvard's Semitic Museum is seeking to undo some of the destruction wrought when Assyrians smashed the ancient city of Nuzi in modern-day Iraq, looting the temple and destroying artifacts.

In a high-tech project that would have been impossible even four years ago, technicians are attempting to re-create a 2-foot-long ceramic lion that likely flanked an image of the goddess Ishtar in a temple in long-ago Nuzi, which is the modern archaeological site of Yorghhan Tepe. The project will blend fragments of the original statue held by the museum with pieces created through 3-D scans of its intact mirror image, which likely sat on Ishtar's other side.

Museum assistant director Joseph Greene said the project is partly driven by the desire to re-create the damaged lion and partly by a commitment to use the latest technology to probe the thousands of artifacts in the museum's collection in search of new data from them.

"It's important to devote our time and attention to objects we have in our collection and to apply the latest techniques, techniques not dreamed of when [the artifacts] were dug up," Greene said. "There's a continual curiosity: What more can we learn? What hasn't been tried so far? Can we wring new data from objects that have been in our basement for 80 years?"

The museum holds just two pieces of the fragmentary lion, its front paws and a larger chunk of rump and back legs. Technicians from an outside contractor, Learning Sites Inc., visited the museum Friday to take digital photographs of the fragments to augment more than 120 images taken of the intact statue.

According to Donald Sanders, Learning Sites president, the 3-D models are made using the digital photos and sophisticated computer software that knits the images together. The images can be taken with ordinary cameras and even cellphone cameras, but they have to overlap, so that the software can sort and match the images to create the model. The more overlap there is, he said, the more data points the software has, and the more detailed the model can be. By taking more than 120 images of a relatively small statue like the lion, the resolution can be less than a millimeter.

A detail from the face of one of the statues. The temple where the lions originated likely contained at least four such statues, two standing and two crouching, flanking an image of the goddess Ishtar, according to Adam Aja.

The result, Sanders said, is a 3-D image that can be called up on a computer screen, rotated, zoomed in and out, and examined in detail by scholars off-site, providing accurate access to a museum artifact that they might otherwise have had to visit

Cambridge to see. For display purposes, the digital models can be “printed out” on sophisticated, 3-D machines that sculpt from high-density foam.

The software will attempt to use the 3-D model of the intact lion to re-create the missing parts for the broken one. The intact original will be returned to its owner, the University of Pennsylvania, next year when the Semitic Museum’s second-floor exhibition hall is closed for renovation.

The temple where the lions originated likely contained at least four such statues, two standing and two crouching, flanking an image of the goddess Ishtar, according to assistant curator Adam Aja.

The two standing statues, owned by the Harvard University Art Museums, and the crouching lions have been on display at the Semitic Museum since 1998, the first time they’ve been together since the late Bronze Age destruction of the temple, Aja said.

Nuzi was inhabited by people called Hurrians near modern-day Kirkuk in Iraq. The city was destroyed by the Assyrians sometime between 1350 and 1300 B.C. Lions, which once roamed the area, were considered symbols of power, and reliefs depict rulers going on lion hunts.

The statues and their re-created models will be taken off display next year when the gallery is renovated, but will be public again when the work is completed, probably in 2014.

Please visit the site: <http://news.harvard.edu/gazette/story/2012/12/an-ancient-statue-re-created/>

DROUGHT MAY HAVE KILLED SUMERIAN LANGUAGE, BY TIA GHOSE

A 200-year-long drought 4,200 years ago may have killed off the ancient Sumerian language, one geologist says.

Because no written accounts explicitly mention drought as the reason for the Sumerian demise, the conclusions rely on indirect clues. But several pieces of archaeological and geological evidence tie the gradual decline of the Sumerian civilization to a drought.

The findings, which were presented Monday (Dec. 3) here at the annual meeting of the American Geophysical Union, show how vulnerable human society may be to climate change, including human-caused change.

"This was not a single summer or winter, this was 200 to 300 years of drought," said Matt Konfirst, a geologist at the Byrd Polar Research Center.

Beginning about 3500 B.C., the Sumerian culture flourished in ancient Mesopotamia, which was located in present-day Iraq. Ancient Sumerians invented cuneiform writing, built the world's first wheel and arch, and wrote the first epic poem, "Gilgamesh." [Image Gallery: Ancient Middle-Eastern Texts]

But after 200 to 300 years of upheaval, the Sumerian culture disappeared around 4,000 years ago, and the Sumerian language went extinct soon after that.

Konfirst wanted to see if a drought that spanned about 200 years may have caused the decline. Several geological records point to a long period of drier weather in the Middle East around 4,200 years ago, Konfirst said. The Red Sea and the Dead Sea had increased evaporation; water levels dropped at Lake Van in Turkey, and cores from marine sediments around that period indicate increased dust in the environment.

"As we go into the 4,200-year-ago climate anomaly, we actually see that estimated rainfall decreases substantially in this region and the number of sites that are populated at this time period reduce substantially," he said.

Around the same time, 74 percent of the ancient Mesopotamian settlements were abandoned, according to a 2006 study of an archaeological site called Tell Leilan in Syria. The populated area also shrank by 93 percent, he said.

"People still live in this region. It's not that the collapse of a civilization means that an area is completely abandoned," he said.

"But that there's a sharp change in the population."

During the great drought, two waves of marauding nomads descended upon the region, sacking the capital city of Ur. After around 2000 B.C., ancient Sumerian gradually died off as a spoken language in the region. For the next 2,000 years, the tongue lingered on as a dead written language, similar to Latin in the Middle Ages, but has been completely extinct since then, Konfirst said.

The coincidence of the social upheaval, depopulation in the area and the geologic record of drought suggests climate change might have played a role in the loss of the Sumerian language, Konfirst said.

The findings also suggest that modern-day civilizations may be vulnerable to climate change, he said.

Please visit the site: <http://news.yahoo.com/drought-may-killed-sumerian-language-165436243.html>

FIRST TARTAN' ON ROMAN STATUE

The Caledonian warrior on the bronze statue appears to be wearing tartan trews.

Remnants of a Roman statue in North Africa could be the "first-ever depiction of tartan", according to a BBC Scotland documentary.

A piece of a bronze statue of the Emperor Caracalla contains the small figure of a Caledonian warrior wearing what appears to be tartan trews.

The third century Roman emperor Caracalla styled himself as the conqueror of the Caledonians.

A statue marking his achievements stood in the Moroccan city of Volubilis.

It stood above a great archway in the ancient city, which lay in the south west of the Roman empire, 1,500 miles from Caledonia - modern day Scotland.

For the local tribes the Roman arrival in what we call Scotland must have been absolutely terrifying”

Dr Fraser Hunter

"It includes an early depiction of that great national stereotype - the long-haired Caledonian warrior," says Dr Fraser Hunter, who presents the BBC Scotland programme.

The warrior is wearing checked leggings which, according to Dr Hunter, is "the first-ever depiction of tartan".

It is thought the Celts have been weaving plaid twills for thousands of years and this is the earliest representation.

Dr Hunter adds: "The shield too is Celtic in style. You can see the warrior's head with the cloak over the shoulders. The arms are bound behind the back.

"This guy is a captive. He's a prisoner from the vicious campaigns of Severus and Caracalla."

Septimius Severus, Caracalla's father, led massive military campaigns into 3rd century Scotland.

The mighty Roman legions had conquered all before them but they stuttered to a halt when they took on the tribes of Iron Age Scotland.

Caracalla carried on his father's fight, waging a brutal campaign.

Dr Hunter says prisoners could have been force-marched for months to other parts of the empire.

"They were living trophies of the emperor's success. Some might have been traded as slaves in the great markets. Others would have been even less fortunate."

Tunisian mosaic A Tunisian mosaic shows a Caledonian prisoner killed by a wild animal

Dr Hunter points to a mosaic from Tunisia which shows how one unfortunate Caledonian met his end.

"Captured, marched for months to this desert province, sent to the amphitheatre and killed by wild animals as exotic entertainment for the locals," says Dr Hunter.

The expert says we have long had a curious "rather cuddly" relationship with the Romans.

"In the western world we often see ourselves as inheritors of Roman values and Roman culture," he says.

"But this evidence from North Africa reminds us that the Romans were invaders and colonisers.

"Their strategies encompassed everything up to and including genocide.

"For the local tribes the Roman arrival in what we call Scotland must have been absolutely terrifying."

The documentary - Scotland: Rome's Final Frontier on BBC Two Scotland on Friday at 21:00 - explores why the Romans struggled to expand their empire north of the border.

Please visit the site: <http://www.bbc.co.uk/news/uk-scotland-20579219> [Go there for [pix](#)]

LION-SHAPED STATUES UNEARTHED IN FAYOUM, BY NEVINE EL-AREF

Italian archaeological mission discovers a pair of large limestone lion statues at the Ptolemaic temple of god Sknopaios in Fayoum

The Italian archaeological mission of Salento-Litchi University stumbled upon a pair of gigantic seated lion statues on Monday. They were found erected at the entrance of Soknopaios Temple at the Ptolemaic town, Dimeh Al-Siba, in Fayoum.

Dimeh Al-Siba, which means ‘Island of the Crocodile god,’ is located eleven kilometres to the north of Qarun Lake. It was founded by Ptolemy II on top of a Neolithic residential area. The Ptolemaic-era town contains a collection of residential houses, a large temple to worship Sknopaios, in ancient Egypt Sobek-en-Pai (crocodile), a bakery and a market.

During excavation work carried out by archaeologist and director of the Italian mission, Mario Capasso, a pair of lion statues appeared on the sand surface. The lion statues are skillfully carved of limestone and were presumably used to decorate the entrance gate of the temple.

Mohamed Ibrahim, Antiquities Minister, describes the discovery as interesting, as it confirms that the temple was constructed according to an architectural plan used in main temples in large cities and capital.

“It is also the first time that the gigantic lion shaped statues can be unearthed in a small Greco-Roman settlement in Fayoum,” said Ibrahim. Both statues are in a very well-preserved condition and are now at the Fayoum storehouse for restoration.

Please visit the site:

<http://english.ahram.org.eg/NewsContent/9/41/59724/Heritage/GrecoRoman/Lionshaped-statues-unearthed-in-Fayoum.aspx>

COPROSTANOL AND HUMAN RECORD

US scientists say they can track early human movements by analysing molecules in ancient faecal matter.

Researchers were able to use prehistoric poo to establish the presence and size of a population dating back over 7,000 years.

They argue the method could be used to distinguish human from natural impacts on past environments.

Details have been published in the journal Proceedings of the National Academy of Sciences.

Strong signal

The presence of charcoal from human fires and pollen from cultivated plants have long been used as biological markers of human activity.

Often found in lake bed sediments that have been built up over thousands of years, they provide at best a rough guide to the presence of humans.

Now researchers at the University of Massachusetts at Amherst say they have discovered a much more accurate marker that produces a "strong human signal."

They found that coprostanol, a by-product of the digestion of cholesterol in the human gut acts as a remarkably accurate chronological record of human activity.

At a site just north of the Arctic circle on Norway's Lofoten islands, the scientists extracted the compound from sediment cores that date back 7,300 years.

According to researcher Robert D'Anjou, faeces from ancient humans and their livestock washed into lakes over time and left a record of these specific molecules in specific concentrations.

Molecules in sediment cores from the lake revealed much about the area's settlement history

"We compared it to this tree ring temperature record from the area," he told BBC News, "and it was shocking how well the coprostanol followed the temperature reconstruction"

The researchers found that there was considerable variation in human activities in this region of northern Norway over time. There was a significant lull between 2,040 and 1,900 years ago reflected in all markers. There was a further decline in human activity and population around 1750 AD.

Robert D'Anjou says the analysis showed the reasons behind this ebb and flow.

"This area is at the northern limit of agricultural possibility and minor variations in the growing season temperature would greatly affect their ability to farm and populate that area."

Pragmatic attitude

And he argues that perhaps the most interesting aspect of the research was the ability to distinguish between human activities from natural events.

"We can define the natural background variability over the 7,000-year record and when we see the peak in human faecal sterols, you see a dramatic increase in the frequency of fires in the area, associated with slash-and-burn type agriculture," said Dr D'Anjou.

It could be a useful tool to help other researchers, says Dr Raymond Bradley, director of the Climate System Research Centre at the University of Massachusetts.

"This approach opens the door to other studies, where the presence of humans is uncertain," he said, "We believe it has great potential for much wider applications in archaeology."

As to the source material, Robert D'Anjou has a highly pragmatic attitude.

"It's just another thing that leaves its mark on the environment," he says, "and good things can come from the most unexpected places."

Please visit the site: <http://www.bbc.co.uk/news/science-environment-20492507>

STUDY REVEALS ORIGINS AND FOOD HABITS OF FIRST SICILIANS, BY ENRICO DE LAZARO

Analysis of skeletal remains found in an island cave in Favignana, Italy, has revealed that modern humans first settled in Sicily around the time of the last Ice Age and despite living on islands, ate little seafood. The genetic analysis of the bones from the Grotta d’Oriente cave on the island of Favignana, the Egadi Islands, provides some of the first mitochondrial DNA data available for early humans from the Mediterranean region, a crucial piece of evidence in ancestry analysis. This analysis reveals the time when modern humans reached these islands.

“The definitive peopling of Sicily by modern humans only occurred at the peak of the last ice age, around 19,000 -26,500 years ago, when sea levels were low enough to expose a land bridge between the island and the Italian peninsula,” said Dr Marcello Mannino of the Max Planck Institute for Evolutionary Anthropology, Germany, lead author of a paper in the open access journal PLoS-ONE.

Dr Mannino and his colleagues also analyzed the chemical composition of the human remains and found that these early settlers retained their hunter-gatherer lifestyles, relying on terrestrial animals rather than marine sources for meat.

This map shows location of upper Palaeolithic and Mesolithic sites on the Ègadi Islands and on Sicily. These cave sites include: Grotta d’Oriente (1) and Grotta dell’Ucceria (2) on the island of Favignana; Grotta di Punta Capperi (3), Grotta di Cala dei Genovesi (3), Grotta Schiacciata (4) and Grotta di Cala Calcara (5) on the island of Levanzo; Grotta Maiorana (6), Riparo San Francesco (7), Grotta Martogna (8), Grotta Emiliana (9) and Grotta Maltese (9) on the mainland of Sicily (Mannino MA et al)

According to the study, despite living on islands during a time when sea level rise was rapid enough to change within a single human lifetime, these early settlers appear to have made little use of the marine resources available to them.

“These findings have crucial implications for studies of the role of seafood in the diet of Mediterranean hunter-gatherers,” the researchers concluded.

Bibliographic information: Mannino MA et al. 2012. Origin and Diet of the Prehistoric Hunter-Gatherers on the Mediterranean Island of Favignana (E`gadi Islands, Sicily). PLoS ONE 7(11): e49802; doi: 10.1371/journal.pone.0049802

Please visit the site: <http://www.sci-news.com/archaeology/article00749.html>
