



Επιστημονικό Σωματείο,
Έτος Ίδρυσης 1982, έδρα:
Κάνιγγος 27, 106 82 Αθήνα
(Ένωση Ελλήνων Χημικών)

**ΔΙΟΙΚΗΤΙΚΟ
ΣΥΜΒΟΥΛΙΟ:**

Ε. Φώτου-Jones (πρόεδρος),
Ι. Μπασιάκος (αντιπρόεδρος),
Ι. Καρατάσιος (γραμματέας),
Ε. Κουλουμπή (ταμίας),
Ε. Φιλιππάκη (βοηθός γραμ.),
Β. Κυλίκογλου (μέλος),
Α. Hein (μέλος)

Πληροφορίες:

Γ. Φακορέλλης (σύνταξη,
επιλογή ύλης)

E-mail: yfacorel@teiath.gr

Scientific Association, Year
of Establishment 1982,
Headquarters: Kaniggos 27,
106 82 Athens (Association
of Greek Chemists)

BOARD:

Ε. Photos-Jones (president),
J. Bassiakos (vice-president),
J. Karatassios (secretary),
Ε. Kouloumpi (treasurer),
Ε. Philippaki (ass. secretary),
V. Kilikoglou (member),
Α. Hein (member)

Information: Y. Facorellis
(editor)

E-mail: yfacorel@teiath.gr

Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

- Φεβρουάριος 2013 -

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

Newsletter of the Hellenic Society of Archaeometry

- February 2013 -

Nr. 143

ΠΙΝΑΚΑΣ ΠΕΡΙΕΧΟΜΕΝΩΝ – TABLE OF CONTENTS

ΣΥΝΕΔΡΙΑ – CONFERENCES/WORKSHOPS

**6th SYMPOSIUM OF THE HELLENIC SOCIETY FOR
ARCHAEOLOGY, 2nd Circular “Craft - based Cultural Influences in
the Mediterranean”, May 16 - 18, 2013 – Athens, Acropolis Museum page 5**

CYCLADIC SEMINAR - PROGRAMME 2013 page 7

ΠΡΟΓΡΑΜΜΑ ΕΚΔΗΛΩΣΕΩΝ ΕΜΑΕΤ, ΙΑΝΟΥΑΡΙΟΣ – ΑΠΡΙΛΙΟΣ
2013 page 9

2nd International Students' Conference on Conservation and Restoration of
Works of Art, Cracow, 12th-13th April 2013 page 10

ΠΡΟΓΡΑΜΜΑ ΟΜΙΛΙΩΝ της Ε.Μ.Α.Ε.Μ. - ΦΕΒΡΟΥΑΡΙΟΥ-ΙΟΥΝΙΟΥ
2013 page 15

¹⁴C & Archaeology: Ghent, 8-12 April 2013, deadlines for abstract submission
and early registration approach page 16

“The coastal Levant during the Middle Bronze Age” Session at the 2013
Annual meeting of the American Schools of Oriental Research, Baltimore,
MD, November 20th-23rd, Call for Papers page 17

"Conservation and Site Preservation in the Near East" (ASOR 2013), Calls for
Papers page 19

Call for Papers: Graduate Archaeology at Oxford Annual Conference 2013 page 20

Archaeology of Cyprus session at the 2013, Annual Meeting of the American
Schools of Oriental Research (ASOR) to be held in Baltimore, MD, November
20-23, 2013, Call for Papers page 22

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ – JOB VACANCIES/FELLOWSHIPS

Post Graduate Course in Greek and Roman Pottery (British School at Athens) . page 23

2013 RICHARD SEAGER DOCTORAL FELLOWSHIP - APPLICATION
GUIDELINES page 26

JOB VACANCY: SCIENTIFIC RESEARCH OFFICER - FITCH
LABORATORY, BRITISH SCHOOL AT ATHENS page 29

FELLOWSHIPS: at Wolfson College (Oxford) page 32

ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

Minor update to OxCal v4.2 beta page 33

The Archaeological Institute of America's Site Preservation Grant page 34

INTERNET SITES

New Online Israel Archaeology Archive, by Chana Ya'ar page 35

ACANE Final Conference Report download page 36

The Archimedes Palimpsest page 37

CSA Newsletter - January, 2013, issue – Volume XXV, No. 3 page 38

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

Journal of Mediterranean Archaeology, Vol 25, No 2 (2012) page 39

Τμήμα Προστασίας & Συντήρησης Πολιτισμικής Κληρονομιάς -
 ΠΕΡΙΛΗΨΕΙΣ ΠΡΩΤΟΥ ΚΥΚΛΟΥ ΔΙΑΛΕΞΕΩΝ ΓΙΑ ΤΗΝ ΣΥΝΤΗΡΗΣΗ
 & ΤΟΝ ΠΟΛΙΤΙΣΜΟ - Αμφιθέατρο Α.ΤΕΙ Ιονίων Νήσων-Πλ. Κάλβου,
 Ζάκυνθος page 40

Oxford Journal of Archaeology, Volume 32, Issue 1 Pages 1 - 122, February
 2013 Blackwell Publishing Ltd. page 61

A Minoan Shipwreck off Laconia, E. Spondylis, 'A Minoan Shipwreck off
 Laconia', ENALIA, 11(2012): 6-7 page 62

Polish Archaeology in the Mediterranean 21 is now available page 63

Archaeometry © University of Oxford, Volume 55, Issue 1 page 64

Current Anthropology 54/ (February 2013) page 66

Tombs of the Late Bronze Age in the Limassol Area (17th-13th Centuries BC) page 69

High medieval copper and lead/silver production central Europe's largest
 copper mine page 70

Journal of Archaeological Science, Volume 40, Issue 2, February 2013, Pages
 1242–1249 page 71

The New Chronology of Iron Age Gordion. Gordion special studies, 6 C. Brian
 Rose, Gareth Darbyshire (ed.) page 72

Two new books from Åström Editions page 75

The Signs of Which Times? Chronological and Palaeoenvironmental Issues in
 the Rock Art of Northern Africa page 76

ΕΙΔΗΣΕΙΣ - NEWS RELEASE

Bulgaria claims find of temple to Priapus page 78

Archaeologists Unearth More Than 300 Prehistoric Clay Figurines in Greece ...	page 79
Largest ever Egyptian sarcophagus identified, By Owen Jarus	page 81
Archaeologists Unearth Agricultural Suburb at Ancient City of Petra	page 84
Famed Roman shipwreck reveals more secrets, by Dan Vergano	page 86
Eight million dog mummies were uncovered at the dog catacomb in Saqqara, by Nevine El-Aref	page 88
Archaeologists discover Augustan-era sculptures near Rome Sculptures found in villa in Ciampino tell myth of Niobe	page 90
Athenian 'Snake Goddess' Gets New Identity, By Stephanie Pappas	page 91
Ancient Eye Treatment Recovered From Tuscan Shipwreck, by Dennis Normile	page 93
Graffiti dating from the Roman era has been found scrawled on the walls of the Colosseum during restoration work, by Nick Squires	page 94
Ancient Pompeians Could Go Upstairs to Pee, by Stephanie Pappas	page 95
2,000-Year-Old Treasure Discovered In Black Sea Fortress, By Owen Jarus	page 97
Archaeologists Explore a Frontier Area of Ancient Italy	page 99
Ancient floor not seen for 10,000 years	page 101
Archaeological finds reveal ancient Balkan civilizations, By Svetla Dimitrova .	page 103
Museum staff in Manchester have devised a computer console which allows visitors to 'handle' ancient artefacts	page 105
Entombing the Tomb of the Gladiator: Who Will Save the Roman Ruins? By Stephan Faris	page 107
Archaeological feast: Heap of ancient cattle bones discovered Study finds site in Peloponnese, Greece, may be left from years of lavish dining, By Stephanie Pappas	page 109
Ovarian tumor found in a Roman-age skeleton	page 111
Sicilian Mummies Bring Centuries to Life Scientists are using radiology and chemistry to determine what Sicilians once ate—and how they died, by Jeremy Berlin	page 113

ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

6TH SYMPOSIUM OF THE HELLENIC SOCIETY FOR ARCHAEOMETRY, 2ND CIRCULAR “CRAFT - BASED CULTURAL INFLUENCES IN THE MEDITERRANEAN”, MAY 16 - 18, 2013 – ATHENS, ACROPOLIS MUSEUM

The Hellenic Society for Archaeometry (HSA) is organizing its 6th Symposium under the title “Craft - based Cultural Influences in the Mediterranean”, which will be held in Athens, from 16th to 18th May 2013.

In due consideration of the economic situation in Greece and in order to facilitate a more convenient arrival of the participants, the Organizing Committee decided for the change of the symposium location. The symposium will be held eventually in the amphitheatre of **Acropolis Museum, in Athens**.

Sessions

In order to initiate and pursue a fruitful discussion among scholars working in the field of archaeometry the HSA invites society members and colleagues to submit papers on their research. The symposium will cover all aspects of the field or in general the study of Cultural Heritage by use of natural science.

More specifically we suggest the following thematic sessions:

- **Integrated studies on provenance, technology and dating of material remains**
- **Investigating landscapes and cultural heritage within**
- **Conservation science and technology**
- **Biomaterials and archaeology**

Furthermore, a **Special Session** is planned, aiming to highlight **scientific approaches** to the study of the **Intangible Cultural Heritage**; these can relate to two main issues: **either** to the development and acquisition of skills and aspects of tradition and experience associated with crafts diachronically, **or** to our contemporary perception of the landscape based on the systematic examination of historical and archaeological data but also those derived from our sensory perception thereof.

Organizing Committee

The Hellenic Society for Archaeometry Board:

E. Photos - Jones, president

Y. Bassiakos, vice - president

I. Karatasios, secretary

E. Kouloumpi, treasurer

A. Hein

V. Kilikoglou

L. Philippaki

Scientific Committee

S. Bogiatzis, Technological Educational Institute of Athens, Greece
P.M. Day, University of Sheffield, UK
A. Hauptmann, Deutsches Bergbau Museum, Germany
C. Heron, University of Bradford, UK
V. Kassianidou, University of Cyprus, Cyprus
G. Kitis, Aristotle University Thessaloniki, Greece
V. Kyriatzi, British School at Athens, Greece
Y. Maniatis, National Centre for Scientific Research “Demokritos”, Greece
N. Maravelaki, Technical University of Crete, Greece
A. Sarris, Foundation for Research and Technology, Greece
S. Sotiropoulou, “Ormylia” Art Diagnosis Centre, Greece
P. Triantafyllidis, Archaeological Institute of Aegean Studies, Greece
P. Vandenabeele, Ghent University, Belgium

Abstract Submission

Due to the delay because of organizing the change of location we decided for an extension for the submission of abstracts until **10th of February 2013**.

Detailed instructions for the electronic abstract submission can be found on our webpage (www.archaeometry.gr)

Language of the Symposium

Greek and English (without simultaneous translation)

Proceedings

The submitted papers will be considered for publication, in English, following peer review,
as a numbered volume of an international book series.

Registration Fees:

The registration fees for participants will be 100 € (reduced fee of 80 € for students) and will include conference package, the book of abstracts and coffee breaks.

Info - Contact:

Webpage: www.archaeometry.gr
Email: conference@archaeometry.gr
Phone: +30 2106503326

CYCLADIC SEMINAR - PROGRAMME 2013

During the last two decades of the 20th century and the first twelve years of this century our knowledge of Cycladic prehistory has grown in leaps and bounds, owing to new field surveys and, especially, systematic excavations at remarkable sites unknown before the 1980s. The publication of material from old excavations, recent general studies of the Cycladic world taken full advantage of this work and studies that have compared Cycladic sites to those in other areas of the Aegean have played their role in this development. In addition, continued investigations at previously known, yet no less important, Cycladic sites have contributed greatly to the discourse.

This Cycladic Seminar aims to highlight recent research, while interpreting it in the light of older data, a strategy that, in many cases, will lead to a reconsideration of the old data. The seminar also will emphasize studies based on material with a known context.

The foundations of Cycladic prehistory were laid by Christos Tsountas with excavations he conducted in the Cyclades under the aegis of the Archaeological Society at Athens in late 19th century, and by his two seminal studies, “Kykladica” and “Kykladica II”, published in the Society’s journal, *Archaïologikē Ephemeris*, in 1898 and 1899. To this day certain of the most important excavations of prehistoric sites in the Cyclades are also conducted under the aegis of the Archaeological Society. The Society seems, therefore, to be the proper venue for organizing a Cycladic Seminar.

Cycladic Seminar meetings will take place in the small hall of the Archaeological Society’s *megaron*, 22 Panepistimiou St., at 7 P.M. Papers presented to the Seminar will last 45 minutes and will be followed by discussion. The annual seminar programme and abstracts of the presentations will be posted on the Society’s website (www.archetai.gr/Επικαιρότητα). The seminar is organized by Marisa Marthari.

Monday, 14 January

Colin Renfrew

“The Early Cycladic settlement at Dhaskalio, Keros and the sanctuary at Kavos in the light of the 2006 to 2008 excavations: Deciphering a mystery”

Tuesday, 2 April

Christina Televantou

“The Neolithic settlement at Strophilas, Andros: Expanding the horizons of Cycladic prehistory and iconography”

Tuesday, 4 June

Christos Doumas

“Akrotiri, Thera: The first settlement”

Tuesday, 26 November

Jack L. Davis, Sharon R. Stocker & Hariklia Breccoulaki

“Of ships - and sealing wax, fig trees - and kings: The Theran miniature frieze, the Pylos ship frieze, and power in the Mycenaean world.”

ΠΡΟΓΡΑΜΜΑ ΕΚΔΗΛΩΣΕΩΝ ΕΜΑΕΤ, ΙΑΝΟΥΑΡΙΟΣ – ΑΠΡΙΛΙΟΣ 2013

Στην αίθουσα του
ΜΟΥΣΕΙΟΥ ΤΗΣ ΠΟΛΕΩΣ ΤΩΝ ΑΘΗΝΩΝ
Παπαρρηγοπούλου 5-7, Πλατεία Κλαυθμώνος
Ώρα έναρξης 18.30

Η αίθουσα παραχωρείται ευγενώς από το ΔΣ του Ιδρύματος Βούρου - Ευταξία

Δευτέρα, 21 Ιανουαρίου 2013

Γ. Βαρουφάκης

«Μεταλλουργική μελέτη 9 σιδερένιων συνδέσμων του Μπαλάνου για έργα αναστήλωσης του Παρθενώνα»

Δευτέρα, 18 Φεβρουαρίου 2013

Θ. Π. Τάσιος

«Γιατί η κορύφωση της Ελληνιστικής Τεχνολογίας;»

Δευτέρα, 4 Μαρτίου 2013

N. Hellner

«Η χρήση του τόρνου στην αρχαϊκή ναοδομία της Σάμου»

Δευτέρα, 11 Μαρτίου 2013

Ε. Γαβριλάκη

«Οι τεχνικές κατασκευής γυάλινων αντικειμένων όπως ανιχνεύονται στα αρχαιολογικά ευρήματα του Ρεθύμνου»

Δευτέρα, 1 Απριλίου 2013

Ε. Χιώτης

«Ήταν ο Ηριδανός εκεί που πιστεύουμε;»

Δευτέρα, 15 Απριλίου 2013

Ο. Δακουρά-Βογιατζόγλου

«Τα τείχη της Αθήνας αφηγούνται την ιστορία της»

Η παρουσία Μελών και Φίλων της ΕΜΑΕΤ είναι χαρά για όλους-μας, ανεβάζει δε και τη στάθμη των παραγωγικών συζητήσεων που επακολουθούν κάθε ομιλίας.

2ND INTERNATIONAL STUDENTS’ CONFERENCE ON CONSERVATION AND RESTORATION OF WORKS OF ART, CRACOW, 12TH-13TH APRIL 2013

Date: 12th-13th April 2013

Location: Conference and exhibition pavilion "Boiler house", Cracow University of Technology, Warszawska 24 St., Krakow

Organizer: The Organizing Committee of Students at the Faculty of Conservation and Restoration of Works of Art, Academy of Fine Arts in Krakow

Deadline for application form: 20th January 2013

Deadline for abstracts:

Patronage:

Dean of the Faculty of Conservation and Restoration of Works of Art, Fine Arts Krakow, dr hab. Marta Lempart-Geratowska, prof. ASP

Information:

...

Facebook – II Międzynarodowa Konferencja Naukowa Studentów

Contact:

conference.wkirds@gmail.com

We invite you to participate in the 2nd International Students’ Conference on Conservation and Restoration of Works of Art, which will be held on 12th-13th April 2013 in Krakow, Poland!

About conference

Our conference will be one of a series of events as part of Krakow’s KULTURALia (festival of student achievement).

On the conference there are to be presented: conservation projects in which the students took part, the results of work carried out at objects during the academic year, theses, scientific papers and papers based on former literature related to the conservation and restoration of works of art.

Aims of the conference

- Presentation of the work results and achievements of students in the field of conservation and restoration of works of art,
- Exchange of experience,
- Encourage students to research,
- Promotion of research in the field of conservation and restoration,
- Revival of cooperation between universities that educate conservators in Poland and abroad
- Allow discussion on papers’ subjects

The conference conducted by students will consist of several thematic sessions adjusted to the number of qualified papers.

In 2011, for the first time in Krakow, International Students’ Conference for Conservation and Restoration of Works of Art was held.

The organizers of the conference were: the Organizing Committee of Students and Students’ Scientific Society of WKiRDS Fine Arts in Cracow, in cooperation with the

Nicolaus Copernicus University, the Academy of Fine Arts in Warsaw and the Cracow University of Technology.

The papers were presented in four thematic sessions:

Session I - Sculpture / Wall painting / Stone

Session II - Contemporary art / Digital methods,

Session III - Easel painting

Session IV - Paper / Fabric / Photography

The conference had an international character and attracted great interest. In 2012, the publication "Studies and materials of Students' Conference for Conservation and Restoration of Works of Art, Krakow, 9th May 2011." was presented.

After a short break, encouraged by the unwavering students' interest, we are organizing the 2nd International Students' Conference on Conservation and Restoration of Works of Art.

It is the only event of its kind in Poland!

RULES OF THE CONFERENCE

1. GENERAL PROVISIONS

- 1.1. II International Scientific Conference of Students of Conservation and Restoration Works of Art, Cracow 2013, hereinafter referred to as the Conference, is organised by the Organizing Committee of the Students of the Faculty of Conservation and Restoration of Works of Art of the Jan Matejko Academy of Fine Arts in Cracow, hereinafter referred to as the Organising Committee.
- 1.2. The Conference is organised in the framework of the V Festival of Student Art of the City of Cracow 2013. – KULTURALia 2013.
- 1.3. The Organizing Committee has been appointed by the Student Union of the Faculty of Conservation and Restoration of Works of Art of AFA in Cracow and the Student Scientific Circle of Faculty of Conservation and Restoration of Art of AFA in Cracow. The following persons represent it: Ms Katarzyna Bizon, Ms Maria Kisiel, and Ms Izabela Michalik.
- 1.4. The Organizer shall appoint the Qualification Committee, which includes at least 2 independent researchers from WKiRDS of AFA in Cracow and the members of the Organizing Committee.
- 1.5. The Conference will be held on 12-13 April, 2013, in the "Kotłownia" Conference Room of Cracow University of Technology, ul. Warszawska 24, in Cracow.
- 1.6. Sending the completed application form (mentioning the topic of the paper and its short description) in electronic form by 20.01.2013, and sending an abstract of the paper by 17.02.2013, shall be deemed as equivalent to sending a declaration of participation in the Conference.
- 1.7. No charges shall be collected for participation in the Conference.
- 1.8. The Organizer does not cover the accommodation and travel costs of the Participants.

2. RULES of PARTICIPATION:

- 2.1. Participants of the Conference are mainly students of Conservation and Restoration of Works of Art of long-cycle studies both from Polish public universities and abroad, people associated professionally with themes of conservation and restoration of works of art and the representatives of sponsors,

however, the event is open and free access to the Conference to all people interested in the topic is ensured.

- 2.2. Only STUDENTS of Conservation and Restoration of Works of Art or STUDENTS of other areas of study related to the above field, whose works oscillate round conservation and restoration of works of art, may be the authors of the papers.
- 2.3. The pronounced papers of the participants shall be original papers or pictorial projects which shall relate to activities carried out in the framework of study or done individually.
- 2.4. Active participants – speakers and passive participants who shall be present in the conference room during the conference shall be participants of the conference
- 2.5. The speaker is the person who:
 - a. has sent a completed application form (providing the topic of the paper and its short description) in the electronic form by 20.01.2013 via the conference e-mail address: conference.wkirds@gmail.com
 - b. has sent an abstract of the paper in Polish and in English by 17.02.2013 r. via the conference e-mail address: conference.wkirds@gmail.com
 - c. has been qualified for the conference by the Qualification Committee. The speakers shall be notified about this by e-mail by 28.02.2013.
 - d. And shall pronounce his/her paper/presentation during the conference.
- 2.6. Each Speaker shall receive a Certificate of Pronouncing a Paper (max. 2 certificates for 1 paper).

3. INFORMATION ABOUT PAPERS

- 3.1. The abstract should not exceed 1800 characters with spaces.
- 3.2. The abstract should include a general outline of the paper, results, discussion. It cannot include tables and diagrams.
- 3.3. The number of allowed co-authors of one paper is 5 persons.
- 3.4. Papers shall be qualified for participation in the conference on the basis of submitted abstracts by the Qualification Committee.
- 3.5. The Qualification Committee shall evaluate the substantial value of the paper.
- 3.6. After getting acquainted with the abstract of the paper, the Committee shall qualify it for the appropriate session.
- 3.7. The decision of the Committee about the rejection of a paper shall be final and shall not be subject to appeal.
- 3.8. Papers qualified for the Conference shall be presented in public.
- 3.9. One paper may be presented by max. 2 persons.
- 3.10. Each paper must have a research supervisor who cares for its substantial level. 3 research supervisors of the paper are allowed.
- 3.11. Authors of the paper shall be obliged to prepare a multimedia presentation in Polish or English, according to the preference of the Speaker.
- 3.12. The Organizer requests to include captions under the photos in Polish and in English.
- 3.13. The abuse of copyright by the Organizer and the Participant (plagiarism) is regulated by the Penal Code.

4. RULES for the PRESENTATION

- 4.1. Authors present papers in thematic sessions which are adapted to the appropriate number of approved papers for presentation.
- 4.2. The presentations shall be held according to the schedule established by the Organizing Committee and which shall be communicated to the interested persons at least 10 days before the Conference.
- 4.3. Herewith the Organizing Committee reserves itself the right to change the schedule.
- 4.4. Participants shall be kept posted about all changes in the schedule.
- 4.5. The pronouncement time of the presentation cannot exceed 15 min.
- 4.6. The moderator is obliged to strictly observe the rule of 15 minutes of the agenda and he/she is authorised to closure the speaker after the expiration of the regular time.
- 4.7. A multimedia projector shall be at the speakers' disposal. The presentations should be saved on CD-R or a USB disk in Power Point software (in the following formats: .ppt or .pptx).
- 4.8. The Organizer shall not be liable for the incompatibility of the software.
- 4.9. The presentations should be delivered to the moderator at the time of registration of the participants. The name of the file should be described by the name of the speaker.

5. FINAL PROVISIONS

- 5.1. The interpretation of the Rules and settlement of the disputes as well as issues not covered in the above mentioned regulations is the exclusive right of the Organizing Committee.
- 5.2. According to the Act of personal data protection as of 29 August, 1997, (Journal of Law No 133 as of 29 October, 1997, div. 833.) the Organizer of the Conference shall not transfer, sell and lend collected personal data of the Participants to other persons or institutions. The personal data provided by the Participant (name, address, phone No, e-mail address) are confidential and they shall be used exclusively for the purpose of communication between the Participant and the Organizers of the Conference.

Submission of the paper for the Conference means the acceptance of these rules and expression of consent for personal data processing by the Organizing Committee.

2ND INTERNATIONAL STUDENTS' CONFERENCE
ON CONSERVATION AND RESTORATION OF WORKS OF ART
KRAKOW, 12TH-13TH APRIL 2013

APPLICATION FORM

FIRST AUTHOR

Name and Surname:

University:

Faculty:

Telephone:

E-mail:

Country:

CO-AUTHORS

Name and Surname:

University:

Faculty:

Telephone:

E-mail:

Country:

TUTOR(S):

PAPER'S SUBJECT:

Short description:

Estimated time of presentation:

Sending application form is tantamount to consent to the processing of personal data by the organizers in the field related to the participation in the conference.

ΠΡΟΓΡΑΜΜΑ ΟΜΙΛΙΩΝ ΤΗΣ Ε.Μ.Α.Ε.Μ. - ΦΕΒΡΟΥΑΡΙΟΥ-ΙΟΥΝΙΟΥ 2013

Αγαπητοί Φίλοι και Μέλη της Ε.Μ.Α.Ε.Μ.,

Σας ενημερώνουμε ότι το πρόγραμμα των ομιλιών της «Εταιρείας Μελέτης Αρχαίας Ελληνικής Μυθολογίας» για το διάστημα Φεβρουαρίου – Ιανουαρίου 2013 θα έχει ως ακολούθως:

1. Παρασκευή, 1 Φεβρουαρίου 2013 ώρα 18.00.

Θέμα: « Μουσικής Μύηση»

Ομιλητής: κ. Γιώργος Λεκάκης, συγγραφέας-λαογράφος.

2. Παρασκευή, 1 Μαρτίου 2013 , ώρα 18.00.

Θέμα: « ΤΡΟΙΑ- Το Σκαμάνδριο Πεδίο και το Σκηνικό της Ιλιάδας ».

Ομιλητής: κ. Παναγιώτης Μάλφας, Ανεξάρτητος Ερευνητής

3. Παρασκευή, 5 Απριλίου 2013 , ώρα 18.00.

Θέμα: «Οι Απαρχές της Ελληνικής Γεωμυθολογίας μέσα από τις Κοσμογονίες της Θεογονίας και τον Κύκλο του Ηρακλή.»

Ομιλήτρια: κ. Έλενα Μητροπέτρου, Αρχαιολόγος, Δρ. Γεωμυθολογίας

4. Παρασκευή, 17 Μαΐου 2013

Θέμα: «Προϊστορικά/Μινωϊκά Ημερολόγια».

Ομιλητής: κ. Αλέξης Πλιάκος, Μαθηματικός και Επιχειρησιακός Ερευνητής

5. Παρασκευή, 7 Ιουνίου 2013

Θέμα: «Τί αντιλαμβάνονταν οι ήρωες του Ομήρου; (Από τον μύθο στον λόγο)».

Ομιλητής: κ. Παναγιώτης Μητροπέτρος, Φιλολόγος, Νομικός

Όλες οι ομιλίες θα πραγματοποιηθούν στην αίθουσα του ισογείου του Εθνικού Ιδρύματος Ερευνών (Βασ. Κωνσταντίνου 48).

ΕΤΑΙΡΕΙΑ ΜΕΛΕΤΗΣ ΑΡΧΑΙΑΣ ΕΛΛΗΝΙΚΗΣ ΜΥΘΟΛΟΓΙΑΣ (Ε.Μ.Α.Ε.Μ.)

ΚΛΕΙΣΟΒΗΣ 12, 106 77 ΑΘΗΝΑ

Τηλ.: 210 5235781, Fax: 210 5230031, E-mail: emaemsociety@gmail.com

**¹⁴C & ARCHAEOLOGY: GHENT, 8-12 APRIL
2013, DEADLINES FOR ABSTRACT
SUBMISSION AND EARLY REGISTRATION
APPROACH**

Dear,

We would like to inform you that we approach the **deadlines for early registration and abstract submission** for the 14C & Archaeology symposium in Ghent (8-12 April 2013). To be able to benefit from the reduced entrance fee of 300€ (250€ for students), attendants must register before 10 February 2013. Papers must be submitted before 1 February 2013.

On the website, you can register for the social events as well:

- Conference dinner on Tuesday 11 April 2013
- Visit of the Royal Institute for Cultural Heritage (Brussels) on Friday afternoon 12 April 2013.

Kind regards,

The 14C & Archeology Organizing Committee

**“THE COASTAL LEVANT DURING THE
MIDDLE BRONZE AGE” SESSION AT THE
2013 ANNUAL MEETING OF THE AMERICAN
SCHOOLS OF ORIENTAL RESEARCH,
BALTIMORE, MD, NOVEMBER 20TH-23RD,
CALL FOR PAPERS**

Call for Papers for the “The coastal Levant during the Middle Bronze Age” Session at the 2013 Annual meeting of the American Schools of Oriental Research to be held in Baltimore, MD, from November 20th to 23rd. The ASOR Annual Meeting is the yearly gathering of ASOR's vibrant academic community. The conference attracts over 900 scholars and enthusiasts of archaeology, linguistics, geography, epigraphy, anthropology, and other fields related to the study of the ancient Near East.

This session seeks to focus on the Middle Bronze Age as a period of dynamic social, economic and political processes for the Levantine coastal zone that are reflected, inter alia, in resettlement, reurbanization, trade, migration, and seeming cultural similarity spanning the region between the Egyptian Delta to Cilicia.

Among the goals of this session are:

- To encourage discussion of the degree of material cultural unity and disunity among the various among the various segments of the littoral zone;
- To consider the role of long shore interaction and coastal gateways in the various social and economic developments;
- To examine how various contemporary polities utilized the coastal landscape and environment;
- To explore how the littoral zone served as an interface between the Near Eastern and Mediterranean worlds;
- To consider how focusing on this geographical region may contribute to a better understanding of some of the broader historical questions:

the origin of the culture and population, patterns of migration, the rise and collapse of particular sub-regions and the emergence of the hybrid Egypto-Levantine kingdom based at Tel el Dab`a (Avaris)

It is hoped that this session will attract presentations from a variety of research areas, including studies of settlement patterns, architecture, ceramic analysis, archaeometallurgy, archaeozoology, paleoenvironment, etc. , as well as broader synthetic studies.

Interested speakers should submit a talk title and abstract (max. 250 words) by February 15th via ASOR's online abstract submission system:

<http://www.asor.org/am/2013/2013-call-2.shtml>.

Professional membership in ASOR is a prerequisite for participation in the Annual Meeting Program as a paper presenter (Associate Memberships and Contributing Memberships do not qualify). The only exception to this rule is for students enrolled at an Institutional Member school.

In addition to ASOR membership, registration for the Annual Meeting is also a requirement for all participants in the Annual Meeting Program.

All program participants must register for the Annual Meeting after submitting their abstracts for review. All of this can be done via the ASOR web site as well (www.asor.org).

Please direct any questions to session chair: Ezra Marcus (ezra@research.haifa.ac.il).

"CONSERVATION AND SITE PRESERVATION IN THE NEAR EAST" (ASOR 2013), CALLS FOR PAPERS

The American Schools of Oriental Research (ASOR) invites abstract submissions for a session on *Conservation and Site Preservation in the Near East * at the ASOR Annual Meeting, November 20-23, 2013 in Baltimore, MD.

The goal of the session is to create a forum where archaeologists and conservators can share research, exchange ideas, and discuss issues impacting the conservation of Near Eastern artifacts and sites.

Interested speakers should submit a talk title and abstract (max. 250 words) by February 15th via ASOR's online abstract submission system, a link to which can be found here <http://www.asor.org/am/2013/2013-call-2.shtml>. Membership in ASOR is required for submission.

Please direct questions to session chairs Suzanne Davis davissl@umich.edu or LeeAnn Barnes Gordon leeannbarnes@gmail.com.

CALL FOR PAPERS: GRADUATE ARCHAEOLOGY AT OXFORD ANNUAL CONFERENCE 2013

Graduate Archaeology at Oxford would like to invite graduate students and recent post docs for paper submissions to this year's GAO Conference:

What's New?

Innovation in archaeology and the archaeology of innovation.

22nd-23rd March 2013: Ioannou Centre for Classical and Byzantine studies, 66 St Giles, Oxford Graduate Archaeology at Oxford invites submissions for papers and posters to be presented at the annual conference in Oxford, March 2013.

This year the GAO annual conference is asking what's new in archaeology. We're interested in papers that explore any and all facets of innovation connected to archaeology, whether that's the archaeological study of past innovations, or innovation within the discipline itself.

Areas of interest include:

1. The idea of innovation. Novelty, revolution, improvement... What does the concept of innovation mean, and how can it be usefully applied by archaeologists?
2. Innovation in the past. From the earliest development of hominid technology to the archaeology of Modernity, what contributions is archaeology making to the study of the material development of new ideas, technologies, and ways of living?
3. New techniques or methods. What new applications of scientific techniques, new fieldwork methods, or other new ways of doing archaeology are currently being developed and applied?
4. New discoveries. Whether they're the result of a serendipitous find, or of years of painstaking searching, new discoveries have the power to revolutionise our knowledge about the past. Tell us about the ones that you're involved in.
5. New theories and ideas. Archaeology as a discipline has benefitted greatly from the application and adaptation of a huge number of theoretical and ideological perspectives. What new theories - or old theories applied in new ways - are changing your area of archaeology?

If you are interested in contributing a paper or poster please send an abstract of up to 300 words, your name and institution, and your presentation title to gao@arch.ox.ac.uk by 15th February 2013.

We especially welcome posters from students who are at an early stage of their research.

Presenter registration is £35 and includes the conference dinner, wine reception, coffee and lunches.

For any questions relating to the conference, please contact gao@arch.ox.ac.uk or philippa.puzey-broomhead@arch.ox.ac.uk, or visit <http://www.arch.ox.ac.uk/gao.html>

Joanna Palermo
Reading for a DPhil in Archaeology
School of Archaeology
University of Oxford

University College
High Street, Oxford OX1 4BH
+44 (0)777 124 2270

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –
JOB VACANCIES/FELLOWSHIPS

POST GRADUATE COURSE IN GREEK AND
ROMAN POTTERY (BRITISH SCHOOL AT
ATHENS)

The British School at Athens is organising an intensive course in Greek and Roman Pottery primarily intended for postgraduate students wishing to acquire or strengthen vital archaeological skills.

Applications from late stage undergraduates with a strong intention to continue their studies will also be considered.

Thanks to a generous grant from the Classical Association, we are able to offer a limited number of bursaries for participants on this course.

This intensive course gives participants a unique opportunity to gain hands-on experience with one of the major pottery sequences in Greece, guided by leading specialists in the field. Based at the British School's Study Centre at Knossos in Crete, it makes use of the rich holdings of the Stratigraphic Museum which include material from across the Mediterranean in all periods from the Early Bronze Age to Late Roman.

An application may be downloaded from the British School at Athens website:
http://www.bsa.ac.uk/pages/content.php?cat_id=116

Those wishing to apply for bursary funding should complete the relevant section of the application form.

Completed application forms and an academic reference letter should be emailed to the Dr Matthew Haysom, Knossos Curator by 21st February 2013 (knossoscurator@bsa.ac.uk).

INSTAP STUDY CENTER FOR EAST CRETE
2133 Arch Street, Suite 300
Philadelphia, PA 19103
USA

215-486-9914 215-496-9925 (fax) elizabethshank@hotmail.com

2013 RICHARD SEAGER DOCTORAL FELLOWSHIP APPLICATION GUIDELINES

The INSTAP Study Center for East Crete is pleased to announce the availability of one Doctoral fellowship to be awarded on a competitive basis to an eligible candidate for work to be done at the Study Center in Pacheia Ammos, Crete in 2013. A minimum of four weeks should be spent working at the Center. The fellowship is intended for scholars in the field of the Aegean Bronze Age/Early Iron Age who are working to complete their PhD Dissertations. The fellowship will be awarded in the amount of \$4,000. Applications must be received by e-mail no later than **March 31, 2013** and the award will be announced by **April 24, 2013**.

In addition to the completed application form, proposals should include a *curriculum vitae* of the applicant, a copy of their Dissertation Proposal, an outline of the Dissertation, and two letters of support, one from the head of your Dissertation Committee, and another from an additional member of your Committee. It is assumed that the applicant will have passed his or her Doctoral Examinations, and have a Dissertation Proposal that has been approved by his or her Department.

Applications and the required enclosures should be sent as attachments to:
elizabethshank@hotmail.com

Consideration for the fellowships is open to all candidates meeting the stated requirements. Awards are made irrespective of race, gender, religion, national origin, age, disability, marital status, sexual orientation, and actual or perceived medical conditions. It is possible that in the absence of qualified candidates with appropriate projects, a fellowship will not be awarded.

**INSTAP Study Center for East Crete
2013 RICHARD SEAGER DOCTORAL FELLOWSHIP
Cover Sheet**

Name of Applicant

Title of Dissertation

INSTAP Study Center for East Crete
2013 RICHARD SEAGER DOCTORAL
FELLOWSHIP
Application Form

1. Full name of applicant: _____ Social Security
Number: _____

2. Title of Dissertation: _____

3. Present Address: _____ Telephone: _____
Fax: _____
E-mail: _____

4. Institution: _____

5. Citizenship: _____

6. Name of the head of your Dissertation Committee:
Telephone number: _____
E-mail address: _____

7. Name of another Dissertation Committee Member:
Telephone number: _____
E-mail address: _____

8. Please list any publications by the applicant:

9. Please list any other fellowship applications for 2013:

Date to receive funding:

Method of payment: _____ A check in US dollars _____ A check in Euros

Where would you like your check to be sent?

If awarded the INSTAP Study Center for East Crete Richard Seager 2013 Doctoral Fellowship, I agree to abide by the terms of the award, including the submission of a final report detailing the work completed and a financial accounting by January 1, 2014. I agree to supply the Library of INSTAP Study Center for East Crete with a copy of my dissertation upon the completion of my degree.

Signature: _____

Date: _____

Proposed Plan of Study

Please provide a brief description of the work that you plan to complete while at the INSTAP Study Center for East Crete, and the dates that you intend use the Center's facilities. Your Proposed Plan of Study must fit on this page and one additional page.

JOB VACANCY: SCIENTIFIC RESEARCH OFFICER - FITCH LABORATORY, BRITISH SCHOOL AT ATHENS

The Fitch Laboratory of the British School at Athens, a centre of advanced research which promotes the integrated application of scientific techniques to the archaeology of Greece and the East Mediterranean, seeks a Scientific Research Officer to take charge of its chemical analysis facility and contribute to the further development of the laboratory's analytical, research and training capacity and the expansion of its international network of collaborations.

The Scientific Research Officer will be responsible for running and further developing the newly established Wavelength Dispersive X-Ray Fluorescence (WD-XRF) facility. S/he will be responsible for the calibration of the analytical instrument (BRUKER S8 Tiger 4K) and the critical application of established analytical protocols for ceramics, as well as the development of new analytical protocols for other materials, with the appropriate sample preparation methods, depending on emerging needs. S/he will be responsible for the preparation (with the help of laboratory assistant[s]) and analysis of large numbers of samples, the maintenance and further development of the relevant infrastructure and the handling of the relevant budgets. In consultation with the Laboratory Director, s/he will develop, execute or supervise research projects leading to high quality publications. These will involve collaborations with other academic or research institutions and, to a more limited extent, service provision. In addition, s/he will contribute to the training or supervision of undergraduate or postgraduate students, early career researchers or interns. In consultation with the Laboratory Director, s/he will contribute to the design of the research programme of the Fitch Laboratory and to funding applications.

You should hold a PhD in Archaeological Science (preferably with a BSc or MSc in Chemistry or another relevant physical science) or in an appropriate field such as Chemistry or Materials Science, combined with training/experience in archaeological science. A proven track record of research of international quality is essential. Experience with methods of elemental analysis of archaeological inorganic materials, including sample preparation, instrument calibration and running of analysis, is essential, and with WD-XRF is desirable (training on this instrument will be provided as necessary). Familiarity with Aegean or East Mediterranean archaeology, as well as knowledge of modern Greek, is desirable but not essential. Applicants must demonstrate evidence of the ability to actively engage in and contribute to a research group, to develop research agendas, to deliver training on specialist equipment and to manage laboratory access. Excellent organisational and inter-personal skills are essential for this post.

The post is based in Athens, Greece, and is currently offered for a fixed term of three years (with a probationary period of a year), in accordance with the funding package which supports it. Salary will be in the range of £28,000 - £30,000 per annum, plus private health insurance. The Scientific Research Officer will be required to abide by current appraisal procedures within the British School at Athens. S/he is directly accountable to the Laboratory Director, who will serve as line manager.

The closing date for receipt of applications is 15 March 2013.

Applications should be sent as an email attachment to the School Administrator, Mrs Tania Gerousi (school.administrator@bsa.ac.uk). Applicants are asked to supply the following:-

- ☐ A covering letter, giving the applicants contact details, outlining the reasons for applying, giving details of supporting enclosures, and summarising the applicant's principal qualifications for the job;
- ☐ A curriculum vitae, giving details of past employment, academic and other qualifications, any relevant experience, research interests and publications;
- ☐ The names, addresses, telephone numbers and email addresses of two referees, whom the candidate has contacted in advance and who have agreed to supply letters of reference which they will send to the School Administrator by the closing date;

Equality of opportunity is BSA policy. Shortlisted candidates will be interviewed in Athens during the second week of April 2013. The post should be filled by 1st June 2013.

For informal enquiries about the post please contact the Laboratory Director, Dr Evangelia Kiriati (fldirector@bsa.ac.uk).

FURTHER PARTICULARS

The BRITISH SCHOOL AT ATHENS is an educational charity founded in 1886. It now forms part of the British Academy's network of Sponsored Institutes and Societies (BASIS) which sustains and supports British research overseas. The School exists to promote research of international excellence in all disciplines pertaining to Greek lands, from fine art to science-based archaeology and in all periods to modern times. It does so through:

- a programme of research undertaken both alone and in collaboration with UK-based and other overseas institutions;
- an academic programme of seminars, lectures, and conferences;
- an internationally renowned library;
- the provision of services for its members, including applications for study and fieldwork permits; advice on the development of research programmes; access to accommodation and facilities in Athens and Knossos; provision of online services;
- promoting the use of its archival, laboratory, and museum collections by the scholarly community worldwide;
- the provision of funding (including studentships and visiting fellowships) for research in Greece, and to enable Greek researchers to visit the UK;
- the provision of internships and training courses for undergraduates, postgraduates, and schoolteachers.

Details of current School projects may be found on www.bsa.ac.uk.

The MARC AND ISMENE FITCH LABORATORY FOR ARCHAEOLOGICAL SCIENCE forms an integral part of the British School. Founded in 1974, it was the first of its kind in Greece. It specialises principally in the analysis of inorganic materials (mainly ceramics, as well as metals or metallurgical remains, wall paintings, and glass) with facilities for petrological analysis of archaeological and geological materials (facilities for thin section preparation and optical microscopy coupled with digital

photography systems) and WD-XRF (Wavelength Dispersive X-Ray Fluorescence) for chemical analysis. It houses comparative collections of over 25,000 archaeological samples and over 3,000 geological samples. Furthermore, it has equipment for geophysical prospection (a magnetometer and a resistivity meter). It also maintains reference collections of animal bones and seeds with ample space for storing and processing archaeological materials. It is staffed by its Director, a part-time administrator, at least one or two postdoctoral research fellows, a senior visiting fellow, one or two bursary holders, and project-related research collaborators. It offers annually a postgraduate training course on ceramic petrology. Its facilities are usually used by a number of, short- or long-term, visiting researchers. It hosts a monthly seminar series co-organized with the Wiener Laboratory of the American School of Classical Studies at Athens and it also organizes an annual open lecture (given by the senior visiting fellow), as well as workshops and conferences often in collaboration with other institutions.

Details of current Laboratory infrastructure and activities may be found on www.bsa.ac.uk.

FELLOWSHIPS: AT WOLFSON COLLEGE **(OXFORD)**

A stipendiary Junior Research Fellowship (3 years) at Wolfson College, Oxford, in the following subject is currently being offered: Lesser Known Language(s) and Script(s) of the Ancient World.

See <https://www.wolfson.ox.ac.uk/fellowships> for further details.

Deadline for applications is Friday 15 March 2013.

ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

MINOR UPDATE TO OXCAL V4.2 BETA

Minor update to OxCal v4.2 beta has been released ahead of a final release of v4.2. This version addresses some problems with the local version (not accessing the log and tabbed files) and some problems going from certain views to the raw view. It also adds a LnN log-normal distribution function which people may wish to use for priors.

Some documentation of mapping has been added to the manual.

No other significant changes.

Please let me know of any issues.

Best wishes

Christopher
christopher.ramsey@rlaha.ox.ac.uk

THE ARCHAEOLOGICAL INSTITUTE OF AMERICA'S SITE PRESERVATION GRANT

The Archaeological Institute of America's Site Preservation Grant is intended to fund projects that uphold the AIA's mission to preserve and promote the world's archaeological heritage for future generations. The goal of the grant, which carries a maximum value of \$25,000 to be awarded over the course of one to three years, is to maximize global preservation efforts and awareness through AIA support. The AIA is targeting projects that not only seek to directly preserve archaeological sites, but those that also emphasize outreach, education, and best practices intended to create a positive impact on the local community, students, and the discipline of archaeology as a whole.

Please note, applicants must first submit an inquiry form. If approved, applicants will have until February 15 to complete a full application.

The next deadline for this grant is Friday, February 15, 2013. All application materials must be received, not postmarked, by that date.

For more information or to submit an inquiry, please visit our website at <http://archaeological.org/grants/706>.

To learn about past winners, visit our projects page at <http://archaeological.org/sitepreservation/projects>.

Kelly Lindberg
Site Preservation Program Administrator
ARCHAEOLOGICAL INSTITUTE *of* AMERICA
656 Beacon Street, 6th Floor
Boston, MA 02215
Phone: 617-358-6098
Fax: 617-353-6550
klindberg@aia.bu.edu
www.archaeological.org

INTERNET SITES

NEW ONLINE ISRAEL ARCHAEOLOGY ARCHIVE, BY CHANA YA'AR

Israel's Antiquities Authority (IAA) has launched a new Israel Archaeological Archive, to be accessible on the Internet in English, with a general explanation also available in Hebrew.

A Heritage Program jointly initiated by the Prime Minister's Office and the IAA, the digital archive will feature tens of thousands of documents, photos, maps and plans from the period of British Mandate (1919-1948), ranging from Akko to Jerusalem.

"The archive is an invaluable project, a site that will consolidate some 30,000 Israeli antiquities web sites into one location for worldwide access," explained Dr. Uzi Dahari, deputy director of the Antiquities Authority. "The scientific importance of the archive is invaluable; it is the only one of its kind in Israel and in the world. In Israel there are approximately 30,000 known and declared antiquities sites that constitute our heritage – the largest and most important asset of the State of Israel."

Uploading the material to the site required special preparations, with the task of scanning entrusted to ImageStore Systems Ltd. "This is because the archival material is especially delicate and sensitive and cannot be scanned with industrial equipment, rather it can only be done individually and manually," the IAA said in a statement.

"The information constitutes the principal foundation of archaeological research of the past one hundred years," noted a spokesperson at the Heritage Program in the Prime Minister's Office.

The project is funded under the PMO's "Landmarks" heritage program. "We will make this extraordinary information accessible to the general public in Israel and abroad," affirmed the IAA spokesperson.

The new archive may be accessed at www.iaa-archives.org.il.

Please visit the site:

http://www.israelnationalnews.com/News/Flash.aspx/259914#.UPbo7meSj_M

ARCANE FINAL CONFERENCE REPORT **DOWNLOAD**

A short report on the ARCANE (Associated Regional Chronologies of the Ancient Near East and the Eastern Mediterranean in the Third Millennium BC) Final Conference, which took place in Bern slightly more than a year ago, has recently appeared in the German journal "Antike Welt" (in German language). It can be downloaded from:
http://www.arcane.uni-tuebingen.de/reports/ARCANE_Final_Conference.pdf.

An actual and overall chronological chart of the project can be downloaded from:
http://www.arcane.uni-tuebingen.de/EA-EM-EL_phasing_v5-4-4.pdf.

The ARCANE project, which has been running since 2005 finally reached its publication phase, presenting the results of the regional and transversal groups.

THE ARCHIMEDES PALIMPSEST

This tenth century manuscript is the unique source for two of Archimedes Treatises, The Method and Stomachion, and it is the unique source for the Greek text of On Floating Bodies. Discovered in 1906 by J.L. Heiberg, it plays a prominent role in his 1910-15 edition of the works of Archimedes, upon which all subsequent work on Archimedes has been based. The manuscript was in private hands throughout much of the twentieth century, and was sold at auction to a private collector on the 29th

Please visit the site:

http://books.google.gr/books/about/The_Archimedes_Palimpsest.html?id=zX8OG3QoF4C&redir_esc=y

CSA NEWSLETTER - JANUARY, 2013, ISSUE **– VOLUME XXV, NO. 3**

Announcing that the January, 2013, issue – Volume XXV, No. 3 – of the _CSA Newsletter_ is now available at <http://csanet.org/newsletter/#winter13>

"From the sorting table to the web: The NPAP research data portal for ceramics"
An extensive and inclusive database for ceramics -- Vladimir Stissi, Jitte Waagen, and Nienke Pieters <http://csanet.org/newsletter/winter13/nlw1301.html>

"AutoCAD®; and the Resurrection of an Old Excavation"
Mapping Hellenistic Gordion -- Martin Wells
<http://csanet.org/newsletter/winter13/nlw1302.html>

"Electronic Publication — Addendum III"
More in a seemingly unending series -- Harrison Eiteljorg, II
<http://csanet.org/newsletter/winter13/nlw1303.html>

"The Blog in Academic Settings"
A fad whose day has passed or . . . ? -- Andrea Vianello
<http://csanet.org/newsletter/winter13/nlw1304.html>

"The Redford Conference in Archaeology"
An excellent conference about digital technologies -- Chris Mundigler
<http://csanet.org/newsletter/winter13/nlw1305.html>

Comments on any Newsletter article are welcome. Please write to the editor at csanet.org.

We have for some time provided a mechanism for comments about articles in the newsletter. The mechanism may be too cumbersome. If there were a simpler way for readers to add their comments, please let us know by writing to editor@csnet.org

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

**JOURNAL OF MEDITERRANEAN
ARCHAEOLOGY, VOL 25, NO 2 (2012)**

Table of Contents

Editorial: JMA's Silver Anniversary (1988–2012) PDF Open Access

A. Bernard Knapp, John F. Cherry, Peter van Dommelen, Nicola
Terrenato, Carl Knappett, Joan Sanmartí 3-20

Articles

The Diffusion of Obsidian in the Northwestern Mediterranean: Toward a New Model of
the Chassey Culture?

Vanessa Léa 21-47

Recovering the Hidden Landscape of Copper Age Sicily

Gianna Ayala 49-70

Technical and Social Considerations of Tools from Roman-period Ceramic Workshops at
Sagalassos (Southwest Turkey): Not Just Tools of the Trade?

Elizabeth A. Murphy, Jeroen Poblome 71-91

Globalizing Mediterranean Identities: The Overlapping Spheres of Egyptian, Greek and
Roman Worlds at Trimithiss Anna Lucille Boozer.

Please visit the site:

<https://www.equinoxpub.com/journals/index.php/JMA/issue/current> [Go there for
links to purchasable pdfs]



Τμήμα Προστασίας & Συντήρησης Πολιτισμικής Κληρονομιάς

**ΠΕΡΙΛΗΨΕΙΣ ΠΡΩΤΟΥ ΚΥΚΛΟΥ ΔΙΑΛΕΞΕΩΝ
ΓΙΑ ΤΗΝ ΣΥΝΤΗΡΗΣΗ & ΤΟΝ ΠΟΛΙΤΙΣΜΟ**

Αμφιθέατρο Α.ΤΕΙ Ιονίων Νήσων-Πλ. Κάλβου, Ζάκυνθος

Συντονιστής- Επιμέλεια: Δρ. Χρήστος Χ. Καρύδης

2012

ΠΕΡΙΕΧΟΜΕΝΑ

- 1. Οι Δυτικοευρωπαϊκές Επιδράσεις στην Μεταβυζαντινή Αγιογραφία της Κρήτης και των Ιονίων Νήσων**
Ομιλήτρια: Δρ. Ελένη Κουλουμπή
Ημερομηνία: 10/05/2012 Σελ. 3
- 2. Πολιτισμός και Τεχνολογία: Μια πρόσφατη σχέση. Διδασκαλία μαθημάτων με θέμα τον πολιτισμό στην τριτοβάθμια εκπαίδευση με χρήση της ψηφιακής τεχνολογίας**
Ομιλήτρια: Δρ. Δήμητρα Κρίγκα
Ημερομηνία: 11/05/2012 Σελ. 5
- 3. Απολιθωμένο Δάσος της Λέσβου: Δημιουργία- Ανακάλυψη- Προστασία- Έργα Συντήρησης**
Ομιλήτρια: Ευαγγελία Κυριαζή, MSc
Ημερομηνία: 14/05/2012 Σελ. 7
- 4. Συντήρηση Χειρογράφων από Αιθιοπία**
Ομιλητής: Δρ. Νικόλας Σαρρής
Ημερομηνία: 16/05/2012 Σελ. 10
- 5. Βυζαντινές & Μεταβυζαντινές Τοιχογραφίες στη Ζάκυνθο**
Ομιλητής: Δρ. Ιωάννης Χουλιάρης
Ημερομηνία: 23/05/2012 Σελ. 13
- 6. Υφάσματα του Αγ. Όρους: Καταγραφή & Προληπτική Συντήρηση**
Ομιλητής: Δρ. Χρήστος Καρύδης
Ημερομηνία: 30/5/2012 Σελ. 16
- 7. Τέχνη & Νέες Τεχνολογίες**
Ομιλητής: Νικόλαος Σαλαμούρης, MA
Ημερομηνία: 06/06/2012 Σελ. 18
- 8. Τα Σύγχρονα Υλικά στη Σύγχρονη Τέχνη: Ο Ρόλος του Συντηρητή**
Ομιλήτρια: Άλκηστις Περδικάρη, MA
Ημερομηνία: 06/06/2012 Σελ. 20

Οι Δυτικοευρωπαϊκές Επιδράσεις στην Μεταβυζαντινή Αγιογραφία της Κρήτης και των Ιονίων Νήσων

Δρ. Ελένη Κουλουμπή

Επιστήμων της Συντήρησης- Εθνική Πινακοθήκη & Μουσείο Αλεξάνδρου Σούτζου
Επιστ. Συνεργάτης Α.ΤΕΙ Ιονίων Νήσων- Τμήμα Προστασίας & Συντήρησης
Πολιτισμικής Κληρονομιάς
ekouloumpi@yahoo.com

Η Ελληνική φορητή ζωγραφική του τέλους του 15ου αιώνα έως τις αρχές του 19ου αιώνα, γνωστή και ως Μεταβυζαντινή τέχνη, υπήρξε η μεταβατική περίοδος κατά την οποία οι ζωγράφοι σταδιακά άφησαν την παραδοσιακή θρησκευτική ζωγραφική της αυγοτέμπερας σε ξύλινο υπόστρωμα προκειμένου να μεταβούν στην κοσμική ζωγραφική σε λάδι. Η συγκεκριμένη εργασία περιγράφει την φυσικοχημική μελέτη αντιπροσωπευτικών έργων της Κρητικής και της Επτανησιακής Σχολής, ώστε να μελετηθεί η εξέλιξη των τεχνικών ζωγραφικής της περιόδου αυτής, να ανιχνευθούν πιθανές τροποποιήσεις στα υλικά κατασκευής και τέλος να δημιουργηθεί ένα επιστημονικό υπόβαθρο των τεχνικών αγιογραφίας το οποίο μέχρι τώρα ήταν βασισμένο στις πραγματείες των καλλιτεχνών της εποχής.

Η συγκεκριμένη φυσικοχημική έρευνα επικεντρώθηκε στον χαρακτηρισμό των υλικών του ζωγραφικού στρώματος και αυτό επιτεύχθηκε με την χρήση της υπέρυθρης φασματοσκοπίας (μFTIR), της ηλεκτρονικής μικροσκοπίας με ακτίνες X (SEM-EDX), και της αέριας χρωματογραφίας (GC-FID). Επιπλέον και όπου αυτό ήταν απαραίτητο και εφικτό χρησιμοποιήθηκε, συμπληρωματικά, η οπτική μικροσκοπία, και φασματοσκοπία Raman.

Η Μεταβυζαντινή τέχνη της αγιογραφίας, υπήρξε η μετάβαση κατά την οποία οι ζωγράφοι, μέσω των άμεσων επιδράσεων με την Δύση, τόλμησαν να ενσωματώσουν «μοντέρνα» υλικά στην τεχνική τους, να απελευθερωθούν από την αυστηρή τεχνοτροπία της Βυζαντινής τέχνης και να αποτελέσουν το πάτημα για την Νεοελληνική τέχνη.

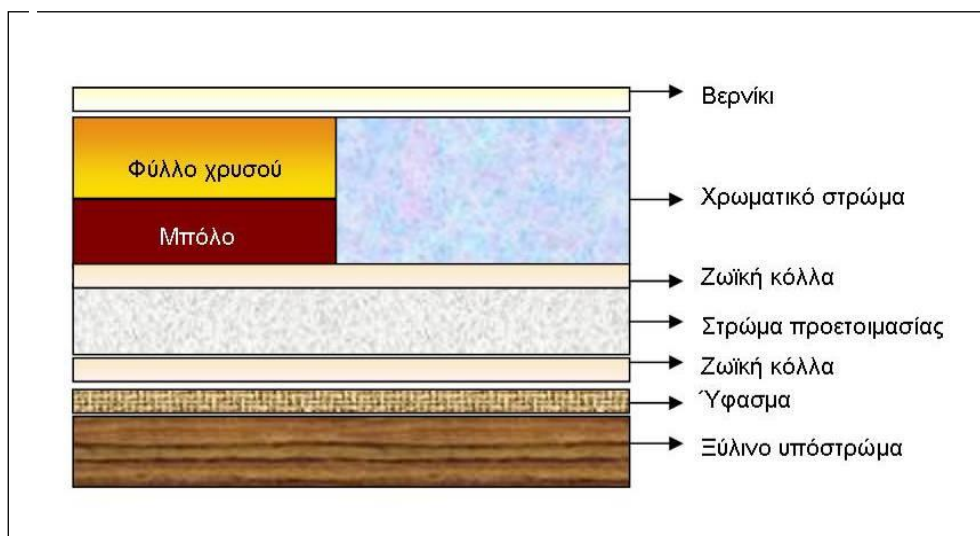
Η πτώση της Βυζαντινής Αυτοκρατορίας το 1453, σηματοδοτεί την αρχή μιας από τις πιο σημαντικές περιόδους της Ελληνικής Ιστορίας της Τέχνης. Η Μεταβυζαντινή περίοδος, η οποία διήρκησε έως τις αρχές του 19^{ου} αιώνα, υπήρξε η μεταβατική περίοδος όπου ουσιαστικά ανοίγουν τα σύνορα με τον δυτικό κόσμο. Η ενετική κυριαρχία, η μετάβαση πολλών καλλιτεχνών κυρίως στην Βενετία, το εμπόριο αλλά και το γεγονός ότι εκείνη τη περίοδο η τέχνη βιώνει σημαντικές και καθοριστικές αλλαγές στην δύση, υπήρξαν η αφορμή για την γέννηση σημαντικών σχολών ζωγραφικής με πιο σημαντικές την Κρητική (1453-1669) και την Επτανησιακή Σχολή (1669-1833).

Παράλληλα, η τέχνη της θρησκευτικής ζωγραφικής σε ξύλο, αλλάζει σταδιακά ύφος: από θρησκευτικό σε κοσμικό. Συγχρόνως, η τεχνική διαφοροποιείται: ο καλλιτέχνης αλλάζει το μέσο έκφρασης και από την αυγοτέμπερα σε ξύλινο υπόστρωμα, εισαγάγει την ελαιογραφία σε μουσαμά. Επιπλέον, οι πολιτισμικές επιδράσεις επέφεραν αλλαγή και στους εικονογραφικούς τύπους: ο καλλιτέχνης ξεφεύγει από τους αυστηρούς Βυζαντινούς κανόνες απεικόνισης και αποκτά ελευθερία έκφρασης.

Πως όμως έγιναν αυτές οι αλλαγές; Υπήρξε μια μεταβατική τεχνική κατά την οποία οι καλλιτέχνες παράλληλα με την ενσωμάτωση δυτικών στοιχείων στην σύνθεσή τους, εισήγαγαν σταδιακά διαφορετικά υλικά από αυτά που υπαγόρευε η Βυζαντινή τεχνική ή άλλαξαν απότομα τεχνική από την αυγοτέμπερα στην ελαιογραφία;

Οι θετικές επιστήμες, προσφέροντας πλέον τη δυνατότητα ανασύνθεσης της τεχνικής ενός καλλιτέχνη, έρχονται ν' απαντήσουν σε ερωτήματα που απασχολούσαν τους μελετητές επί χρόνια. Σκοπός της συγκεκριμένης έρευνας ήταν ο χαρακτηρισμός των

υλικών κατασκευής των εικόνων (εικόνα 1), προκειμένου να ανιχνεύσει τυχόν διαφοροποιήσεις στην τεχνική που προκύπτουν από τις επιρροές με την Δύση.



Εικόνα 1: Τυπική δομή μιας εικόνας (Πηγή: Ε. Κουλουμπί)

Πολιτισμός και Τεχνολογία: Μια πρόσφατη σχέση. Διδασκαλία μαθημάτων με θέμα τον πολιτισμό στην τριτοβάθμια εκπαίδευση με χρήση της ψηφιακής τεχνολογίας

Δρ. Δήμητρα Κρίγκα

Αρχαιολόγος, Επιστ. Συνεργάτης Α.ΤΕΙ Ιονίων Νήσων- Τμήμα Προστασίας &
Συντήρησης Πολιτισμικής Κληρονομιάς
mimikriga@gmail.com

Η παρούσα διάλεξη έχει ως σκοπό να παρουσιάσει το πως ενισχύεται η πρόσληψη πληροφοριών για τους φοιτητές μέσω της διδασκαλίας στην τάξη με την χρήση εποπτικών μέσων ψηφιακής τεχνολογίας.

Η σχέση πομπού και δέκτη μέσα στην τάξη γίνεται πολύ πιο εύκολη με την χρήση της σύγχρονης ψηφιακής τεχνολογίας. Άλλωστε, η χρήση της εικόνας (εικόνα 1) και ο συνδυασμός της με τον ήχο, ως τμήμα της εκπαιδευτικής διαδικασίας έχει πολύ μεγαλύτερα ποσοστά επιτυχίας από ότι αν χρησιμοποιηθεί η παραδοσιακή μέθοδος της παράδοσης με στείρα απαρίθμηση των δεδομένων που πρέπει να συζητηθούν μέσα στο χρονικό πλαίσιο εξαμηνιαίου μαθήματος.

Η δύναμη της εικόνας είναι τεράστια και όταν μάλιστα συνοδεύεται και από ήχο (ομιλία ή μουσική), τότε τα ποσοστά επιτυχίας και αποτύπωσης στον ανθρώπινο εγκέφαλο του μηνύματος που αυτή φέρει είναι μεγάλα. Αξιολογώντας την θα έλεγα ότι μπορεί ακόμη να συγκριθεί με την δύναμη της διαφήμισης.

Αναφορικά με το εξειδικευμένο θέμα της διδασκαλίας μαθημάτων ανθρωπιστικών σπουδών και λόγω του θεωρητικού τους χαρακτήρα, χρειάστηκε να περάσει πολύς καιρός για να προχωρήσουν οι διδάσκοντες στην από έδρας προφορική «παράδοση» στην χρήση εποπτικών μέσων κατ' αρχήν και στην χρήση εποπτικών ψηφιακών μέσων στην συνέχεια.

Τα περισσότερα από τα ελληνικά μουσεία, είτε είναι κρατικά είτε ιδιωτικά, έχουν εισάγει στις εκθέσεις τους εποπτικά μέσα που χρησιμοποιούν τις νέες ψηφιακές τεχνολογίες για να λειτουργήσουν, ενώ θεωρούν πολύ φυσικό να επικοινωνούν με το κοινό τους μέσω διαδικτύου. Πολλά μουσεία και φορείς πολιτισμού αναγνωρίζοντας την δύναμη και την εξάπλωση των μέσων κοινωνικής δικτύωσης, δημιούργησαν εκτός από την επίσημη ιστοσελίδα τους, σελίδα ή «προφίλ», όπως λέγεται και εκεί αναρτούν τις ανακοινώσεις για τις εκδηλώσεις τους και ότι άλλο τα αφορά. Με τον τρόπο αυτό η ενημέρωση είναι άμεση και ενδεχομένως αυξάνεται η ανταπόκριση των δεκτών του εκάστοτε μηνύματος, καθώς είναι σε θέση να γνωρίζουν κάποια εκδήλωση από πολύ νωρίς, οπότε προσαρμόζουν εγκαίρως το πρόγραμμα τους ή λόγω συμπάθειας προς το μέσο κοινωνικής δικτύωσης, η συμπάθεια μεταδίδεται και σε όσα εκείνο μεταδίδει και κατά συνέπεια όσα εκείνο μεταδίδει ωφελούνται.

Με βάση την πολιτική των σύγχρονων μουσείων σχετικά με την εξυπηρέτηση του απομακρυσμένου χρήστη μέσα από τις ενημερώσεις της ιστοσελίδας τους, πιστεύω ότι μπορεί να έχει εκπαιδευτικό χαρακτήρα η χρήση ψηφιακού εποπτικού υλικού στην τάξη, μιλώντας σε φοιτητές ενός ιδρύματος της ανώτατης εκπαίδευσης, το οποίο βρίσκεται μακριά από τα κέντρα λήψης των αποφάσεων και μακριά από τα μεγάλα μουσεία και φορείς πολιτισμού της χώρας.

Ιδιαίτερα σημαντική ως προς την καλύτερη αντίληψη του χώρου, των μεγεθών και της αίσθησης που έδιναν τα κτίρια στην αρχαιότητα είναι η χρήση των δυνατοτήτων που προσφέρουν οι τρισδιάστατες ψηφιακές αναπαραστάσεις.

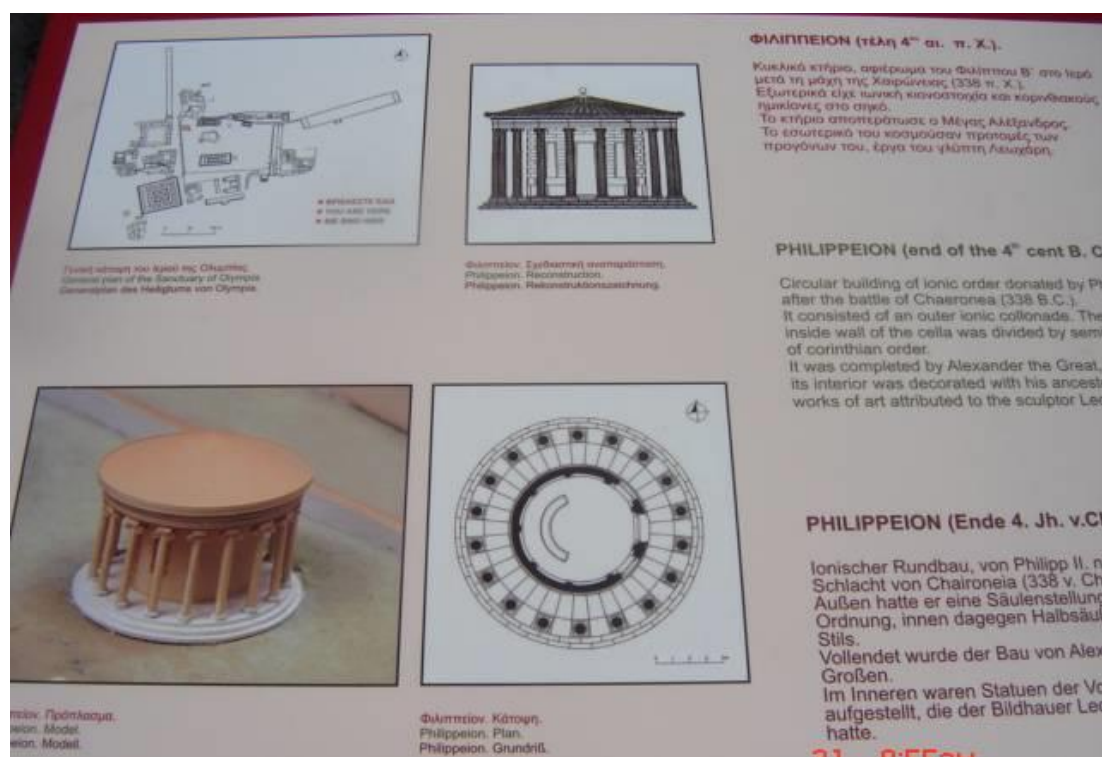
Αναφορικά τώρα με τους τρόπους επίλυσης του προβλήματος της έλλειψης πρόσβασης σε βιβλιογραφία, θα ήταν παράλειψη να μην αναφερθεί η *wikipedia*, η οποία αποτελεί κατά την γνώμη μου ένα από τα εγκυρότερα διαδικτυακά εγχειρίδια μελέτης με

ανοικτή πρόσβαση. Τα περισσότερα από τα λήμματα της είναι πολύ έγκυρα και με τον απλουστευμένο τρόπο που έχουν γραφτεί είναι κατανοητά από τους πολλούς και για αυτό πολύ χρήσιμα για τους φοιτητές που ξεκινούν την ενασχόληση τους με την έρευνα.

Πολύ χρήσιμες μελέτες μπορεί κανείς να βρει στο δημόσιο καταθετήριο του Εθνικού Κέντρου Τεκμηρίωσης, το οποίο σε συνεργασία με το Εθνικό Ίδρυμα Ερευνών και το Κέντρο μελέτης ελληνικής και ρωμαϊκής αρχαιότητας έχουν προχωρήσει στην ψηφιοποίησης μεγάλου όγκου δεδομένων από πολλά κεφάλαια της αρχαιολογίας και της ιστορίας.

Αυτό που δεν πρέπει να φεύγει από το μυαλό κανενός διδάσκοντος και σε καμμία στιγμή, είναι το ότι καλή η δύναμη της τεχνολογίας, αλλά δεν μπορεί ούτε το 50% να φθάσει της αξίας του πραγματικού βιβλίου. Η ψηφιακή τεχνολογία μπορεί να λειτουργεί ως δεκανίκι της γνώσης, εκεί που δεν μπορεί να φθάσει με ευκολία το βιβλίο, αλλά χρησιμοποιώντας τις ψηφιακές δυνατότητες μαθαίνεις την μέθοδο προσέγγισης της έντυπης και έτσι όταν φθάσει η στιγμή της, όταν δηλ. αποκτήσει κανείς πρόσβαση στα ίδια τα βιβλία, τότε δεν θα αποτελούν *terra incognita*.

Δεδομένου του ότι η γνώση που παρέχεται από το διαδίκτυο έχει περισσότερο τον χαρακτήρα του άμεσου και στιγμιαίου και του μη μόνιμου και βασίζεται περισσότερο στην εντύπωση και λιγότερο στην κατανόηση και γνώση, τα επιστημονικά δεδομένα που μπορεί να αποκτηθούν μέσω του διαδικτύου είναι συντομότερα από τα αντίστοιχα τους σε έντυπη μορφή. Αυτό δεν είναι αναγκαία κακό, διότι δημιουργεί σε βάθος χρόνου ενημερωμένους πτυχιούχους και αυριανούς επαγγελματίες.



Εικόνα 1. Εποπτικός πίνακας με στοιχεία για την Θόλο της Επιδαύρου. (Πηγή: Αρχαιολογικός χώρος Επιδαύρου).

Απολιθωμένο Δάσος Λέσβου: Δημιουργία-Προστασία-Ανακάλυψη-Συντήρηση

Ευαγγελία Κυριαζή, MSc

Συντηρήτρια Αρχαιοτήτων & Έργων Τέχνης (ΠΕ), Εργ. Συνεργάτης Α.ΤΕΙ Ιονίων
Νήσων- Τμήμα Προστασίας & Συντήρησης Πολιτισμικής Κληρονομιάς

Evangelia_Kyriazi@yahoo.gr

Το Απολιθωμένο Δάσος Λέσβου (ΑΔΛ)¹ βρίσκεται στην καλυμμένη από ηφαιστειακά πετρώματα Δ χερσόνησο του νησιού. Χρονολογείται στο Μειόκαινο, όταν η Λέσβος αποτελούσε τμήμα της Αιγαίδας και καλύπτονταν από πυκνό τροπικό-υποτροπικό δάσος.

Η υποβύθιση της Αφρικανικής λιθοσφαιρικής πλάκας υπό την Ευρασιατική οδήγησε πριν από 20.000.000 χρόνια (20 Ma) στη δημιουργία ηφαιστειών στο ΒΑ Αιγαίο. Οι εκρήξεις τους δημιούργησαν ωστικό κύμα που κατέστρεψε το δάσος, ρίχνοντας απογυμνωμένους στο έδαφος τους περισσότερους κορμούς οι οποίοι καλύφθηκαν από πυροκλαστικά υλικά. Το νερό της βροχής δημιούργησε λάσπη που έρευνε στις γειτονικές περιοχές καλύπτοντας τη βλάστηση. Τα πλούσια σε Si υδροθερμικά ρευστά εντός της λάσπης προκάλεσαν τη μόριο-προς-μόριο αντικατάσταση του οργανικού ιστού των παγιδευμένων φυτών με SiO₂ οδηγώντας στην τέλεια διατήρηση των μορφολογικών και ανατομικών χαρακτηριστικών όπως φλοιός, αυξητικοί δακτύλιοι, εντεριώνη, εντεριώνιες ακτίνες και ρητινοφόροι αγωγοί.

Σήμερα, φυτικά απολιθώματα ανακαλύπτονται ιστάμενα ή κατακείμενα, σε ξηρά, ακτή και θάλασσα, είτε στην επιφάνεια του εδάφους λόγω φυσικής διάβρωσης, ή παγιδευμένα στον ηφαιστειακό τόφο. Η απολιθωμένη χλωρίδα περιλαμβάνει κορμούς, κλάδους, κλαδίσκους, ριζικά συστήματα, κουκουνάρες, πευκοβελόνες και αποτυπώματα φύλλων και εκπροσωπείται από πάνω από 45 είδη από τις τάξεις των πτεριδόφυτων, κωνοφόρων και αγγειόσπερμων. Οι απολιθωμένοι κορμοί φτάνουν σε εντυπωσιακά μεγέθη με διαμέτρους έως 3m, ύψη έως 7m, μήκη έως 20m και περίμετρους έως 13m.

Το κύριο υλικό τους είναι το Si. Τα χρώματά τους οφείλονται στην παρουσία ορυκτών στοιχείων στη λασποροή κατά τη διάρκεια της απολίθωσης. Οξείδια Fe αποδίδουν κόκκινο-καφέ χρώμα, το Si λευκό-γκρι, το άμορφο Si κιτρινοπράσινο, το Mg ροζ, τα οξείδια Mg μαύρο και του Cu πράσινο.

Εκπρόσωποι της παλαιοπανίδας βρέθηκαν σε λιμναία ιζήματα, με διαφορετικό τρόπο απολίθωσης. Περιλαμβάνουν το *Prodeinotherium bavaricum*, από τα αρχαιότερα απολιθώματα προβοσκιδωτών στην Ευρώπη. Πρόσφατες έρευνες έφεραν στο φως απολιθωμένα δόντια από χειρόπτερα, τρωκτικά, εντομοφάγα, φρουτοφάγα ζώα, γαστρόποδα και μικρές σαύρες, και ωτόλιθους μικρών ψαριών. Με χρονολόγηση πιθανόν πριν από 18.4±0.5 Ma, τα ευρήματα κατατάσσονται στις παλαιότερες παλαιοπανίδες μικροθηλαστικών στην Ελλάδα.

Το ΑΔΛ ήταν γνωστό από την αρχαιότητα, με αναφορές από το Θεόφραστο (371 π.Χ.) και τον Πλίνιο. Η πρώτη επιστημονική αναφορά και αναγνώριση απολιθωμάτων έγινε από τον Αυστριακό παλαιοβοτανολόγο Unger (1845). Το 1986 το κράτος κυρήσσει το ΑΔΛ προστατευόμενο μνημείο της φύσης. Το 1994 ιδρύεται το Μουσείο Φυσικής Ιστορίας ΑΔΛ με σκοπό τη μελέτη, προστασία, συντήρηση και ανάδειξη του μοναδικού αυτού μνημείου της φύσης. Από το 1997 πραγματοποιούνται οι πρώτες ανασκαφές, περιφράσσονται οι σημαντικότερες απολιθωματοφόρες θέσεις και δημιουργούνται επισκέψιμα πάρκα. Για την προστασία των απολιθωμάτων κατασκευάζονται στέγαστρα,

¹ Ευχαριστίες οφείλονται στο Δρ. Ν. Ζούρο, γεωλόγο και διευθυντή, και στην Δρ. Κ. Βασιλειάδου, γεωλόγο-παλαιοντολόγο του Μουσείου Φυσικής Ιστορίας Απολιθωμένου Δάσους Λέσβου, για την συνεργασία και την παραχώρηση πληροφοριών.

τοιχία, βάσεις στήριξης, ενώ δίνεται κλίση στο έδαφος για την απορροή υδάτων. Εργασίες συντήρησης τελούνται από το 1999.

Για την αφαίρεση σωμάτων όπως σκόνη, χώμα, πυροκλαστικό υλικό, αργιλικές επικαθίσεις, βλάβιση, λειχήνες, άλατα, προϊόντα διάβρωσης κ.ά. πραγματοποιείται καθαρισμός αναλόγως του τύπου των επικαθίσεων και του πορώδους και της ευαισθησίας του κάθε απολιθώματος, μηχανικά με πλήθος εργαλείων, με H_2O , οργανικούς διαλύτες, H_2O_2 , HCl , πάστες όπως EDTA και σπιρίτιος, και υπερήχους.

Παράγοντες όπως ασταθείς T και RH, διαφορική συστολή-διαστολή, τριχοειδής αναρρίχηση διαλυτών αλάτων, ρίζες φυτών και βανδαλισμός οδηγούν στον κατακερματισμό των απολιθωμάτων σε εκατοντάδες κομμάτια. Για τη συγκόλλησή τους χρησιμοποιούνται διαλύματα Paraloid® B67 20-60% w/w σε C_3H_6O , εποξικές ρητίνες και κονιάματα. Για λόγους αναστρεψιμότητας προηγείται επάλειψη των επιφανειών με διάλυμα Paraloid® B67 ή B72.

Για την αποφυγή συγκέντρωσης επικαθίσεων και ύδατος και πρόληψη ανάπτυξης οργανισμών σε ρωγμές εγχέονται διαλύματα Paraloid® B67 2,5% - 30% w/w σε C_3H_6O . Για τη συμπλήρωση μεγάλων ρωγμών και οπών, στο μίγμα προστίθενται πυριτική άμμος και χρωστικές.

Ενίοτε για λόγους στερέωσης χρησιμοποιούνται αραιά υδατικά γαλακτώματα όπως Primal® AC532K. Για ταυτόχρονο καθαρισμό και στερέωση σε πολύ πορώδεις και κονιορτοποιημένες επιφάνειες με υψηλή πειεκτικότητα σε μέταλλα εφαρμόζεται Paraloid B48N 2 - 4% w/w σε C_3H_6O .

Η στερέωση και υδροφοβίωση των in situ απολιθωμάτων επιτυγχάνεται με εφαρμογή Rhodorsil RC70 (ethyl silicate με ουδέτερο καταλύτη) και Rhodorsil®RC90 (ethyl silicate με ουδέτερο καταλύτη και μεθυλφενυλική ρητίνη) αντίστοιχα, είτε καθαρών, είτε σε διαλύματα με white spirit, με πινέλο, έγχυση ή ψεκασμό αναλόγως των αναγκών του κάθε απολιθώματος.

Σε περίπτωση που κριθεί αναγκαία η μεταφορά ενός απολιθώματος, αυτό γίνεται με τον εγκλεισμό του σε νάρθηκα από πολλαπλές στρώσεις συρματοπλέγματος, υφασμάτων και γύψου. Η μεταφορά πραγματοποιείται με γερανό και ο νάρθηκας αφαιρείται μηχανικά με την εισαγωγή του απολιθώματος στο εργαστήριο. Για μικρότερα απολιθώματα εφαρμόζονται γάζες με διαλύματα Primal® AC 532K ή Vinavil® Ravemul M18, που αφαιρούνται μηχανικά και χημικά με χρήση C_3H_6O .

Καθώς η έλλειψη ή η ελλιπής γνώση οδηγούν στη μη κατανόηση της σπανιότητας και της ευαισθησίας των απολιθωμάτων, και σε αδιαφορία για την προστασία τους, το μουσείο πραγματοποιεί εκπαιδευτικά προγράμματα από το 1997. Το 2006 δημιουργούνται εκπαιδευτικά προγράμματα για τη συντήρηση στα ελληνικά και αγγλικά που απευθύνονται σε παιδιά ηλικίας 8-12 και 13-18 ετών. Σκοπός τους η ευαισθητοποίηση των παιδιών για την ευαισθησία, σπανιότητα και σημασία των απολιθωμάτων, η κατανόηση της αναγκαιότητας λήψης προστατευτικών μέτρων και η αναγκαιότητα και σημασία των διαφόρων στάδιων συντήρησης, και η ενίσχυση του σεβασμού προς τα απολιθώματα, τους εργαζόμενους και το έργο τους. Τα εκπαιδευτικά προγράμματα περιλαμβάνουν ενημέρωση για τη δημιουργία του ΑΔΛ, για την κατάσταση των απολιθωμάτων τη στιγμή της εύρεσής τους και τα στάδια ανασκαφής και συντήρησης. Μέσω παιχνιδιών όπως ακροστοιχίδες, σταυρόλεξα, ερωτήσεις γνώσεων αλλά και πρακτική εξάσκηση επάνω στον καθαρισμό απολιθωμάτων, τα παιδιά έρχονται σε άμεση επαφή με τα απολιθώματα και το φυσικό τους περιβάλλον, κατανοούν το χρόνο, την υπομονή και την προσπάθεια που απαιτεί το κάθε έκθεμα από την εύρεση έως την έκθεσή του και αντιλαμβάνονται τη διαρκή αναγκαιότητα των εργασιών συντήρησης για τη διατήρηση των απολιθωμάτων στη φυσική τους θέση.

Εν κατακλείδι, απαραίτητη είναι η έρευνα τόσο για την κατανόηση της σύστασης και των αναγκών των απολιθωμάτων όσο και για την ανάπτυξη συγκεκριμένης μεθοδολογίας συντήρησης. Η έρευνα και το εκπαιδευτικό έργο μπορούν να ευαισθητοποιήσουν το κοινό, συμβάλλοντας στη διατήρηση των απολιθωμάτων για τις επόμενες γενεές.

Συντήρηση Χειρογράφων από Αιθιοπία

Δρ. Νικόλας Σαρρής

Επιστ. Συνεργάτης Συντήρησης Χαρτιού & Βιβλίου Α.ΤΕΙ Ιονίων Νήσων-Τμήμα
Προστασίας & Συντήρησης Πολιτισμικής Κληρονομιάς
sarris1@otenet.gr

Η παράδοση της Αιθιοπιακής βιβλιοδεσίας αποτελεί μια ενότητα ξεχωριστή, ως μια από τις αρχαιότερες βιβλιοδετικές παραδόσεις στον κόσμο και μια από τις ελάχιστες που συνεχίζονται να εξασκούνται με μικρές μόνο παραλλαγές. Στην Αιθιοπία ο χριστιανισμός διατηρείται με έντονες πρωτοχριστιανικές αναφορές, ενώ παρέμεινε ανεπηρέαστος για αιώνες από αλλαγές όπως αυτές που γνώρισε στη Δύση, κυρίως λόγω του γεωγραφικού της αποκλεισμού από τις γειτονικές μουσουλμανικές χώρες. Όπως αναφέρουν συχνά μελετητές Αιθιοπιακών κειμένων, αυτό είναι ένα γεγονός που αντικατοπτρίζεται ξεκάθαρα στα Αιθιοπικά θεολογικά κείμενα, αλλά και σε όλη την παράδοση παρασκευής και αντιγραφής βιβλίων και κατ' επέκταση στη βιβλιοδεσία των χειρογράφων.

Παρ' όλα αυτά η γνώση μας περί των Αιθιοπιακών βιβλιοδεσιών προέρχεται κατά κύριο λόγο από χειρόγραφα που μεταφέρθηκαν σε Ευρωπαϊκές βιβλιοθήκες τους περασμένους αιώνες, δίνοντάς μας δυστυχώς μόνο μια αποσπασματική και μη αντιπροσωπευτική εικόνα για την ιστορία τους και τον τρόπο κατασκευής τους.

Το 2010 ξεκίνησε το πρόγραμμα Ethio-SPARE με έδρα το Πανεπιστήμιο του Αμβούργου που μέσω αποστολών σε περιοχές της βορειοανατολικής Αιθιοπίας στο Τιγράι στοχεύει να εξερευνήσει και να ανακαλύψει χειρόγραφα απευθείας από τις χιλιάδες εκκλησίες και μοναστήρια της περιοχής, στα οποία εικάζεται ότι βρίσκονται πολλές χιλιάδες παλαιών χειρογράφων. Σκοπός του ερευνητικού αυτού προγράμματος είναι να εντοπίσει σημαντικά χειρόγραφα και να τα καταγράψει, ψηφιοποιήσει, και μελετήσει ώστε να βοηθήσει στη διάδοση και διατήρησή τους.

Από το 2010 περί τα 1300 νέα και συχνά σημαντικότερα χειρόγραφα έχουν ανακαλυφθεί έως σήμερα, πολλά εκ των οποίων χρονολογούνται από τον 8-9^ο έως και τον 15^ο αιώνα, προσθέτοντας στη γνώση μας σχετικά με αυτή την εκκλησιαστική, βιβλιογραφική και βιβλιοδετική παράδοση.

Ως μέρος του προγράμματος αυτού στόχος είναι επίσης και η διατήρηση και συντήρηση των χειρογράφων αυτών. Το Νοέμβριο του 2011 μια διμελής ομάδα συντηρητών, (Δρ Νικόλας Σαρρής, ΑΤΕΙ Ιονίων Νήσων, Ζάκυνθος και Marco di Bella, Thesaurus Islamicus Foundation, Cairo) συμμετείχε με μια πρώτη αποστολή σε επιλεγμένα μοναστήρια και εκκλησίες του Τιγράι ώστε να καταγράψει την κατάσταση των πιο σημαντικών και πιο φθαρμένων χειρογράφων (εικόνα 1) από αυτά να νέα που είχαν ανακαλυφθεί, ώστε να οργανωθεί ένα πλάνο προληπτικής και επεμβατικής συντήρησης. Η καταγραφή σε ειδικά προετοιμασμένη βάση δεδομένων περί των 50 χειρογράφων έδωσε τη δυνατότητα τόσο να περιγραφούν και μελετηθούν σπάνια δείγματα παλαιών βιβλιοδεσιών που μας βοηθούν στην κατανόηση της κατασκευής Αιθιοπικών βιβλίων όσο και στο να εκτιμηθούν οι προτεραιότητες χειρογράφων προς συντήρηση.

Οι συνθήκες φύλαξης των χειρογράφων ήταν συχνά άκρως ακατάλληλες, σε πολύ υγρούς και σκονισμένους χώρους, με έντονη δράση εντόμων και τρωκτικών, μέσα σε παλαιούς ναούς ή και σπίτια χωρικών γύρω από τις εκκλησίες, ενώ η τακτική χρήση των χειρογράφων ακόμα και σήμερα για τις καθημερινές λειτουργικές ανάγκες των εκκλησιών σήμαινε ότι τα περισσότερα χειρόγραφα ήταν ιδιαίτερα κατεστραμμένα από

μηχανικές φθορές. Ένα πρόχειρο εργαστήριο συντήρησης στήθηκε σε συνθήκες «εκστρατείας» για να εκτελεστούν ορισμένες βασικές εργασίες συντήρησης, σε χώρο που παραχωρήθηκε στους συντηρητές από τη μητρόπολη της περιοχής του Αντιγκράτ, που συχνά αποδείχθηκε προβληματικός και εκτεθειμένος στις πολύ δύσκολες περιβαλλοντικές συνθήκες – πολύ υψηλή σχετική υγρασία τις περιόδους των βροχών (70-90% RH) και πολύ ξηρασία τον υπόλοιπο χρόνο (17-35% RH).

Τα απαραίτητα υλικά συντήρησης, όπως κατάλληλα γιαπωνέζικα χαρτιά, κόλλες, ειδικά χαρτιά συντήρησης, περγαμινές και βασικά εργαλεία και εξοπλισμός ήταν απαραίτητο να μεταφερθούν από το εξωτερικό. Επιπλέον, βασικά αναλώσιμα όπως αλκοόλη, καθαρό νερό και σκεύη δεν ήταν αυτονόητο ότι θα ήταν διαθέσιμα.

Σε διάρκεια δύο εβδομάδων της πρώτης αποστολής οι συντηρητές εργάστηκαν σε τρία περγαμινά χειρόγραφα και τις βιβλιοδεσίες τους. Ένα τετραευαγγέλιο του 14^{ου} αιώνα, έναν Πραξαπόστολο 15^{ου} αιώνα και ένα χειρόγραφο με τις ομιλίες του Ιακώβου Σερόγκ του 14^{ου} αιώνα, όλα γραμμένα στα αρχαία Αιθιοπικά (Γκε'έζ). Τα χειρόγραφα διατηρούσαν πολύ σημαντικές και αρκετά κατεστραμμένες αλλά πρωτότυπες αιθιοπικές βιβλιοδεσίες. Βασικές επεμβάσεις συμπλήρωσης, υποστήριξης και διόρθωσης σκισιμάτων και άλλων φθορών στα περγαμινά φύλλα γίνανε με γιαπωνέζικα χαρτιά τονισμένα σε κατάλληλες αποχρώσεις, που κολλήθηκαν με ζελατίνη φωτογραφικής ποιότητας, αναμεμιγμένη με αμυλόκολλα για να αυξηθεί η ελαστικότητά της.



Εικόνα 1. Αιθιοπικό χειρόγραφο κατά την καταγραφή του και προ της συντήρησής τους.
(Πηγή: Ν. Σαρής)

Τα περισσότερα τεύχη έχριζαν ενίσχυσης στη ράχη ώστε να μπορέσει να διορθωθεί η ραφή τους, ενώ σε ορισμένα ιδιαίτερα κατεστραμμένα φύλλα έγινε και ελαφριά ύγρανση και επιπεδοποίηση. Η ραφή των χειρογράφων ενισχύθηκε στα σημεία που είχε σπάσει χρησιμοποιώντας χοντρή λινή κλωστή, παρότι παραδοσιακά στα αιθιοπικά χειρόγραφα εμφανίζεται κλωστή από στριμμένους τένοντες ζώων, κυρίως μοσχαριού ή κατσίκας. Η τεχνική παρασκευής και η διάθεση ενός υλικού δυστυχώς όμως είναι αδύνατον πλέον να βρεθεί. Η τεχνική της ραφής έγινε αντιγράφοντας τον παραδοσιακό αιθιοπικό τρόπο αλυσιδωτής ραφής σε δύο ζεύγη διπλών σταθμών προς

μία φορά, ξεκινώντας πχ από τη εμπρόσθια πινακίδα και καταλήγοντας στην οπίσθια. Οι αρχικές ξύλινες πινακίδες επιδιορθώθηκαν όπου είχαν σπάσει και σχιστεί χρησιμοποιώντας ζελατίνη ως κόλλα και παλαιές τρύπες ραφής για την ενίσχυση των πινακιδών με τοπικές ραφές. Συμπληρώσεις πινακιδών, όπου αυτές είχαν χαθεί έγιναν με ένα τοπικό σκληρό ξύλο λεγόμενο wanza (άγρια ελιά), που χρησιμοποιούνταν κατά την παράδοση στη βιβλιοδεσία.

Με το πέρας των εργασιών συντήρησης, τα χειρόγραφα ψηφιοποιήθηκαν ξανά, τοποθετήθηκαν σε ειδικά κουτιά φύλαξης κατασκευασμένα με αντιόξινα χαρτόνια και παραδόθηκαν πίσω στα μοναστήρια προέλευσής τους, συμβουλευοντας παράλληλα τους μοναχούς και ιδιοκτήτες των χειρογράφων σχετικά με απλές λύσεις βελτίωσης του τρόπου φύλαξης των χειρογράφων, μακριά από υγρές περιοχές και χώρους έντονης δραστηριότητας εντόμων ή τρωκτικών.

Οι αποστολές συντήρησης στην περιοχή του Τιγράι της Αιθιοπίας συνεχίζονται, έχοντας πλέον αποκτήσει μεγαλύτερη εμπειρία των συνθηκών εργασίας αλλά και των ιδιαιτεροτήτων των χειρογράφων που αντιμετωπίζουμε. Για τις επόμενες αποστολές έχουν εντοπιστεί ιδιαίτερα πολύτιμα χειρόγραφα, μοναδικά για την Αιθιοπική εκκλησιαστική παράδοση που χρονολογούνται έως και τον 10^ο αιώνα μ.Χ τα οποία κινδυνεύουν με σημαντικές απώλειες και που με βασικές εργασίες συντήρησης στοχεύουμε στη σταθεροποίηση και διάσωσή τους.

**Βυζαντινές και Μεταβυζαντινές Τοιχογραφίες στη Ζάκυνθο
(12ος-17ος αι.)**

Δρ. Ιωάννης Π. Χουλιάρης

Αρχαιολόγος, Προϊστάμενος 20^{ης} Εφορείας Βυζαντινών Αρχαιοτήτων
ichouliaras@culture.gr

Τμήματα βυζαντινού διακόσμου εντοπίζονται σε τέσσερις ναούς της Ζακύνθου, στον Άγιο Νικόλαο στο Λαγοπόδο, στον Άγιο Νικόλαο τον Μεγαλομάτη (οι τοιχογραφίες του είναι αποτοιχισμένες στο σύνολό τους), στη Μεταμόρφωση του Σωτήρος στο κάστρο Ζακύνθου και στο καθολικό της μονής Αναφωνήτριας.

Στην τέχνη του 16^{ου} αιώνα ανήκουν οι τοιχογραφίες του Κάτω Αγίου Γεωργίου των Κρημνών και τμήμα του διακόσμου της μονής Αναφωνήτριας. Από τον 17^ο αιώνα τα μέχρι τώρα γνωστά στην έρευνα σύνολα είναι η μονή Υπεραγάθου στον Κοιλιωμένο, ο Άγιος Ανδρέας στο Μεσοβούνι Βολιμών (οι τοιχογραφίες του είναι αποτοιχισμένες στο σύνολό τους), η μονή της Παναγίας της Σκοπιώτισσας και τμήματα του διακόσμου της μονής Αναφωνήτριας. Σπαράγματα ζωγραφικής της ίδιας περιόδου προέρχονται και από τον Άγιο Γεώργιο των Καλογραιών.

Ο Άγιος Νικόλαος στο Λαγοπόδο είναι μικρός μονόχωρος ναός κτισμένος στη νότια είσοδο αβαθούς σπηλαίου. Η ζωγραφική του ναού ανήκει στην λεγόμενη ιερατική ή εκφραστική τεχνοτροπία και χρονολογείται στο πρώτο μισό του 12^{ου} αιώνα².

Στον τρίκογχο ναό της Μεταμόρφωσης του Σωτήρος το μοναδικό τμήμα τοιχογραφίας, που σώζεται ικανοποιητικά και αποτοιχίστηκε, προέρχεται από την κόγχη του διακονικού και εικονίζει στο τεταρτοσφαίριο τον Χριστό Εμμανουήλ και από κάτω τους αγίους Κοσμά και Δαμιανό εκατέρωθεν της μητέρας τους Θεοδότης. Οι τοιχογραφίες χρονολογούνται στα τέλη του 12^{ου} αιώνα³.

Ο ναός του Αγίου Νικολάου του Μεγαλομάτη στον Σκοπό σώζει το εκτενέστερο αλλά εξαιρετικά κατεστραμμένο εικονογραφικό πρόγραμμα. Οι τοιχογραφίες του ναού ανήκουν σε τουλάχιστον δύο βυζαντινές φάσεις. Η πρώτη φάση χρονολογείται στα τέλη του 12^{ου} με αρχές του 13^{ου} αιώνα και η δεύτερη στον 15^ο αιώνα⁴.

Στη μονή Αναφωνήτριας η βυζαντινή φάση τοιχογράφησης εντοπίζεται στο διακονικό. Στο τεταρτοσφαίριο εικονίζεται η Θεοτόκος και στον ημικύλινδρο διακρίνονται δύο ιεράρχες. Η φάση αυτή χρονολογείται πιθανώς στον 13^ο αιώνα⁵. Στην κόγχη της πρόθεσης σώζεται ζωγραφικό στρώμα του 16^{ου} αιώνα. Στο τεταρτοσφαίριο ιστορείται η Βλαχερνίτισσα και στον ημικύλινδρο εκατέρωθεν του Μελισμού από ένας ιεράρχης. Οι παραστάσεις εντάσσονται στην παράδοση της ηπειρωτικής Ελλάδας και ιδιαίτερα της Μακεδονίας⁶. Η τελευταία φάση τοιχογράφησης της μονής πιθανώς να ανάγεται στο έτος 1669. Οι τοιχογραφίες αυτής της φάσης επηρεάζονται από το έργο των αδερφών Μόσχων και φαίνεται να μην αποτελούν έργο ενός ζωγράφου αλλά συνεργείου ζωγράφων⁷.

² Π. Α. Βοκοτόπουλος, «Οι τοιχογραφίες του Αγίου Νικολάου στο Λαγοπόδο της Ζακύνθου», *Πελοποννησιακά*, τ. Α' (2011), σ. 105-126.

³ Βυζαντινή και Μεταβυζαντινή τέχνη, Αθήνα 1986, σ. 39-41.

⁴ Π. Α. Βοκοτόπουλος, «Η βυζαντινή τέχνη στα Επτάνησα», *Κερκυραϊκά Χρονικά* XV (1970), σ. 159-161.

⁵ Ζ. Μυλωνά, «Η εκκλησιαστική τέχνη στη Ζάκυνθο από τον 11ο έως τις αρχές του 13ου αιώνα», *Ζάκυνθος – Λογοτεχνικό, Ιστορικό και Λαογραφικό Ημερολόγιο*, Ζακυνθινό Ημερολόγιο – Εορτολόγιο 2002, σ. 253-254.

⁶ Μυλωνά, ό.π. σ. 254.

⁷ Μ. Ρουσέα, «Οι άγνωστες τοιχογραφίες της Ιεράς Μονής Αναφωνήτριας», *Μονές της Ζακύνθου. Ιστορία-Αρχιτεκτονική-Τέχνη, Επιστημονική Ημερίδα 16 Νοεμβρίου 1996. Πρακτικά*, Ζάκυνθος 1998, σ. 181-191.

Στον Κάτω Άγιο Γεώργιο των Κρημνών εντοπίζουμε ζωγραφική του πρώτου μισού του 16^{ου} αιώνα. Ο ναός διατηρεί ελάχιστα τμήματα ζωγραφικής κυρίως στο ιερό, που εντάσσονται στην δράση ενός αξιόλογου ζωγράφου που μεταφέρει τις εκζητήσεις της κρητικής τέχνης στην Ζάκυνθο⁸.

Στο ιερό του καθολικού της μονής Υπεραγάθου κοντά στον Κοιλιωμένο συναντούμε ένα από τα πρώτα δείγματα ζωγραφικής του 17^{ου} αιώνα στη Ζάκυνθο. Η σχέση του διακόσμου με την ηπειρωτική και ιδιαίτερα τη μακεδονική εικονογραφική παράδοση είναι εμφανής, όπως δείχνει η τοποθέτηση του Αγίου Μανδηλίου στα χέρια της Θεοτόκου στην Ανάληψη (Εικ. 1), τύπος που δημιουργήθηκε σε μνημεία της Μακεδονίας και είναι άγνωστος στην κρητική ζωγραφική⁹.

Στο πρώτο μισό του 17^{ου} αιώνα χρονολογείται η πρώτη φάση ζωγραφικής της μονής Παναγίας της Σκοπιώτισσας. Οι σκηνές της δεύτερης φάσης, του 1699, και οι δυτικές τους καταβολές αποτυπώνονται στην χρήση δυτικών χαρακτηρισμών· η ζωγραφική της φάσης αυτής συνδέεται με το εργαστήριο του ζωγράφου Ηλία Μόσκου¹⁰.

Σε έναν ζωγράφο των μέσων του 17^{ου} αιώνα οφείλονται οι τοιχογραφίες του καθολικού της μονής Αγίου Ανδρέα στο Μεσοβούνι Βολιμών. Η λαϊκή και εκφραστική τεχνοτροπία των παραστάσεων και τα εικονογραφικά τους πρότυπα παραπέμπουν στην τέχνη της ηπειρωτικής Ελλάδας και μάλιστα φαίνεται να είναι άμεσα επηρεασμένες από τις επιβιώσεις της κρητικής σχολής στον 17^ο αιώνα¹¹.

Υπάρχουν τέλος κάποια σπαράγματα τοιχογραφιών που διασώθηκαν από τον κατεστραμμένο ναό του Αγίου Γεωργίου των Καλογραιών στην πόλη της Ζακύνθου. Τα λίγα αυτά δείγματα ζωγραφικής του ναού είναι αρκετά για να τα εντάξουμε στα έργα με δυτικό προσανατολισμό του δεύτερου μισού του 17^{ου} αιώνα, πιθανώς του 1669, όπως προκύπτει από αφιερωματική επιγραφή¹².

Στο Μουσείο της Ζακύνθου σώζονται αποτοιχισμένα τμήματα τοιχογραφιών και από άλλους κατεστραμμένους σήμερα ναούς της πόλης που θα μπορούσαν να τοποθετηθούν στη μετάβαση από τον 17^ο στον 18^ο αιώνα και εκφράζουν ανάλογα με τον Άγιο Γεώργιο των Καλογραιών πρότυπα. Ενδεικτικά αναφέρουμε τον ναό της Παναγίας Πικριδιώτισσας και τον ναό της Αγίας Αικατερίνης του Γρυπάρη¹³.

Συμπερασματικά, η τέχνη της βυζαντινής περιόδου στη Ζάκυνθο ακολουθεί, με την επαρχιακή πάντα καθυστέρηση, την εκάστοτε καλλιτεχνική κοινή, όπως υπαγορευόταν από τα μεγάλα κέντρα του βυζαντινού κόσμου και ιδιαίτερα την Κωνσταντινούπολη. Όσον αφορά την τέχνη των ναών της μεταβυζαντινής περιόδου μπορούμε να πούμε γενικά, ότι κατά τον 16^ο αιώνα συνδέεται άρρηκτα με αυτή της ηπειρωτικής Ελλάδας και μάλιστα του βορειοελλαδικού χώρου. Η ζωγραφική του 17^{ου} αιώνα παρουσιάζει δύο πρόσωπα, ένα που ανταποκρίνεται στις καλλιτεχνικές αναζητήσεις της ηπειρωτικής Ελλάδας και ένα δεύτερο που στρέφεται έντονα στη Δύση και προετοιμάζει την τέχνη του επόμενου αιώνα και τις απαρχές της λεγόμενης Επτανησιακής Σχολής.

⁸ Ζ. Α. Μυλωνά, «Ο ναός του Κάτω Αγίου Γεωργίου των Κρημνών», *Πρακτικά Διεθνούς Επιστημονικού Συμποσίου «Παχώμιος Ρουσάνος 450 χρόνια από την κοίμησή του († 1553)»*, Αθήνα 2005, σ. 129-137.

⁹ Ι. Π. Χουλιαράς, «Η Θεοτόκος που κρατά το Άγιο Μανδήλιο στη σκηνή της Ανάληψης: Ένα “Μακεδονικό” θέμα στην τέχνη της Ηπείρου κατά τον 16ο και 17ο αιώνα», *Ηπειρωτικά Χρονικά* 43 (2009), σ. 601-615.

¹⁰ Ι. Στουφή-Πουλημένου, «Οι τοιχογραφίες του καθολικού της μονής της Παναγίας της Σκοπιώτισσας στη Ζάκυνθο», *30^ο Συμπόσιο Βυζαντινής και Μεταβυζαντινής Αρχαιολογίας και Τέχνης* (πρόγραμμα και περιλήψεις εισηγήσεων και ανακοινώσεων), Αθήνα 14-16 Μαΐου 2010, σ. 89-90.

¹¹ Ζ. Α. Μυλωνά, *Μουσείο Ζακύνθου*, 2010₂, σ. 155-180.

¹² Μ. Χατζηδάκης, «Μεταβυζαντινές τοιχογραφίες στη Ζάκυνθο», *Ζυγός*, τ. 5, Μάρτιος 1956, σ. 14-15.

¹³ Μυλωνά, ό.π., σ. 43, 184-185.



Εικόνα 1. Μονή Υπεραγάθου (α' μισό 17^{ου}). Ανάληψη (Άγιο Μανδήλιο)

Υφάσματα του Αγ. Όρους: Καταγραφή & Προληπτική Συντήρηση

Δρ. Χρήστος Χ. Καρύδης

Επικ. Καθηγητής (407/80) Πρ. Συντήρησης & Ιστορίας Υφάσματος Α.ΤΕΙ Ιονίων
Νήσων, Α.Π.Θ & Α.Ε.Α.Θ
c.karydis@gmail.com

Μια συστηματική προσπάθεια ηλεκτρονικής καταγραφής Αθωνικών υφασμάτων ξεκίνησε το 2005 σε δεκατέσσερα αγιορειτικά καθιδρύματα, αρχικά με την καταγραφή και την ταυτοποίηση των κατασκευαστικών υλικών με φυσικοχημικές τεχνικές των αρχιερατικών σάκκων, σε συνεργασία με Διεθνή και Ελληνικά ιδρύματα. Αυτή η προσπάθεια αποτελεί την πρώτη συστηματική έρευνα ταυτοποίησης και χρονολόγησης αθωνικών υφασμάτων στην ιστορία του Αγ. Όρους. Η μελέτη των εκκλησιαστικών κυρίως υφασμάτων συνεχίστηκε μέσω του IBE-EIE στο πλαίσιο του επιχειρησιακού προγράμματος 'Κοινωνία της Πληροφόρησης' με στόχο τη δημιουργία υποδομών για την κατάρτιση ψηφιακού πολιτιστικού αποθέματος.

Το πρώτο βήμα της συγκεκριμένης μελέτης είναι η καταγραφή- μελέτη των αντικειμένων. Ακολουθεί η δειγματοληψία και η ταυτοποίηση των κατασκευαστικών υλικών με φυσικοχημικές τεχνικές (HPLC-DAD, SEM-EDX, OM) και ολοκληρώνεται με προτάσεις και επεμβάσεις διατήρησης τους με την μέθοδο της προληπτικής συντήρησης.

Η ιδιαιτερότητα των μοναστικών συγκροτημάτων είναι η προτεραιότητα που δίνεται στη μοναστική ζωή και κατά συνέπεια στη λατρευτική χρήση των αντικειμένων, με συνέπεια η ιστορική και καλλιτεχνική τους αξία ως πολιτιστικών αγαθών να έρχεται σε δεύτερη μοίρα. Λαμβάνοντας αυτό υπόψη βλέπουμε ότι υπάρχουν παραδοσιακοί τρόποι φύλαξης-διπλώματος των αντικειμένων όπως είναι οι επισκοπικοί σάκκοι, τα φελόνια, τα επιτραχήλια κ.α. που βέβαια δημιουργούν έντονες μηχανικές καταπονήσεις σε συγκεκριμένα σημεία στη δομή των έργων.

Τα ενδύματα που έχουν σε μεγάλο βαθμό φινιρίσματα-κολλαρίσματα στην επιφάνειά τους, όπως είναι κυρίως τα ρώσικα φελόνια, οι σάκκοι κ.α. σε συνδυασμό με τα μεταλλικά νήματα, παρουσιάζουν απώλεια σε σημεία όπως στους ώμους (σημείο διπλώματος), φθορές στην λαιμόκοψη που προέρχονται από τα εγκόλπια ή τον σταυρό των πρεσβυτέρων κ.α. Σε ορισμένα σκευοφύλακια- κειμηλιαρχεία οι σκευοφύλακες στοιβάζουν σύνολα λειτουργικών ενδυμάτων, που χρησιμοποιούνται από επισκέπτες επισκόπους ή ιερείς. Με τον τρόπο αυτό στα βαριά υφάσματα δημιουργούνται μεγαλύτερες τσακίσεις και αποδυνάμωση των σημείων.

Κατά την διάρκεια της καταγραφής παρατηρήθηκε η χρήση πολλών μεταλλικών στοιχείων (καρφίτσες, πινέζες κ.α.) ως παλαιότερη μέθοδος ανάρτησης μέσα στις προθήκες ή πάνω στα ενδύματα, όπως επίσης και η χρησιμοποίηση ταμπλετών ναφθαλίνης και καμφοράς για την απώθηση εντόμων. Άλλα υφάσματα έχουν υποστεί στεγνό καθαρίσμα (ατμού) καθαριστηρίου το οποίο ελκύει τετραχλωροαιθυλένιο στο εσωτερικό του χώρου. Τέλος, τα περισσότερα υφάσματα αποθηκεύονται σε ξύλινες ντουλάπες, απορροφώντας πτητικά οργανικά οξέα (VOCs) που εκπέμπουν τα κακής ποιότητας ξύλα.

Η φυσικοχημική ανάλυση των υφασμάτων ως δεύτερο βήμα, κατάφερε να ταυτοποιήσει τα κατασκευαστικά υλικά και να απαντηθούν ερωτήματα πριν την επεμβατική ή την παθητική συντήρηση.

Με τη χρήση του ερευνητικού πρωτοκόλλου που ακολουθήθηκε δόθηκαν πληροφορίες σχετικά με τα ακόλουθα:

- ταυτοποιήθηκαν οι βαφές των υφασμάτων,
- ταυτοποιήθηκαν τα τεχνολογικά χαρακτηριστικά και τα υλικά κατασκευής των μεταλλικών νημάτων,
- ταυτοποιήθηκαν οι υφάνσιμες ίνες και οι ίνες ως πυρήνας στα μεταλλικά νήματα,
- οριοθετήθηκαν οι τυχόν παλαιότερες επεμβάσεις και πιστοποιήθηκε η μη ύπαρξη αυθεντικού προσχεδίου κάτω από το κέντημα,
- οι παρατηρήσεις κατά την μακροσκοπική παρατήρηση πιστοποίησαν τυχόν παλαιότερες διαφορετικές φάσεις επεμβάσεων στα υφάσματα & ενδύματα,
- διαγνώστηκε και τεκμηριώθηκε η κατάσταση διατήρησης των υλικών, και τέλος
- καταγράφηκαν ορισμένα από τα χαρακτηριστικά των τεχνιτών.

Οι παραπάνω πληροφορίες θα μπορέσουν να αποτελέσουν χρήσιμο υλικό για τους αρχαιολόγους και ιστορικούς υφασμάτων προκειμένου να μπορέσουν να καταλήξουν σε συγκεκριμένα συμπεράσματα σχετικά με την ταυτότητα του τεχνίτη αλλά και για την μελλοντική δημιουργία ενός αρχείου με συγκεκριμένα χαρακτηριστικά Ορθόδοξων εκκλησιαστικών υφαντών και κεντημάτων ανά χρονική περίοδο. Τέλος, η καταγραφή και η ταυτοποίηση των υλικών είναι σημαντικό στοιχείο για τους συντηρητές υφάσματος οι οποίοι θα μπορέσουν να επιλέξουν τη μελλοντική κατάλληλη παθητική ή επεμβατική μέθοδο αλλά και τα κατάλληλα υλικά προκειμένου να διατηρήσουν τα Αθωνικά υφασμάτινα έργα τέχνης.



Εικόνα 1. Αντιμήνσιο 1738, αποθηκευμένο στην Ι. Μονή Σίμωνος Πέτρα- Άγιον Όρος, πρίν την πρ. συντήρηση. (Πηγή: Χρ. Καρύδης)

Τέχνη & Νέες Τεχνολογίες

Νικόλαος Σαλαμούρης, ΜΑ

Εικαστικός, Υποψ. Διδάκτωρ ΕΜΠ. Εργ. Συνεργάτης Α.ΤΕΙ Ιονίων Νήσων- Τμήμα
Προστασίας & Συντήρησης Πολιτισμικής Κληρονομιάς
nsalamouris@hotmail.com

Η βιομηχανική επανάσταση του 19^{ου} αιώνα προκάλεσε, έμμεσα ή άμεσα, μια νέα δυναμική στην τέχνη του δυτικού κόσμου όχι μόνο ως προς την μορφολογική της απόδοση αλλά ως την υιοθέτηση τεχνολογικών επιτευγμάτων, απόρροια την νέας εποχής που αναδυόταν.

Ήδη η εφαρμογή της φωτογραφίας, στις πρώτες δεκαετίες του 19^{ου} αιώνα, και ο κινηματογράφος στα τέλη του ίδιου αιώνα μαρτυρούν το ξεκίνημα αυτής της νέας εποχής της τέχνης η οποία, εκκολάπτεται μέσα στον αιώνα και εμφανίζεται με εκρηκτικό και καθολικό τρόπο στον επόμενο (20^ο αιώνα).

Αυτή η τεχνολογική προσαρμογή που γίνεται στην τέχνη, σε συνδυασμό με την αλλαγή που επήλθε σταδιακά στις κοινωνικές δομές των μεγάλων εκ-βιομηχανοποιημένων χώρων της Ευρώπης, θα θέσει νέα ζητήματα ως προς το περιεχόμενο της (περίπτωση Jean Désiré Gustave Courbet και Honoré Daumier), αλλά και την μορφολογική απόδοση της ίδιας της φύσης. Στην δεύτερη περίπτωση, αναδύθηκαν ζητήματα που απασχόλησαν άμεσα την εξέλιξη της φωτογραφίας (τελειοποίηση της εικόνας στα πρότυπα της ίδιας της πραγματικότητας) και του κινηματογράφου (αφενός με την τελειοποίηση της εικόνας, απόρροια της φωτογραφίας και αφετέρου της κίνησης).

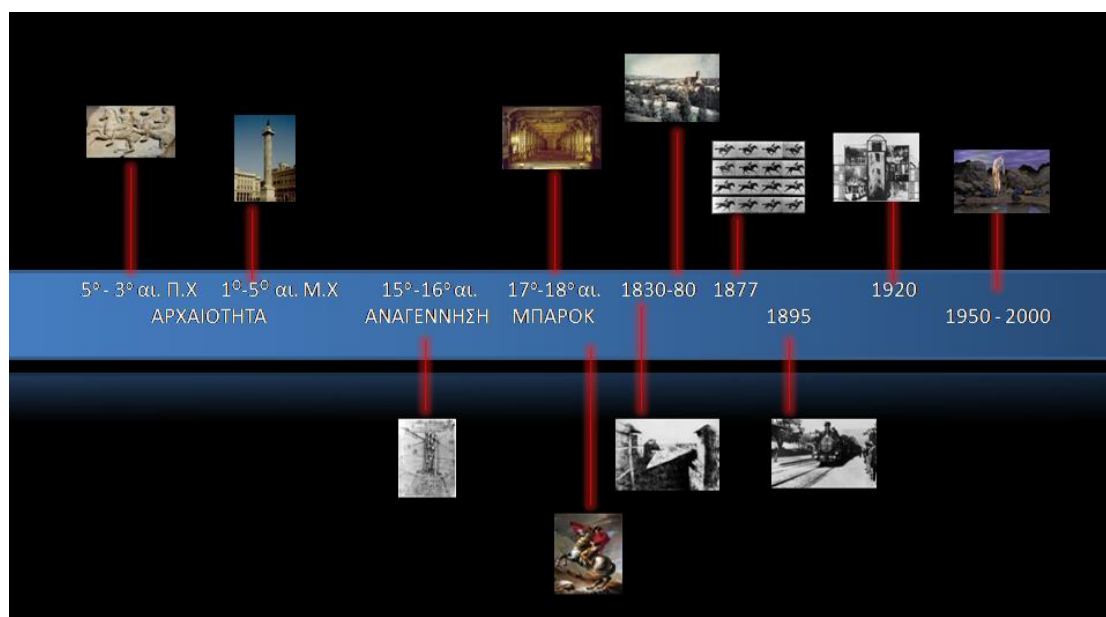
Η απόδοση της νατουραλιστικής εικόνας και η οπτικοποίηση του χρόνου μέσω της κίνησης είναι ζητήματα τα οποία είχαν κάνει την εμφάνιση τους ήδη από την περίοδο της αρχαιότητας ή από τις επαναστατικές ανατροπές της πρώιμης και ύστερης Αναγέννησης. Ήταν ζητήματα που δημιουργήθηκαν αφενός, μέσω της ανάγκης για την απόλυτη απόδοση της πραγματικότητας (που εν μέρει βασίστηκε στην εξέλιξη της τεχνικής πάνω στην δημιουργία ενός έργου) και αφετέρου, την κίνηση ή αλλιώς την απόδοση του χρόνου (της χρονικής εξέλιξης μιας πράξης) μέσω της δισδιάστατης ή τρισδιάστατης στατικής εικόνας. Παραδείγματα όπως η ζωφόρος του Παρθενώνα (5^ο αιώνας) ή η τοιχογραφία του Giotto στην Arena της Πάδοβα (14^ο αιώνας) μαρτυρούν την ανάγκη απόδοσης της χρονικής εξέλιξης μιας πράξης με κινηματογραφικό τρόπο (εικόνα 1). Ένας κινηματογραφικός τρόπος απόδοσης της κίνησης μέσω της συνεχής προβολής εικόνων είτε με στατικό τρόπο (ο θεατής έρχεται σε μετωπική επαφή με την κάθε εικόνα – απόσπασμα μιας ολοκληρωμένης πράξης, παράδειγμα η τοιχογραφία του Giotto) είτε μέσω της κίνησης του ίδιου του θεατή διαβάζοντας παράλληλα, την εξέλιξη της ίδιας της εικόνας η οποία ερμηνεύει μια πράξη εξελισσόμενη μέσα στον χρόνο (περίπτωση της Ζωφόρου του Παρθενώνα).

Θέτοντας πλέον ο κινηματογράφος και σαφώς η ίδια η φωτογραφία τις βάσεις για μια νέα αντίληψη της ίδιας της πραγματικότητας, βασιζόμενα, όπως φάνηκε, σε ζητήματα του παρελθόντος, προκαλεί μια ιδιότυπη αντιπαράθεση με το σύνολο των πλαστικών τεχνών κατά την περίοδο του 20^{ου} αιώνα. Αυτό θα φανεί στη παράλληλη ύπαρξη μιας επίμονης αναζήτησης μιας όλο και πιο νατουραλιστικής εικόνας μέσω και της κίνησης (άρα και της ερμηνείας του ίδιου του πραγματικού χρόνου) και μιας όλο και πιο αφαιρετικής και φορμαλιστικής εικόνας, από την άλλη, που προβλήθηκε από τις λοιπές πλαστικές τέχνες.

Μέσα από αυτή την ιδιόρρυθμη «σύγκρουση» των νέων τεχνολογικών επιτευγμάτων με τις πιο παραδοσιακές πρακτικές της τέχνης ξεπήδησαν εκφράσεις οι οποίες προσπάθησαν να συνδυάσουν αυτές τις δύο φαινομενικά αντίθετες μορφές τέχνης.

Τέτοιες προσπάθειες φάνηκαν να γίνονται σταδιακά μέσα στον 20^ο αιώνα αφενός, με την εισχώρηση της φωτογραφίας στα εικαστικά κινήματα και αφετέρου, της χρήσης των τεχνολογικών επιτευγμάτων (από την απλή μηχανική έως την ψηφιακή τεχνολογία). Το παράδειγμα με τα έργα του Jean Tinguely (κινητικά γλυπτά) ή οι ψηφιακές εικόνες – Video του Nam June Paik προδίδουν μια νέα αρχή σε αυτή την ιδιότυπη σχέση της τέχνης και της τεχνολογίας πέρα πια από εκείνη που υπήρχε με την φωτογραφία και το κινηματογράφο.

Στη δύση του προηγούμενου αιώνα η σχέση τεχνολογίας και πλαστικών τεχνών έχει παγιωθεί σε μεγάλο βαθμό. Μέσω των δυνατοτήτων που παρέχει η ψηφιακή τεχνολογία έχουν εισχωρήσει νέα ζητήματα στην τέχνη, που δεν αφορά μόνο την ψευδαίσθηση που δημιουργεί η εικόνα αλλά και την ίδια την ύπαρξη του χρόνου και του, τριών διαστάσεων, χώρου. Μια προσπάθεια να αντικατασταθεί ο πραγματικός κόσμος με εκείνο της ψευδαίσθησης.



Εικόνα 1. Σταθμοί σε σχέση με την τεχνολογία και την τέχνη (Πηγή: Ν. Σαλαμούρης)

Τα Σύγχρονα Υλικά στη Σύγχρονη Τέχνη: Ο Ρόλος του Συντηρητή

Αλκηστις Περδικάρη, ΜΑ

Συντηρήτρια Έργων Τέχνης (ΠΕ)

Εργ. Συνεργάτης Α.ΤΕΙ Ιονίων Νήσων- Τμήμα Προστασίας & Συντήρησης

Πολιτισμικής Κληρονομιάς

perdikari.alcestis@gmail.com

Εάν θα προσπαθούσε κάποιος να χρησιμοποιήσει έναν χαρακτηρισμό ή έναν ορισμό για τη σύγχρονη τέχνη θα μπορούσε να πει πως είναι η «τέχνη του σήμερα», η τέχνη που παράγουν οι άνθρωποι που είναι σύγχρονοί μας. Οι σημερινοί εικαστικοί /καλλιτέχνες δημιουργούν τα έργα τους (εικόνα 1) έχοντας στην διάθεσή τους μια πληθώρα υλικών και μέσων. Πρωταρχικός τους στόχος είναι να επικοινωνήσουν ένα μήνυμα στον αποδέκτη/παρατηρητή. Για το λόγο αυτό χρησιμοποιούν όλα τα διαθέσιμα υλικά και μέσα ώστε να οδηγηθούν στην επίτευξη αυτού του στόχου. Έτσι λοιπόν αντιλαμβάνεται κανείς πως ουσιαστικά δεν υπάρχουν όρια και περιορισμοί όσον αφορά τη χρήση και την εφαρμογή των υλικών και των μέσων.

Πέραν της προφανούς χρήσης των «παραδοσιακών» υλικών, όπως τα μέταλλα, το χαρτί, το ύφασμα κτλ οι εικαστικοί σήμερα χρησιμοποιούν και ένα πλήθος βιομηχανικών και μαζικά παραγόμενων υλικών. Τα περισσότερα από αυτά είναι είτε συνθετικά είτε ημισυνθετικά. Τα συνθετικά υλικά είναι αμιγώς παραγόμενα από τον άνθρωπο ενώ τα ημισυνθετικά είναι υλικά τα προκύπτουν από την χημική /εργαστηριακή επεξεργασία φυσικών υλικών.

Πολύ συχνά επίσης παρατηρείται και παράλληλη χρήση παραδοσιακών υλικών με σύγχρονα, ενώ πολύ συχνό είναι και το φαινόμενο της επανάχρησης υλικών, είτε με τη μορφή της «ανακύκλωσης» και της μεταποίησης είτε ακόμη και χωρίς καμία απολύτως παρέμβαση.

Επίσης αξίζει να σημειωθεί ο ρόλος ορισμένων «σύγχρονων» αντικειμένων που ωστόσο έχουν κατακτήσει μια θέση στις μουσειακές συλλογές όχι ως έργα τέχνης ή μέρος αυτών, αλλά ως αντιπροσωπευτικά δείγματα της σύγχρονης λαογραφίας και ιστορίας.

Ο ρόλος του συντηρητή έργων τέχνης είναι να διατηρήσει για όσο το δυνατόν περισσότερο χρόνο τα έργα και να «αναστείλει» τους μηχανισμούς φθοράς. Λαμβάνοντας υπόψιν το θεώρημα πως η τέχνη και τα αντικείμενα του σήμερα αποτελούν την ιστορία και τη λαογραφία του αύριο, είναι καθήκον του συντηρητή έργων τέχνης να χρησιμοποιήσει όλα τα μέσα που διαθέτει για να διασφαλίσει την «παράδοση» αυτών των έργων στις επερχόμενες γενιές.

Παρόλα αυτά δεν είναι λίγες οι φορές όπου ο ρόλος του συντηρητή έργων σύγχρονης τέχνης είναι αμφιλεγόμενος, μιας και τα έργα αυτά συχνά είναι πολυδιάστατα και η υπόστασή τους δεν είναι μόνον υλική.

Σε κάθε περίπτωση οι υποχρεώσεις του συντηρητή έργων τέχνης είναι συγκεκριμένες. Αρχικά είναι η σωστή και ολοκληρωμένη καταγραφή του αντικειμένου, αυτό που ονομάζουμε τεκμηρίωση. Έπειτα ακολουθεί η αξιολόγηση της κατάστασης διατήρησης του έργου. Τέλος η συντήρηση του έργου που μπορεί να είναι είτε παρεμβατική, είτε προληπτική είτε συνδυασμός και των δύο και περιλαμβάνει διάφορες εργασίες -οι οποίες σε κάθε περίπτωση εξαρτώνται από την κατάσταση διατήρησης του έργου.

Ο συντηρητής της σημερινής εποχής έχει το πλεονέκτημα να έχει στα χέρια του τα αντικείμενα πριν προλάβουν να αποκτήσουν τις φθορές «αιώνων» που παρουσιάζουν

τα αντίστοιχα αρχαιολογικά/ιστορικά αντικείμενα. Έτσι ενώ αρχικά η πρόταση «Συντήρηση της Σύγχρονης Τέχνης» φαντάζει οξύμωρη, η πρακτική της εφαρμογή είναι απαραίτητη.



Εικόνα 1. Lobster Telephone, Salvador Dalí, 1936, συνθετικά υλικά. Courtesy Tate Modern London. (Πηγή: Ανακτήθηκε από http://www.tate.org.uk/art/images/work/T/T03/T03257_8.jpg)

OXFORD JOURNAL OF ARCHAEOLOGY,
VOLUME 32, ISSUE 1 PAGES 1 - 122,
FEBRUARY 2013 BLACKWELL PUBLISHING
LTD.

Original Articles

On the Constitution and Transformation of Philistine Identity (pages 1–38) Aren M. Maeir, Louise A. Hitchcock and Liora Kolska Horwitz Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12000

The Afterlife of Monuments in the English Peak District: The Evidence of Early Bronze Age Burials (pages 39–51) Alice J. Rogers Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12001

Colonial Representations and Carthaginian Archaeology (pages 53–72) Iván Fumadó Ortega Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12002

The Ins and Outs of Death in the Iron Age: Complex Funerary Treatments at Broxmouth Hillfort, East Lothian (pages 73–100) Ian Armit, Naomi Neale, Fiona Shapland, Hannah Bosworth, Derek Hamilton and Jo Mckenzie Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12003

Date, Rituals and Socio-Cultural Identity in the North-Western Roman Provinces (pages 101–117) Alexandra Livarda Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12004

Note

A Note Concerning Flake Axes and Umiaks (pages 119–122) Lou Schmitt Article first published online: 9 JAN 2013 | DOI: 10.1111/ojoa.12005

Please visit the site: <http://onlinelibrary.wiley.com/doi/10.1111/ojoa.2013.32.issue-1/issuetoc> [Go there for links to purchasable downloads]

A MINOAN SHIPWRECK OFF LACONIA, E. SPONDYLIS, 'A MINOAN SHIPWRECK OFF LACONIA', ENALIA, 11(2012): 6-7

During the summer of 2009, a research team of the Greek Ephorate of Underwater Antiquities, under the direction of the archaeologist Elias Spondylis, made an important discovery in the Koulenti area, on the Laconian coast. During an underwater archaeological survey, a wrecked cargo of the Middle Minoan III-Late Minoan I period was on the rocky bottom of a steep reef.

Evidently, the ceramic cargo belonged to a Minoan shipwreck, the second that has been recorded until today (after the one at Pseira islet, in the northeast of Crete) and the first that has been located outside Crete. Among the finds that were raised from the wreck-site for further investigation, were jugs with a cut-away spout, an oval-mouthed amphora and an amphora with two horizontal cylindrical handles. It appears that the main concentration of finds has been plundered, but on the nearby sandy bottom more finds may survive. In any case, the operational depth can allow a systematic excavation to take place. The finds have been desalinated, conserved and are now under study.

The continuation of the research project at the site is expected to add new evidence for the understanding of the Minoan Thalassocracy with which the wreck at Koulenti is associated.

POLISH ARCHAEOLOGY IN THE MEDITERRANEAN 21 IS NOW AVAILABLE

The latest volume of the annual of the Polish Centre of Mediterranean Archaeology, University of Warsaw, Polish Archaeology in the Mediterranean 21 contains almost 50 articles, including 39 reports from 18 sites studied by PCMA missions in the 2009 season. The reported archaeological and conservation projects were carried out at sites in Egypt, Sudan, Cyprus, Lebanon and Syria.

In a Studies section, introduced in the previous volume, there are eight articles relating to the research of PCMA missions, and ranging from material presentations to archaeozoological studies. This section is intended to hold research articles on issues connected with PCMA projects, the scope of which is wider than that of the current reports presented in the Reports section.

A list of all 25 projects carried out by PCMA missions in 2009 provides brief résumés of the research that had not been reported on in this volume of PAM.

Abstracts of all articles from PAM 20 and PAM 21 as well as the full text of the articles from previous 19 volumes are available online at the PCMA website:

<http://www.pcma.uw.edu.pl/index.php?id=617&L=2>

ARCHAEOMETRY © UNIVERSITY OF OXFORD, VOLUME 55, ISSUE 1

Volume 55, Issue 1 Pages 1 - 177, February 2013 The latest issue of Archaeometry is available on Wiley Online Library Original Articles

NEUTRON TOMOGRAPHIC ASSESSMENT OF INCISIONS ON PREHISTORIC STONE SLABS: A CASE STUDY FROM WONDERWERK CAVE, SOUTH AFRICA* (pages 1–13) L. JACOBSON, F.C. DE BEER, R. NSHIMIRIMANA, L. K. HORWITZ and M. CHAZAN Article first published online: 30 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00670.x

CHARACTERIZATION OF LATE CHALCOLITHIC MICRO-BEADS FROM [c CEDILLA]AMLIBEL TARLASI, NORTH-CENTRAL ANATOLIA (pages 14–32) C. PICKARD and U.-D. SCHOOP Article first published online: 9 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00672.x

STUDYING TECHNOLOGICAL PRACTICES AT A LOCAL LEVEL: NEUTRON ACTIVATION AND PETROGRAPHIC ANALYSES OF EARLY CERAMIC PERIOD POTTERY IN CENTRAL CHILE* (pages 33–53) F. FALABELLA, L. SANHUEZA, I. CORREA, M. D. GLASCOCK, T. J. FERGUSON and E. FONSECA Article first published online: 30 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00681.x

STUDIES OF CERAMIC TILES ATTRIBUTED TO GABRIEL DEL BARCO (pages 54–67) R. S. CARVALHO, A. P. CARVALHO and M. F. VAZ Article first published online: 21 FEB 2012 | DOI: 10.1111/j.1475-4754.2012.00661.x

THE EFFECTS OF CORROSION AND CONSERVATION TREATMENTS ON NON-DESTRUCTIVE NEUTRON DIFFRACTION ANALYSIS OF ARCHAEOLOGICAL COPPER ALLOYS: PRELIMINARY RESULTS* (pages 68–80) L. D. FRAME, I. C. FREESTONE, SHU YAN ZHANG and M. NICHOLAS Article first published online: 7 MAY 2012 | DOI: 10.1111/j.1475-4754.2012.00676.x

MICROSCOPIC IDENTIFICATION AND SOURCING OF ANCIENT EGYPTIAN PLANT FIBRES USING LONGITUDINAL THIN SECTIONING* (pages 81–112) K. BOROJEVIC and R. MOUNTAIN Article first published online: 22 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00673.x

EXAMINING CHILDHOOD DIETS AT KAMINALJUYU, GUATEMALA, THROUGH STABLE ISOTOPIC ANALYSIS OF SEQUENTIAL ENAMEL MICROSAMPLES* (pages 113–133) L. E. WRIGHT Article first published online: 28 FEB 2012 | DOI: 10.1111/j.1475-4754.2012.00668.x

EXPERIMENTAL IN VITRO DISSOLUTION OF THE DENTINE OF TEETH OF SUS SCROFA (MAMMALIA, SUIDAE): CHEMISTRY AND MICROSTRUCTURAL ALTERATIONS* (pages 134–147) Y. DAUPHIN, P. MASSARD, C. QUANTIN and S. MONTUELLE Article first published online: 16 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00679.x

A NEW DATE FOR THE NEANDERTHALS FROM EL SIDRÓN CAVE (ASTURIAS, NORTHERN SPAIN)* (pages 148–158) R. E. WOOD, T. F. G. HIGHAM, T. DE TORRES, N. TISNÉRAT-LABORDE, H. VALLADAS, J. E. ORTIZ, C. LALUEZA-FOX, S. SÁNCHEZ-MORAL, J. C. CAÑAVERAS, A. ROSAS, D. SANTAMARÍA and M. DE LA RASILLA Article first published online: 20 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00671.x

NEW ARCHAEOMAGNETIC DATA RECOVERED FROM THE STUDY OF THREE ROMAN KILNS FROM NORTH-EAST SPAIN: A CONTRIBUTION TO THE IBERIAN PALAEOSECULAR VARIATION CURVE* (pages 159–177) M. GÓMEZ-PACCARD, E. BEAMUD, G. MC INTOSH and J. C. LARRASOÑA Article first published online: 14 MAR 2012 | DOI: 10.1111/j.1475-4754.2012.00675.x

Please visit the site: <http://onlinelibrary.wiley.com/doi/10.1111/arcm.2013.55.issue-1/issuetoc> [Go there for purchasable downloads]

CURRENT ANTHROPOLOGY 54/ **(FEBRUARY 2013)**

Table of Contents Alert

The University of Chicago Press on behalf of Wenner-Gren Foundation for Anthropological Research is happy to notify you that the new issue of Current Anthropology is now available. The online issues of this journal are hosted on JSTOR on behalf of The University of Chicago Press on behalf of Wenner-Gren Foundation for Anthropological Research.

Current Anthropology

Vol. 54, No. 1, February 2013

Published by: The University of Chicago Press on behalf of Wenner-Gren Foundation for Anthropological Research

Articles

Governing Future Potential Biothreats: Toward an Anthropology of Uncertainty Limor Samimian-Darash

DOI: 10.1086/669114

Current Anthropology February 2013, Vol. 54, No. 1: 1-22.

Reconstructing Social and Cultural Evolution: The Case of Dowry in the Indo-European Area Alain Testart

DOI: 10.1086/668679

Current Anthropology February 2013, Vol. 54, No. 1: 23-50.

The “Fateful Hoaxing” of Margaret Mead: A Cautionary Tale Paul Shankman

DOI: 10.1086/669033

Current Anthropology February 2013, Vol. 54, No. 1: 51-70.

CA☆ Forum on Public Anthropology

Is Poverty in Our Genes? A Critique of Ashraf and Galor, “The ‘Out of Africa’ Hypothesis, Human Genetic Diversity, and Comparative Economic Development,” American Economic Review (Forthcoming) Jade d’Alpoim Guedes, Theodore C. Bestor, David Carrasco, Rowan Flad, Ethan Fosse, Michael Herzfeld, Carl C. Lamberg-Karlovsky, Cecil M.

Lewis, Matthew Liebmann, Richard Meadow, Nick Patterson, Max Price, Meredith Reiches, Sarah Richardson, Heather Shattuck-Heidorn, Jason Ur, Gary Urton, and Christina Warinner

DOI: 10.1086/669034

Current Anthropology February 2013, Vol. 54, No. 1: 71-79.

Discussions

Meat Distribution, Game, and Spirits: A Response to Knight Peter M. Gardner

DOI: 10.1086/668655

Current Anthropology February 2013, Vol. 54, No. 1: 80.

Without Language, No Distinctly Human Numerosity: A Reply to Coolidge and Overmann Caleb Everett

DOI: 10.1086/668795

Current Anthropology February 2013, Vol. 54, No. 1: 81-82.

On the Nature of Numerosity and the Role of Language in Developing Number Concepts: A Reply to Everett Karenleigh A. Overmann and Frederick L. Coolidge

DOI: 10.1086/668833

Current Anthropology February 2013, Vol. 54, No. 1: 83-84.

Reports

An Early Paleoindian Bead from the Mockingbird Gap Site, New Mexico Vance T. Holliday and David Killick

DOI: 10.1086/668654

Current Anthropology February 2013, Vol. 54, No. 1: 85-95.

Living with Kin in Lowland Horticultural Societies Robert S. Walker, Stephen Beckerman, Mark V. Flinn, Michael Gurven, Chris R. von Rueden, Karen L. Kramer, Russell D. Greaves, Lorena Córdoba, Diego Villar, Edward H. Hagen, Jeremy M. Koster, Lawrence Sugiyama, Tiffany E. Hunter, and Kim R. Hill

DOI: 10.1086/668867

Current Anthropology February 2013, Vol. 54, No. 1: 96-103.

Book and Film Reviews

Why Monkeys Matter: Understanding Human Love and Competitiveness (Maestriepieri's Games Primates Play: An Undercover Investigation of the Evolution and Economics of Human Relationships) Games Primates Play: An Undercover Investigation of the Evolution and Economics of Human Relationships by Dario Maestriepieri Review by: Brenda R. Benefit

DOI: 10.1086/669115

Current Anthropology February 2013, Vol. 54, No. 1: 104-105.

Who Got Here First? (Stanford and Bradley's Across Atlantic Ice: The Origin of America's Clovis Culture) Across Atlantic Ice: The Origin of America's Clovis Culture by Dennis J. Stanford; Bruce A. Bradley Review by: Douglas B. Bamforth

DOI: 10.1086/669116

Current Anthropology February 2013, Vol. 54, No. 1: 105-107.

Heritage or Homes? Djenné and the Western Imagination (Joy's The Politics of Heritage Management in Mali: From UNESCO to Djenné) The Politics of Heritage Management in Mali: From UNESCO to Djenné by Charlotte Joy Review by: Angela Demovic

DOI: 10.1086/669117

Current Anthropology February 2013, Vol. 54, No. 1: 107-108.

Building Community Capability (Wallman's The Capability of Places:

Methods for Modelling Community Response to Intrusion and Change) The Capability of Places: Methods for Modelling Community Response to Intrusion and Change by Sandra Wallman Review by: Robert V. Kemper

DOI: 10.1086/669118

Current Anthropology February 2013, Vol. 54, No. 1: 108-110.

Ancient Maya Landscapes: A Community of Prosperous Farmers (Robin's

Chan: An Ancient Maya Farming Community)

Chan: An Ancient Maya Farming Community by Cynthia Robin Review by: Anabel Ford

DOI: 10.1086/669119

Current Anthropology February 2013, Vol. 54, No. 1: 110-111.

Manage your table of contents alerts.

If you need additional assistance, please do not hesitate to contact us at support@jstor.org, or by phone at 888 388-3574 (toll free in the United States) or 734 887-7001.

Please visit the site: <http://www.jstor.org/stable/10.1086/668648>

TOMBS OF THE LATE BRONZE AGE IN THE LIMASSOL AREA (17TH-13TH CENTURIES BC)

A new book by Vassos Karageorghis and Yiannis Violaris entitled “Tombs of the Late Bronze Age in the Limassol Area (17th-13th Centuries BC)” has just been published. It includes appendices by Andreas Charalambous, George Constantinou, Paul Croft, Nicolle Hirschfeld, Vasiliki Kassianidou, Kirsí Lorentz, Ioannis Panagides, Katerina Papanikolaou and Zomenia Zomeni. It has a hard cover, it is 324 pages long and it includes numerous color plates.

PRICE: 65.00 EUROS + POSTAGES. Reduced prices for booksellers. For more information please contact Voula Kokkinou at En Tipis Publications, Chiles 26, Pallouriotissa, 1020, Nicosia, Cyprus.

Email: entipis@cable.net.cy

Fax: +357 22765438

Vasiliki (Lina) Kassianidou

Associate Professor - NARNIA Project Coordinator

Archaeological Research Unit, Department of History and Archaeology

UNIVERSITY OF CYPRUS

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

tel. +357 22 893564, FAX. +357 22 674101

Personal web page: <http://www.ucy.ac.cy/~arkasian.aspx>

NARNIA web page: <http://narnia-itn.eu/>

HIGH MEDIEVAL COPPER AND LEAD/SILVER PRODUCTION CENTRAL EUROPE'S LARGEST COPPER MINE

My dissertation on the high medieval smelting of copper and lead/silver ores from the UNESCO World heritage site Rammelsberg/Goslar, Harz Mountains, Germany has just been published:

Bastian Asmus: Medieval Copper Smelting in the Harz Mountains, Germany (= Montanregion Harz, Bd 10 [Hg. Christoph Bartels, Karl Heinrich Kaufhold und Rainer Slotta]), Bochum (Veröffentlichungen aus dem Deutschen Bergbau-Museum Bochum Nr 191), 2012
ISBN 13: 978-3-937203-63-8

It deals with the archaeometallurgical/archaeological/historical study of a high medieval copper and lead/silver production site. It sheds light on the smelting process of the highly complex poly-metallic ores of the Rammelsberg with special reference to the copper chapters of the treatise of the benedictine monk and artificer Theophilus Presbyter on the one hand and a minute examination and analysis of the archaeological excavation documentation on the other hand. 390 pages, full colour throughout, an extensive appendix dedicated to the micro-analytical (reflected polarising light microscopy) identification of slag and metal phases, their analyses by EPMA and SEM-EDS, bulk chemical analyses by XRF.

For further details contact me, or order at the shop of the German Mining Museum:

http://www.bergbau-museumsshop.de/shop/article_DBM191/Medieval-Copper-Smelting-in-the-Harz-Mountains%2C-Germany.html?sessid=3VqJQLtrGoh7PmUmDpFaKoUF1rPrcM007s4xDrQmyGVefyhBSO9rcMcm14WmYNgR&shop_param=cid%3D1%26aid%3DDBM191%26

Best wishes,
Bastian

Dr Bastian Asmus
Labor für Archäometallurgie
Beroldingerweg 1
79194 Gundelfingen
www.consult.archaeometallurgie.de
www.forum.archaeometallurgie.de

JOURNAL OF ARCHAEOLOGICAL SCIENCE,
VOLUME 40, ISSUE 2, FEBRUARY 2013,
PAGES 1242–1249

**Multispectral documentation and image processing analysis of the papyrus of tomb
II at Daphne, Greece**

Athina A. Alexopoulou, Corresponding author contact information, E-mail the corresponding author,

Agathi-Anthoula Kaminaria, E-mail the corresponding author,

Athanasios Panagopoulou, E-mail the corresponding author,

Egert Pöhlmann, E-mail the corresponding author

a Technological Educational Institute of Athens, Department of Antiquities and Works of Art Conservation, Ag. Spyridonos 12, Egaleo 12210, Athens, Greece

b Friedrich-Alexander-Universität Erlangen-Nürnberg, Institut für Alte Sprachen, Erlangen, Kochstraße 4, Germany

<http://dx.doi.org/10.1016/j.jas.2012.09.013>, How to Cite or Link Using DOI

Abstract

This paper refers to the study of an ancient papyrus, dated ca. 420/430 BC, found in 1981 during an excavation at Daphne, Athens, Greece, using multispectral imaging combined with image processing analysis. It was assumed that the papyrus contained ancient Greek musical notation but the condition of the object hindered the drawing of any conclusion based only on visual examination. This fact, combined with the significance of the object itself, as it is the oldest papyrus which carries Greek text, pointed to the application of non-invasive techniques to enhance its readability. The multispectral imaging carried out in the range of 420–1000 nm enabled the detection of more letters on surface layers, at various places and orientations.

False colour imaging proved to yield better results in distinguishing the letters compared to single wavelength recording. In some cases, letters from several layers underneath are revealed in the infrared.

The letters present different grey levels according to the layer they belong. An interesting result coming from a simple subtraction of the infrared image at 1000 nm from the visible one at 660 nm is that different layers of the papyrus can be distinguished. The Application of Principal Component Analysis (PCA) showed that the best results, as far as the extraction of the letters from the background is concerned, are obtained when the second and the third images are merged. The automatic extraction of the letters is feasible to some extent but there is a certain amount of noise with similar characteristics that cannot be removed.

Please visit the site:

<http://www.sciencedirect.com/science/article/pii/S0305440312004153>

THE NEW CHRONOLOGY OF IRON AGE
GORDION. GORDION SPECIAL STUDIES, 6
C. BRIAN ROSE, GARETH DARBYSHIRE
(ED.)

Bryn Mawr Classical Review
BMCR 2013.01.51 on the BMCR blog

Bryn Mawr Classical Review 2013.01.51
C. Brian Rose, Gareth Darbyshire (ed.), *The New Chronology of Iron Age Gordion. Gordion special studies, 6*. Philadelphia: University of Pennsylvania Museum of Archaeology and Anthropology, 2011. Pp. xiv, 181. ISBN 9781934536445. \$69.95.

Reviewed by Naoíse Mac Sweeney, University of Leicester (nm241@le.ac.uk)

Preview

The New Chronology of Iron Age Gordion is the latest, and perhaps the most eagerly awaited, of the volumes in the ‘Gordion special studies’ series. The chronology of the Iron Age in Anatolia remains notoriously obscure, and has proved a stumbling block for scholarship due to the lack of evidence available, especially in central and western Anatolia. Anatolian archaeologists have long looked to the site of Gordion to help solve this problem. Gordion, the capital of Phrygia and the seat of King Midas, would have been an important centre in the Iron Age. Indeed, the site identified as Gordion offers a rare opportunity to investigate a largely unbroken Iron Age stratigraphic sequence, and to establish a firmer chronology for the Iron Age in Anatolia as a whole.

The site was first investigated in the early twentieth century, and a chronology established which depended substantially on classical and Neo-Assyrian literary sources, using the reign of Midas and the invasion of the Kimmerians as key chronological points. However, new excavations and the application of scientific dating techniques over the last decade have prompted a dramatic revision of this chronology.

The entire Iron Age sequence is now thought to be much earlier than previously thought, with some levels being re-dated by up to two hundred years. The destruction of the monumental Early Phrygian citadel, for example, is now thought to have taken place in the late 9th century, rather than the early 7th century, BC. The implications of this revised chronology are substantial, not only for those interested in Phrygia and central Anatolia, but also for those interested in the Iron Age throughout the eastern Mediterranean. The new Gordion chronology has therefore generated a great deal of interest and excitement, as well as debate. This edited volume offers, for the first time, a comprehensive discussion of the new chronology, both from a methodological and an interpretive point of view.

The book opens with a brief introduction, which gives the reader a clear overview of the history of research at Gordion, and a short explanation of the key differences between the old and new Iron Age chronologies. This introduction is followed by two

historiographical chapters. The first of these is written by Keith DeVries, and discusses in more detail the excavations under the Körte brothers and Rodney Young up until 1973, focusing on the establishment of the traditional chronology. DeVries highlights three key points underpinning the traditional chronology. The first is the destruction layer at the end of the Early Phrygian Period (YHSS 6A), which was dated to c.690 on the basis of literary texts about the Kimmerian invasion and subsequent death of Midas. The second is the burial in Tumulus MM (the so-called 'Midas Mound'), which was assigned a date in the early eighth century due to a single artefact that had parallels in Neo-Assyrian art under Sargon II. The third is the monumental rebuilding of the citadel, which was thought to have happened some time after the destruction in the sixth century, either during the time of Lydian expansion or under Persian rule. The role played by literary sources, both classical and Neo-Assyrian, in the creation of the traditional chronology is evident. The second chapter, by Mary Voigt and Keith DeVries, describes how the body of evidence against the old chronology grew over the course of the 1950s-90s, culminating in the radical revision of the chronology in the early 2000s. This chapter makes for engaging reading, developing its plots and subplots like a detective story, and describing the slow accumulation of evidence from radiocarbon dating, finds of imported Greek pottery, comparisons of architectural style, survey archaeology and detailed stratigraphic analysis. Taken together, these two chapters provide a novel insight into archaeological history, prompting reflections not only on the site of Gordion itself, but also on the development of archaeological theory and method over the course of the twentieth century.

The following four chapters each provide a detailed analysis of the main classes of evidence which have been crucial in establishment of Gordion's chronology: textual material, artefacts and ceramics, dendrochronology, and radiocarbon dating.

Chapter 3, also by DeVries, offers a comprehensive discussion of the textual sources relevant for the chronology of Gordion. It provides references for the figure of Midas in the Greek, Roman and Byzantine traditions, as well as in the Neo-Assyrian texts. It also includes a short section on the textual sources for the Kimmerians in Anatolia.

The ambiguity of all of these textual sources is highlighted, and the many contradictions between them. DeVries does not offer explanations for this, but there is an implied critique of positivist readings of these texts, and the suggestion that a more nuanced reading of the texts as literary constructions may be more fruitful.

Chapter 4, by Kenneth Sams, focuses on the finds from Gordion. Sams considers a range of different classes of material, including carved stone orthostats, bronze fibulae, arrowheads, and a fragmentary Phrygian inscription. Where individual objects have been used as keystones for chronology, their archaeological contexts are closely considered, and parallels are discussed. Sams also presents the ceramics, focusing particularly on vessels with painted animal decoration, and fine black-polished wares. This evidence from finds, Sams tells us, is consistent with the new chronology for the Iron Age.

However, the new chronology also has some significant implications for the interpretation of some of these finds. Sams mentions this briefly in the context of certain pottery styles, but does not go into detail about it here.

Chapter 5 is the longest chapter of the book, and presents the dendrochronological work done at Gordion. Ian Kuniholm, Maryanne Newton and Richard Liebhart introduce the history of dendrochronological analysis at the site, which goes back to the late 1950s.

The chapter goes on to discuss the establishment of a full Anatolian dendrochronological chart, and highlights some of the non-chronological insights that can be gained from analysis of the wooden remains. A longer discussion describes the various techniques used over the year to achieve absolute dates in the dendrochronological sequence, including use of radiocarbon. The methodological discussion is full, and includes reflections on sampling strategies, statistical methods, and the potential pitfalls of radiocarbon. A detailed appendix with tables, graphs and accompanying commentary allows readers to explore the research further.

The sixth chapter, by Sturt Manning and Bernd Kromer, is concerned with the radiocarbon dating of the site, and focuses in particular on the Early Phrygian destruction layer (YHSS 6A). The chapter summarises all the radiocarbon dating work conducted at Gordion up until 2010, explicitly addressing the potential problems with the data and making reference to the tree-ring samples first mentioned in Chapter 5. Once again, this chapter contains detailed discussion of sampling methods and tools of analysis, presenting raw data as well as interpretation.

This chapter, like the others before it, concludes in favour of the new Iron Age chronology.

The final concluding chapter, by Kenneth Sams and Mary Voigt, summarises the latest understanding of Gordion's development over the Iron Age, describing the various complex phases of construction and re-construction from the tenth until the fourth century BC. The establishment of the new chronology has meant that a clearer picture can be gained of the site's development, and new interpretations must be put forward for its history. Sams and Voigt highlight some areas where the new chronology has brought forth new insights, such as the sequence and occupants of the tumulus burials, and the character of Kimmerian activity in Anatolia. However, the implications of the new Gordion chronology for Anatolian and Near Eastern archaeology are far broader than any of the authors, in their modesty, claim. The idea of a 'Dark Age' in the Early Iron Age has long been critiqued, but with back-dating of the monumental Gordion remains into the tenth century, this idea must finally be abandoned. The political map of the Near East must also be redrafted, to take into account Gordion as a peer and contemporary of the Neo-Hittite states in the east. Finally, the comprehensive publication of this work allows other scholars to build on the research done at Gordion, to shed even more light on the Anatolian Iron Age.

Please visit the site: <http://bmcr.brynmawr.edu/2013/2013-01-51.html>

TWO NEW BOOKS FROM ÅSTRÖM EDITIONS

www.astromeditions.com

2012 was the 50th anniversary of the founding of *Studies in Mediterranean Archaeology* by the late Professor Paul Åström. To celebrate this milestone the current editors asked members of the editorial board to contribute something reflecting developments over this period and/or on the contribution of *Studies in Mediterranean Archaeology* to different aspects of the discipline. The resulting volume is *Studies in Mediterranean Archaeology: Fifty Years On*, edited by Jennifer M. Webb and David Frankel (SIMA CXXXVII, Åström Editions, Uppsala, 2012, ISBN 978-91-7081-246-0).

Robert Merrillees, *The 'Ochsenkrater-Grab' from Nicosia Ayia Paraskevi* (Åström Editions, Uppsala 2012, ISBN 978-91-7081-247-7) is a study of the scattered finds from a significant Middle and Late Bronze Cypriot Age tomb group acquired by Max Ohnefalsch-Richter in the 1880s and subsequently sold to the Königliche, now Staatliche Museen zu Berlin.

Professor David Frankel PhD FAHA FSA

Archaeology Program
La Trobe University
Bundoora 3086
Australia
phone (03) 9479 1429
fax (03) 9479 1881
d.frankel@latrobe.edu.au

Editor in Chief
Studies in Mediterranean Archaeology
sima@astromeditions.com
www.astromeditions.com

THE SIGNS OF WHICH TIMES? **CHRONOLOGICAL AND** **PALAEOENVIRONMENTAL ISSUES IN THE** **ROCK ART OF NORTHERN AFRICA**

The Royal Academy for Overseas Sciences (Brussels, Belgium) is pleased to announce the publication of:

Huyge D., Van Noten F. & Swinne D. (Guest Eds) The Signs of Which Times? Chronological and Palaeoenvironmental Issues in the Rock Art of Northern Africa, Brussels: Royal Academy for Overseas Sciences

377 pp., 197 fig., 6 tab.

2012

45.00 EUR

This volume presents the proceedings of the international colloquium “The Signs of Which Times?” held at the Royal Academy for Overseas Sciences in Brussels from 3 to 5 June 2010.

Contents

F. Van Noten - Introduction

P. Bahn - North Africa's Place in Rock Art Research

J. Soler i Subils - The Age and the Natural Context of the Western Saharan Rock Art

C. Dupuy - Trois époques de gravure rupestre en Adrar des Iforas (Mali)

M. Hachid et al. - Quelques résultats du projet de datation directe et indirecte de l'art rupestre sarien

S. Searight-Martinet - Holocene Rock Art in Morocco: Hard Facts, Hesitant Hypotheses and Hopeful Headway

A. Skounti et al. - Rock Art and Archaeology in Ifran-n-Taska (Eastern Jebel Bani, Morocco): First Results of the Moroccan-Italian Research Project

J. Raymaekers & F. Van Noten - A Decorated Stele from the Ténéré

M. Guagnin - From Savanna to Desert: Rock Art and the Environment in the Wadi al-Hayat (Libya)

A. & A.-M. Van Albada - Eléments intéressant la chronologie relative des gravures rupestres du Plateau du Messak au Fezzan (Libye)

A. Zerboni - Rock Art in the Central Sahara (SW Libya): A Geo-archaeological and Palaeoenvironmental Perspective

F. Förster et al. - The 'Cave of Beasts' (Gilf Kebir, SW Egypt) and its Chronological and Cultural Affiliation: Approaches and Preliminary Results of the Wadi Sura Project

A. Zboray - A Revision of the Identified Prehistoric Rock Art Styles of the Central Libyan Desert (Eastern Sahara) and their Relative Chronology

D. Huyge et al. - Premiers témoignages d'un art rupestre pléistocène en Afrique du Nord: confirmation de l'âge des petroglyphs de Qurta (Egypte) par datation OSL de leur couverture sédimentaire

L. Lippiello & M. Gatto - Intrasite Chronology and Palaeoenvironmental Reconstruction at Khor Abu Subeira South 1 (Aswan, Egypt)

S. Hendrickx et al. - Iconographic and Palaeographic Elements Dating a Late Dynasty 0 Rock Art Site at Nag el-Hamdulab

F. Hardtke - Rock Art around Settlements: The Boats & Fauna at Hierakonpolis, Egypt

F. Lankester - Dating the Petroglyphs of Egypt's Central Eastern Desert

D. Huyge – Postscript

Copies can be ordered at the price of EUR 45.00 (not including shipping costs) at the following address:

Royal Academy for Overseas Sciences
Louizalaan 231
B-1050 Brussels
Belgium
Fax: 00 32 2 539.23.53
E-mail: kaowarsom@skynet.be

or can be ordered online at:

http://www.kaowarsom.be/catalog/product_info.php?products_id=767&language=en

Jack M. Sasson
Vanderbilt University
Nashville, TN 37240
jack.m.sasson@vanderbilt.edu

ΕΙΔΗΣΕΙΣ - NEWS RELEASE

BULGARIA CLAIMS FIND OF TEMPLE TO PRIAPUS

In a claim certain to prick the interest of followers of archaeology and mythology everywhere, the head of Bulgaria's National History Museum has said that an ancient temple to the Greek god Priapus has been found in the Black Sea town of Sozopol.

National History Museum chief Bozhidar Dimitrov, who hails from Sozopol, said that archaeologists had found a clay phallus inscribed "to Priapus" during a dig in the Black Sea town, which in the past 24 months has boasted everything from the finding of the purported hand bones of Christian saint John the Baptist to a temple to Poseidon.

Dimitrov reminded local media of the legend of Priapus and a donkey having disputed who was the better-endowed, with the donkey losing the dispute and its life into the bargain, ending as a sacrifice to the god.

The cult of Priapus, Dimitrov said, was believed to have originated along the coast of Asia Minor. In Hellenistic and Roman times, Priapus became associated with sensual pleasure.

Votives were made to Priapus, he said, from men who had genital diseases or otherwise had problems with erectile dysfunction or potency.

Priapus, Dimitrov omitted to mention, also is seen as something of a pagan patron saint of gardens (think: fertility) and his place in popular legend has been enhanced by mentions in the Satyricon by Petronius, in the works of Ovid, and in Chaucer.

Priapus, interestingly, also had a less obviously sexually prominent place in the figurines used as pointers in artefacts used in ancient Greece and Rome as navigational aids.

Please visit the site: <http://sofiaglobe.com/2013/01/06/archaeology-bulgaria-claims-find-of-temple-to-priapus/>

ARCHAEOLOGISTS UNEARTH MORE THAN 300 PREHISTORIC CLAY FIGURINES IN GREECE

Archaeologists from the University of Southampton studying a Neolithic archaeological site in central Greece have helped unearth over 300 clay figurines, one of the highest density for such finds in south-eastern Europe.

The Southampton team, working in collaboration with the Greek Archaeological Service and the British School at Athens, is studying the site of Koutroulou Magoula near the Greek village of Neo Monastiri, around 160 miles from Athens.

Koutroulou Magoula was occupied during the Middle Neolithic period (c. 5800 - 5300 BC) by a community of a few hundred people who made architecturally sophisticated houses from stone and mud-bricks. The figurines were found all over the site, with some located on wall foundations. It's believed the purpose of figurines was not only as aesthetic art, but also to convey and reflect ideas about a community's culture, society and identity.

"Figurines were thought to typically depict the female form, but our find is not only extraordinary in terms of quantity, but also quite diverse - male, female and non-gender specific ones have been found and several depict a hybrid human-bird figure," says Professor Yannis Hamilakis, Co-Director of the Koutroulou Magoula Archaeology and Archaeological Ethnography project.

He continues, "We still have a lot of work to do studying the figurines, but they should be able to give us an enormous amount of information about how Neolithic people interpreted the human body, their own gender and social identity and experience."

Excavations at Koutroulou Magoula were started in 2001 by Dr Nina Kyparissi (formerly Greek Archaeological Service) and this latest project began in 2010. The site is roughly four times the area of a football pitch and consists of a mound up to 18 feet high featuring at least three terraces surrounded by ditches. The people who lived in the settlement appear to have rebuilt their homes on the same building footprint generation after generation, and there is also evidence that some of the houses were unusual in their construction.

Professor Hamilakis comments, "This type of home would normally have stone foundations with mud-bricks on top, but our investigations at Koutroulou Magoula have found some preserved with stone walls up to a metre in height, suggesting that the walls may have been built entirely of stone, something not typical of the period.

"The people would have been farmers who kept domestic animals, used flint or obsidian¹ tools and had connections with settlements in the nearby area. The construction of parts of the settlement suggests they worked communally, for example, to construct the concentric ditches surrounding their homes..

"There is no evidence of a central authority to date, yet large numbers of people were able to come together and carry out large communal and possibly socially beneficial projects."

In later centuries, the settlement mount became an important memory place. For example, at the end of the Bronze Age, a 'tholos' or beehive-shaped tomb was constructed at the top and in Medieval times (12-13th c. AD) at least one person (a young woman) was buried amongst the Neolithic houses.

In addition to excavation, the project has conducted ethnography amongst the local communities, exploring their customs and culture and their relationship to the site. It has engaged in a series of community and public archaeology events, including the production and staging of site-specific theatrical performances, which turn into communal celebrations with food, drink and dance. In part, this aims to examine the importance of Koutroulou Magoula to contemporary communities and make the site an important feature in the social and cultural life of the area.

The project team will carry out two study seasons in 2013 and 2014.

1 Obsidian is the rock formed as a result of cooled magma.

Please visit the site:

<http://www.sciencedaily.com/releases/2013/01/130107082220.htm>

LARGEST EVER EGYPTIAN SARCOPHAGUS IDENTIFIED, BY OWEN JARUS

The largest ancient Egyptian sarcophagus has been identified in a tomb in Egypt's Valley of the Kings, say archaeologists who are re-assembling the giant box that was reduced to fragments more than 3,000 years ago.

Made of red granite, the royal sarcophagus was built for Merneptah, an Egyptian pharaoh who lived more than 3,200 years ago. A warrior king, he defeated the Libyans and a group called the "Sea Peoples" in a great battle.

He also waged a campaign in the Levant attacking, among others, a group he called "Israel" (the first mention of the people). When he died, his mummy was enclosed in a series of four stone sarcophagi, one nestled within the other.

Archaeologists are re-assembling the outermost of these nested sarcophagi, its size dwarfing the researchers working on it. It is more than 13 feet long, 7 feet wide and towers more than 8 feet above the ground. It was originally quite colorful and has a lid that is still intact.

"This as far as I know is about the largest of any of the royal sarcophagi," said project director Edwin Brock, a research associate at the Royal Ontario Museum in Toronto, in an interview with LiveScience.

Brock explained the four sarcophagi would probably have been brought inside the tomb already nested together, with the king's mummy inside.

Holes in the entrance shaft to the tomb indicate a pulley system of sorts, with ropes and wooden beams, used to bring the sarcophagi in.

When the workers got to the burial chamber they found they couldn't get the sarcophagi box through the door. Ultimately, they had to destroy the chamber's door jams and build new ones.

"I always like to wonder about the conversation that might have taken place between the tomb builders and the people from the quarry," said Brock in a presentation he gave recently at an Egyptology symposium in Toronto. "This study has shown a lot of interesting little human aspects about ancient Egypt [that] perhaps makes them look less godlike."

When he first examined fragments from Merneptah's tomb in the 1980s, they were "piled up in no particular order" in a side chamber. Even when put together, the fragments made up just one-third of the box, meaning researchers had to reconstruct the rest.

Brock's efforts got a boost with the launch of a full reconstruction project (affiliated with the Royal Ontario Museum) that started in March 2011. (Merneptah's tomb has been recently re-opened to the public.)

The four sarcophagi

Not only was the pharaoh's outer sarcophagus huge but the fact that he used four of them, made of stone, is unusual. "Merneptah's unique in having been provided with four stone sarcophagi to enclose his mummified confined remains," said Brock in his presentation. [The 10 Weirdest Ways We Deal With the Dead]

Within the outer sarcophagus was a second granite sarcophagus box with a cartouche-shaped oval lid that depicts Merneptah. Within that was a third sarcophagus that was taken out and reused in antiquity by another ruler named Psusennes I. Within this was a fourth sarcophagus, made of travertine (a form of limestone), that originally held the mummy of Merneptah.

Only a few fragments of this last box survive today; the mummy itself was reburied in antiquity after the tomb was robbed more than 3,000 years ago. It was after this robbery that the outer sarcophagus box, and the second box within it, were broken apart (the lids for both boxes being kept intact). They were destroyed not only for their parts but also to help get at the third box (that was reused by Psusennes).

Fire was used in breaking apart the outer sarcophagus box.

"Scorch marks, spalling [splinters] and circular cracking on various locations of the interior and exterior of the box attest to the use of fire to heat parts of the box, followed by rapid cooling with water to weaken the granite," writes Brock in his symposium abstract, adding that dolerite hammer stones also appear to have been used.

Why so big?

Why Merneptah built himself such a giant sarcophagus is unknown. Other pharaohs used multiple sarcophagi, although none, it appears, with an outer box as big as this.

Brock points out that Merneptah's father, Ramesses II, and grandfather, Seti I, both great builders, were apparently each buried in one travertine sarcophagus.

The decorations on Merneptah's different sarcophagi offer a clue as to why he built four of them. They contain illustrations "from two compositions that describe the sun god's journey at night, one is called the 'Book of Gates' and one is called the 'Amduat,'" Brock said. These books are divided into 12 sections, or "hours."

He notes that the same hours tend to be repeated on the box and lids of Merneptah's sarcophagi. One motif the king appears particularly fond of is the opening scenes of the "Book of Gates," including one depicting a realm that exists before the sun god enters the netherworld, according to Egyptologist Erik Hornung's book "The Ancient Egyptian Books of the Afterlife" (Cornell University Press, 1999, translation from German). "Upon his entry into the realm of the dead, the sun god is greeted not by individual deities but by the collective of the dead, who are designated the 'gods of the west' and located in the western mountain range," Hornung writes.

For the king repeating scenes like this over and over may have been important, it's "as though they're trying to enclose the [king's] body with these magical shells that have power of resurrection," Brock said.

The research was presented at a Toronto symposium that ran from Nov. 30 to Dec. 2 and was organized by the Society for the Study of Egyptian Antiquities and the Royal Ontario Museum's Friends of Ancient Egypt.

Please visit the site: http://www.cbsnews.com/8301-205_162-57557584/largest-ever-egyptian-sarcophagus-identified/ [Go there for pict]

ARCHAEOLOGISTS UNEARTH **AGRICULTURAL SUBURB AT ANCIENT** **CITY OF PETRA**

An agricultural suburb and other finds unearthed at Petra by archaeologists from the Brown University Petra Archaeological Project suggest that extensive terrace farming and dam construction in the ancient desert city began some 2,000 years ago, not during the Iron Age as had been previously hypothesized.

The successful terrace farming of wheat, grapes and possibly olives, resulted in a vast, green, agricultural ‘suburb’ to Petra in an otherwise inhospitable, arid landscape.

This terrace farming remained extensive and robust through the third century. Based on surface finds and comparative data collected by other researchers in the area, however, it is clear that this type of farming continued to some extent for many centuries, until the end of the first millennium (between AD 800 and 1000). That ancient Petra was under extensive cultivation is a testament to past strategies of land management, and is all the more striking in light of the area’s dry and dusty environment today.

These findings will be presented today at the Archaeological Institute of America Annual Meeting in Seattle.

Dating the start of extensive terrace farming at Petra to the beginning of the common era has important historical implications, because this date coincides closely with the Roman annexation of the Nabataean Kingdom in AD 106.

“No doubt the explosion of agricultural activity in the first century and the increased wealth that resulted from the wine and oil production made Petra an exceptionally attractive prize for Rome. The region around Petra not only grew enough food to meet its own needs, but also would have been able to provide olives, olive oil, grapes and wine for trade. This robust agricultural production would have made the region a valuable asset for supplying Roman forces on the empire’s eastern frontier,” said lead author Christian Cloke, a doctoral student at the University of Cincinnati.

“In other words, successful terrace farming and water management when Petra was at its zenith as a trading center added not only to the city’s economic importance but to its strategic military value as well, because there were limited options in the region for supplying troops with essential supplies,” added Dr Cecelia Feldman Weiss, a classics lecturer at UMass-Amherst.

On large stretches of land north of Petra, inhabitants built complex and extensive systems to dam wadis and redirect winter rainwater to hillside terraces used for farming.

Rainfall in the region occurs only between October and March, often in brief, torrential downpours, so it was important for Petra’s inhabitants to capture and store all available water for later use during the dry season. Over the centuries, the Nabataeans of Petra became experts at doing so. The broad watershed of sandstone hills naturally directed

water flow to the city center, and a complex system of pipes and channels directed it to underground cisterns where it was stored for later use.

“Perhaps most significantly,” Cloke said, “it’s clear that they had considerable knowledge of their surrounding topography and climate. The Nabataeans differentiated watersheds and the zones of use for water: water collected and stored in the city itself was not cannibalized for agricultural uses. The city’s administrators clearly distinguished water serving the city’s needs from water to be redirected and accumulated for nurturing crops. Thus, extensive farming activity was almost entirely outside the bounds of the city’s natural catchment area and utilized separate watersheds and systems of runoff.”

Bibliographic information: Chris Cloke & Cecelia Feldman Weiss. On the Rocks: Landscape Modification and Archaeological Features in Petra’s Hinterland. AIA/APA 2013

Please visit the site: <http://www.sci-news.com/archaeology/article00804.html> [Go there for pix]

FAMED ROMAN SHIPWRECK REVEALS MORE SECRETS, BY DAN VERGANO

Marine archaeologists report they have uncovered new secrets of an ancient Roman shipwreck famed for yielding an amazingly sophisticated astronomical calculator. An international survey team says the ship is twice as long as originally thought and contains many more calcified objects amid the ship's lost cargo that hint at new discoveries.

At the Archaeological Institute of America meeting Friday in Seattle, marine archaeologist Brendan Foley of the Woods Hole (Mass.) Oceanographic Institution, will report on the first survey of Greece's famed Antikythera island shipwreck since 1976. The ancient Roman shipwreck was lost off the Greek coast around 67 BC, filled with statues and the famed astronomical clock.

"The ship was huge for ancient times," Foley says. "Divers a century ago just couldn't conduct this kind of survey but we were surprised when we realized how big it was."

Completed in October by a small team of divers, the survey traversed the island and the wreck site, perched on a steep undersea slope some 150 to 230 feet deep in the Mediterranean Sea.

The October survey shows the ship was more than 160 feet long, twice as long as expected. Salvaged by the Greek navy and skin divers in 1901, its stern perched too deep for its original skin-diver discoverers to find.

The wreck is best known for yielding a bronze astronomical calculator, the "Antikythera Mechanism" widely seen as the most complex device known from antiquity, along with dozens of marble and bronze statues.

The mechanism apparently used 37 gear wheels, a technology reinvented a millennium later, to create a lunar calendar and predict the motion of the planets, which was important knowledge for casting horoscopes and planning festivals in the superstitious ancient world.

A lead anchor recovered in a stowed position in the new survey shows that the ship likely sank unexpectedly when "a storm blew it against an underwater cliff," says marine archaeologist Theotokis Theodoulou of Greece's Ephorate (Department) of Underwater Antiquities. "It seems to have settled facing backwards with its stern (rear) at the deepest point," he says.

Antikythera Mechanism

The bronze Antikythera Mechanism used 37 gear wheels, a technology reinvented a millennium later, to create a lunar calendar and predict the motion of the planets. (Photo: Antikythera Mechanism Research Project)

Scholars have long debated whether the ship held the plunder of a Roman general returning loot from Greece in the era when the Roman Republic was seizing the reins of the Mediterranean world, or merely luxury goods meant for the newly built villas of the

Roman elite. The last survey of the shipwreck was led by undersea explorer Jacques Cousteau, whose documentary Diving for Roman Plunder chronicled that 1976 effort, which appears to have excavated the ship's kitchen.

The October survey team watched the 1970s documentary to help orient themselves to the wreck site. "They didn't have the diving technology that we now have to do a very efficient survey," Theodoulou says.

Along with vase-like amphora vessels, pottery shards and roof tiles, Foley says, the wreck also appears to have "dozens" of calcified objects resembling compacted boulders made out of hardened sand resting atop the amphorae on the sea bottom. Those boulders resemble the Antikythera mechanism before its recovery and restoration. In 2006, an X-ray tomography team reported that the mechanism contained at least 30 hand-cut bronze gears re-creating astronomical cycles useful in horoscopes and timing of the Olympic Games in the ancient world, the most elaborate mechanical device known from antiquity until the Middle Ages. "The (objects) may just be collections of bronze nails, but we won't know until someone takes a look at them," Foley says.

The survey effort, headed by Aggeliki Simossi of the Ephorate of Underwater Antiquities, will continue for the next two years. The international survey team will look in two different locales for ancient shipwrecks in that time, while Greek antiquities officials ponder further exploration. An amphora recovered from the wreck will also have its inner walls tested for DNA traces of the regular cargo, such as wine, once carried by the vessel.

Recovery of whatever cargo remains with the wreck, now covered in sand, presents a technically difficult, but not impossible, challenge for marine archaeologists.

"Obviously there are a lot of artifacts still down there, but we will need to be very careful about our next steps. This ship was not a normal one," Theodoulou says.

Please visit the site: <http://www.usatoday.com/story/tech/2013/01/03/antikythera-shipwreck-survey/1804353/> [Go there for pix]

EIGHT MILLION DOG MUMMIES WERE UNCOVERED AT THE DOG CATACOMB IN SAQQARA, BY NEVINE EL-AREF

During routine excavations at the dog catacomb in Saqqara necropolis, an excavation team led by Salima Ikram, professor of Egyptology at The American University in Cairo (AUC), and an international team of researchers led by Paul Nicholson of Cardiff University have uncovered almost 8 million animal mummies at the burial site.

Studies on their bones revealed that those dogs are from different breeds but not accurately identified yet.

“We are recording the animal bones and the mummification techniques used to prepare the animals,” Ikram said.

Studies on the mummies, Ikram explains, revealed that some of them were old while the majority were buried hours after their birth. She said that the mummified animals were not limited to canines but there are cat and mongoose remains in the deposit.

“We are trying to understand how this fits religiously with the cult of Anubis, to whom the catacomb is dedicated,” she added.

Ikram also told National Geographic, which is financing the project, that “in some churches people light a candle, and their prayer is taken directly up to God in that smoke. In the same way, a mummified dog's spirit would carry a person's prayer to the afterlife”.

Saqqara dog catacomb was first discovered in 1897 when well-known French Egyptologist Jacques De Morgan published his Carte of Memphite necropolis, with his map showing that there are two dog catacombs in the area.

However, mystery has overshadowed such mapping as it was not clear who was the first to discover the catacombs nor who carried out the mapping, and whether they were really for dogs.

“The proximity of the catacombs to the nearby temple of Anubis, the so called jackal or dog-headed deity associated with cemeteries and embalming makes it likely that these catacombs are indeed for canines and their presence at Saqqara is to be explained by the concentration of other animal cuts at the site,” Nicholson wrote on his website.

“These other cults include the burials of, and temples for, bulls, cows, baboons, ibises, hawks and cats all of which were thought to act as intermediaries between humans and their gods.”

Despite the great quantity of animals buried in these catacombs and the immense size of the underground burial places, Egyptologists have focused on the temples and on inscriptional evidence rather than on the animals themselves and their places of burial.

The mysteries behind De Morgan's mapping were unsolved until 2009 when this team started concrete excavations at the cemetery in an attempt to learn more about the archaeological and history of the site.

"Results at the first season showed that De Morgan map has substantial inaccuracies and a new survey is under way," Nicholson said.

"The animal bones themselves have been sampled and preliminary results suggest that as well as actual dogs there may be other canids present. Furthermore the age profile of the animals is being examined so that patterns of mortality can be ascertained."

Please visit the site:

<http://english.ahram.org.eg/NewsContent/9/40/61381/Heritage/Ancient-Egypt/Eight-million-dog-mummies-found-in-Saqqara.aspx>

ARCHAEOLOGISTS DISCOVER AUGUSTAN- ERA SCULPTURES NEAR ROME SCULPTURES FOUND IN VILLA IN CIAMPINO TELL MYTH OF NIOBE

Archaeologists discover Augustan-era sculptures near Rome (ANSA) - Rome, January 8
- Archaeologists say they've uncovered an "exceptional" group of sculptures dating to the 1st century BC in a villa in Rome's suburb of Ciampino.

The sculptures, found in an ancient villa owned by Roman general Marcus Valerius Messalla Corvinus, a patron of the poet Ovid, tell the myth of Niobe, the proud daughter of Tantalus who lost all her 14 children after boasting to the mother of Apollo and Artemis, Leto, about her fertility.

Niobe, regarded as a classic example of the retribution caused by the sin of pride or hubris, was turned to stone. Excavations at the villa have also revealed a thermal bath area with fragments of artistic mosaics and a swimming pool as long as 20 meters with walls painted blue.

Inside the bath area were found seven sculptures dating to the Augustan age, as well as a complete series of fragments that experts say can be reassembled.

The group tells the story of Niobe, which figured in Ovid's epic poem of transformation, the Metamorphoses, published in AD 8.

La Repubblica newspaper said Tuesday a team of archaeologists made the valuable discovery last summer.

"Statues of Niobe have been found in the past, but in the case of Ciampino, we have a good part of the group," of statues, said Elena Calandra, superintendent of archaeological heritage.

According to their reconstruction of the bath area, experts say the statues were carved on all four sides of the swimming pool, which may have been buried by an earthquake in the 2nd century AD.

Please visit the site:

http://www.ansa.it/web/notizie/rubriche/english/2013/01/08/Archaeologists-discover-Augustan-era-sculptures-near-Rome_8042282.html

ATHENIAN 'SNAKE GODDESS' GETS NEW IDENTITY, BY STEPHANIE PAPPAS

A mysterious "snake goddess" painted on terracotta and discovered in Athens may actually be Demeter, the Greek goddess of the harvest.

Once linked to the worship of the dead, the goddess is flanked by two snakes on a slab of terracotta about the size of a piece of notebook paper. She has her hands up above her head, which has given her the nickname "the touchdown goddess" thanks to the resemblance of the pose to a referee's signal. The goddess is painted in red, yellow and blue-green on a tile, with only her head molded outward in three dimensions. This unusual piece of art was found amid a jumble of gravel and other terracotta fragments in 1932 in what was once the Athenian agora, or public square.

The catch, however, is that the snake goddess isn't originally from the agora. The gravel and figurine fragments were fill material, brought in from an unknown second location to build a path or road in the seventh century B.C.

"Not only is our snake goddess unidentified, but she's homeless," said study researcher Michael Laughy of Washington and Lee University in Virginia. "She got mixed up in that road gravel, presumably obtained near the site of her original shrine."

Forgotten offering

Along with the snake goddess plaque, the road fill contains small terracotta figurines, or votives, of humans, chariots, shields, loom weights, portions of spindles and pottery disks, most of which individually could fit in the palm of a hand. The terracotta figurines were used during this time period as offerings at the sanctuaries of gods and goddesses, Laughy told LiveScience after presenting his findings here at the annual meeting of the Archaeological Institute of America. [See Images of the Mystery Figurines & Snake Goddess]

Normally, he said, the votive offerings were considered somewhat sacred, and once cleared from sanctuaries would be buried and left undisturbed in a pit. Thus, although it's typical to see artifacts out of place in Athens, which has been built over for thousands of years, it's strange to see votives used as road fill, Laughy said.

Tracing the source of this fill is a difficult task. Previously, archaeologists have assumed the figurines originated from the worship of the dead, linking the items found in Athens to ones found at a Bronze Age tomb outside the city. But the items at that tomb don't match all those found in the Athens agora, Laughy said.

Displaced goddess

More Likely, according to Laughy's analysis, the snake-flanked woman is both a representation of and an offering to a goddess. Votive deposits from the shrines of goddesses include pottery disks, terracotta horses, plaques and shields, as well as female figurines.

These votives match the finds uncovered in Athens.

In particular, shrines devoted to Demeter and Athena, the goddess of wisdom and war, show the closest matches to the types of figurines found, Laughy said.

Demeter is a strong candidate, as there was a shrine built in her name in the seventh century mere minutes-long walk from the Athens agora, he said. It's the only sanctuary where ancient Greeks are known to have left loom weights and spindle whorls, which are disks that weigh down spindles used for spinning thread and which are found in the Athens fill debris. What's more, Laughy said, the spot was graded in the seventh century, which could have produced a debris pile that was then carted away to make paths in the agora.

Finally, the goddess' serpentine companions also point to Demeter, who was particularly associated with snake iconography, Laughy said.

"Snakes and Demeter are happy together in imagery in the seventh century," he said.

Laughy warned that the evidence linking the snake goddess and Demeter is circumstantial. However, he said, the evidence is strong that the woman is not a figure associated with death, but a goddess. If she were Demeter, the snake goddess plaque would be one of the oldest images ever found of that particular deity.

Either way, the snake goddess is "striking," Laughy said. It's one of the earliest multicolor paintings found in Athens

"It's an amazing piece of work," he said.

Please visit the site: <http://news.yahoo.com/athenian-snake-goddess-gets-identity-150708569.html> [Go there for pix]

ANCIENT EYE TREATMENT RECOVERED FROM TUSCAN SHIPWRECK, BY DENNIS NORMILE

Medicinal tablets retrieved from a 2000-year-old shipwreck suggest that classical Mediterranean civilizations had sophisticated drugs.

Around 130 B.C.E., a merchant ship sank just off the coast of Italy's Tuscany region. The wreck was spotted in 1974 and dubbed the Relitto del Pozzino after the beach near where it was found. Archaeological excavations in 1989 and 1990 yielded glass bowls, amphoras for carrying wine, lamps, and tin and bronze vessels all likely to have come from the eastern Mediterranean.

There were also artifacts presumably contained in a wooden chest that had rotted away: wooden vials, a cup possibly used for blood-letting, and other objects likely to have been found in an ancient physician's medical bag. Among them was a small tin cylinder known at the time as a "pyxis," that contained five tablets that were about 4 cm in diameter and had been preserved from the elements by a tight-fitting lid. Italian scientists recently analyzed fragments from one tablet and found primarily two zinc-rich materials (hydrozincite and smithsonite), as well as various animal and plant residues, pollen grains, beeswax, and pine resin. In a paper appearing online today in the Proceedings of the National Academy of Sciences, the scientists argue that the writings of Pliny the Elder, a Roman, and Pedanius Dioscorides, a Greek, both recognized by classicists for their writings on medicinal materials, claim these zinc compounds were once thought beneficial for the eyes and the skin. And they note that the Latin word for eyewash, collyrium, derives from a Greek word meaning "small round loaves."

"This is a fascinating paper on a very interesting set of new finds," says Richard Evershed, a chemist at University of Bristol in the United Kingdom. He adds that the chemical and microscopic analyses "seem robust, although there are aspects I would have pursued in further detail." He is less sure that the materials were really used to treat the eyes, though he agrees the case is strengthened by the links to the classical literature.

The tablets were originally thought to be vitamin pills sailors might take while on long voyages. But the researchers have concluded that "the tablets were directly applied on the top of the eyes," says Erika Ribechini, a chemist at the University of Pisa and a co-author of the report.

Despite lingering questions about the use of the tablets, the study "provides a further example of the high level of knowledge our ancestors possessed concerning the properties of natural materials and technologies required to refine and manipulate them to provide improved products," Evershed says.

Please visit the site: <http://news.sciencemag.org/sciencenow/2013/01/ancient-eye-treatment-recovered.html?ref=hp> [Go there for pix]

GRAFFITI DATING FROM THE ROMAN ERA HAS BEEN FOUND SCRAWLED ON THE WALLS OF THE COLOSSEUM DURING RESTORATION WORK, BY NICK SQUIRES

Restorers also discovered fragments of brightly coloured frescoes, suggesting that the ancient monument was gaudily decorated when it hosted gladiatorial fights and wild animal hunts under the emperors.

The fragments – in ochre, red, blue and green – are in stark contrast to the monochrome grey and white of the travertine marble that covers the facade of the amphitheatre today.

The graffiti includes hard-to-decipher words and symbols as well as two large phalluses – possibly an erotic representation, or perhaps just lewd scribbling.

The new discoveries were made on the third and highest level of the Colosseum, which is closed to the public.

They are spread out over a 200ft-long section of a covered tunnel which would have funnelled spectators to their seats high above the arena.

The coloured frescoes were "an extraordinary discovery", said Rossella Rea, who is in charge of the landmark in the centre of Rome. "We weren't expecting to find them. There is still a great deal to be studied and there will almost certainly be other surprises."

The frescoes would have been "rich and elaborate" in colour and detail, said Ida Simonelli, the head of the restoration team.

A £22 million restoration of the Colosseum, to be funded by Diego Della Valle, the multi-millionaire founder of the Tod's shoe empire, is scheduled to begin within weeks.

It will be the most comprehensive restoration effort in more than 70 years and is expected to take two years.

The project, which will entail removing decades of grime from the facade of the Colosseum, will take place in phases so that the amphitheatre can remain open to visitors.

The privately-funded work, which has been delayed by months of bureaucracy, is being seen as a model for the sponsoring of other ancient sites in Italy, including Pompeii.

Please visit the site:

<http://www.telegraph.co.uk/news/worldnews/europe/italy/9793231/Roman-era-graffiti-found-on-Colosseum.html>

ANCIENT POMPEIANS COULD GO UPSTAIRS TO PEE, BY STEPHANIE PAPPAS

The residents of the ancient city of Pompeii weren't limited to street-level plumbing, a new study finds. In fact, many in the city may have headed upstairs when nature called.

Most second floors in the Roman city are gone, claimed by the eruption of Mount Vesuvius that destroyed Pompeii in A.D. 79. But vertical pipes leading to lost second stories strongly suggest that there were once toilets up there, according to a new analysis by A. Kate Trusler, a doctoral candidate in anthropology at the University of Missouri.

"We have 23 toilets that are connected, that are second-story preserved, that are connected to these downpipes," Trusler told LiveScience on Friday (Jan. 4) at the annual meeting of the Archaeological Institute of America in Seattle, where she presented her research.

Traces of toilets

Trusler became interested in Pompeii's latrines six years ago while doing fieldwork in the city. Previous researchers and works on Pompeii often stated that there was a toilet in almost every house. But Trusler found that statement confusing. Walking around the city, she said, it was clear that some spots were chock full of homes with private latrines, while other areas seemed to be toilet deserts.

"And," Trusler added, "there are all of these downpipes that are part of that picture that no one is really considering." [Image Gallery: A Look at Pompeii's Toilets]

So Trusler decided to conduct a plumbing survey of sorts, mapping latrine and downpipe locations around the city. One residential district, known to archaeologists as Region 6, does indeed have toilets on the ground story of almost every home, she said. But other blocks have few toilets. In total, 43 percent of homes in the city had latrines on the ground floor, Trusler found.

Downpipes provide the other half of that picture. These vertical, usually terracotta pipes are concentrated in the oldest part of the city, where there were many workshops and small businesses crammed into close quarters. A total of 286 pipes run down the walls of these buildings, leading to the mostly lost second floors. In 23 cases, however, the second story remains, and the same types of pipes lead to latrines.

In addition, Trusler said, unpublished research on scrapings from the insides of the pipes revealed fecal material and traces of intestinal parasites, good signs of a toilet.

The plumbing of Pompeii

The upstairs plumbing offers a window into daily Pompeii life, Trusler said.

"The sanitation features can tell us a lot about what people are doing on upper floors and above these little shops," she said. "What they suggest is that people are living there."

Most of the downpipes were likely installed in the first century B.C. into the first century A.D., Trusler said, the same time that the city developed its pumped-water system. Residents of apartments above shops would have been able to get water from public fountains installed in the streets.

"You really have a picture of urban development going on in Pompeii," Trusler said.

Please visit the site: <http://news.discovery.com/history/pompeii-ancient-toilet-130112.htm>

2,000-YEAR-OLD TREASURE DISCOVERED IN BLACK SEA FORTRESS, BY OWEN JARUS

Residents of a town under siege by the Roman army about 2,000 years ago buried two hoards of treasure in the town's citadel — treasure recently excavated by archaeologists.

More than 200 coins, mainly bronze, were found along with "various items of gold, silver and bronze jewelry and glass vessels" inside an ancient fortress within the Artezian settlement in the Crimea (in Ukraine), the researchers wrote in the most recent edition of the journal *Ancient Civilizations from Scythia to Siberia*.

"The fortress had been besieged. Wealthy people from the settlement and the neighborhood had tried to hide there from the Romans. They had buried their hoards inside the citadel," Nikolai Vinokurov, a professor at Moscow State Pedagogical University, explained.

Artezian, which covered an area of at least 3.2 acres (1.3 hectares) and also had a necropolis (a cemetery), was part of the Bosphorus Kingdom. At the time, the kingdom's fate was torn between two brothers —Mithridates VIII, who sought independence from Rome, and his younger brother, Cotys I, who was in favor of keeping the kingdom a client state of the growing empire. Rome sent an army to support Cotys, establishing him in the Bosporan capital and torching settlements controlled by Mithridates, including Artezian.

People huddled in the fortress for protection as the Romans attacked, but Vinokurov said they knew they were doomed. "We can say that these hoards were funeral sacrifices. It was obvious for the people that they were going to die shortly," he wrote in an email to LiveScience. The siege and fall of the fortress occurred in AD 45.

Curiously, each hoard included exactly 55 coins minted by Mithridates VIII. "This is possibly just a simple coincidence, or perhaps these were equal sums received by the owners of these caskets from the supporters of Mithridates," the team wrote in its paper.

A Greek lifestyle

Vinokurov's team, including a number of volunteers, has been exploring Artezian since 1989 and has found that the people of the settlement followed a culture that was distinctly Greek. The population's ethnicity was mixed, Vinokurov wrote, "but their culture was pure Greek. They spoke Greek language, had Greek school; the architecture and fortification were Greek as well. They were Hellenes by culture but not that pure by blood."

Greeks are known to have created colonies on the Black Sea centuries earlier, intermarrying with the Crimeans. The customs and art forms they introduced appear to have persisted through the ages despite being practiced nearly 600 miles (1,000 kilometers) from Greece itself.

This Greek influence can be seen in the treasures the people of Artezian buried. Among them is a silver brooch engraved with an image of Aphrodite, the Greek goddess of love, and gold rings with gems engraved with images of Nemesis and Tyche, both Greek deities.

When archaeologists excavated other portions of the torched site they found more evidence of a Greek lifestyle.

"In the burnt level of the early citadel, many fragmentary small terra cotta figures were found depicting Demeter, Cora, Cybele, Aphrodite with a dolphin, Psyche and Eros, a maiden with gifts, Hermes, Attis, foot soldiers and warriors on horseback, semi-naked youths," the researchers wrote in their paper, adding fragments of a miniature oinochoai (a form of Greek pottery) and small jugs for libations also were found.

All this was torched by the Romans and later rebuilt by Cotys I, who had been successfully enthroned by Rome. However the treasures of the earlier inhabitants remained undiscovered beneath the surface, a testament to a desperate stand against the growing power of Rome.

Please visit the site: <http://news.yahoo.com/2-000-old-treasure-discovered-black-sea-fortress-151425299.html> [Go there for image]

ARCHAEOLOGISTS EXPLORE A FRONTIER AREA OF ANCIENT ITALY

A site and its surrounding area may open new windows on a previously unexplored area and chapter of ancient pre-Roman and Roman Italy.

The site got attention when a farmer's plough churned up an armless, headless marble statue of the Roman god Venus, an unexpected find in an area largely agricultural. It was found in an area that had been little explored by archaeologists, making the find all the more exciting for scholars looking for virgin territory to conduct research in a country wherein the vestiges of ancient history have been comparatively picked over for centuries.

Located near the slopes of the extinct volcano Monte Vulture in the Basilicata region of south-central Italy, the archaeological site of Torre Degli Embrici and its environs (referred to as the "Vulture or Rionero/Atella zone") are the focus of new investigations by a team of archaeologists from various universities, including the University of Alberta, Canada and the University of Sydney, Australia. Under the directorship of Richard Fletcher, Erin Stepney and Emil Aladjem, they hope, through extensive survey and limited excavation, to illuminate the dynamics of cultural interaction and development in the pre-Roman and Roman periods in this ancient rural frontier.

Reports the project staff: "Although little archaeological information has been published about the Rionero/Atella zone, there is good reason to suspect that it possessed an important settlement site during the Iron Age, and acted as a fluid frontier zone for most of the 1st millennium BC and 1st millennium AD. This may be made clear from the number of burials excavated illegally in the area in the 19th century.

The contents of those tombs, and their form, suggest Lucanian (pre-Roman people) settlement in the area in the 4th century BC."

Investigation of Torre Degli Embrici and its area will include an exploration of how the area changed after the Roman conquest, including surveys and excavations of baths and large villas associated with intensive agricultural production (villa rustica), such as that found at Torre Degli Embrici. Finds thus far have suggested a stability in the area well into the centuries following the demise of Imperial Rome. "Late Roman evidence both at Ruoti and Torre Degli Embrici indicate continuity after the fall of the Western Empire and the latter suggests stability into the 7th century AD", reports the project leadership.[1]

In addition to the excavation of the Roman villa/baths/basilica complex at Torre Degli Embrici, archaeologists plan to conduct a preliminary excavation of the Lucanian necropolis at Rionero, including some excavation of tombs south of Rionero and other surveyed sites to determine their chronology and spatial extent and relationships.

Along with university participation, the efforts are sponsored and funded locally by the Comune of Rionero in Vultur and the Comunità Montana.

More information about the project can be found at the Vultur Archaeological Project website: <http://www.vulturproject.com/>.

Please visit the site: <http://popular-archaeology.com/issue/december-2012/article/archaeologists-explore-a-frontier-area-of-ancient-italy>

ANCIENT FLOOR NOT SEEN FOR 10,000 YEARS

AN ANCIENT floor which has not seen the light of day for 10,000 years has been uncovered at the Ayia Varvara-Asprokremmos site, the antiquities department said yesterday.

The department said new finds during the latest excavations had redefined the understanding of the kind of human occupation that existed at the Neolithic site in the Nicosia district, which has been radio-carbon dated to between c. 8,800-8,600 BC.

The excavations took place in November 2012 and were run by Dr Carole McCartney on behalf of the University of Cyprus working in partnership with Cornell University and the University of Toronto.

According to an announcement, the floor which “was exposed for the first time in 10,000 years” exhibited a dished form, raised above the central area providing a rough bench that ran along the circumference of the interior wall.

The floor was made of trampled mud, refreshed by erosional washed sediments that appear to have collected during short term (perhaps seasonal) abandonment events.

“As seen in the northern side of the feature, ash heaps and stone tools were stratified in a sequence of repeated use events,” the department said.

The presence of buried artefacts (usable, but abandoned) and evidence of erosional episodes indicated the punctuated character of the structure’s occupation, while the nature of the artefacts demonstrated the domestic character of the building, it added.

Constructional features illustrated the significant degree of investment given to the building, including the deeply dished form of the building dug into bedrock and a 10-15 cm thick wall lining.

The department said the latter exhibited significant evidence of burning and was likely constructed of an organic super-structure of branches cemented in place by mud plaster.

It said the finds suggested a decline in the investment applied to the construction of shelters utilised at the site, and a shift towards a more temporary architectural form during later phases of occupation.

A large carefully engraved teardrop-shaped picrolite pendant, representing a more developed form of ornament than those recovered previously, was also recovered.

Renewed excavation in another area of the site uncovered a unique arrangement of chalk slabs encircling a large hearth-like setting of burnt stone.

“This provides important information regarding the activities conducted at the site,” said the department, adding that the indications were the site may have been used for the tanning of animal, and specifically pig, skins as multi-coloured pigments, including red, yellow, orange, purple and grey ochre as well as bright green, terra verde, were found.

Please visit the site: <http://www.cyprus-mail.com/ancient-floor/ancient-floor-not-seen-10000-years/20130110>

ARCHAEOLOGICAL FINDS REVEAL ANCIENT BALKAN CIVILIZATIONS, BY SVETLA DIMITROVA

Bulgarian archaeologists announced two major finds at the close of the 2012 excavation season, and hope to obtain state and other financial support to shed more light on the life and culture of the early Balkan civilisations.

Vasil Nikolov, former head of the country's National Archaeology Institute, unearthed Europe's oldest urban settlement near Provadia, 50 kilometres west of Varna on the Black Sea, which is dated between 4700 and 4200 BC.

The site is more than 100 metres in diameter, is encompassed by a 3-meter high stone wall and has two-story structures housing nearly 350 residents.

The settlement is one part of a much larger complex from the same period, which includes a salt production unit, a sanctuary and a necropolis.

"A thorough study of the site will take many years. ... There is work for at least seven generations of archaeologists at the site," Nikolov told SETimes.

Archeologists said they believe Provadia's ancient residents made a living by producing salt. They suspect production began in 5500 BC and by 4500 BC produced 5,000 kg annually.

The salt trade helped the ancients obtain raw materials, some of which were used to craft luxury goods like jewelry, and also gain enormous economic power, Nikolov added.

The Provadia finds may provide significant clues about the origin of the Varna Chalcolithic Necropolis riches, dating back to around 4300 BC.

The latest find -- a wooden chest containing two different sets of gold treasure, but from a much later period and left behind by the Getae, a Thracian tribe -- was unearthed at the largest mound on the site of the Sboryanovo Historical and Archaeological Reserve in northeastern Bulgaria.

Weighing more than 1.8kg, the treasure was from the late 4th or early 3rd century BC, buried as part of the funeral of a Getic ruler, archeologist Diana Gergova said.

"We found the chest in a vesicle at a depth of 8 metres ... Inside were two sets of gold objects. The first was a set of women's jewelry, including a unique tiara of a type never found before. There were also four spiral bracelets and a ring with an incredible haut-relief image of a lion," Gergova told SETimes.

The other set comprised an iron bridle and a number of gold items the bridle was decorated with, including horse harness decorations and buttons, as well as two large

round pieces with the image of the goddess Athena and an exquisite forehead piece with a horse head.

Gergova and Nikolov are due to continue fieldwork at the two sites next summer, but excavations are dependent on funding.

The Bulgarian culture ministry told SETimes that it channelled 1.3 million euros in 2012 for archaeological excavation and conservation across Bulgaria and for the preservation of 10 historical sites.

Finance Minister Simeon Djankov promised last year to set aside more than 5 million euros for archaeology in the 2013 state budget.

Nikolov said although the budget was passed, he still does not know the amount the government will provide him.

"The minimum amount needed for the two-month excavation campaign stands at 61,000 euros," he told SETimes.

Given the volatility of government funding, archeologists said the excavations would not have been possible without private support.

"We would not be able to continue without private donations," Nikolov said.

Please visit the site:

http://www.setimes.com/cocoon/setimes/xhtml/en_GB/features/setimes/features/2013/01/14/feature-03 [Go there for pix]

MUSEUM STAFF IN MANCHESTER HAVE DEvised A COMPUTER CONSOLE WHICH ALLOWS VISITORS TO ‘HANDLE’ ANCIENT ARTEFACTS

The technology at Manchester Museum – the first of its kind in the UK – allows the public to virtually touch delicate objects which would normally be kept behind glass.

It means that visitors will be able to feel the texture and shape of 6,000-year-old pots, jewellery, and tools from the museum’s Egyptology collection.

The pioneering ‘haptic’ technology features a sensitive robotic control which provides varying degrees of resistance when the operator ‘touches’ an object on the screen, tricking the user into sensing shape and texture.

Using a pioneering 3D laser scanner, museum curators were able to scan their most valuable relics and put the ‘solid’ scans on to the console device.

The device was designed with the help of Henshaws Charity for the Blind, where blind and visually impaired people gave their feedback on the machine.

But Sam Sportun, the museum’s collections manager, said it would give all visitors the chance to handle rare relics.

She said: “This haptic technology has been around for 10 years. It has been used in the nuclear industry, where people have been operating robotic arms. But we are the first in the country to use it this way.

“As a conservation expert, I’ve spent half my life protecting these objects. But I’m realistic about the fact that people want to touch the artifacts and they can learn a great deal from doing so.”

Museum staff have so far scanned three items from the museum’s Egyptology collection – including a 4,000BC bowl and an Egyptian model, known as a Shabti – but hope to scan many more objects from the archive, including a full-scale mummy.

Former teaching assistant Barbara Whitehead, 68, from Levenshulme, whose eyesight has deteriorated dramatically over recent years, said it was a remarkable experience.

She said: “I was a bit sceptical at first but, once you get used to it, it is incredibly tactile and you really get a sense of what these objects are like.”

Curators also have a portable model of the device, which they plan to take into schools and elderly care homes.

Staff at the museum collaborated with innovator Chris Dean, a former sculptor turned electronic pioneer, to create the 3D technology box.

Please visit the site: <http://www.lep.co.uk/news/museum-gives-you-feel-for-items-you-can-t-touch-1-5312093>

ENTOMBING THE TOMB OF THE GLADIATOR: WHO WILL SAVE THE ROMAN RUINS? BY STEPHAN FARIS

A worker searches a site along the Via Flaminia in northern Rome where a mausoleum was found and believed to be the tomb of Marcus Nonius Macrinus, a general and statesman in the late second century AD, Oct. 21, 2008.

When archaeologists announced the discovery of the tomb of Marcus Nonius Macrinus in Rome in 2008, the find was heralded as the most important in decades. Built in the shape of a temple, with tall fluted columns and an intricately carved sarcophagus, it was the final resting place for the Roman general who served as inspiration for Russell Crowe's character in the movie *Gladiator*, unearthed at the site of a planned housing project some 1,800 years after its construction.

In contrast, the December 2012 announcement regarding the tomb was much more muted. Italy's cash-strapped ministry of culture declared it was unable to find the several million euros that would be required to protect the ruins and turn them into a tourist attraction. Instead, the *Gladiator's Tomb*, as the site has come to be known, would likely have to be buried once again.

The fate of Macrinus' monument illustrated the challenges faced by even the most spectacular bits of Italy's past, as historical preservation falls prey to austerity. Funding for the maintenance of the country's archaeological riches has been slashed by 20% since 2010. In the ancient city of Pompeii, the ruins are literally crumbling from neglect, and sites like the Coliseum in Rome and the Rialto Bridge in Venice have been forced to find corporate saviors to prevent the same from happening to them.

Further excavations are just about out of the question. The *Gladiator's Tomb* is one of four monumental burial sites discovered during the excavation, part of what was once a necropolis predominantly dedicated to military men. The site includes a 70-meter stretch of perfectly preserved paving stones—lined in places with the disused tombstones of imperial bodyguards—that disappears tantalizingly into the earth on either side of the dig. "It's like discovering a vein of gold and not being able to follow it," says Giacomo Restante, the architect who is overseeing the technical aspects of the excavation.

Of the uncovered burial sites, Macrinus' is by far the largest, and the only one shaped like a temple. Where Crowe's fictional character in *Gladiator* fell into disgrace and was sold into slavery, the real-life general enjoyed a flourishing career, served as a close adviser to the emperor, Marcus Aurelius, and led campaigns in Spain and Asia. Dedicated to him by his son, his tomb was elaborately carved and built entirely of marble; even the roof is made from slabs of white stone. "Other tombs in Rome were made with a marble facade and the rest in brick," says Federica Chiocci, the archaeologist overseeing the dig. "Macrinus wanted to build himself a real and proper temple."

By the time the site was buried by the flooding of the nearby Tiber River, it had already begun to crumble. The ruins are preserved as they were in the 12th century A.D., some 1,000 years after the tomb's construction, when medieval diggers had begun to pull it apart, recycling the general's marble ruins for building materials. Most of the walls and the foundation have long been carried away. What remain are the bits that were hardest to recycle, those most elaborately carved. The entire left side of the facade, including—miraculously—the block containing the inscription that bears the general's name, lies to one side of the burial site. Just beyond it, lies a neighboring tomb that the medieval diggers converted into a lime kiln. Inside it, Chiocci and her colleagues found partially burnt bits of Macrinus' sarcophagus.

For the moment, the plan to bury the site has been put on hold. An online petition to save the Gladiator's Tomb, organized by American Institute for Roman Culture, a group dedicated to the preservation of city's ancient remains, has gathered some 3,700 signatures. "This should be a high profile site, if only because it's associated with Gladiator," says Darius Arya, the group's CEO. "When you think about archeology, you think about ancient Rome, and then you think about that movie." Russell Crowe has voiced his support, retweeting links to the petition and telling Italy's La Repubblica newspaper that, "Of all the great nations of the world, Italy in particular should be a leader in promoting the importance of exploring and conserving the ancient past."

In the coming months, the city of Rome, Italy's culture ministry and the developers who own the site will be discussing its future. The American Institute for Roman Culture has proposed raising a mix of public and private money for its preservation. Long centuries spent under a slightly acidic soil has weakened the marble. Exposed to the elements, its brilliant white has faded. Some pieces have begun to fragment and chip. Many of the marble blocks have been covered by cloth, in a stopgap effort to protect them. "We need to get together and find some sort of agreement and funding," says Daniela Rossi, the archaeologist in charge of the site. "Otherwise, the only thing is to bury it. It will go back to being a tomb."

Please visit the site: <http://world.time.com/2013/01/23/entombing-the-tomb-of-the-gladiator-who-will-save-the-roman-ruins/>

ARCHAEOLOGICAL FEAST: HEAP OF ANCIENT CATTLE BONES DISCOVERED STUDY FINDS SITE IN PELOPONNESE, GREECE, MAY BE LEFT FROM YEARS OF LAVISH DINING, BY STEPHANIE PAPPAS

A metric ton of cattle bones found in an abandoned theater in the ancient city of Corinth may mark years of lavish feasting, a new study finds.

The huge amount of bones — more than 1,000 kilograms (2,205 pounds) — likely represent only a tenth of those tossed out at the site in Peloponnese, Greece, said study researcher Michael MacKinnon, an archaeologist at the University of Winnipeg.

"What I think that they're related to are episodes of big feasting in which the theater was reused to process carcasses of hundreds of cattle," MacKinnon told LiveScience. He presented his research last Friday at the annual meeting of the Archaeological Institute of America in Seattle.

From theater to butcher shop

A theater may seem an odd place for a butchery operation, MacKinnon said, but this particular structure fell into disuse between A.D. 300 A.D. and A.D. 400. Once the theater was no longer being used for shows, it was a large empty space that could have been easily repurposed, he said.

The cattle bones were unearthed in an excavation directed by Charles Williams of the American School of Classical Studies at Athens. They'd been discarded in that spot and rested there until they were found, rather than being dragged to the theater later with other trash, MacKinnon said.

"Some of the skeletal materials were even partially articulated (connected), suggesting bulk processing and discard," MacKinnon said.

MacKinnon and his colleagues analyzed and cataloged more than 100,000 individual bones, most cattle with some goat and sheep. The bones of at least 516 individual cows were pulled from the theater. Most were adults, and maturity patterns in the bones and wear patterns on the teeth showed them all to have been culled in the fall or early winter.

"These do not appear to be tired old work cattle, but quality prime stock," MacKinnon said.

Annual feasting?

It's impossible to say how quickly the butchering episodes took place, MacKinnon said, though it could be on the order of days or months. The bones were discarded in layers, likely over a period of 50 to 100 years, he said.

The periodic way the bones were discarded plus the hurried cut marks on some of the bones suggest a large-scale, recurring event, MacKinnon said. He suspects the cattle were slaughtered for annual large-scale feasts. Without refrigeration, it would have been difficult to keep meat fresh for long, so may have been more efficient for cities to take a communal approach.

"What goes around comes around, so maybe we'll do it this year and next year, it's the neighbor's turn to do it," MacKinnon speculated.

"Neighborhoods might sponsor these kinds of things, so people do it to curry favor."

The next step, MacKinnon said, is to look for other possible signs of ancient feasting at different sites.

"Maybe there are some special pots, or maybe we'll find big communal cauldrons or something," he said. "Something that gives a material record of a celebration."

Please visit the site:

http://www.msnbc.msn.com/id/50417109/ns/technology_and_science-science/#.UPvb4GeSj_N [Go there for pix]

OVARIAN TUMOR FOUND IN A ROMAN- AGE SKELETON

A team of researchers led by the UAB has found the first ancient remains of a calcified ovarian teratoma, in the pelvis of the skeleton of a woman from the Roman era. The find confirms the presence in antiquity of this type of tumour - formed by the remains of tissues or organs, which are difficult to locate during the examination of ancient remains. Inside the small round mass, four teeth and a small piece of bone were found.

Teratomas are usually benign and contain remains of organic material, such as hair, teeth, bones and other tissues. There are no references in the literature to ovarian teratomas in ancient remains like those found in this study, led by the researcher Núria Armentano of the Biological Anthropology Unit of the UAB and published in the International Journal of Paleopathology.

The tumour in question is rounded in shape, with a wrinkled surface, of the same colour as the bones, about 43 mm long and 44 mm in diameter. It was found in the right-hand part of the pelvis of a woman of between 30 and 40 years of age and who lived around 1,600 years ago, and came from the Roman cemetery in the archaeological site of La Fogonussa (Lleida). A macroscopic examination and a scan revealed four teeth of anomalous morphology inside the tumour, two of which were adhering to the inside wall of the tumour, and a small bone fragment.

"The calcification and preservation of the external walls of this tumour are exceptional, since these types of remains usually only retain the internal structures and the extremely fragile external ones disappear", explains Assumpció Malgosa, co-author of the study.

In fact, there are very few differential diagnoses of pelvic and abdominal calcifications in archaeological contexts, among other reasons because it is so difficult to determine their nature - they could be kidney stones, fibromas, teratomas, arterial remains, etc. Moreover, they are hard to spot during the excavation and can easily be mistaken for stones.

Teratomas are asymptomatic in 60% of cases, but on occasion they cause torsions and functional problems in nearby organs, by compression when they are large. Pregnancy seems to favour certain complications in teratomas, such as complications on giving birth. Nevertheless, nowadays they seldom grow large and calcify even less often, because they are detected and operated on very early.

In the case of the Roman woman the researchers do not discount the possibility that the tumour was the cause of death, though this cannot be certain. It is also possible that she lived all her life with the calcified tumour with no further complications.

The skeleton was recovered in 2010 during the excavation of 46 graves in La Fogonussa, and formed part of a total of 87 skeletons. It was complete and well-preserved, buried in a tile grave.

###

The study was carried out by researchers from the Biological Anthropology Unit of the UAB, ANTROPÒLEGS.LAB, the Institute of Legal Medicine of Catalonia, the Sacred Heart University Hospital of Barcelona and the Lleida-based company Iltirta Archaeology.

Contact: Maria Jesus Delgado
MariaJesus.Delgado@uab.cat
34-935-814-049
Universitat Autònoma de Barcelona

Please visit the site: http://www.eurekalert.org/pub_releases/2013-01/uadb-otw012413.php [Go there for image]

SICILIAN MUMMIES BRING CENTURIES TO LIFE SCIENTISTS ARE USING RADIOLOGY AND CHEMISTRY TO DETERMINE WHAT SICILIANS ONCE ATE—AND HOW THEY DIED, BY JEREMY BERLIN

Arrayed in crypts and churches, with leering skulls and parchment skin, the desiccated dead of Sicily have long kept mute vigil.

But now, centuries later, these creepy cadavers have plenty to say.

Five years into the Sicily Mummy Project, six macabre collections are offering scientists a fresh look at life and death on the Mediterranean island from the late 16th century to the mid-20th.

Led by anthropologist Dario Piombino-Mascali of the Department of Cultural Heritage and Sicilian Identity in Palermo (map), the ongoing investigation is revealing how religious men and their wealthy supporters ate, interacted, dealt with disease, and disposed of their dead.

"These mummies are a unique treasure in terms of both biology and history," says Piombino-Mascali, who is also a National Geographic Expeditions Council grantee. (National Geographic News is part of the National Geographic Society.) "They can tell us a lot if they are studied appropriately." (See pictures of Sicily's mummies from National Geographic.)

Show and Tell

In the case of the Sicilian mummies, that means x-ray exams and CT scans rather than invasive sampling and autopsy. Radiographic techniques preserve the specimens—the oldest of which dates to 1599, when Capuchin friars began mummifying clergy, then nobles and bourgeoisie who hoped to secure blessed afterlives—even as they peek inside.

And what lies within?

For one thing, evidence of a good diet, says Piombino-Mascali, whose international team includes scientists from Germany, Brazil, and the United States. Since most of the mummies were well off in life, they ate a balanced mix of meat, fish, grains, vegetables, and dairy products.

But that gastronomic affluence came with a price. Radiographs of the bones also show signs of maladies like gout and skeletal disease, which Piombino-Mascali says "tended to afflict the middle and upper classes in preindustrial societies."

And of course wealth couldn't protect them from aging. More than two-thirds of these bodies show signs of degenerative disorders, says Piombino-Mascali—"probably because

most were old adults when they died." (From National Geographic magazine: Sicily's mummies offer lessons about life.)

Spilling His Guts

As work continues apace in Sicily, which operates as an autonomous region of Italy, discoveries are coming from unlikely places.

Consider the studies performed by Karl Reinhard, a forensic scientist at the University of Nebraska-Lincoln. He and his graduate students recently conducted a pilot program to see what they could glean just by examining intestines.

Their subject: "Piraino 1," a male in his 40s who lived at the turn of the 19th century, one of 26 mummies in the Piraino Mother Church's Sepulcher of the Priests in northeastern Sicily, which dates to the 16th century.

Radiology revealed that he had multiple myeloma, a form of cancer. But the real surprise came when Reinhard's student Melissa Lein found evidence of milkwort, a pollen plant with antitumor agents used in China and Turkey but thought to be uncommon in Sicily.

"That indicates that people here had an esoteric knowledge of medicinal plants," says Reinhard, whose team also found traces of grape pulp, a purgative with compounds effective in cancer treatment and cardiovascular disease. Based on the type of pulp, adds Reinhard, Piraino 1 likely died in the winter.

What's more, Reinhard's student Kelsey Kumm found an enormous whipworm infection—involving more than 600 worms—in the mummy's intestinal tract. Kumm concluded that because the man had been sick with other diseases, his immune system was vulnerable to whipworm, a fecal-borne parasitic disease usually associated with poverty.

"From all these intestinal findings we can put together a pretty interesting picture," says Reinhard. "Though this individual was well-to-do in life, one can speculate that his activities brought him into contact with the lower classes. This shows how we can create a thumbnail sketch—his disease, his diet, his time of death—from the inside of a mummy."

Mor(t)al Quandaries

Mummification in Sicilian usually meant stowing a body in a ventilated chamber, draining it of bodily fluids, and stuffing it with straw or bay leaves, to preserve its shape and combat the stink of death.

Months later it would be washed with vinegar, dressed in its Sunday best, and laid in a coffin or hung on a wall.

The more recently mummified—like two-year-old Rosalia "Sleeping Beauty" Lombardo, who died of pneumonia in 1920 and lies with 1,251 others in the Capuchin Catacombs of Palermo—were embalmed with chemicals, and thus better preserved.

But for how much longer?

Piombino-Masali is eager to perform DNA investigations on the mummies—including those at newly studied collections in the towns of Caccamo and Gangi, where wax was "peculiarly" used to create partial and complete death masks—to understand how they might be related. But with moisture, humidity, and dust preying on some of the collections, particularly those at Palermo and Piraino, time may be running out.

Piombino-Masali says climate-control systems such as air conditioning are desperately needed, though it's unclear if the money or political will exist to put them in place.

"We need to act fast to save these mummies," he says. "It was the wish of these people to be mummified. So we have a moral [imperative] to preserve them."

Whatever comes next, Piombino-Masali says his team's work has had an unexpectedly existential effect on the local populace.

"For many years the subject of death was taboo [in Sicily]," he says.

"In the 20th century, things like the two world wars somehow influenced the approach Sicilians had toward death. They just didn't want to talk about it anymore.

"Now, given the scientific importance of what's emerging with these mummies, people are understanding that in Sicily, death has always been part of life. And for centuries many Sicilians were using mummification to make sure there was a constant relationship between life and death."

Please visit the site: <http://news.nationalgeographic.com/news/2013/13/130128-sicilian-mummies-archeology-italy/>
