



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

**ΟΙΚΗΤΙΚΟ
ΣΥΜΒΟΥΛΙΟ:**

Β. Κυλίκογλου (πρόεδρος),
Ι. Μπασιάκος (αντιπρόεδρος),
Ε. Φιλιππάκη (γραμματέας),
Ι. Καρατάσιος (ταμίας),
Ν. Ζαχαριάς (μέλος),
Α. Hein (μέλος),
Γ. Φακορέλλης (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:

V. Kilikoglou (president),
J. Bassiakos (vice-president),
E. Philippaki (secretary),
I. Karatassios (treasurer),
N. Zacharias (member),
A. Hein (member),
Y. Facorellis (member)

Information: Y. Facorellis
(editor)

E-mail: yfacorel@teiath.gr

Πληροφοριακό Δελτίο της Ελληνικής Αρχαιομετρικής Εταιρείας

- Αύγουστος 2015 -

The seed of everything is in everything else. (Anaxagoras)

Newsletter of the Hellenic Society of Archaeometry

- August 2015 -

Nr. 173

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ΣΥΝΕΔΡΙΑ - CONFERENCES/WORKSHOPS

INART2016 - GHENT, BELGIUM 21-25 MARCH 2016

Dear Colleague,

We are pleased to invite you at the inArt2016, **International Conference on Innovation in Art Research and Technology**, that will take place in **Ghent, Belgium at 21-25 March 2016**.

The main **aim** of the conference is to merge humanities with cutting-edge scientific research. The **topics** to be addressed within the conference sessions are: new technological developments, in vitro experimental set-ups and degradation mechanisms, in situ experiments and mobile instrumentation, the need on non-invasive and non-destructive analysis, imaging techniques, environmental issues on the preservation of art and archaeological objects, etc.

More details on the conference can be found on the conference website:
<http://www.inart2016.ugent.be/>

Here, you are also able to sign in on our mailing list (pre-registration).

You can also join us on facebook via <https://www.facebook.com/inart2016>

We hope to welcome you in Ghent!

On behalf of the Organizing Committee,

Peter Vandenabeele,

Chair of the inArt2016.



THE STUDY OF MUSICAL PERFORMANCE **IN ANTIQUITY: ARCHAEOLOGY AND** **WRITTEN SOURCES, ROME, NOVEMBER 6TH** **2015, CALL FOR PAPERS**

The study of musical performance in Antiquity: archaeology and written sources / Lo studio della performance musicale nell'Antichità: archeologia e fonti scritte

Where and when: Rome, November 6th 2015

Organizers (in alphabetical order): Agnès Garcia-Ventura (“Sapienza”, Università degli Studi di Roma), Claudia Tavolieri (Università degli Studi RomaTre), Lorenzo Verderame (“Sapienza”, Università degli Studi di Roma).

Keynote speakers (in alphabetical order): Raquel Jiménez Pasalodos (Universidad de Valladolid, Spain) / Regine Pruzsinszky (Albert-Ludwigs-Universität Freiburg) / Eleonora Rocconi (Università degli Studi di Pavia) / Claudia Tavolieri (Università degli Studi RomaTre, Italy)

The sources to study music in Antiquity are diverse, as diverse as geographies and chronologies as well. While it is possible to carry on detailed organological studies for Ancient Greece, for instance, in the case of the ancient Near East at the end of the 3rd millennium BC sometimes is even impossible to establish if a word is used to label a musical instrument or not. In both cases, then, is clear that the nature of the sources enables or difficults certain kinds of research regarding musical performance. In this workshop we invite you to reflect about possibilities and limitations of the sources we have at our disposal to study music in Antiquity (Classical Antiquity and Ancient Near East). We specially encourage scholars who aim to discuss how the joint analyses of written sources and archaeological ones might enrich our research.

If you are willing to deliver a paper, please submit a proposal to any of the organizers, including title and abstract (about 200 words) by August 30th 2015. Speakers will have 20 minutes to develop the topic + 10 minutes for debate. We plan to publish accepted proposals (deadline to send the papers: March 31st 2016). We expect all contributions in English (for both the workshop and the volume).

Agnès Garcia-Ventura: agnes.ventura@gmail.com Claudia Tavolieri: claudia.tavolieri@tiscali.it
Lorenzo Verderame: lorenzo.verderame@uniroma1.it

**WORKSHOP: PALEODIET MEETS
PALEOPATHOLOGY, USING SKELETICAL
BIOGEOCHEMISTRY TO LINK ANCIENT
HEALTH, FOOD AND MOBILITY, 15-16TH
OCTOBER 2015, SANTIAGO DE
COMPOSTELA, SPAIN**

Dear all,

This workshop that myself and other colleagues are organizing may be of interest to some of you. Thanks.

Regards,
Olalla



**PALEODIET MEETS
PALEOPATHOLOGY**

USING SKELETICAL BIOGEOCHEMISTRY TO
LINK ANCIENT HEALTH, FOOD AND MOBILITY

15th -16th October 2015, Santiago de Compostela, Spain

<http://paleodietmeetspaleopathology.com/>

THE WORKSHOP

Aims

The objective of this workshop is to explore the connections between paleodiet and paleopathology, with special focus on the stable isotopes and bone chemistry applications. The studies of diet and disease in antiquity have always been important areas of research in bioarchaeology and physical anthropology.

With the advent of stable isotope applications more than 40 years ago, our ability to reconstruct the diet of individuals significantly improved; however, despite the fact that numerous diseases have a dietary component, only relatively few studies have combined bone chemistry with palaeopathological analysis. More recently, there has been a surge of interest in integrating the two approaches, not just to explore the synergies between diet and disease but also to understand the relationship between health and mobility and exposure to toxins (eg. trace metals) and how to tell these effectively from *post-mortem* contamination.

This workshop will aim to take stock of recent advances and hopes to strengthen collaborations between different research groups on questions related to past diet and health and how these can be approached with bone chemistry applications. Discussions will include not only the differences between "diseased" and "healthy" individuals, but also, among others, which diseases are most suitably investigated by bone chemistry applications, how to deal with inter-population variation and intra-skeletal variability, and the role of environmental factors in disease ecology.

15th October

15.00-15.15 Opening

15.15-16.00 Paleodiet and paleopathology: an overview

Tamsin O'Connell, University of Cambridge

16.00-17.00 Diet and mortality crisis

Diet and mortality: Famine, feast and fertility.

Julia Beaumont, University of Bradford

17.00- 17.30 Coffee break (fika)

17.30- 18.30 **Communications for call**

18.30 - Visit to Compostela city

16th October

09.00-10.00 Growth, metabolic conditions and stable isotopes

Stable isotopes analysis of diet in past populations: delving into the interplay of dietary choices, growth patterns, and health outcomes.

Andrea Waters-Rist, University of Leiden.

10.00-11.00 Diet, health and infectious diseases

Diet and disease in 19th and 20th Century Denmark. Marie Louise Schjellerup Jørvok, University of Copenhagen

11.00-11.30 Coffee break (fika)

11.30-12.30 **Poster session**

12.30-15.30 Lunch

15.00-16.00 Ancient DNA and stable isotopes

The best of both worlds, when stable isotopes and aDNA meet in an archaeological context.

Kerstin Lidén, Stockholm University.

16.00-17.00 New perspectives from the animal studies

Stable isotopes and DNA in Paleontology: beyond the family diet. Aurora Grandal d'Anglade, University of A Coruña

17.00- 17.30 Coffee break (fika)

17.30- 18.30 **Communications for call**

18.30 -19.30 Discussion

REGISTRATION AND CALL FOR PAPERS

The Registration and Call for Papers (oral communications or posters) is now available and **the deadline is the 15th of August 2015. The registration is totally free of cost.**

More information in the webpage <http://paleodietmeetspaleopathology.com/>

and facebook page <https://www.facebook.com/paleodietmeetspaleopathology>

Dra. Olalla López-Costas, PhD. MSc. BSBIO.

- **Postdoctoral researcher**, group Earth System Science, Dpt. of Geography, Universidade. de Santiago de Compostela.

Project Plan Galego I2C mod. A

Effect of diet and environment on the development of infectious diseases (TB & brucellosis) in past populations.

- **Visiting research fellow**, Archaeological Research Laboratory, Stockholm University, Wallenberglaboratoriet, SE-10691 Stockholm, Sweden.

- Member of the group CTS-112, Universidad de Granada, Antropología Biológica, Paleoecología Humana

- **Phone:** +34 647452760.

- Notification address: Fac. Biología, Avda. Lope Gómez de Marzoa s/n cp.15782. Santiago de Compostela. A Coruña. Galicia. España (Spain).

olallalc@gmail.com ; olalla.lopez@usc.es



11TH INTERNATIONAL CONGRESS OF EGYPTOLOGISTS 3RD CIRCULAR AND PROGRAM

The 3rd Circular and the Program of the 11th International Congress of Egyptologists (ICE XI) of the IAE is now on-line.

The official website is at: <http://www.ice11florence.org/>.

Please go there to access relevant information.

**GAO ANNUAL CONFERENCE: CALL FOR
PAPERS - HUMAN-NATURE INTERACTIONS
IN ARCHAEOLOGICAL RESEARCH,
OXFORD, 12TH-13TH MARCH 2016**

Graduate Archaeology at Oxford is welcoming submissions for papers to be presented at the annual conference in **Oxford, 12th-13th March 2016**.

This conference will focus on the multidimensional ways in which humans have interacted with their natural environment in prehistoric and historic times. The volume of research conducted on reconstructing past environments over recent decades demonstrates the significance of understanding how social groups interacted with their natural surroundings and how, in return, environmental factors affected societal, political and economic developments. We seek to promote the synthesis of archaeological data and the results of diverse disciplines and methodologies.

We encourage both in-depth and wide-ranging studies on the following themes:

A. Theory of human-nature interaction

- Perception of nature and various modes of human-nature interactions
- Influence of modern Western attitudes on interpretations of the archaeological evidence

B. Landscapes/Seascapes and Climate

- the physical landscape, settlement distribution and political ecology
- navigation and the maritime world
- environmental and social change
- climate change and its impact on population sustainability and socio-economic organisation
- geographic information systems and spatial analysis

C. Resources

- management and exploitation of resources
- effects on nature and society

D. Fauna and Flora

- reconstruction of fauna and local vegetation
- agriculture and animal husbandry
- dietary habits and social stratigraphy

E. Material culture

- attestations of human interaction with the natural environment in iconography
- appreciation and perception of nature by social groups based on material evidence

The GAO conference is one of the leading graduate conferences encompassing archaeological, anthropological and historical perspectives. Presenters will have the opportunity to submit their papers to the GAO conference volume published by Archaeopress.

Papers should be delivered in English and oral presentations are not to exceed a maximum of 20 minutes each. Due to time limitations for oral presentations, proposals more loosely related to the main themes of the conference may be accepted as poster

presentations. Proposals accompanied by an abstract of no more than 250 words should be submitted to gao2016@merton.ox.ac.uk . Abstracts should include the name and institution of the applicant, title and 4 keywords. **The deadline is 27th November 2015.**

For inquiries please contact Julia Binnberg (julia.binnberg@arch.ox.ac.uk) or Christina Marini (christina.marini@exeter.ox.ac.uk) or visit <http://www.arch.ox.ac.uk/gao.html> for further information.

<p>ΟΡΓΑΝΩΤΙΚΗ ΕΠΙΤΡΟΠΗ ΣΥΝΕΔΡΙΟΥ www.euromed2015. eu ΕΛΛΑΔΑ</p>	 <p>Πανελλήνιο Συνέδρι Ψηφιοποίησης Πολιτιστικ Κληρονομιάς - 2015</p>
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ΠΡΟΣΚΛΗΣΗ

ΠΑΝΕΛΛΗΝΙΟ ΣΥΝΕΔΡΙΟ ΨΗΦΙΟΠΟΙΗΣΗΣ
ΠΟΛΙΤΙΣΤΙΚΗΣ ΚΛΗΡΟΝΟΜΙΑΣ 2015
ΠΟΛΙΤΙΣΜΟΣ, ΠΑΙΔΕΙΑ, ΕΡΕΥΝΑ,
ΚΑΙΝΟΤΟΜΙΑ, ΨΗΦΙΑΚΕΣ ΤΕΧΝΟΛΟΓΙΕΣ,
ΤΟΥΡΙΣΜΟΣ.
ΒΟΛΟΣ, 24-26 ΣΕΠΤΕΜΒΡΙΟΥ, 2015
ΠΑΝΕΠΙΣΤΗΜΙΟ ΘΕΣΣΑΛΙΑΣ,
ΠΑΡΑΛΙΑΚΟ ΣΥΓΚΡΟΤΗΜΑ
"ΠΑΠΑΣΤΡΑΤΟΥ"

Παράταση υποβολής εργασιών και POSTERS μέχρι τις 25/8/2015

Αγαπητοί Συνάδελφοι,

Έχουμε την τιμή να σας προσκαλέσουμε στο " Πανελλήνιο Συνέδριο Ψηφιοποίησης Πολιτιστικής Κληρονομιάς - 2015 "("Pan-Hellenic Conference on Digital Cultural Heritage-2015"), που θα γίνει στην Ελλάδα ,στην όμορφη πόλη του Βόλου κατά το χρονικό διάστημα από την Πέμπτη 24 έως και το Σάββατο 26 Σεπτεμβρίου 2015 .

Το Συνέδριο για την Ψηφιοποίηση της Πολιτιστικής Κληρονομιάς 2015 ,είναι αποτέλεσμα μιας μεγάλης συνεργασίας μεταξύ Φορέων της Ελλάδας και της Κύπρου πάνω σε θέματα Επιστημών και συνδιοργανώνεται από:

- το Τεχνολογικό Πανεπιστήμιο Κύπρου (ΤΕ.ΠΑ.Κ.) ,Εργαστήριο Ψηφιακής Πολιτιστικής Κληρονομιάς
- το ΑΕΙ ΠΕΙΡΑΙΑ Τεχνολογικού Τομέα -Εργαστήριο Μη Καταστροφικών Τεχνικών Σχολής Τεχνολογικών Εφαρμογών
- τον Δευτεροβάθμιο Οργανισμό "ΔΙΚΤΥΟ ΠΕΡΡΑΙΒΙΑ" για τον Άνθρωπο και τον Πολιτισμό

με την υποστήριξη:

πολλών Κρατικών Φορέων, της Περιφέρειας Θεσσαλίας, του Δήμου Βόλου, του Πανεπιστημίου Θεσσαλίας, Ερευνητικών Εργαστηρίων, της επιστημονικής κοινότητας από την Ελλάδα και την Κύπρο, του Τεχνολογικού Πανεπιστημίου Κύπρου (ΤΕ.ΠΑ.Κ. - Λεμεσός), του Ανώτατου Επιστημονικού Ιδρύματος Πειραιά Τεχνολογικού Τομέα., του ICOMOS Ελλάδος, του Δικτύου Μη Κυβερνητικών Οργανώσεων Θεσσαλίας, Πολιτιστικών Φορέων από όλη την Ελλάδα, αλλά και πολλών άλλων συλλογικών Φορέων της Θεσσαλίας.

Στο τριήμερο του Συνεδρίου θα υπάρξουν πολλές ευκαιρίες να επιτευχθεί ανταλλαγή γνώσης και εμπειριών για τα αποτελέσματα της έρευνας στην πολιτιστική κληρονομιά και τις ψηφιακές τεχνολογίες και να συζητηθούν οι τρέχουσες και οι μελλοντικές εξελίξεις στον τομέα αυτό σε παγκόσμιο επίπεδο και να δημιουργήσουμε τις απαραίτητες συνέργειες μεταξύ Φορέων της Ελλάδας και της Κύπρου για την καλύτερη αξιοποίηση των ίσων ευκαιριών μέσα στην Ευρώπη και πρόσβαση σε ευρωπαϊκούς πόρους που προορίζονται για τον Πολιτισμό.

Επίσης, στο Συνέδριο αυτό θα συμμετέχουν ως εισηγητές εκπρόσωποι του Υπουργείου Πολιτισμού, αλλά και άλλων Υπουργείων, Ελληνικών και Κυπριακών Πανεπιστημίων, ερευνητικών κέντρων, αλλά και ανεξάρτητοι επιστήμονες και ερευνητές που εμπλέκονται με κάθε τρόπο στο μεγάλο θέμα της μελέτης, έρευνας και διάσωσης της πολιτιστικής μας κληρονομιάς.

Το συνέδριο θα πραγματοποιηθεί, στο Βόλο, στους φιλόξενους χώρους του Παραλιακού Συγκροτήματος "Παπαστράτου" του Πανεπιστημίου Θεσσαλίας, στα αμφιθέατρα «Γ. Κορδάτος» και «Γ. Σαράτσης», που διαθέτουν σύγχρονα μέσα βιντεοπροβολών και τηλεπικοινωνίας (Wi-Fi κτλ.) και από τους Διοργανωτές έχει ληφθεί μέριμνα για μια ευχάριστη και εποικοδομητική διαμονή στην πόλη του Βόλου κατά το τριήμερο του Συνεδρίου.

Φιλοδοξία του συνεδρίου είναι η συνάντηση και η αλληλογνωριμία επιστημόνων και επαγγελματιών που εργάζονται στον πολιτισμό, την παιδεία, την έρευνα, τις ψηφιακές τεχνολογίες και τον τουρισμό, τομείς που αποτελούν ζητήματα αιχμής για την Ελλάδα και την Ευρώπη στην παρούσα συγκυρία.

Ο ρόλος της έρευνας για την πολιτιστική κληρονομιά στο σύγχρονο κόσμο της διάχυσης της πληροφορίας είναι εξαιρετικά σημαντικός. Οι πολιτικές της Ευρωπαϊκής Ένωσης για την προστασία, την αποκατάσταση, τη συντήρηση και την ψηφιακή τεκμηρίωση της πολιτιστικής κληρονομιάς, καθώς και οι πηγές της χρηματοδότησης της έρευνας αυτής μπορούν και πρέπει να αποτιμηθούν ως προς τη συμβολή τους στη δημιουργία νέας γνώσης και νέων θέσεων εργασίας, μέσα από την αξιοποίηση Ευρωπαϊκών Προγραμμάτων και πόρων και είμαστε βέβαιοι ότι μέσα από το Συνέδριο θα προκύψουν μεγάλες συνέργειες, έτσι ώστε να μπορέσουμε να διεκδικήσουμε το μέλλον από καλύτερες θέσεις.

Η αξιολόγηση των υπαρχόντων ερευνητικών υποδομών και των αποτελεσμάτων τους, η παρουσίαση ιδεών και οραμάτων για νέες ψηφιακές μεθόδους, η συζήτηση για την καθιέρωση μοντέλων και προτύπων στον τομέα της πολιτιστικής κληρονομιάς, η εξέταση του σχετικού νομοθετικού πλαισίου που αφορά στην πολιτιστική κληρονομιά, την πολιτισμική διαχείριση και τη συντήρηση αρχαιοτήτων και έργων τέχνης, η διερεύνηση του ρόλου των τρεχόντων εξελίξεων στις διεθνείς δραστηριότητες, τις

συμφωνίες και τις συνεργασίες σε θέματα πολιτιστικής κληρονομιάς και της ψηφιοποίησής της, η αναζήτηση των ηθικών διαστάσεων του τομέα των πληροφοριακών συστημάτων για την πολιτιστική κληρονομιά, είναι ορισμένοι μόνον από τους τομείς στους οποίους σκοπεύει να επικεντρωθεί το συνέδριο.

Οι ενδεικτικοί θεματικοί άξονες προβληματισμού είναι οι ακόλουθοι:

1. Νέες τεχνολογίες στις ανθρωπιστικές επιστήμες
2. Η ψηφιοποίηση στην Αρχαιολογία και τον τουρισμό
3. Ψηφιακή Πολιτιστική κληρονομιά και η διαχείριση της
4. Συντήρηση, Προστασία και ανάδειξη της πολιτιστικής κληρονομιάς στο ψηφιακό πολυμεσικό περιβάλλον και διαδίκτυο (Εκπαίδευση, Τουρισμό, κτλ)
5. Νομικό πλαίσιο και ψηφιοποίηση της Πολιτιστικής Κληρονομιάς (συμβάσεις, προγράμματα, πνευματικά δικαιώματα)
6. Εμπειρίες, νέες προκλήσεις και προοπτικές για την ψηφιακή κοινωνία της Πολιτιστικής Κληρονομιάς.

Για συμπληρωματικές πληροφορίες, παρακαλούμε επισκεφτείτε τον αποκλειστικό ιστότοπο του συνεδρίου :

www.euromed2015.eu

μέσα από τον οποίο θα λαμβάνετε όλη την ενημέρωση για κάθε τι νεώτερο που θα αφορά τη Διοργάνωση του συνεδρίου και τους συνέδρους .

Στους συμμετέχοντες θα δοθεί Πιστοποιητικό Συμμετοχής .

Προσκαλούνται ,λοιπόν, όλοι οι Φορείς που επιθυμούν να παρουσιάσουν το έργο τους να συμμετάσχουν με εκπροσώπους τους ,όπως ,επίσης και κάθε επιστήμονας που ασχολείται με το θέμα της Ψηφιοποίησης.

Όσοι επιθυμούν να συμμετάσχουν στο συνέδριο με ανακοίνωση ή με ανακοίνωση τοίχου (poster) μπορούν να τα υποβάλλουν ηλεκτρονικά μέχρι τις 25 Αυγούστου 2015 και ώρα 15.00 μ.μ., μέσω της επίσημης ιστοσελίδας. Όσοι επιθυμούν να παρακολουθήσουν το Συνέδριο παρακαλούνται να δηλώσουν έγκαιρα τη συμμετοχή τους ηλεκτρονικά, λόγω του έντονου ενδιαφέροντος, που ήδη υπάρχει, από την Ελλάδα και το εξωτερικό.

Με Εκτίμηση

Η Οργανωτική Επιτροπή του Συνεδρίου

- ΜΑΡΙΝΟΣ ΙΩΑΝΝΙΔΗΣ -ΚΥΠΡΟΣ
- ΙΩΑΝΝΗΣ ΒΑΡΑΛΗΣ, ΘΕΟΔ.ΓΚΑΝΕΤΣΟΣ, ΗΛΙΑΣ ΝΟΜΠΙΛΑΚΗΣ, ΚΩΝ/ΝΟΣ ΣΚΡΙΑΠΑΣ -ΕΛΛΑΔΑ

ΣΤΟΙΧΕΙΑ ΟΡΓΑΝΩΤΙΚΗΣ ΕΠΙΤΡΟΠΗΣ

ΟΝΟΜΑΤΕΠΩΝ ΥΜΟ	ΦΟΡΕΑΣ	ΣΤΟΙΧΕΙΑ ΕΠΙΚΟΙΝΩΝΙΑΣ
	ΚΥΠΡΟΣ	

Dr Μαρίνος Ιωαννίδης	Διευθυντής Εργαστηρίου Ψηφιακής Πολιτιστικής Κληρονομιάς Τεχνολογικού Πανεπιστημίου Κύπρου - ΤΕΠΑΚ(Λεμεσός -ΚΥΠΡΟΣ)	E-Mail: marinos.ioannides@cut.ac.cy
	ΕΛΛΑΔΑ	
Dr Ιωάννης Βαραλής	Επίκ. Καθηγητής Τμήματος Ιστορίας -Αρχαιολογίας Πανεπιστημίου Θεσσαλίας -ΒΟΛΟΣ-ΕΛΛΑΔΑ	E-Mail: iovaralis@uth.gr ,
Dr Θεόδωρος Γκανέτσος	Καθηγητής ΑΕΙ Πειραιά Τ.Τ.-Εργαστήριο Μη Καταστροφικών Τεχνικών Σχολής Τεχνολογικών Εφαρμογών ΑΕΙ ΠΕΙΡΑΙΑ Τ.Τ.-ΠΕΙΡΑΙΑΣ -ΕΛΛΑΔΑ	E-Mail: ganetsos@teipir.gr ,
Ηλίας Νομπιλάκης	τ. Καθηγητής Συντήρησης Λίθου ΤΕΙ ΑΘΗΝΩΝ .-ΑΘΗΝΑ-ΕΛΛΑΔΑ	E-Mail: elnobil@hotmail.com ,
Κων/νος Σκριάπας	Οικονομολόγος -Σύμβουλος Ανάπτυξης & Επιχειρηματικότητας- Πρόεδρος ΔΣ Δικτύου "ΠΕΡΡΑΙΒΙΑ"- Δευτεροβάθμια ΜΚΟ για τον Άνθρωπο και τον Πολιτισμό--ΕΛΛΑΔΑ	E-Mail: skriapask@gmail.com , Mobile: 6974-881944

www.euromed2015.eu
<https://www.facebook.com/digitalculturalheritage2015>

EN HOMMAGE À ANTOINE HERMARY,
MUSÉE D'HISTOIRE DE MARSEILLE,
COLLOQUE INTERNATIONAL
16 -17 OCTOBRE 2015 (PROGRAMME
PROVISOIRE), CHYPRE ET LES GRANDES
ÎLES DE MÉDITERRANÉE UN NOUVEL
ESPACE D'ÉCHANGES, DE LA FIN DU IIE
MILLÉNAIRE AV. J.-C. À L'ÉPOQUE
HELLÉNISTIQUE

Présidents de séance :

P. Aupert, S. Colin-Bouffier, A. Farnoux, J.-P. Morel, D. Pilides

Invisible links and cultural memory : Crete, Cyprus and Euboea during the Early Iron Age (N. Kourou)

Aux échelles du Levant. Ports de commerce au Bronze Récent (M. Yon) Invisible links and cultural memory : Crete, Cyprus and Euboea during the Early Iron Age (N. Kourou) Copper metallurgy in Iron Age Kition (V. Kassianidou) La diffusion de la céramique chypriote d'époque géométrique en Méditerranée orientale : productions et modèles de distribution (A. Georgiadou) Kypriaka in the Siderospilia Cemetery at Prinias (H. Matthäus) Trafics orientaux en Méditerranée occidentale (L. de Barbarin et J.-Chr. Sourisseau)

*Identités, marqueurs sociaux et religieux Au fil des écritures : phénomènes de plurilinguisme et de plurigraphisme dans les îles méditerranéennes (A. Cannavò) Villes ou emporia ? Réexions à propos des villes phéniciennes de Chypre (S. Fourrier) et d'Occident (H. Tréziny) Monumental built tombs: High culture in the era of the Cypriot basileis (A. Satraki) Le paysage des théonymes en Crète et à Chypre (J.-B. Cayla)

*Art et artisanat, réseaux et échos

D'Allassia à Tartessos. Ivoires et autres matières dures d'origine animale (A. Caubet et H. Le Meaux) La production crétoise du haut-archaïsme : production et contextes (H. Aurigny) The Early Stone Sculpture of Cyprus in the Archaic Age. Questions of Meaning and External Relations (R. Sen) Chypre et la Sicile : quelques réexions sur les usages comparatifs du marbre (H. Dridi) D'où viennent les pièces du puzzle ? Les -gurines de style attique en contexte chypriote (P. Maillard) Modelli attici e atticismi nella coroplastica siceliota di età classica: problemi di stile, cronologia e società (M. Pisani)

*Un autre monde ? L'époque hellénistique Chypre dans le nouvel ordre méditerranéen de l'époque hellénistique : approches épigraphiques (A. Michel) Architecture funéraire et

décor à Chypre et dans les grandes îles de Méditerranée orientale à l'époque hellénistique
(A.-M. Guimier-Sorbets et D. Michaelides)

8TH INTERNATIONAL SYMPOSIUM ON ¹⁴C & ARCHAEOLOGY, EDINBURGH, SCOTLAND, 27TH JUNE TO 1ST JULY 2016

We take this opportunity to invite you to the 8th International Symposium on ¹⁴C & Archaeology to be held in Edinburgh, Scotland, 27th June to 1st July 2016. The symposium will be organised by the staff of the [SUERC Radiocarbon Dating Laboratory](#), with help from a number of Scottish based archaeologists and scientists. The SUERC laboratory has a long association with archaeology, particularly Scottish archaeology, having worked closely with Historic Scotland for over 30 years. Therefore, our aim for the symposium is to showcase a good balance of current archaeological research that employs radiocarbon and developments in the radiocarbon technique.

The symposium will be held in the [Royal College of Surgeons](#), which sits within the Old Town, the name given to the oldest part of Scotland's capital city. The area has preserved much of its medieval street plan and many Reformation-era buildings and is a protected UNESCO World Heritage Site. The [National Museum of Scotland](#), [Edinburgh Castle](#) and many other visitor attractions are less than 10 minutes' walk from the symposium venue.

There are a number of social events that we are already in the process of planning. These include a whisky tasting in the Fellows Library of the Royal College of Surgeons, guided tours of the Early People Gallery at the National Museum of Scotland, a day excursion (perhaps to the [Scottish Crannog Centre](#) or a local distillery), and the conference dinner. We chose this venue carefully and are sure that you will enjoy it!

P.S. – Sign up for notifications and to suggest a session topic. Also, follow us on [Facebook](#) and/or [Twitter](#) where we will be posting updates from now until the Proceedings go to the printer.

Please visit the site: <http://www.c14archaeology2016.com/>

**"METAL IN MOTION: CONSERVATION AND
CARE OF KINETIC METAL OBJECTS",
INSTITUTE FOR CONSERVATION (ICON)
METALS GROUP CONFERENCE AND
ANNUAL GENERAL MEETING,
AMGUEDDFA CYMRU - NATIONAL
MUSEUM WALES, CARDIFF, WALES, UK,
MONDAY 16 NOVEMBER 2015,
CALL FOR PAPERS**

The Metals Group Committee invites abstracts of 250 words maximum to be submitted by Monday 7 September 2015.

Contributions from public and private practitioners working with kinetic metal objects are welcomed. Presentations of 20 minutes will explore, normally through case studies, ethical and practical challenges related to the operation and maintenance of moving metal objects. We envision that the subject will cover a vast range of objects including industrial machinery, sculptures, decorative arts objects, scientific instruments and clocks.

Possible themes include, but are not limited to:

Ethical issues involved in running and maintaining dynamic objects

Challenges related to treatment and display

Logistics of operating the objects

Decision-making and institutional policies regarding moving objects

Conservation case studies

If you have experience treating moving metal objects please consider submitting an abstract, up to 250 words, for oral presentation.

Please include presentation title and full name and institutional affiliation of author.

Abstracts should be submitted to the group Chair, Nicola Emmerson emmersonnj@cf.ac.uk by Monday 7 September 2015. Submissions will be evaluated by the Metals Committee and successful applicants will be notified by Friday 18 September 2015. Speakers (one per presentation) will receive free entry to the conference.

Cymbeline Storey

ICON Metals Group Committee

**WORKSHOP "NANOTECHNOLOGIES FOR
CULTURAL CONSERVATION: CURRENT
TRENDS AND PRACTICES"
ALLENTOWN ART MUSEUM OF THE
LEHIGH VALLEY ALLENTOWN,
PENNSYLVANIA, OCTOBER 30-31, 2015**

Sponsored by The Samuel H. Kress Foundation.

Learn about cutting-edge advances in art conservation from leaders in the field

Public lecture and hands-on workshop led by Piero Baglioni, pioneer of nano-based conservation technologies and director, Consorzio Interuniversitario per lo Sviluppo dei Sistemi a Grande Interfase-CSGI

Keynote lecture by Dianne Dwyer Modestini, Senior Research Fellow and Paintings Conservator for The Samuel H. Kress Program at the Conservation Center of the Institute of Fine Arts

Poster presentations and discussion forum for conservation practices

Hosted by the Allentown Art Museum of the Lehigh Valley and the IDEAL Center of Lafayette College

For more information, please email ideal@lafayette.edu

Online registration begins August 10, 2015

Diane Cole Ahl
Arthur J. '55 and Barbara S. Rothkopf
Professor of Art History
Robert Adenbaum '49
Co-Director,
IDEAL Center Lafayette College Easton, PA 18042-1768
610-330-5358
Fax: 610-330-5058

ΘΕΣΕΙΣ ΕΡΓΑΣΙΑΣ/ΥΠΟΤΡΟΦΙΕΣ –
JOB VACANCIES/FELLOWSHIPS

THREE PHD POSITIONS IN ARCHAEOLOGY

The Faculty of Archaeology, the section Material Culture Studies, 15-228, 15-229, 15-230

The Faculty of Archaeology, the section Material Culture Studies, has vacancies for:

Three PhD Positions in Archaeology (1.0 fte) Vacancy numbers: 15-228 / 15-229 / 15-230

Project description

Greek Mycenaean monumental architecture has been well-studied. However, the extent to which large-scale building programmes contributed to the socioeconomic and political changes and crises that took place in Late Bronze Age Greece (c.1600-1100 BC) has not been studied. The project aims to investigate human and natural resources which interacted in the core regions of Mycenaean Greece. There, elites mobilized these resources to implement their monumental building programmes. It seeks to reveal how and why these constructions were accomplished, and what impact such large-scale prolonged building programmes had on the population over time. Methodologically, practical building processes and inherent social practices are captured via an interdisciplinary methodology consisting of econometric, statistic, anthropological and theoretical approaches. This combination of approaches is novel in its scope because it brings together in a unique way the wide range of scattered data available on many aspects of human ecology and past economies of the region. As such, multi-layered data sets will illuminate the many interconnected networks of human and resource interactions that impacted on people's day-to-day activities, first, but also on the economic, cultural and socio-political situations over time in these regions. The local Mycenaean phenomena governing this period will be embedded into the much wider ongoing debate of the societal 'collapse' indicative of the final phases of the Late Bronze Age in the East Mediterranean more generally in order to understand which role it played on this much larger scale. As such, this project contributes in demonstrating the long-term insights archaeological research achieves in studying and understanding very human issues, and it illustrates the contemporary relevance of archaeological studies today and for the future.

As a member of a larger team each PhD position is embedded within the SETinSTONE programme, funded by an ERC Consolidator Grant, and supervised by Dr. Ann Brysbaert.

Key responsibilities

- To write a PhD;

- To present papers at national and international conferences and workshops as required by the project (individual and/or co-authored);
- To submit research results for publication in peer-reviewed journals (individual and/or co-authored);
- To submit research results for their incorporation in a synthetic publication and the proceedings of the International Conference, both edited by the PI;
- To take part in PhD training offered by the Faculty and through field schools where appropriate and needed;
- To undertake/participate in limited teaching in year 2 and 3 of the appointment;
- To participate in the Faculty's workshops, reading and discussion groups;
- To participate in yearly meetings-workshops organised by the ERC project and in regular supervision sessions with the supervisor(s);
- To contribute and participate in the International Conference held at Leiden in year 5 of the project (year after the PhD is finished).

Vacancy number 15-228, specific project task: The architectural energetics of monumental Cyclopean architecture in Mycenaean Greece

This PhD project, PhD 1, seeks to investigate the technological processes of acquiring, transporting, and constructing monumental cultural commodities mainly in stone work, and trace the builders' communicative and logistical strategies.

Vacancy number 15-229, specific project task: The architectural energetics of earthwork architecture in Mycenaean Greece

This specific PhD project, PhD 2, seeks to investigate the technological processes of acquiring, transporting, and constructing monumental cultural commodities in earth work, sometimes combined with stone.

Vacancy number 15-230, specific project task: A holistic human and other resources assessment for late MBA-LBA Mycenaean Greece

This project, PhD 3, will study the Argive Plain to obtain an updated and more holistic understanding of the socio-economic mosaic of the Mycenaean societies in the Argive Plain, its changes over time and the subsistence and other support it may have provided to its population.

Selection criteria

The project seeks to employ a highly motivated and proactive candidate who will need to work both independently and as part of a larger team. S/he is willing to travel between the Netherlands and Greece, and is willing to stay for periods in Greece to carry out research in libraries and archives, and when required, fieldwork, for which training and equipment will be provided. The candidate will be part of a larger team consisting of 3 PhD candidates, two postdocs and the PI, will work together with the group on a day-to-day basis at the Faculty of Archaeology, and will regularly present her/his findings in this group and beyond.

Crucial

- Degrees (BA/BSc. and MA/MSc.) in archaeology with a specific focus on East Mediterranean and/or Aegean Bronze/Iron Age Archaeology;

- An explicit interest in prehistoric (monumental) architecture, material culture and landscape studies;
- Excellent verbal and written communication skills;
- The MA/MSc. Thesis shows well-developed research skills (both analytical and descriptive). The ability to work with statistical packages and databases is a great advantage and the thesis should have received a grade of minimally 8.0 on a ten-point scale, or its international equivalent;
- The PhD research needs to result in a doctor's degree and should to be undertaken, finished and ready for publication within 4 years;
- An excellent command of English (reading, understanding, speaking, writing) and a strong command of German (reading, understanding), and modern Greek (reading, speaking, understanding) or willing to commit taking intensive classes in modern Greek in year one of the PhD and as long as it takes to converse and read it well;
- Valid European driving license.

Desirable

- Relevant working experience in the field, well-developed GIS skills;
- Other modern language skills (French) are useful;
- Relevant publications.

Our faculty

The future of the past begins in Leiden. The Faculty of Archaeology is internationally leading for its research, home to a broad array of specializations and notable for the strong connection it fosters between teaching and research. Home to over 500 students in the multidisciplinary world of Archaeology, the Faculty and its researchers from all areas of the Archaeological field determine the future of archaeological research.

Terms and conditions

We offer a full-time position for 1,0 fte (38 hours per week), the start date is January 1, 2016. The appointment as a PhD student will be for a period of four years (initially for a period of one year with an extension of three years after positive evaluation of progress and skills development) leading to the successful completion of a PhD thesis and its publication within these four years. The appointment will be under the terms of the cao (Collective Labour Agreement) of Dutch Universities

The gross monthly salary is set on € 2.125,- in the first year, increasing to € 2.717,- gross per month in the final year.

Leiden University offers an attractive benefits package with additional holiday (8%) and end- of-year bonuses (8.3 %), training and career development and sabbatical leave. Our individual choices model gives you some freedom to assemble your own set of terms and conditions. Candidates from outside the Netherlands may be eligible for a substantial tax break.

Information

Enquiries can be made to Dr. Ann Brysbaert (a.n.brysbaert@arch.leidenuniv.nl).

Information about The Faculty of Archaeology can be found at <http://www.archaeology.leiden.edu/> and about Leiden University at www.leiden.edu.

Information on the advanced research qualification and research programmes of the Graduate School of Archaeology can be found on: <http://archaeology.leiden.edu/graduate-school/phd-programme/>.

Applications

To apply for one of these vacancies, please send an email to Mrs. Yvonne Haring; y.m.haring@arch.leidenuniv.nl and ensure that you upload the following additional documents in pdf format quoting the correct vacancy number (15-228, 15-229, 15-230) for the post you are interested in.

Note: you cannot apply for all three posts in one application, but people with a keen interest in posts 1 and 2 can apply for both. However, two completely separate applications with all required documentation (see below) need to be submitted in order to be considered:

- A cover letter (max 2 pages) stating how your skills and experience relate to the selection criteria and project description above;
- A short research proposal including short bibliography (max 3 pages) in relation to the advertised position and its specifics;
- Your curriculum vitae (CV), including publications if applicable;
- Your master thesis or other major writing sample;
- Copies of your academic transcripts (BA/BSc., MA/MSc.);
- If your native language is not English, proof of your English language proficiency since the thesis will need to be written in English;
- The names and contact details (with emails) of three academic referees who know your work well; one should be your MA thesis supervisor.

Only applications received per email at the latest on August 31, 2015 can be considered.

The selection procedure will take place in mid-September/early October 2015, and selected candidates will be invited for an interview (in person or over Skype) in early November 2015.

Please visit the site: <http://werkenbij.leidenuniv.nl/vacatures/phd-posities/15-228-229-230-vacature-universiteit-leiden-three-phd-positions-in-archaeology.html>

POSTDOCTORAL FELLOWSHIP
ANNOUNCEMENT (HISTORY OF ANCIENT
SCIENCE) TOPOI HUMBOLDT UNIVERSITY
BERLIN

A postdoctoral fellowship in research group (D-1) Space of Nature:

The Exact Sciences of the Cosmos of the Excellence Cluster 264 Topoi, starting October 1, 2015, is now open to applicants who have obtained exemplary results in their doctoral studies in History of Science, Classics, Assyriology, Egyptology, or another branch of Ancient Eastern Mediterranean philology.

Pursuant to DFG guidelines, the fellowship will be awarded for two years and will include a stipend of 1853 euros per month (including research allowance). A child allowance will be made available in accordance with DFG guidelines.

The successful recipient will pursue an original research project on the history of ancient science (e.g. astronomy, astrology, divination, medicine, mathematics) or its social or institutional context. The research will be conducted as a member of the research group D-1, which focusses on the history of the exact sciences in the Eastern Mediterranean (e.g. Babylonia, Greece, Greco-Roman world, Ptolemaic Egypt) between 500 BCE and 200 CE.

Project advisor will be Prof. Dr. Mathieu Ossendrijver (Humboldt-Universität zu Berlin, Institut für Philosophie).

Applications, together with the documents listed below, should be emailed to ruti.ungar@topoi.org by August 25, 2015.

Weblink: <http://www.topoi.org/news/announcement/>

For more information, please visit www.topoi.org

Application documents:

- Cover letter
 - Curriculum Vitae
 - Project plan and schedule
 - Official copies of degree certificates
 - Two letters of recommendation
 - List of publications
-

2016-2017 GETTY RESIDENTIAL SCHOLAR GRANTS

The Getty Research Institute and the Getty Villa invite proposals for the 2016-2017 scholar year residential grants and fellowships (see attached posters).

The Getty Research Institute theme, "Art and Anthropology," explores the intensifying rapprochement between art history and anthropology. As these two disciplines adapt to the analysis of the cultural production of art and material culture from around the world, this process challenges both the canons of art and the methodologies in the different fields of art history. The Getty solicits applications that address both past and present relationships among the disciplines of art history and anthropology as well as archaeology.

The Getty Villa theme, "The Classical World in Context: Egypt," renews its focus on the relations between the cultures of the classical world and Egypt from prehistory to the coming of Islam. Priority will be given to research projects that are cross-cultural and interdisciplinary, utilizing a wide range of archaeological, textual, anthropological, and other evidence.

Deadline: October 1, 2015.

The Getty Scholars Program strongly encourages recipients of this email to share this information with colleagues.

Detailed application guidelines are available online at:

<http://www.getty.edu/foundation/apply>

For more information about each theme please visit:

<http://www.getty.edu/research/scholars/years/future.html>

Please address inquiries to:

Phone: (310) 440-7374

E-mail: researchgrants@getty.edu

STUDENTSHIPS AT CENTRE FOR DOCTORAL TRAINING SCIENCE AND ENGINEERING IN ARTS, HERITAGE AND ARCHAEOLOGY

Doctoral studentships

The Centre for Doctoral Training Science and Engineering in Arts, Heritage and Archaeology (SEAHA)

The Centre for Doctoral Training Science and Engineering in Arts, Heritage and Archaeology (SEAHA) at UCL, University of Oxford and University of Brighton is delighted to be offering four exceptionally exciting doctoral studentships:

"Making the Antikythera Mechanism: Rebuilding Technology that changed History"

Please visit the site: [URL:http://www.seaha-cdt.ac.uk/wordpress/wp-content/uploads/2015/07/P32_Making-the-Antikythera-Mechanism-FINAL.pdf](http://www.seaha-cdt.ac.uk/wordpress/wp-content/uploads/2015/07/P32_Making-the-Antikythera-Mechanism-FINAL.pdf)

This studentship offers an outstanding opportunity to explore the making of the Antikythera Mechanism, an extraordinary ancient Greek astronomical calculating machine. This is a unique and exciting cross-disciplinary research program, focused on answering key issues, such as how the Mechanism was constructed, calibrated and used. X-ray CT and surface imaging data, gathered in 2005, reveal the details of each component and will form the basis of experimental models, designed to investigate the early language of mechanical engineering and the first steps in the development of computing machines. The project will be jointly supervised by University College London, Matelect Ltd and the Computer History Museum in California.

Application deadline: open until filled.

**"MASS DIGITIZATION AND METADATA
ENRICHMENT OF 3D CULTURAL
HERITAGE ARTEFACTS BY AUTOMATIC
AND USER-BASED METADATA
ACQUISITION"**

Please visit the site: [URL:http://www.seaha-cdt.ac.uk/wordpress/wp-content/uploads/2015/07/P20_Mass-digitization-and-metadata-enrichment-of-3D-cultural-heritage-artefacts-FINAL.pdf](http://www.seaha-cdt.ac.uk/wordpress/wp-content/uploads/2015/07/P20_Mass-digitization-and-metadata-enrichment-of-3D-cultural-heritage-artefacts-FINAL.pdf)

This research project seeks to develop new methods to improve and speed-up metadata acquisition for digitised 3D cultural heritage artefacts. The work will build on a web-based 3D-centered annotation platform which the Fraunhofer Institute for Computer Graphics Research IGD (Fraunhofer-IGD) has developed alongside a new device capable of supporting a "conveyor belt" approach to the digitisation of 3D objects. The project will be jointly supervised by Fraunhofer-IGD, the University of Brighton and partner cultural organisations

Application deadline: open until filled.

POSITION AT BRITISH MUSEUM, DIRECTOR OF SCIENTIFIC RESEARCH, LONDON

Full time, Permanent

Salary: Competitive

Application Deadline: 9 August 2015

Can you help one of the world's leading cultural institutions develop new strengths in scientific research? It's an exciting challenge and this newly-created leadership role is your opportunity to take it on. You will be responsible for the Museum's new scientific research strategy and develop an ambitious research programme to deliver it.

Founded in 1753, the British Museum's remarkable collection spans over two million years of human history and culture. We have a strong legacy and an ambitious vision for scientific research. With our new state-of-the-art research laboratories at the World Conservation and Exhibitions Centre, you'll have every opportunity to innovate. Here in the heart of a vibrant world city, you'll collaborate with brilliant minds. Supported by the Wellcome Trust, we are looking to appoint a world-class leader to transform the Museum's scientific research agenda as we develop a new focus in the science of organic artefacts and bio-archaeology. For the right candidate there will also be the opportunity to develop a close working relationship with the Francis Crick Institute.

If you are the forefront of your field, help us to lead and inspire the scientific research team, building the department's worldwide reputation.

Person Specification: The ideal candidate will have at minimum significant post-doctoral research experience, a track record of university or museum-based research in either the science of organic artefacts or bio-archaeology, and have experience of successfully applying for grants from major national and international funding-bodies. The successful post-holder will have experience developing and implementing strategies within a research-focussed environment, along with proven abilities to effectively handle large budgets. The ability to lead, develop and motivate a team is essential, as is the skill to effectively communicate with internal and external stakeholders at all levels.

About the British Museum: Founded in 1753, the British Museum's remarkable collection spans over two million years of human history and culture. With over 6.5 million visitors in 2014, the Museum is the top visitor attraction in the UK, and its world-famous collection includes the Rosetta Stone, the Parthenon sculptures, Egyptian mummies, the Admonitions Scroll, and the Amaravati sculptures. The Museum is an equal opportunity employer, supports a diverse workplace and offers a competitive benefits package

including:

Membership of the civil service pension scheme

Free entry to a wide range of museums and exhibitions

Participate in private and public Museum activities, including talks by leading curators from around the world and behind-the-scenes opportunities to learn how museums care for and manage their extraordinary collections

Generous annual leave allowance

Interest-free season ticket loan

Child care voucher scheme

Professional and personal development opportunities

Employee Assistance Programme

Discounts on food and gift shop purchases

If you are a positive individual, passionate about the Museum and would like to know more about this exciting opportunity, please visit the website for further information and details on how to apply.

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HR Consultant
Recruitment and Resourcing
Human Resources
The British Museum
Great Russell Street
London WC1B 3DG
+44 20 7323 8201



ΑΝΑΚΟΙΝΩΣΕΙΣ - ANNOUNCEMENTS

AIA ANNOUNCES RESEARCH ENDOWMENT FUND FROM PHILANTHROPIST RICHARD C. MACDONALD, LARGEST GIFT IN HISTORY OF AIA, HOMER'S ILIAD A PROFOUND INFLUENCE ON PHILANTHROPIST'S LIFE

The Archaeological Institute of America (AIA) has established a new endowment fund to provide vital support for archaeological research in the 21st century and beyond. The Richard C. MacDonald *Iliad* Endowment for Archaeological Research will be used to create a reliable, long-term stream of revenue to support the AIA's mission to promote archaeological inquiry and public understanding of the human past. The Endowment was established with a \$750,000 contribution from businessman and philanthropist Richard C. MacDonald and represents the largest gift in the history of the AIA.

According to AIA President Andrew Moore, "This most generous gift from Mr. MacDonald will have a transformative effect on the AIA's efforts to support field research of fundamental significance. It will greatly advance our understanding of the archaeology of a key region, and continue to do so far into the future."

The Richard C. MacDonald *Iliad* Endowment for Archaeological Research will enable the AIA to offer grants in support of research in Ancient Troy and sites in the wider region of Western Turkey. The Endowment will also support the study of the ancient cultures and civilizations that interacted with the Trojans over the city's long history, particularly in the regions that supply context to the study of Troy. These regions include Anatolia, southeastern Europe, the Aegean and Crete in the Third to First Millennium B.C.E. Funding may also be awarded for the purchase of innovative technologies that enable archaeologists to learn more from these research sites.

Mr. MacDonald described the origins of his interest in archaeology, "I read an abridged copy of the *Iliad* when I was about eight years old and was hooked. I've been interested in Troy and everything about it ever since."

He continued, "I was instrumental in setting up the local chapter of the AIA here in the Las Vegas area and have attended several Annual Meetings over the years, so it was a natural progression to go to the AIA to accomplish the endowment, which allows me to fulfill a dream that started when I was a child."

"Growing the AIA's permanent endowment is a priority in our efforts to provide resources critical for state-of-the-art archaeological research, education, and preservation. Making a gift to the AIA endowment is a wonderful way for archaeology enthusiasts to provide lasting support for the important work of the Institute," explained AIA Executive Director Ann Benbow.

About Richard C. MacDonald

AIA Member Richard C. MacDonald is president of MacDonald Companies, a residential and commercial real estate development company. Mr. MacDonald founded The MacDonald Center for the Arts & Humanities through which he has sponsored several archaeological research projects, including the study of a Minoan ship sunk between Crete and Egypt and investigations of Bronze Age Santorini and Iron Age Israel. He has also provided educational grants to the Southern Nevada school system to provide greater opportunities for young people.

About the AIA

The Archaeological Institute of America is North America's oldest and largest organization devoted to the world of archaeology. The Institute is a nonprofit group founded in 1879 and chartered by the United States Congress in 1906. Today, the AIA has 210,000 Members and more than 100 Local Societies in the United States, Canada, and overseas. Members include professional archaeologists, corresponding members, students, and enthusiasts, all united by a shared passion for archaeology and its role in furthering human knowledge.

The AIA promotes archaeological inquiry and public understanding of the material record of the human past to foster an appreciation of diverse cultures and our shared humanity. The AIA supports archaeologists, their research and its dissemination, and the ethical practice of archaeology. The AIA educates people of all ages about the significance of archaeological discovery and advocates the preservation of the world's archaeological heritage. Additional information about the AIA may be found at www.archaeological.org.

Samantha Craig
Development Associate
Site Preservation Program Administrator
Archaeological Institute of America
656 Beacon Street
Boston, MA 02215
617.353.9364



INTERNET SITES

'MICROSCOPE HISTORY' WEBSITE

My website entitled: Microscope History is live now! Based solely on my collection of historical microscopes of the last 300 years, the narrated photos tell chapters in the history of the invention, development and use of the optical microscope.

From many links go to: <http://microscopehistory.com/>

ΝΕΕΣ ΕΚΔΟΣΕΙΣ – NEW PUBLICATIONS

PROCEEDINGS OF THE 1ST KÜLTEPE INTERNATIONAL MEETING. KÜLTEPE, SEPTEMBER 19-23, 2013. STUDIES DEDICATED TO KUTLU EMRE - (KÜLTEPE INTERNATIONAL MEETINGS 1)

F. Kulakoğlu, C. Michel (eds.)

XIV+249 p., 79 b/w ill., 22 b/w tables, 210 x 295 mm, 2015

ISBN: 978-2-503-55545-4

Languages: English

Paperback

Retail price: EUR 84,00 excl. tax

This first volume of the Kültepe International Meetings gathers interdisciplinary studies dedicated to Kültepe, ancient Kaneš (central Anatolia), and its environment, mainly during the Bronze Age.

This book is the first of a new series dedicated to the site of Kültepe, ancient Kaneš, in central Anatolia. It is the report of a conference which took place at Kültepe on September 2013. Contributions written by the best specialists of the field focus on Kültepe and its environment, mainly during the Bronze Age, and on its Assyrian settlement located in the lower town. The volume brings about a reflection on archaeological and textual materials, and provides an interdisciplinary summary of the state of research. It is divided into six sections dedicated to the following topics: archaeology, chronology and population of Kültepe; archives unearthed in the houses belonging to Assyrians; Old Assyrian writing and literacy; Anatolian settlements and daily life; metals and minerals; Kültepe after the Middle Bronze Age.

Fikri Kulakoğlu, Professor of archaeology at Ankara University, is the director of Kültepe excavations since 2006.

Cécile Michel, Director of Research at the National Center for Scientific Research (France), belongs, since the 90s, to the international team in charge of the publication of Kültepe tablets.

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TWO OXEN AHEAD: PRE-MECHANIZED FARMING IN THE MEDITERRANEAN

Bryn Mawr Classical Review 2015.07.05

Paul Halstead, *Two Oxen Ahead: Pre-Mechanized Farming in the Mediterranean*. Malden, MA; Oxford; Chichester: Wiley Blackwell, 2014. Pp. xi, 372. ISBN 9781405192835. \$99.95.

Reviewed by Ruth Scodel, The University of Michigan (rscodel@umich.edu)

It may surprise readers who have any familiarity with Paul Halstead's research and my own that I asked to review this book. To be honest, having already read the ebook, the only version available at my library, and borrowed the print version from ILL, I wanted a copy. Halstead describes his own scholarship on his website: "My research has focussed chronologically and geographically on the later prehistory (Neolithic and Bronze Age) of Greece, thematically on the relationship between farming economies and social change, and methodologically on the contributions of zooarchaeology and ethnoarchaeology to the study of past animal and crop husbandry." Many of his article titles are intimidating to the philologist, such as (with R. Fraser, A. Bogaard et al.), "Manuring and stable nitrogen isotope ratios in cereals and pulses: towards a new archaeobotanical approach to the inference of land use and dietary practices." This book, though, is ethnoarchaeology with the weight on the ethno-. Although it keeps prehistory and classical antiquity in view, its main concern is the recent past. I read it because I am working on Hesiod's *Works and Days*, but I think I would be glad that I had read it even if I were not. I could perhaps have learned some of the material that it covers in other ways, but not nearly so conveniently, or so enjoyably. I have learned a great deal about Hesiod from this book, even though he is never mentioned. Indeed, the early Iron Age, for which zooarchaeological data are thin, is lacking, while references to Neolithic, Bronze Age, classical, and Roman evidence are not. Halstead's farmers operate in a far more developed market system than anyone thinks any ancient economy had, and grow crops that Hesiod never knew, like maize and potatoes, but the book is still full of material to think with. There are aspects that I am not at all competent to evaluate, and I certainly cannot helpfully locate this book within archaeological debates, but I hoped that my enthusiasm would have value precisely because this is not what I do. Archaeologists and social-economic historians are unlikely to need my recommendation, but many of us (readers of BMCR) know very little of farming, even modern farming, and our students know even less. Students in my Homer class did not know what winnowing is, so the winnowing-fan of Tiresias' prophecy in the *Odyssey* was completely obscure to them, and others have no idea of the difference between wheat and barley. A colleague in English once asked me to explain what hay is.

The book is based largely on conversations with older farmers (including many women), mostly in various locations around Greece, but also in Italy, Provence, Andalucia, and Asturias in Northern Spain. Halstead looks at the varying strategies and practices of people who farmed without modern machinery. The book is permeated by his respect for his informants, whose voices come through clearly and whose resilience always impresses. The author's voice is distinct, too (in the preface he explains why he did not obtain "informed consent" and the acknowledgements thank "infant passports to

households closed to unaccompanied adults," both named Halstead: ethnography has its tricky aspects). The informants, however, are by no means the only source: citation of scholarship is abundant, with references listed at the end of each chapter. Illustrations are small and not beautiful, but sometimes very useful, like the series of photographs of winnowing on Amorgos (Figures 4.2 and 4.3).

It is very readable and approachable: a short glossary aids readers who enter as ignorant as I did of basic terms like "glume" and "maslin." It is full of detail that is fascinating even when not especially relevant for the classicist, like the bakers on Crete who produce a barley bread with a little chaff and awn (bristles) in it, to give an impression of authentic rusticity, in contrast with an anecdote from the desperate early 1940s about a woman whose poverty is revealed when she pays back a borrowed loaf of bread to a neighbor, and the flour has been stretched with bitter vetch, normally only an animal fodder (164-6). Some passages illuminate antiquity even when it is not mentioned. On 335-6, Halstead discusses how communities praised neat farm work, even when it was more precise than was practically necessary, and how the cultural capital produced by skill or extra effort (or lost owing to sloppiness) had material effects. The respected farmer would find it easier to conduct business, whether finding a partner or marrying a child.

The material is initially divided by the cycle of tasks, very much like the Works and Days: plowing and sowing, harvest, and threshing and sorting. One chapter considers the annual strategies for avoiding failure and promoting success: crop rotation and fallow, manuring, irrigation, and weeding. The next looks at longer-term planning: clearing land, terracing, drainage, balancing subsistence and cash crops, livestock, the domestic cycle (from having young children to support to having surplus labor from teenagers and young adults), negotiating with the larger community, and the last chapter addresses the value of comparison for understanding the past. Throughout, Halstead emphasizes the variety of strategies employed under different conditions, including the nature of the land, the livestock and labor available, and the circumstances of particular years. A small and irregular plot will be cultivated by hand with a hoe, and the seed dibbled or planted in a row; a larger field is plowed and the sower broadcasts. He also addresses the complexity of the farmer's risks. If a grain grows too quickly, it is vulnerable to frost in some areas and to "lodging," stem collapse. Sheep can be lightly grazed on such a crop so that it does not grow too high, but then if the spring rains are not good, the crop may not recover.

Halstead argues that local variation has always been greater than the changes in Mediterranean conditions over time, and that changes in vegetation and soil can be documented and incorporated in our understanding of date, but that the basic challenges of farming are still comparable. Farmers are more rational than scholars have often thought—farmers who explicitly base their practice on tradition are often selecting among alternatives and basing their decisions both on experience and on a varied repertory of traditional sayings. Modern analogy is to be used heuristically. It does not tell us what people did in the past, but helps formulate questions and provide possible interpretations of the evidence. He lists ten issues (349-353) that analogy usefully illuminates: the flexibility of actual farming practice; how a decision at one stage of production has effects through the cycle; how complex the calculations of costs and benefits can be; the importance of scale; buffering strategies, since production is uncertain year to year; how the cycle of family life brings both difficulties and opportunities; the integral role of livestock; the importance of exchanges of labor, livestock, land, and food; the way

markets can increase inequality; the hierarchy of grain crops may be a better example of diffusion than developments in technology (I am not sure about this last). Inequality is a concern throughout.

One of Halstead's informants defines "farmer" as two oxen ahead and one behind" ("dumb as an ox" rather than "strong as an ox" is the relevant saying). The book shows just how false that is.

Please visit the site: <http://bmcr.brynmawr.edu/2015/2015-07-05.html>

NEW GETTY PUBLICATION 2015:
HISTORICAL PERSPECTIVES IN THE
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PAPER

Edited by Margaret Holben Ellis

Comprehensive and thorough, the book relates how paper conservation has responded to the changing place of prints and drawings in society. The readings include a remarkable range of historical selections from texts such as Renaissance printmaker Ugo da Carpi's sixteenth-century petition to the Venetian senate on his invention of chiaroscuro, Thomas Churchyard's 1588 essay in verse "A Sparke of Frenship and Warne Goodwill," and Robert Bell's 1773 piece "Observations Relative to the Manufacture of Paper and Printed Books in the Province of Pennsylvania." These are complemented by influential writings by such figures as A. H. Munsell, Walter Benjamin, and Jacques Derrida, along with a generous representation of recent scholarship.

Please visit the site:

http://www.getty.edu/conservation/publications_resources/books/historical_cons_paper.html

EΙΔΗΣΕΙΣ - NEWS RELEASE

THE RISE AND FALL OF A FORGOTTEN PHOENICIAN CITY (AND ITS CONNECTION TO THE ISRAELITES), BY PROF. AYELET GILBOA

More than 30 years of excavations have unearthed a Phoenician city that was extremely prosperous and indeed truly cosmopolitan.

The Mediterranean Sea is an enclosed, relatively small and to a large extent easily-navigated basin. Many modern historians and archaeologists claim therefore that cross-Mediterranean contacts were rather constant and continuous throughout history. In fact, however, they were rather fragile, and their sustenance (or not) depended on many factors, not least of all - politics.

The first truly 'international' period around the Mediterranean was in the fourteenth and thirteenth century BCE, the period archaeologists call the Late Bronze Age, when the region of present-day Israel was dominated by Canaanite city-states. Extensive maritime activity is attested in this period between polities over a vast range, from Mesopotamia to the Atlantic coast of Iberia. But in a complex process that culminated around 1200 BCE nearly all the political entities that were involved in these networks collapsed - the Mycenaean centers in Greece, the Hittite Empire in Anatolia (modern Turkey), the city-states of Canaan and Syria, most famously the city of Ugarit, and even mighty Egypt was considerably weakened.

What happened next? It is usually assumed that the main beneficiaries of this collapse were the inhabitants of the great Phoenician centers in Lebanon, such as Tyre and Sidon, who eventually, around 850-800 BCE started to colonize the West Mediterranean and their activities were long remembered in Greek and Latin history and myth. However, new evidence from Tel Dor, the major port town on Israel's Carmel coast (just east of Kibbutz Nahsholim) shows that the process was more gradual and complex.

More than 30 years of excavations have unearthed a Phoenician city that was extremely prosperous and indeed truly cosmopolitan after the 1200 BCE collapse. It boasted monumental administrative structures, among the largest known around the Mediterranean and it maintained close commercial connections with Cyprus, Egypt and other Phoenician port cities.

It imported silver from Anatolia and the west Mediterranean, it produced purple dye and resins - among the most coveted commodities of the era. It even imported cinnamon from South Asia and indeed produced the earliest evidence for sustainable trade with this distant region.

As a matter of fact, no other city in the Levant produced such ample evidence for extensive and far-flung commercial networks during the 11th-9th centuries BCE. So why did no memory of Phoenician Dor make it into the Greek and Latin traditions? Why do

we not hear about 'Dorian' colonies in the West? We now think that we may have the answer. Excavations have revealed that around the mid-ninth century BCE the Phoenician town was transformed and replaced by a new and imposing administrative center with new monumental buildings that recall Israelite cities such as Megiddo and Dan. None of the Phoenician structures, which functioned for hundreds of years, remained intact. We believe that this drastic change occurred during the reign of King Ahab, who battled Israel's enemies on all fronts.

Therefore, the allusion to Dor as part of Solomon's kingdom in the 10th century (1 Kings 4:11) is probably anachronistic. Be that as it may - the Israelites had no maritime interests at Dor, and possibly as part of their alliances with Phoenician cities in Lebanon (recorded, for example, in the biblical account of Ahab marrying the Sidonian princess Jezebel) they agreed to direct trade through harbors in Lebanon, at the expense of the Dorians. This is patently evident in the ground. Nearly all the previously ample evidence of Dor's commercial contacts has vanished and from now on the town looks inland rather than to the sea. Thus, when the Phoenicians started their westward thrust in earnest around the 850 BCE, Dor and the Carmel coast were already insignificant from a commercial point of view. In fact, it seems that the Phoenician cities in Lebanon, especially Tyre, should have been thankful to the Israelites for eliminating one of their major competitors.

Prof. Ayelet Gilboa is a researcher at the Zinman Institute of Archaeology and a teacher at the Department of Archaeology at the University of Haifa. She co-directs the Tel Dor excavations and her main fields of interest are the Levant in the Bronze and Iron Ages, Phoenicians, "Sea Peoples", Israelites and cross-Mediterranean maritime contacts.

The Tel Dor Excavations are a joint University of Haifa - Hebrew University project, Directed by Profs. Ilan Sharon and Ayelet Gilboa.

Please visit the site: <http://www.jpost.com/Israel-News/Article.aspx?id=406765> [Go there for pix]

NEW CENTER FOR BYZANTINE STUDIES IN TURKEY

"Istanbul's Boğaziçi University has founded a new Byzantine Studies Practice and Research Center to contribute scholarship on the Byzantine Empire and operate as a platform for this field of study. As the first center established in a state university, the center will shed light on the history of Anatolia during the Middle Ages, the Balkans, Istanbul and the Ottoman Empire with projects on Byzantine history, culture and archaeology.

The center is managed by Nevra Necipoğlu, a lecturer in Byzantine history at Boğaziçi University. It aims to bring the academic studies on the Byzantine Empire to an international level. Necipoğlu said that Turkey is one of the heirs of the Byzantine Empire in terms of culture, history and geography, and stressed there are a number of similar centers around the world focusing on the history of the Byzantines. "The lack of an academic center on the Byzantine Empire in Istanbul, which was the capital of the empire for 11 centuries, is a big void. This is the main reason for its establishment," she said.

Necipoğlu added that Boğaziçi University has conducted studies on Byzantine history for many years. "

Paul Halsall

drhalsall@gmail.com

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UNIQUE FIND OFFERS FIRST
OPPORTUNITY TO UNDERSTAND HOW THE
ROMAN MILITARY WAS ORGANIZED IN
THE EASTERN EMPIRE - IN FIRST,
IMPERIAL ROMAN LEGIONARY CAMP
UNCOVERED NEAR MEGIDDO, BY ILAN
BEN ZION

Archaeologists unearth remains of 2,000-year-old Galilee garrison of Sixth Legion Ferrata, where 5,000 men kept order at time of Bar Kochba Revolt - the only permanent Roman military camp ever discovered in region

The remains of an imperial Roman legionary camp - the only one of its kind ever to be excavated in Israel or in the entirety of the Eastern Empire from the second and third centuries CE - have come to light at a dig near Megiddo, archaeologists said this week.

Legio, a Roman site situated next to Tel Megiddo in northern Israel, served as the headquarters of the Sixth Legion Ferrata - the Ironclad - in the years following the Jewish Revolt, and would have helped keep order in the Galilee during the Bar Kochba Revolt in 132-135 CE.

"It's a very, very exciting find," Yotam Tepper, co-director of the excavation and a field archaeologist at the Israel Antiquities Authority specializing in the Hellenistic and Roman periods, said in a phone interview Monday.

The dig, now in its second season, was conducted by the W.F. Albright Institute of Archaeological Research with support from Israel Antiquities Authority as part of the Jezreel Valley Regional Project.

In the century following the Jewish Revolt in 66-70 CE, Rome garrisoned two imperial legions in Palestine to keep order, one in Jerusalem and a second in the Galilee. Until recently, the location of the castrum - Latin for a permanent military camp - housing the Sixth Legion was uncertain.

The erstwhile presence of a Roman legio was preserved in the name of an Arabic village nearby - Lajjun. But surveys and aerial studies of the site by Tepper in recent years pointed to the presence of a Roman military structure, and during the first season in 2013 the team found the first evidence of the military camp.

This season's excavations have unearthed large numbers of ceramic roofing tiles marked with the sign of the Sixth Ironclad Legion, clay pipes, sewer channels and several buildings, all of which attest to the high level of planning at the site.

"We're talking about a large camp, an imperial camp, one of about 5,000 soldiers, about 300 meters by 500 meters (984 feet by 1,640 feet)," Tepper said. "These are things we wouldn't have been able to say [about the site] two years ago."

This month's excavations at Legio have also yielded remains of some of the camp's main streets and a large building - possibly a praetorium, a grand residence belonging to the commander of the fortress.

Tepper said the team had unearthed "a type of building which apparently was at the center of the camp and may have functioned as the commander's house."

The number of Roman military camps of this type found in the eastern half of the Roman Empire "is zero," said Matthew J. Adams, head of the Albright Institute and co-director of the dig: "Our entire understanding about Roman military architecture, and especially Roman legionary bases for this particular period, comes from the western empire - Germany, Britain and Gaul."

Remains of other Roman military installations, like the siege camp at Masada, were temporary, and of a smaller scale than the Megiddo castrum.

The new finds contribute to a better understanding of Roman military architecture and engineering, and are "rare and unique in the Roman East," said Tepper, Adams and Jonathan David, deputy director of the JVRP, in a statement.

"In the aftermath of the first revolt, you had the beginnings of a lot of emigration of the Jewish population of Judea northward," Adams explained. "The Galilee was increasingly the center of Jewish activity."

In light of the bloody first century revolt which took Rome four years to crush, "probably one of the reasons that they brought the legion here at all was to garrison this unruly population," Adams said.

Megiddo sits at a historic crossroads connecting the coastal road and the main highway running inland toward the Sea of Galilee and Damascus.

"Control of the Galilee can very much be had from this particular location, as it had been for centuries, that's why Tel Megiddo is here from the Bronze Age onwards," he said.

The legionary fortress would have also served as "point zero" for development of Roman roads, aqueducts and other infrastructure in the Galilee during the second and third centuries, Tepper said. The location may have been chosen for its strategic position, as well as the presence of large sources of year-round water in the vicinity.

Legio served not only to protect but to project Roman power.

Adams noted that whereas the first Jewish revolt against Rome in the first century CE was waged in the Galilee and farther south in Judea, the Bar Kochba Revolt of 132 CE mostly took place in the hills near Jerusalem and comparatively less in the north.

"Considering the fact that the first revolt had a lot of its origins in the northern half of the country, it's surprising that during the Bar Kochba Revolt the Galilee did not seem to be involved. And that's probably because the Roman legion was here," he said.

"This is the first time we had the opportunity to understand how the Roman military was organized, in terms of their settlement especially, in the eastern empire," Adams said.

Please visit the site: <http://www.timesofisrael.com/in-first-imperial-roman-legionary-camp-uncovered-near-megiddo/> [Go there for pix]

NAQADA TOMBS UNCOVERED IN EGYPT'S **DAQAHLIYAH - FOUR PRE-DYNASTY** **TOMBS HAVE BEEN UNCOVERED AT TEL** **AL-FARKHA IN THE NILE DELTA,** **BY NEVINE EL-AREF**

A Polish mission at Tel Al-Farkha in Daqahliyah has discovered four pre-dynastic tombs, Minister of Antiquities Mamdouh Eldamaty announced on Tuesday.

Eldamaty said three of the tombs are in a very poor condition and include child burials. Meanwhile the fourth tomb is in very good conservation condition and can be dated to the Naqada IIIc2 era.

The minister told Ahram Online that the tomb is a small mastaba with two chambers. The southern one was filled with 42 clay vessels, mainly beer jars, bowls as well as a collection of 26 stone vessels of different shapes and sizes. Some of them are cylinder and globular. A collection of 180 small carnelian beads is also among the deceased funerary collection. The corpse of the deceased was also unearthed in the northern chamber.

Mahmoud Afifi, head of the Ancient Egyptian Antiquities Department at the Ministry of Antiquities, pointed out that the most important discovery was the remains of a brewery with fragments of two vats surrounded with multiple clay and burned fire-dogs.

Head of the Polish mission, Marek Chlodnicki, told Ahram Online that on the eastern sand pile located on the northern and eastern sides of the Naqada III mastaba, the mission discovered the remains of two huge buildings. The first is a rectangular shaped structure, with very thick walls and a row of rooms located on the eastern side of a wide courtyard, raised in Naqada IIIa1 period.

The second is a rounded structure, located on the north-eastern slope of the sand pile, built during the second half of the First Dynasty. Chlodnicki said that the rounded structure consists of double adjacent mud-brick walls, each 95cm thick, with the interior seven metres in diameter. Close to the rounded building, a unique ceramic big stamp with hieroglyphs was discovered.

Please visit the site:

<http://english.ahram.org.eg/NewsContent/9/40/134767/Heritage/Ancient-Egypt/Naqada-tombs-uncovered-in-Egypt-Daqahliyah.aspx> [Go there for pix]

POLES DISCOVERED A UNIQUE 6.5 THOUSAND YEARS OLD BURIAL IN EGYPT

Traces of intentional injury in the form of cuts on the femur have been discovered on the remains of one of the dead found during this year's excavations carried out in the Western Desert in Egypt. It is the first known case of such treatment from the Neolithic period in this part of Africa.

Discovery has been made by the expedition led by Prof. Jacek Kabaciński from the Poznań branch of the Institute of Archaeology and Ethnology PAS. Polish research area in the desert, called Gebel Ramlah, is located near the southern border of Egypt with Sudan, about 140 km west of Abu Simbel. Poles have been working there since 2009 and making important discoveries from the beginning, including an unusual cemetery of newborns.

This year, they discovered a further part of the cemetery and investigated 60 new burials, this time belonging to adults. In the grave marked with number 11, which contained the remains of two dead, one bearing traces of deliberate damage to the body in the form of cuts on the femur - yet such treatments were unknown to scientists who study the Neolithic in North Africa and Eastern Europe. In another grave they discovered the remains of unprecedented in this area tomb structures, consisting of stone slabs which lined the interior of the cavity, in which the deceased had been buried.

Another interesting find, according to Prof. Kabaciński, is also the burial of a man whose body, after the burial, was showered with fragments of broken pottery, stone products and lumps of red dye. The remains of the deceased were also unusual - anthropologists noticed the pathology of numerous bones in the form of overgrowth of femoral bone, fractures and abnormal bone adhesions. Above his head archaeologists found a fragment of Dorcas gazelle skull with horns, which probably served as a headdress, worn during a ceremony. Similar finds known from European Paleolithic and Mesolithic sites suggest that it is a grave of a person who performed magical rites, perhaps associated with hunting - the researchers suggest.

Research project at Gebel Ramlah is carried out as part of the activities of the Combined Prehistoric Expedition IAE PAS, in collaboration with the Centre of Mediterranean Archaeology of University of Warsaw. The work is financed by the National Science Centre.

Please visit the site: <http://scienceinpoland.pap.pl/en/news/news,405679,poles-discovered-a-unique-65-thousand-years-old-burial-in-egypt.html>

150 YEARS OF THE PALESTINE **EXPLORATION FUND, BY ADAM JOHN** **FRASER, LIBRARIAN AT THE PALESTINE** **EXPLORATION FUND**

The Palestine Exploration Fund is currently celebrating 150 years of scientific study of the geographic region of Palestine. We were founded on May 12, 1865, in the Jerusalem Chamber of Westminster Abbey. The location was appropriate for its historical significance but also because the Dean of Westminster, Arthur Penrhyn Stanley, was one of its integral founders. He had also travelled with the Prince of Wales extensively throughout Egypt and Palestine.

Stanley, along with Sir George Grove (who is best known for his work on Crystal Palace) worked together on publishing books about the history of Palestine. It was of great interest to further study the country at the centre of Christianity, but it was evident to both Stanley and Grove that there was a gap in the knowledge of the region.

In 1864, Baroness Angela Burdett-Coutts was involved in a philanthropic effort to provide Jerusalem with a better water supply. The existing one had been highly inadequate and disease was rife. In order for a better water supply to be constructed a survey of the geography of Jerusalem was essential. Dean Stanley was on the committee for the Jerusalem Water Relief Fund and contacted the War Office to acquire anyone who had expertise in mapping and surveying. Charles Wilson of the Royal Engineers volunteered for the job (unpaid) and set off for Palestine with a small crew. Their work was extremely successful and was quite popular back in Britain. Because of the popularity of the survey of Jerusalem for the Water Relief Fund, Stanley and Grove felt the moment was ripe for establishing a society to specifically study Palestine.

Stanley and Grove did most of the groundwork for lobbying people to join and contributed to the establishment of the Palestine Exploration Fund. There was an extensive letter writing campaign in an attempt to garner as much support as possible and from people with vastly different expertise and backgrounds.

The early committee was made up of a wide selection of individuals; Dr J.D. Hooker, Professor Owen, John Murray, A.H. Layard, Rev H.D. Tristram. These are just a selection of the individuals who formed the committee were some of the leading scientists and researchers of their day and key people in Victorian society in Britain. Some of them came from the British Museum, Kew Gardens, the Natural History Museum. There were friends and enemies of Charles Darwin. Many members of Parliament were eager to join, even the Speaker of the House of Commons had joined!

Letter from Professor Owen

The Palestine Exploration Fund was established to scientifically investigate the archaeology, geography, geology, manners and customs and natural history of Palestine. It was not a religious organization though there were people of faith in the committee. It

was not a political organization even though there were politicians in the organization. The main priority, since day one, has always been the research.

Making to 150 years is a big achievement for us. Many people have devoted their extra time and energy to helping us get this far. It has been a difficult task, bringing an antiquarian society into the 21st century. We have a loyal band of volunteers who are vital to the digitizing of maps and documents, making a stack of old papers into a workable archive and carrying out important research on our archaeological collection.

The Palestine Exploration Fund HQ today

The volunteers and interns are very important to us, but we would be lost without the direction and guidance of our Executive Secretary and Curator, Felicity Cobbing. Felicity has been with the PEF since 1998. She had previously worked at the British Museum and had also spent many seasons working as a field archaeologist. Felicity is responsible for bringing the PEF to where it is today. She is the one who trains and supervises the volunteers and does hundreds of very important tasks that I cannot begin to list here. Felicity is the backbone of the Palestine Exploration Fund. I know that for my part, I have never learned more from a supervisor and I credit her for getting us to where we are today.

Please visit the site: <http://c-u-d-i.blogspot.com/2015/07/150-years-of-palestine-exploration-fund.html> [Go there for pix]

ANTIQUITIES FOUND ON SHIPWRECK **THAT CARRIED ELGIN MARBLES,** **BY ROSSELLA LORENZI**

Lord Elgin collected other Greek antiquities besides the sculptures taken from the Parthenon, finds a new survey at the site of the British ship Mentor, which sank off southern Greece more than 200 years ago carrying marbles from the Acropolis to London.

During a two-week search that ended on July 12, Greek Culture Ministry divers explored the wreck of the Mentor, off the island of Kythera and found three ancient handles of Rhodian amphoras and a small stone vessel. The handles date to the 3rd century B.C. and belong to jars made in the island of Rhodes. Two are stamped.

The findings confirm the theory that other antiquities besides the Parthenon marbles were aboard the ship. The shipwreck has been investigated by underwater archaeologists since 2009 in the hope of finding other Parthenon marbles.

The ship was loaded with 16 crates of marble art removed from the Acropolis on behalf of Thomas Bruce, the Scottish Earl of Elgin. En-route to Malta and then the United Kingdom, the ship sank in 1802 during a storm at the entrance of the port of Avlaimona, on the island of Kythera.

Recovered soon after the sinking, the sculptures are now displayed with other Parthenon Marbles in London's British Museum. They are at the center of a long standing cultural dispute between Greece and Britain.

Greece contends that the 17 figures and 56 panels that once decorated Athens' most sacred shrine, the Parthenon, were stolen in 1801 by Lord Elgin, the British Ambassador to the Ottoman Empire between 1799 and 1803. Britain claims that Lord Elgin had received permission from the Ottoman Empire to take the marbles.

As with the other explorations, the July underwater excavation aimed at establishing whether there are still remnants of artworks near the ship. "This year the excavation focused on the western boundary of the surviving portion of the hull, towards the bow, where two fragments of Egyptian sculptures were found in 2013," the Greek Culture Ministry said in a statement.

Carried out with the support of the Kytherian Research Group, an Australian foundation, and under the direction of archaeologist Dimitrios Kourkouvelis, the excavation concentrated on a 17 by 17-foot area.

Please visit the site: <http://news.discovery.com/history/archaeology/antiquities-found-on-shipwreck-that-carried-elgin-marbles-150728.htm> [Go there for pix]

CANAANITE RULERS LIKED THEIR WINE JARS: VAST COLLECTION FOUND AT TEL KABRI, BY JULIA FRIDMAN

New findings at sprawling 4,000-year old Canaanite palace include 120 huge jars - and seeds, from which we may be able to rediscover the ancient grape.

What may be the biggest concentration of storage jars in ancient Canaan has been uncovered at the Tel Kabri palatial complex in northern Israel, dating about 4,000 years ago.

A room full of clay storage jars, dubbed the "wine cellar," had been found there in the last season. Now the latest excavation season at the site, located in an avocado orchard in the north just five kilometers from the Mediterranean coast, has uncovered three more rooms containing no less than about 70 storage jars.

Altogether, the excavators say, they uncovered at least 120 restorable jars still in situ in four storage rooms in the southern storage area of the palace (including pieces found in the last seasons). They may have also found a fifth storage room in a different building complex located to the northwest. "The rooms have not all been fully excavated," points out Assaf Yasur-Landau of the University of Haifa: the number will probably double when that's done, he adds.

All the jars are undergoing organic residue analysis in order to determine their contents, the excavators told Haaretz. Residue analysis of the jars found in the first storage room during the previous excavation season showed they had contained an aromatic red wine.

Original Canaanite grapes

We don't know who lived at the Tel Kabri palace, which is a vast 6,000 square meters in area, let alone what the place was called at the time - not a shred of written evidence has been found there. We do know that the palace was inhabited continuously for over 250 years, from about 1850 BCE to the 1600s BCE, and that it featured multiple banquet rooms and halls.

The palace at Tel Kabri is unique in the Levant for this period, and appears to have more affinities to the Aegean than to anything in the more immediate area. It is most similar to the massive palace of Knossos in Crete although a similar palace was found at Mari as well.

The palace at Kabri was a sprawling place with rooms constantly being added to it over the years. The ruler would have lived inside and his subjects would have lived outside, coming to the palace for special occasions like feasts, or to pay taxes or tribute.

Absent findings of writing at the site, its history is being "glued together" through excavations by Yasur-Landau and Eric H. Cline of George Washington University.

"The goal of this season was to further understand the Canaanite palatial economy, by expanding the excavation beyond the area where the jars were found last season. We were hoping to find additional store rooms, thinking about the palace of Mari and the palaces in Crete from the same period - but to find ones that are actually filled with jars was unexpected," says Yassur-Landau. "This kind of a find is a once in a lifetime opportunity to learn about Canaanite economy and rulership."

It now looks like the 'wine cellar' was actually the northernmost room in a storage complex with at least four rooms in a row.

It can also now be said that the storage rooms had plastered floors and contained a range of types of jars. For example, room 2520 had pithoi (handleless storage jars) of two types, one around one meter tall and smaller, more slender pithoi, up to 80 centimeters in height.

In the center of room 2520, the excavators also found a juglet, two shallow bowls, and a chalice, crushed under the weight of a fallen pithos.

Palatial economy

Another unusual find was the middle of room 2533: an installation made of a sunken half of a pithos, still intact, still holding grape seed remnants, as well as pieces of charcoal. The installation appears to have been used to collect liquids spilled in the room.

This particular room had the biggest amount of crushed jars and pithoi, apparently more than 50 jars of various types.

The grape seeds are an incredible find. Not only can they help date the site: their analysis can help us rediscover the original Canaanite grape.

The grapes grown in Israel today are very tasty, but they're strains brought by Baron Edmond James de Rothschild in the late 19th century. The famed wine industry of the Levant, which had existed for millennia, had been wiped out during Islamic rule of the region, starting in the 7th century CE.

Last season the excavators tested the substance found in the large jars from the first storage room and found, as said, evidence of spiced wine.

"This season yielded 80 organic residue analysis (ORA) samples taken from approximately 70 unique vessels," says Yassur-Landau. "Last season's samples were taken from large storage vessels that proved to have contained spiced wine but the 80 samples from this season were more varied, including smaller storage jars with handles possibly used for transport and a larger assortment of fine ware."

The samples will further the understanding of Canaanite eating habits and augment our understanding of the economy of the time, the archaeologists hope.

"Finding these additional storerooms and the tremendous additional number of jars is wonderful, since it clearly indicates that we are in the storage area of the palace and that it was substantial, and composed of numerous rooms," Cline commented. "I am eagerly

awaiting the results of the Organic Residue Analysis from the jars, so we can see if they also held wine, like the ones that we found in 2013, or if they held something else like olive oil."

Please visit the site: <http://www.haaretz.com/life/archaeology/1.668265> [Go there for pix]

IMPORTANT ANCIENT RELIEFS DISCOVERED IN ASWAN

Three engraved reliefs, recently unearthed in Aswan, are set to change the history of Al-Hoody's Middle Kingdom settlement Nevine El-Aref

On the eastern bank of Aswan, an American-Egyptian archaeological mission at the Middle Kingdom settlement of Al-Hoody has found three engraved limestone reliefs which could be of great historical significance.

Minister of Antiquities Mamdouh Eldamaty said the reliefs are in very poor condition but the texts are readable. He asserted that comprehensive conservation work is to take place in order to reveal all the engravings, as well as using a reflectance transformation imaging system to uncover its faded parts.

Mahmoud Afifi explains that early studies show that the eighth year of the twelve dynasty King Senusert I's reign was mentioned on one of the discovered reliefs. There was also information on the ancient Egyptian missions sent to and from Al-Hoody.

Al-Hoody was a settlement for quarrying amethyst which they used in the fabrication of jewellery. The area was also a meeting point from which the ancient Egyptians sent missions abroad to collect precious and semi-precious stones.

Restoration and studies are now going on in order to reveal more of the history of the site.

Please visit the site:

<http://english.ahram.org.eg/NewsContent/9/40/136334/Heritage/Ancient-Egypt/Important-ancient-reliefs-discovered-in-Aswan.aspx> [Go there for pix]

SIGNS OF WORLD'S FIRST PICTOGRAPH **FOUND IN GÖBEKLITEPE**

Turkey's Göbeklitepe, the site of the world's oldest temple, may be the home of the first pictograph, according to a scene etched into an obelisk.

A scene on an obelisk found during excavations in Göbeklitepe, a 12,000-year-old site in the southeastern province of Şanlıurfa, could be humanity's first pictograph, according to researchers.

"The scene on the obelisk unearthed in Göbeklitepe could be construed as the first pictograph because it depicts an event thematically. It depicts a human head in the wing of a vulture and a headless human body under the stela," Şanlıurfa Museum Director and Göbeklitepe excavation head Müslüm Ercan said. "There are various figures like cranes and scorpions around this figure. This is the portrayal of a moment; it could be the first example of pictograph. They are not random figures. We see this type of thing portrayal on the walls in 6,000-5,000 B.C. in Çatalhöyük [in modern-day western Turkey]."

Ercan said the artifacts found in Göbeklitepe provided information about ancient burial traditions. "There were no graves 12,000 years ago. The dead bodies were left outdoors and raptors ate them. In this way, people believed the soul goes to the sky," he added.

Ercan said it was called "burial in the sky," and was depicted in obelisks in Göbeklitepe, which is home to the world's oldest-known temples.

Many of the artifacts being unearthed during the excavations in the Neolithic-era field were the first of their kind, Ercan said, adding that Göbeklitepe served as a religious center and that geo-radar works had showed 23 temple structures in the region.

T-shaped stelas

Ercan said two obelisks, which are called "T" stelas since they are in the shape of the letter "T," were found opposite each other and that they were surrounded by smaller, round-shape obelisks.

The obelisks symbolized the sacred beings that people worshipped at that time, Ercan said.

"We have a small-size pig sculpture in our museum. It was found in front of central stelas in the 'C' temple. It is believed that these stelas symbolized the sacred beings for the people of Göbeklitepe. People of this era used to gather in these temples at a certain time of the year to take vows and worship. After this ceremony, they returned to the plains, their living spaces."

Roof protection project

In the meantime, the infrastructure work for the construction of a preservation roof in the excavation area has been finished.

"We are carrying out works for the preparation of the roof project, aiming to protect the artifacts unearthed in the Göbeklitepe excavation area," said Ercan. "Professor Klaus Schmidt initiated this project before he died ... We have finished the infrastructure work of the roof project, and now we are ready to construct it. It is a EU project and in the tender phase. Our goal is to start construction by the end of the year and finish it in eight months."

Please visit the site: <http://www.hurriyetdailynews.com/signs-of-worlds-first-pictograph-found-in-gobeklitepe-.aspx?pageID=238&nID=85438&NewsCatID=375>
[Go there for pix]

GLOBAL WARMING COULD MAKE CARBON DATING IMPOSSIBLE, BY ADRIENNE LAFRANCE

The technique is used to determine the age of organic artifacts in fields like archaeology, geology, and ecology. But it could become unreliable within decades.

Since the 1940s, scientists have used carbon dating to determine the age of fossils, identify vintages of wine and whiskey, and explore other organic artifacts like wood and ivory. The technique involves comparing the level of one kind of carbon atom—one that decays over time—with the level of another, more stable kind of carbon atom.

The approach was a sensation when it was introduced. The chemist who developed carbon dating, Willard Libby, won the Nobel Prize for his work. “Seldom has a single discovery in chemistry had such an impact on the thinking in so many fields of human endeavour,” one of Libby's colleagues wrote at the time, according to the Nobel Foundation.

Today, carbon dating is used so widely as to be taken for granted. Scientists across countless disciplines rely on it to date objects that are tens of thousands of years old.

That may soon change.

An analysis by Heather Graven, a climate-physics researcher at Imperial College London, finds that today's rate of fossil-fuel emissions is skewing the ratio of carbon that scientists use to determine an object's age. Combustion of fossil fuels is “diluting the fraction of atmospheric carbon dioxide containing radiocarbon,” Graven told Environmental Research Web. “This is making the atmosphere appear as though it has ‘aged,’ or lost radiocarbon by radioactive decay occurring over time.”

By 2050, Graven wrote in a paper published this month in the Proceedings of the National Academy of Sciences, the large amount of carbon dioxide in the atmosphere will make new organic material appear to be 1,000 years old based on today's carbon-dating models. By the year 2100, the atmosphere will have a radiocarbon age of 2,000 years old.

The implications of this forecast are huge. If Graven's calculations are correct, carbon dating as we know it today will no longer be reliable by the year 2030. Which means scientists won't be able to use carbon dating to distinguish between new materials and artifacts that are hundreds or thousands of years old. (Carbon dating is already limited in scope because older artifacts have to be dated using other methods. For instance, Lucy, the 3.2-million-year-old human ancestor, was dated by scientists who studied the volcanic flows and ashes in deposits where her bones were found.)

“Given current emissions trends, fossil fuel emission-driven artificial ‘aging’ of the atmosphere is likely to occur much faster and with a larger magnitude than previously expected,” Graven wrote. “This finding has strong and as yet unrecognized implications

for many applications of radiocarbon in various fields, and it implies that radiocarbon dating may no longer provide definitive ages for samples up to 2,000 [years] old.”

Please visit the site: <http://www.theatlantic.com/technology/archive/2015/07/global-warming-carbon-dating/399398/>

ARCHAEOLOGISTS MAY HAVE BEEN WRONG ABOUT WHERE ALEXANDER THE GREAT'S FATHER WAS BURIED A NEW STUDY CAUSES CONTROVERSY ABOUT THE LOCATION OF KING PHILIP II'S TOMB, BY JACQUELINE HOWARD

The mystery of where Alexander the Great's father, King Philip II of Macedon, is buried just got more mysterious.

Philip II was assassinated in 336 B.C., and his young wife Cleopatra Eurydice -- who was not Alexander's mother -- and their newborn child were killed shortly after.

Many archaeologists had thought that Philip II was buried in the so-called "Tomb of Philip," which was discovered in Vergina, Greece, in the late 1970s. At the time, three tombs known collectively as the Royal Tombs in the Great Tumulus were excavated, and Tomb II was identified as housing Philip II's remains.

But a new study suggests that the king may have actually been buried in the adjacent tomb, Tomb I.

To conduct the study, which was published Monday in the Proceedings of the National Academy of Sciences, an international team of researchers used scanning techniques and radiography to analyze the skeletal remains of the man buried in Tomb I. The researchers noticed that the leg bones showed signs of having suffered from a penetrating wound. The wound appeared strikingly similar to one that Philip II is believed to have suffered 2,000 years ago, according to ancient texts that mention the injury.

"When I found the femur fused to the tibia at the knee joint, I suddenly remembered the leg injury of Philip, but I could not recall any details," Dr. Antonis Bartsiokas, the study's lead author and an associate professor at the Democritus University of Thrace, told Live Science. "I then ran to study the historical evidence ... I knew the bone must belong to Philip!"

The leg injury wasn't the only wound that the researchers analyzed. Science magazine reported that the skeleton in Tomb I also displayed damage to the skull, which the researchers linked to an injury that Philip II is believed to have received when an arrow left him blind in his right eye.

Based on this analysis, the researchers concluded that Philip II is the occupant of Tomb I, along with Cleopatra and their baby.

Who is buried in Tomb II, then? The study suggests the occupants may actually be King Arrhidaeus (Philip II's son and Alexander the Great's half-brother) and his wife, along with some of Alexander's armor.

However, not everyone is convinced that the bones in Tomb I are those of Philip II.

Some researchers say that the ancient texts about the king's injury may not be reliable, and argue that more research is needed.

"This publication in PNAS is incorrect," Dr. Theodore Antikas, head of the anthropological research team at Aristotle University, told Live Science. He continues to believe that Philip II was buried in Tomb II,

According to Antikas, there are other bones from Tomb I that the researchers were not able to study, since they were moved after the discovery of the tomb from Vergina to a museum in Thessaloniki.

In a letter that Antikas wrote to the editors of PNAS, which he shared with The Huffington Post, he argues, "Only by having all bones from Tomb I studied ... the mystery of the identity of the occupants of Tomb I may be resolved. The study by Bartsiakos et al on the identity of the dead, based on insufficient material evidence, is far from resolving it."

But the researchers are confident in their new findings.

"I think that we have made a very strong case," Dr. Juan-Luis Arsuaga, a co-author of the study and professor at the Universidad Complutense de Madrid in Spain, told Live Science. "Now the focus of attention will turn to Tomb I. I am open to debate."

Please visit the site: http://www.huffingtonpost.com/entry/alexander-the-great-father-tomb_55afec52e4b0a9b948536a84

A FIND IN BRITAIN: QURAN FRAGMENTS **PERHAPS AS OLD AS ISLAM,** **BY DAN BILEFSKY**

The ancient manuscript, written on sheep or goat skin, sat for nearly a century at a university library, with scholars unaware of its significance.

That is, until Alba Fedeli, a researcher at the University of Birmingham studying for her doctorate, became captivated by its calligraphy and noticed that two of its pages appeared misbound alongside pages of a similar Quranic manuscript from a later date.

The scripts did not match. Prodded by her observations, the university sent the pages out for radiocarbon testing.

On Wednesday, researchers at the University of Birmingham revealed the startling finding that the fragments appeared to be part of what could be the world's oldest copy of the Quran, and researchers say it may have been transcribed by a contemporary of the Prophet Muhammad.

"We were bowled over, startled indeed," said David Thomas, a professor of Christianity and Islam at the University of Birmingham, after he and other researchers learned recently of the manuscript's provenance.

The ancient pieces of manuscript, estimated to be at least 1,370 years old, offered a moment of unity, and insight, for the world's 1.6 billion Muslims. Professor Thomas said it provided tantalizing clues to help settle a scholarly dispute about whether the holy text was actually written down at the time of the prophet, or compiled years later after being passed down by word of mouth. The discovery also offered a joyful moment for a faith that has struggled with internal divisions and external pressures.

Muslims believe Muhammad received the revelations that form the Quran, the scripture of Islam, between 610 and 632, the year of his death. Professor Thomas said tests by the Oxford Radiocarbon Accelerator Unit indicated with a probability of more than 94 percent that the parchment dated from 568 to 645.

During the time of Muhammad, the divine message was not compiled into the book form in which it appears today, Professor Thomas said. Rather, the words believed to be from God as told to Muhammad were preserved in the "memories of men" and recited. Parts were written on parchment, stone, palm leaves and the shoulder blades of camels, he said.

Tom Holland, the author of "In the Shadow of the Sword," which charts the origins of Islam, said the discovery in Birmingham bolstered scholarly conclusions that the Quran attained something close to its final form during Muhammad's lifetime. He said the fragments did not resolve the controversial questions of where, why and how the manuscript was compiled, or how its various suras, or chapters, came to be combined in a single volume.

Consisting of two parchment leaves, the manuscript in Birmingham contains parts of what are now Chapters 18 to 20. For years, the manuscript had been mistakenly bound with leaves of a similar Quran manuscript.

Saud al-Sarhan, the director of research at the King Faisal Center for Research and Islamic Studies in Riyadh, Saudi Arabia, said he doubted that the manuscript found in Birmingham was as old as the researchers claimed, noting that its Arabic script included dots and separated chapters - features that were introduced later. He also said that dating the skin on which the text was written did not prove when it was written. Manuscript skins were sometimes washed clean and reused later, he said.

Professor Thomas said the text of the two folio pages studied by Ms. Fedeli, who received her doctorate this month, corresponded closely to the text of the modern Quran. But he cautioned that the manuscript was only a small portion of the Quran and therefore did not offer conclusive proof.

Omid Safi, the director of the Duke Islamic Studies Center and the author of "Memories of Muhammad: Why the Prophet Matters," said that the discovery of the manuscript provided "further evidence for the position of the classical Islamic tradition that the Quran as it exists today is a seventh-century document."

The manuscript is in Hijazi script, an early form of written Arabic, and researchers said the fragments could be among the earliest textual evidence of the holy book known to survive.

A manuscript from the University of Tübingen Library in Germany was found last year and sourced to the seventh century, 20 to 40 years after the death of the prophet. Fragments from Tübingen were radiocarbon-tested by a lab in Zurich and determined with 95 percent certainty to have originated from 649 to 675, making the Birmingham text a few years older.

Radiocarbon dating measures levels of a heavier form of carbon as it appears in the atmosphere over time and becomes part of plants and, later, the animals that eat them. In this case, the Oxford laboratory measured the age of the goat or sheep whose skin was turned into parchment.

Jeff Speakman, director of the Center for Applied Isotope Studies at the University of Georgia, who was not involved with the research, said the dates and accuracy sounded reasonable. "Oxford is one of the premier radiocarbon laboratories in the world," he said.

Dating of artifacts from the era in question is often more accurate than dating material from the last few hundred years, Dr. Speakman said.

Graham Bench, director of the Center for Accelerator Mass Spectrometry at Lawrence Livermore National Laboratory, concurred, and added a caveat: "You're dating the parchment," he said. "You're not dating the ink. You're making the assumption that the parchment or vellum was used within years of it being made, which is probably a reasonable assumption, but it's not watertight."

Dr. Sarhan of the King Faisal center said that there was a sort of competition now among researchers to find the earliest copy of the Quran, but that the discovery in Britain would have little effect on people's beliefs, since Muslims believe that "the Quran has not been changed since the Prophet Muhammad."

Professor Thomas said the manuscript found in Birmingham would be put on public display.

The fragments were part of a collection of more than 3,000 documents from the Middle East amassed in the 1920s by Alphonse Mingana, a theologian and historian who was born in what is now Iraq. His document-gathering expeditions to the Middle East were funded by Edward Cadbury, a member of the famous chocolate-making family.

In Birmingham, which has a large Muslim population, the discovery of the ancient manuscript was greeted with joy.

Mohammad Afzal, the chairman of the Birmingham Central Mosque, said he had been granted access to the manuscript. "I am honored to see this manuscript, which is unique," he said. "This goes back to the very early stages of Islam. All the Muslims in the world would love to see this manuscript."

Muhammad Isa Waley, curator at the Persian and Turkish Section at the British Library in London, said it was an "exciting" discovery.

"We know now that these two folios, in a beautiful and surprisingly legible Hijazi hand, almost certainly date from the time of the first three caliphs," he said. He added that, according to classic accounts, it was under the third caliph, Uthman ibn Affan, that the Quranic text was compiled and the suras arranged into the order familiar today.

Professor Thomas said that the discovery could make Birmingham a draw for Muslims and scholars. But he noted that Muslims did not require a text to feel close to the Quran because for many, it was essentially an oral experience to be recited, memorized and revered.

"The Quran," he said, "is already present in the minds of Muslims."

Ben Hubbard contributed reporting from Beirut, Lebanon, and Kenneth Chang from New York.

Please visit the site: <http://www.nytimes.com/2015/07/23/world/europe/quran-fragments-university-birmingham.html>

THE ANCIENT CITY WHERE PEOPLE DECIDED TO EAT CHICKENS, BY DAN CHARLES

An ancient, abandoned city in Israel has revealed part of the story of how the chicken turned into one of the pillars of the modern Western diet.

The city, now an archaeological site, is called Maresha. It flourished in the Hellenistic period from 400 to 200 BCE.

"The site is located on a trade route between Jerusalem and Egypt," says Lee Perry-Gal, a doctoral student in the department of archaeology at the University of Haifa. As a result, it was a meeting place of cultures, "like New York City," she says.

Not too long ago, the archaeologists unearthed something unusual: a collection of chicken bones.

"This was very, very surprising," says Perry-Gal.

The surprising thing was not that chickens lived here. There's evidence that humans have kept chickens around for thousands of years, starting in Southeast Asia and China.

But those older sites contained just a few scattered chicken bones. People were raising those chickens for cockfighting, or for special ceremonies. The birds apparently weren't considered much of a food.

In Maresha, though, something changed.

The site contained more than a thousand chicken bones. "They were very, very well-preserved," says Perry-Gal, whose findings appear in the Proceedings of the National Academy of Sciences.

Perry-Gal could see knife marks on them from butchering. There were twice as many bones from female birds as male. These chickens apparently were being raised for their meat, not for cockfighting.

Perry-Gal says there could be a couple of reasons why the people of Maresha decided to eat chickens.

Maybe, in the dry Mediterranean climate, people learned better how to raise large numbers of chickens in captivity. Maybe the chickens evolved, physically, and became more attractive as food.

But Perry-Gal thinks that part of it must have been a shift in the way people thought about food. "This is a matter of culture," she says. "You have to decide that you are eating chicken from now on."

In the history of human cuisine, Maresha may mark a turning point.

Barely a century later, the Romans starting spreading the chicken-eating habit across their empire. "From this point on, we see chicken everywhere in Europe," Perry-Gal says. "We see a bigger and bigger percent of chicken. It's like a new cellphone. We see it everywhere."

Chicken-eating really is everywhere today. It's the most commonly eaten meat in America. Globally, it's second behind pork, but it's catching up fast. Within five years, humans will probably eat more chicken than any other meat.

http://media.npr.org/assets/img/2015/07/20/15-04236_2large_custom-a7bafd7cd8cf728acf8e008b3e71118f7c418292-s1500-c85.jpg

Tarsometatarsus chicken bones are ready to be analyzed at the zooarchaeology lab, Zinman Institute of Archaeology, University of Haifa.

Courtesy of Lee Perry Gal

From <http://www.pnas.org/content/early/2015/07/15/1504236112.abstract> [Go there for purchasable article]

Lee Perry-Gal, Adi Erlich, Ayelet Gilboa, and Guy Bar-Oz Earliest economic exploitation of chicken outside East Asia: Evidence from the Hellenistic Southern Levant PNAS 2015 ; published ahead of print July 20, 2015,

"Significance" and Abstract" texts:

Significance: This study offers new evidence on the cultural history of the chicken, a species that until recently received limited attention compared with other domesticated animals. We provide evidence for the earliest known economic exploitation of the chicken outside its original distribution. This intensified use is first documented in the Southern Levant during the Hellenistic period (fourth-second centuries B.C.E.), at least 100 y before chickens spread widely across Europe. We explore the mechanisms for the spread of chickens as an important species in livestock economies from Asian to Mediterranean and European economies in antiquity to become one of the most widespread and dominant domesticates in the world today.

Abstract: Chicken (*Gallus gallus domesticus*) is today one of the most widespread domesticated species and is a main source of protein in the human diet. However, for thousands of years exploitation of chickens was confined to symbolic and social domains such as cockfighting. The question of when and where chickens were first used for economic purposes remains unresolved. The results of our faunal analysis demonstrate that the Hellenistic (fourth-second centuries B.C.E.) site of Maresha, Israel, is the earliest site known today where economic exploitation of chickens was widely practiced. We base our claim on the exceptionally high frequency of chicken bones at that site, the majority of which belong to adult individuals, and on the observed 2:1 ratio of female to male bones. These results are supported further by an extensive survey of faunal remains from 234 sites in the Southern Levant, spanning more than three millennia, which shows a sharp increase in the frequency of chicken during the Hellenistic period. We further argue that the earliest secure evidence for economic exploitation of chickens in Europe

dates to the first century B.C.E. and therefore is predated by the finds in the Southern Levant by at least a century. We suggest that the gradual acclimatization of chickens in the Southern Levant and its gradual integration into the local economy, the latter fully accomplished in the Hellenistic period, was a crucial step in the adoption of this species in European husbandry some 100 y later.

Please visit the site: <http://www.npr.org/sections/thesalt/2015/07/20/424707879/the-ancient-city-where-people-decided-to-eat-chickens>

4,000-YEAR-OLD TABLETS FOUND IN TURKEY INCLUDE WOMEN'S RIGHTS

The Kültepe-Kaniş-Karum trade colony in the Central Anatolian province of Kayseri continues to amaze archeologists, with an expert at the dig revealing that tablets citing women's rights were discovered at the Bronze Age settlement.

The Kültepe-Kaniş-Karum trade colony in the Central Anatolian province of Kayseri continues to amaze archeologists, with an expert at the dig revealing that tablets citing women's rights were discovered at the Bronze Age settlement.

Excavations at the ancient tumulus site began in 1948. So far, it has been discovered the center was where the written history of Anatolia began and the largest monumental structure of the Middle East was unearthed in 2013. A centuries-old baby rattle and a tablet about the sale of a donkey were unearthed last year.

Last month, the 2015 excavation season began in Kültepe. The head of the excavation team, Prof. Fikri Kulakoğlu of Ankara University, told Doğan News Agency on July 16 the site was remarkable not only because the priceless tablets revealed commercial information about the Assyrians, but also about the local social life of the time with all kinds of personal details about individuals.

Emotional letters, complaints

"From women's rights to the adoption of children and marriages arranged at birth, the tablets include all kinds of civilizational and social data from Anatolia 4,000 years ago. There is also an emotional letter from a woman to her husband and a letter from another woman who complains about her mother-in-law. You can't find such things in an empire's official archive," he said.

Still, most of the 23,500 cuneiform tablets unearthed at Kültepe were about commerce. "Kültepe is where the Anatolian enlightenment began. The people in this area were literate much earlier than other places in Anatolia, including its west," Kulakoğlu added.

Some 90 percent of the Kültepe tablets can be seen in the Museum of Anatolian Civilizations in Ankara. Some of them are exhibited at the site and are expected to be transferred soon to a new archaeology museum under construction in Kayseri, deemed to be the most important museum of the historic Cappadocia region.

"This is a huge wealth," Kulakoğlu said, voicing his hope that the trade colony will soon be included in the UNESCO World Heritage List.

Vast site once hosted 70,000

The settlement in the tumulus is composed of segments from the early Bronze Age, the middle Bronze Age, the Iron Age and Ancient Greece and Rome.

One of the most important discoveries was a tablet from 2000 B.C., which explains there were local kingdoms in Anatolia at that time and the Kaniş Kingdom was the most powerful one.

Only a small area of Kültepe, which is thought to have hosted over 70,000 people four millennia ago, has been excavated so far. Officials say it might take 5,000 years to excavate the entire ancient site.

Please visit the site: <http://www.hurriyetdailynews.com/4000-year-old-tablets-found-in-turkey-include-womens-rights.aspx?pageID=238&nID=85528&NewsCatID=375>

TWO 4,000-YEAR-OLD RELIEFS DISCOVERED IN EGYPT

Egyptian Antiquities Minister Mamdouh Eldamaty announced that two 4,000-year-old reliefs, belonging to Ptolemaic Queen Berenice, were found by Polish archaeologists in the temple of Serapis, on the coast of the Red Sea.

Relief sculpture is any work which projects from but which belongs to the wall, or other type of background surface, on which it is carved.

The pieces date to Ancient Egypt's so-called Middle Kingdom (2050-1750 BC) and the Second Intermediate Period (1650-1550 BC), epochs long before the temple's construction date, EFE news agency quoted Eldamaty as saying on Sunday.

The first relief has a cartouche containing the name of the Pharaoh Amenemhat IV -- the seventh and next-to-last pharaoh of the 12th dynasty -- whose reign was characterised by exploration expeditions for precious turquoise and amethyst, while the second relief, quite damaged, requires restoration.

The archaeologists also found a number of blocks of stone, which served as bases for the temple's statues and are engraved with lotus and papyrus flowers as well as with writing in Greek.

The seaport of Berenice was established at the beginning of the 3rd century AD by Ptolemy II, who ordered campaigns to the East African coast to capture elephants to be used in battle.

Please visit the site: <https://in.news.yahoo.com/two-4-000-old-reliefs-discovered-egypt-032003379.html>
