

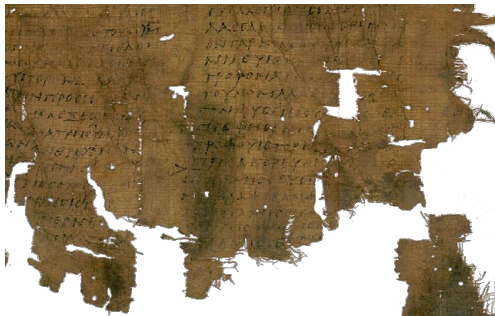
# A Virtual Research Environment for the Study of Documents and Manuscripts

Oxford e-Research Conference 2008

12/9/2008

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John Pybus, Ruth Kirkham





# Building a VRE for the Humanities



- Initial project looked at requirements for an Institutional VRE for the Humanities in Oxford
- Capturing user requirements from researchers across the division
- How do the Humanities differ from large scale Science?
- No predefined technology (ground up approach)
- Build 3 to 4 prototypes/demonstrators

# What is a Virtual Research Environment?

## Definition of a VRE:

“The purpose of a VRE is to help researchers in all disciplines manage the increasingly complex range of tasks involved in carrying out research. A VRE will provide a framework of resources to support the underlying processes of research on both small and large scales, particularly for those disciplines which are not well catered for by the current infrastructure.” (JISC)

“A set of online tools, systems and processes interoperating to facilitate or enhance the research process within and without institutional boundaries.” (Mike Fraser – OUCS)

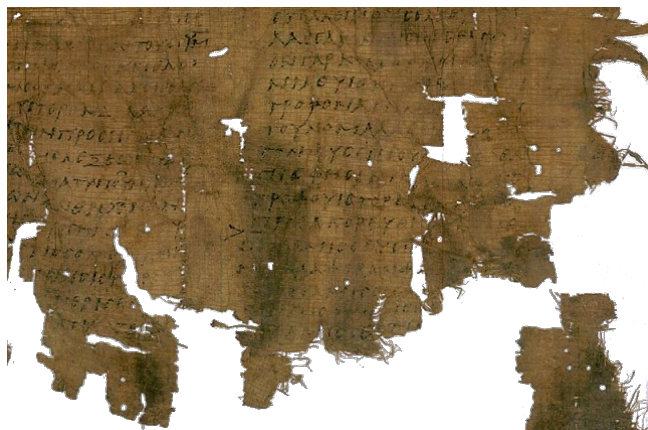
## User Requirements: Tools for research

- Communication tools:
  - Video conferencing/Access Grid
  - VoIP
  - Chat facilities/IM
- Collaborative document editing
  - Keep track of multiple versions of a draft manuscript
- Locating research material:
  - Search on-line databases
  - Cross Search multiple sources
  - Retrieve and Integrate data from multiple sources (DataGrids)
  - Provide a Front End to ease this rather than replacement for existing source

## User Requirements: Tools for research

- A personal working space
  - Store
  - View
  - Organise
  - Annotate
- Share work space to enable collaboration
  - personal collection and notes
  - view/edit remotely
- Bibliography Management
- Assistance in Publishing online
  - Personal Content Management System
- Links to Institutional Repository

# A Virtual Research Environment for the Study of Documents and Manuscripts



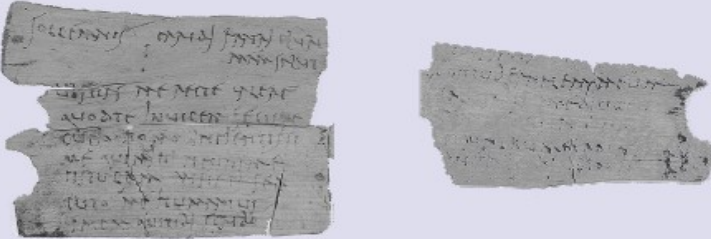
# A Virtual Research Environment for the Study of Documents and Manuscripts


Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://pybus.oerc.ox.ac.uk/gsv/trans-b.html


http://pybus..../trans-b.html





Search 



Vindolanda Tablets


Go!

 **John**  
online

Unfiled (0/2)

-  **ruth**
-  System

 **ruth** History

**<John>** Are ready to work on the first image?

**<ruth>** Yes I've got my cup of tea ready and can see the image in the workspace

Send

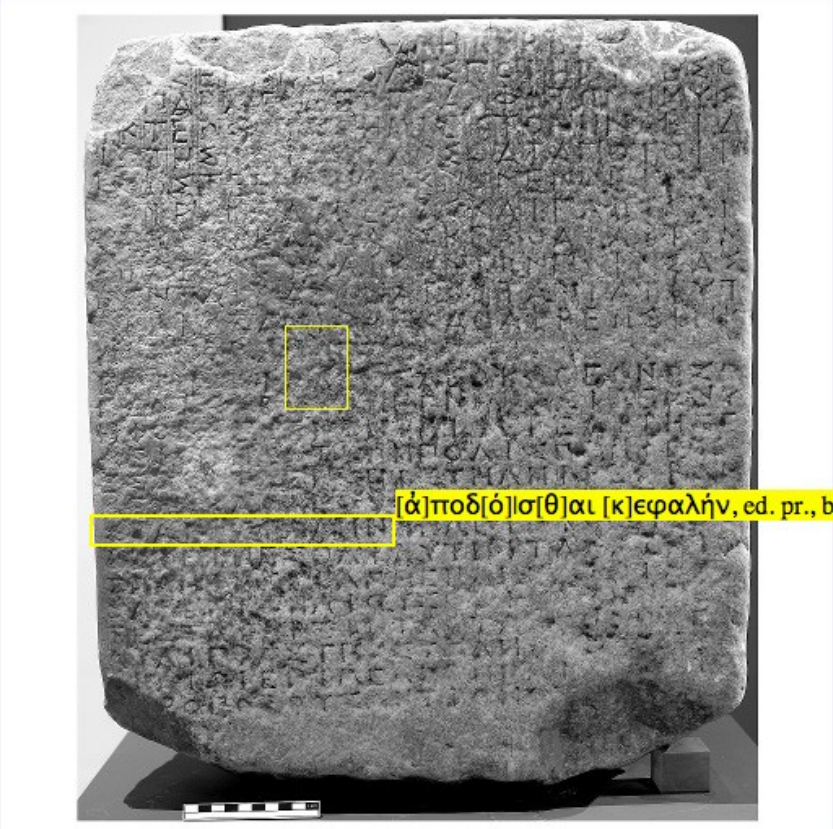
Selected Images:

- 311\_1-front
- 311\_2-front

Done

Mozilla Firefox

http://pybus.oerc.ox.ac.uk/vwsad/test-ann4.html#



Chios-M054.2

Show annotations

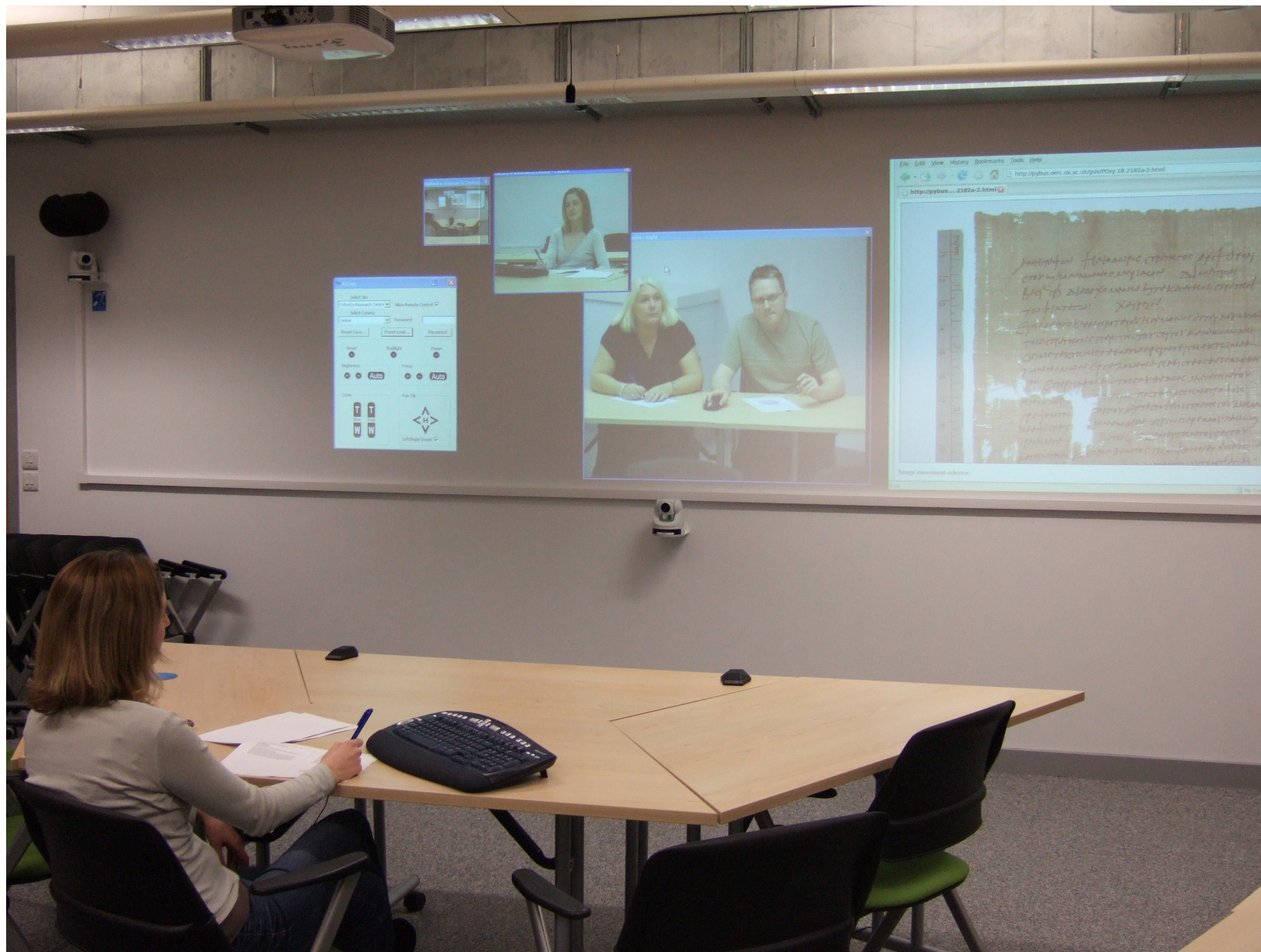
New Annotation

[ἀ]ποδ[ό]σ[θ]αι [κ]εφαλήν, ed. pr., but read πόδ[α]ς καὶ [κ]εφαλήν

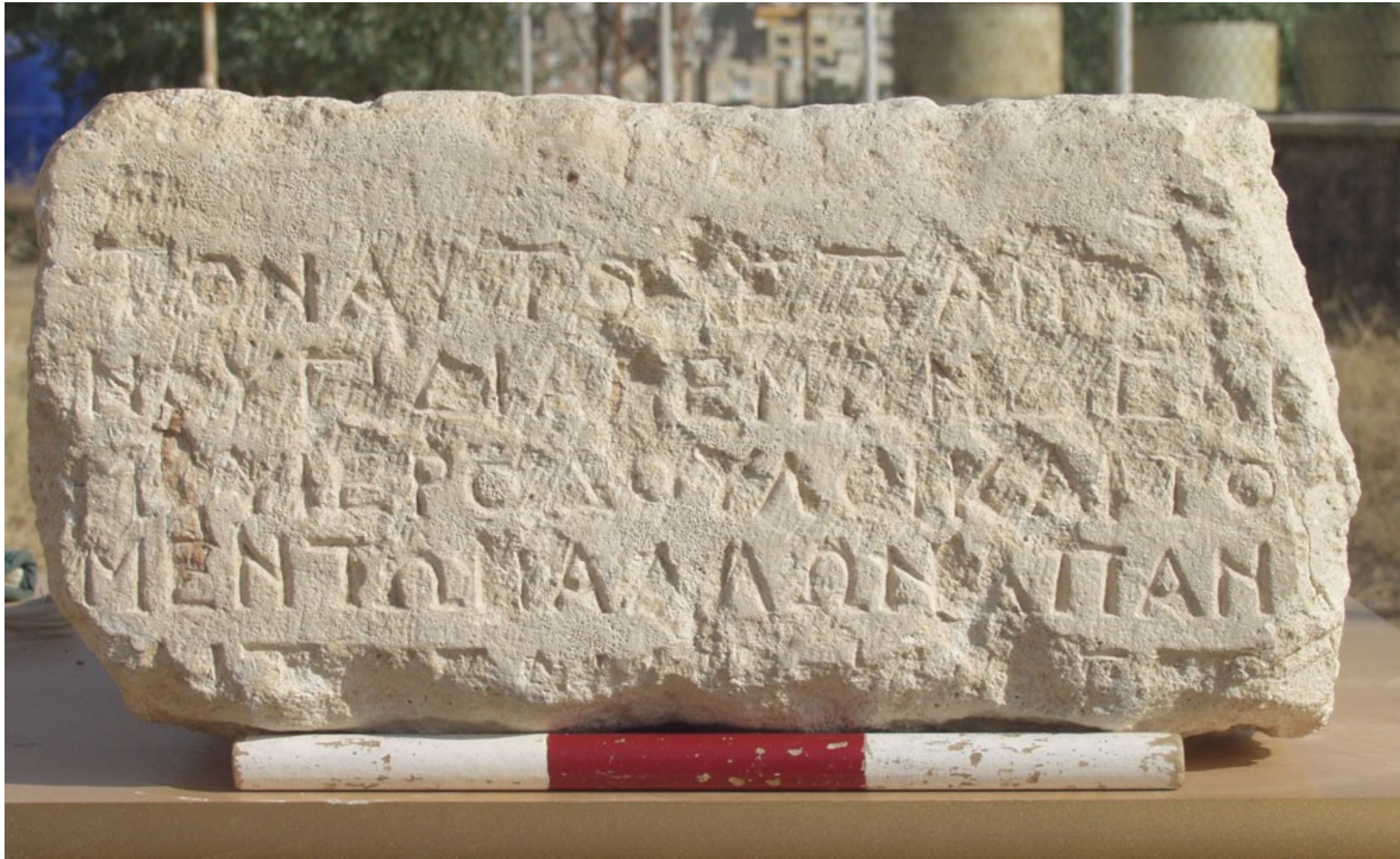
http://pybus.oerc.ox.ac.uk/vwsad/test-ann4.html#

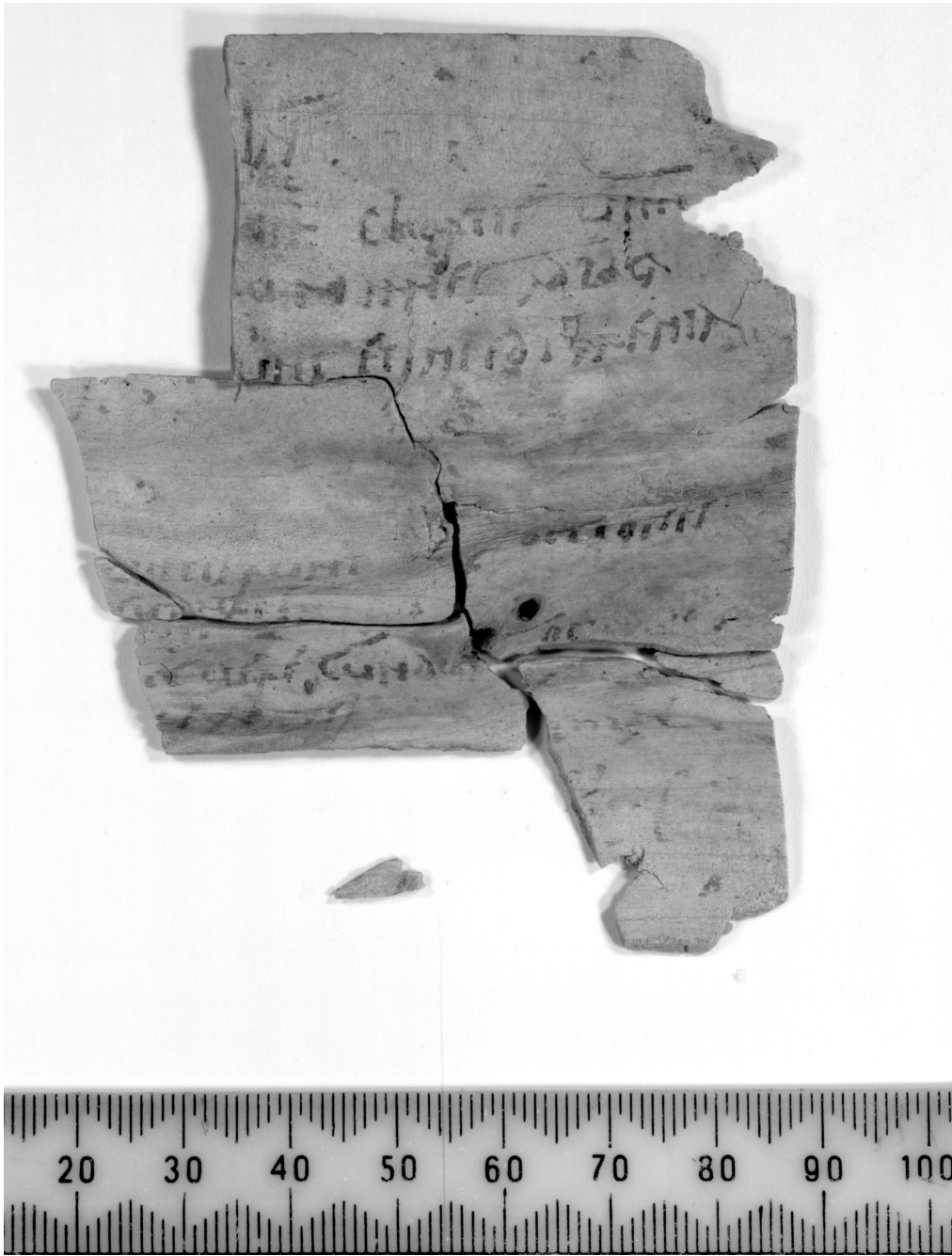


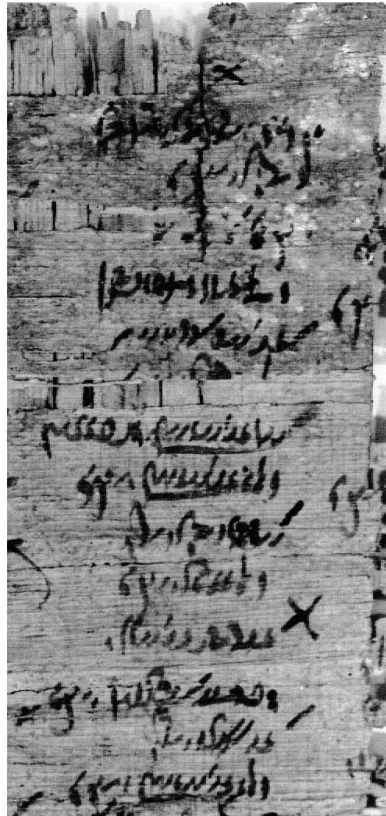
# A Virtual Research Environment for the Study of Documents and Manuscripts











col. vi

- top of column
- T3-B3st.t!  
onverwacht!  
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- 115 X
- 116 sh . 'P3'-šr-Hnm s3 P3-di-Wsir
- 117 3 | T3-B3st.t t3y=f rmt.t
- 118 rmt 6 (wp-s.t) 'hwt 3'
- 119 n3 hrd.w n3 rs.w
- 120 / Hr (s3) ~~31~~ hr ..
- 121 [T3]-'šr.t-Hnm t3y=f rmt.t'
- 122 P3-di-Hr-p3-bik s3 Yn. . .
- 123 / T3-šr.t-Hr-p3-bik t3y=f rmt.t
- 124 P3-di-... ~~W~~ sir p3y=f sn
- 125 T3-šr(t)-~~Tukw~~. t3y=f rmt.t
- 126 X 'Hr-~~ta~~-Is.t' s3 Hr-p3-ntr
- 127 4 T3-3brgwn t3y=f rmt.t
- 128 Hr-llw p3y=f sn
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Reading the Lycopolite census from Rifeh

# Creating a VRE

Existing environment

# Vindolanda Tablets Online

## Search database

View tablet number  
(118-573):




## General search

(Excluding Tablets  
database)

### Text:



### Images:




This online edition of the Vindolanda writing tablets, excavated from the Roman fort at Vindolanda in northern England, includes the following elements:

**Tablets** - a searchable online edition of the tablets (volumes I and II)

**Exhibition** - an introduction to the tablets and their context

**Reference** - a guide to aspects of the tablets' content

**Help** - navigation and using the site

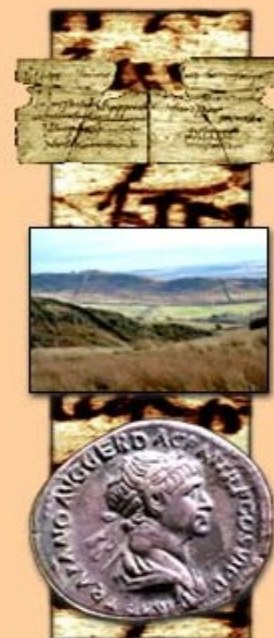
Also available are [highlights from the tablets](#).

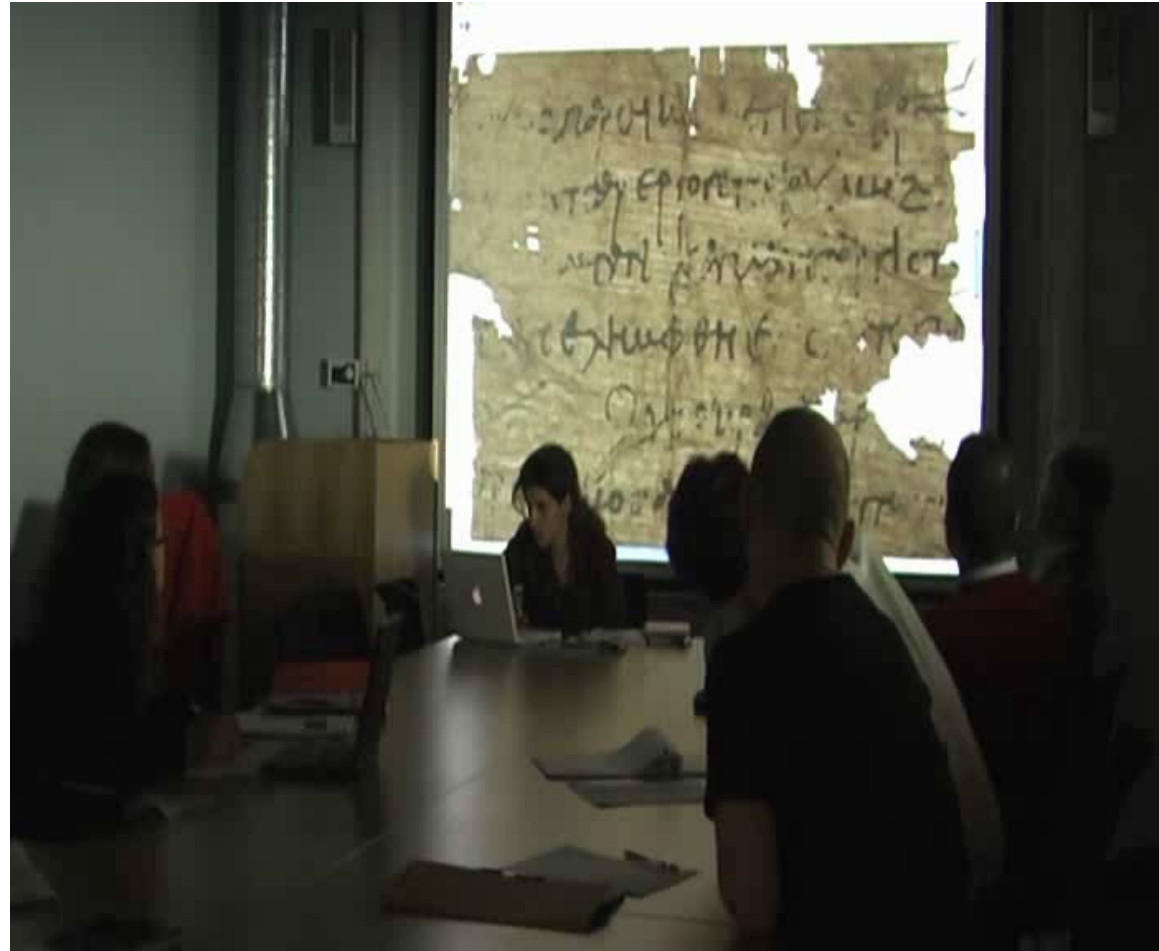
The website is part of the [Script, Image and the Culture of Writing in the Ancient World](#) programme, supported by the [Andrew W. Mellon Foundation](#). It is a collaborative project between the [Centre for the Study of Ancient Documents](#) and the [Academic Computing Development Team](#), Oxford University.

Scholarly publications should refer to this site as:

Vindolanda Tablets Online <http://vindolanda.csad.ox.ac.uk/>

Feedback: if you are using Vindolanda Tablets Online for teaching, research or general interest, please send us your [comments](#) on the site.







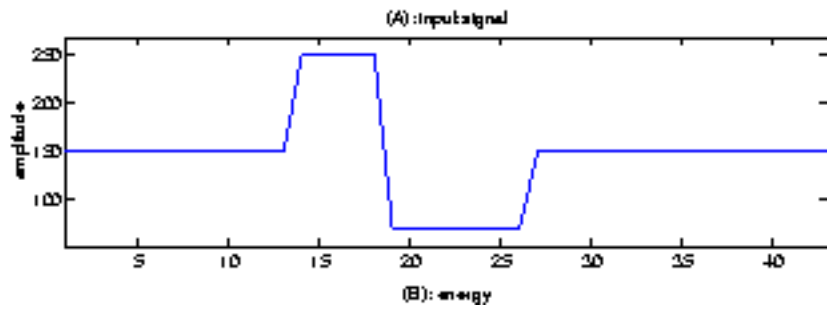
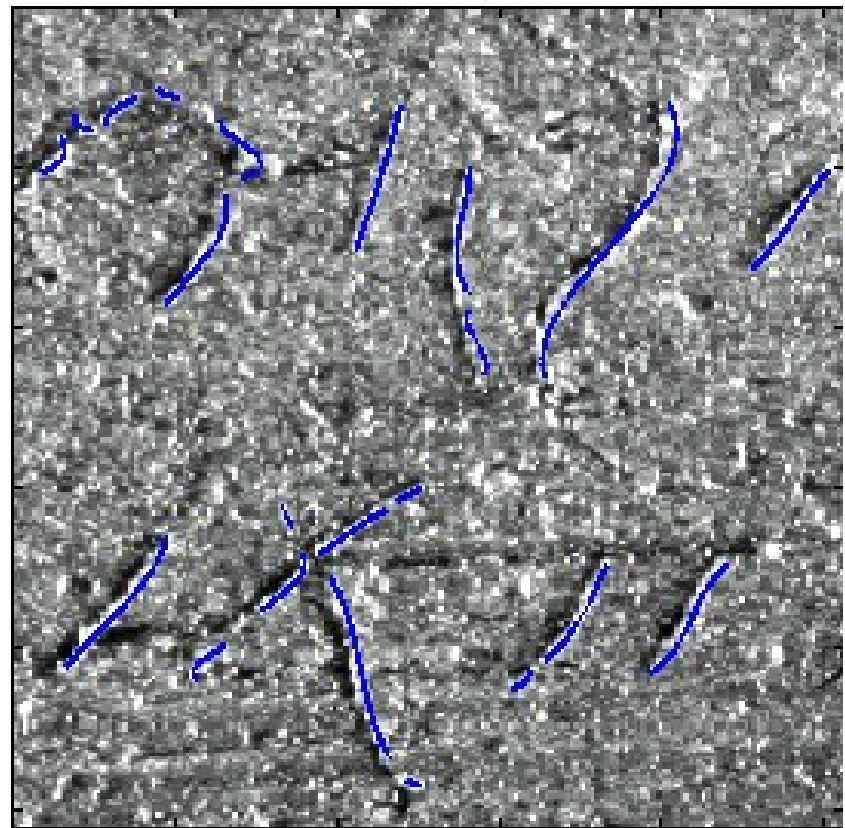
## Data Sources

- Integrated searches across databanks of texts and images, e.g.
  - Duke Databank of Documentary Papyri
  - Heidelberger Gesamtverzeichnis
  - APIS
  - Vindolanda Tablets Online
  - databases of Greek and Latin inscriptions
  - on-line reference resources, dictionaries
    - Lexicon of Greek Personal Names
    - LDAB
    - Fayum Villages Database
    - etc.

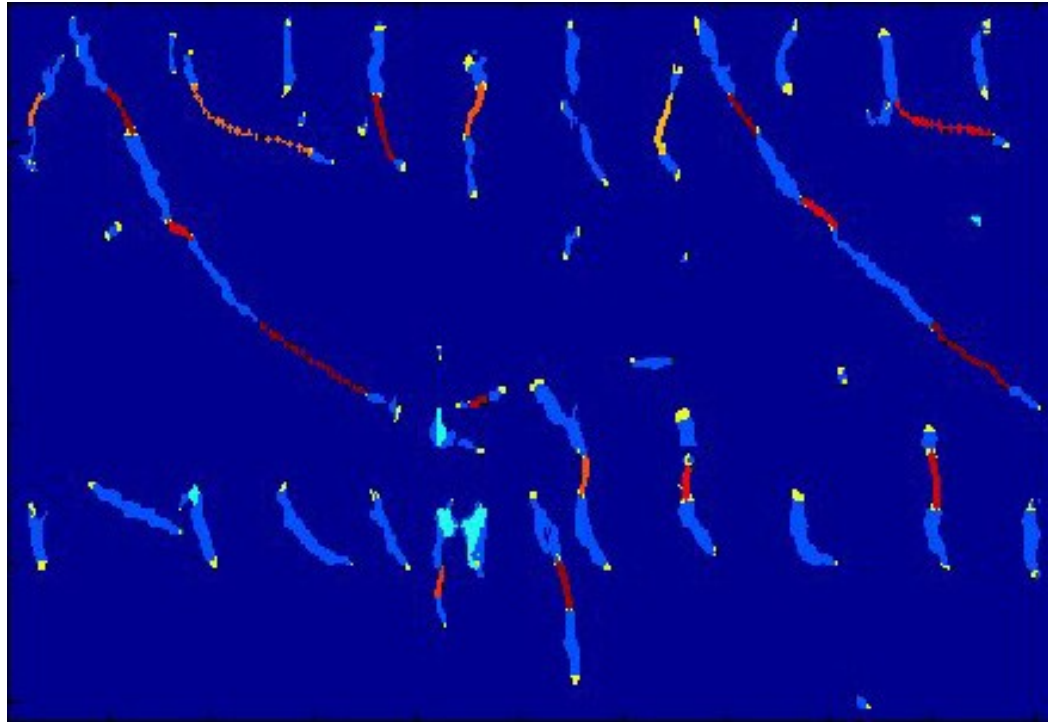


Fragment of a stylus tablet.  
Note the strong highlight  
and cast shadows

The strokes detected that  
conform to a model of  
shadow adjacent to highlight



Idealised model of an incision



AHRC eScience project led by Prof Alan Bowman, Mike Brady and Dr Mel Terras (UCL)

Work continues by Dr. Ségolène Tarte

<http://esad.classics.ox.ac.uk/>



# Architecture

uPortal - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://vre.humanities.ox.ac.uk/tag.6c420b71f58a0bcd.render.userLayoutRootNode.uP?uP\_root=rc

Welcome Admin User [Home](#) | [Site Map](#) | [Channel Admin](#) | [Preferences](#) | [Logout](#)

**uportal**  
by JASIG

Portlets Main Entertainment Admin Tools Development CWebProxy


Google Portlet

 Search
 

powered by Google™

Word of the Day

A new word is presented every day with its definition and example sentences from actual published works.



ensorcell: [Dictionary.com Word of the Day](#)  
ensorcell: to enchant; to bewitch.

Test Portlet 1

This portlet is a portlet specification compatibility test portlet. It provides several tests of varying complexities which will assist in evaluating compliance with the portlet specification. It was originally developed for testing Apache Pluto, however, it does not utilize any proprietary APIs and should work with all compliant portlet containers.

Please select one of the following tests:

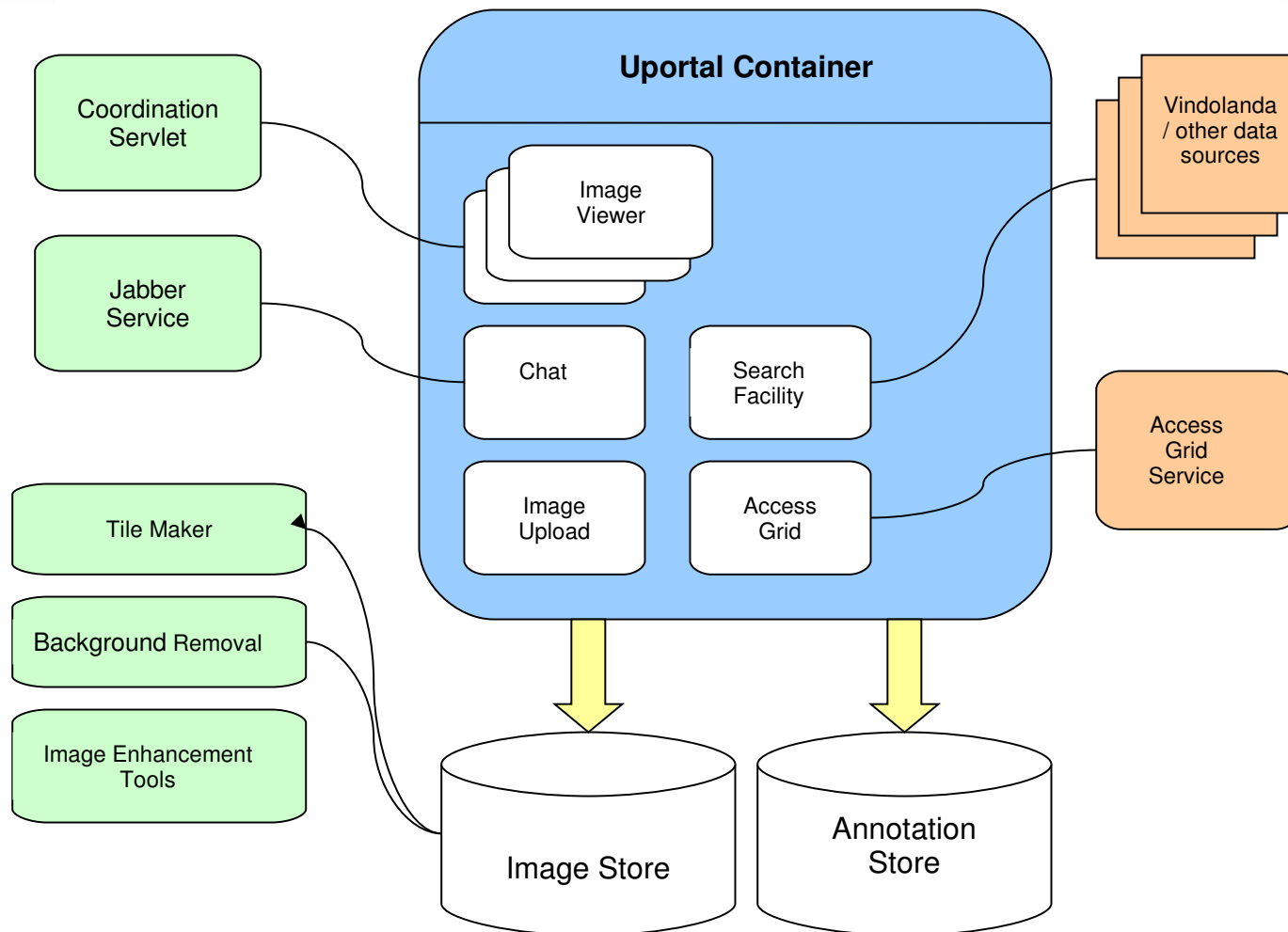
- Simple Parameter Test [Test](#)
- Simple Attribute Test [Test](#)
- Complex Attribute Test [Test](#)
- External App Scoped Attribute Test [Test](#)
- Context Init Parameter Test [Test](#)
- Simple Preference Test [Test](#)
- Portlet Mode Test [Test](#)
- Window State Test [Test](#)
- Misc Test [Test](#)
- Security Mapping Test [Test](#)
- Resource Bundle Test [Test](#)

Library Search


http://vre.humanities.ox.ac.uk/tag.ffe4bd64a8291102.render.userLayoutRootNode.uP?uP\_root=root&uP\_sparam=activeTab&activeTab=2

## uPortal

- Java based portal system
  - supports JSR-168
- Initial concern as to whether a browser based system would meet needs
  - should we go with a framework such as eclipse?
- So far what we need has proved possible
  - and browsers capabilities improving



 BVREH hosted tools/Services

 3<sup>rd</sup> Party tools/Services

File Edit View History Bookmarks Tools Help

http://vre-dev.humanities.ox.ac.uk/tag.ef97536b296ace1a.render.userLayoutRoot

## Building a Virtual Research Environment for the Humanities

Welcome Admin User [Home](#) | [Site Map](#) | [Channel Admin](#) | [Preferences](#) | [Logout](#)

Image View Triplestore | Image Upload Triplestore | Image View | Image Upload | Image Compare | Image Uploader

PTM Viewer | Image Viewer | Entertainment | Admin Tools

### Image View

edit

+  
-  
 Show annotations  
New Annotation

### Image List

edit

% [Search images](#)

Display in image viewer:  One  Two

Frisia-005058 Frisia-005053

Frisia-005054 Frisia test 005061

### BVREImageNotes

Done







# Linking data and interoperability with other VRE systems

# The Lexicon of Greek Personal Names

File Edit View History Bookmarks Tools Help

http://www.lgpn.ox.ac.uk/online/search\_data.html

Google

## LEXICON OF GREEK PERSONAL NAMES

LGPN  
LEXICON

### Online Name Search

**What can be searched:**

**Search II** offers online analysis of all the primary names published in LGPN I (Aegean Islands, Cyprus, Cyrenaica), II A (the revised version of Attica), III.A (Peloponnese, Western Greece, Sicily, Magna Graecia) and III.B (Central Greece), IV (Macedonia, Thrace, Northern Shores of the Black Sea), and, provisionally, the names in preparation for publication as LGPN VA: Coastal Asia Minor: Pontos to Ionia: a total of 35,982 names.

Note: **Search I** offers only the names from LGPN I-III.B, a total of just over 28,000 names. This search facility will not be updated. Names from LGPN IV, and all future additions, are available only through **Search II**.

*Dialect forms, of which there are very many in LGPN III.B, stand as separate forms. We intend in due course to set*

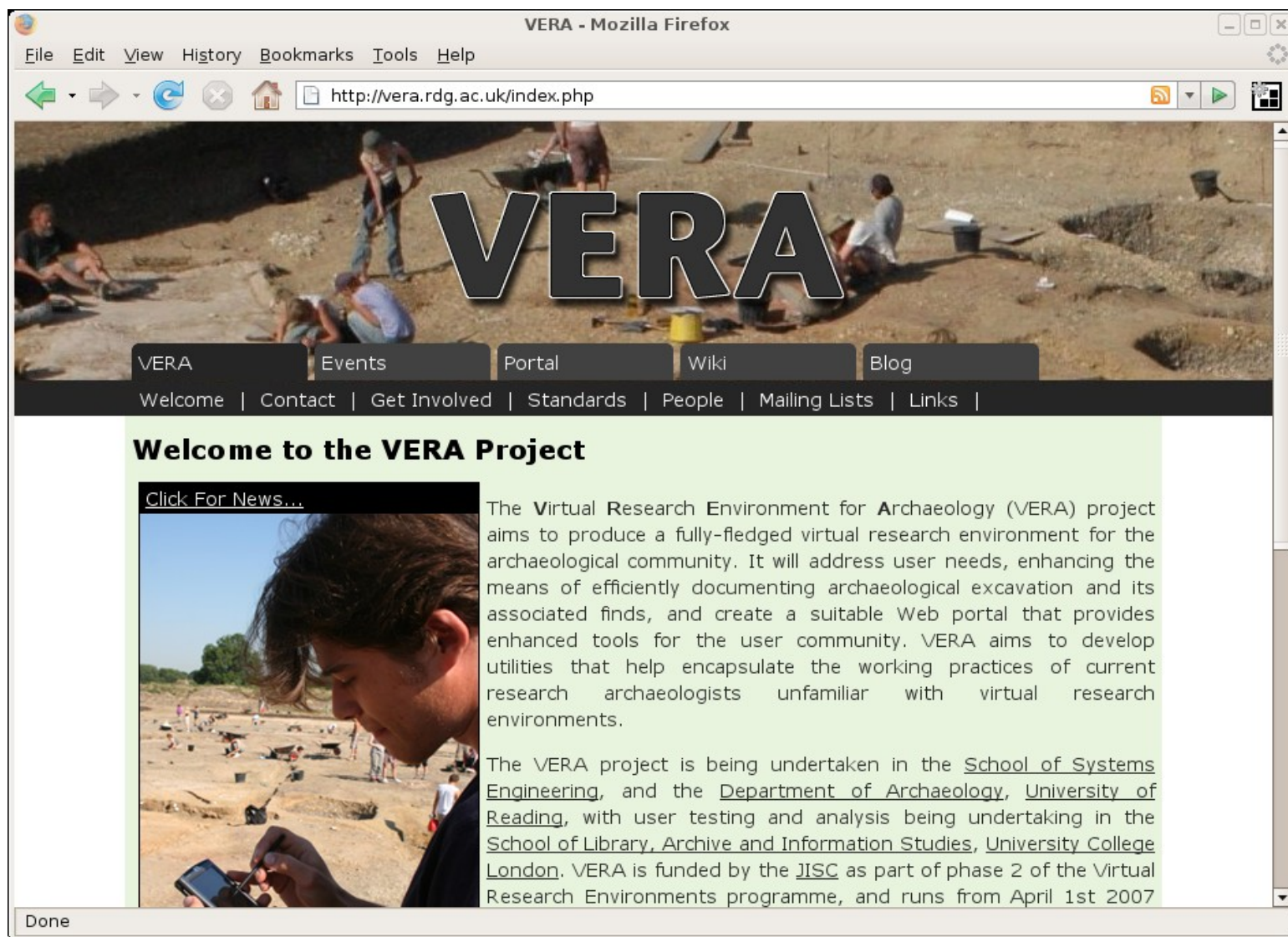
Done

- Home
- Project
- Publications
- LGPN Online
- Background
- Searches
- Downloads
- Statistics
- Greek names
- Image Archive

## The Lexicon of Greek Personal Names

- Recently moved infrastructure to XML database
- Is enabling them to offer RESTful webservice and javascript API
- The VRE integrating their test service
-


# A Virtual Environment for Archaeology



The screenshot shows a Mozilla Firefox browser window displaying the VERA website. The browser's address bar shows the URL <http://vera.rdg.ac.uk/index.php>. The website features a large banner image of an archaeological excavation site with the word "VERA" overlaid in large, bold, white letters. Below the banner is a navigation menu with buttons for "VERA", "Events", "Portal", "Wiki", and "Blog". A secondary navigation bar contains links: "Welcome | Contact | Get Involved | Standards | People | Mailing Lists | Links |".

## Welcome to the VERA Project

[Click For News...](#)



The Virtual Research Environment for Archaeology (VERA) project aims to produce a fully-fledged virtual research environment for the archaeological community. It will address user needs, enhancing the means of efficiently documenting archaeological excavation and its associated finds, and create a suitable Web portal that provides enhanced tools for the user community. VERA aims to develop utilities that help encapsulate the working practices of current research archaeologists unfamiliar with virtual research environments.

The VERA project is being undertaken in the [School of Systems Engineering](#), and the [Department of Archaeology, University of Reading](#), with user testing and analysis being undertaken in the [School of Library, Archive and Information Studies, University College London](#). VERA is funded by the [JISC](#) as part of phase 2 of the Virtual Research Environments programme, and runs from April 1st 2007

Done

Integrated Archaeological Database - Mozilla Firefox

File Edit View History Bookmarks Tools Help

http://laws1.reading.ac.uk/i2/i2.php

Integrated Archaeological Database

Project SILCH  
 Silchester Insula IX  
 VRE 4: House 1 (LEAP)

Sign Out GUEST | Help

Research Topics Key Resources Browse Utilities

Search for:

Search Results:

Type one or more search terms into the field above. Click on the [Options] button to refine or extend your search. Click on any of the menu items (Browse, Utilities) to view a document to view and edit it.

**Virtual Research Domain**  
 Select About this VRD from the Utilities menu. The Research Topics menu contains a list of resources to view and edit it. The Key Resources menu contains a list of search resources working in this VRD. Select a resource to view.

**Recent Changes:**

- 11th Jan 2007 23:02 [The Small Finds](#)  
figurine frags added by MFULFORD
- 11th Jan 2007 11:35 [Introduction](#)  
Figure links added by ADMIN
- 11th Jan 2007 10:10 [The Pottery](#)  
adding images by ACLARKE
- 11th Jan 2007 09:38 [The Pottery](#)  
edits of Jane's text by ADMIN
- 11th Jan 2007 09:13 [The Pottery](#)  
Restored Text by ADMIN
- 10th Jan 2007 15:16 [The Pottery](#)  
edit by ACLARKE
- 9th Jan 2007 13:25 [Early Roman Masonry Buildings](#)  
adding by MFULFORD
- 9th Jan 2007 13:22 [The Carbonised Plant Remains](#)  
modifying title by MFULFORD
- 9th Jan 2007 13:20 [The Infant Burial](#)  
adding by MFULFORD

Options

VRE Chat

ADMIN (06/10/2006 14:46):  
 Welcome to the LEAP Virtual Research Domain!

ADMIN (07/11/2006 09:29):  
 I've created Document 168 (Period 1 Overview). Let me know if the title needs changing.

GUEST (16/03/2007 09:53):  
 Hello world

Done

File Edit View History Bookmarks Tools Help

http://xdb.vera.rdg.ac.uk/

Google

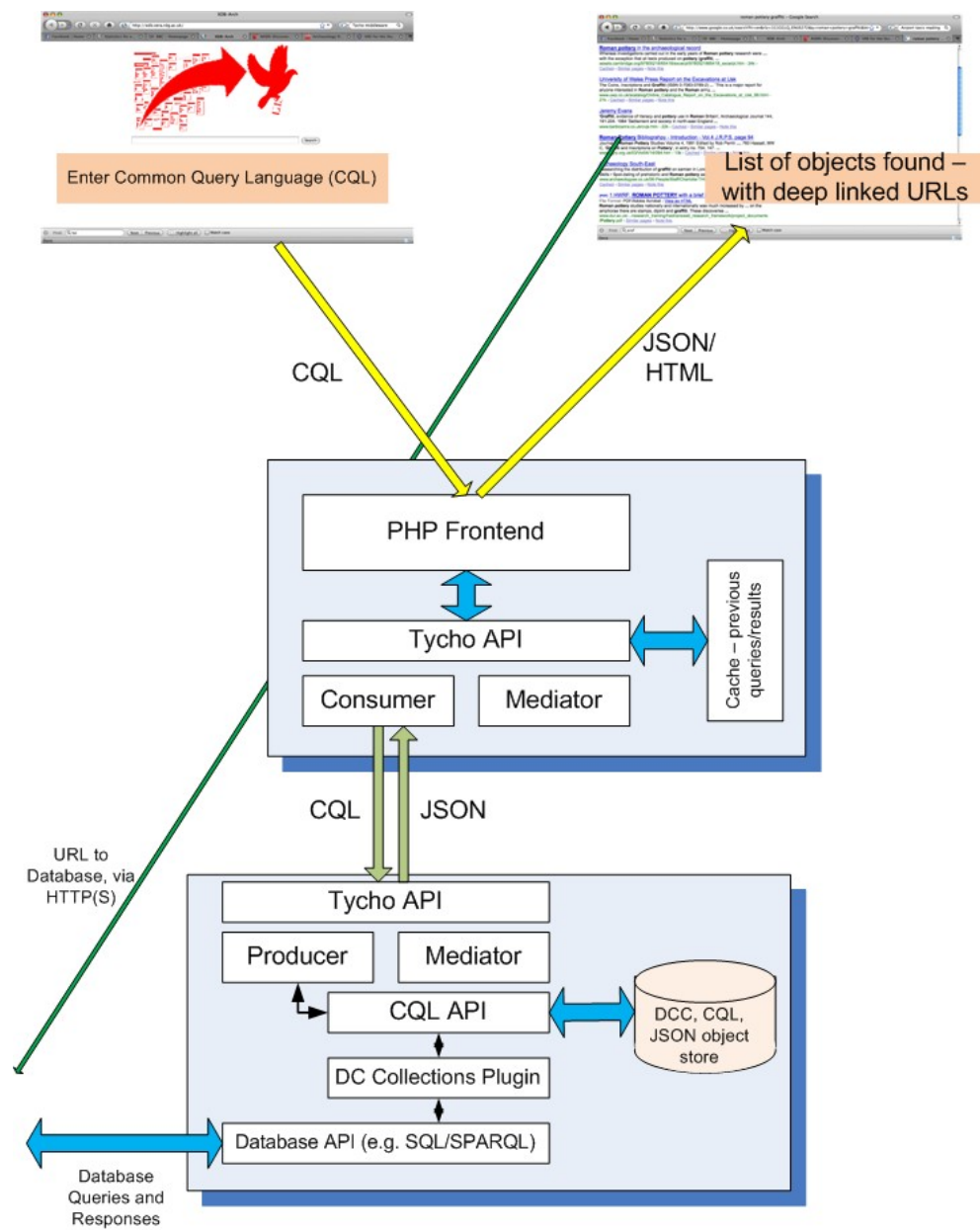
# XDB-Arch

XDB Search About Wiki VERA

Search

Done

# A Virtual Research Environment for the Study of Documents and Manuscripts





## Further VRE functionality

- Ability to place documents in archaeological context (on-line where possible) and connect with related documents and other artefacts.
- Databank of alphabets: grids to drag letters from digitised texts to build up a custom alphabet for that document and stored for cross-searching

## Future work

- Reuse current tools in other domains
  - Medieval manuscripts
  - Music
- Challenge to extend to other projects
  - Limitations of Java based systems
  - Scripting languages on JVM / RecycleBridge may help

JISC

oerc