

A VRE for the Study of Documents and Manuscripts

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E-Research on Texts and Images colloquium

10th May 2010









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)

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



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



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Medical

 Databal interest

BVREH use the

Virtual Workspace for the Study of Ancient Documents

An interface allowing browsing and searching of multiple image collections, including tools to compare and annotate the researcher's personal collection



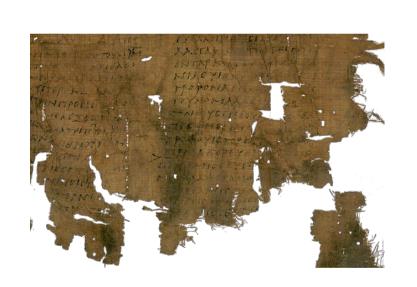




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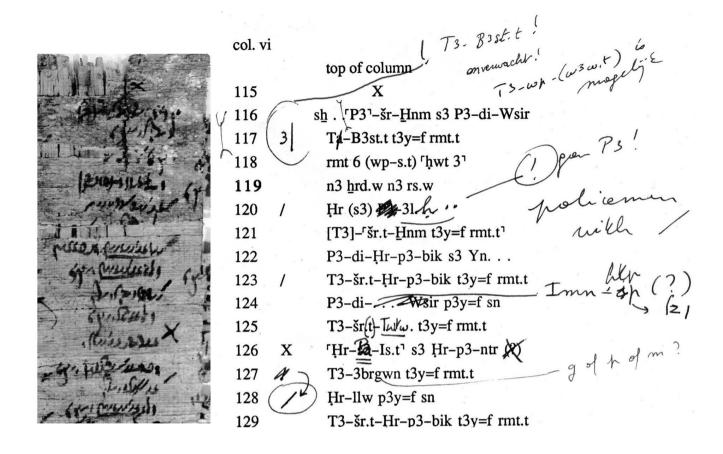
A Virtual Research Environment for the Study of Documents and Manuscripts





"I have seen the future and it works"

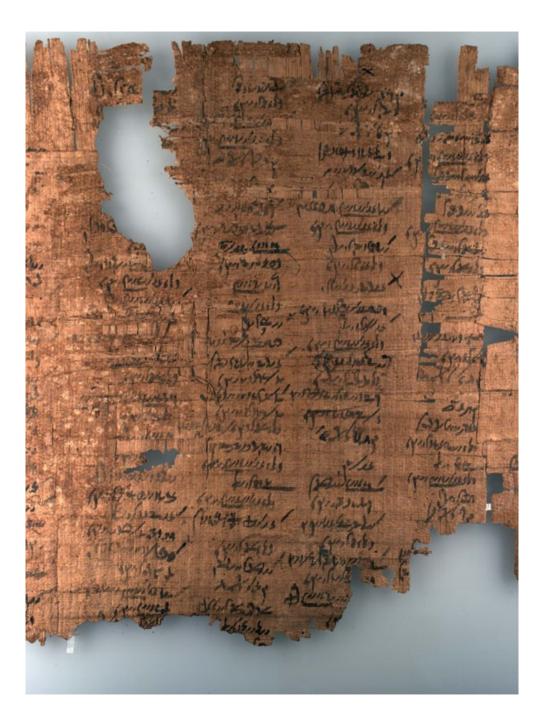
Dorothy J.Thompson, FBA, Fellow of Girton College Cambridge, President of the Association Internationale de Papyrologues, 1998

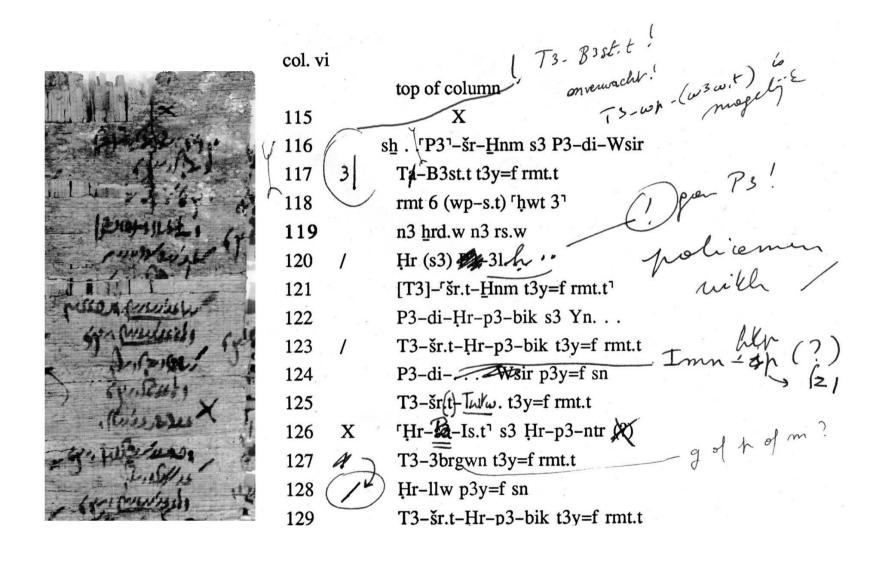


"I have seen the future and it works"

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Monday 29 January saw an unusual carload on its way to Oxford: Willy Clarysse from Leuven and Dorothy Thompson from Cambridge and - pride of place on the back seat - the demotic papyrus from Rifeh described by Sir Herbert Thompson in 1907 and recently rediscovered in University College, London. Our destination was the Centre for the Study of Ancient Documents where this Lycopolite population register was to be digitised. The text is one of the longest surviving of such texts and one of the few from outside the Fayum; it dates from the second century BC. The writing of its 21 columns is small and faint in many places. Already John Tait (UCL) had made a preliminary transcription, and he and Willy Clarysse had then spent several days poring over this text together, turn by turn, with magnifying glass in hand, but much still remained unread. International cooperation needs every modern aid it can find and the chance offered in Oxford of capturing the image of this papyrus in digitised form was a welcome one. Lighting was borrowed from the Ashmolean - and there at the Centre in St. Giles photography began. Excitement was in the air; comparison with the image of a photograph showed a marked improvement on the screen but there was no time then for real work on the text. The resulting images were stored in digitised form, for passing down the line to Clarysse in Leuven and Tait in London. Teaching and term then intervened. The scene shifts to late afternoon on Tuesday 19 March 1996. Clarysse and Tait are together in Oxford for a conference and Ursula Kaplony-Heckel from Marburg is also here. It is with some trepidation that they call up the images on the screen in the Documents Centre. Will the text really be more legible than when they last worked together on the original and made only insignificant changes to their earlier readings? (Thompson looks on and listens as they start to look at the screen.) First they must locate where they are (that comes quickly), learn to play with the image, to zoom in and out on the difficult readings and to work the colour contrast that highlights the ink that was faded. Soon work is under way. Three people, no longer crouched and hunched but sitting at ease, stare across at the screen together; the adrenaline starts to flow. Suggestions for readings are made; a quick flip of the screen to two columns earlier allows a speedy check with names and elements of names that went before. Gods' determinatives emerge, a host of local names; the script comes to life. Decipherment is underway; the parts that before were illegible slowly take their place on the page. The transcription is transformed; the texts grows and, though much of this damaged text is still obscure, it is significantly improved (see the facsimile of the transcript above).

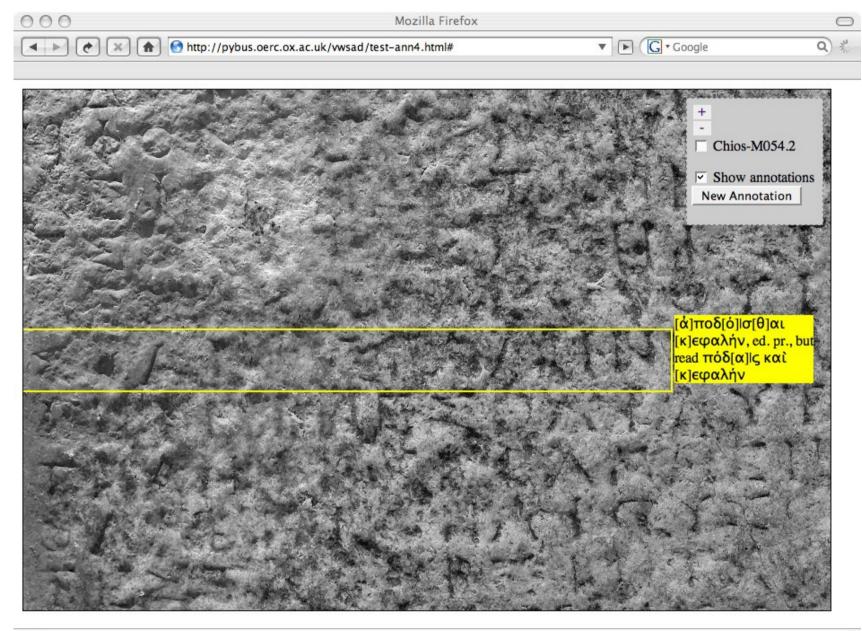


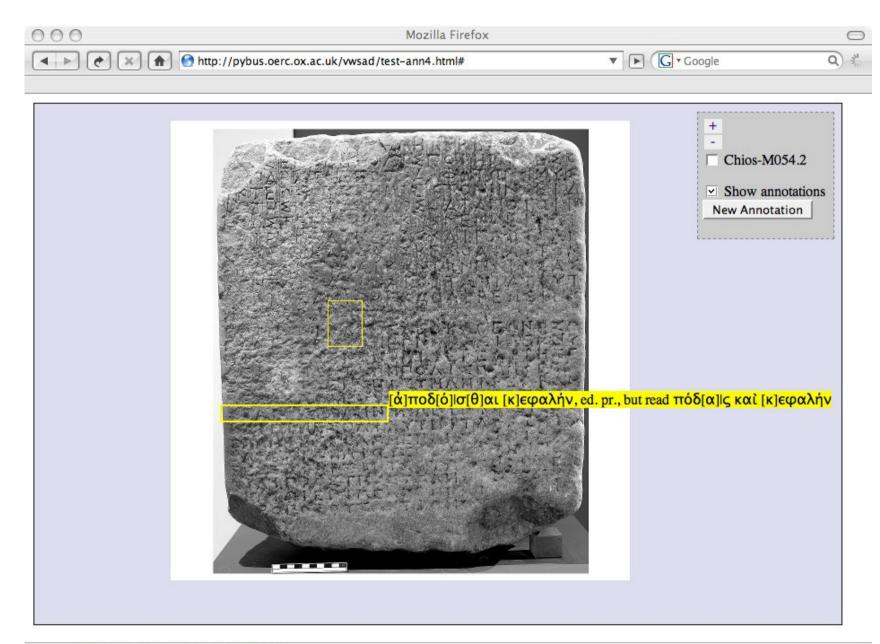


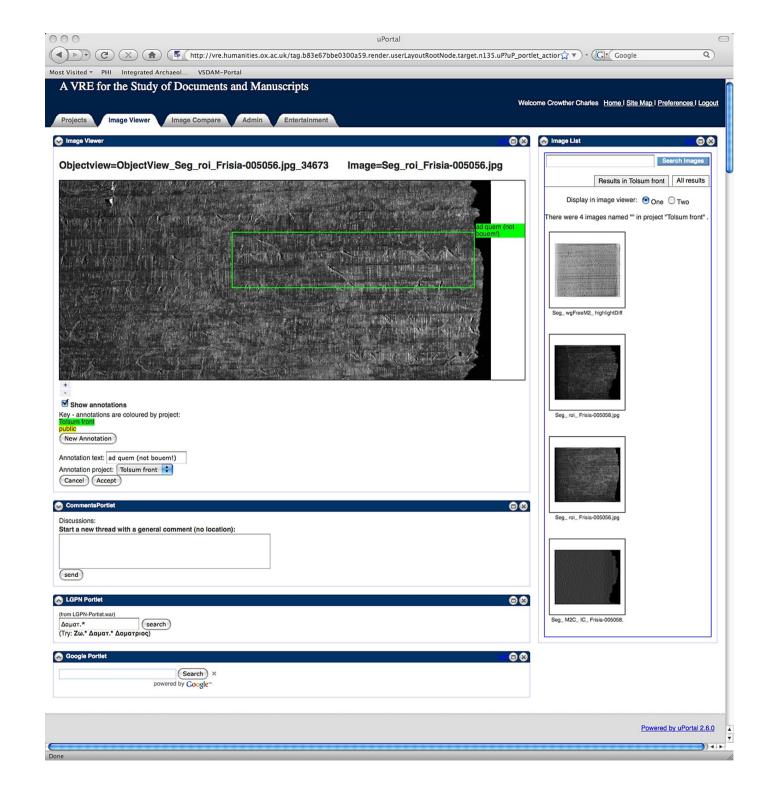
Reading the Lycopolite census from Rifeh

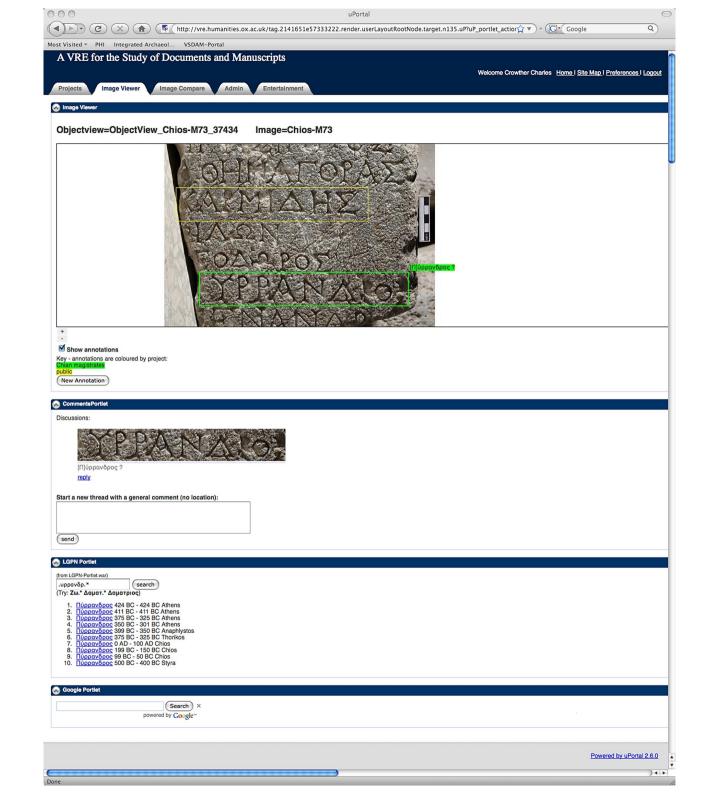












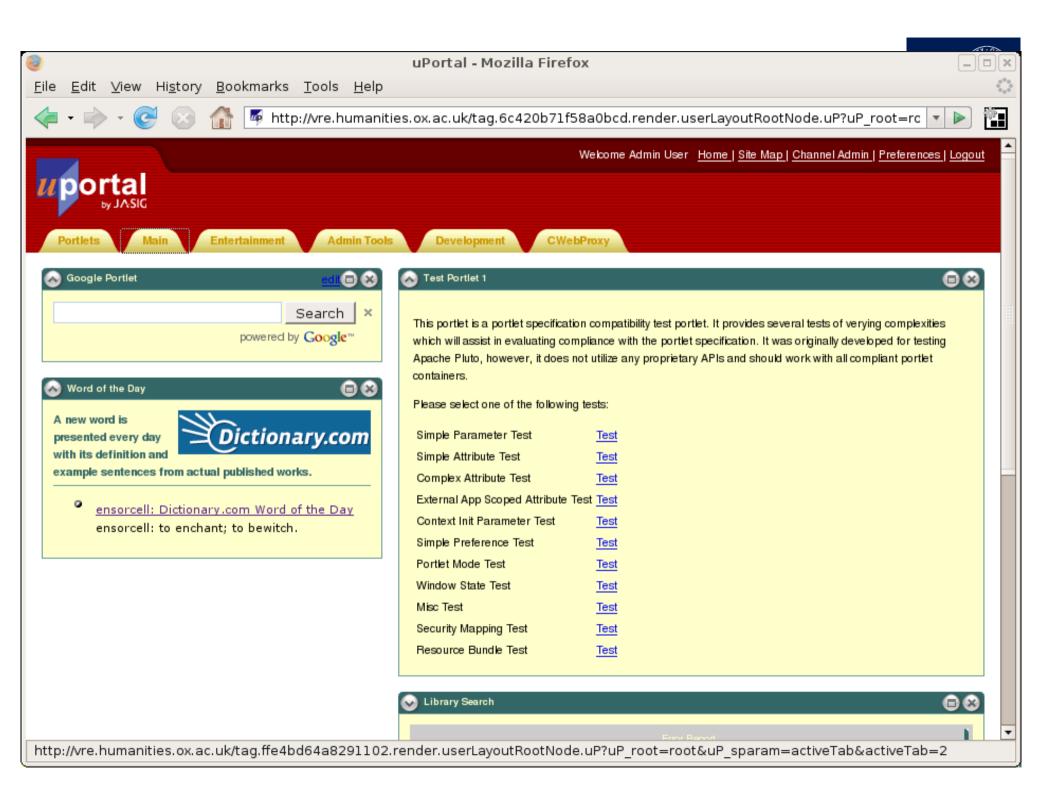
VRE aims

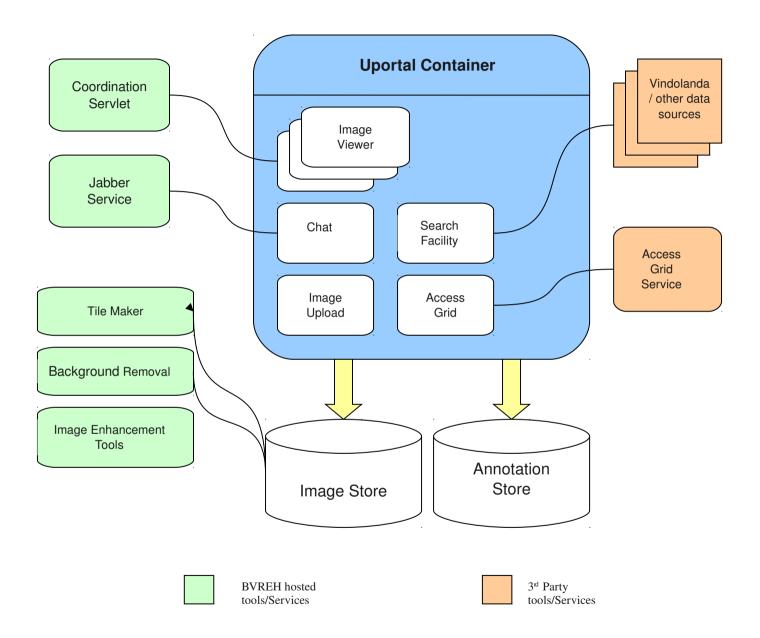


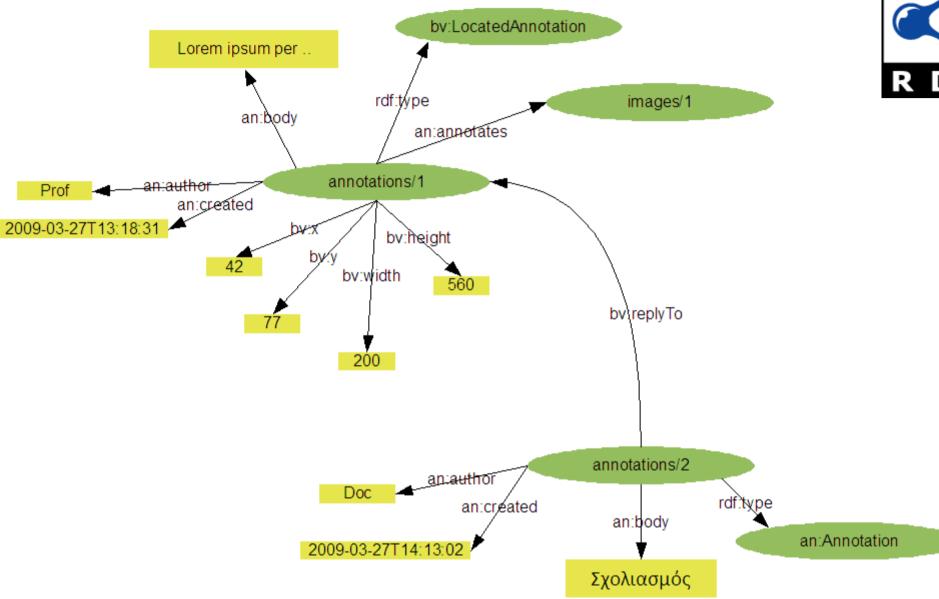
- Support Collaboration
 - as if a group of scholars sitting round the table
 - works in a web browser

- Customisable
 - choose and arrange the things you need









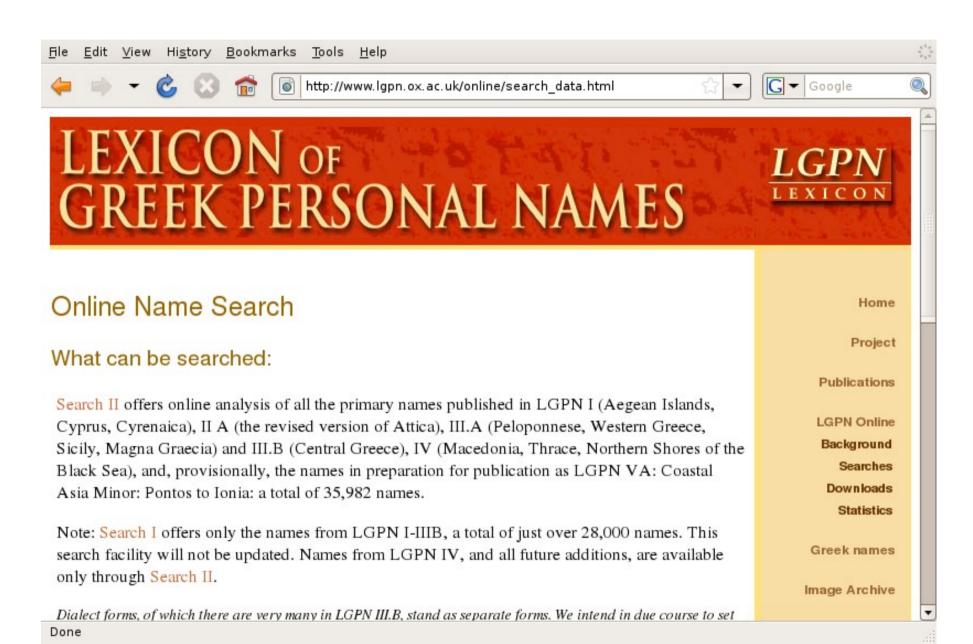


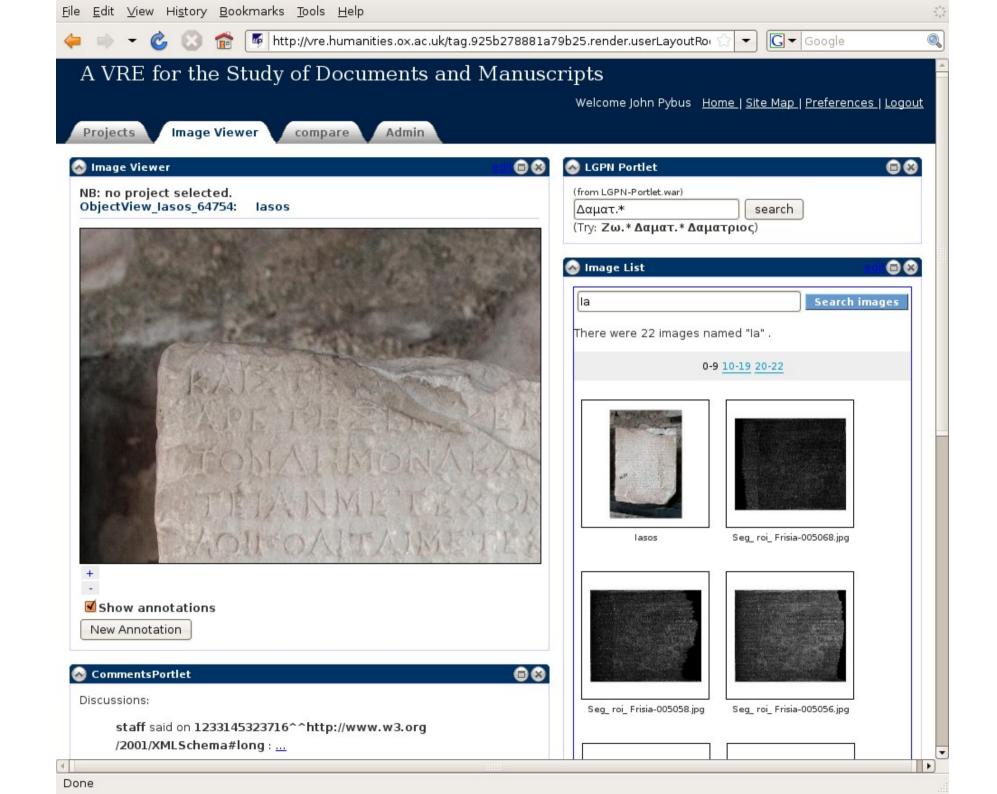
rdf = http://www.w3.org/1999/02/22-rdf-syntax-ns#type

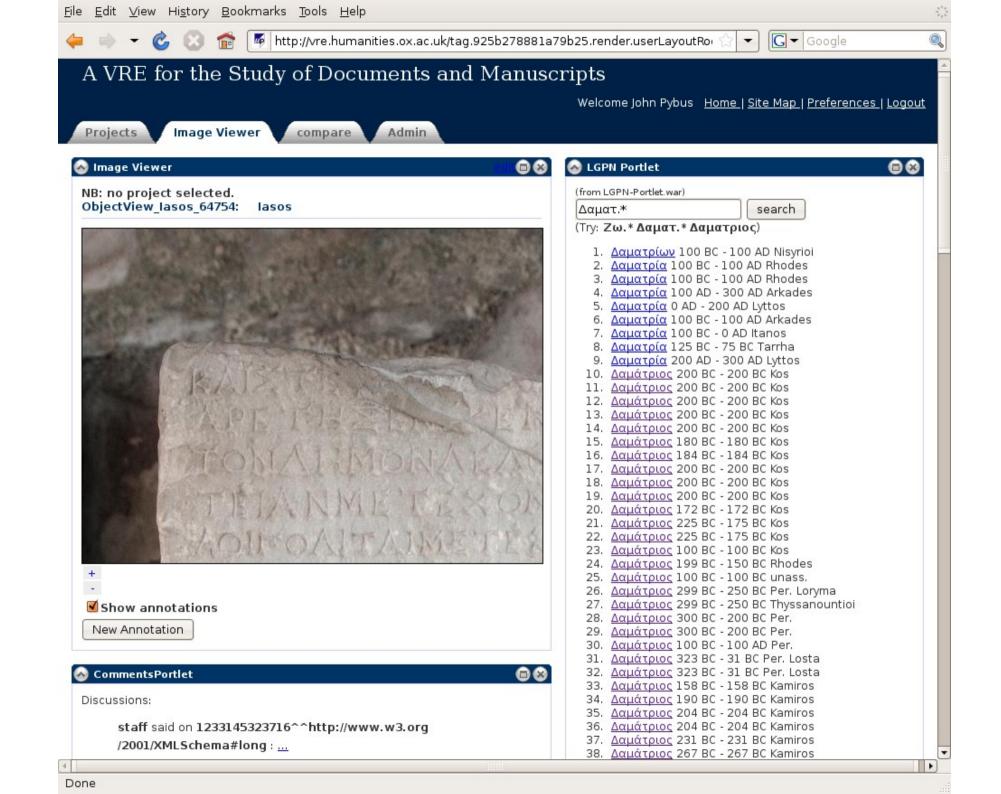


Linking to other data sources

The Lexicon of Greek Personal Names





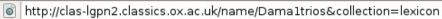






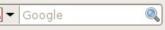












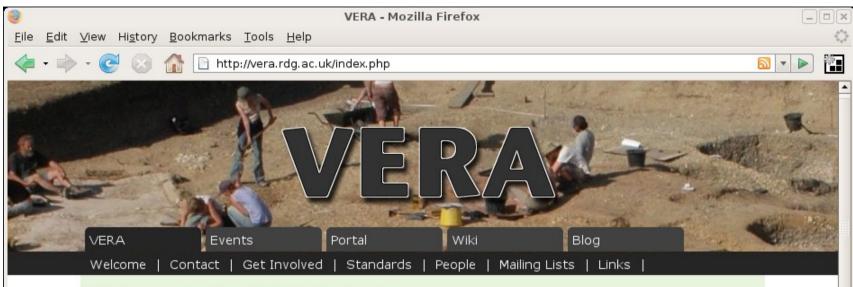
LEXICON OF GREEK PERSONAL NAMES

Search

Find name: Go!							
Place catalogue Status and profession catalogue							

Showing 1 to 83 of 83 hits for search on name for Dama1trios from possible total of 131366 in 0.08 seconds

<u>ID</u>	<u>Region</u>	Settlement	<u>Deme</u>	Modern name	Other name	Barrington	TGN	Geo
LGPN_12650	Kos			<u>name</u>				27.128506861132 36.826080558265
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LGPN_13280	Rhodes	Kamiros	<u>Tymnioi</u>			kamiros-60-f3		
LGPN_13282	Rhodes	Kamiros	<u>Tymnioi</u>			kamiros-60-f3		
LGPN_13100	Rhodes	Kamiros	7.9			kamiros-60-f3		
LGPN_13290	Rhodes	<u>Lindos</u>				lindos-60-g3		
LGPN_13310	Rhodes	<u>Lindos</u>	<u>Argeioi</u>			lindos-60-g3		
LGPN_13390	Rhodes	Lindos	<u>Lindopolitai</u>	n 6		<u>lindos-60-g3</u>		

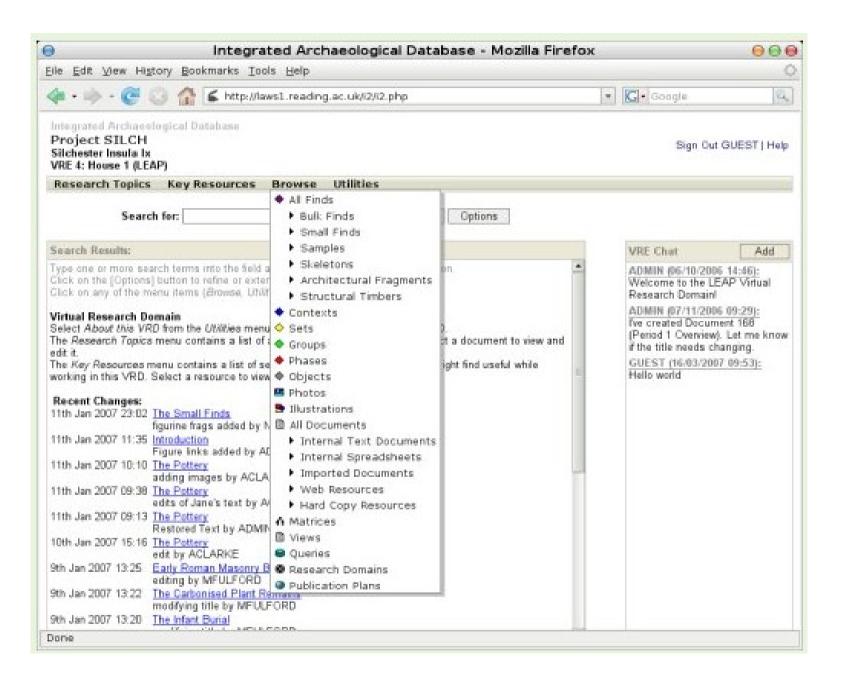


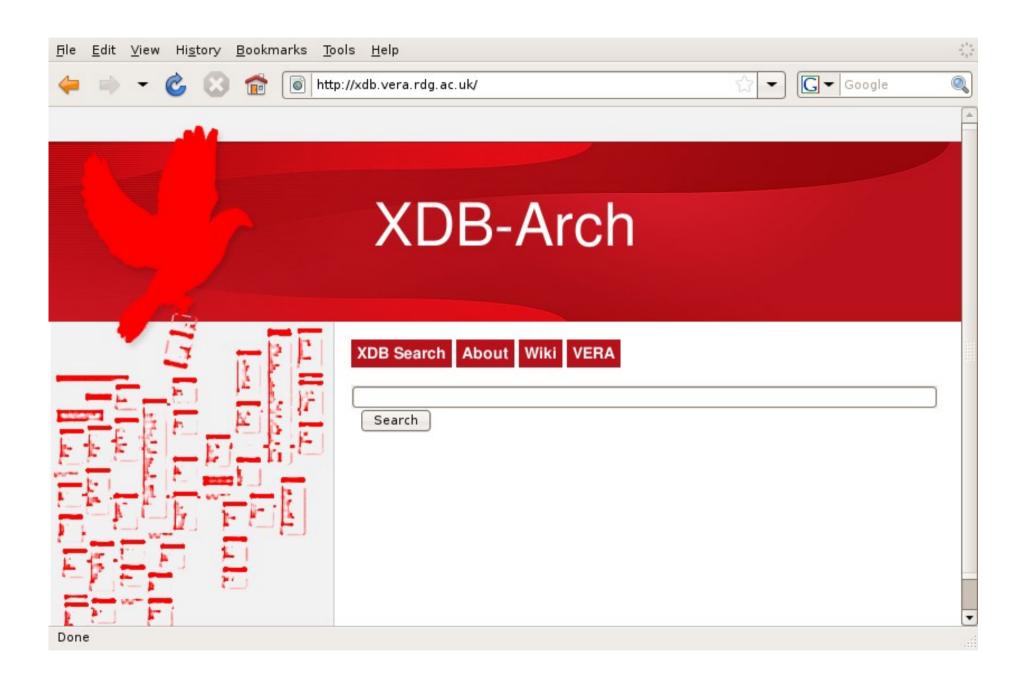
Welcome to the VERA Project

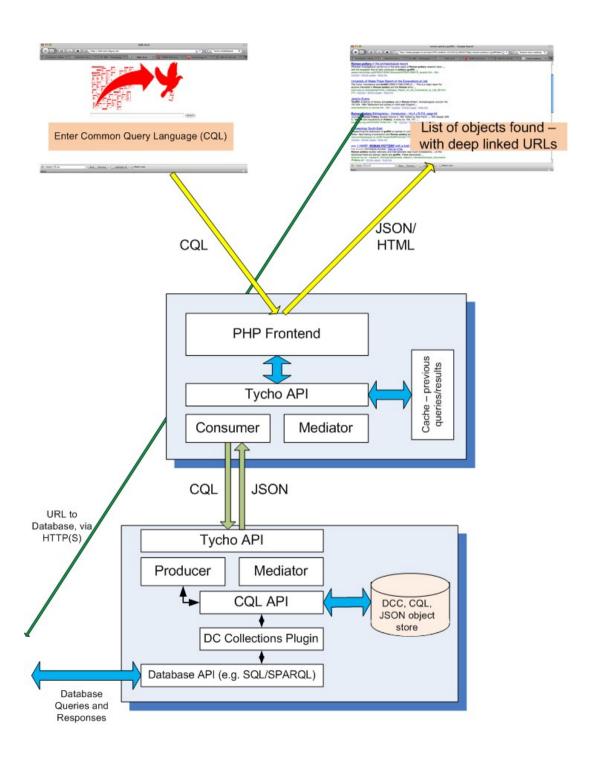


The **V**irtual **R**esearch Environment for **A**rchaeology (VERA) project aims to produce a fully-fledged virtual research environment for the archaeological community. It will address user needs, enhancing the means of efficiently documenting archaeological excavation and its associated finds, and 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.

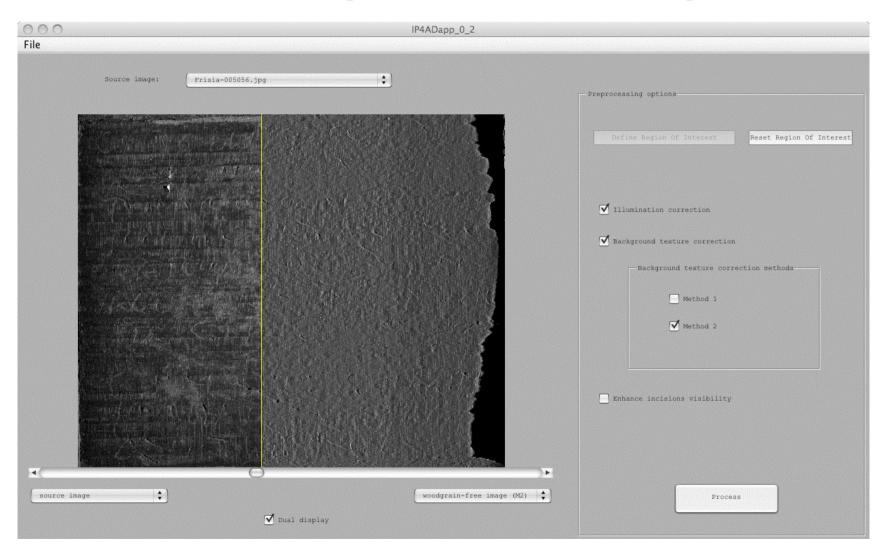
The VERA project is being undertaken in the <u>School of Systems</u> Engineering, and the <u>Department of Archaeology</u>, <u>University of Reading</u>, with user testing and analysis being undertaking in the <u>School of Library</u>, <u>Archive and Information Studies</u>, <u>University College London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







eSAD Image Processing Tool



linking of this into VRE



- Currently import processed images by hand
 - want to do better
- Supported by JISC ENGAGE project
- Run image processing algorithms on NGS Grid computing resource
- Link output images directly into VRE portal environment

Integrating the eSAD Functionality in the VRE-SDM

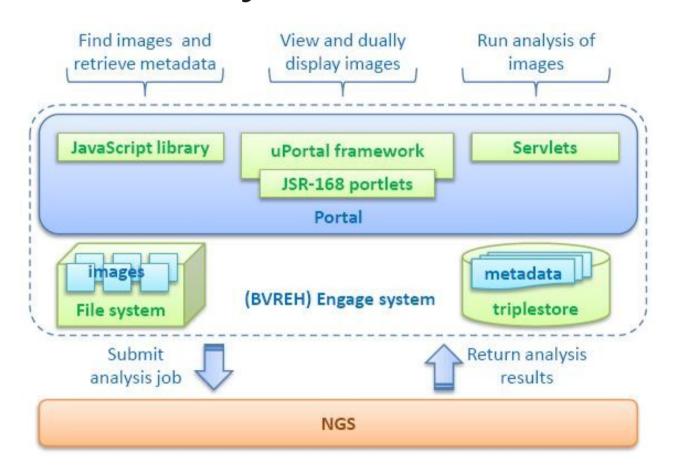


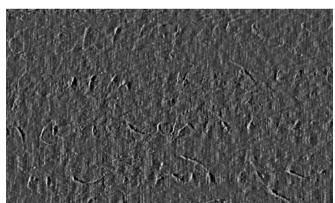
Image Processing

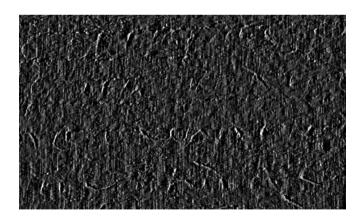
Original image



- Algorithms in Matlab
- Compiled, wrapped in NGS
 Uniform Execustion
 Environment and installed on NGS (with Matlab Runtime Environment)



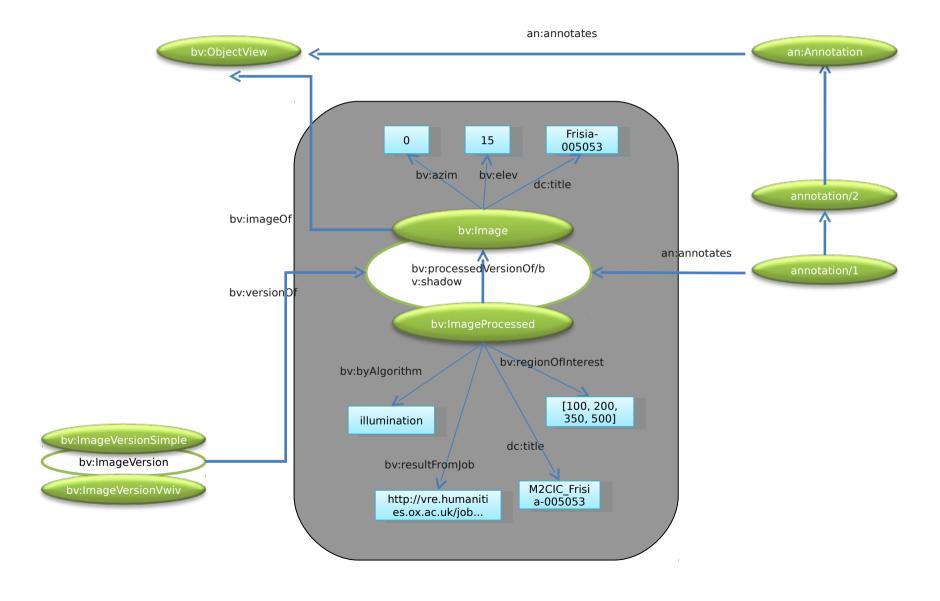




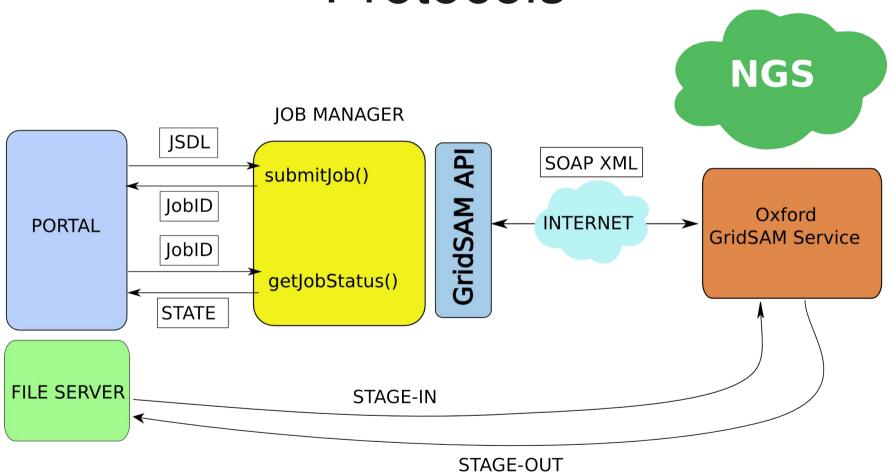
After illumination correction

After woodgrain removal (2 methods)

Data Model Extension



Web-service and Communication Protocols

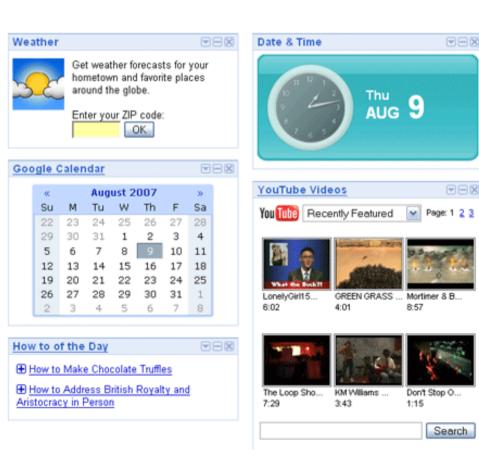


The future



 We have been moving our tools from the uPortal software to the Open Social/Google

Gadgets system





On 30th June the WebLearn service is under-going a major enhancement.

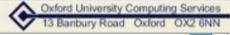


Improvements:

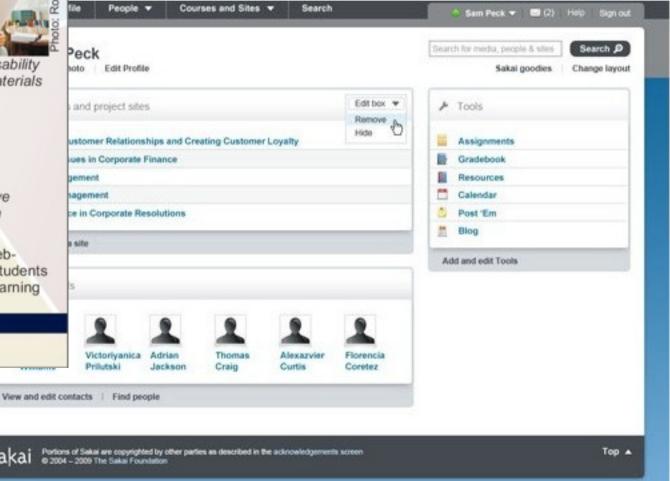
- · cleaner modern interface with improved usability
- · searchable file store for sharing course materials
- · discussion forums
- · announcements (with email)
- tutorial support including sign-up sheets
- · calendars for course related events
- · wikis for collaborative authoring
- · formative assessment, survey and polls
- · email distribution lists with message archive
- · electronic pigeon holes with Turnitin option
- · integration with OxCORT, GSS, OXAM, ...

WebLearn provides an easily accessible webbased workspace for lecturers, tutors and students and is well-suited to a research-intensive learning environment.

weblearn.ox.ac.uk







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Acknowledgements



CSAD



Prof. Alan Bowman

eSAD

e-Science and

OeRC/ VRE project

Ancient Documents

- Ruth Kirkham
- oerc
- Pin Hu
- Katie Portwin
- Bruce Godden
- JISC
 - who funded most of this work

- ESAD project
 - Dr Segolene Tarte
 - Henriette Roued [thanks for her slides]
- OUCS
 - Dr Mike Fraser
- Reading / VERA
 - Prof. Mike Fulford
 - Prof. Mark Baker
 - Matt Grove
 - Hugo Mills

