AHRC ICT Methods Network Expert Seminar on History and Archaeology

VIRTUAL HISTORY AND ARCHAEOLOGY

Humanities Research Institute, University of Sheffield, 19 – 21 April 2006.

PROGRAMME

The Expert Seminar has three subjects on the programme. Each subject aims to bring specialists in the application of ICT to the historical and archaeological domains together. Subject specialists will present their overview in pre-circulated papers, presented orally in no more than 30 minutes. There will be a panel Rapporteur who will orientate the discussion with a presentation of no more than 15 minutes. Each subject specialist will be invited to nominate particular ICT applications that 'exemplify' the questions and problems they are tackling. These will be available for inspection where possible before and after the seminars so that discussion of the issues can flow through from one session to the next. There will also be some time for blue-sky discussion so that we can pick up on issues and themes that have not been raised or given adequate coverage up to that point. The aim is to lay the groundwork for a publication in the Methods Network series *Advanced ICT Methods in Arts and Humanities Research* (working title). We shall have our work cut out to reflect the breadth and potential of the subject in our three days' discussions.

SUBJECT 1 - THE PAST AND THE VIRTUAL REPRESENTATION OF PLACE AND TIME (19 APRIL)

This subject will examine questions of the representation of spatial and temporal analysis in historical and archaeological data. Both are crucial to the disciplines in question, although they are understood in different ways. The representation of time ('chronological'; 'epochal'; etc) is problematic in both disciplines. Senses of time have varied significantly in the past and their representation in historical documentation is therefore important. Historical and archaeological representations of space are also flexible. This subject is the one in which we shall touch on the extensive use of GIS and VR techniques developed by archaeologists and historians. In both areas, the disciplines probably have a good deal to learn from other social science disciplines (geography; sociology; urban planning, etc) as well as from each other. We shall conclude by questioning whether ICT tools can be developed and applied which adequately recover the ways in which senses of time and space are historically and archaeologically understood that cannot be effectively presented through traditional media.

SUBJECT 2 - THE PAST AND THE VIRTUAL REPRESENTATION OF TEXTS (19-20 APRIL)

This subject concentrates on assessing critically the degree to which ICT enables historians and archaeologists to interpret text in ways that have not conventionally been possible. Throughout the subject, we shall include images representing textual artefacts as part of our overall consideration. Our first session starts with a relatively practical issue: the application of advanced mark-up in historical and archaeological environments. This will involve the use of specific mark-up for particular historical and archaeological domains, whilst ensuring that our disciplines are applying the interesting techniques developed in other, especially literary, humanities environments. We shall want to take stock as we go of where latest developments have taken us, and where we have not made as much progress in applying techniques and applications available elsewhere. Our next two sessions involve questions of developing environments where text can be 'searched' and 'mined' in distributed environments, including environments where textual artefacts are stored in image forms. In the first, we shall concentrate on the experience (limited) and potential (great) for data-mining in historical and archaeological environments, and the challenge in building the appropriate ontologies. The third session focuses on data-linkage and, in particular, the development of appropriate common environments for archaeological field reports and linking archive/library records to historical text-based materials, including digital images of archival materials. In a final session, we hope to link up by Access Grid with some delegates at the Computer Applications in Archaeology Conference, Utah to take stock of the ICT tools that are currently available which most effectively assist archaeologists to undertake data analysis in ways that were not available in the past. We may want also to consider what a working environment in ICT for these disciplines would look like in the future.

SUBJECT 3. THE PAST AND THE VIRTUAL REPRESENTATION OF OBJECTS AND EVENTS (21 APRIL)

This subject addresses the question of the virtual representation of historical objects, how best to record the various assumptions and circumstances that go into any virtual representation (e.g. the reconstruction of an object or the recreation of a historical event). These have recently been termed 'paradata'. In our first seminar, we shall investigate how ontologies of 'paradata' can help historians and archaeologists develop a reliable scholarly environment for virtual representation. The second seminar takes as its theme an even broader question – virtual representation and the historical and archaeological agenda. The objective of this seminar is to take a reality check on whether virtual representation is really helping us to answer major historical and archaeological questions. On the one hand, we may (ought) to be sceptical about the research conclusions reached through virtual representation to date. On the other hand, the benefits of being able to study certain kinds of objects, surviving in scattered locations, closely, bringing a variety of skills to bear on them, are clearly potentially very large. Beyond that, there are issues of funding and audience. So this seminar is also about present and future scholarly cost-benefit from research via these technologies.

19 APRIL 2006	SUBJECT 1 - THE PAST AND THE VIRTUAL REPRESENTATION OF PLACE AND TIME
09.30	**Introduction** (to conference and subject 1)
09.45	**Using GIS to Study Long-Term Population Change** *Ian Gregory, Queens University Belfast, Northern Ireland.*
10.15	**Which; What; When?** *Manfred Thaller, University of Cologne, Germany.*
10.45	*tea/coffee*
11.15	**Visualisation: Pretty pictures or enabling technologies** *Vince Gaffney, University of Birmingham, UK.*
11.45	**Spatial Technologies in Archaeology in the Twenty-First Century** *Paul Cripps, University of Southampton, UK.*
12.15	**Discussion** (to include 15 minute Rapporteur presentation by Kate Devlin, *University of Bristol, UK.*)
13.00	*buffet lunch*
19 APRIL 2006	SUBJECT 2 - THE PAST AND THE VIRTUAL REPRESENTATION OF TEXTS
	SESSION ONE
14.15	Introduction (to subject 2)
14.30	**Imaging of Historical Documents** *Andrew Prescott, University of Sheffield, UK.*
15.00	**Data, Structure and Analysis: XML mark-up and its application to historical data** *Donald Spaeth, University of Glasgow, Scotland.*
15.30	*tea/coffee*
16.00	**Historical Documents and Encoding** *Harold Short, King's College, London, UK.*
16.30	**Discussion** (to include 15 minute Rapporteur presentation)
17.30	**Close**
20 APRIL 2006	SESSION TWO
09.30	**Finding Needles in Haystacks: Data-mining in distributed historical data-sets** *Mark Greengrass and Fabio Ciravegna, University of Sheffield, UK.*
10.00	**Digital Searching and the Problem of the Ventriloquist's Dummy** *Tim Hitchcock, University of Hertfordshire, UK.*
10.30	*tea/coffee*
11.00	**Using Computer-Assisted Qualitative Data Analysis Software (CAQDAS) in Historical Research: Some methodological issues from the experience of the 'Health of the Cecils' Project** *Caroline Bowden, Royal Holloway, University of London, UK.*
11.30	**Discussion** (to include 15 minute Rapporteur presentation)
13.00	*Lunch*
	SESSION THREE [in ICoSS Access Grid Suite – to link with AAC conference]
14.30	**Shared Spaces: Library and archive metadata, encoded documents and research needs** *Susan Hockey, University College, London, UK.*
15.00	**Attempts to Construct a Common Platform for Archaeological Reports** *Julian D Richards, University of York, UK.*
15.30	**Crossing an 'Information Divide': The OASIS project and its use of XML schema** *Catherine Hardman, University of York, UK.*
16.00	**Discussion** (to include 15 minute Rapporteur presentation)

1700 - 17.30	*tea/coffee [in HRI]*
17.30	Close
19.00	Dinner for participants
21 APRIL 2006	**SUBJECT 3. THE PAST AND THE VIRTUAL REPRESENTATION OF OBJECTS AND EVENTS**
09.30	**Introduction** (to subject 3)
10.00	**Digital Artefacts: Possibilities and purpose** *David Arnold, University of Brighton, UK.*
10.30	**Oh, to make boards to speak! There is a task!" Towards a Poetics of Paradata** *Richard Beacham, King's College, London, UK*
11.00	*tea/coffee*
11.15	**Constructing a Corpus of Material Objects: The case of the *Corpus of Romanesque Sculpture in Britain and Ireland*** *Anna Bentkowska-Kafel, Courtauld Institute of Art, London, UK.*
11.45	**Virtual Restoration and Manuscript Archaeology: A case study** *Meg Twycross, University of Lancaster, UK.*
12.15	**Discussion** (to include 15 minute Rapporteur presentation by Matthew Woollard, *AHDS Data Archive, UK*) **and Close of Expert Seminar**
13.15	*Lunch and depart*