

e-Science at the Methods Network and AHDS

E-Science is well established in the physical and life science communities, having been served since 2000 by a national Core Programme (see <http://www.rcuk.ac.uk/escience>). The Core Programme defines e-Science as '[T]he large scale science that will increasingly be carried out through distributed global collaborations enabled by the Internet.'

This means using the large-scale computational power and capacity of the grid. Of primary interest to the arts and humanities communities is the data grid. This is use of internet infrastructure used for sharing complex and/or large amounts of information over the internet. The access grid, now present in some 35 UK institutions, provide connected AV meeting spaces which enable more powerful yet cheaper ways to collaborate and conduct visualised research. Arguably of lesser importance, yet with some potential applications, the computational grid provides a gateway to distributed high performance computing (HPC) for researchers with projects needing large amounts of processing power – multiple high-resolution image rendition for example, or streaming animations on the web.

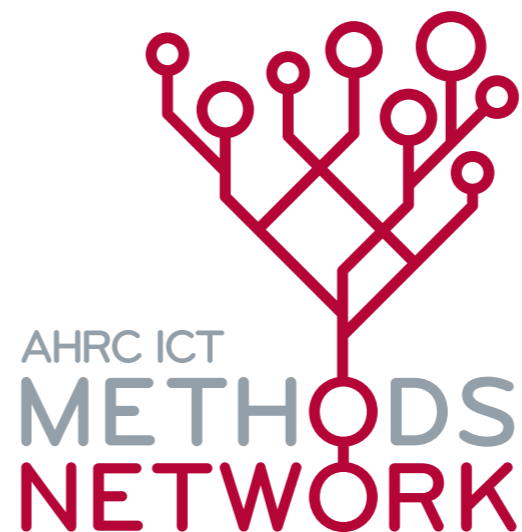
Although its implementation in the arts and humanities is at an early stage, e-Science promises immense possibilities for researchers in terms of how they manage and share their data, and how they collaborate with each other. Both aspects have profound implications within and between all the arts and humanities disciplines.

In January 2006, as part of the AHRC-JISC e-Science initiative, JISC established in an Arts and Humanities e-Science Support Centre (AHESSC), based at Kings

College, London, and directed jointly by the Arts and Humanities Data Service (AHDS) and the Methods Network. Both organizations have e-Science written into their existing programmes of activities. Neither organisation, however, is funded to provide direct support to arts and humanities scholars who wish to use e-Science tools and methods in their work.

AHESSC's mission is to coordinate and support these developments. Staffed by two full-time Research Associates, it will be the first port of call for arts and humanities researchers wanting to use e-Science now, and for those who wish to find out more about its possibilities. It will act as a 'dating agency' to match these academics with appropriate experts in computer science, and raise the profile of e-Science across all arts and humanities subject areas. The Centre will work closely with a number of key operations in the field - especially the AHDS e-Science Scoping Survey (see <http://ahds.ac.uk/e-science>) - to help track and map developments in the tools, technologies, and methods concerned; and to survey user needs for them. It will also host a number of activities and events targeted at various groups. In the coming months the Centre will identify, and work closely with, 'early adopters', especially those funded under the AHRC-JISC e-Science Initiative (see <http://www.ahrc.ac.uk/e-science>), promoting cross-fertilisation between research projects, and working with the investigators to disseminate their outcomes to the widest possible audience. In this way we hope to realise approaches to e-Science, which will reach new constituencies in the arts and humanities, and positively engage academics that would not otherwise use, or even encounter, the methods involved.

Further information about AHESSC is available at <http://www.ahessc.ac.uk>.



Newsletter

Spring 2006 - Issue 1

Welcome to the first issue of the AHRC ICT Methods Network Newsletter. We hope that this publication will compliment the activities and publications of the Methods Network, and provide an opportunity to showcase particular projects and events.

The Methods Network is a national initiative to promote, support and develop advanced ICT Methods in the arts and humanities, and to address the strategic issues that underpin the use of technology for research. The Methods Network will provide a forum for the exchange and dissemination of expertise, supporting the cross-disciplinary network of practitioners using ICT in arts and humanities research. The Methods Network is funded by the AHRC until March 2008. For more information, please see our website: www.methodsnetwork.ac.uk or contact any of our staff: methnet@kcl.ac.uk



Left to right, Network Administrative Centre staff:
Hazel Gardiner, Senior Project Officer, hazel.gardiner@kcl.ac.uk; **Stuart Dunn**, Research Associate - AHESSC, stuart.dunn@kcl.ac.uk;
Lorna Hughes, Manager, lorna.hughes@kcl.ac.uk; **Neil Grindley**, Senior Project Officer, neil.grindley@kcl.ac.uk;
Lorna Gibson, Publications and Administrative Officer, lorna.gibson@kcl.ac.uk.

Structure of the Network

The AHRC ICT Methods Network is co-directed by Harold Short, Director of the Centre for Computing in the Humanities (CCH), King's College London, and Marilyn Deegan (Director of Research Development, CCH). To ensure broad discipline coverage, the Network presently has three senior academics as Associate Directors: Mark Greengrass (Executive Director of the Humanities Research Institute, University of Sheffield), Sandra Kemp (Director of Research at the Royal College of Art), and Andrew Wathey (Vice-Principal at Royal Holloway, University of London). The Methods Network's Administrative Centre is based in CCH at King's College London.

Activities and Publications

All Methods Network activities and publications are co-ordinated by the Network Administrative Centre, which is based in CCH at King's College, London. The Methods Network runs a series of activities which are intended to promote and support ICT methods in the arts and humanities.

Core activities are organized by the Methods Network Partners and Network Administrative Centre staff. These include Expert Seminars, Workgroups, and workshops. Topics for upcoming Expert Seminars include: Modern Methods in Musicology; Text Editing in a Digital Environment; and Virtual History and Archaeology. Reports and materials from these events will be available on the Methods Network website, and proceedings will also be published.

The Methods Network also has funding available for a number of distributed activities, including Workshops, conferences, meetings and publications. These can be organized by other centres of expertise and practitioners around the community. There is an open call for proposals, available at the following URL:

<http://www.methodsnetwork.ac.uk/activities/act.html>

The deadline for applications is the end of June and December every year.

So far, funding has been awarded to the following activities:

Lou Burnard, Sebastian Rahtz and James Cummings, Oxford University: Development of Skills in Advanced Text Encoding with TEI P5.

Julia Craig-McFeely: Digital Restoration for Damaged Documents.

Martin Wynne, Oxford University: Corpus Approaches to the Language of Literature.

Anna Bentkowska-Kafel, Courtauld Institute of Art: Technical Innovation in Art Historical Research: Opportunities and Problems.

The Methods Network will also be jointly hosting a Symposium with the King's Visualisation Lab and EPOCH entitled "Making 3D Visual Research Outcomes Transparent", and a Workshop with the LAIRAH project at UCL, "Digital Visibility: a workshop on neglected digital resources".

Conference Bursaries

Each year, the Methods Network sponsors a number of bursary places for postgraduate students who wish to attend key conferences on Arts and Humanities Computing, including CHArt (Computers and the History of Art) and DRHA (Digital Resources in the Arts and Humanities). Please see our website for details of how to apply:

<http://www.methodsnetwork.ac.uk/community/community.html>

Methods Network Roadshow

We are currently scheduling presentations and meetings with individuals, organisations and groups that have an interest in engaging with ICT based methods for arts and humanities research. The purpose of these events is to elaborate on the objectives of the Methods Network and to setup a collaborative dialogue with practitioners at all levels. If you would like to arrange for the Methods Network team to visit your institution, please email Neil.Grindley@kcl.ac.uk

Word Frequency and Keyword Extraction

AHRC ICT Methods Network Expert Seminar on Linguistics,

Lancaster University, 8 September 2005

The first Methods Network Expert Seminar, Word Frequency and Keyword Extraction was organised and chaired by Professor Tony McEnery, then Methods Network Associate Director representing Linguistics (Professor McEnery is now Director of Research for the AHRC). The Seminar was a one-day event with eight speakers, a small invited audience, and a Rapporteur.

The applicability of corpus linguistics to the arts and humanities as a whole was a thread that ran through the whole event, and the papers themselves extended across a number of disciplines, including Literature, Politics and Media Studies. Themes explored included: the effectiveness and scope of current word frequency studies and their contribution to linguistic theory; problems faced when analysing historical data where variable spellings are common; problems of applying keyword analysis to small bodies of material; and a study of keyword analysis in political discourse, and also in literature. The influence that e-Science might have in the fields of corpus linguistics and keyword extraction was speculated upon in the discussions following the

seminar and the value of Corpus Linguistics to the non-academic community – in areas such as business and defence, was also considered.

The Linguistics Expert Seminar amply demonstrated the effectiveness of providing a dedicated forum for academics employing advanced ICT methods in research. This highly-focused event generated enthusiastic discussion during and following the seminar, and the exchange continues. Some of the more immediate results have emerged as proposals for further Methods Network activities. The production of an 'advanced methods' guide, developed from the Expert Seminar, and incorporating all the papers given, is currently under way. This publication will be the first of a series of such guides, aimed at the arts and humanities community as a whole, which will be published by the Methods Network.

The Programme, Abstracts and Rapporteur's report are available on the Methods Network website on <http://www.methodsnetwork.ac.uk/activities/programmes.html>



Christian Kay (University of Glasgow, Scotland), paper entitled 'Issues for Historical Corpora: First catch your word', AHRC ICT Methods Network Expert Seminar on Linguistics.



John M. Kirk (Queen's University Belfast, Northern Ireland), paper entitled 'Word Frequency: Use or misuse?', AHRC ICT Methods Network Expert Seminar on Linguistics.