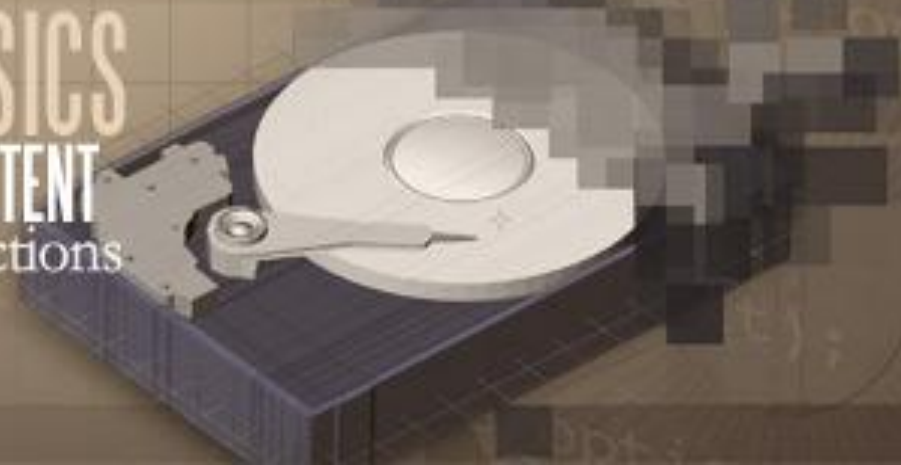


COMPUTER FORENSICS & BORN DIGITAL CONTENT

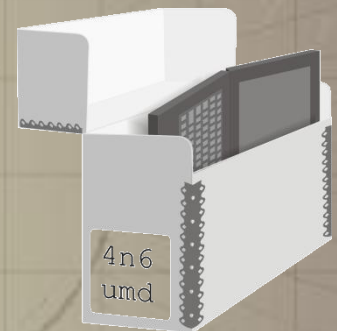
in Cultural Heritage Collections



A CLIR Report (late 2010)

by Matthew Kirschenbaum, Richard Ovenden,
Gabriela Redwine, Rachel Donahue

sponsored by the
Andrew W. Mellon Foundation



Authors



- Matthew Kirschenbaum
 - Associate Professor of English and Associate Director, Maryland Institute for Technology in the Humanities, University of Maryland



- Richard Ovenden
 - Associate Director, Bodleian Library, Oxford



- Gabriela Redwine
 - Archivist and Electronic Records Specialist, Harry Ransom Center, The University of Texas at Austin



- Rachel Donahue (Research Assistance)
 - Doctoral Candidate, University of Maryland College of Information Studies

Consultants



- Luciana Duranti
 - Professor, School of Library, Archival and Information Studies, University of British Columbia
- Bradley Glisson
 - Director and Lecturer, Computer Forensics and e-Discovery, Humanities Advanced Technology and Information Institute, University of Glasgow
- Cal Lee
 - Assistant Professor, School of Information and Library Science, University of North Carolina, Chapel Hill
- Rob Maxwell
 - Lead Incident Handler, Office of Information Technology and Founder, Digital Forensic Lab, University of Maryland
- Doug Reside
 - Associate Director, Maryland Institute for Technology in the Humanities
- Susan Thomas
 - Digital Archivist, Bodleian Library, Oxford



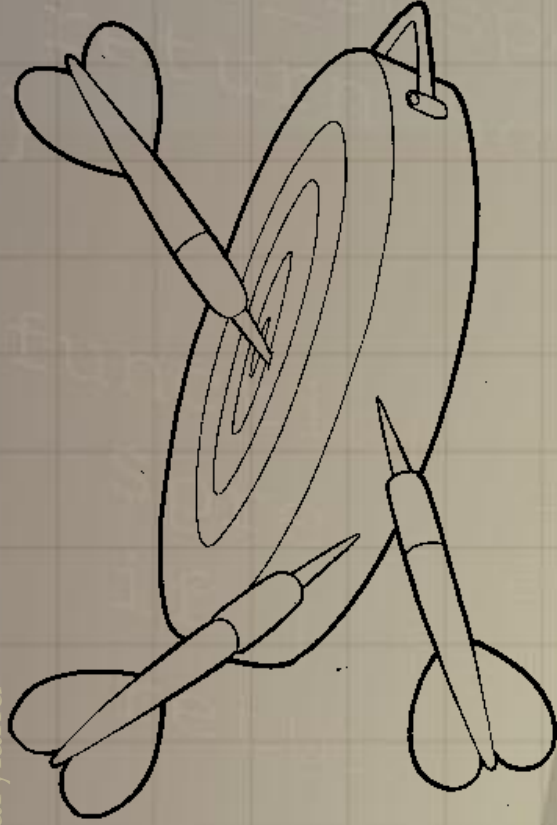
Timeline for Report

- Proposed to Mellon early 2009
 - Funded July 2009
- Research and Writing through April 2010
- Symposium May 2010
- Revisions June-August 2010
- Submission to CLIR August 2010
- Publication late 2010



Audience

- ❖ Archives and Cultural Heritage Professionals
- ❖ Technical Forensics
- ❖ Textual Scholars
- ❖ Funders



Purpose

- Introduce Computer Forensics to Cultural Heritage Community
- Identify Points of Convergence
- Create Basis for Further Contact and Collaboration

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InterPARES Project

International Research on Permanent Authentic Records in Electronic Systems



project overview

[Welcome message from Project Director, Dr. Luciana Duranti](#)

The **International Research on Permanent Authentic Records in Electronic Systems (InterPARES)** aims at developing the knowledge essential to the long-term preservation of authentic records created and/or maintained in digital form and providing the basis for standards, policies, strategies and plans of action capable of ensuring the longevity of such material and the ability of its users to trust its authenticity. InterPARES has developed in three phases:



IP2 book now available:
[Print version](#)
[Online version](#)

InterPARES 1 was initiated in 1999 and concluded in 2001. It focused on the development of theory and methods ensuring the preservation of the authenticity of records created and/or maintained in databases and document management systems in the course of administrative

InterPARES 2 was initiated in 2002 and concluded in 2007. In addition to dealing with issues of authenticity, it delved into the issues of reliability and accuracy during the entire lifecycle of records, from creation to permanent preservation. It focused on records produced in complex digital environments in the course of artistic, scientific and

InterPARES 3 was initiated in 2007 and will continue through 2012. This third phase of the Project builds upon the findings of InterPARES 1 and 2, as well as of other digital preservation projects worldwide. It will put theory into practice, working with small and medium-sized archives and archival / records units within organizations, and develop teaching modules for in-house training programs, continuing education and

s t u d i e s

Digital Archaeology: Rescuing Neglected and Damaged Data Resources

A JISC/NPO Study
within the
Electronic Libraries (eLib) Programme
on the Preservation
of Electronic Materials

February 1999

Seamus Ross and Ann Gow

Humanities Advanced Technology
and Information Institute (HATII)
University of Glasgow
<http://www.hatii.arts.gla.ac.uk/>

PARADIGM

Welcome to paradigm

The **Personal Archives Accessible in Digital Media** (paradigm) project saw the major research libraries of the Universities of **Oxford** and **Manchester** come together to explore the issues involved in preserving digital private papers through gaining practical experience in accessioning and ingesting digital private papers into digital repositories, and processing these in line with archival and digital preservation requirements.

The project was funded between 2005 and 2007, under the JISC's programme "**Supporting Institutional Digital Preservation and Asset Management**".

Project outcomes

The project outcomes included:

- A template for ensuring long-term access for institutional holdings of digital personal papers
- Best-practice guidelines in the form of a **workbook** on issues relating to the archiving of personal papers in digital form, made available in sections as they are completed
- Strengthened local institutional capacity for digital preservation
- Developed templates for institutional policies for collection development, retention, and disposal
- Practical test of digital repository softwares **DSpace** and **Fedora** and related tools
- Research resources for 20th century political history in the form of new archival collections

Visit the **About** section to find out more.

[\[Top\]](#)

What's new?



Building on Paradigm

futureArch is a major project to develop production-level services for hybrid archives at the Bodleian. The project has a **blog** for those interested in the work.

The Paradigm Workbook is now available in hard copy - please contact susa...@bodley.ox.ac.uk to request a free copy.

Paradigm nominated for The 2007 Conservation Awards - Digital Preservation Award - the Paradigm project is among five international **projects short-listed for the award**, which is sponsored by the Digital Preservation Coalition. The winners of the Conservation Awards 2007 will be announced at the British Museum on 27 September.

DIGITAL LIVES RESEARCH PROJECT

In partnership with



Funded by

Arts & Humanities
Research Council[Home](#) > [Digital Lives](#)

Digital Lives Research Project

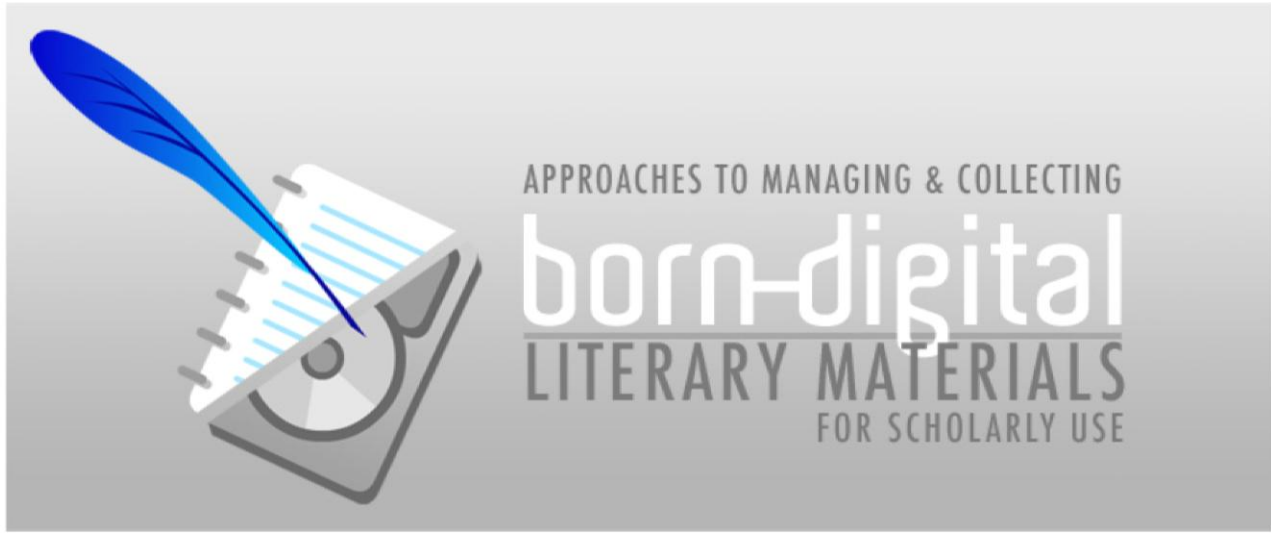


The Digital Lives Research Project is designed to provide a major pathfinding study of personal digital collections. The project team drawn from the British Library, University College London and University of Bristol is led by Dr Jeremy Leighton John of the British Library (the lead partner) and funded by the Arts and Humanities Research Council (AHRC).

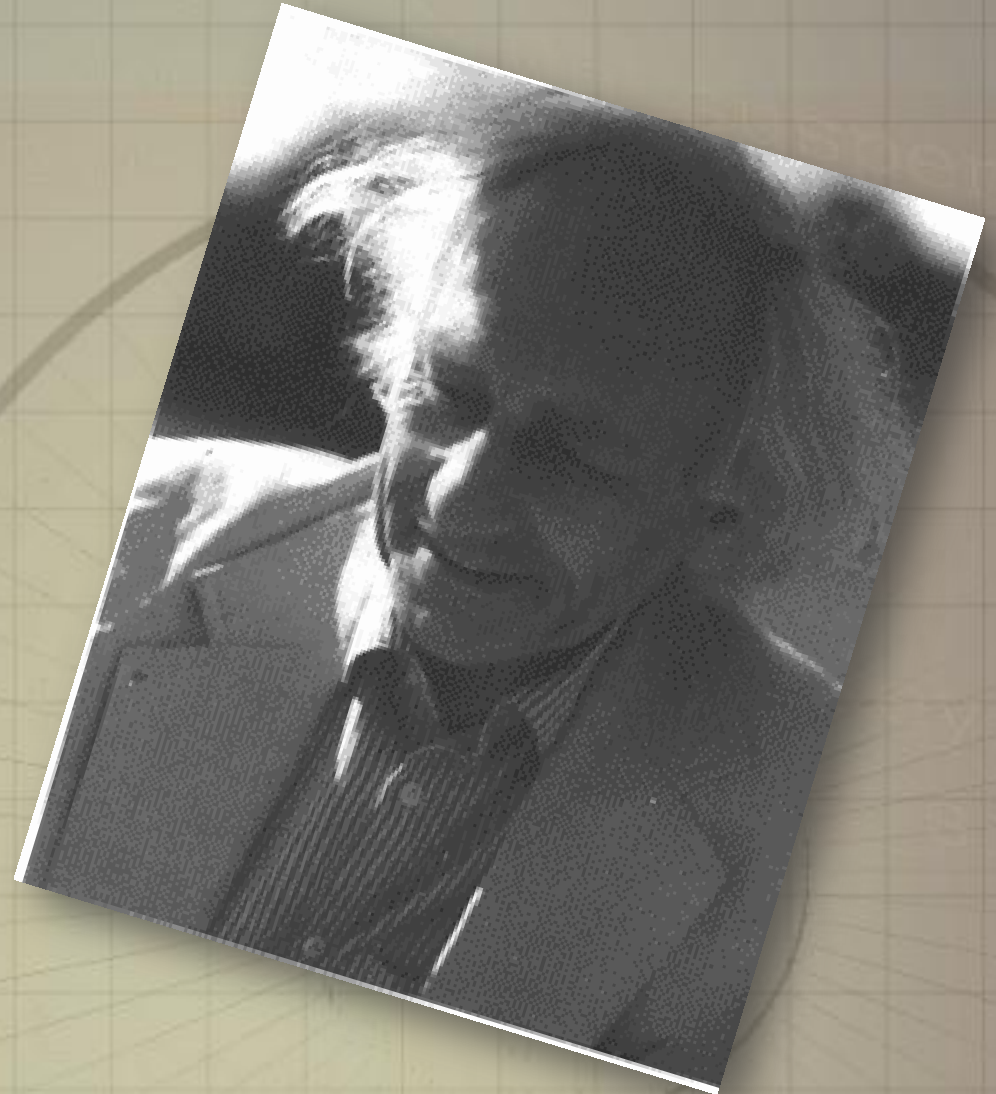
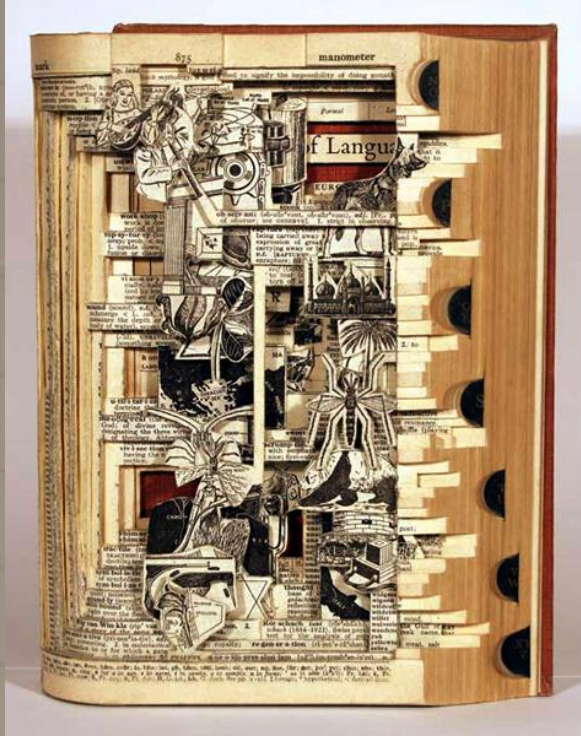
The research for Digital Lives commenced in September 2007 and will run until March 2009, with dissemination continuing until June 2009. We expect outcomes from our research to generate significant interest within arts and humanities, and the archives, library and information science professions as well as social and human sciences. It will also be of direct relevance to individuals who wish to manage their own personal digital collections for

Sections:

- [Main](#)
- [About Digital Lives](#)
- [First Digital Lives Research Conference](#)
- [Research Partners and Project Team](#)
- [Publications](#)
- [Team blog](#)



D. F. McKenzie



Edmond Locard



Computer Forensics Overview

- File System Forensics
- Network Forensics
- Incident Response
- Intrusion Detection
- Web Forensics
- Mobile Forensics



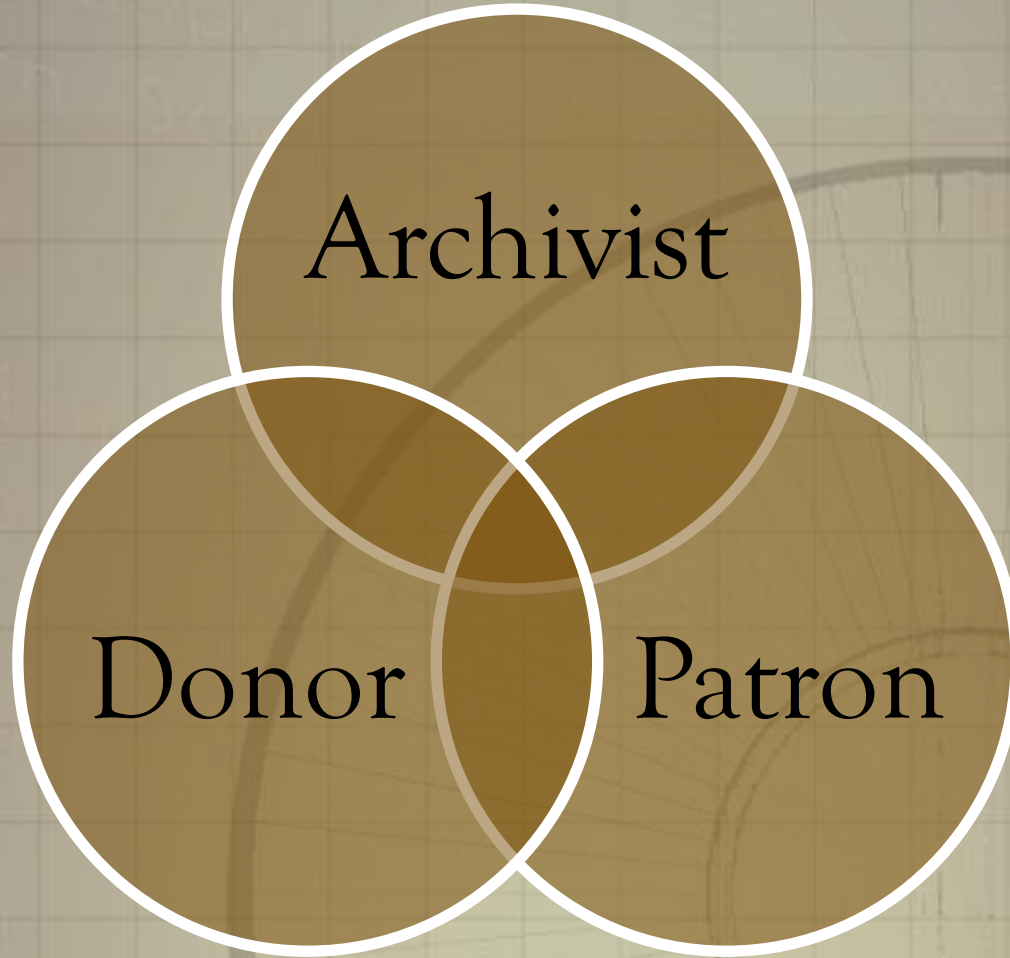
```

for m1 = 1,M do begin
  for m2 = 1,M do begin
    for u1 = u_min,u_max do begin
      for u2 = u_min,u_max do begin
        if u1 gt u2 then begin
          for v1 = v_min,v_max do begin
            if v1 lt u1 then begin
              for v2 = v_min,v_max do begin
                if v2 ge v1 then begin
                  KE_B = double(m1*u1^2+m2*u2^2)
                  KE_A = double(m1*v1^2+m2*v2^2)
                  if (KE_B gt KE_A) and (KE_A ge 0.965*KE_B) then begin
                    x_axis[index]=index
                    LM_B = double(m1*u1+m2*u2)
                    LM_A = double(m1*v1+m2*v2)
                    y_LM_Diffs[index]=LM_B-LM_A
                    Total_LM=Total_LM+LM_B-LM_A
                    y_LM_Total[index]=double(Total_LM/(index+1))
                    index=index+1
                    if index gt 65535 then goto, end_of_loop
                  endif
                endif
              endfor
            endif
          endfor
        endif
      endfor
    endfor
  endfor
endfor
endfor
endfor
endfor

```



Stakeholders for Forensic Work



Vintage Computer Forensics



Access



Ethics

