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# Deconstructing Digital Libraries

Neil Jefferies

R&D Project Manager

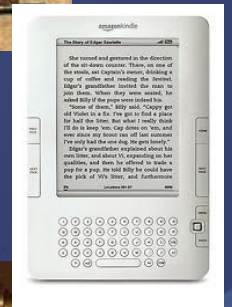
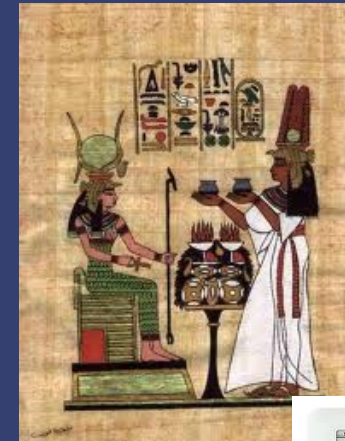
~~Systems & eResearch Service (SERS), Bodleian Libraries,~~  
Bodleian Digital Library Systems & Services,  
Oxford University

# Introduction to SERS

- The Bodleian Library
- ~30 “Bodleian” libraries
- ~30 other libraries
- 46 college libraries
- And a few others!
- 750 Staff
- £25M budget
- 11 million items
- 156 shelf miles (250 km)
- SERS provides all electronic services

# Why do (Research) Libraries Exist?

- What are the salient features of the content?
  - Tablets? Scrolls? Books? Journals? Images?
  - Data? Facts? Understanding? Information?
  - Ideas and the development of ideas
    - The artefacts of “intellectual discourse”
- Libraries are not just archives or museums
  - Assumptions about discovery, access, reach and accessibility
  - Low latency access essential
- History
  - Content generator as well as repository
  - Gap between librarians and academics



# Changing nature of intellectual discourse

- Artefacts of discourse are changing...quickly
  - Books, letters, papers, websites, social media, linked-data
- Reduced turnaround times
  - Desire for currency of content shortens publication cycle
- Rise of interdisciplinary projects
  - Reduce silo-ization
  - Broad discovery and linking
  - What about “subject specialists”
- Rise of collaborative projects
  - Reach, interoperability and openness
  - Cash

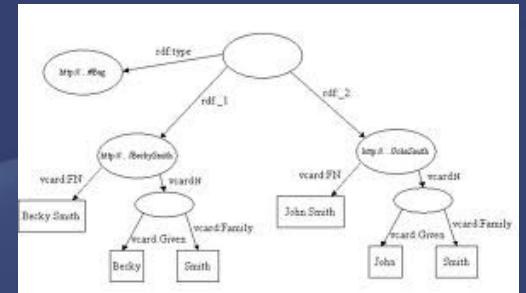


# Shift of emphasis in outputs

- Shift to born-digital content
  - and digital surrogates of existing material
- Publication not necessarily the primary outcome
  - Creation of (online) resources
    - Data/information unpackaged, linked, diverse format
  - Creation of communities
    - Dynamic and ephemeral content
  - Concept of “impact”
    - How is this measured?
- There is no “thing” that can be deposited

# Impact of technology

- Internet technologies and standards encroach on many traditional library and academic areas
  - Often more pragmatic, better tested and better supported
  - Open Source and Open Standards
- RDF, Semantic Web and linked data
  - Access/reuse of content is a key value proposition
  - Flexibility and extensibility are very useful features
- Decreasing unit costs of processing and storage
  - Balance between capacity to create and capacity to preserve
- The internet achieves a high rate of change
  - With engagement by users





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# Implications for Libraries

...how to maintain our role as information custodians in this changing environment...

# Proactive approach to content

- Involvement early in the content creation cycle
  - Proposal or bid stage – talk to academics
  - Ensure content creators are aware of the issues
    - Cost visibility
- Embed standards and preservation at the outset
  - Preservation and curation after the event is not cost effective
  - Endowment model for preservation
  - Metadata from the source rather than cataloguers (!)
- Dynamic resources need hosting rather than archiving
  - Store knowledge directly
  - Proximity of sources, Virtual Research Environment, publication
  - Versioning captures valuable process information



# Catalogue 2.0

- Objects have a context from which much of their meaning is derived
  - Include context objects representing people, places, events etc.
  - Catalogues become contextual skeletons fleshed-out by “traditional” digital objects
  - Authority lists become prosopographical and biographical resources
  - Geopolitical and temporal information
  - Aggregations become a key structural element
  - Should reflect actual knowledge – conflict with cataloguing practice!
- Annotations and files can be attached to any object
  - Context objects hold content...what is the difference?
- Objects are not static – preservation challenge...and benefit!



### Agents (Who)

Organisation

Person

### Location (Where)

Physical

Geopolitics

### Object (What)

Work

Manifestation

Collection

### Event Streams (When)

Organisational History

Membership/Projects/Activities

Biography/Geneology

Prosopography

Territorial Sucession

Historical Events

History/Provenence of Physical Object

History/Provenence of Digital Object

PREMIS Preservation/System Log

Scheduled Events (reviews etc)

Annotations

OpenOrg

ARPFO

FOAF

UNFAO

MODS/DCterms

# Some projects...

- Cultures of Knowledge ([www.history.ox.ac.uk/cofk](http://www.history.ox.ac.uk/cofk))
  - 17C correspondence network
- IMPaCT – 13-16C Persian codices (uses CofK model)
- Fihrist ([www.fihrist.org.uk](http://www.fihrist.org.uk))
  - Oxford/Cambridge Islamic Manuscripts Online
  - → JISC Islamic Manuscript Gateway
- Google Books
- [digital.bodleian.ox.ac.uk](http://digital.bodleian.ox.ac.uk) (old and new digital collections)
- [vocab.ox.ac.uk](http://vocab.ox.ac.uk) – vocabularies and ontologies in use
- [ora.bodleian.ox.ac.uk](http://ora.bodleian.ox.ac.uk) – institutional repository
- DMSTech and Open Annotation Collaboration

**Fihrist**  
Oxford and Cambridge Islamic Manuscripts Catalogue Online

Home Browse Search About Help

**Person**  
12 works held

**Details**  
Gagnier, Jean, 1670?-1740. Gagnier, John, 1670-1740 Gagnier, Jean, 1670?-1740. Gagnier, Jean, 1670-1740 Gagnier, Jean, 1670?-1740. Lived from 1670 to 1740, Gregorian calendar (70 years)

**Author of:**

- Collectanea geographica\* (MS. Bodl. Or. 319)
- Excerpts\* transcribed by Gagnier from Arabic and Persian geographical MSS with notes by him. (MS. Bodl. Or. 306)
- Collectanea geographica\* (MS. Bodl. Or. 304)
- A volume of extracts and notes\*, chiefly transcribed from Arabic historical MSS. (MS. Bodl. Or. 319)
- An alphabetical index in Latin of names of places, authors and books mentioned in the works of Abū al-Fidā', with latitude and longitude of places drawn from Siphāhizādah and Marsh 596). (MS. Bodl. Or. 309)
- Transcript of excerpts from Bodleian Arabic MSS. dealing with history. (MS. Bodl. Or. 306)
- A list of the cities of the world according to the seven climes (MS. Bodl. Or. 306)

**Welcome - Mozilla Firefox**

http://www.openannotation.org/

**Open Annotation Collaboration**

Welcome Phase II OAC Data Model Community & Resources Phase I [ended]

**Main Menu**

- OAC Web
  - Welcome
  - About Open Annotation
  - OAC Phase II Workshop
  - Alpha3 Data Model
  - The Collaboration
  - Interoperability - Guiding Principles
  - OAC Discussion List on Google Groups
- OAC Wiki
  - Wiki Home
  - Workshop Use Cases
  - User Narratives
  - Annotation Definitions
  - Known Annotations
  - Request an OAC
  - Join the OAC List (coming soon)

**Welcome**

Annotating is a pervasive element of scholarly practice for both the humanist and the scientist. Over time annotations can have scholarly value in their own right. The importance of annotating as a scholarly practice coupled with the real-world limitations of existing practices and tools supporting annotation of digital content has had a retarding effect on the growth of digital scholarship and the level of digital resource use by scholars.

The overarching goals of the Open Annotation Collaboration (OAC) are to facilitate the emergence of a Web and resource-centric interoperable annotation environment that allows leveraging annotations across the boundaries annotation clients, annotation servers, and

**Recent Presentations**

CNI Fall 2010 Presentation

**vocab.ox - Vocabularies - Mozilla Firefox**

http://vocab.ox.ac.uk/vocabs

University of Oxford Vocabularies

home browse publish about contact help

Google Custom Search Search

Vocabularies created at Oxford

| Vocabulary  | Creator       | Owner  | Files  |
|---|---------------|--|--|
| <a href="#">displayEnergyCertificate</a>  |               | • Alexander Cutton                             | • <a href="#">displayEnergyCertificate.ttl</a>   |
| <a href="#">lei</a>   |               | • <a href="#">vocab.ox.ac.uk Administrator</a> | • <a href="#">researchers.html</a> (text/html)<br>• <a href="#">researchers.rdf</a> (application/rdf+xml)  |
| <a href="#">Academic Research Project Funding Ontology (ARPF0) (projectfunding)</a><br>2008-10-06 | • Ben O'Steen | • <a href="#">vocab.ox.ac.uk Administrator</a> | • <a href="#">index.html</a> (text/html)<br>• <a href="#">projectfunding-0.1.rdf</a> (application/rdf+xml) |
| <a href="#">Ontology for modelling metering (meter)</a>   |               | • Alexander Cutton                             | • <a href="#">metering.rdf</a> (application/rdf+xml)   |

**Digital Collections from the Bodleian Libraries - Mozilla Firefox**

http://digital.bodleian.ox.ac.uk/

Digital Collections from the Bodleian Libraries

Bodleian Library

Digital Collections

Digitized images from the Bodleian Libraries Special Collections

Search all items  Go [More Search Options](#)

Subject Categories:

All

Blockbooks and woodcut prints



Early Printing in Europe



Greek manuscripts



Masterpieces of the non-Western book





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# Questions

Neil Jefferies

[neil.jefferies@bodleian.ox.ac.uk](mailto:neil.jefferies@bodleian.ox.ac.uk)