Collaboration Success in the Dataverse: Libraries as Digital Humanities research partners

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35th IATUL Conference “Measures for Success: Library Resources and Effectiveness under Scrutiny”.
Aalto University, Espoo, Finland 2-5 June 2014
Collaboration Success in the Dataverse: Libraries as Digital Humanities research partners. Owen, Verhoeven, Horn, Robertson.
Deakin University, at 40 ...

... Driving the digital frontier

... Globally connected

... Entrepreneurial

... Innovation and collaboration are core business

The Library is valued as a research partner
Shared philosophy of libraries and the academy

**We Value**

... citizens’ right to access information

... infrastructure and systems - openly accessible, built collaboratively, assuring preservation

**We Understand**

... new linkages can occur serendipitously, connecting previously ‘disparate’ knowledge

... digital tools and e-infrastructure enable discovery in previously unimaginable avenues of research
Humanities computing - 1946

Padre Roberto Busa
1913 - 2011

Index Thomisticus
Taking stock of Digital Humanities in 2008

DH in progressive Humanities Faculties ... University of Virginia

DH featured on the 29th IATUL Conference Agenda

DH Centres surveyed
- Extent
- Structure
- Sustainability

Australian Academy of The Humanities → University Libraries allies in transforming collaborative research infrastructure

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Deakin University CRICOS Provider Code: 00113B
Digital Humanities in 2014

The contribution of Research Libraries

a) Research Data mining, curation and discovery for complex research projects

b) Linked Data asserting connections through triples: subject predicate object

c) Open Linked Data second LODLAM summit – breaching the divide between traditional ‘schema’ thinking and LOD opportunities (Weinberger, 2013)

d) International and Australian exemplars
Digital Humanities in 2014

International and Institutional Programs: US, UK, Europe and Australia

- Europeana
- Dariah
- Digital Humanities Network (Cambridge)
- Digital Humanities @ Oxford
- Digital Humanities, Kings College London
- University of Virginia Library Scholars Lab
- Harvard Library Innovation Lab
- University of South Carolina Centre for DH, Div of Libraries
Digital Humanities in 2014

Australian programs, large and small

• Trove, National Library of Australia – over 374 million resources located in the deep web

• Victoria Parliamentary Library – open linked data enhancing parliamentary research services

• Australian Broadcasting Commission ABC Science website – video, audio, images, news

• HuNI – first national cross-disciplinary virtual laboratory for the Humanities
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What's inside?
HuNI combines data from many Australian cultural websites into the biggest humanities and creative arts database ever assembled in Australia. HuNI data covers all disciplines and brings together information about the people, works, events, organisations and places that make up the country's rich cultural landscape.

What can I do with the HuNI data?
You can search and browse the HuNI data and build your own private or shared virtual collections of HuNI records; make new connections between HuNI records and follow existing trails; and then export, publish and share your findings. You can even publish your own data into HuNI.

SEARCH HUNI
Try searching ‘Mary Hobbs’, ‘Western Desert Art’ or ‘Eureka Stockade’
Advanced Search

BROWSE RECORDS BY CATEGORY
- Concept
- Event
- Organisation
- Person
- Place
- Work
Building a new **national data service** that is of cultural significance and widely accessible, now and in the future

The HuNI project is:

• Integrating cultural data at a national level

• Making this new data service accessible to all

• Making steps towards connecting to the Linked Data Cloud

• Laying the foundations for future growth
What is HuNI data?

Drivers for the HuNI Data Model:

- 29 Input data sources covering history, science, literature, stage, media, circus, social history, linguistics, performing arts and visual arts
- Technical and pragmatic considerations: response speeds, ease of use for constructing queries, etc
- Users’ research needs: what research questions users are trying to investigate? What needs to be able to be queried? Eg “women writers writing about the bush in the 1950s”

HuNI Data Model

Concept | Event | Organisation | Person | Place | Work
What is HuNI data?

The HuNI Data Model is designed around 6 core entities:

<table>
<thead>
<tr>
<th>Entity</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>PERSON</td>
<td>A natural person</td>
</tr>
<tr>
<td>ORGANISATION</td>
<td>A company, club, trust, gallery, political party, etc</td>
</tr>
<tr>
<td>WORK</td>
<td>A cultural artefact or some other manmade thing created by someone, that has some existence in its own right, either physical or digital</td>
</tr>
<tr>
<td>PLACE</td>
<td>A real, spatial location</td>
</tr>
<tr>
<td>EVENT</td>
<td>An activity that occurs in space and time and may involve people, organisations, places, works, etc</td>
</tr>
<tr>
<td>CONCEPT</td>
<td>Something whose existence is primarily mental</td>
</tr>
</tbody>
</table>

Each HuNI record is one of the six core types above. See [http://wiki.huni.net.au/display/DS/Data+Model](http://wiki.huni.net.au/display/DS/Data+Model)
What is HuNI data?

There are also two entities to support users:

| USER PROFILE | Details of a person using the HuNI system including their name, research institution, research interests, etc |
| USER COLLECTION | Collections of HuNI entities created by the user. These can be annotated by the user. They can be private, shared with collaborators, or “published” i.e. publicly visible. |

The core HuNI entities may have multiple kinds of relationships connecting them, shown as a network.

These connections may be uncertain, and users will be able to agree or disagree with them to strengthen or weaken the connection as shown visually in the graph.
HuNI ontology

The HuNI Data Model will be available as an RDF Ontology, based on the core entity types, their properties and relationships.

HuNI data can be published as RDF triples and therefore as Linked Open Data.

Above example shows FOAF ontology rendered in Visual OWL (VOWL)
http://vowl.visualdataweb.org/v1/FOAF_concept_view.png
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What can I do with the HuNI virtual laboratory?

• **Browse** the HuNI data aggregate using the six main entity types;

• **Search** the HuNI data aggregate and filter search results according to entity type and/or source dataset;

• **Create personal collections** by saving selected items from my browsing and searching activities;

• **Find collections** which have been created and published by other HuNI users

• **Create links** between HuNI records;

• **Find links** which have been added and published by other HuNI users;

• **View and navigate the network graph** composed of links between related records
Working with HuNI collections

• Publish my collections to HuNI, so that they can be discoverable by others;

• Share and promote my collections, via various social media platforms;

• Export my collections (e.g., as a .csv file) into another software environment for further analysis;

• Invite other HuNI users to co-own a collection, turning it from a personal to a shared research project;

• Discover collections published by other HuNI users and contact researchers working in similar areas of interest
Working with links between HuNI records

• Select records from the HuNI data aggregate;
• Define the nature of the relationship between them;
• Add a statement about the origin and significance of the relationship;
• Manage and edit the links I’ve created;
• Discover links created by other HuNI users and contact researchers working on similar areas of interest
• View and navigate the network graph for a record and see the growing “social ecosystem” within the HuNI data aggregate
Challenges for library involvement in the Digital Humanities

- Provision of ongoing maintenance and tech services to support a valuable data aggregate, within the existing University infrastructure
- New Library staff capability, required to fulfil governance models
- Assuring sustainability of e-research infrastructure
- Scoping of future plans requires alternative pathways. Realising plans is often opportunistic, looking to funding sources and institutional strategic agendas
Library futures

- Building our library capability and knowledge in:
  - Humanities Research Process
  - Preferences and thought processes underpinning humanities research methods

- Addressing the broader professional question:
  - future of discovery, future of collections, and the future of libraries as we know them...
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Follow our progress

**Project wiki**
wiki.huni.net.au

**HuNI website**
huni.net.au

**HuNI lab beta**
staging.huni.net.au