

# Heritage Connector and Digital Humanities

Jane Winters, School of Advanced Study, University of London





Digital Humanities Research Hub, SAS

- An inclusive understanding of digital humanities, which involves learning from digital research practices that may fall under other names or disciplinary identities
- Practical, responsible and ethical openness
- Commitment to exploring and demonstrating the value of digital cultural heritage
- Working as far as possible with responsible and low-impact technology



Collaboration & conversation

- The importance of different skillsets and perspectives: cultural heritage, digital humanities, data science, history, research software engineering, and more ...
- Building on long-term partnerships, which helps to establish a common language and shared understandings
- The 'translating' or 'bridging' role of digital humanities in complex digital projects
- The value of conversation both within and outside the team for generating ideas
- Opportunities for formal and informal knowledge exchange, including hackathons and workshops
- Co-creation of knowledge and outputs, recognising all contributions

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Heritage connector: A machine learning framework for building linked open data from museum collections Kalyan Dutia 🕵 John Stack 🕿	Figures References Related Information		
First published: 03 May 2021   https://doi.org/10.1002/ail2.23 Funding information: Arts and Humanities Research Council	Recommended Sale of Harvard Peabody Museum Collections		
E SECTIONS TOOLS SHARE	Council for Museum Anthropology newsletter		
As with almost all data, museum collection catalogues are largely unstructured, variable in consistency and overwhelmingly composed of thin records. The form of these catalogues means that the potential for new forms of research, access and scholarly enquiry that range across multiple collections and related datasets remains dormant. In the project <i>Heritage Connector: Transforming text into data to extract meaning and make</i> <i>connections</i> , we are applying a battery of digital techniques to connect similar, identical and related objects within and across collections and other publications. In this article, we describe a framework to create a Linked Open Data knowledge graph from digital	Museum Archaeology and the Mediterranean Cultural Heritage Robin Skeates The Archaeology of Mediterranean Prehistory, [1]		



## HISTORY, AI AND KNOWLEDGE GRAPHS

17 March 2021

A conversation between Tim Boon and Kalyan Dutia

Tim: Let's start by explaining why we're here and who we are. The Science Museum Group has a current research project, <u>Heritage Connector</u>, which is bringing the power of modern computing to address some long-standing issues to do with how we record information about the objects in our



## Experimentation

- Flexible, iterative ways of working in support of agreed high-level aims and objectives
- Encouraging a 'playful' approach to working with data
- Acknowledging that both positive and negative results are useful project findings, e.g. the value of identifying that a particular approach or tool isn't suitable
- The idea of a minimum viable product (hat tip to Living with Machines!) – this dataset or tool may not be perfect but is it 'good enough' to release publicly?
- Being explicit about experimentation so that expectations can be managed





### Mapping locations

Creating Google maps from places found in the Science Museum Group collection.

As part of the Heritage This is an experiment	tal interface design	ed to let you explor	e the connections in	this knowledge gri	sph, in a way that fee	is familiar.
project website tf   bi	tog til i github til					
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or enter a U This URL can be f	IRL from the Science Mu processed our last	seum Group's criline batch of data in 202	collections cf, blog cf 9).	t or academic journ	al t), or from some se	lect categories

### Metadata explorer

An interface for guided exploration of the Heritage Connector knowledge graph.

### Visualisation

View a map of a knowledge graph containing the Science Museum Group's collection, blog and journal.

### Visualisation - multiple collections

View a map of a knowledge graph containing the Science Museum Group's collection, blog and journal, and part of the V&A's collection.







## Openness

- Embracing radical openness, from project inception to the publication of final outputs
- The project methods and the thinking of the project team are documented on the Heritage Connector blog
- Various means of sharing data/code and exchanging knowledge: YouTube channel, public Zotero library, GitHub repository, publicly accessible demonstrators
- Commitment to open access publication wherever possible, with the most permissive licensing allowable
- Acknowledging that this sometimes means loss of control
- Provision of FAIR data Findable, Accessible, Interoperable and Reusable



### Context

- The project used data from three institutions/sources the Science Museum Group, the Victoria & Albert Museum, Wikidata
- Even within a single institution, there are many kinds of data journal articles, blog posts, catalogue records – produced by different people over varying periods of time
- Considering researcher positionality and how this influences data and technology choices
- Thinking about the influence of institutional histories and organisational profiles
- Developing and publishing data stories in future projects, like the Congruence Engine



Navigation and discovery through visualisation

- Exploration of alternatives routes in to GLAM collections at scale
- Moving away from both keyword searching and structured browsing
- Representing the range and scope of collections visually
- Using visualisation not just as a means of communicating complex research results, but as a valuable tool for research
- Thinking about how to make data more accessible without 'hiding' its provenance and complexity (back to openness again)

# Thank you!

- Heritage Connector website: <u>https://www.sciencemuseumgroup.o</u> <u>rg.uk/project/heritage-connector/</u>
- The project's open Zotero library: www.zotero.org/groups/2439363/her itage\_connector
- Heritage Connector demonstrators: <u>http://heritageconnector.sciencemus</u> <u>eum.org.uk/</u>
- Towards a National Collection: <u>https://www.nationalcollection.org.u</u> <u>k/</u>

