Bodleian Libraries

CNI Fall 2016 Membership Meeting

12-13 December 2016

The Future of Finding at the University of Oxford

Catríona Cannon, Deputy Librarian, Bodleian Libraries

Christine Madsen, Co-Founder & Chief Innovation Officer, Athenaeum21

Outline:

1. Why are we doing this?
2. The Resource Discovery review
3. The Oxford Collections Visualization tool

	Collection Size	Digital metadata record		Digitised resource	
Ashmolean	1,000,000	330,000	36%	60,000	6%
Oxford Botanic Garden	30,000	7,500	25%	7,500	25%
Museum of the History of Science	45,000	40,000	89%	8,000	18%
Museum of Natural History	6,250,000	152,000	2.4%	15,000	0.24%
Pitt Rivers Museum	650,000	430,000	65%	240,000	35%
Bodleian Library Published (Print+Electronic)	12,000,000	12,000,000	100%	1.5M	12%
Bodleian Special Collections	18 kilometres	?	48%	?	?

online educational resources
international relations
WebLearn
podcasts
climate change
geography
ORA
genetics
iTunesU
researchers
journal articles
zoology
viruses
librarians
epidemiology
Ebola
SOLO
theses
anthropology
e & print
patient data
books
nutrition
interpretation
NHS
museums
curators
public health
databases
bat specimens
Museum of Natural History

librarians & curators
digitized collections
Museum of the History of Science
interpretation of collections
LibGuides
art collections
collection management tool
card catalogues
maps
Ashmolean
history
geography
tailored reading lists
Allegro
SOLO
art history
earth sciences
books
International relations
current & rare
Senkaku Islands
researchers
Journal articles
law
China Centre
e & print
manuscripts
archaeology
Chinese language
Japanese studies
theses
data
business
digitized card catalogues
digitized printed catalogues
online educational resources
economics
WebLearn
iTunesU

online educational resources

international relations

WebLearn

podcasts

climate change

geography

ORA

genetics

iTunesU

researchers

journal articles

zoology

viruses

librarians

epidemiology

Ebola

SOLO

theses

anthropology

e & print

patient data

books

nutrition

NHS

interpretation

museums

public health

curators

databases

bat specimens

Museum of Natural History

Collections

Life Collections
Earth Collections
Archives and Library

Collections: home

search site

Go!

Contact us
Accessibility
Copyright
Site map

Collections

The Museum is an important centre for research and teaching, and is organised into Life Collections, Earth Collections, and Archival Collections.

A fossil identification workshop

Search collections online: The Museum aims to make its collections as accessible as possible. To search the Museum's online databases select the subject link from the menu on the left, and then select databases.

We have recently launched a new unified Collections Online website. At present it holds the Lepidoptera (butterflies and moths), the minerals, and the archives. We will continue to migrate data from our existing online databases to the new site.

Scientific enquiries: every year hundreds of rocks, fossils and other finds are identified by our team of curators and scientists. If you have found anything of interest, bring it along on your next visit to the Museum.

Important note: the Museum does not condone any illegal action, including the collection of birds' eggs, trapping live animals or unauthorised work in quarries.

Nuffield Research Placements

The Museum hosts Nuffield Research Placements in our Life and Earth collections in the fields of zoology, entomology and geology. Projects cover a wide range of disciplines from collections based curation and research to insect ecology and ecosystem services. Previous project titles include “Darwin's Insects in the Hope Entomological Collections”, “Burchell’s African Insect Collection” and “Dung Beetle Ecology”. All our Nuffield Research Placements take place through Science Oxford.

Life Collections

The Life Collections comprise the zoological collections and the Hope Entomological Collections.

The Zoological Collections comprise more than 250,000 specimens, including some 1,000 type specimens. Many extinct and endangered species are represented, including the most complete remains of a dodo in the world. Notable collections include those of Thomas Bell, William Burchell, and Charles Darwin.

Within the United Kingdom, the Hope Entomological Collections are second in size and importance to the national insect collection at the Natural History Museum, London. The collection houses over 25,000 arthropod types, and comprises over 5 million specimens. Of particular significance are:

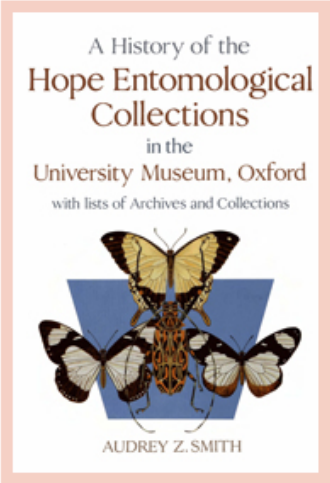
- Hope-Westwood collections
- Extensive historic collections
- The Verrall-Collin collection of Diptera
- Comprehensive British collections
- The Pickard-Cambridge and Blackwall arachnid collections
- The Wytham Woods collections

Moths in the collection

To find out more, please search the entomological collections and the associated archives.

Enquiries regarding the collections should be sent to: life@oum.ox.ac.uk

Davies, K.C. and Hull, J. *The Zoological Collections of the Oxford University Museum*
For information about the Zoological Collections please download this free version. Complete book, 6630Kb



Smith, A. 1986. *A History of the Hope Entomological Collections*
For information about the Entomological Collections and associated academics please download this free version.
Complete book, 9597Kb
For slower internet connections it may be easier to download the book in four separate parts.
Part one, 5270Kb
Part two, 1534Kb
Part three, 3009Kb
Part four, 488Kb

Stanley Bowestead and Thomas M. Eccles, 2012. *Drawing Techniques for Publication* Download

Children can discover the world of animals in the Learning zone
Children can discover the world of insects in the Learning zone

Life Collections: searchable databases

The zoological databases include the bird and mammal specimens, a small collection of Charles Darwin's material, the extinct and endangered species represented in the collections, and the human remains.

A crab from Darwin's collection

Search the mammals database
Over 5,000 specimens representing 750 species, including British material
Search the birds database
Over 17,000 bird skins from around the world representing 5,000 species
Search Charles Darwin's collection
Dried crustacea collected on the voyage of *The Beagle*
Search the extinct and endangered database
Around 2,000 specimens cross-referenced with the IUCN 2000 Red List
Search the human remains database
400 specimens representing the species of the genus Homo
How to use the databases
A guide to searching the databases

The entomological databases provide summary listings of all the entomological collections and archives. There are also databases of type specimens, each one representing a taxonomic order, and the Diptera databases of type material from the Bigot and Verrall-Collin collections.

Search collections
A list of entomological collections
Search archives
A list of entomological archives
Search Bigot-Macquart Diptera
The Bigot-Macquart collection of over 2,500 species
Search Verrall-Collin Diptera
The Verrall-Collin collection of approximately 1,000 species
Search Palaearctic Diptera
The Palaearctic Diptera collection of over 5,000 species
Search Pickard-Cambridge Arachnid collection
The named material from the O. Pickard-Cambridge Arachnid collection
Search Embioptera
A small collection of web-spinners
Search Odonata
An important collection of dragonflies and damselflies
Search Plecoptera
A small collection of stoneflies
Search Strepsiptera
Includes the important collection of Sir S. S. Saunders
How to use the databases
A guide to searching the databases

Oxford University Museum of Natural History

Life Collections: mammals database

The mammal collections comprise nearly 5,000 specimens, representing more than 750 different species. Around 500 of these specimens are British, representing over 60 species native to the United Kingdom.

To search the Mammals database please enter a search term in one or more fields and press submit.

Scientific Name
Family
Order
Common Name: bat
Collector
Nature of Specimen
Country

Submit | Clear form

How to use the databases
A guide to searching the databases
More about the database and collection
A description of the size and scope of the collection

Enquiries regarding the collections should be sent to: life@oum.ox.ac.uk

The Collections

Life Collections
- Staff
- Bee hive
- Databases
- Collectors

Earth Collections

Archives and Library

Collections: home

search site

Go!

Contact us

Accessibility

Copyright

Site map

Life Collections : mammals database

Records returned where species.Common_name matches 'bat'
There are 214 records. Records 1 to 10.
Click on the red reference number to view full specimen details.

- 00595 : *Myrmecobius fasciatus* : Numbat : Australia
- 01407 : *Vombatus ursinus* : Common Wombat : Australia
- 03067 : *Myrmecobius fasciatus* : Numbat : Australia
- 03124 : *Hipposideros diadema* : Diadem Roundleaf Bat : Malaysia
- 03125 : *Rhinolophus ferrumequinum* : Greater Horseshoe Bat : United Kingdom
- 03127 : *Cynopterus sphinx* : Short-nosed Fruit Bat : not known
- 03130 : *Thoopterus nigrescens* : Swift Fruit Bat : not known
- 03131 : *Megaderma lyra* : Greater False Vampire Bat : not known
- 03132 : *Scotophilus kuhlii* : Lesser Asiatic Yellow Bat : not known
- 03138 : *Lavia frons* : Yellow-winged Bat : not known

Back Next

Enter new search criteria

How to use the databases
A guide to searching the databases
More about the database and collection
A description of the size and scope of the collection

Enquiries regarding the collections should be sent to: life@oum.ox.ac.uk

online educational resources

international relations

WebLearn

podcasts

climate change

geography

ORA

genetics

iTunesU

researchers

journal articles

zoology

viruses

librarians

epidemiology

Ebola

SOLO

theses

anthropology

e & print

patient data

books

nutrition

NHS

interpretation

museums

public health

curators

databases

bat specimens

Museum of Natural History

online educational resources
international relations
WebLearn
podcasts
climate change
geography
ORA
genetics
iTunesU
researchers
journal articles
zoology
viruses
librarians
epidemiology
Ebola
SOLO
theses
anthropology
e & print
patient data
books
nutrition
interpretation
NHS
museums
curators
public health
databases
bat specimens
Museum of Natural History

librarians & curators
digitized collections
Museum of the History of Science
interpretation of collections
LibGuides
art collections
collection management tool
card catalogues
maps
Ashmolean
history
geography
tailored reading lists
Allegro
SOLO
art history
earth sciences
books
International relations
current & rare
Senkaku Islands
researchers
Journal articles
law
China Centre
e & print
manuscripts
archaeology
Chinese language
Japanese studies
theses
data
business
digitized card catalogues
digitized printed catalogues
online educational resources
economics
WebLearn
iTunesU

librarians & curators
digitized collections
Museum of the History of Science
interpretation of collections
LibGuides
art collections
collection management tool
card catalogues
maps
Ashmolean
history
geography
tailored reading lists
Allegro
SOLO
art history
earth sciences
books
International relations
current & rare
Senkaku Islands
researchers
Journal articles
law
China Centre
e & print
manuscripts
archaeology
Chinese language
Japanese studies
theses
data
business
digitized card catalogues
digitized printed catalogues
online educational resources
economics
WebLearn
iTunesU

SOLO
SEARCH OXFORD LIBRARIES ONLINE

OxLIP+ | OU e-Journals | Bodleian

UNIVERSITY OF OXFORD

Oxford Collections | Articles & More | Search Everything | What am I searching?

Senkaku Islands | All libraries/collections | Search

Advanced Search
Browse Search
Map Search
New Search

Limit your search: All items | that contain my query words | anywhere in the record

E-journal unavailability 4th and 7th December

Please note that due to server moves by our service provider, there will be no access to ejournals or ejournal articles via OU ejournals or SOLO during the following time periods:

- Sunday 4 December from 15:00 until 19:00 GMT
- Wednesday 7 December from 11:45 until 13:15 GMT

SOLO Live Help

Available SOLO Live Help

Type here to chat. Press ENTER to send.

You can also text us on: 02030 953910
Monday-Friday, 9am-5pm

About this service

Latest news

Michaelmas 2016 update from Richard Ovenden, Bodley's Librarian

Bodleian event celebrates sonnets in Shakespeare's anniversary year

Editor and Scholar Christopher Tolkien awarded Bodley Medal

Bodleian display celebrates Oxford geographer Richard Hakluyt and his 'world in a book'

More

Recent notices

UPDATE: Gladstone Link now fully open

About SOLO

Coverage
Feedback
Getting Help
SOLO Service Updates and Development

Other Catalogues and Services

Chinese Catalogues
Oxford Research Archive (ORA)
Special Collections catalogues

Additional Information

Library passwords
Book recommendations

Managing your references

RefWorks, Endnote, Zotero, Mendeley, Colwiz, Papers and BibTex

SOLO video tutorials

- Searching
- Reserving a book
- Renewing your books
- Saving searches
- Signing on
- Requesting closed stack material
- Using the e-Shelf
- Searching SOLO by date

Refine your results

Show only:
Online Resources (3)
Physical Items (15)
Refine further

Topic
Japan (9)
Senkaku Islands (8)
China (7)
United States (2)
Territory, National (2)
Show 26 more | Refine further

Library
Alexander Library (1)
At Reading Room: China Centre KB Chen Library (1)
Bod Japanese Library (8)
Bodleian Library (4)
China Centre: KB Chen Library (1)
Show 3 more | Refine further

Language
English (14)
Chinese (2)
Japanese (2)
Refine further

Date Refine
From To Refine

Creator
Association for Asian Studies (1)
Choong, William (1)
ebrary, Inc (1)
Eldridge, Robert D. (1)
Haiwen, Zhang (1)
Show 19 more | Refine further

Resource Type

Results 1 - 10 of 17 for **All libraries/collections**

Sorted by: Relevance

1 2 →

Show only Online Resources (3) | Physical Items (15)

Book
Add to e-Shelf
Report of scientific research on the Senkaku Islands
Ikihara, S
1971 | Okinawa : University of Ryukyns | 140 p. : ill., plates, maps ; 26 cm
Find & Request | Details & Links | Reviews & Tags | More | Permalink

Book
Add to e-Shelf
Lessons from the disturbed waters : the Diaoyu/Diaoyutai/Senkaku Islands disputes
Tseng, Hui-Yi Katherine
[2015?] | Singapore : World Scientific | x, 228 pages : illustrations ; 24 cm
Find & Request | Details & Links | Reviews & Tags | More | Browse Related Titles | Permalink

Multiple Versions
The dispute over the Diaoyu/Senkaku Islands : how media narratives shape public opinion and challenge the global order
View all 2 versions
Hollihan, Thomas A.
Multiple versions found
To view, click on the title or the link to the right

Book
Add to e-Shelf
Sovereign rights and territorial space in Sino-Japanese relations : irredentism and the Diaoyu/Senkaku Islands
Suganuma, Unryu, 1964- | Association for Asian Studies
2000 | Honolulu, Hi. : Association for Asian Studies and University of Hawai'i Press | xiii, 298 p. ; 24 cm
Find & Request | Details & Links | Reviews & Tags | More | Browse Related Titles | Permalink

Book
Add to e-Shelf
The origins of US policy in the East China Sea islands dispute : Okinawa's reversion and the Senkaku Islands
Eldridge, Robert D.
2014 | London : Routledge | xvi, 353 pages : illustrations ; 24 cm
Find & Request | Details & Links | Reviews & Tags | More | Permalink

Add to e-Shelf
釣魚台列嶼之法律地位 = Legal status of Diaoyutai (Senkaku) Islands / 程家瑞主編
程家瑞

釣魚台列嶼之法律地位 = Legal status of Diaoyutai (Senkaku) Islands / 程家瑞主編
程家瑞
1998 | 台北 : 東吳大學法學院 | 精裝1冊(376頁) : 25公分

Details & Links | Reviews & Tags | More | Permalink

Export options

Title: 釣魚台列嶼之法律地位 = Legal status of Diaoyutai (Senkaku) Islands / 程家瑞主編
Author: 程家瑞
Publisher Details: 台北 : 東吳大學法學院
Publication Date: 1998
Format: 精裝1冊(376頁) : 25公分
Language: Chinese
Source: Allegro Chinese
Type: text
Location Information: Please follow the link on the right hand side of the screen for item information

Links
› View holdings in the Allegro Chinese catalogue

Back to results list

Previous Result 6 Next

[Log On]

DIGITAL BODLEIAN

Senkaku Islands

GO CLEAR

RECENT SEARCHES

NARROW YOUR SEARCH

Collection
Language

MY COLLECTIONS

No matching records found

Sort by: Sort Order

Display: 10

RECENT SEARCHES

MS.Laud Or.145 (1) [x]

NARROW YOUR SEARCH

Collection

Chinese (1)

Oriental (1)

Language

Chinese (1)

MY COLLECTIONS

Search Result (1)

1

Sort by: Sort Order Display: 10

(150)

MS.Laud Or.145

METADATA

ID: 40aeb385-ef63-4f69-b11f-cccc2dc4f723

Shelfmark: MS.Laud Or.145

Language: Chinese

Collection: Oriental,Chinese

Source: Bodleian Libraries

Rights: Photo: © Bodleian Libraries, University of Oxford

Terms of access: Terms of use: http://digital.bodleian.ox.ac.uk/terms.html

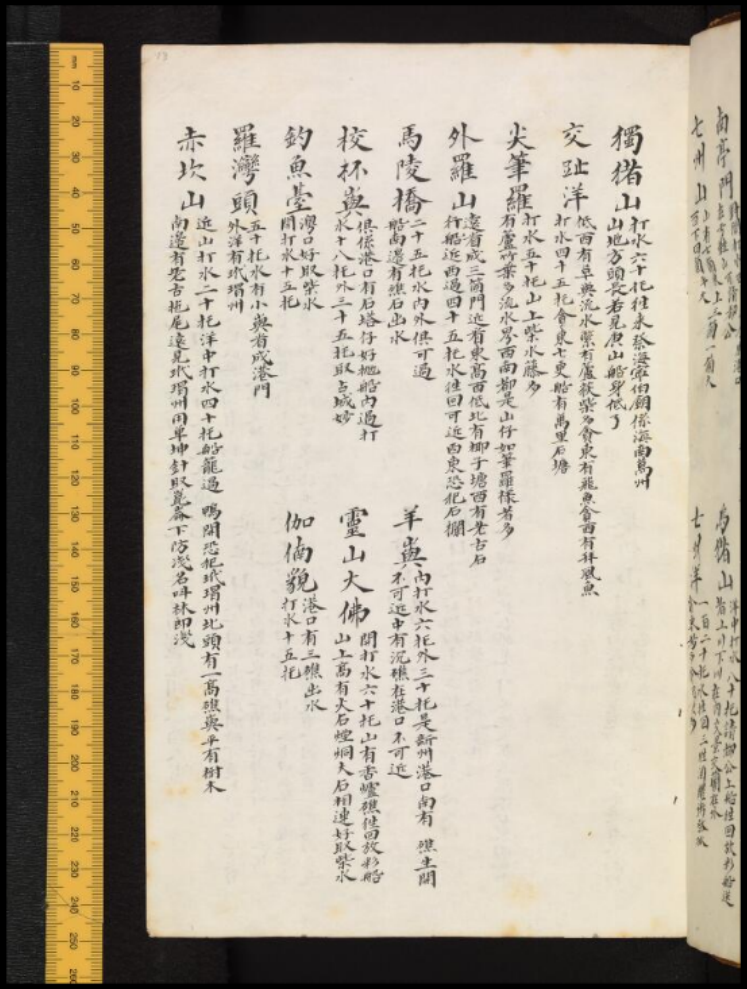
Permalink: http://digital.bodleian.ox.ac.uk/inquire/p/40aeb385-ef63-4f69-b11f-cccc2dc4f723

PRIVATE NOTES

TAGS

PUBLIC COMMENTS

Tweet



獨猪山 打水六十托往水發源伯銅係海南萬州山地方頭長者見唐山船身低

交趾洋 低西有豆與流水紫有蘆荻紫多會東有魚魚會西有科魚魚

尖筆羅 打水五十托山上紫水藤多

外羅山 邊有咸三箇門近有東高西低北有椰子塘西有老古石

馬陵橋 二十五托水內外俱可過

羊嶼 內打水六托外三十托是新州港口南有 嶼生間

校杯嶼 俱係港口有石塔仔好抛船內過打

霍山大佛 閒打水六十托山有香爐想使用炊彩船

釣魚臺 灣口好取紫水

伽倫貌 港口有三線出水

羅灣頭 五十托水有小與有咸港門

赤坎山 近山打水二十托洋中打水四十托船能過

南京門 [illegible]

馬猪山 [illegible]

七州洋 [illegible]

librarians & curators
digitized collections
Museum of the History of Science
interpretation of collections
LibGuides
art collections
collection management tool
card catalogues
maps
Ashmolean
history
geography
tailored reading lists
Allegro
SOLO
art history
earth sciences
books
International relations
current & rare
Senkaku Islands
researchers
Journal articles
law
China Centre
e & print
manuscripts
archaeology
Chinese language
Japanese studies
theses
data
business
digitized card catalogues
digitized printed catalogues
online educational resources
economics
WebLearn
iTunesU

Outline:

1. Why are we doing this?
2. The Resource Discovery review
3. The Oxford Collections Visualization tool

The Resource Discovery Review

1. What we did
2. What we found out
3. How we tried to solve 1 key issue

Resource Discovery: What We Did

106 interviews, 18 site visits, 3 literature reviews

38 Interviews with **users** of collections around Oxford

30 Interviews with collection **'experts'** (representing all collections)

22 Interviews with **external institutions** (including **11** site visits)

16 Interviews with **vendors/suppliers**

7 Site visits to **Oxford libraries and museums** to observe researchers

3 **Literature reviews**

Analysis across all data

Final Report Available Online

Resource Discovery @ The University of Oxford

2015

Analysis & Recommendations by Christine Madsen & Megan Hurst, Athenaeum21 Consulting
Research by

Christine Madsen
Iain Emsley
Alfie Abdul-Rahman
Min Chen
Megan Hurst
Ray Stacey
Saiful Khan
Simon McLeish
Masha Garibyan

Bodleian.ox.ac.uk
>>About Us
>>Policies and Reports

Or

Athenaeum21.com

What We Found

Search behaviour & skills at Oxford <u>are</u>:

- about **training people to become expert in their field**, rather than finding things in the collections
- very discipline-specific. This is **not a matter of *Google vs the Catalogue***
- while there is evidence that students need to learn how to search**, discovery is not as simple as 'novice' vs 'expert'.** Experts in their fields use some of the the same discovery tools and techniques as young students when they switch to a new discipline or are looking for something specific
- as much about knowing **who to ask** as it is about looking for something specific
- still a **very 'analogue' process** for many collections and disciplines

What We Found

Search behaviour & skills at Oxford <u>are not</u>:

- tied to a specific discovery tool – **Google is heavily used, but by no means universal**
- correlated to a specific discipline – **'digital natives' are universally bad at searching regardless of their field**

Outside of Oxford

- **Vendors** are eager to partner with their customers because they **don't know what to do next**
- Academic and cultural institutions outside of Oxford are largely in the same place: not satisfied with their current discovery tools and **looking for what is next**

3 Recommended Areas for Investment

1. Map the landscape of things
2. Map the network of people
3. Save people time

3. Save People Time

- **Getting existing metadata out** to the places where researchers work: Wikipedia/Wikidata, Google, Google Scholar, subject-specific repositories like arXiv and PubMed, publishers like JSTOR
- **Facilitate citation chaining**. Citation chaining is ubiquitous in all areas of research across all disciplines and levels of expertise. Users use cited references as authoritative points of departure for finding more resources on a topic.

2. Map the Network of People

- **Visualization of the network of experts and research.** A graph of the professional networks at Oxford would facilitate discovery and navigation within and between fields. (NB: a number of institutions have attempted this with varying degrees of success. Care should be taken to learn lessons from others' successes and failures.)

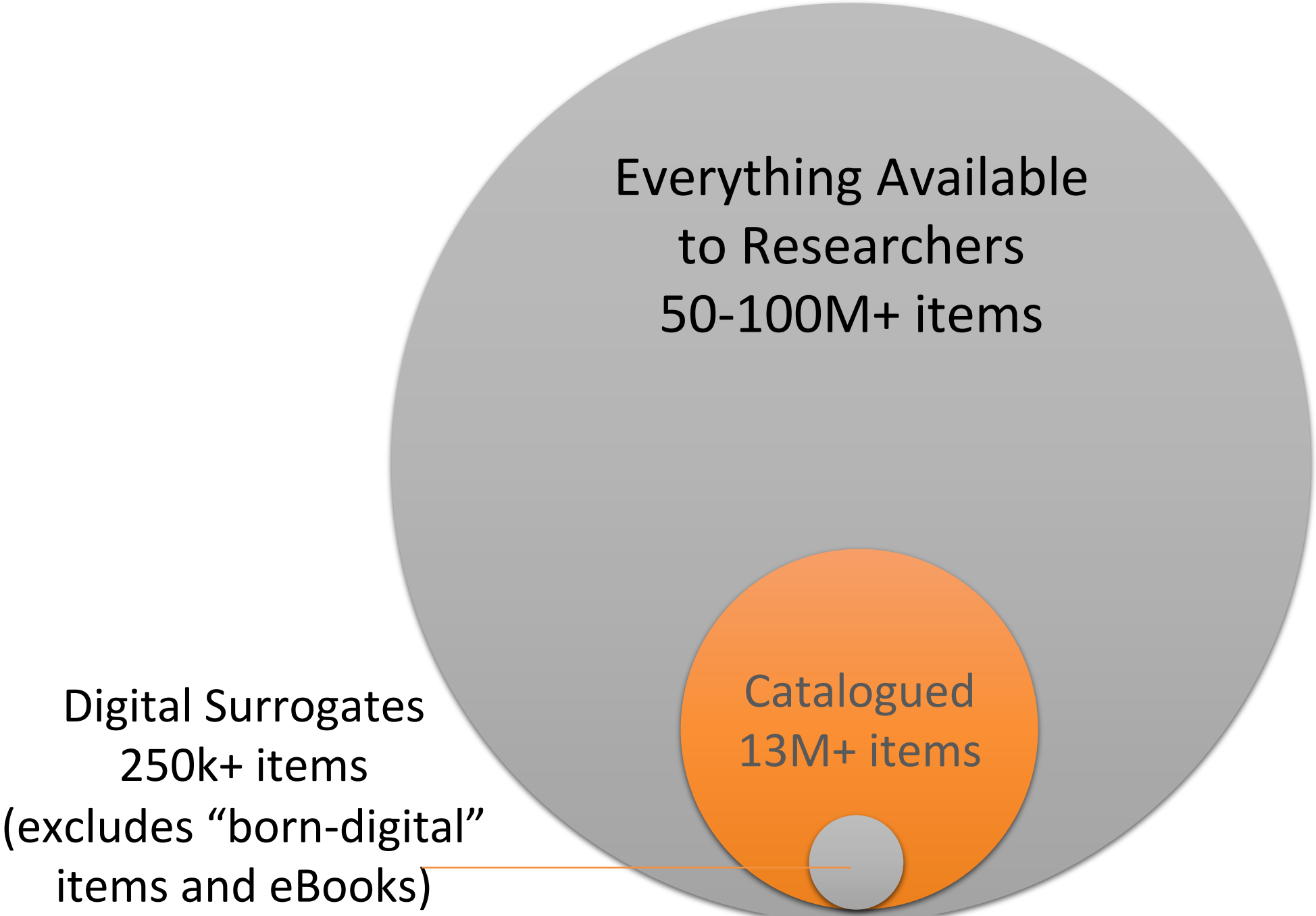
1. Map the Landscape of Things

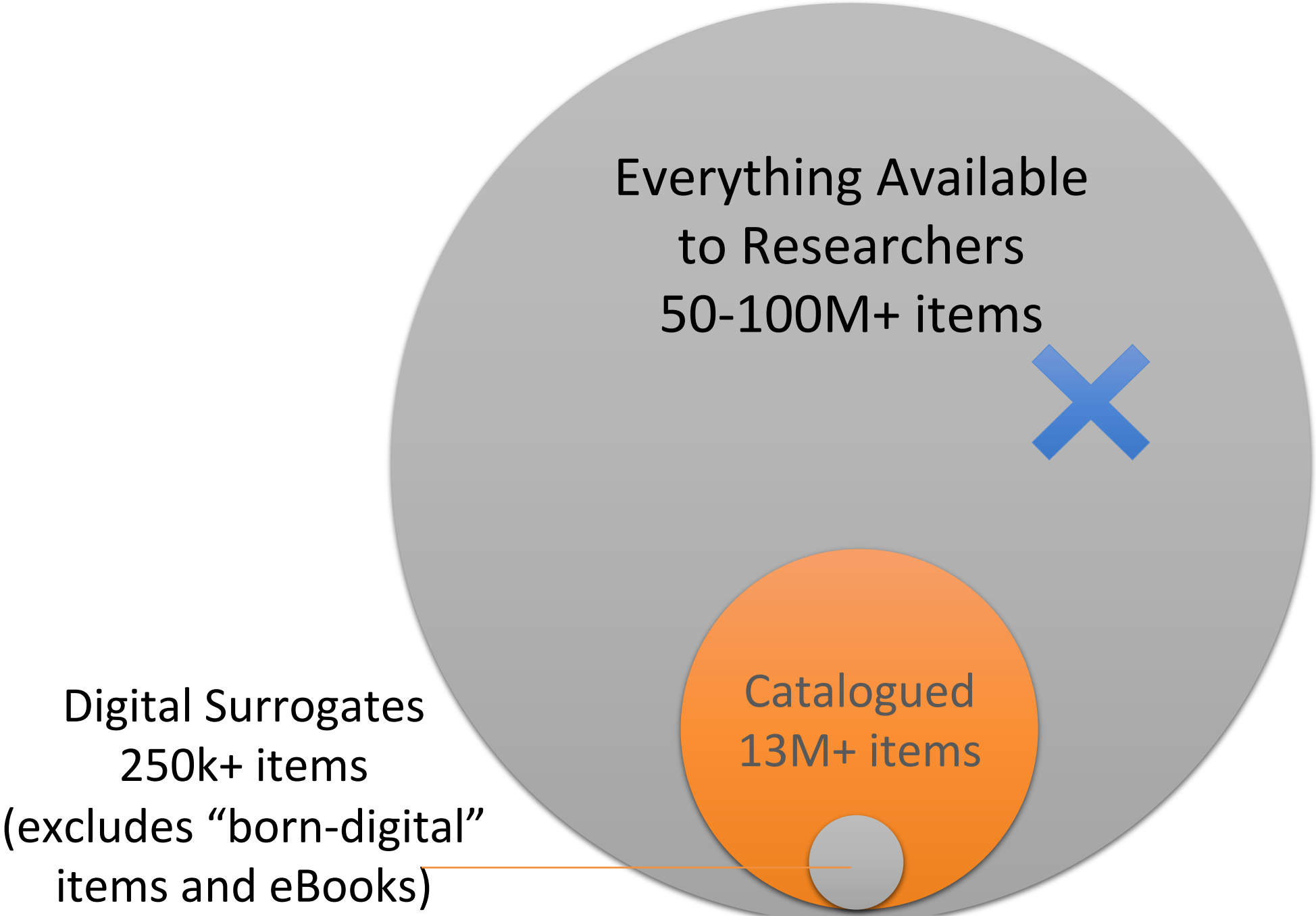
Orienting the users to the corpora of collections (digital and non-digital) by:

1. **Visualizing the scope of collections at Oxford:** providing an interactive diagram that represents the range of collections at Oxford (using collection-level metadata).

2. **Cross-Collection Search:** Overlaying this diagram with the ability to search within or across collections. In such a context, researchers will understand not only what they are finding, but what they might be missing.

	Collection Size	Digital metadata record		Digitised resource	
Ashmolean	1,000,000	330,000	36%	60,000	6%
Oxford Botanic Garden	30,000	7,500	25%	7,500	25%
Museum of the History of Science	45,000	40,000	89%	8,000	18%
Museum of Natural History	6,250,000	152,000	2.4%	15,000	0.24%
Pitt Rivers Museum	650,000	430,000	65%	240,000	35%
Bodleian Library Published (Print+Electronic)	12,000,000	12,000,000	100%	1.5M	12%
Bodleian Special Collections	18 kilometres	?	48%	?	?


Everything Available
to Researchers
50-100M+ items
Catalogued
13M+ items
Digital Surrogates
250k+ items
(excludes “born-digital”
items and eBooks)


Everything Available
to Researchers
50-100M+ items
Catalogued
13M+ items
Digital Surrogates
250k+ items
(excludes “born-digital”
items and eBooks)

The Project: Why

“It's clear that reasonably diligent students are strikingly not sophisticated in their searching. Students search in one place, and if they don't find anything on the first try, they think it doesn’t exist.”

The Challenge

- We know what can be done with lots of metadata…

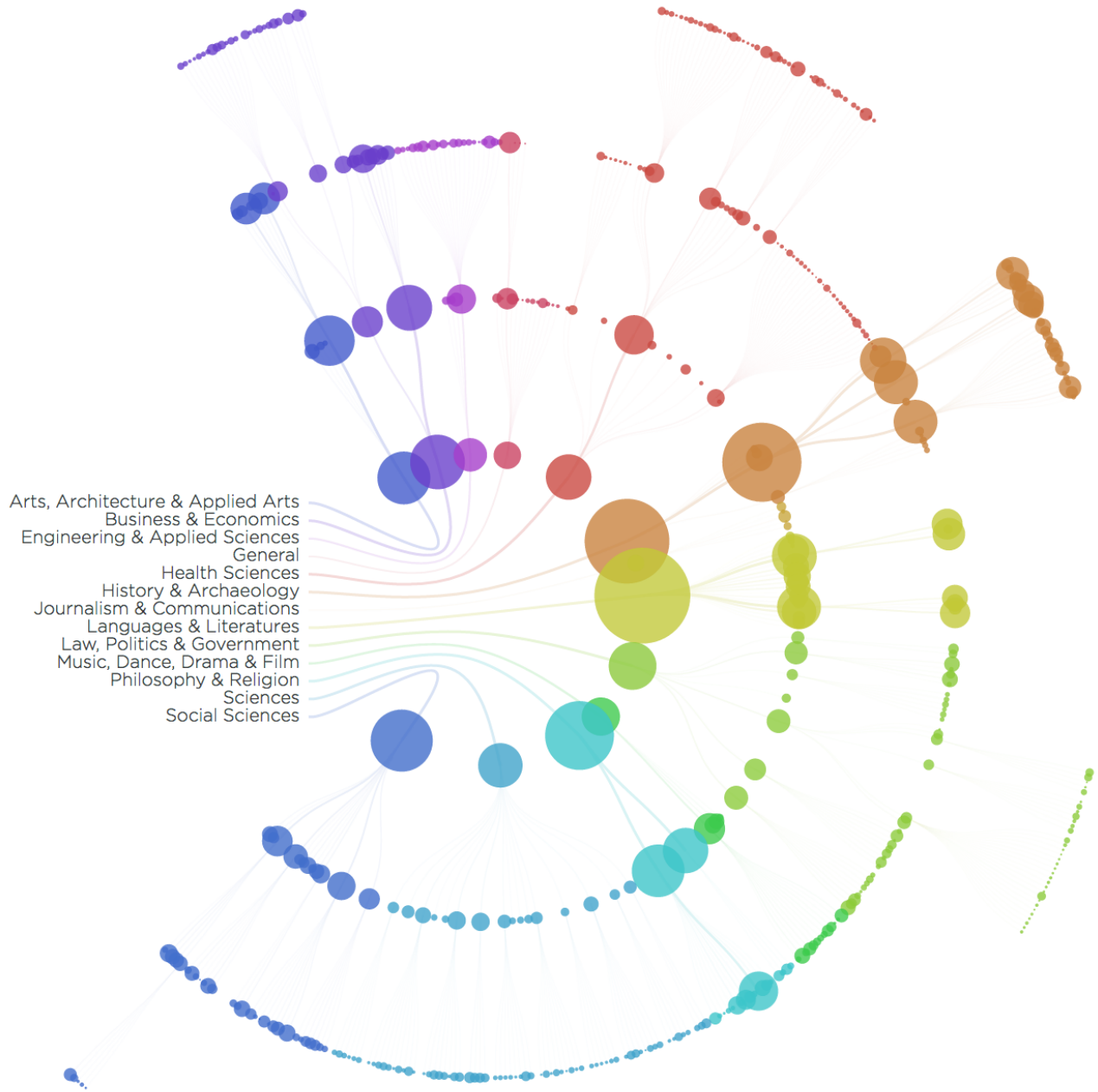
CATALOG

A visualization of the Columbia Library's holdings, circulation and activity

About

Books: Aggregate holdings, per subject

Total holdings | Total circulations | Relative activity

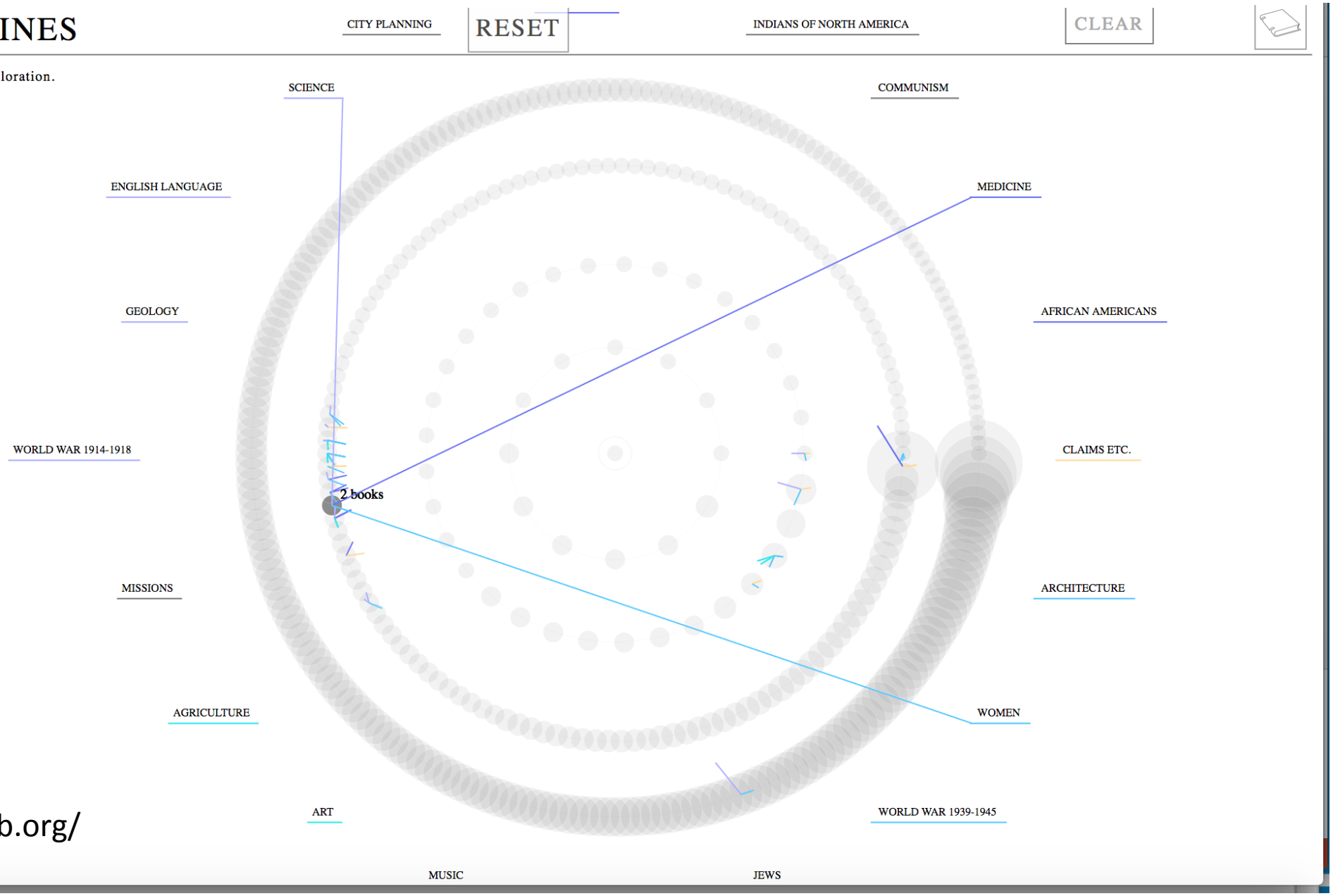


http://spatialinformationdesignlab.org/project_sites/library/catalog.html

CROSSING DISCIPLINES

A digital library tool for multidisciplinary exploration.

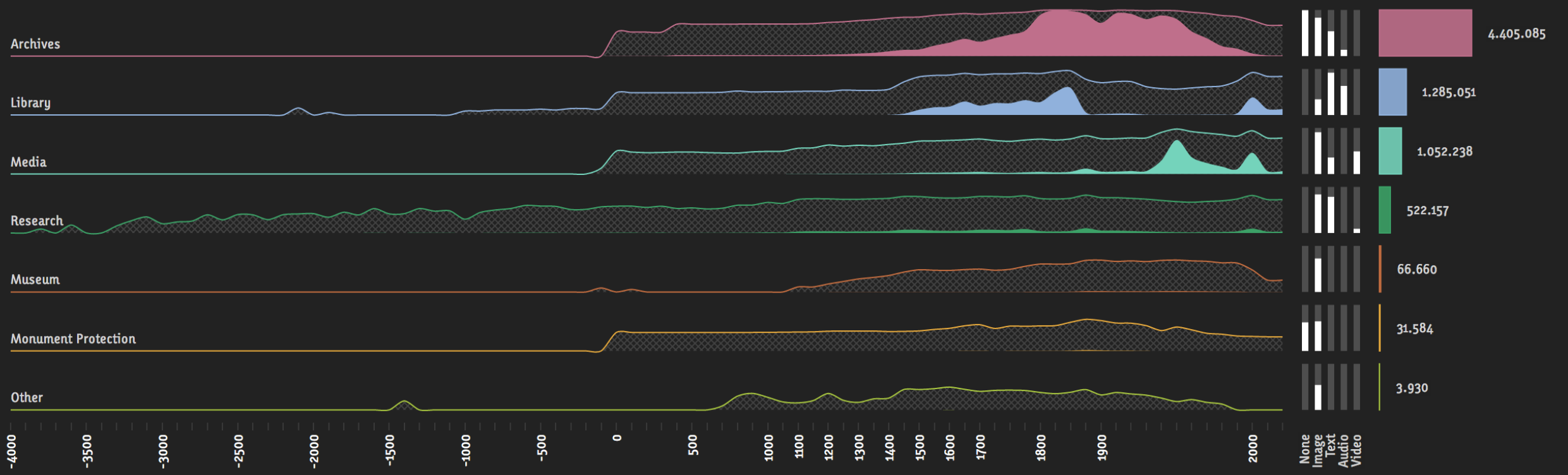
About Guiding Notes



http://spatialinformationdesignlab.org/project_sites/library/crossingDisciplines.html

Periods & Sectors from -4000 until 2020

Overview visualization along the time periods and cultural heritage sectors. Selecting a time span shows the most common keywords, places, persons and organizations for these periods.



Keywords

Photos Contact sheet Monograph
Photo Photography Personnel files
Architecture Town List for Art and Architecture
Office Books Records politics image Prospectus
Sculpture Maps and plans Arts and Culture

Places

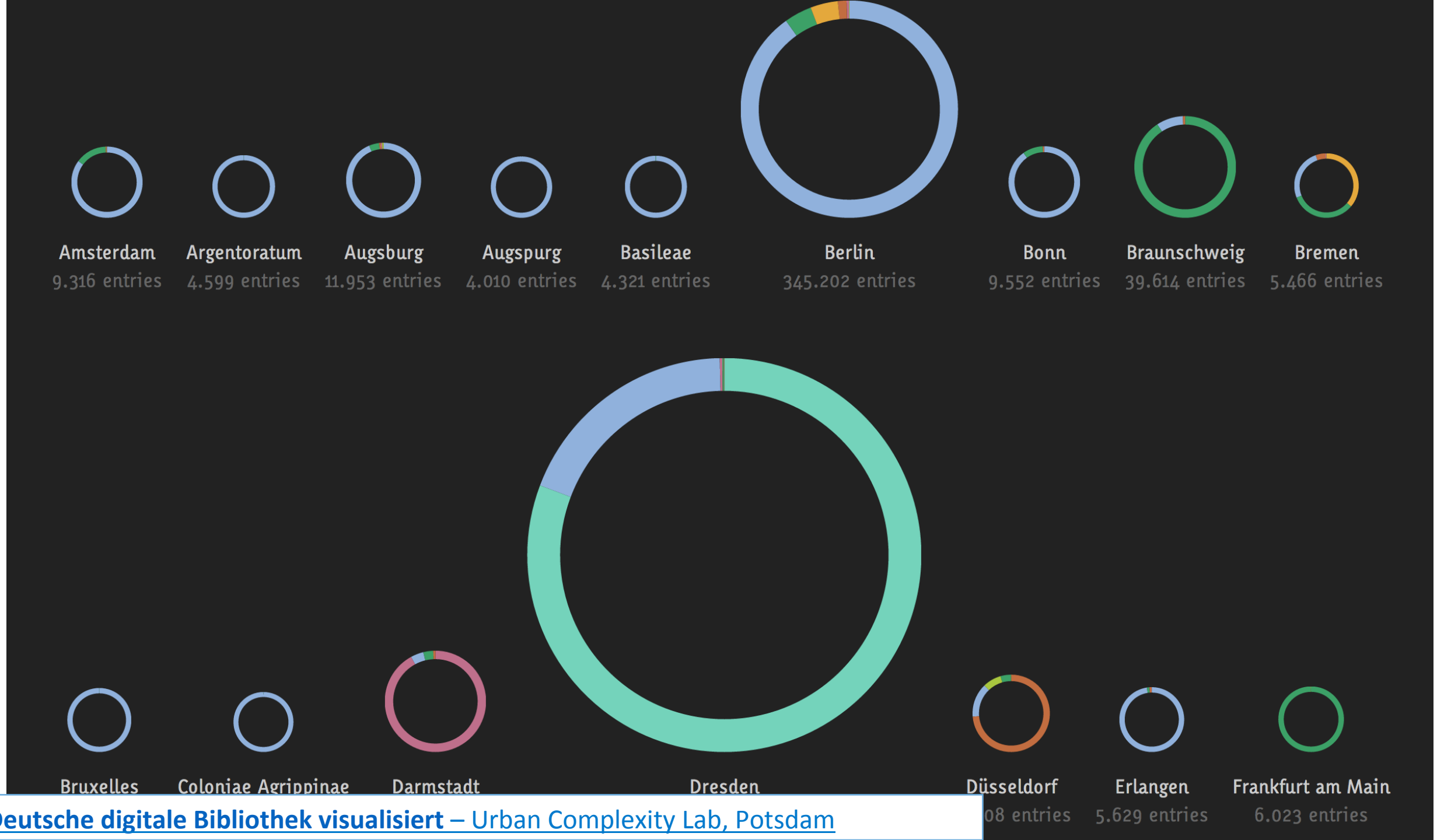
Ludwigsburg Dresden
Stuttgart Karlsruhe
Freiburg in Breisgau Sigmaringen
Wertheim Neuenstein Munich Berlin Paris

Persons/Organizations

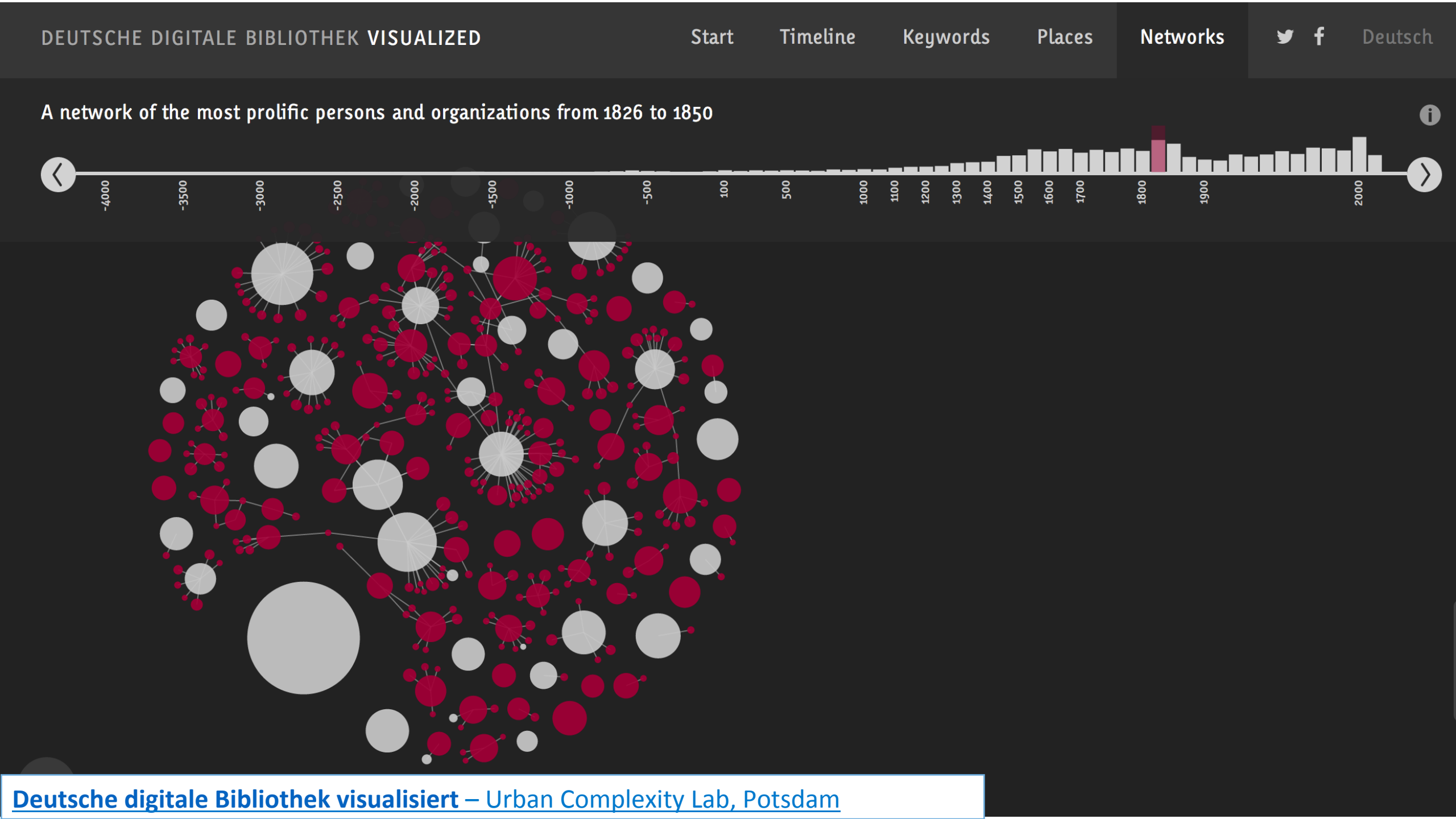
Höhne, Erich (Photographer)
Pohl, Erich (Photographer) Willy Pragher Pisarek, Abraham (Photographer)
Rössing, Renate (Photographer) Rössing, Roger (Photographer) Domain Registry Prussian government Sigmaringen
Gerig, Uwe (Photographer) Otto, Gerhard (Photographer) MESSBILDSTELLE Dresden (Photographer)
ion Karlsruhe Leopold Adler Schumacher, Klaus-Dieter (Photographer)
es Justizdepartement, Lehenhof

Feedback

Deutsche digitale Bibliothek visualisiert – Urban Complexity Lab, Potsdam



Deutsche digitale Bibliothek visualisiert – Urban Complexity Lab, Potsdam



Deutsche digitale Bibliothek visualisiert – Urban Complexity Lab, Potsdam

The Challenge

- We know what can be done with lots of metadata…
- **But what can you do without it?**

The Project: Mapping the Collections

Create a map of **all** of the museum and library collections at Oxford

- Interactive visual navigation of Oxford's collections
- **Regardless of whether they have metadata**

Build something that is **beautiful, easy to use** and transports the user into the world of Oxford's collections

- Like a **Google maps of Oxford collections**

How does this project relate to other efforts like linked data?

- Assumes users **have little or no prior knowledge** of collections
- Is **NOT dependent upon item-level** metadata
- Will display collections that have **no metadata**
- **"What does Oxford have that is relevant to my research?"**

- Dependent **upon item-level metadata**
- Will only ever **include 'catalogued' things**
- **"How is this thing I have found related to other things in the collections"**

A Supplement – Not a Substitute

The Project: Target Audience

"what collections are at Oxford that might be useful for my research?"

- Many **incoming researchers** are spending 1-2 years just finding their primary resources

"I know these things exist, why aren't I getting any search results?"

- Most researchers have no idea the scale of what is catalogued electronically or not

The Project: Deliverables

1. A **working demonstrator**, that is, an elegant, visualization design that leverages real data (a subset of the available data) with minimum intervention. The prototype will be user-tested and will help to illustrate the feasibility and scalability of the approach.

2. A **plan for gathering summary data** to provide complete coverage of Oxford's collections

3. A **detailed plan and budget to develop the project into a second phase** with a broader partnership

The Prototype: What Will it Do?

provide **an immediate visual guide** to:

- **what exists at Oxford** and where it is held;
- **relative sizes** of different types of collections;
- which collections are findable/searchable **electronically**;
- which collections are catalogued in **print indices**; and
- which are **not yet catalogued**.

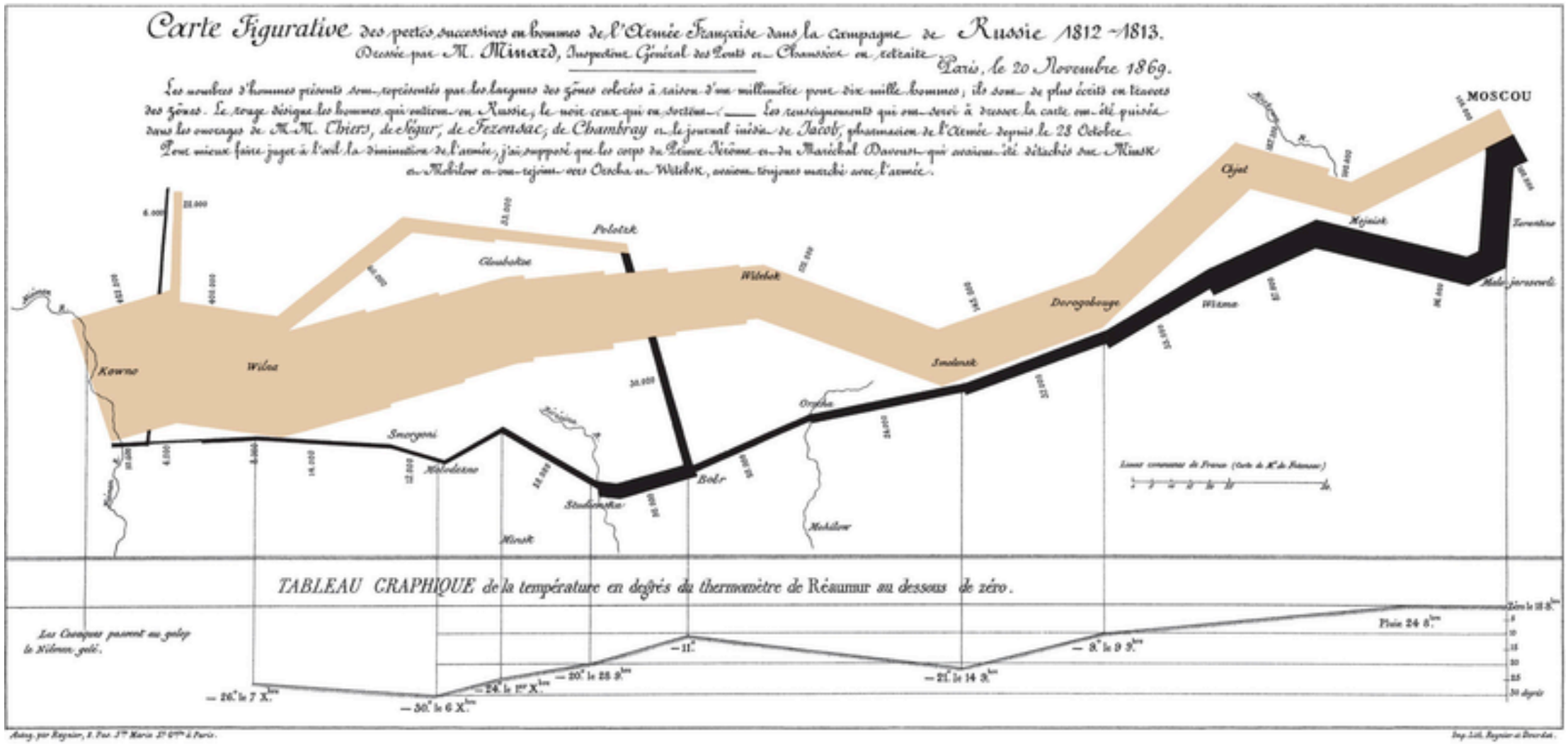
The Prototype: How was it built?

Data from two sources:

- Existing **electronic metadata** from museums and libraries through batch exports
  - Data will be analysed and summarised to provide the highest level of navigation
- Collection **summary data** for collections that do not have item-level electronic metadata through interviews and spreadsheets
  - Every collection curator or manager at the University has a good sense of what is in their collection. Much of this summary level data already exists in spreadsheets

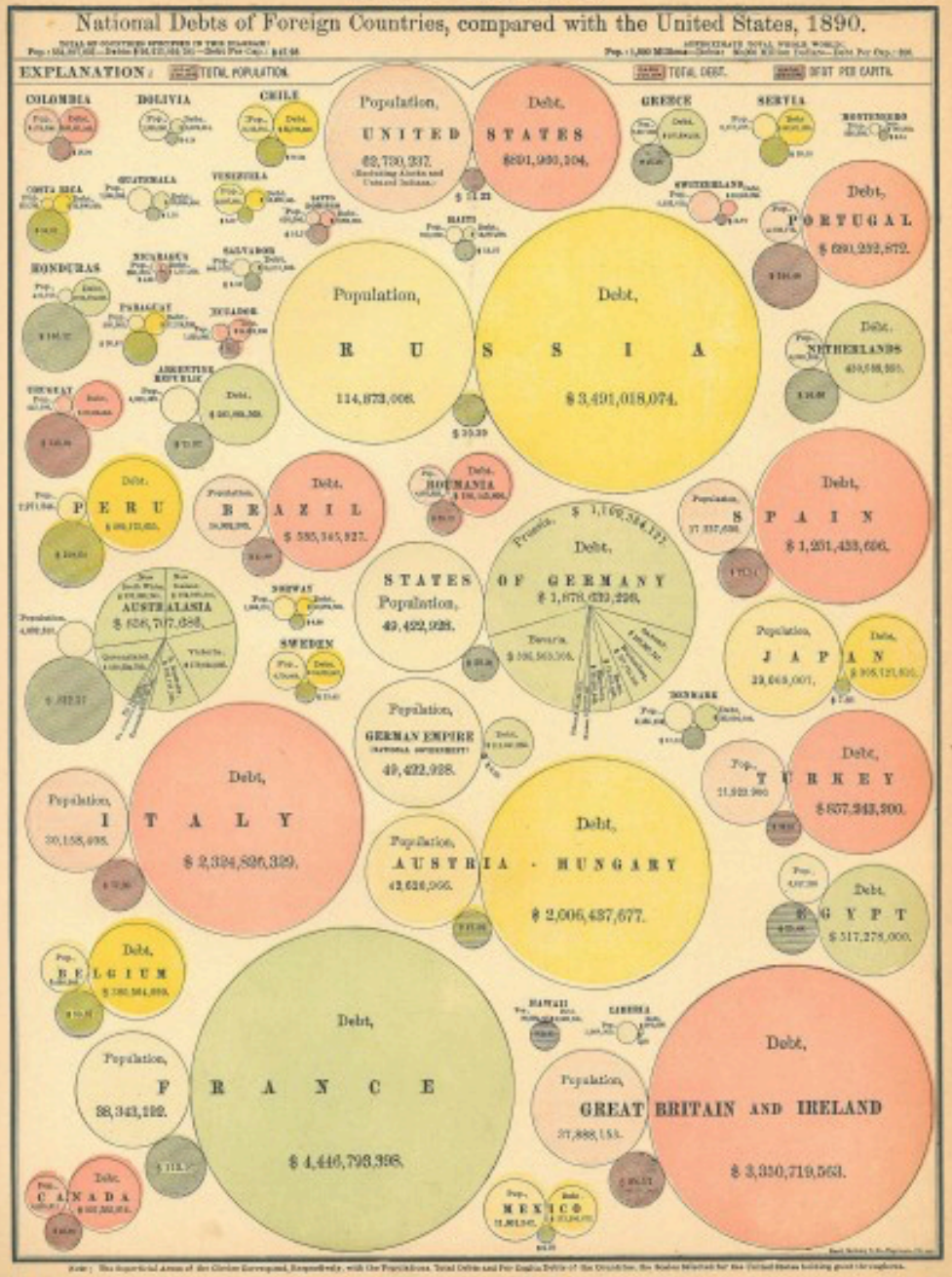
The User Journey

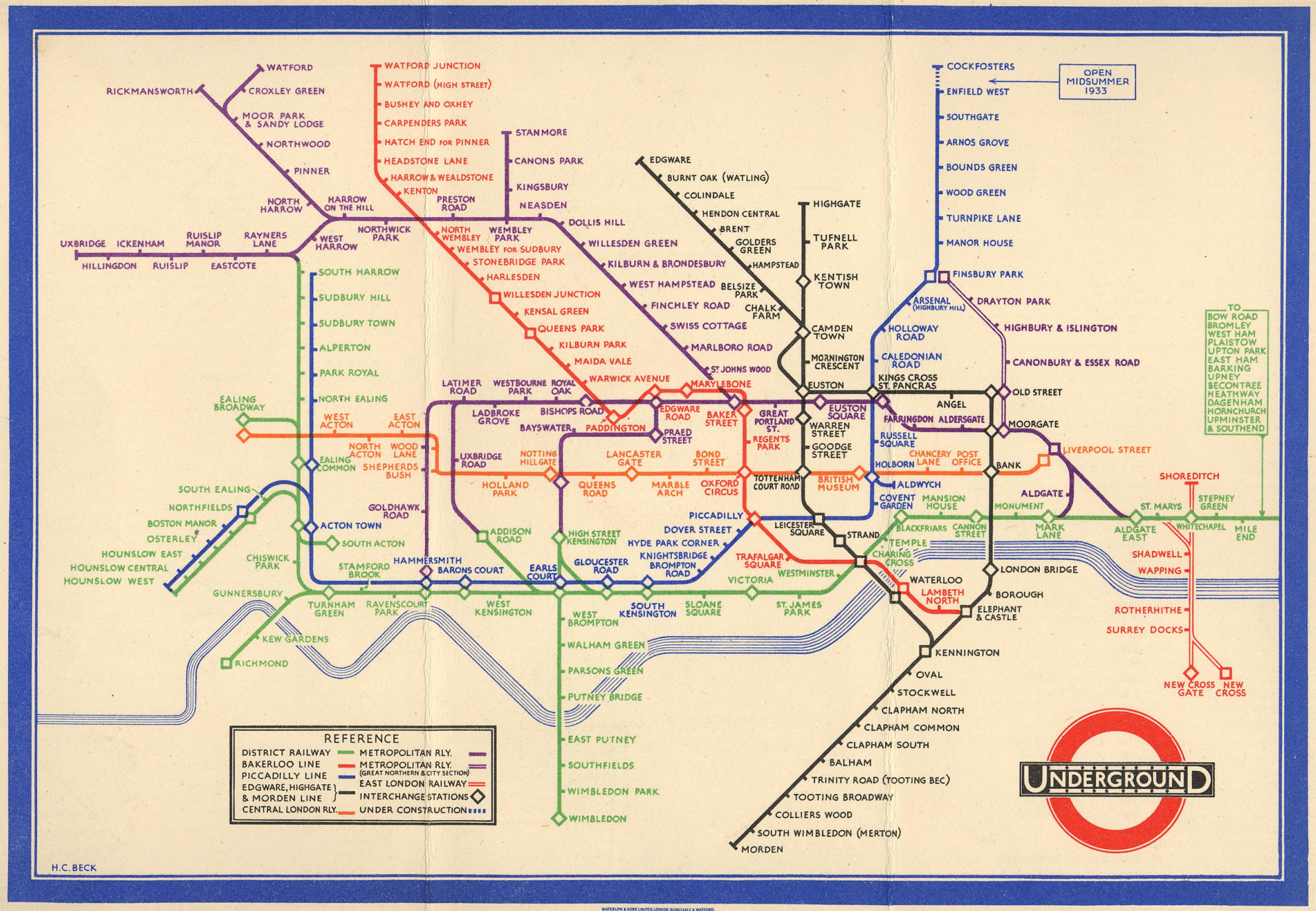
- Users **will not start from a search term**
- Journey **may end** in a detailed metadata record, digital object, or contact information for a collection manager
- The visual navigation should **uncover the unexpected** -- that the Bodleian has art or that the Pitt Rivers has manuscripts



Autog. par Regnier, 8 Pas. St Marie St Ont à Paris.

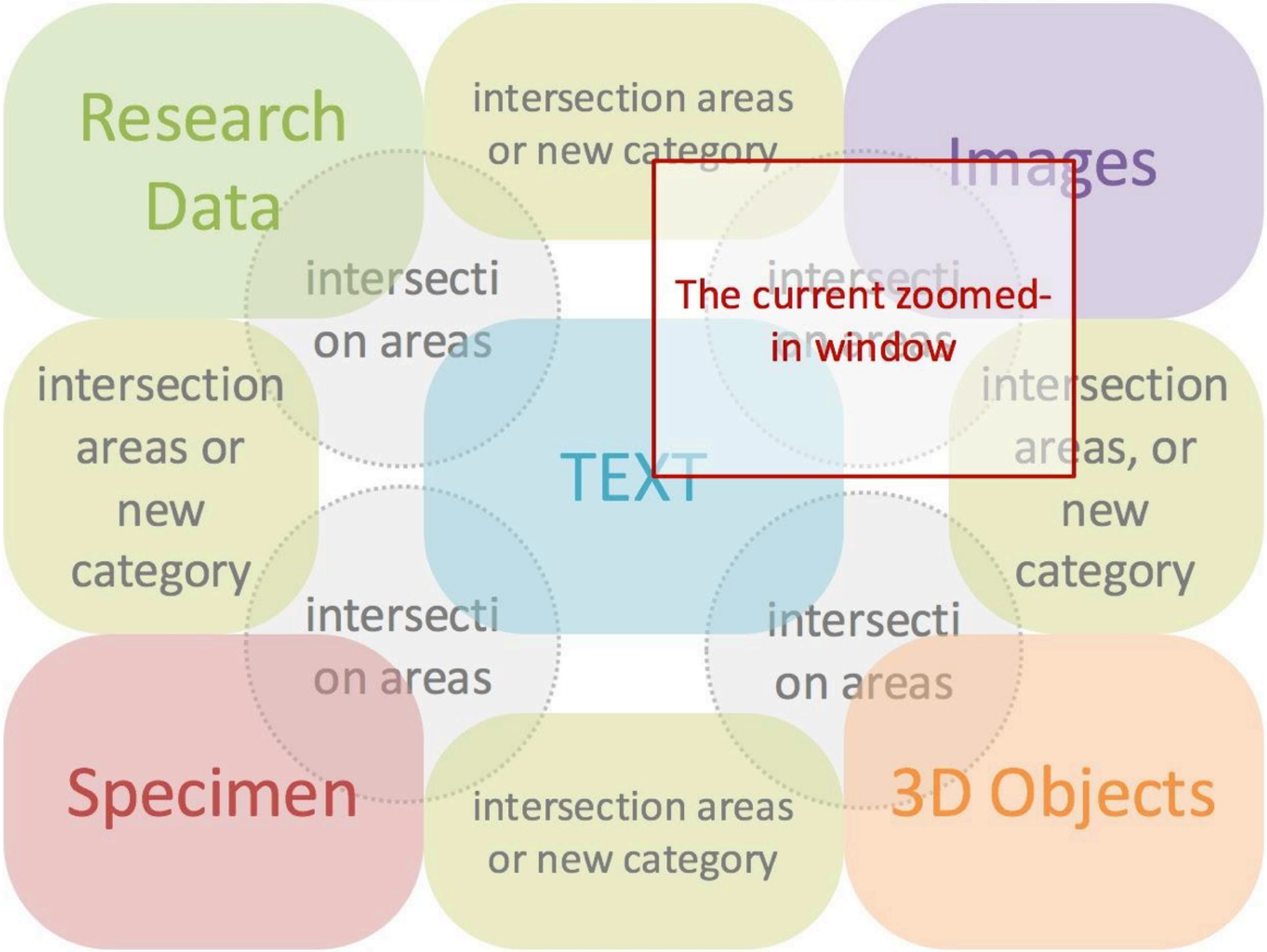
Imp. Lith. Regnier et Dourdet.


National Debts of Foreign Countries, compared with the United States, 1890.
EXPLANATION:
TOTAL POPULATION.
TOTAL DEBT.
DEBT PER CAPITA.
COLOMBIA
BOLIVIA
CHILE
Population, UNITED STATES 62,730,317.
Debt, UNITED STATES $891,990,104.
GREECE
SERVIA
MONTENEGRO
COSTA RICA
GUATEMALA
VENEZUELA
HAITI
SWITZERLAND
Debt, PORTUGAL $ 691,292,872.
HONDURAS
NICARAGUA
SALVADOR
PARAGUAY
ECUADOR
Population, RUSSIA 114,873,008.
Debt, RUSSIA $3,491,018,074.
Debt, NETHERLANDS
URUGUAY
ARGENTINE REPUBLIC
Debt, PERU
Debt, BRAZIL $ 585,345,827.
ROUMANIA
Debt, SPAIN $ 1,251,433,606.
AUSTRALASIA $ 626,707,688.
NEWFOUNDLAND
SWEDEN
STATES Population, 49,422,928.
Debt, OF GERMANY $ 1,678,639,226.
Population, JAPAN 39,069,001.
Debt, JAPAN
DENMARK
Population, GERMAN EMPIRE 49,422,928.
Debt, TURKEY $ 657,343,300.
Population, ITALY 30,158,698.
Debt, ITALY $ 2,324,826,329.
Population, AUSTRIA - HUNGARY 42,626,966.
Debt, AUSTRIA - HUNGARY $ 2,006,437,677.
Debt, EGYPT $ 517,278,000.
Debt, BELGIUM
HAWAII
LIBERIA
Population, FRANCE 38,343,192.
Debt, FRANCE $ 4,446,798,398.
Population, GREAT BRITAIN AND IRELAND 37,888,153.
Debt, GREAT BRITAIN AND IRELAND $ 3,350,719,563.
Debt, CANADA
MEXICO



WATERLOW & SONS LIMITED, LONDON, DUNSTABLE & WATFORD

One of the possible spatialization schemes at the top level



Prof Min Chen

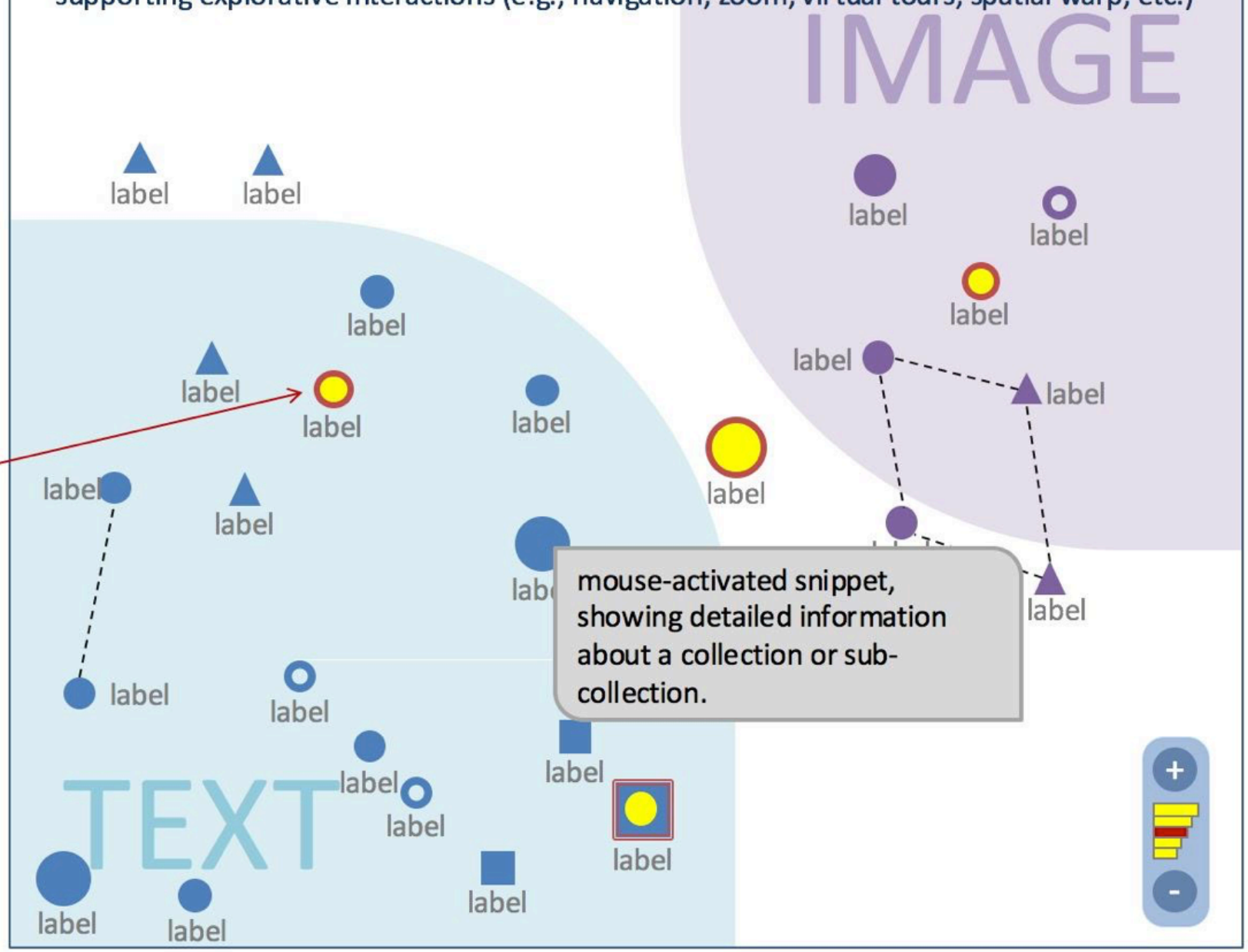
search and information panel

supporting **keywords search** as well as structured search according to predefined attributes (e.g., subjects, formats, materials, dates, hierarchy, etc.)

grid and out-of-zoom information

map-based visual interface

supporting explorative interactions (e.g., navigation, zoom, virtual tours, spatial warp, etc.)



The actual visual encoding is to be designed in the pilot project

Prof Min Chen

What Have we Accomplished

- First version of a demonstrator
  - But it doesn’t quite do what we want it to do
- Much better understanding of the problem
  - Scale of the metadata issue
  - Problems with visualization
- New design ideas
- More data analysis

Welcome to the Oxford Collection Map

Below you'll see a map of the hundreds of **collections** held in the various institutional collections across Oxford. Try filtering the map by *Type of Thing*, *University Department*, or *Subject*. If you prefer, you can also simply noodle around by **subject**, **type of thing** or **institution**, if you like.

LIBRARIES, MUSEUMS & GARDENS

Ashmolean Museum | Bodleian Libraries | Museum of the History of Science | Museum of Natural History | Pitt Rivers Museum | Oxford University Herbaria

Legend

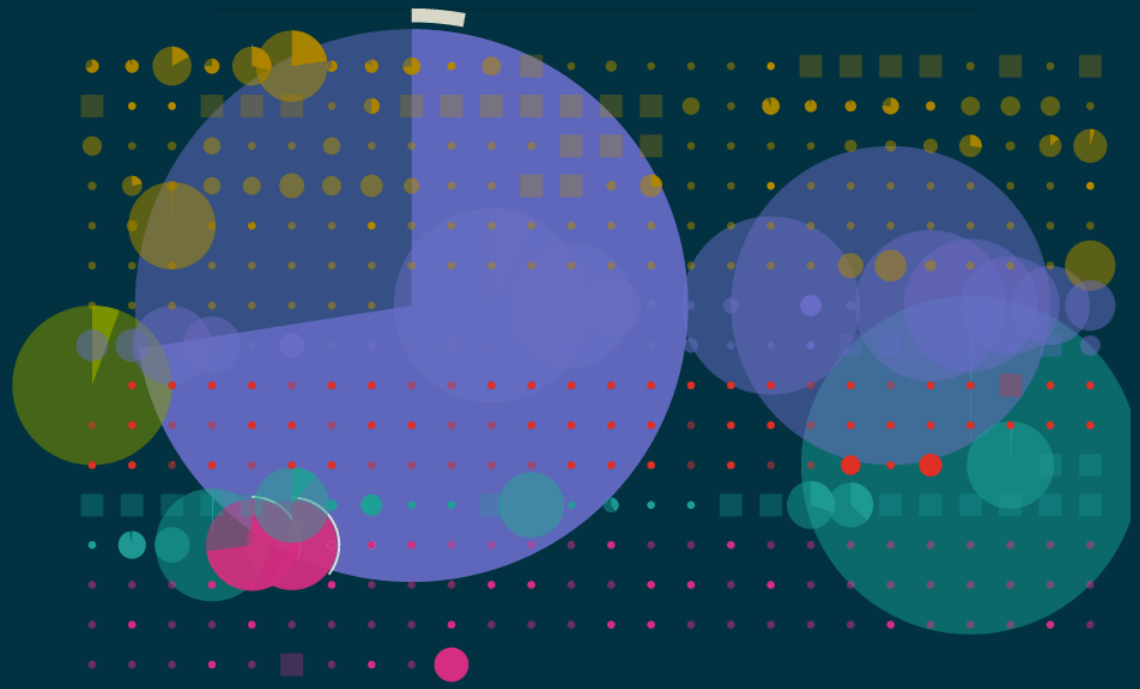
A collection

Some metadata is online

Some digitised materials

A collection, but we aren't sure of size

Choose a filter... | then more options will come up here | Clear



What am I looking at?

Each collection is represented as a circle or a square. A circle means we know how big it is, and a square means we don't. →

← If we know how many things in the collection have a digital metadata record, we draw proportion as a piece of pie.

Welcome to the Oxford Collection Map

Below you'll see a map of the hundreds of **collections** held in the various institutional collections across Oxford. Try filtering the map by *Type of Thing*, *University Department*, or *Subject*. If you prefer, you can also simply noodle around by **subject**, **type of thing** or **institution**, if you like.

LIBRARIES, MUSEUMS & GARDENS

Ashmolean Museum | Bodleian Libraries | Museum of the History of Science | Museum of Natural History | Pitt Rivers Museum | Oxford University Herbaria

Legend

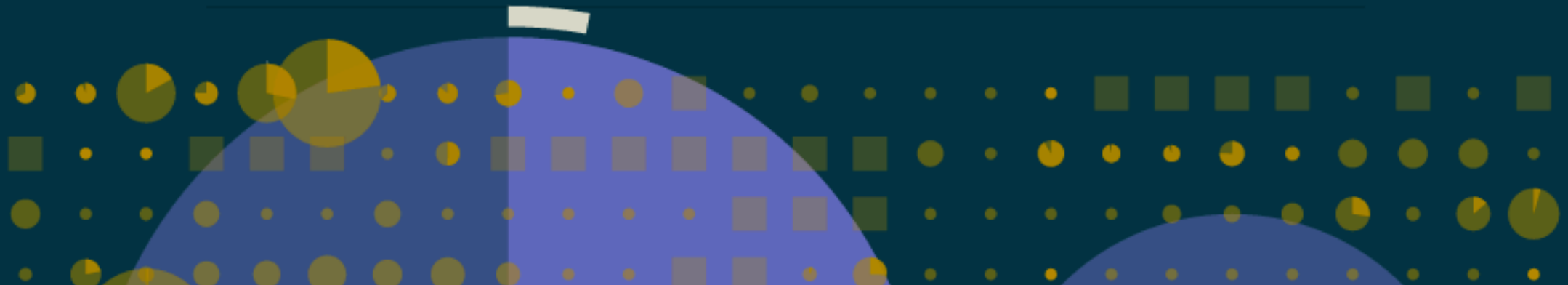
A collection

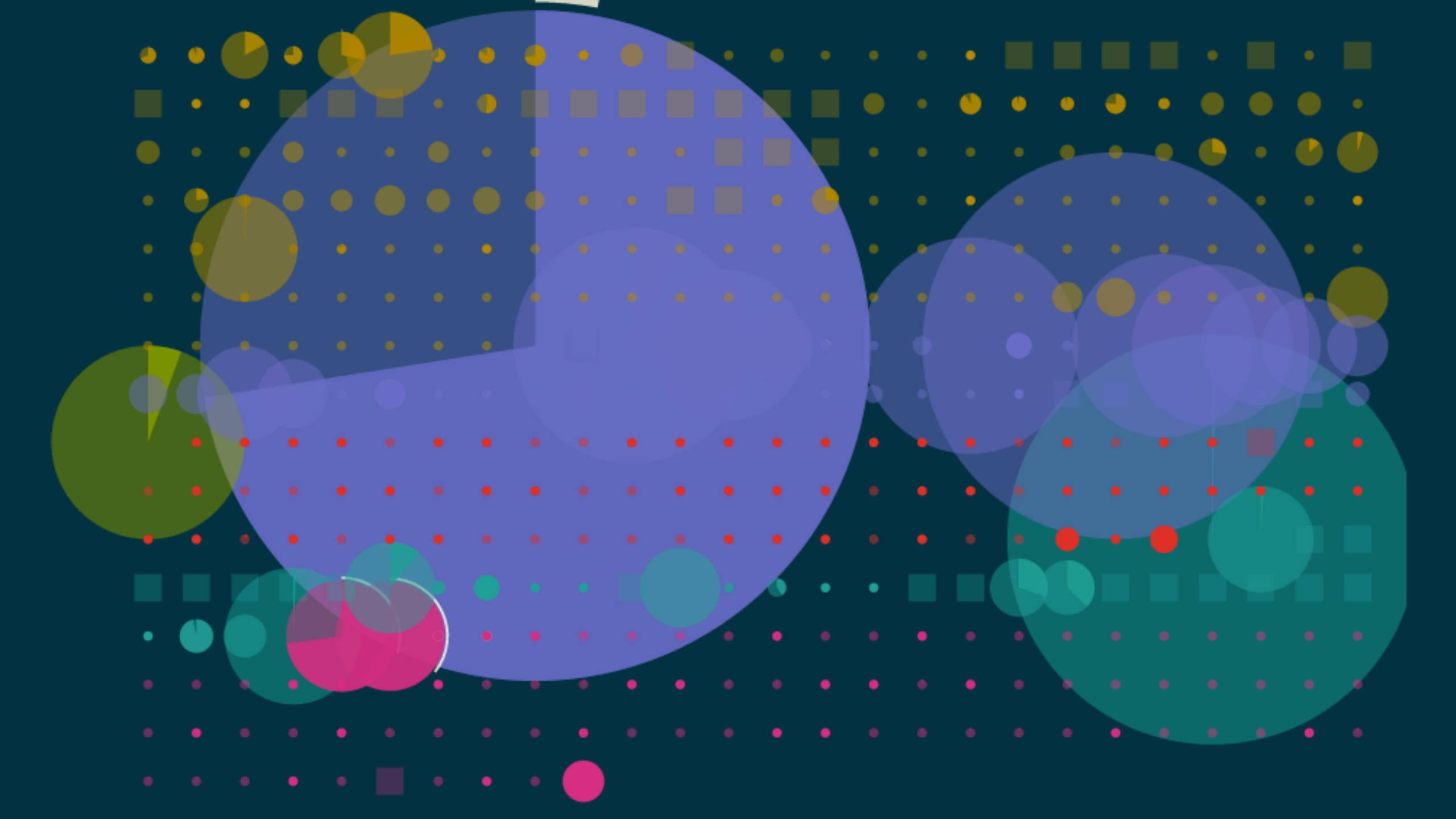
Some metadata is online

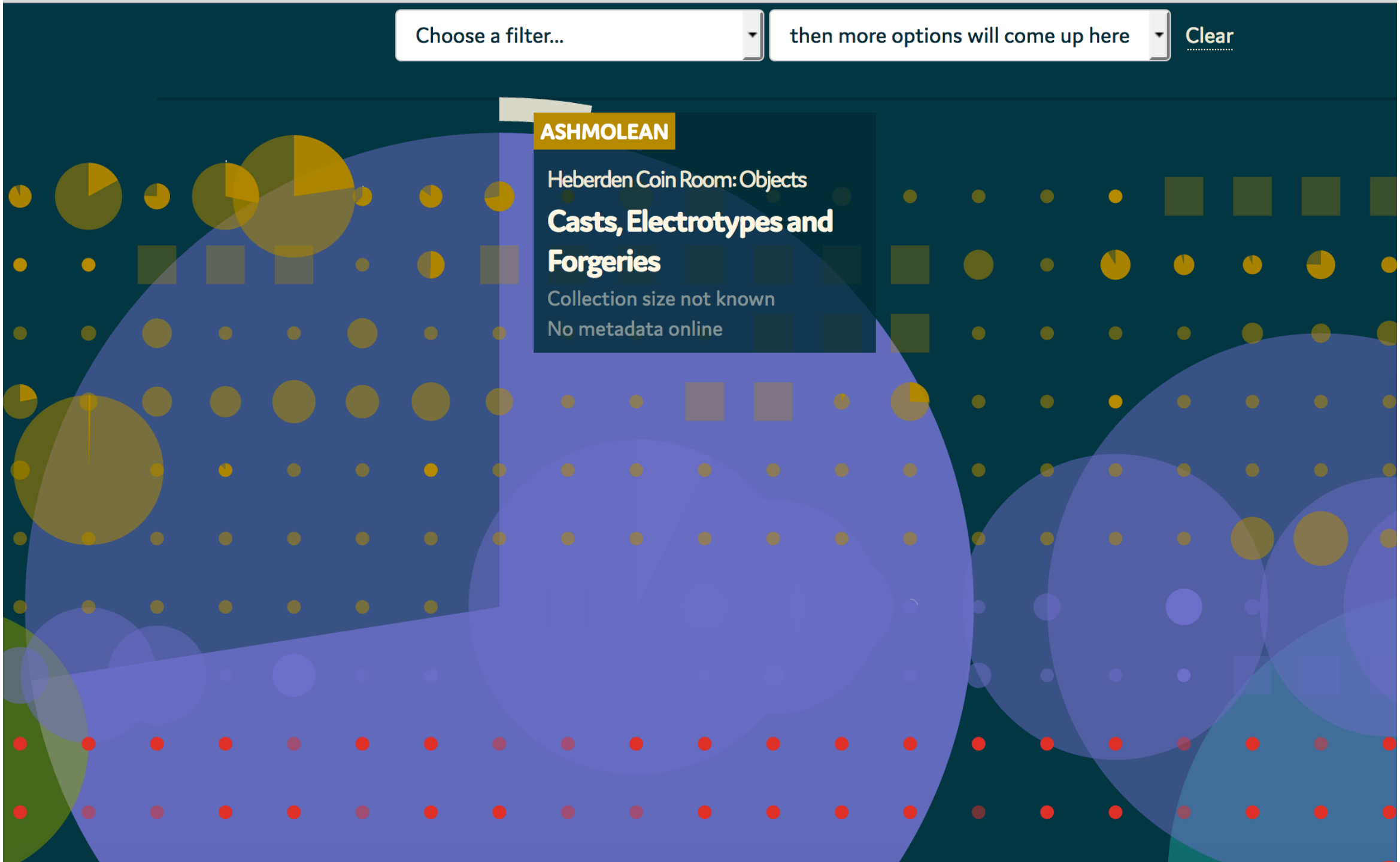
Some digitised materials

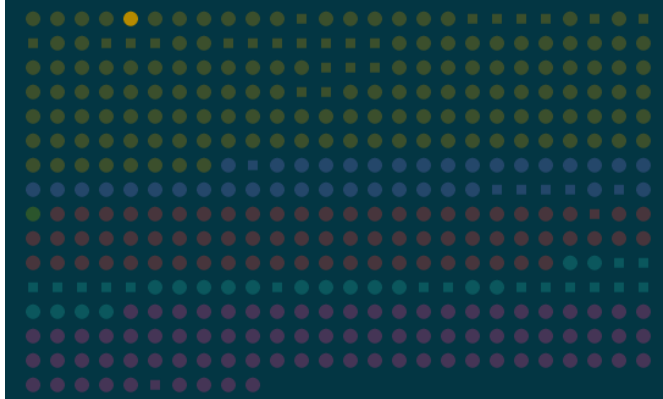
A collection, but we aren't sure of size

Choose a filter... | then more options will come up here | Clear





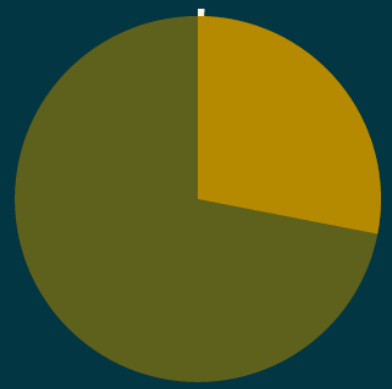

Choose a filter...
then more options will come up here
Clear
ASHMOLEAN
Heberden Coin Room: Objects
Casts, Electrotypes and Forgeries
Collection size not known
No metadata online



Ashmolean

Ancient Near East

This collection mostly contains tablets, seals and terracottas about archaeology and art history dated about 1200BC-500AD. Materials are either from or about Near East.



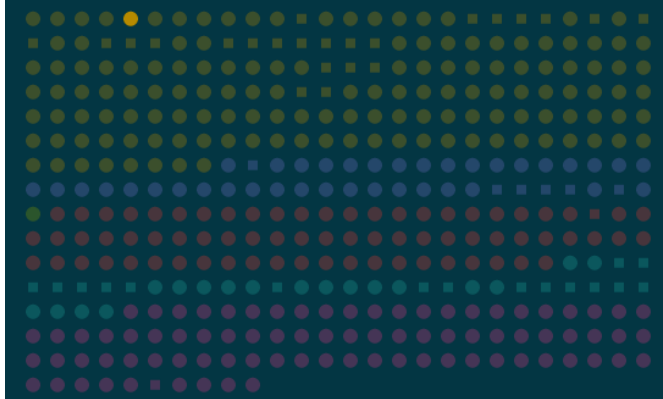
60,000 things

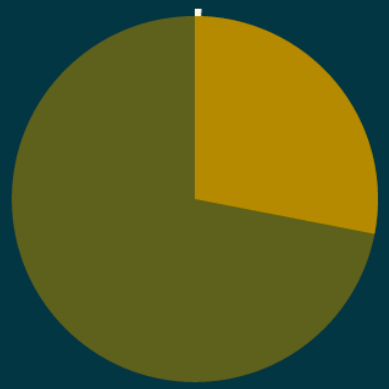
STAFF COMMENTS ON THIS COLLECTION

http://www.ashmolean.org/research/

STATS

- 60,000 things
- 28% have metadata online
- 1% of those have a digitised version





STATS

- 60,000 things
- 28% have metadata online
- 1% of those have a digitised version

Ashmolean

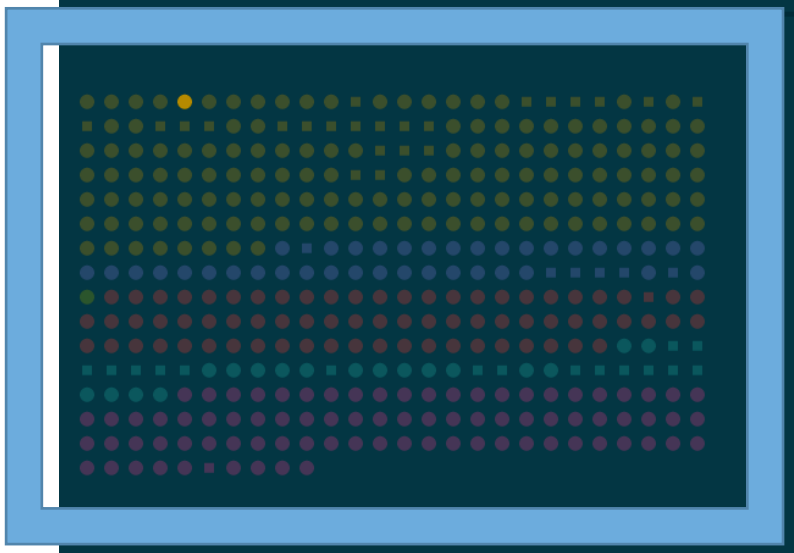
Ancient Near East

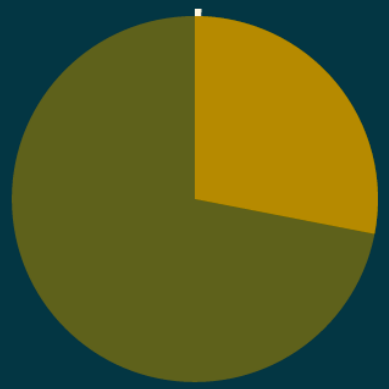
This collection mostly contains tablets, seals and terracottas about archaeology and art history dated about 1200BC-500AD. Materials are either from or about Near East.

60,000 things

STAFF COMMENTS ON THIS COLLECTION

http://www.ashmolean.org/research/





Ashmolean

Ancient Near East

This collection mostly contains tablets, seals and terracottas about archaeology and art history dated about 1200BC-500AD. Materials are either from or about Near East.

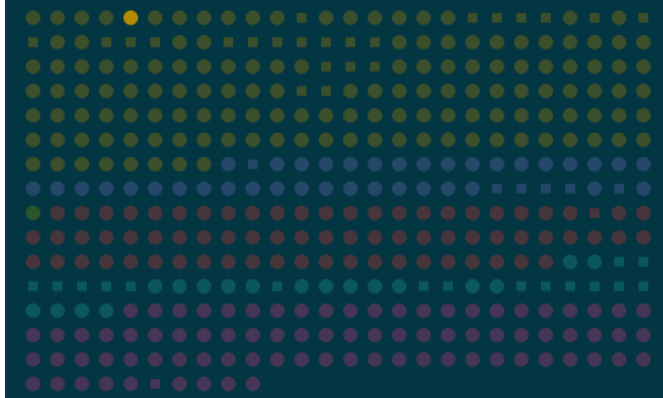
60,000 things

STAFF COMMENTS ON THIS COLLECTION

http://www.ashmolean.org/research/

STATS

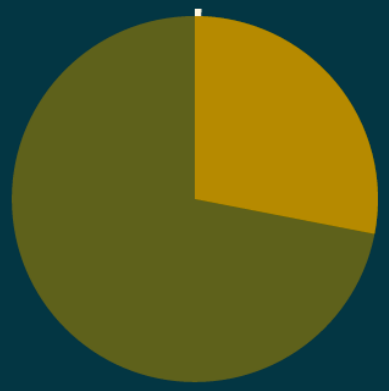
- 60,000 things
- 28% have metadata online
- 1% of those have a digitised version



Ashmolean

Ancient Near East

This collection mostly contains tablets, seals and terracottas about archaeology and art history dated about 1200BC-500AD. Materials are either from or about Near East.



60,000 things

STAFF COMMENTS ON THIS COLLECTION

http://www.ashmolean.org/research/

STATS

- 60,000 things
- 28% have metadata online
- 1% of those have a digitised version

Ancient Near Eastern Terracottas (ANET)

Browse Collection *(393 objects found)*

AN.Susa Loan (Louvre), no. 1

AN.Susa Loan (Louvre), no. 2

AN.Susa Loan (Louvre), no. 3

AN.Susa Loan (Louvre), no. 4

AN.Susa Loan (Louvre), no. 5

The Issues

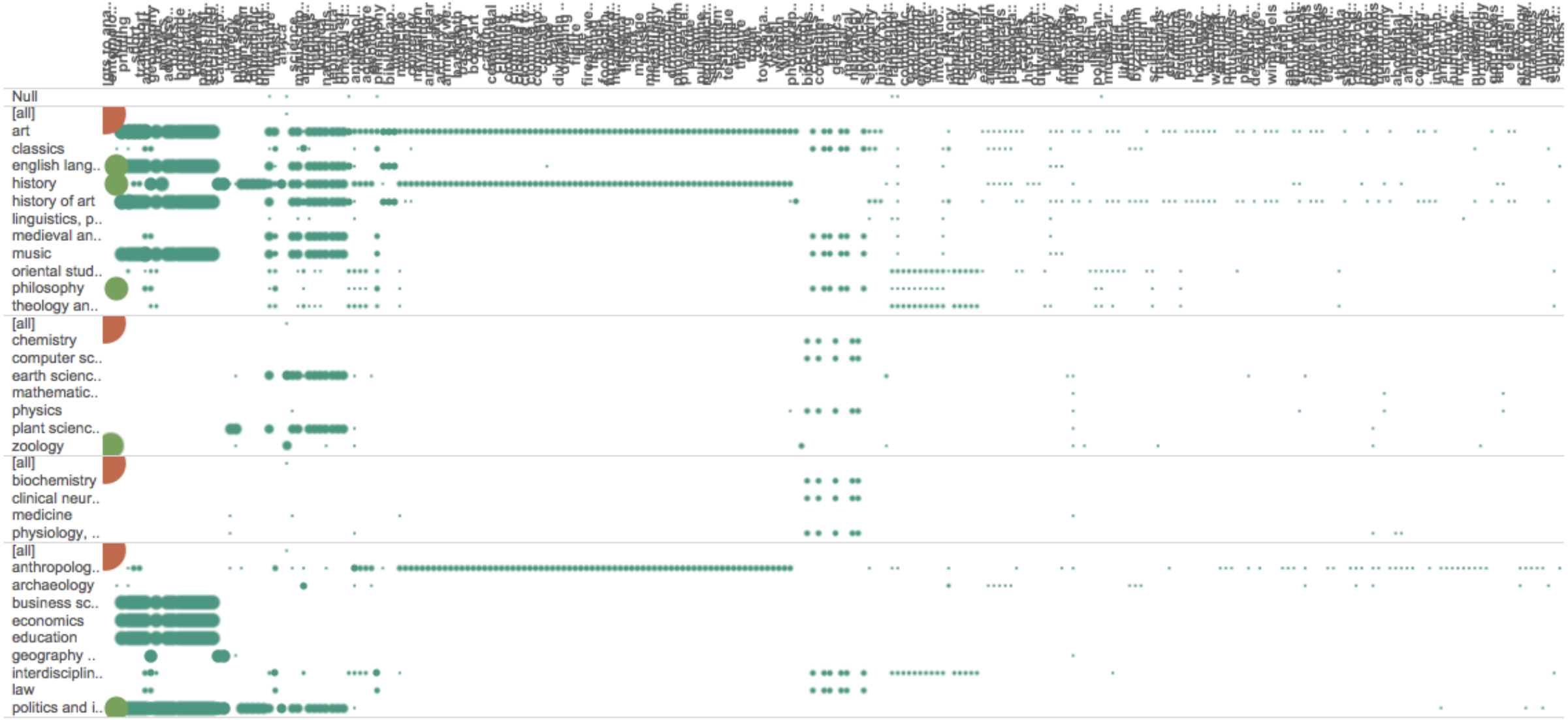
- Requires too much interaction before understanding
- Does not display enough information
- Relies too much on text
- Users get lost

Next Steps

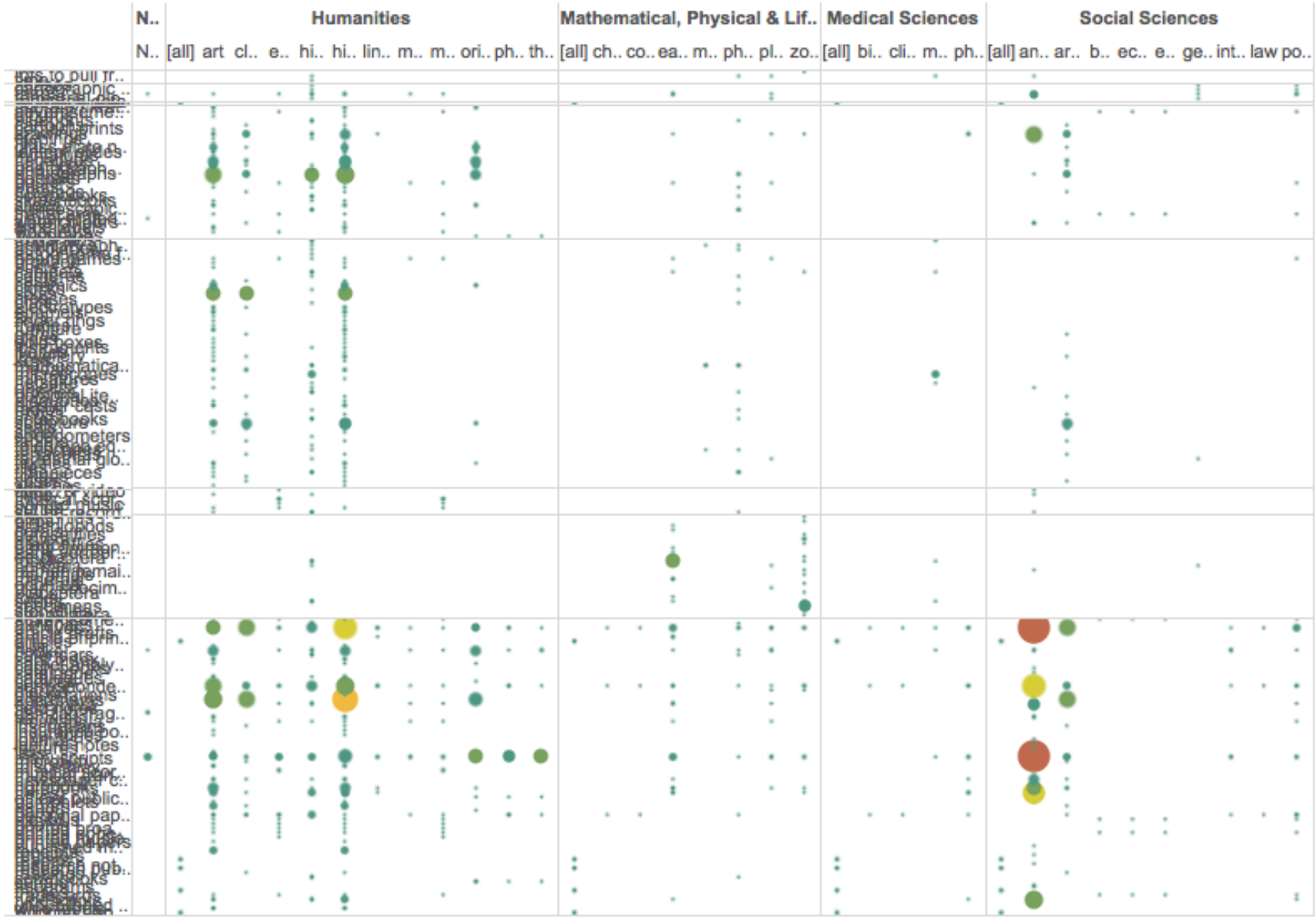
- Analysis of data
- More design options

Heatmap comparing the Division/Academic Department (verical) to the subject of the collection (horizontal)
Size of bubble = # of items in collections

Subjects x Division - # items

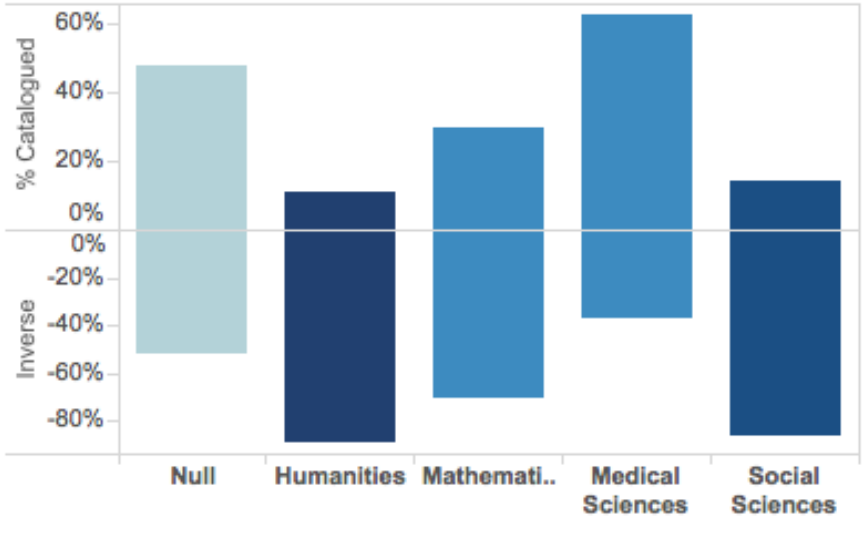


Heatmap comparing the type of materials available (vertical) by Division/Academic Department (horizontal)
Size of bubble = number of distinct collections

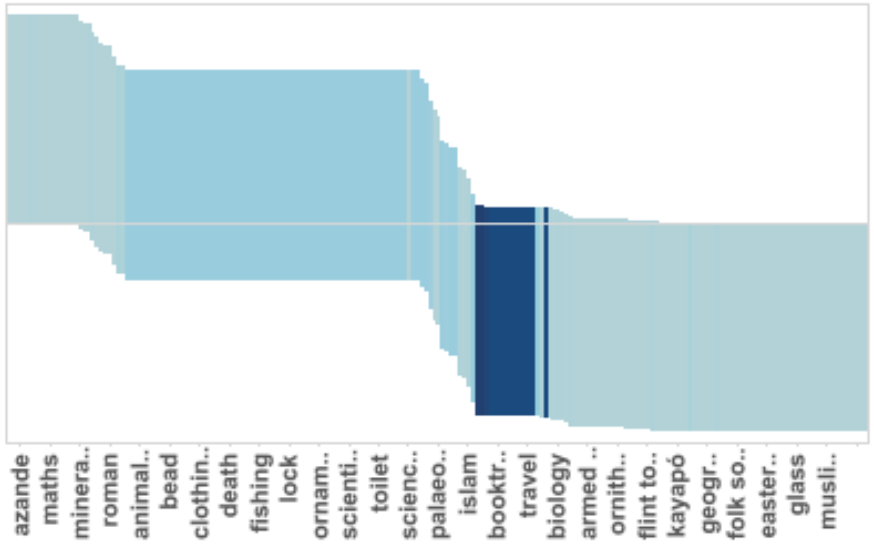


Iceberg chart showing the % of the collection catalogued (above the line) and uncatalogued (below the line)
Top chart shows categorical breakdown by division/academic department; bottom chart shows type of material

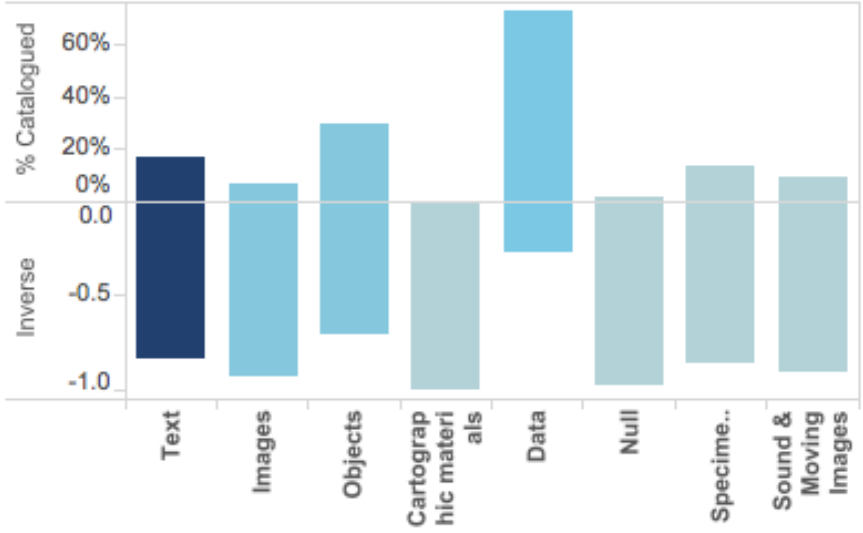
Division/Academic Department



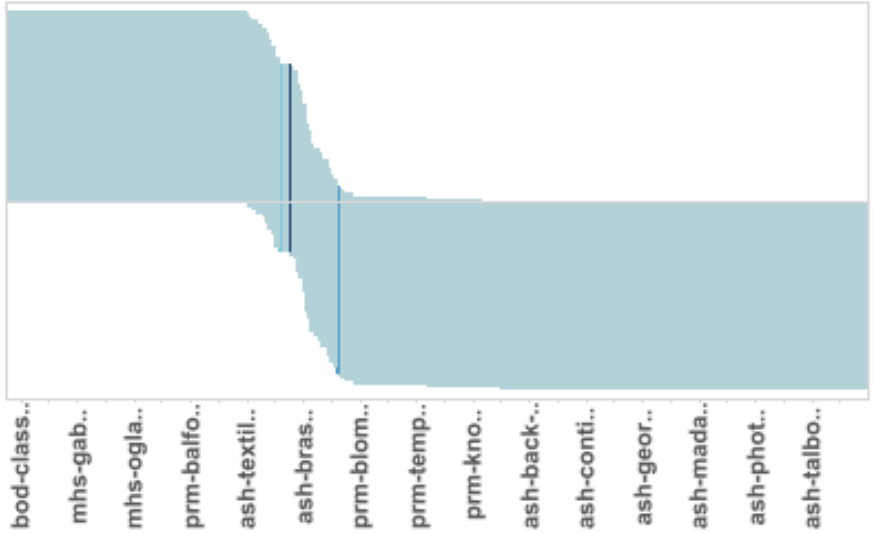
Subject



Type of Material



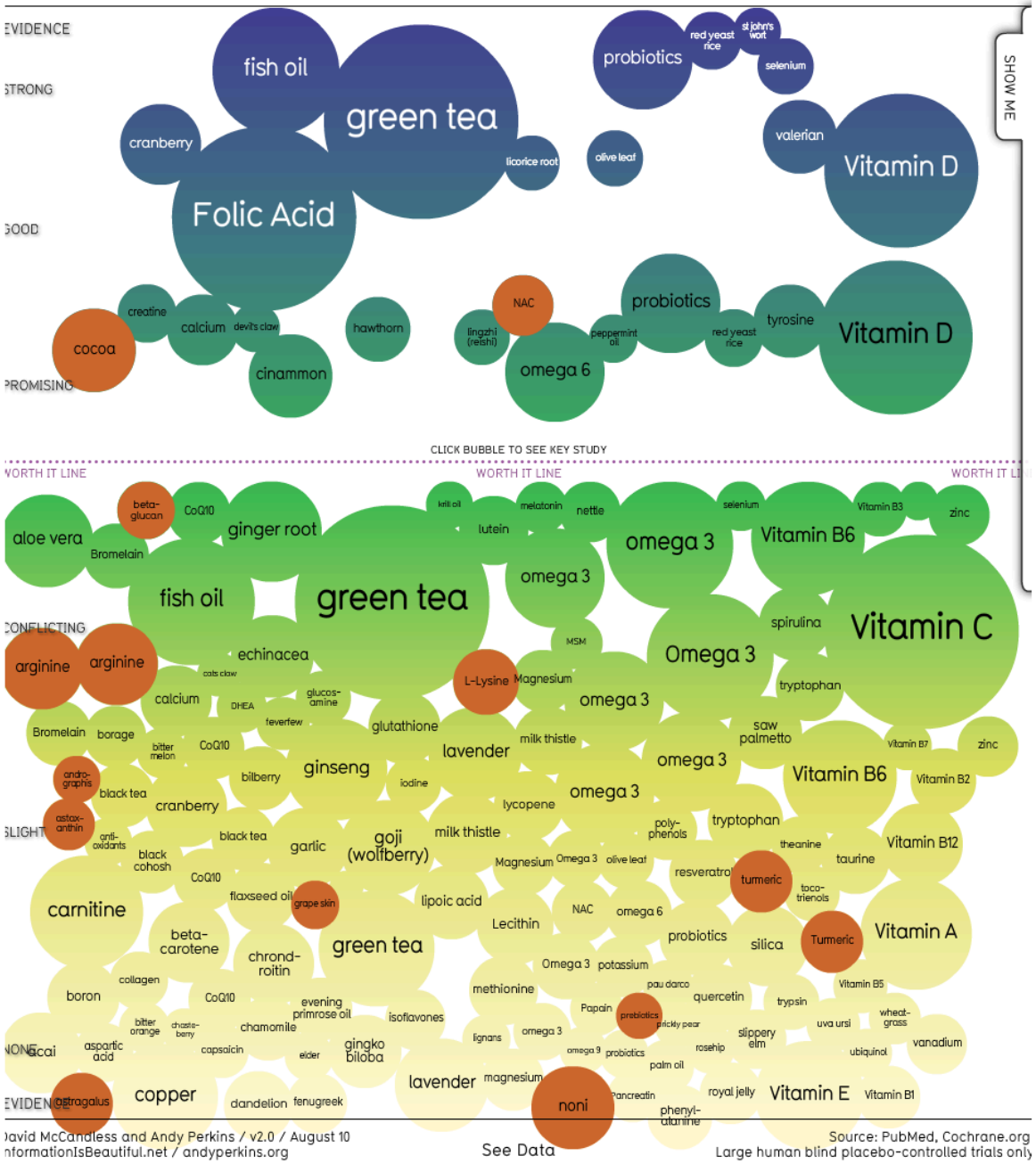
Collection



Snake Oil?

Scientific evidence for popular health supplements

showing tangible human health benefits when taken orally by an adult with a healthy diet



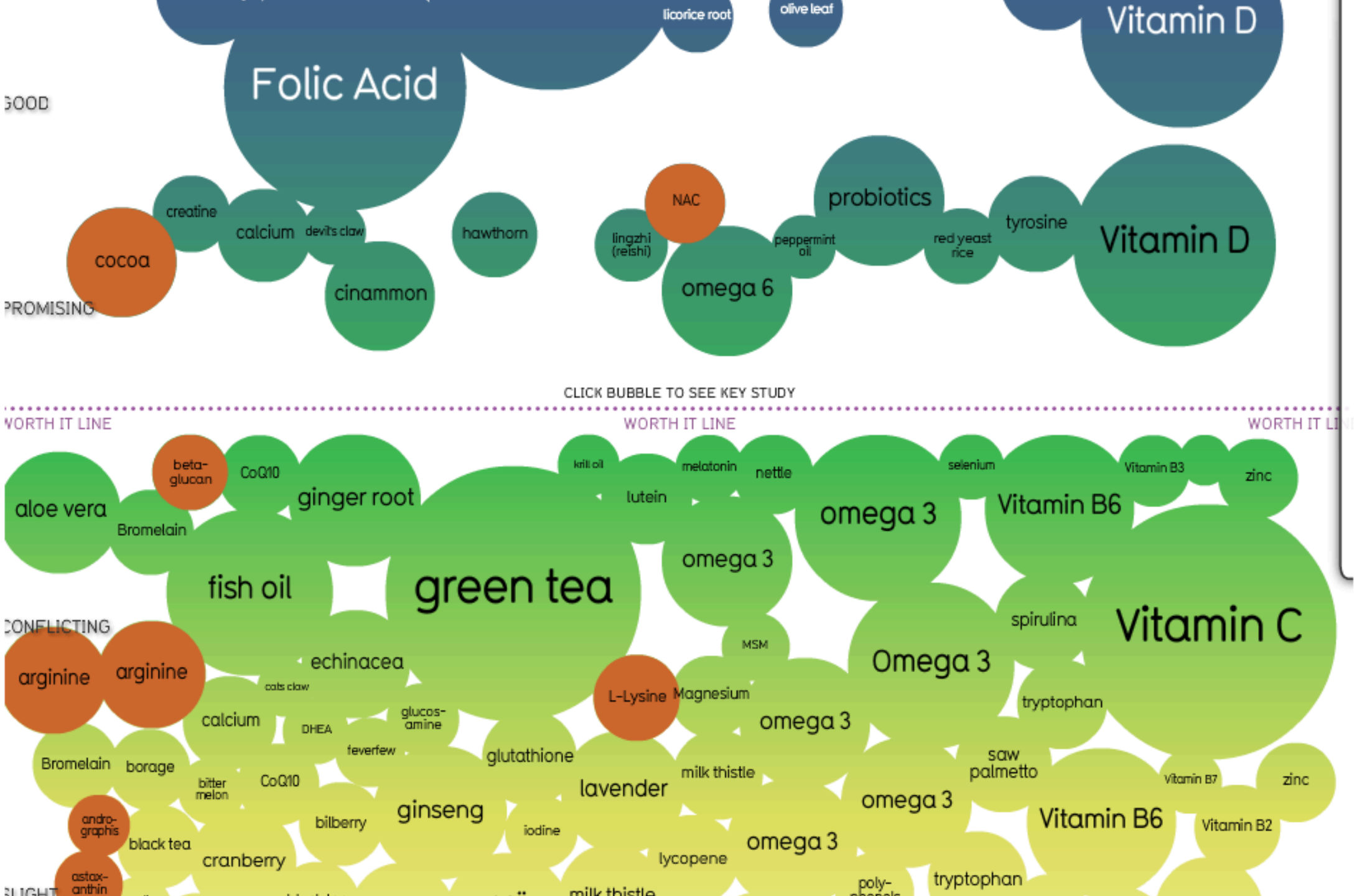
David McCandless and Andy Perkins / v2.0 / August 10

InformationIsBeautiful.net / andyperkins.org

See Data

Source: PubMed, Cochrane.org

Large human blind placebo-controlled trials only


licorice root
olive leaf
Vitamin D
Folic Acid
GOOD
creatine
calcium
devil's claw
hawthorn
NAC
probiotics
tyrosine
Vitamin D
cocoa
lingzhi (reishi)
peppermint oil
red yeast rice
cinammon
omega 6
PROMISING
CLICK BUBBLE TO SEE KEY STUDY
WORTH IT LINE
WORTH IT LINE
WORTH IT LI
beta-glucan
CoQ10
krill oil
melatonin
nettle
selenium
Vitamin B3
zinc
aloe vera
ginger root
lutein
omega 3
Vitamin B6
Bromelain
omega 3
fish oil
green tea
spirulina
Vitamin C
CONFLICTING
MSM
Omega 3
arginine
arginine
echinacea
cats claw
L-Lysine
Magnesium
tryptophan
calcium
DHEA
glucos-amine
omega 3
feverfew
glutathione
saw palmetto
Bromelain
borage
milk thistle
Vitamin B7
zinc
bitter melon
CoQ10
lavender
omega 3
andro-graphis
ginseng
Vitamin B6
bilberry
iodine
Vitamin B2
black tea
omega 3
cranberry
lycopene
astax-anthin
poly-
tryptophan
LIGHT
milk thistle

Snake Oil Supplements?

Scientific evidence for popular health supplements

Showing tangible human health benefits when taken orally by an adult with a healthy diet (Sep 11th 2015)

one to watch

EVIDENCE

BUBBLE COLOUR EVIDENCE TYPE *BUBBLE SIZE* POPULAR INTEREST SCIENTIFIC INTEREST

HIDE FILTER

STRONG

GOOD

St John's wort

coffee
heart disease

caffeine

egg shell membrane

feverfew

folic acid

iron

peppermint oil

probiotics

xylitol

vitamin D

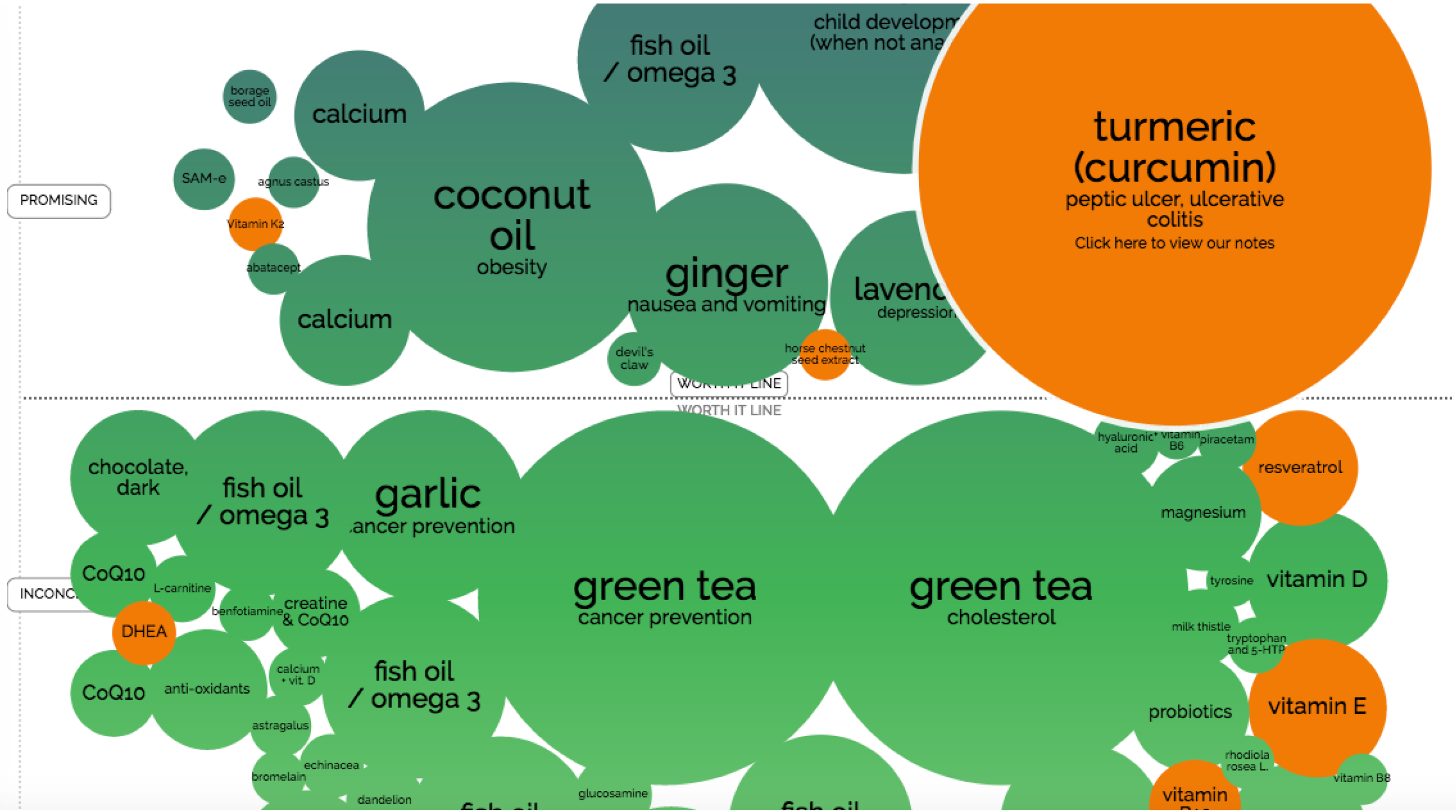
vitamin C

Filter by...

HEALTH CONDITIONTYPE

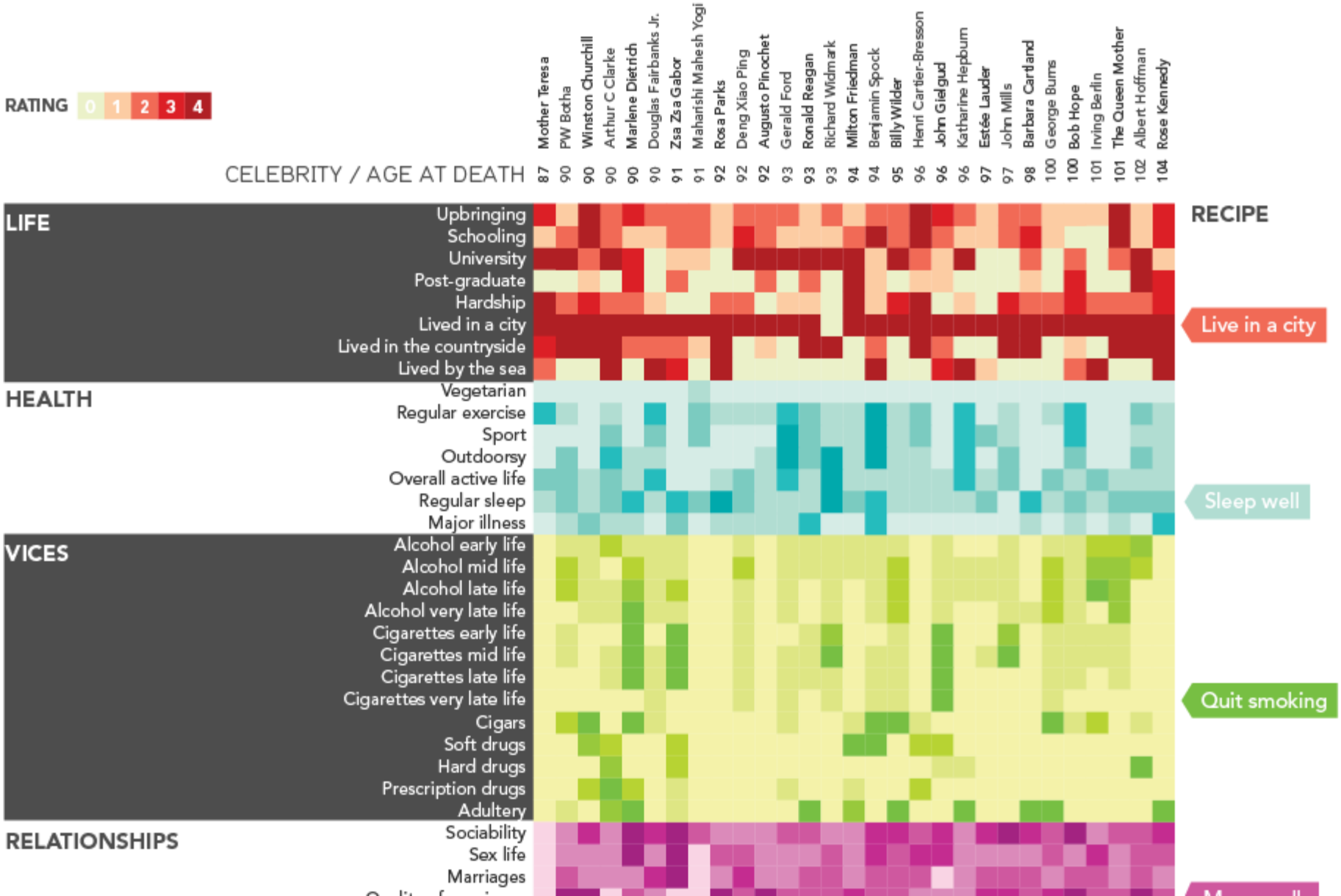
- all
- cancer
- cardio
- children
- cognition
- diabetes
- digestion
- eyes
- general health
- infections
- men
- mental health
- musculoskeletal
- pain
- reproductive
- respiratory
- sex
- urinary
- women

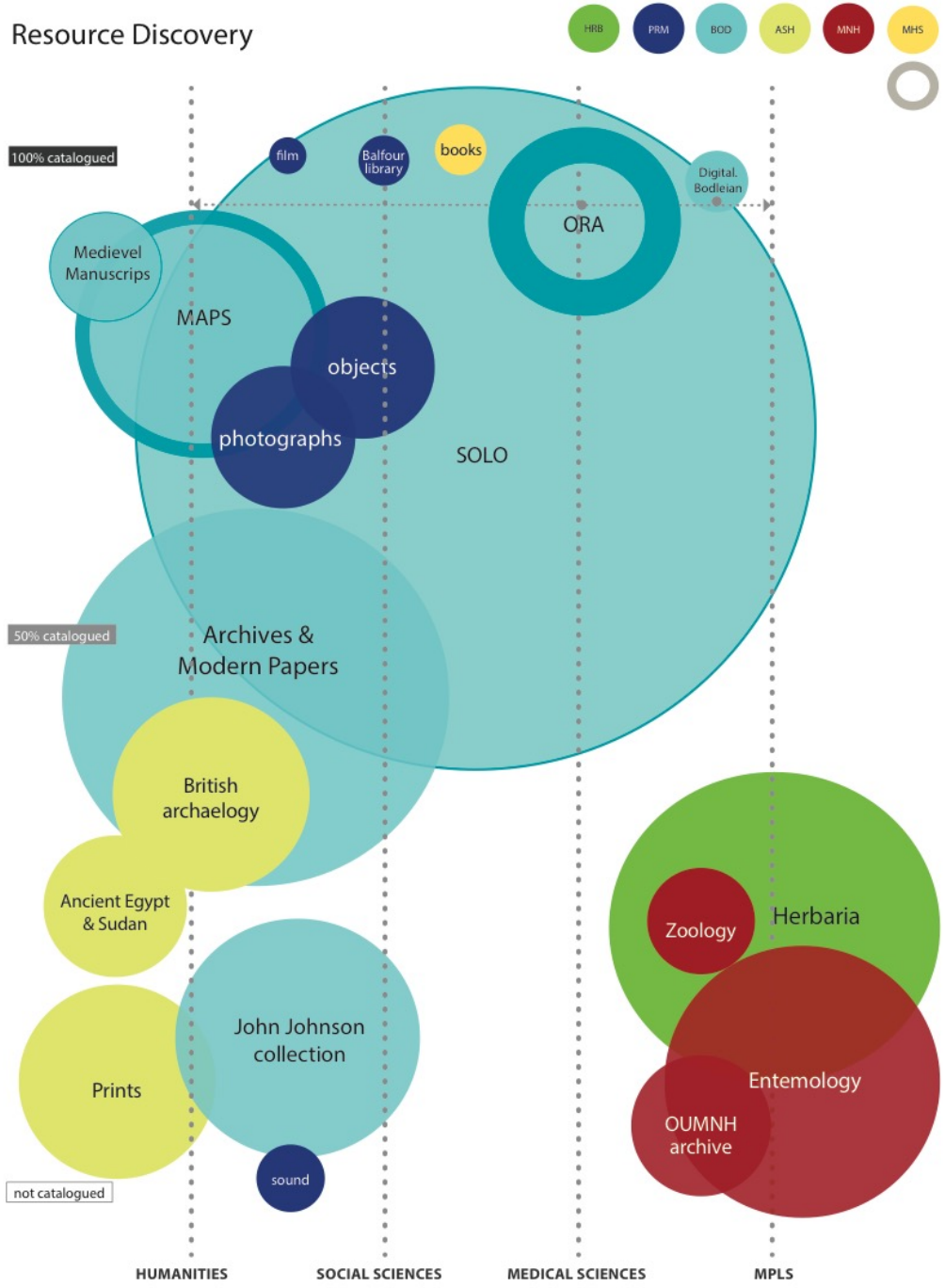
- all
- compound
- enzyme
- hormone
- mineral
- plant / herb
- vitamin
- other

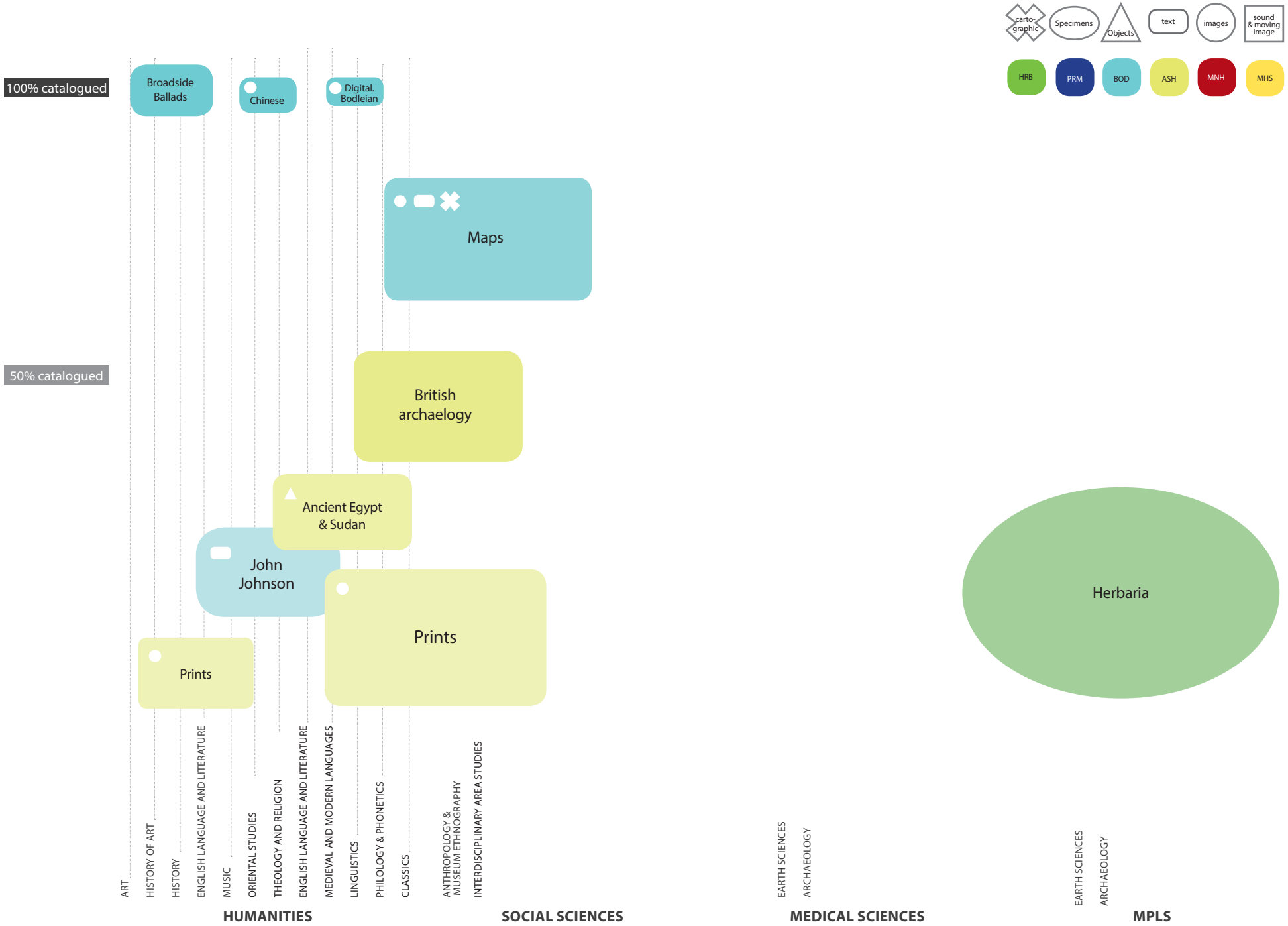

PROMISING
borage seed oil
calcium
SAM-e
agnus castus
Vitamin K2
abatacept
calcium
coconut oil
obesity
fish oil / omega 3
child developm
(when not ana
ginger
nausea and vomiting
lavend
depression
devil's claw
horse chestnut seed extract
turmeric (curcumin)
peptic ulcer, ulcerative colitis
Click here to view our notes
WORTH IT LINE
WORTH IT LINE
INCONC
chocolate, dark
fish oil / omega 3
garlic
ancer prevention
CoQ10
L-carnitine
benfotiamine
creatine & CoQ10
DHEA
CoQ10
anti-oxidants
calcium + vit. D
fish oil / omega 3
astragalus
echinacea
bromelain
dandelion
green tea
cancer prevention
glucosamine
green tea
cholesterol
hyaluronic acid
vitamin B6
piracetam
resveratrol
magnesium
tyrosine
vitamin D
milk thistle
tryptophan and 5-HTP
probiotics
vitamin E
rhodiola rosea L.
vitamin B8
vitamin

Immortality

Biographies of the famously long-lived examined for clues to longevity




Resource Discovery
HRB
PRM
BOD
ASH
MNH
MHS
100% catalogued
film
Balfour library
books
Digital. Bodleian
ORA
Medievel Manuscrips
MAPS
objects
photographs
SOLO
50% catalogued
Archives & Modern Papers
British archaelogy
Ancient Egypt & Sudan
John Johnson collection
Prints
sound
not catalogued
Zoology
Herbaria
Entemology
OUMNH archive
HUMANITIES
SOCIAL SCIENCES
MEDICAL SCIENCES
MPLS


carto-graphic
Specimens
Objects
text
images
sound & moving image
HRB
PRM
BOD
ASH
MNH
MHS
100% catalogued
50% catalogued
Broadside Ballads
Chinese
Digital. Bodleian
Maps
British archaelogy
Ancient Egypt & Sudan
John Johnson
Prints
Prints
Herbaria
ART
HISTORY OF ART
HISTORY
ENGLISH LANGUAGE AND LITERATURE
MUSIC
ORIENTAL STUDIES
THEOLOGY AND RELIGION
ENGLISH LANGUAGE AND LITERATURE
MEDIEVAL AND MODERN LANGUAGES
LINGUISTICS
PHILOLOGY & PHONETICS
CLASSICS
ANTHROPOLOGY & MUSEUM ETHNOGRAPHY
INTERDISCIPLINARY AREA STUDIES
EARTH SCIENCES
ARCHAEOLOGY
EARTH SCIENCES
ARCHAEOLOGY
HUMANITIES
SOCIAL SCIENCES
MEDICAL SCIENCES
MPLS

“If I get dropped into the middle of the landscape, I can deduce where I am and navigate my way out, whereas my students will latch on to the first tree that looks interesting.”

Lessons Learned

- There is a place for visualisation and a place for search
- No way around creating metadata
- Whatever you do is going to take a lot of work
  - Off the shelf packages don't seem so terrible
- Data visualization vs info visualization
  - Tolerance for abstraction
  - Data analysis versus simple visualisation
- If you want something to be design-led, hold off on data

Next Steps

Questions and discussion