

CIDOC CRM Research Infrastructures



Report on Development

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[@researchspace](#)



Components

- Fully Linked Data – Uses RDF Store and Index only
- Fully CIDOC CRM – All data for content and system is CIDOC CRM Linked Data
- Open Source
- Standards based HTML and Wiki-markup
- No reasoning of core data – stable research objects
- ETL (Extract, Transform Load) Publication Pipeline
- Docker Implementation

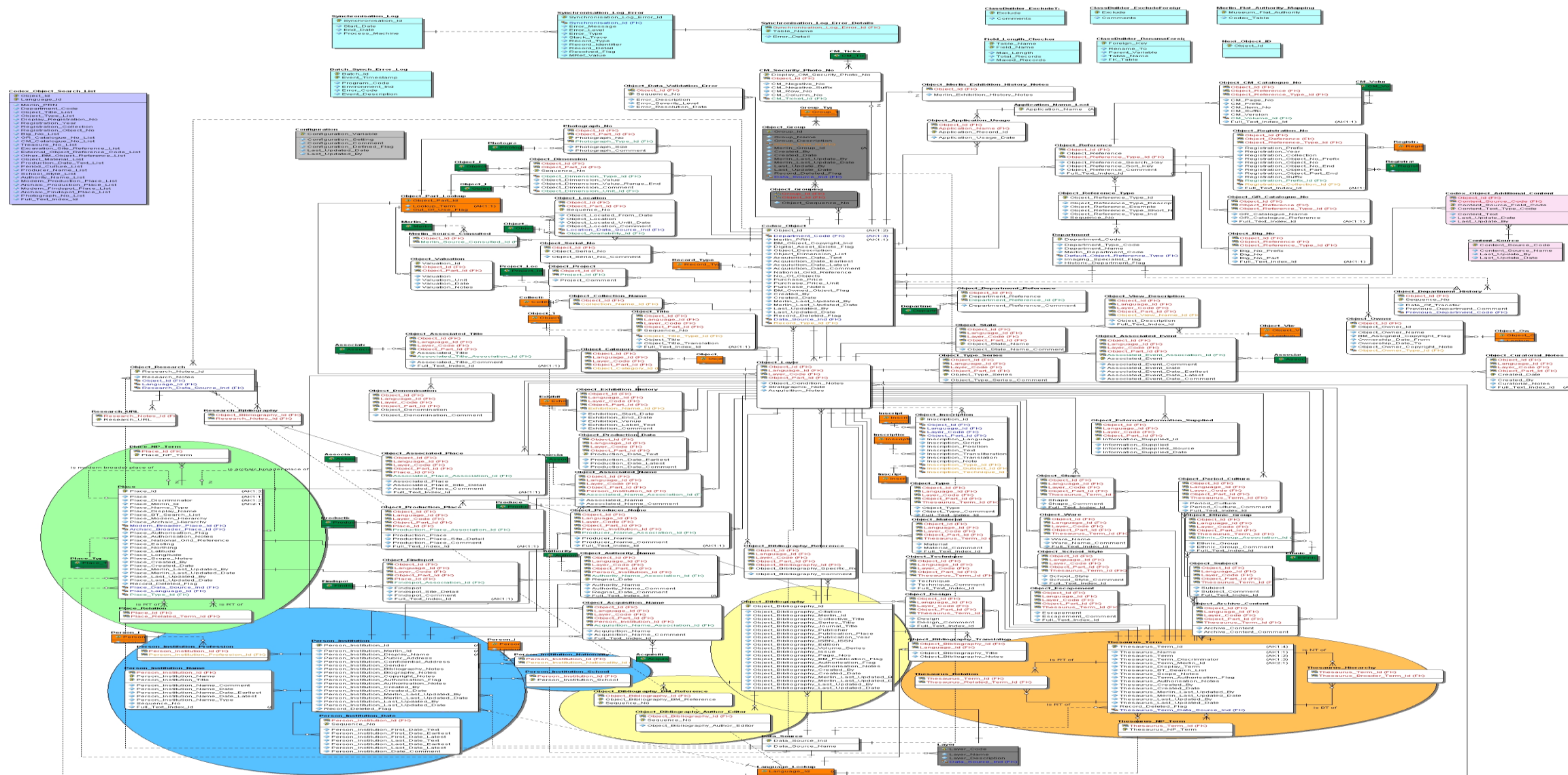
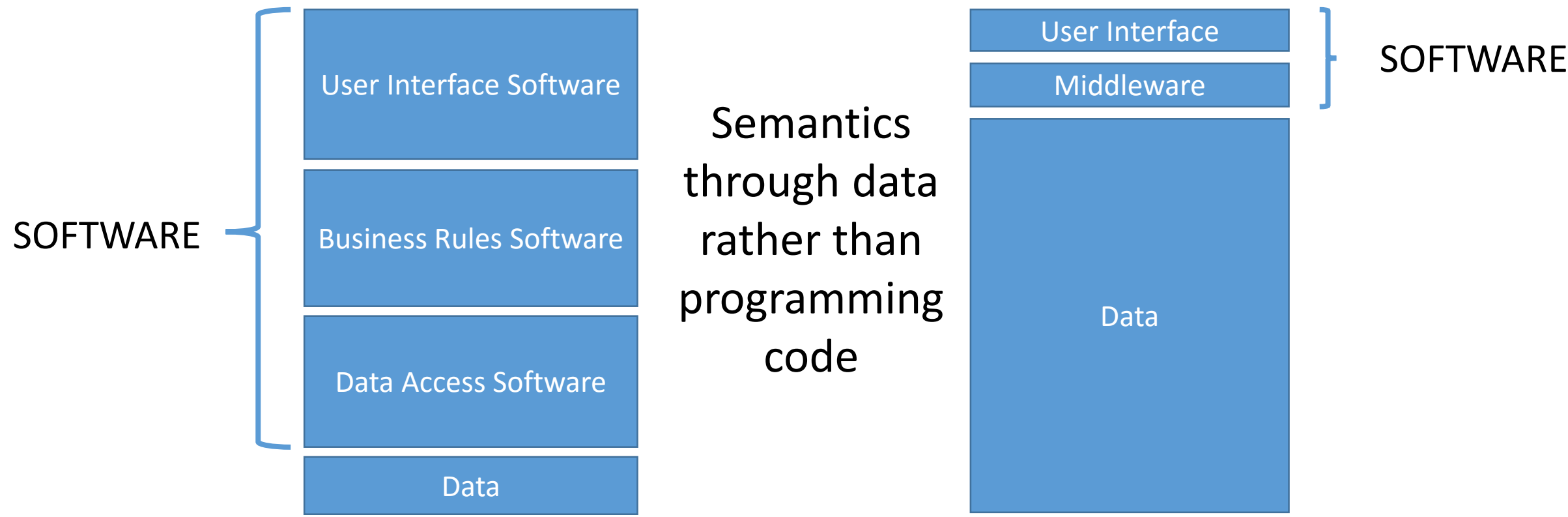
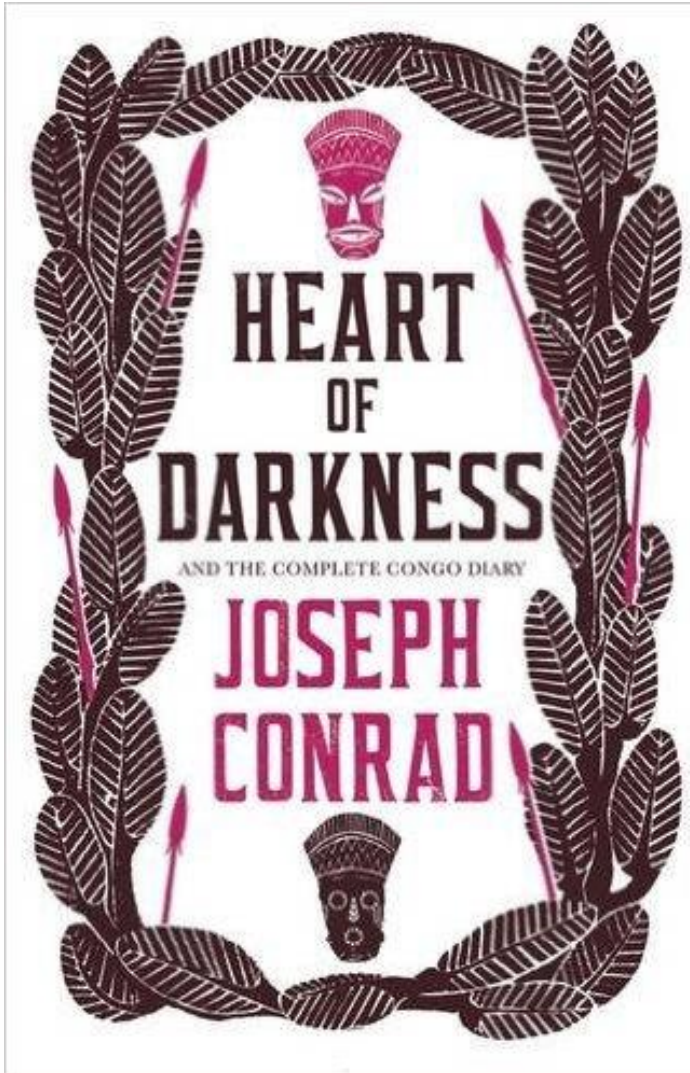


Table Colour: Key		Project - Codeserver.dml	
	Lookup Type 1	File Name	codes_vb.dml
	Lookup Type 2	Component	Main Module
	Phase 2	Author	
		Copyright	
		Version	1.0 Modified: 1/01/2000
		Copyright (c)	2005



Resource Discovery

Why we use CIDOC CRM?



```
=LDR 00972pam 2200301 i 4500
=001 016965243
=003 Uk
=005 20160519142819.0
=008 141127s2015\\lenk\\b\\000\\1\\eng\\d
=015 \\$aGBB4D7759$2bnb
=020 \\$a9781847494016 (pbk.) :$c£4.99
=040 \\$aStDuBDS$beng$cStDuBDS$dUk$erda
=042 \\$aukblcatcopy
=082 04$a823.912$223
=100 1\\$aConrad, Joseph,$d1857-1924,$eauthor.
=240 10$aWorks.$kSelections
=245 10$aHeart of darkness ;$band,
The complete Congo diary /$cJoseph Conrad.
=250 \\$aNew edition.
=264 \\1$aRichmond :$bAlma Classics,$c2015.
=300 \\$a128 pages ;$c20 cm
=336 \\$atext$2rdacontent
=337 \\$aunmediated$2rdamedia
=338 \\$avolume$2rdacarrier
=504 \\$aIncludes bibliographical references.
=500 \\$aFormerly CIP.$5Uk
=650 \\0$aEuropeans$zAfrica$vFiction.
=651 \\0$aCongo River$xDiscovery and
exploration$vFiction.
=700 12$aConrad, Joseph,$d1857-1924.$tCongo diary.
```

Why we use CIDOC CRM?

Why Linked Data is Not Enough for Scientists

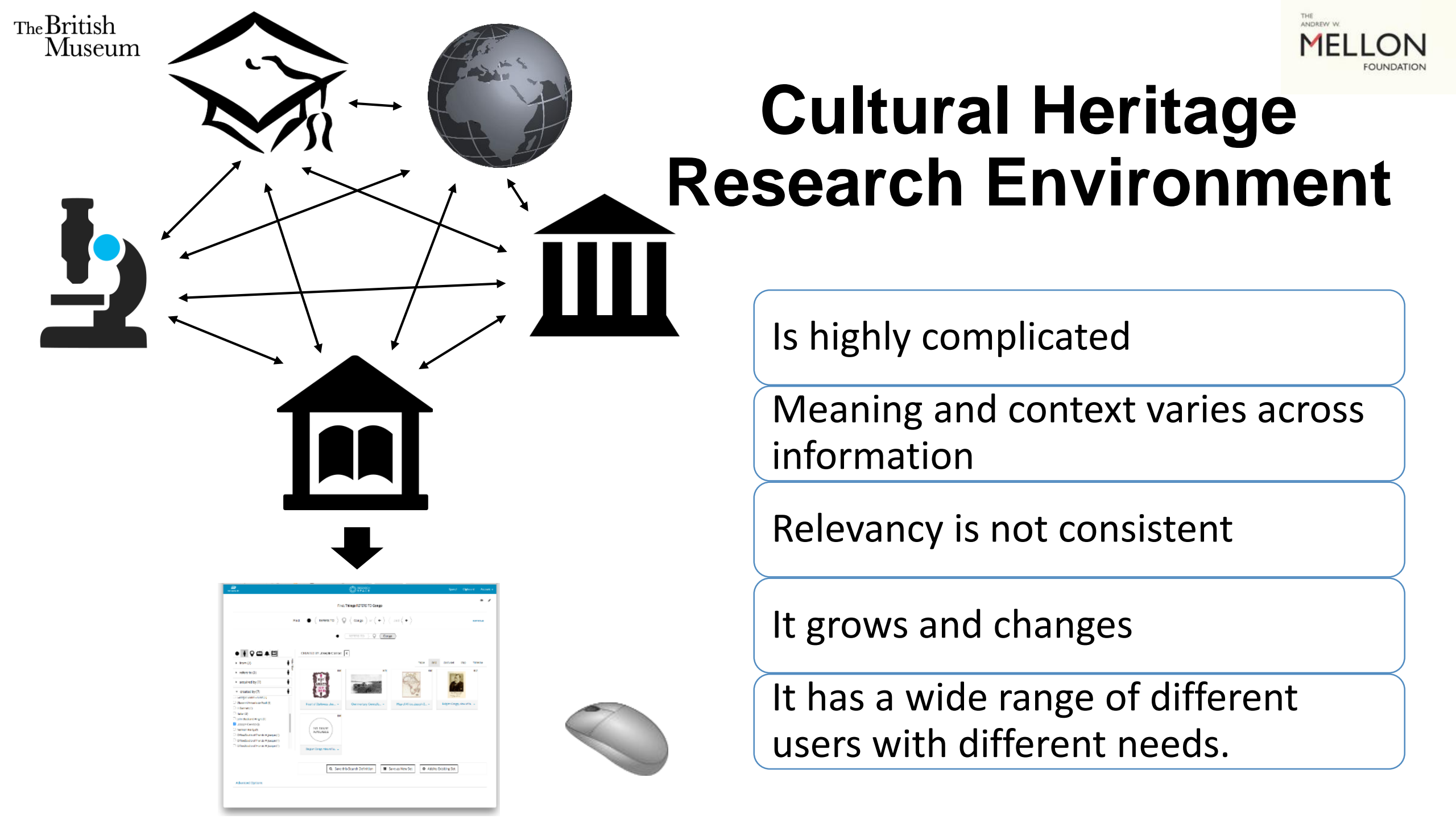
Sean Bechhofer^{a,*}, Iain Buchan^b, David De Roure^{d,c}, Paolo Missier^a, John Ainsworth^b, Jiten Bhagat^a, Philip Couch^b, Don Cruickshank^c, Mark Delderfield^b, Ian Dunlop^a, Matthew Gamble^a, Danus Michaelides^c, Stuart Owen^a, David Newman^c, Shoaib Sufi^a, Carole Goble^a

^a*School of Computer Science, University of Manchester, UK*

^b*School of Community Based Medicine, University of Manchester, UK*

^c*School of Electronics and Computer Science, University of Southampton, UK*

^d*Oxford e-Research Centre, University of Oxford, UK*



Cultural Heritage Research Environment

Is highly complicated

Meaning and context varies across information

Relevancy is not consistent

It grows and changes

It has a wide range of different users with different needs.



Dataset(s): All Profile: Default

Find: Events ...

- Thing
- Actor
- Place
- Time
- Event
- Concept

Collection online

Search the collection

Search

☐ Images only

Advanced search options

People and organisations ?

e.g. Hokusai, Ramesses

OR

AND

Places ?

india

OR

AND

Production date

AD ▼

to

AD ▼

Object types ?

e.g. bowl, hanging scroll, print

OR

AND

Subjects ?

e.g. farming, New Testament

OR

AND

Cultures/ periods / dynasties ?

e.g. Choson Dynasty, Ptolemaic

OR

AND

Techniques ?

e.g. carved, celadon-glazed

OR

AND

Schools/styles ?

e.g. French, Mughal Style

OR

AND

Materials ?

e.g. canvas, porcelain, silk

OR

AND

Ethnic group ?

e.g. Hmong, Maori, Tai

OR

AND

Ware ?

e.g. Imari ware, Qingbai ware

OR

AND

Escapement ?

e.g. cylinder, gravity, lever

OR

AND

Publication (author/ title) ?

OR

AND

Publication reference ?

Find: Things...

● Thing

...related to...

● Thing

● Actor

● Place

● Time

● Event

● Concept

● text Text Search

remove

Find: Places ...related to... Actor

● Place

has met

is origin of

is referred to by

refers to

● Actor

remove

Find: Things ...related to... Actor

● Thing

is referred to by

modified by

refers to

used by

acquired by

created by

found by

from

has met

● Actor

remove

Find: **Things**...

Find:



... RELATED TO ...



Advanced Options

Select dataset(s) to search over. Default: all

- British Museum
- Rijksmuseum
- AIIS
- YCBA

× Default (BM+AIIS+Rijks)

Original data and terminology not affected

Relationship Profile "Default (BM+AIIS+Rijks)"

Description: default system profile

Profile Categories:

×

Thing

×

Actor

×

Place

×

Time

×













Event



×

Concept

×

▼

Domain/Range	 Thing	 Actor	 Place	 Time	 Event	 Concept
 Thing	7	6	5	4	5	1
 Actor	3	5	2	5	8	1
 Place	3	2	2	0	3	1
 Time	1	0	0	1	0	0
 Event	4	6	3	1	4	1
 Concept	1	1	1	0	1	2

Relations for  Time ⇒  Time :

×

is part of

×

▼

metaphacts

RESEARCH SPACE

SparqlClipboardAccount

THE BRITISH MUSEUM

THE ANDREW W. MELLON FOUNDATION

Find: Things REFERS TO Congo and FROM Year 1870 AD - Year 1910 AD

Find: REFERS TO Congo or and remove

REFERS TO Congo AND FROM Year 1870 AD - Year 1910 AD

from (256)

refers to (16)

acquired by (256)

created by (218)

Hide Filter

Choiseul (1)

Cisterns of Tawila (1)

Colombia (1)

Congo (528)

Congo, River (16)

Coombes (1)

Corbie (2)

Croatia (1)

Cullercoats (1)

Georges Andre Brunet (1)

Giovanni Antonio de Paoli (1)

H Bennett (1)

Italian (3)

John Buckland Wright (1)

Joseph Conrad (3)

Leopold II of Belgium

Norman Hardy (2)

Office/Studio of Francis W Joaque (1)

CREATED BY Joseph Conrad

CREATED BY Leopold II

REFERS TO Congo, River

Table

Heart of Darkness, Jos...

Commentary, Conrad's...

Map of Africa Joseph C...

Cap, head ornament m...

Steamship, river in West...

Save this Search Definition

Save as New Set

Add to Existing Set

Faceting by Relationships

●

👤

📍

📅

🔔

📄

▶ from (256)

👤

▼ refers to (16)

📍

Choiseul (1)

Cisterns of Tawila (1)

Colombia (1)

Congo (528)

☒ Congo, River (16)

Coombes (1)

Corble (2)

Croatia (1)

Cullercoats (1)

▶ acquired by (256)

👤

▼ created by (218)

👤

Georges Andre Brunet (1)

Giovanni Antonio de Paoli (1)

H Bennett (1)

Italian (3)

John Buckland Wright (1)

☒ Joseph Conrad (3)

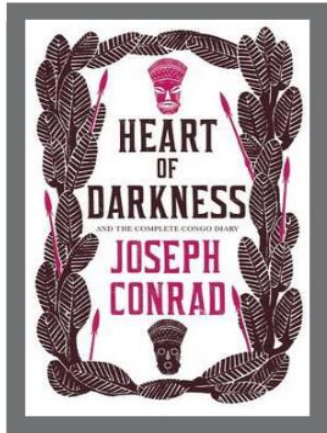
☒ Leopold II of Belgium

Norman Hardy (2)

Office/Studio of Francis W Joaque (1)

Hide Filter

Heart of Darkness, Joseph Conrad



British Museum Object Record

Title
Heart of Darkness; and, The complete Congo diary

Author
Joseph Conrad, 1857-1924, author

Description
Conrad, Joseph, 1857-1924. Congo diary.

Physical Description
128 pages; 20cm

Identifier
ISBN 9781847494016 (pbk.) : £4.99; BNB GBB4D7759; System number 016965243

Object type
book


Material(s)
paper, cardboard


Condition
fair


Subjects
Europeans -- Africa -- Fiction ; Congo River -- Discovery and exploration -- Fiction


Other Identifiers
EA24 (bigno)
117631 (codexid)
BS.24Birch Slip Number (otherid)
.24 (regno)


Related content from Wikidata



Sunrise on the Congo



Lualaba River DRC



Ubangi_21.43546E


In Darkest Africa Itur...


Ndjili


Africa satellite ortho...


River crossing, Pweto


Port of Basankusu an...

Alignment with other datasets

Basai Burj



Object Record

Shows

- Basai Burj

Monument Type

- tomb

Monument Material

- Red sandstone

Patron

- Shah Jahan

Production of Monument - start date

- 1650-01-01

Production of Monument - end date

- 1650-12-31

Period

- Mughal

Place of Monument Complex

- Taj Mahal complex

Monument Complex Latitude

- 27.083334

Monument Complex Longitude

- 77.96667

Place of Monument Site

- Agra Site

Monument District

- Agra

Related content from the BM Museum

Object

- Panel, one of two
- Panel, one of two
- Panel, one of two
- Panel, one of two
- Reconstructed stone tomb of Gaius Julius Alpinus C...
- Reconstructed stone tomb of Gaius Julius Alpinus C...
- Reconstructed stone tomb of Gaius Julius Alpinus C...
- Reconstructed stone tomb of Gaius Julius Alpinus C...
- Reconstructed stone tomb of Gaius Julius Alpinus C...
- Left fragment from the gable end of the roof of a ...

Related content from Wikidata

Wikidata

Agra

Uttar Pradesh

Taj Mahal

Taj Mahal

Taj Mahal

Taj Mahal



▼ Dataset(s): All Profile: Default


Find: Things is referred to by Event where Event is from Time...

● Thing


is referred to by

 Event
 [remove](#)

WHERE

 Event

from

 Time
 [remove](#)

Select Date or Range Type ▾

-- (dd-mm-yyyy)

-- to --


-- +-

to

+-

Collecting

Find: **Things** FROM **India** and CREATED ON Year 1650 AD - Year 1700 AD and HAS TYPE **bronze**


Find: ● HAS TYPE  bronze or + and + remove

● FROM  India AND CREATED ON  Year 1650 AD - Year 1700 AD AND HAS TYPE  bronze

● 👤 📍 📅 🔔 📄


- Hide Filter
- ▶ created on (649) 
 - ▶ has type (649) 
 - ▶ from (649) 
 - ▶ has met (649) 
 - ▶ modified in (649) 
 - ▶ is similar or same with (568) 
 - ▶ from (649) 
 - ▶ refers to (452) 
 - ▶ acquired by (649) 
 - ▶ from (649) 
 - ▶ created in (649) 
 - ▶ found or acquired at (611) 
 - ▶ found by (395) 
 - ▶ created by (26)

Table **Grid** Carousel Map Timeline




BM

Figure (part of backplate) ▾




BM

Figure (Nandi) ▾




BM

Figure (Kali) ▾




BM

Figure (Durgā Mahiṣāsu...) ▾




BM

Figure (Viṣṇu) ▾




BM

Figure (part of) ▾




BM

Figure (series of images) ▾




BM

Figure (Viṣṇu) ▾



BM

Bronze figure of Mahratta ▾



BM

Part of bronze figure (ba...) ▾

Create a New Set

Add to Existing Set

Add to Clipboard

Use in Extended Search

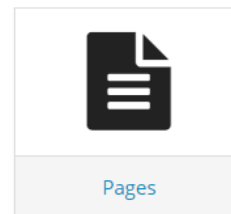
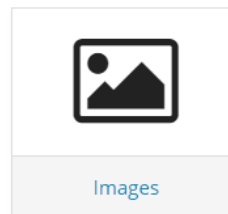
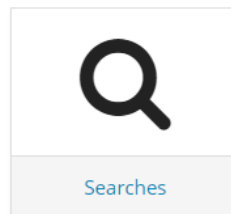
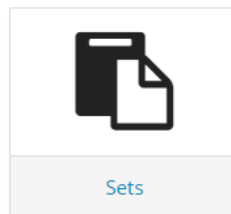
« 1 2 3 4 5 6 7 8 9 10 11 »

 Save this Search Definition  Save as New Set  Add to Existing Set



PORTAL / CLIPBOARD

My Clipboard

[Search for Annotations](#)[Search for Arguments](#)[Search for Pages](#)

Individual Items


Item	Item Type	Owner	Modification Date
dominic shape ▾	Thing	admin	June 28, 2016 1:35 PM
Dominics shape ▾	Thing	admin	June 28, 2016 1:38 PM
Dominic Fan test ▾	Thing	admin	June 28, 2016 2:06 PM
Boat ▾	Thing	admin	June 28, 2016 2:10 PM
octopus ▾	Thing	admin	June 28, 2016 4:41 PM

Recycling Searches and Sets


RESEARCH SPACE

Find: **Actors** IS REFERRED TO BY ...


Find:




IS REFERRED TO BY



bro





IS REFERRED TO BY

Find: Things from India and created on Year 1650 AD - Year 1700 AD and has type **bronze** [Search]

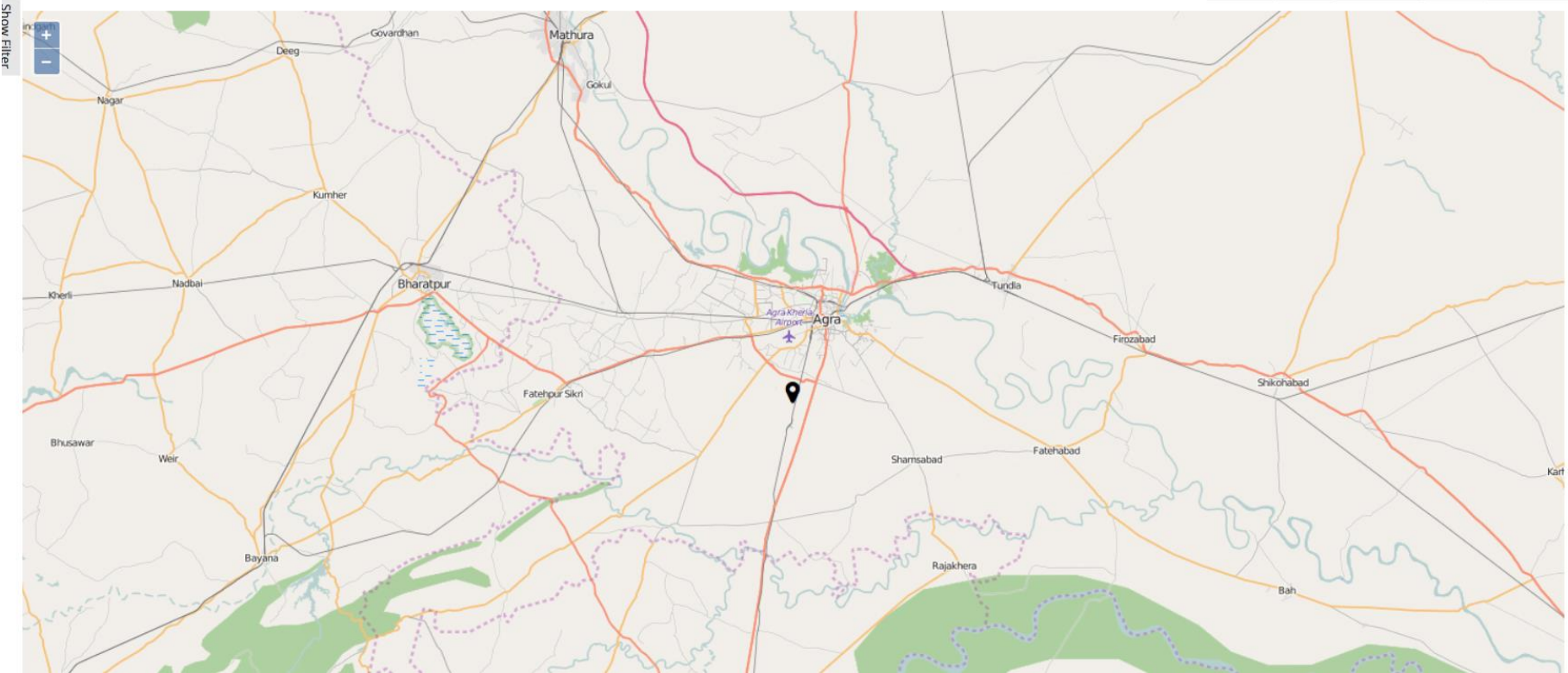
Find: Things from India and created on Year 1650 AD - Year 1700 AD and has type **bronze** [Search]

Find: **Places** IS PART OF **India** *and* HAS MET **India 17th century [Set]**

Find:  **HAS MET**  **India 17th century [Set]** **or** **+** **and** **+** [remove](#)

 **IS PART OF**  **India** **AND** **HAS MET**  **India 17th century [Set]**

TableGridCarousel**Map**Timeline



Japanese Painting: Kokin waka shu

Basic Information

Acquisition

Other

CRM Preferred Identifier

JCF8939

✓

All Identifiers

8333

✓

x

Jap.Ptg.Add.702Japanese Painting Additional Number

✓

x

1982,0701,0.17

✓

x

+

Acquisition Begin Date

30/12/1981

x

01/01/1982

x

Reset

Submit

Enrichment



PORTAL / KOKIN WAKA SHU

Kokin waka shu

- Object Details
- Object Annotations
- Explore Relations
- ...

- Related Images
- Related Pages
- Related Arguments

 Upload Related Image

Related Images

[Open in lightbox](#)

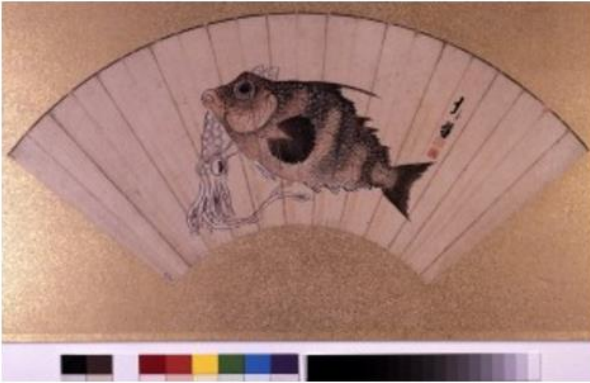


Image	Title
	Image of Album of 9 fan paintings 
	Image of Album of 9 fan paintings

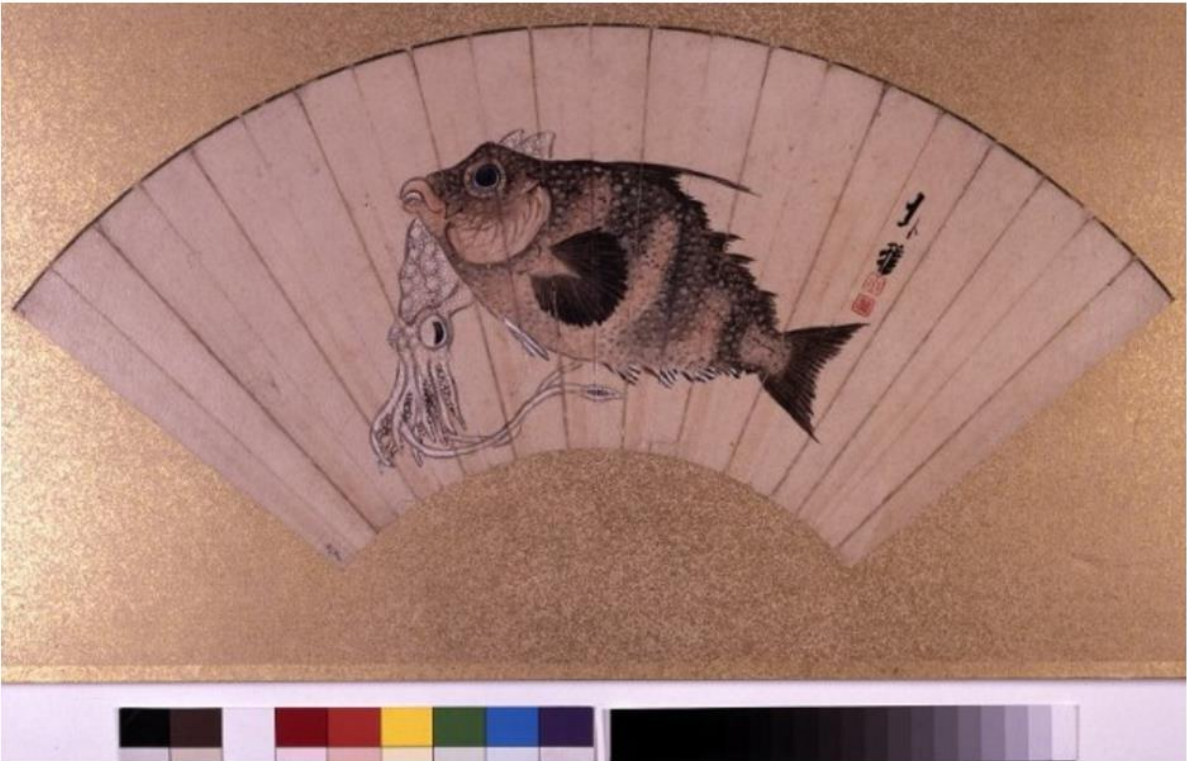


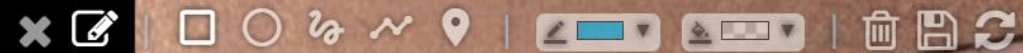
Image of Album of 9 fan paintings

- Object Details
- Object Annotations
- Explore Relations
- Image Viewer
- ...

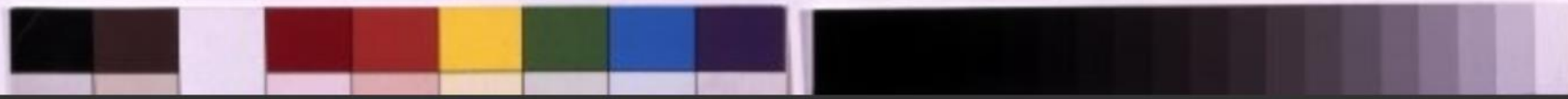
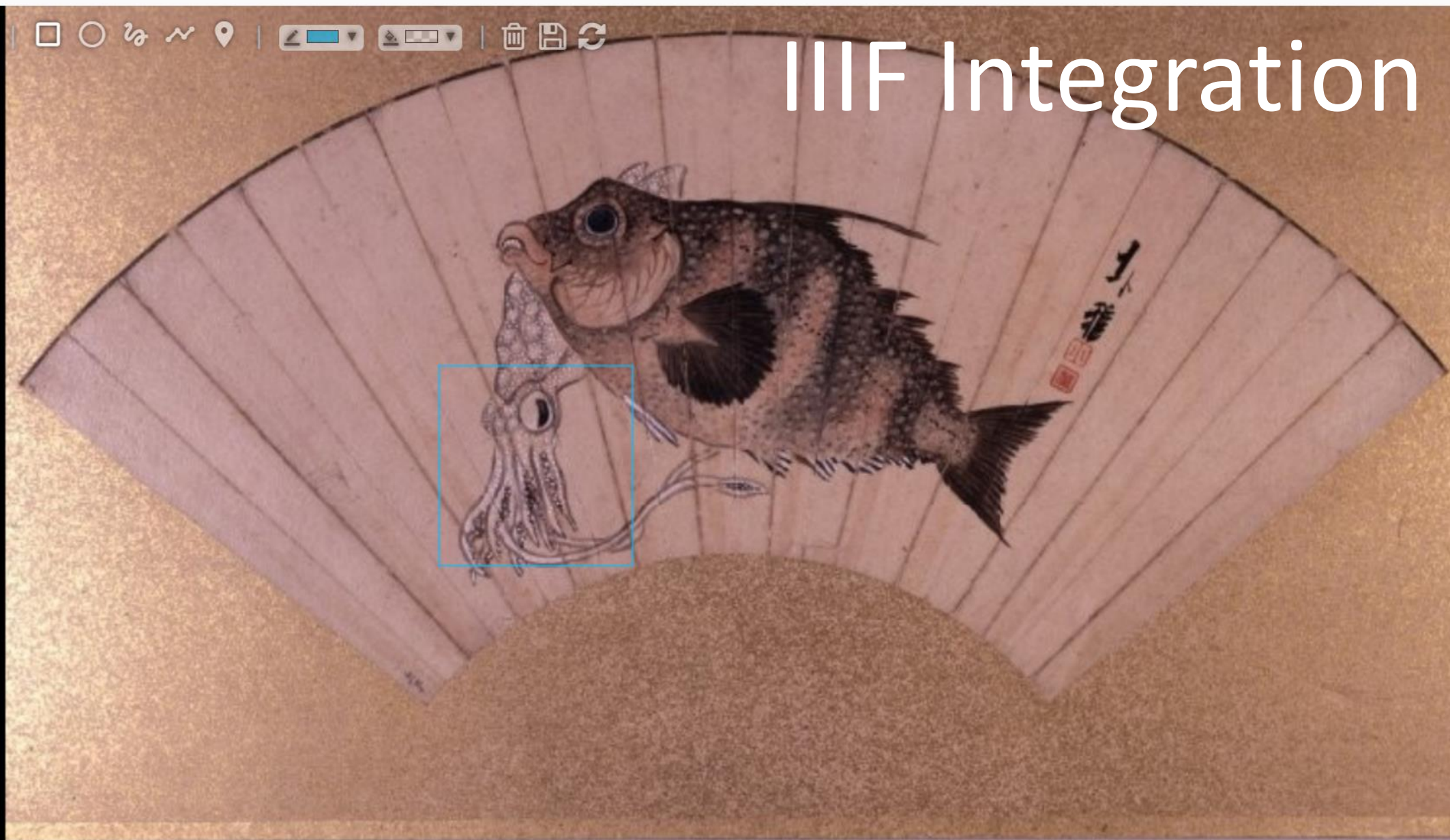
- ☐ Private
- ☐ Shared
- ☒ Public

Image





IIIF Integration





PORTAL / IMAGE OF ALBUM OF 9 FAN PAINTINGS

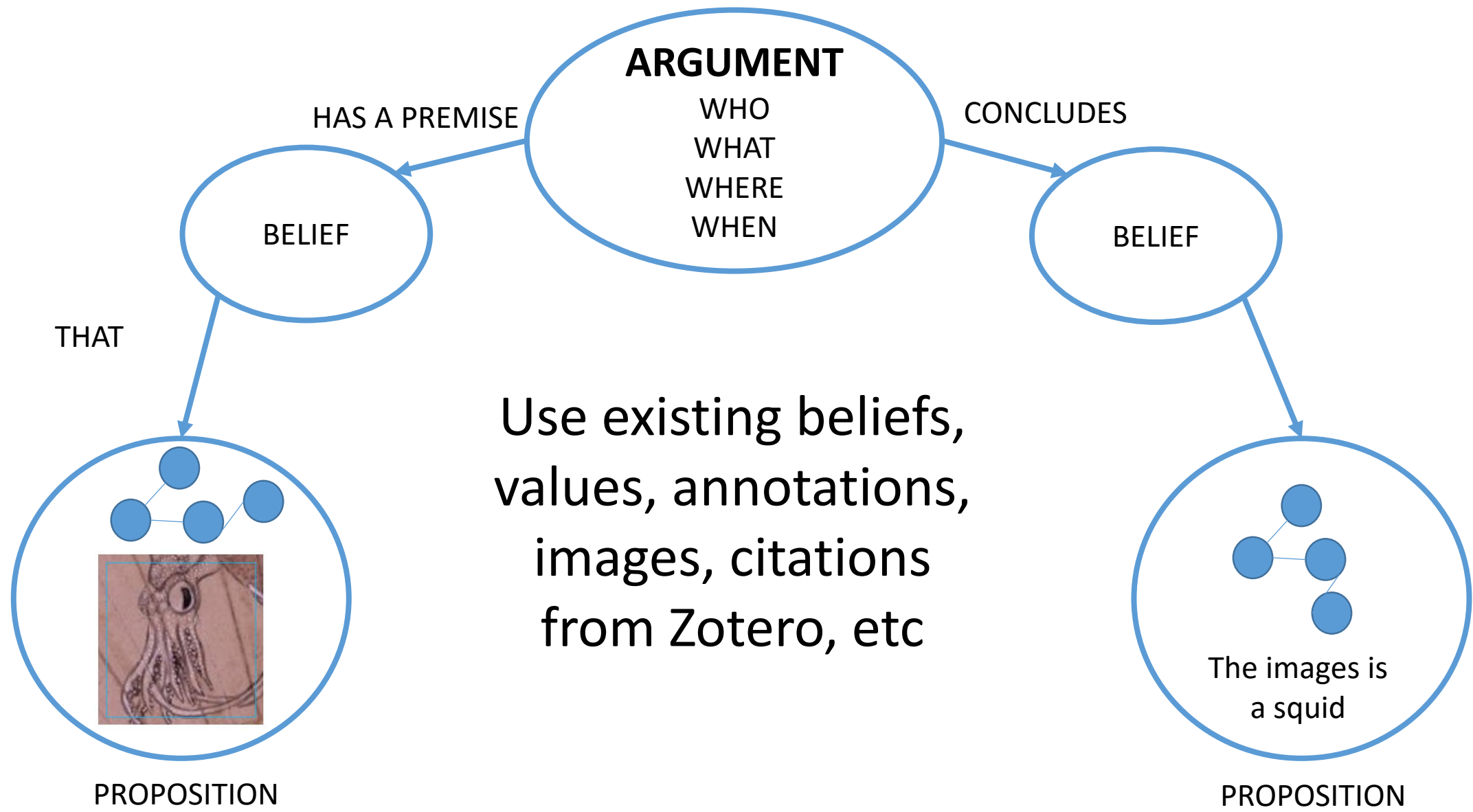
Image of Album of 9 fan paintings

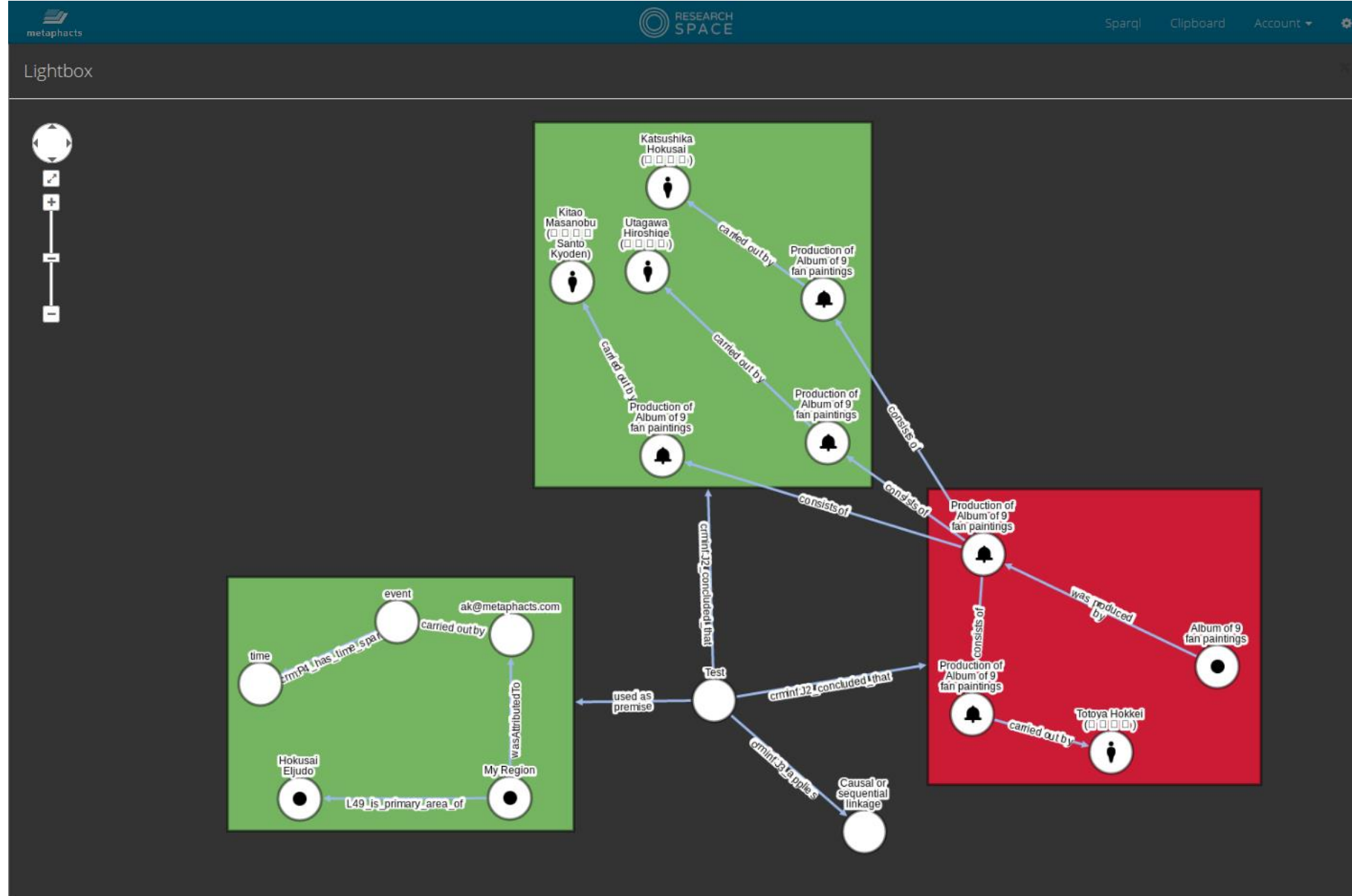
[Object Details](#)[Object Annotations](#)[Explore Relations](#)[Image Viewer](#)

...

[Related
Regions](#)[Related
Pages](#)[Related
Arguments](#)[Open in lightbox](#)**Image****Title**

octopus



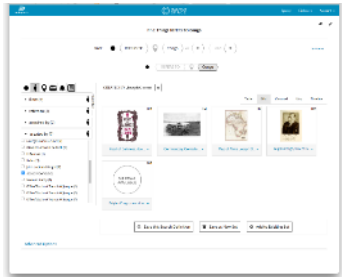


Knowledge Base
of Link Data
Field Patterns

You can add any field
patterns you like
with no coding



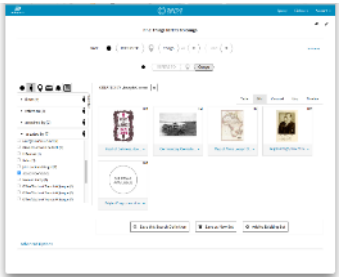
Faculty Database



Project database



Collection Catalogue



Universal
Resource Discovery



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Senior Curator, Ancient Egypt & Sudan
Doldman@thebritishmuseum.ac.uk
dominic.oldman@wolfson.ox.ac.uk