

# An introduction to Linked Data and the CIDOC-CRM for bookbinding descriptions

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# 7. SPINE, SPINE LININGS AND ENDBANDS

MS

|  |  |   |  |  |  |
|--|--|---|--|--|--|
| <b>1. SPINE</b><br>ADHESIVE<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Adhesive type<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK  |  | <b>2. Spine &amp; joint profile</b><br>SHAPE (original)<br><input type="checkbox"/> Flat<br><input type="checkbox"/> Slight round<br><input type="checkbox"/> Round<br><input type="checkbox"/> Heavy round<br><input type="checkbox"/> NK<br>JOINTS<br><input type="checkbox"/> None<br><input type="checkbox"/> Curved<br><input type="checkbox"/> Angled<br><input type="checkbox"/> Right angle<br><input type="checkbox"/> NK  |  | <b>3. SPINE CONDITION</b><br>ADHESIVE<br><input type="checkbox"/> NA<br><input type="checkbox"/> Sound<br><input type="checkbox"/> Loss of adhesion<br>Current profile<br>EXTRA APPLICATION<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other   |  |
| <b>4. LINING</b><br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br><input type="checkbox"/> Overall<br><input type="checkbox"/> Transverse<br><input type="checkbox"/> Comb<br><input type="checkbox"/> Panel<br><input type="checkbox"/> H&T only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other |  | LINING MATERIAL<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Textile<br><input type="checkbox"/> Tanned skin<br><input type="checkbox"/> Tawed skin<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colour   |  | MATERIAL TYPE<br><input type="checkbox"/> Plain<br><input type="checkbox"/> MS<br><input type="checkbox"/> Printed<br><input type="checkbox"/> Decorated<br><input type="checkbox"/> NK<br>LINING JOINTS<br><input type="checkbox"/> Inside boards<br><input type="checkbox"/> Outside boards<br><input type="checkbox"/> NK<br>Lining(s) from outside<br>Right Left   |  |
| No. of layers<br>1st 2nd 3rd   |  | <b>5. LINING CONDITION</b><br><input type="checkbox"/> Missing<br><input type="checkbox"/> Spine detach<br><input type="checkbox"/> Sound<br>Extent Left Right Extent<br><input type="checkbox"/> Split at joint<br><input type="checkbox"/> Lifted from bds<br>Extent Severity<br><input type="checkbox"/> Mechanical damage<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br><input type="checkbox"/> Other                                |  |  |  |
| <b>6. ENDBAND</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK <input type="checkbox"/> Greek <input type="checkbox"/> Western <input type="checkbox"/> Islamic <input type="checkbox"/> Other <input type="checkbox"/> Missing  |  |   |  |  |  |
| No. of cores<br><input type="checkbox"/> Cord<br><input type="checkbox"/> Tanned<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Tawed<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  | PRIMARY<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br><input type="checkbox"/> No bead<br><input type="checkbox"/> No front bead<br><input type="checkbox"/> Reversing twist<br><input type="checkbox"/> Greek, single core<br><input type="checkbox"/> Greek, double core<br><input type="checkbox"/> Warps only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other |  | Colours<br>1<br>2<br>3<br>4<br>5<br>Front Back   |  |
| BOARD ATTACH<br><input type="checkbox"/> None<br><input type="checkbox"/> Laced<br><input type="checkbox"/> Adhered<br><input type="checkbox"/> Other  |  | SECONDRY<br><input type="checkbox"/> None<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> Stuck-on<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  | Colours<br>1<br>2<br>3<br>4<br>5<br>Front Back   |  |
| NO. OF TIEDOWNS<br><input type="checkbox"/> Every gathering<br><input type="checkbox"/> Frequent<br><input type="checkbox"/> Infrequent<br><input type="checkbox"/> NK   |  | <input type="checkbox"/> Extra stuck-on folded endbands   |  |  |  |
| <b>7. ENDBAND CONDITION</b><br>Slips detached from board<br>Slips broken at joint(s)<br><input type="checkbox"/> Core broken across spine  |  | HEAD TAIL<br>Extent<br><input type="checkbox"/> Loose<br><input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other                             |  | Extent<br><input type="checkbox"/> Loose<br><input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other |  |

WinAStar - previous frames

File Edit View Database Settings Reports Help

Blank report | Survey log | Dimensions | Opening characteristics | Materials | Imported material

Field names | Ink and pigments | Endbands | Sewing | Edges | Boards | Spine | Endbands | Coverings | Furniture and Tackings | Additional notes

**Ink and pigments**

ADD COPY DELETE

\*% single ink or pigment

List of inks that the ink is observed

ink number

ink number

List of locations that the ink has been used

\*% single location that the ink is observed

ink number

\*% single location that the ink is observed

ink number

\*% single location that the ink is observed

ink number

List of conditions

\*% single condition observed

ink number

\*% single ink or pigment

List of inks that the ink is observed

ink number

List of locations that the ink has been used

\*% single location that the ink is observed

ink number

List of conditions

\*% single condition observed

ink number

\*% single condition observed

Save

Close | Title page only | Endbands | Throughout | Occasional



Sangreal. Arthur Rackham



**Larger sample →  
Better conclusions**

# For instance:

- After what century is paper used instead of parchment in books?

# For instance:

- After what century is paper used instead of parchment in books?
- After what [period] is [material A] used instead of [material B] in [objects/components of type A]?

# Possible questions

- In which [geographical area] do we observe [technique A]?
- Who [bought/sold] a [object of type A]?
- What is the origin of [material A] observed on [object/component type A]?

# Possible questions



Conservator

- How do I combine bookbinding descriptions with catalogue data;
  - Catalogue integration



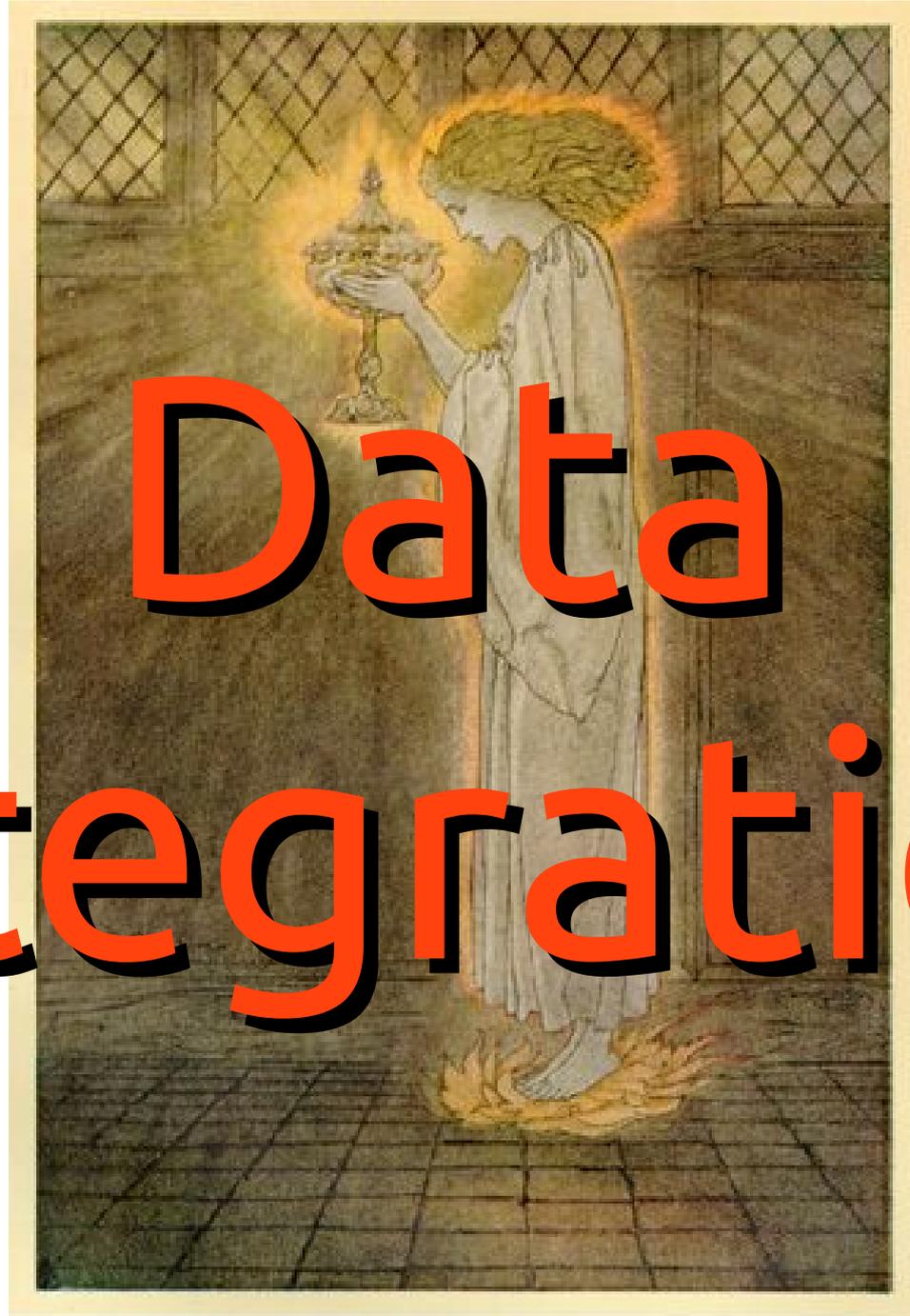
Librarian /  
Researcher

- Which observations help identify provenance?
  - Material evidence and provenance



Digitisation  
expert

- The binding of which book has already been photographed by conservators?
  - Digitisation – photography metadata



**integration**



Field matching

## 7. SPINE, SPINE LININGS AND ENDBANDS

MS

### 1. SPINE

ADHESIVE  
 No  
 Yes  
 NK

#### 2. Spine & joint profile

Adhesive type  
 Animal  
 Starch  
 NK

SHAPE (original) JOINTS  
 Flat  
 Slight round  
 Round  
 Heavy round  
 NK  
 None  
 Curved  
 Angled  
 Right angle  
 NK

### 3. SPINE CONDITION

ADHESIVE  
 NA  
 Sound  
 Loss of adhesion  
 Cracked  
 Severity  
 Rodent damage  
 Insect damage  
 Mould damage

#### Current profile

EXTRA APPLICATION  
 Animal  
 Starch  
 NK  
 Other

### 4. LINING

No  
 Yes  
 NK  
 Overall  
 Transverse  
 Comb  
 Panel  
 H&T only  
 NK  
 Other

#### LINING MATERIAL

Parchment  
 Paper  
 Textile  
 Tanned skin  
 Tawed skin  
 NK  
 Other

#### MATERIAL TYPE

Plain  
 MS  
 Printed  
 Decorated  
 NK  
 Right  
 Left

### 5. LINING CONDITION

Missing  
 Spine detach  
 Sound  
 Extent Left  
 Split at joint  
 Lifted from bds  
 Extent Severity  
 Mechanical damage  
 Rodent damage  
 Insect damage  
 Mould damage  
 Other

No. of layers 1st 2nd 3rd

### 6. ENDBAND

Yes  No  NK  Greek  Western  Islamic  Other  Missing

No. of cores  
 Cord  
 Tanned  
 Parchment  
 Tawed  
 NK  
 Other

PRIMARY  
 Plain thread  
 Silk  
 Metal thread  
 NK  
 Other

No bead  
 No front bead  
 Reversing twist  
 Greek, single core  
 Greek, double core  
 Warps only  
 NK  
 Other

Colours  
 1  
 2  
 3  
 5

Front  
 Back

BOARD ATTACH  
 None  Sewn  
 Laced  Sewn & recessed  
 Adhered  NK  
 Other

SECONDARY  
 None  
 Plain thread  
 Silk  
 Metal thread  
 Stuck-on  
 NK  
 Other

Colours  
 1  
 2  
 3  
 4  
 5

Front  
 Back

NO. OF TIEDOWNS  
 Every gathering  
 Frequent  
 Infrequent  
 NK

Extra stuck-on folded endbands

### 7. ENDBAND CONDITION

Slips detached from board  
 Extent  
 Loose  Missing  
 Tiedowns pulled out  
 Primary broken  
 Secondary broken  
 Warps broken  
 Primary worn away  
 Secondary worn away  
 Missing core  
 Missing endband  
 Other

#### HEAD TAIL

Slips detached from board  
 Extent  
 Loose  Missing  
 Tiedowns pulled out  
 Primary broken  
 Secondary broken  
 Warps broken  
 Primary worn away  
 Secondary worn away  
 Missing core  
 Missing endband  
 Other

Core broken across spine

Core broken across spine

WinAStar - previous frames

Blotting paper | Survey log | Dimensions | Opening characteristics | Markers | Inserted material  
 Text blocks | Ink and pigments | Endpapers | Sewing | Edges | Boards | Spine | Endbands | Coverings | Furniture and fastenings | Additional notes

Endpapers

ADD COPY DELETE

\*% single ink or pigment

List of editions that the ink is observed

edition number

ADD COPY DELETE

edition number

List of locations that the ink has been used

ADD COPY DELETE

\*% single location that the ink is observed

edition number

\*% single location that the ink is observed

edition number

\*% single location that the ink is observed

edition number

ink

colour

List of conditions

ADD COPY DELETE

\*% single condition observed

edition number

\*% single ink or pigment

List of editions that the ink is observed

edition number

ADD COPY DELETE

edition number

List of locations that the ink has been used

ADD COPY DELETE

\*% single location that the ink is observed

edition number

\*% single condition observed

edition number

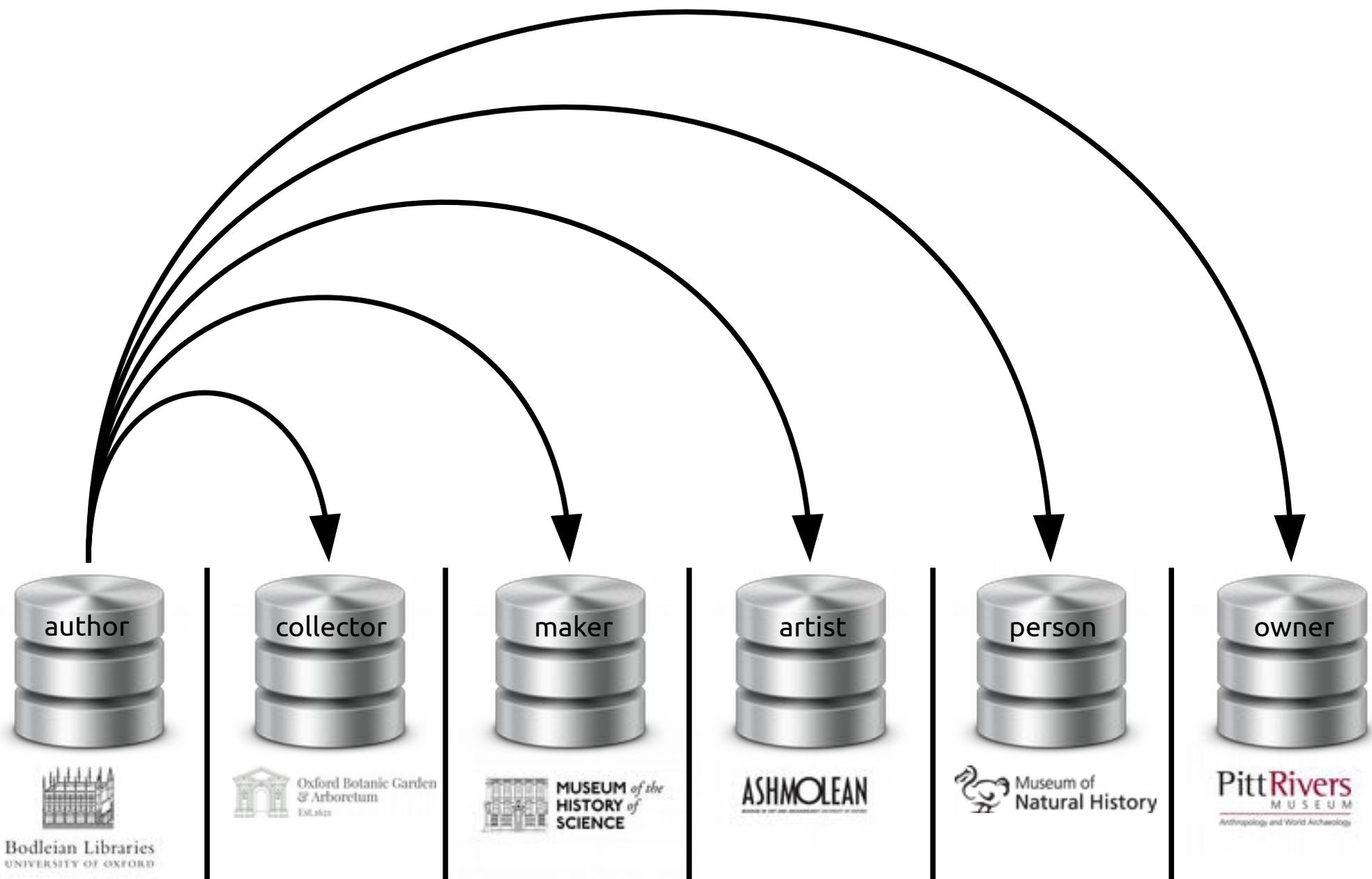
\*% single condition observed

edition number

Save

Cover: Title page only | Endpapers | Throughout | Occasional





  
Bodleian Libraries  
UNIVERSITY OF OXFORD

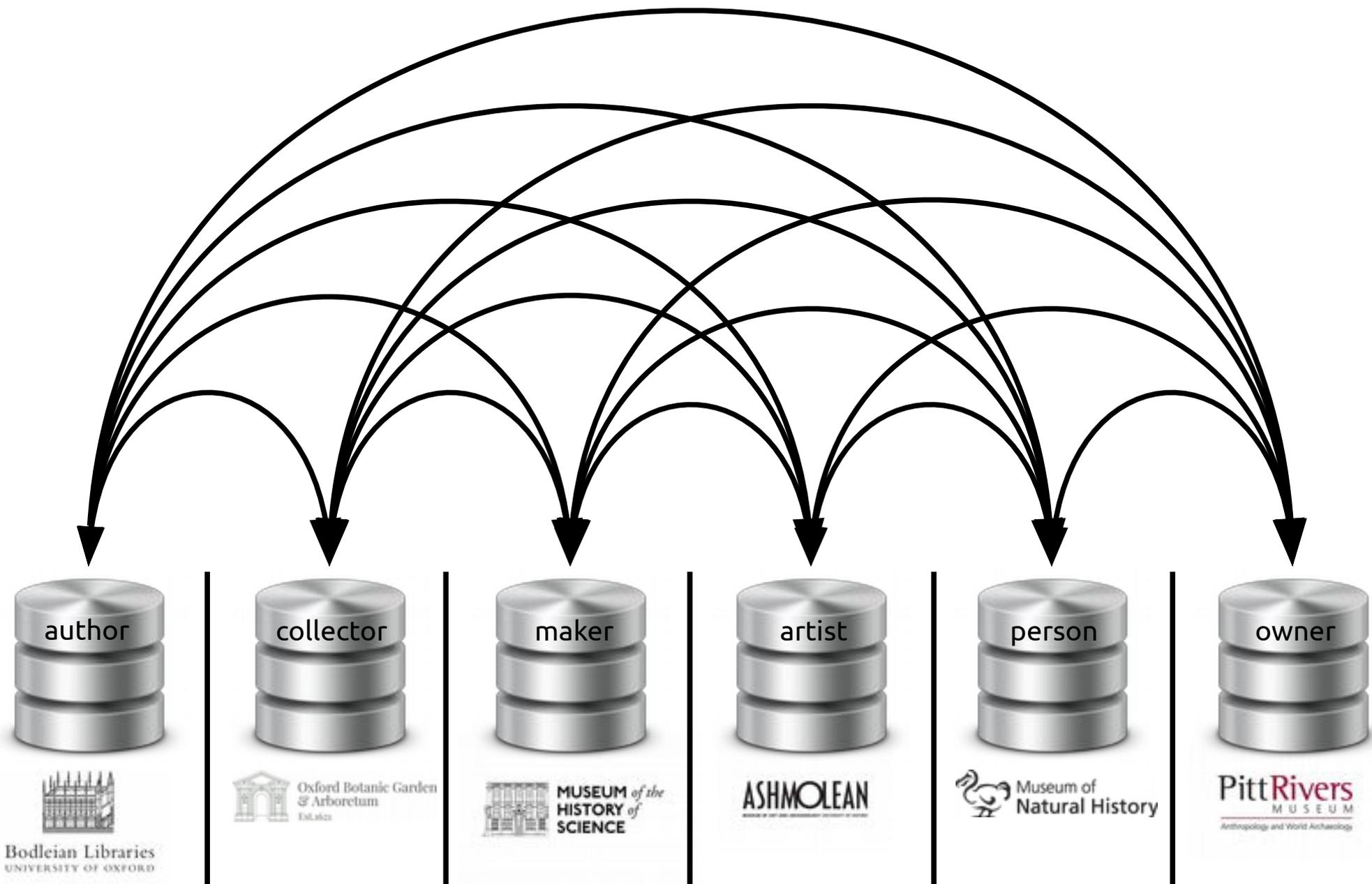
  
Oxford Botanic Garden  
& Arboretum  
Est. 1620

  
MUSEUM of the  
HISTORY of  
SCIENCE

ASHMOLEAN

 Museum of  
Natural History

Pitt Rivers  
MUSEUM  
Anthropology and World Archaeology





# ontology





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# Ontology (information science)

From Wikipedia, the free encyclopedia

*"Knowledge graph" redirects here. For the Google knowledge base, see Knowledge Graph. For other uses, see Knowledge engine (disambiguation). This article is about ontology in information science. For the study of the nature of being, see Ontology.*

In [computer science](#) and [information science](#), an **ontology** is a formal naming and definition of the types, properties, and interrelationships of the [entities](#) that really or fundamentally exist for a particular [domain of discourse](#). It is thus a practical application of philosophical [ontology](#), with a [taxonomy](#).

An ontology compartmentalizes the variables needed for some set of computations and establishes the relationships between them.<sup>[1][2]</sup>

The fields of [artificial intelligence](#), the [Semantic Web](#), [systems engineering](#), [software engineering](#), [biomedical informatics](#), [library science](#), [enterprise bookmarking](#), and [information architecture](#) all create ontologies to limit complexity and to organize information. The ontology can then be applied to [problem solving](#).

**Contents** [\[hide\]](#)

## Information science

### General aspects

- [Information access](#) · [Information architecture](#) · [Information management](#) · [Information retrieval](#) · [Information seeking](#) · [Information society](#) · [Knowledge organization](#) · **Ontology** · [Taxonomy](#) · [Philosophy of information science, technology and society](#)

### Related fields and sub-fields

- [Bibliometrics](#) · [Categorization](#) · [Censorship](#) · [Classification](#) · [Computer data storage](#) · [Cultural studies](#) · [Data modeling](#) · [Informatics](#) · [Information technology](#) · [Intellectual freedom](#) · [Intellectual property](#) · [Memory](#) · [Library and information science](#)



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# Ontology (information science)

From Wikipedia, the free encyclopedia

*"Knowledge graph" redirects here. For the Google knowledge base, see Knowledge Graph. For other uses, see Knowledge engine (disambiguation).*

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An ontology compartmentalizes the variables needed for some set of computations and establishes the relationships between them.<sup>[1][2]</sup>

The fields of artificial intelligence, the Semantic Web, systems engineering, software engineering, biomedical informatics, library science, enterprise bookmarking, and information architecture all create ontologies to limit complexity and to organize information. The ontology can then be applied to problem solving.

**Contents** [hide]

## Information science

### General aspects

Information access · Information architecture · Information management · Information retrieval

Information seeking · Information society · Knowledge organization · **Ontology** · Taxonomy

Philosophy of information · Science, technology and society

### Related fields and sub-fields

Bibliometrics · Categorization · Censorship · Classification · Computer data storage · Cultural studies · Data modeling · Informatics · Information technology · Intellectual freedom · Intellectual property · Memory · Library and information science

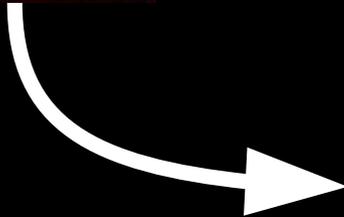
- Main page
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  - Cite this page

- Print/export
  - Create a book







**RESEARCHER'S GUIDE**

**SECTION 1: GENERAL INFORMATION**

|                    |  |
|--------------------|--|
| Name of Researcher |  |
| Organization       |  |
| Date of Collection |  |
| Location           |  |

**SECTION 2: COLLECTION DETAILS**

| Item No. | Description | Material | Condition | Notes |
|----------|-------------|----------|-----------|-------|
| 1        |             |          |           |       |
| 2        |             |          |           |       |
| 3        |             |          |           |       |
| 4        |             |          |           |       |
| 5        |             |          |           |       |
| 6        |             |          |           |       |
| 7        |             |          |           |       |
| 8        |             |          |           |       |
| 9        |             |          |           |       |
| 10       |             |          |           |       |

**SECTION 3: ADDITIONAL NOTES**

\_\_\_\_\_

\_\_\_\_\_

\_\_\_\_\_



| RESEARCHER'S NAME                    |  | DATE                     |  |
|--------------------------------------|--|--------------------------|--|
| 1. Name of the researcher            |  | 1. Date of the research  |  |
| 2. Address of the researcher         |  | 2. Date of the research  |  |
| 3. Contact number of the researcher  |  | 3. Date of the research  |  |
| 4. Email address of the researcher   |  | 4. Date of the research  |  |
| 5. Institution of the researcher     |  | 5. Date of the research  |  |
| 6. Country of the researcher         |  | 6. Date of the research  |  |
| 7. City of the researcher            |  | 7. Date of the research  |  |
| 8. State of the researcher           |  | 8. Date of the research  |  |
| 9. Zip code of the researcher        |  | 9. Date of the research  |  |
| 10. Country of the researcher        |  | 10. Date of the research |  |
| 11. Name of the researcher           |  | 11. Date of the research |  |
| 12. Address of the researcher        |  | 12. Date of the research |  |
| 13. Contact number of the researcher |  | 13. Date of the research |  |
| 14. Email address of the researcher  |  | 14. Date of the research |  |
| 15. Institution of the researcher    |  | 15. Date of the research |  |
| 16. Country of the researcher        |  | 16. Date of the research |  |
| 17. City of the researcher           |  | 17. Date of the research |  |
| 18. State of the researcher          |  | 18. Date of the research |  |
| 19. Zip code of the researcher       |  | 19. Date of the research |  |
| 20. Country of the researcher        |  | 20. Date of the research |  |





# CIDOC CRM

CONCEPTUAL  
REFERENCE  
MODEL



## What's New?

[Meeting on 24 - 26 February, 2016](#)

[International Journal on Digital Librari...](#)

[New version of the CRMgeo \(version 1.2\)...](#)

## Choose a shortcut:

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[Current version](#)

[CIDOC CRM Tutorial](#)

[CIDOC CRM Web site design related documents](#)

[Compatible models & Collaborations >>](#)

## Login for editing

Username \*

## Home

### What is the CIDOC CRM?

The **CIDOC Conceptual Reference Model (CRM)** provides definitions and a formal structure for describing the implicit and explicit concepts and relationships used in cultural heritage documentation.

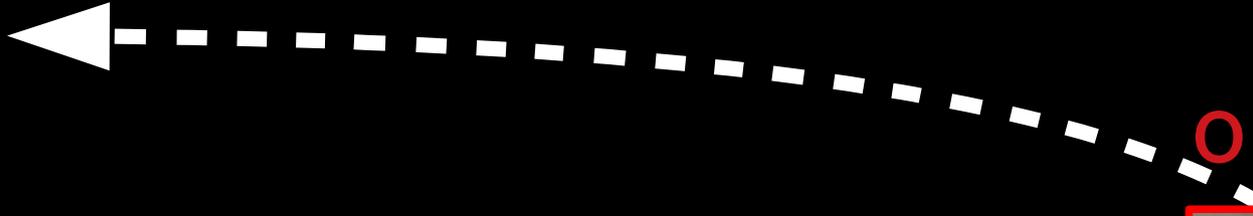
The **CIDOC CRM** is intended to promote a shared understanding of cultural heritage information by providing a common and extensible semantic framework that any cultural heritage information can be mapped to. It is intended to be a common language for domain experts and implementers to formulate requirements for information systems and to serve as a guide for good practice of conceptual modelling. In this way, it can provide the "semantic glue" needed to mediate between different sources of cultural heritage information, such as that published by museums, libraries and archives.

The **CIDOC CRM** is the culmination of over 10 years work by the **CIDOC Documentation Standards Working Group** and **CIDOC CRM SIG** which are working groups of **CIDOC**. Since 9/12/2006 it is official standard **ISO 21127:2006**.

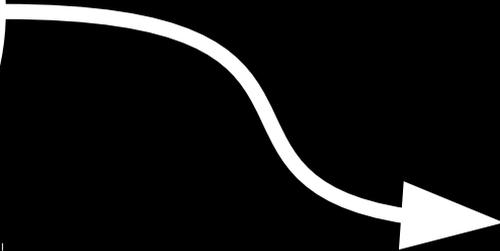
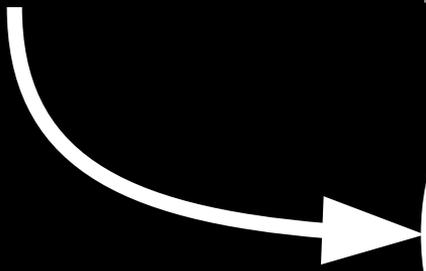
### Who we are

Over many years, **CIDOC** and the CIDOC Documentation Standards Working Group (DSWG) have engaged in the creation of a general data model for museums, with a particular focus on information interchange. Until 1994 the product of these activities had been the CIDOC Relational Data Model. In the interim meeting in March 1996 in Crete, the DSWG decided to engage in an object-oriented approach in order to benefit from its expressive power and extensibility for dealing with the necessary diversity and complexity of data structures in the domain. This effort resulted in 1999 in the first complete edition of the "*CIDOC Conceptual Reference Model*" (*CRM*), a product of the intensive voluntary work of a variety of contributors. The CRM as a means of information interchange was decided in the interim meeting in London in 1996. In 2006, the CRM was adopted as an international standard by ISO, in cooperation with the CIDOC CRM SIG, to create an official recommendation. Since 9/12/2006 it is official standard **ISO 21127:2006**.





ontology

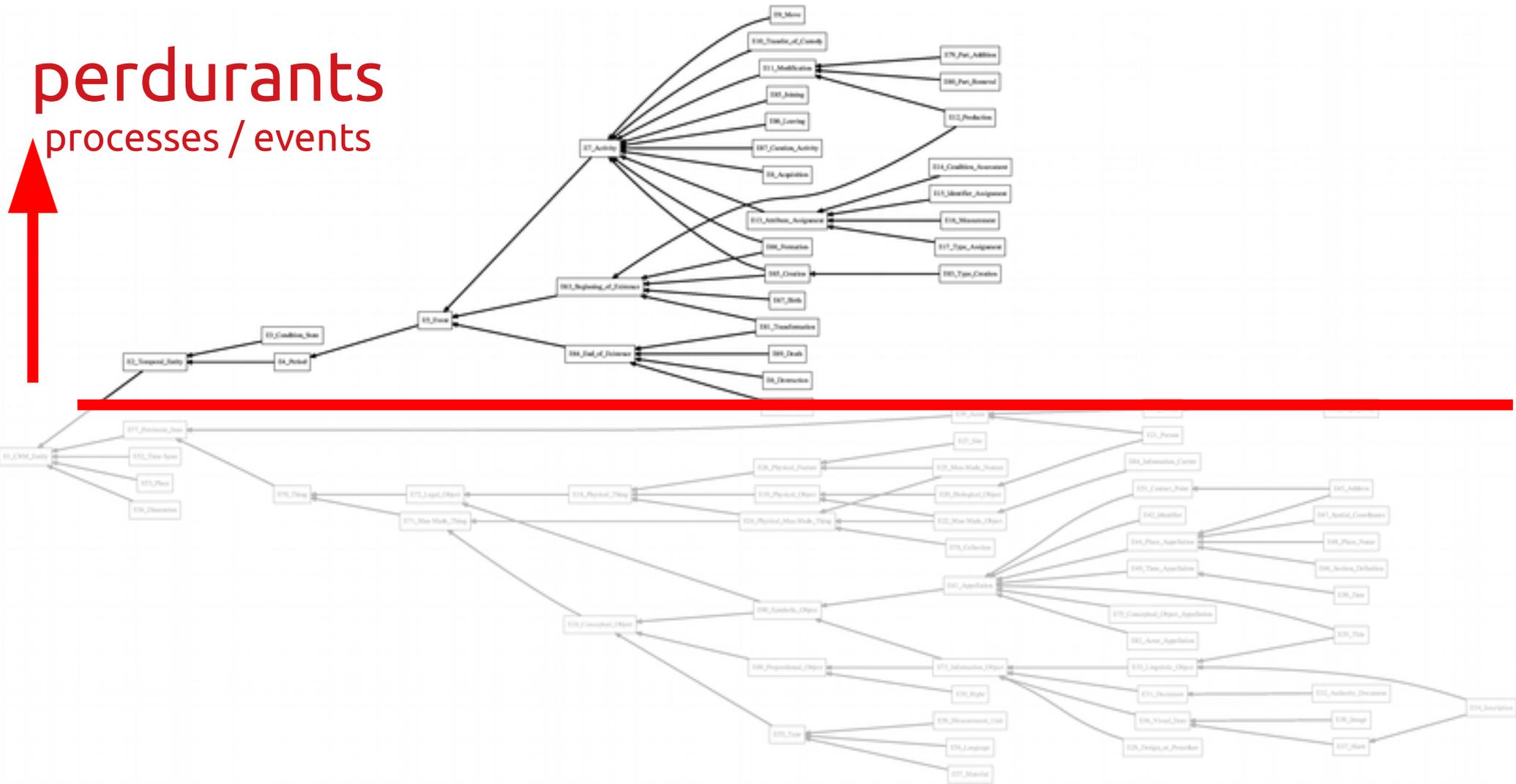




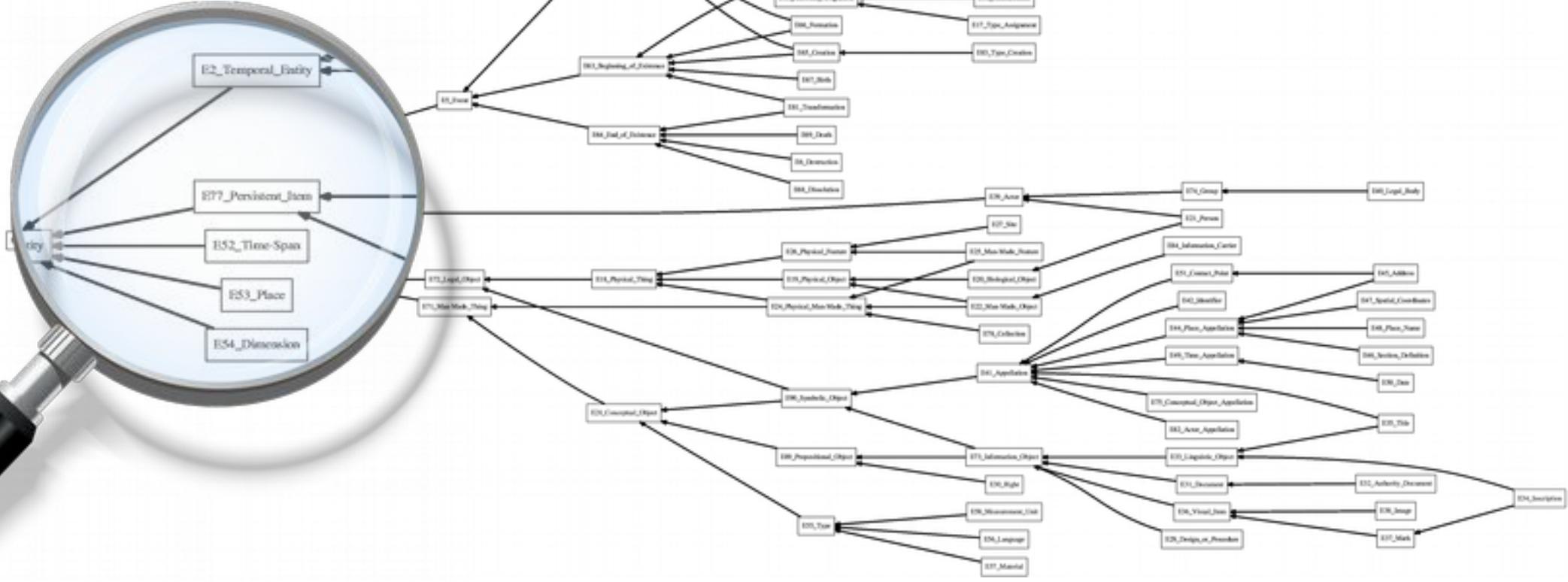
Choosing classes  
and properties



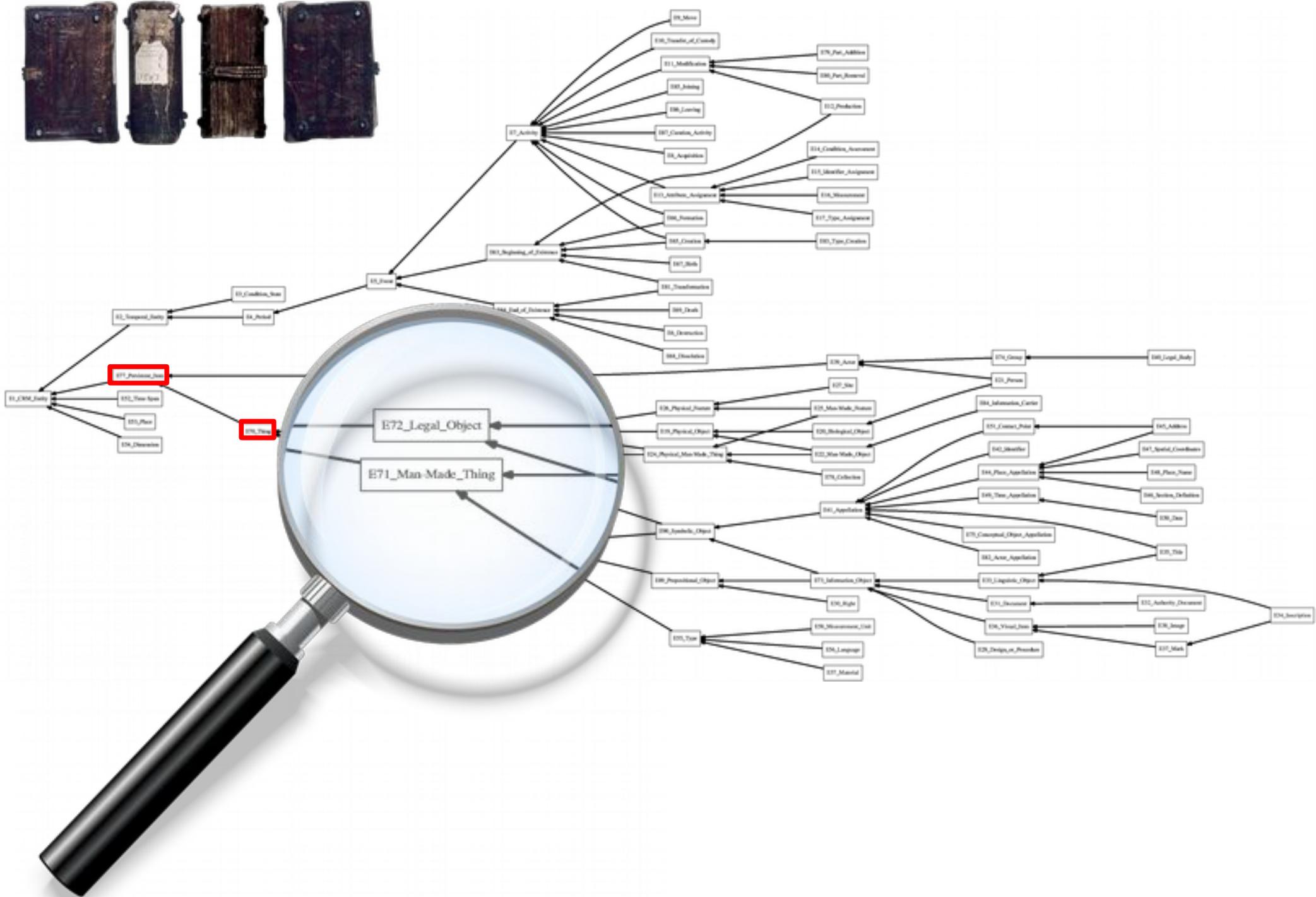
perdurants  
processes / events

















# CIDOC-CRM

**Scope note:**

This class comprises physical objects purposely created by human activity.

No assumptions are made as to the extent of modification required to justify regarding an object as man-made. For example, an inscribed piece of rock or a preserved butterfly are both regarded as instances of E22 Man-Made Object.

**Examples:**

Mallard (the World's fastest steam engine)  
the Portland Vase  
the Coliseum

E22 Man-Made Object



## 7. SPINE, SPINE LININGS AND ENDBANDS

MS

### 1. SPINE

ADHESIVE

No

Yes

NK

2. Spine & joint profile

Adhesive type

Animal

Starch

NK

SHAPE (original)

Flat

Slight round

Round

Heavy round

NK

JOINTS

None

Curved

Angled

Right angle

NK

### 3. SPINE CONDITION

ADHESIVE

NA

Sound

Current profile

Extent

Loss of adhesion

EXTRA APPLICATION

Animal

Starch

NK

Other

Cracked

Extent

Severity

Rodent damage

Insect damage

Mould damage

### 4. LINING

No

Yes

NK

Overall

Transverse

Comb

Panel

H&T only

NK

Other

LINING MATERIAL

Parchment

Paper

Textile

Tanned skin

Tawed skin

NK

Other

Colour

MATERIAL TYPE

Plain

MS

Printed

Decorated

NK

Linings from outside

Right

Left

LINING JOINTS

Inside boards

Outside boards

NK

5. LINING CONDITION

Missing

Spine detach

Extent

Left

Right extent

Split at joint

Lifted from bds

Extent

Severity

Mechanical damage

Rodent damage

Insect damage

Mould damage

Other

No. of layers

1st

2nd

3rd

### 6. ENDBAND

Yes

No

NK

Greek

Western

Islamic

Other

Missing

No. of cores

Cord

Tanned

Parchment

Tawed

NK

Other

cross section

PRIMARY

Plain thread

Silk

Metal thread

NK

Other

No bead

No front bead

Reversing twist

Greek, single core

Greek, double core

Warps only

NK

Other

Colours

1

2

3

Front

Back

BOARD ATTACH

None

Sewn

Laced

Sewn & recessed

Adhered

NK

Other

SECONDARY

None

Plain thread

Silk

Metal thread

Stuck-on

NK

Other

Colours

1

2

3

4

5

Front

Back

NO. OF TIEDOWNS

Every gathering

Frequent

Infrequent

NK

Extra stuck-on folded endbands

### 7. ENDBAND CONDITION

Extent

Sound

HEAD

TAIL

Slips detached from board

Loose

Missing

Tiedowns pulled out

Primary broken

Secondary broken

Warps broken

Primary worn away

Secondary worn away

Missing core

Missing endband

Other

Core broken across spine

Slips detached from board

Loose

Missing

Tiedowns pulled out

Primary broken

Secondary broken

Warps broken

Primary worn away

Secondary worn away

Missing core

Missing endband

Other

Core broken across spine

Extent

Sound

Extent

Sound

## Implied relationships

- lining **part of** spine
- spine adhesive **has type** animal

## 7. SPINE, SPINE LININGS AND ENDBANDS

MS

|  |  |  |  |  |  |  |  |
|--|--|--|--|--|--|--|--|
| <b>1. SPINE</b><br>ADHESIVE<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Adhesive type<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK  |  | <b>2. Spine &amp; joint profile</b><br>SHAPE (original)<br><input type="checkbox"/> Flat<br><input type="checkbox"/> Slight round<br><input type="checkbox"/> Round<br><input type="checkbox"/> Heavy round<br><input type="checkbox"/> NK<br>JOINTS<br><input type="checkbox"/> None<br><input type="checkbox"/> Curved<br><input type="checkbox"/> Angled<br><input type="checkbox"/> Right angle<br><input type="checkbox"/> NK   |  | <b>3. SPINE CONDITION</b><br>ADHESIVE<br><input type="checkbox"/> NA<br><input type="checkbox"/> Sound<br>Extent<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Cracked<br>Extent Severity<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage |  | Current profile<br>EXTRA APPLICATION<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  |
| <b>4. LINING</b><br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Overall<br><input type="checkbox"/> Transverse<br><input type="checkbox"/> Comb<br><input type="checkbox"/> Panel<br><input type="checkbox"/> H&T only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other            |  | LINING MATERIAL<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Textile<br><input type="checkbox"/> Tanned skin<br><input type="checkbox"/> Tawed skin<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colour  |  | MATERIAL TYPE<br><input type="checkbox"/> Plain<br><input type="checkbox"/> MS<br><input type="checkbox"/> Printed<br><input type="checkbox"/> Decorated<br><input type="checkbox"/> NK<br>Lining(s) from outside<br>Right Left  |  | <b>5. LINING CONDITION</b><br><input type="checkbox"/> Missing<br><input type="checkbox"/> Spine detach<br>Extent Left Right extent<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Split at joint<br><input type="checkbox"/> Lifted from bds<br>Extent Severity<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Mechanical damage<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br><input type="checkbox"/> Other |  |
| No. of layers<br>1st 2nd 3rd   |  | <b>6. ENDBAND</b><br><input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK <input checked="" type="checkbox"/> Greek <input type="checkbox"/> Western <input type="checkbox"/> Islamic <input type="checkbox"/> Other <input type="checkbox"/> Missing  |  | No. of cores<br><input type="checkbox"/> Cord<br><input type="checkbox"/> Tanned<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Tawed<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  | PRIMARY<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br><input type="checkbox"/> No bead<br><input type="checkbox"/> No front bead<br><input type="checkbox"/> Reversing twist<br><input type="checkbox"/> Greek, single core<br><input type="checkbox"/> Greek, double core<br><input type="checkbox"/> Warps only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  |
| BOARD ATTACH<br><input type="checkbox"/> None <input type="checkbox"/> Sewn<br><input type="checkbox"/> Laced <input type="checkbox"/> Sewn & recessed<br><input type="checkbox"/> Adhered <input type="checkbox"/> NK<br><input type="checkbox"/> Other   |  | SECONDARY<br><input type="checkbox"/> None<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> Stuck-on<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  | Colours<br>1<br>2<br>3<br>4<br>5<br><input type="checkbox"/> Extra stuck-on folded endbands  |  | NO. OF TIEDOWNS<br><input type="checkbox"/> Every gathering<br><input type="checkbox"/> Frequent<br><input type="checkbox"/> Infrequent<br><input type="checkbox"/> NK   |  |
| <b>7. ENDBAND CONDITION</b><br>Extent <input type="checkbox"/> Sound<br>Slips detached from board<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Slip(s) broken at joint(s)<br><input type="checkbox"/> L <input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine |  | HEAD TAIL<br><input type="checkbox"/> Loose <input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other |  | Extent <input type="checkbox"/> Sound<br>Slips detached from board<br><input type="checkbox"/> L <input type="checkbox"/> R<br><input type="checkbox"/> Slip(s) broken at joint(s)<br><input type="checkbox"/> L <input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine   |  | Slips detached from board<br><input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/><br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other  |  |

## Implied relationships

- lining **part of** spine
- spine adhesive **has type** animal
- endband **has technique** Greek

## 7. SPINE, SPINE LININGS AND ENDBANDS

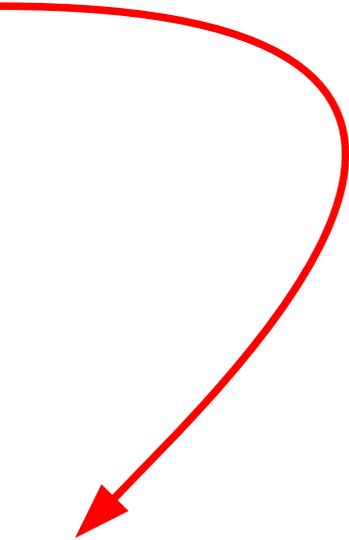
MS

|  |  |  |  |   |  |
|--|--|--|--|---|--|
| <b>1. SPINE</b><br>ADHESIVE<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Adhesive type<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK  |  | <b>2. Spine &amp; joint profile</b><br>SHAPE (original)<br><input type="checkbox"/> Flat<br><input type="checkbox"/> Slight round<br><input type="checkbox"/> Round<br><input type="checkbox"/> Heavy round<br><input type="checkbox"/> NK<br>JOINTS<br><input type="checkbox"/> None<br><input type="checkbox"/> Curved<br><input type="checkbox"/> Angled<br><input type="checkbox"/> Right angle<br><input type="checkbox"/> NK   |  | <b>3. SPINE CONDITION</b><br>ADHESIVE<br><input type="checkbox"/> NA<br><input type="checkbox"/> Sound<br>Extent<br><input type="checkbox"/> Cracked<br><input type="checkbox"/> Loss of adhesion<br><input type="checkbox"/> Extent severity<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br>Current profile<br>EXTRA APPLICATION<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other |  |
| <b>4. LINING</b><br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Overall<br><input type="checkbox"/> Transverse<br><input type="checkbox"/> Comb<br><input type="checkbox"/> Panel<br><input type="checkbox"/> H&T only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other  |  | LINING MATERIAL<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Textile<br><input type="checkbox"/> Tanned skin<br><input type="checkbox"/> Tawed skin<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colour  |  | MATERIAL TYPE<br><input type="checkbox"/> Plain<br><input type="checkbox"/> MS<br><input type="checkbox"/> Printed<br><input type="checkbox"/> Decorated<br><input type="checkbox"/> NK<br>LINING JOINTS<br><input type="checkbox"/> Inside boards<br><input type="checkbox"/> Outside boards<br><input type="checkbox"/> NK<br>Lining(s) from outside<br>Right<br>Left   |  |
| No. of layers<br>1st<br>2nd<br>3rd   |  | <b>5. LINING CONDITION</b><br><input type="checkbox"/> Missing<br><input type="checkbox"/> Spine detach<br><input type="checkbox"/> Sound<br>Extent<br>Left<br>Right extent<br><input type="checkbox"/> Split at joint<br><input type="checkbox"/> Lifted from bds<br>Extent severity<br><input type="checkbox"/> Mechanical damage<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br><input type="checkbox"/> Other |  |   |  |
| <b>6. ENDBAND</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK <input type="checkbox"/> Greek <input type="checkbox"/> Western <input type="checkbox"/> Islamic <input type="checkbox"/> Other <input type="checkbox"/> Missing<br>No. of cores<br><input type="checkbox"/> Cord<br><input type="checkbox"/> Tanned<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Tawed<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>cross section<br>PRIMARY<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br><input type="checkbox"/> No bead<br><input type="checkbox"/> No front bead<br><input type="checkbox"/> Reversing twist<br><input type="checkbox"/> Greek, single core<br><input type="checkbox"/> Greek, double core<br><input type="checkbox"/> Warps only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colours<br>1<br>2<br>3<br>Front<br>Back<br>BOARD ATTACH<br><input type="checkbox"/> None<br><input type="checkbox"/> Sewn<br><input type="checkbox"/> Laced<br><input type="checkbox"/> Sewn & recessed<br><input type="checkbox"/> Adhered<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>SECONDARY<br><input type="checkbox"/> None<br><input type="checkbox"/> Plain thread<br><input checked="" type="checkbox"/> silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> Stuck-on<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colours<br>1<br>2<br>3<br>4<br>5<br>Front<br>Back<br>NO. OF TIEDOWNS<br><input type="checkbox"/> Every gathering<br><input type="checkbox"/> Frequent<br><input type="checkbox"/> Infrequent<br><input type="checkbox"/> NK<br><input type="checkbox"/> Extra stuck-on folded endbands |  |  |  |   |  |
| <b>7. ENDBAND CONDITION</b><br>Extent <input type="checkbox"/> Sound<br>Slips detached from board<br><input type="checkbox"/> Extent<br><input type="checkbox"/> Extent<br>Slip(s) broken at joint(s)<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine<br>HEAD<br><input type="checkbox"/> Loose<br><input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other<br>TAIL<br>Slips detached from board<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br>Slip(s) broken at joint(s)<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine<br>Extent <input type="checkbox"/> Sound<br>Slips detached from board<br><input type="checkbox"/> Loose<br><input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other   |  |  |  |   |  |

## Implied relationships

- lining **part of** spine
- spine adhesive **has type** animal
- endband **has technique** Greek
- secondary thread **has material** silk

# Implied relationships → CRM properties

- lining **part of** spine
  - spine adhesive **has type** animal
  - endband **has technique** Greek
  - secondary thread **has material** silk
  
  - lining **crm:P46\_forms\_part\_of** spine
  - spine adhesive **crm:P2\_has\_type** animal
  - making of endband **crm:P32\_used\_general\_technique** Greek
  - secondary thread **crm:P45\_consists\_of** silk
- 

# CIDOC-CRM

**Scope note:**

This class comprises physical objects purposely created by human activity.

No assumptions are made as to the extent of modification required to justify regarding an object as man-made. For example, an inscribed piece of rock or a preserved butterfly are both regarded as instances of E22 Man-Made Object.

**Examples:**

Mallard (the World's fastest steam engine)  
the Portland Vase  
the Coliseum

E22 Man-Made Object

# CIDOC-CRM

## **Scope Note:**

This class comprises all persistent physical items that are purposely created by human activity.

This class comprises man-made objects, such as a swords, and man-made features, such as rock art. No assumptions are made as to the extent of modification required to justify regarding an object as man-made. For example, a “cup and ring” carving on bedrock is regarded as instance of E24 Physical Man-Made Thing.

## **Examples:**

the Forth Railway Bridge (E22)

the Channel Tunnel (E25)

the Historical Collection of the Museum Benaki in Athens (E78)

E24 Physical Man-Made Thing

P62 depicts: E1 CRM Entity

P65 shows visual item: E36 Visual Item

E22 Man-Made Object

# CIDOC-CRM

P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

E22 Man-Made Object

# CIDOC-CRM

E18 Physical Thing

P44 has condition: E3 Condition State  
P45 consists of: E57 Material  
P46 is composed of: E18 Physical Thing  
P49 has former or current keeper: E39 Actor  
P50 has current keeper: E39 Actor  
P51 has former or current owner: E39 Actor  
P52 has current owner: E39 Actor  
P53 has former or current location: E53 Place  
P128 carries: E90 Symbolic Object  
P156 occupies: E53 Place

E24 Physical Man-Made Thing

P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

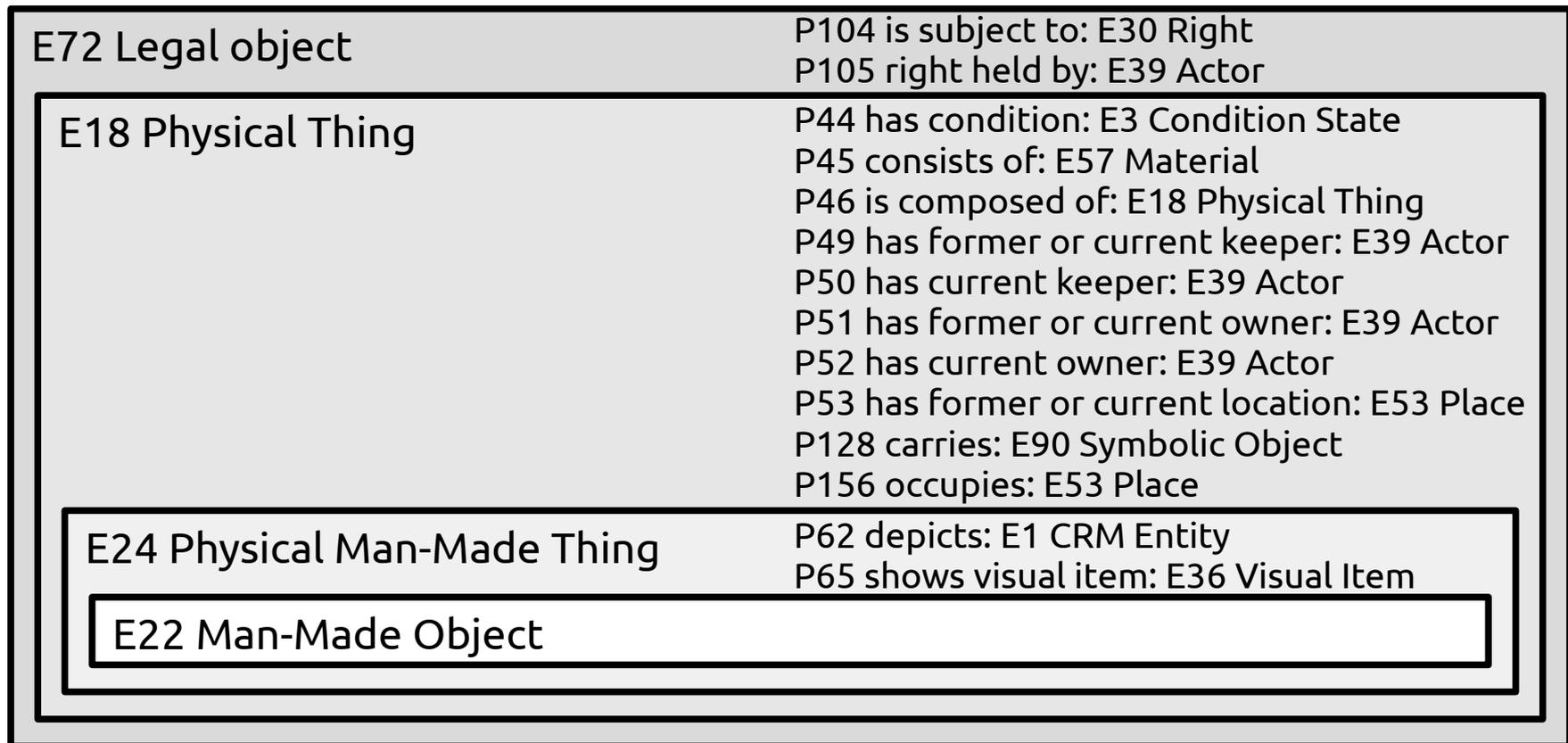
E22 Man-Made Object

# CIDOC-CRM

P44 has condition: E3 Condition State  
P45 consists of: E57 Material  
P46 is composed of: E18 Physical Thing  
P49 has former or current keeper: E39 Actor  
P50 has current keeper: E39 Actor  
P51 has former or current owner: E39 Actor  
P52 has current owner: E39 Actor  
P53 has former or current location: E53 Place  
P128 carries: E90 Symbolic Object  
P156 occupies: E53 Place  
P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

E22 Man-Made Object

# CIDOC-CRM



# CIDOC-CRM

P104 is subject to: E30 Right  
P105 right held by: E39 Actor  
P44 has condition: E3 Condition State  
P45 consists of: E57 Material  
P46 is composed of: E18 Physical Thing  
P49 has former or current keeper: E39 Actor  
P50 has current keeper: E39 Actor  
P51 has former or current owner: E39 Actor  
P52 has current owner: E39 Actor  
P53 has former or current location: E53 Place  
P128 carries: E90 Symbolic Object  
P156 occupies: E53 Place  
P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

E22 Man-Made Object

# CIDOC-CRM

E1 CRM Entity

P1 is identified by: E41 Appellation  
P2 has type: E55 Type  
P3 has note: E62 String  
P48 has preferred identifier: E42 Identifier  
P137 exemplifies: E55 Type

E77 Persistent Item

E70 Thing

P43 has dimension: E54 Dimension  
P101 had as general use: E55 Type  
P130 shows features of: E70 Thing

E72 Legal object

P104 is subject to: E30 Right  
P105 right held by: E39 Actor

E18 Physical Thing

P44 has condition: E3 Condition State  
P45 consists of: E57 Material  
P46 is composed of: E18 Physical Thing  
P49 has former or current keeper: E39 Actor  
P50 has current keeper: E39 Actor  
P51 has former or current owner: E39 Actor  
P52 has current owner: E39 Actor  
P53 has former or current location: E53 Place  
P128 carries: E90 Symbolic Object  
P156 occupies: E53 Place

E24 Physical Man-Made Thing

P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

E22 Man-Made Object

# CIDOC-CRM

E1 CRM Entity

P1 is identified by: E41 Appellation  
P2 has type: E55 Type  
P3 has note: E62 String  
P48 has preferred identifier: E42 Identifier  
P137 exemplifies: E55 Type

E77 Persistent Item

E70 Thing

P43 has dimension: E54 Dimension  
P101 had as general use: E55 Type  
P130 shows features of: E70 Thing

E72 Legal object

P104 is subject to: E30 Right  
P105 right held by: E39 Actor

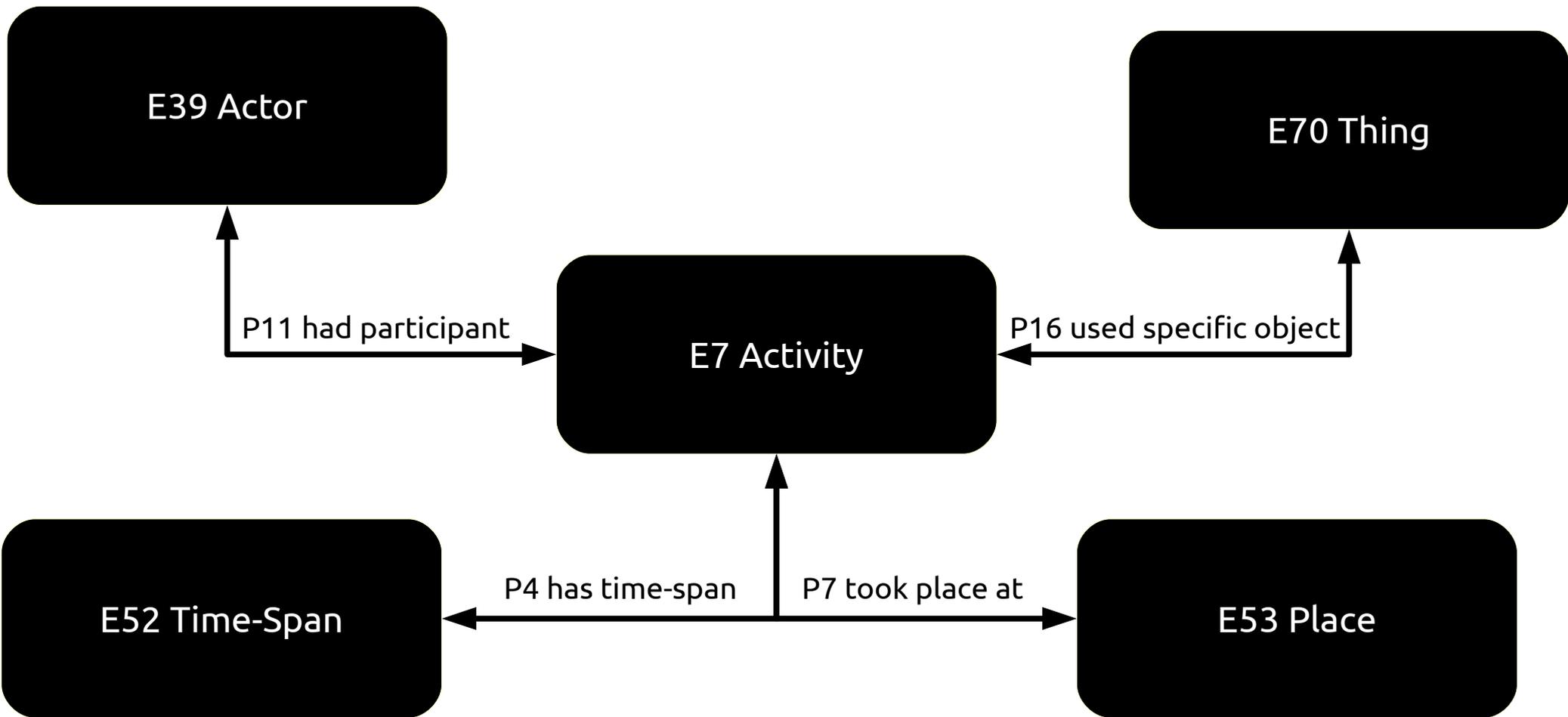
E18 Physical Thing

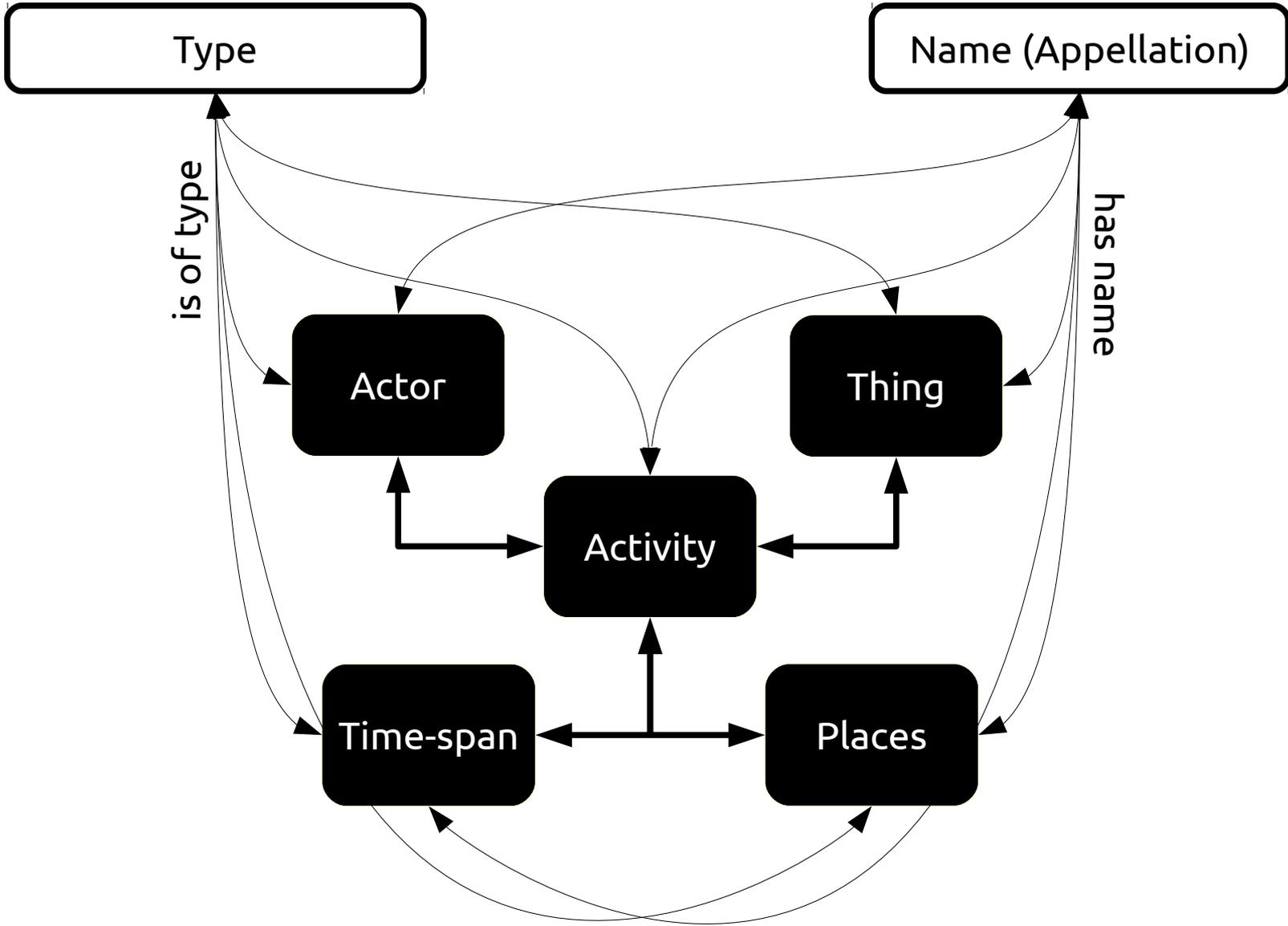
P44 has condition: E3 Condition State  
P45 consists of: E57 Material  
P46 is composed of: E18 Physical Thing  
P49 has former or current keeper: E39 Actor  
P50 has current keeper: E39 Actor  
P51 has former or current owner: E39 Actor  
P52 has current owner: E39 Actor  
P53 has former or current location: E53 Place  
P128 carries: E90 Symbolic Object  
P156 occupies: E53 Place

E24 Physical Man-Made Thing

P62 depicts: E1 CRM Entity  
P65 shows visual item: E36 Visual Item

E22 Man-Made Object





# More mapping exercises

- What is the result of tooling (i.e. the mark on the cover of a book)?
- What is the tool used to produce it?
- What is the process of producing the mark?
- What is the removal of a board?
- What is the title of a book?



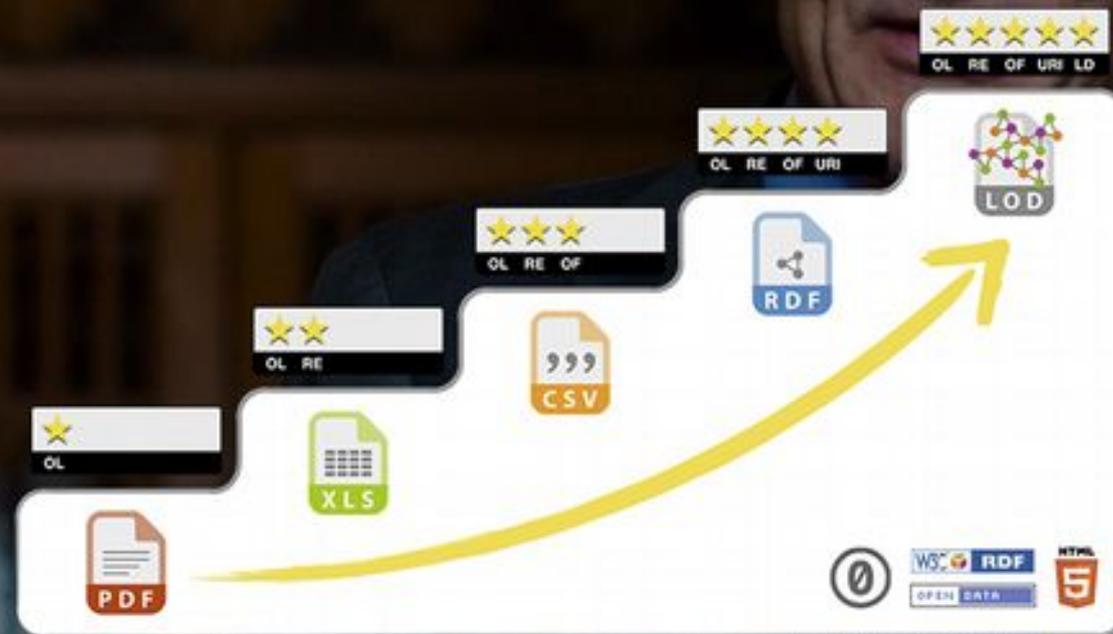
Implementation – Semantic Web

# Linked data

- World Wide Web Consortium
  - Tim Berners-Lee five star open data
  - <http://5stardata.info/en/>
- Resource Description Framework (RDF)

# 5 ★ OPEN DATA

Tim Berners-Lee, the inventor of the Web and Linked Data initiator, suggested a 5-star deployment scheme for Open Data. Here, we give examples for each step of the stars and explain costs and benefits that come along with it.



## BY EXAMPLE ...

Below, we provide examples for each level of Tim's 5-star Open Data plan. The example data used throughout is 'the temperature forecast for Galway, Ireland for the next 3 days':

- ★ make your stuff available on the Web (whatever format) under an open license<sup>1</sup> [example ...](#)
- ★★ make it available as structured data (e.g., Excel instead of image scan of a table)<sup>2</sup> [example ...](#)
- ★★★ make it available in a non-proprietary open format (e.g., CSV instead of Excel)<sup>3</sup> [example ...](#)

## 7. SPINE, SPINE LININGS AND ENDBANDS

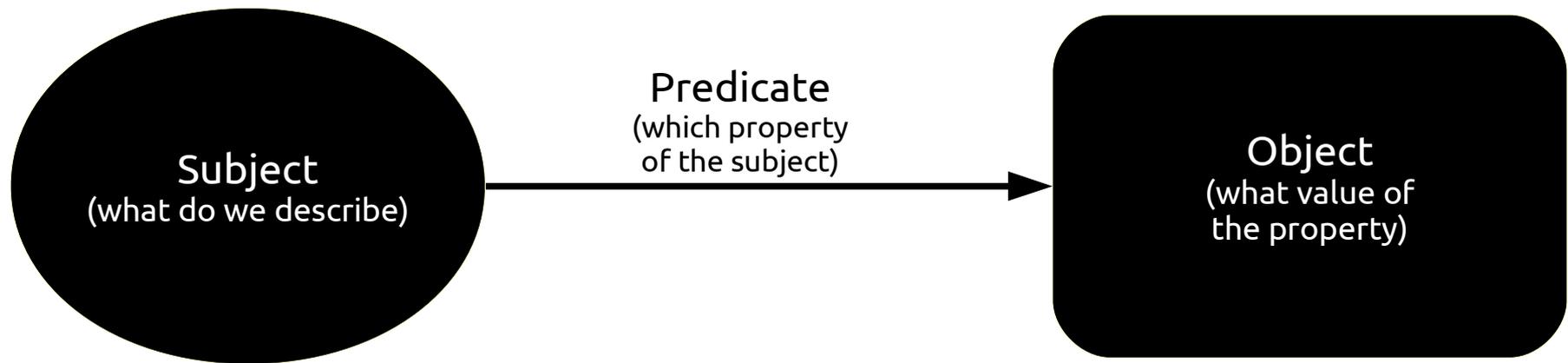
MS

|   |  |   |  |  |  |
|---|--|---|--|--|--|
| <b>1. SPINE</b><br>ADHESIVE<br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Adhesive type<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK   |  | <b>2. Spine &amp; joint profile</b><br>SHAPE (original)<br><input type="checkbox"/> Flat<br><input type="checkbox"/> Slight round<br><input type="checkbox"/> Round<br><input type="checkbox"/> Heavy round<br><input type="checkbox"/> NK<br>JOINTS<br><input type="checkbox"/> None<br><input type="checkbox"/> Curved<br><input type="checkbox"/> Angled<br><input type="checkbox"/> Right angle<br><input type="checkbox"/> NK  |  | <b>3. SPINE CONDITION</b><br>ADHESIVE<br><input type="checkbox"/> NA<br><input type="checkbox"/> Sound<br>Extent<br><input type="checkbox"/> Cracked<br><input type="checkbox"/> Extent Severity<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br>Current profile<br>EXTRA APPLICATION<br><input type="checkbox"/> Animal<br><input type="checkbox"/> Starch<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other |  |
| <b>4. LINING</b><br><input type="checkbox"/> No<br><input type="checkbox"/> Yes<br><input type="checkbox"/> NK<br>Overall<br><input type="checkbox"/> Transverse<br><input type="checkbox"/> Comb<br><input type="checkbox"/> Panel<br><input type="checkbox"/> H&T only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other   |  | LINING MATERIAL<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Paper<br><input type="checkbox"/> Textile<br><input type="checkbox"/> Tanned skin<br><input type="checkbox"/> Tawed skin<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colour   |  | MATERIAL TYPE<br><input type="checkbox"/> Plain<br><input type="checkbox"/> MS<br><input type="checkbox"/> Printed<br><input type="checkbox"/> Decorated<br><input type="checkbox"/> NK<br>LINING JOINTS<br><input type="checkbox"/> Inside boards<br><input type="checkbox"/> Outside boards<br><input type="checkbox"/> NK<br>Right<br>Left<br>Linings from outside<br>Left<br>Right   |  |
| No. of layers<br>1st<br>2nd<br>3rd  |  | <b>5. LINING CONDITION</b><br><input type="checkbox"/> Missing<br><input type="checkbox"/> Spine detach<br>Extent<br>Left<br>Right<br>Extent Severity<br><input type="checkbox"/> Mechanical damage<br><input type="checkbox"/> Rodent damage<br><input type="checkbox"/> Insect damage<br><input type="checkbox"/> Mould damage<br><input type="checkbox"/> Other  |  | <input type="checkbox"/> Sound<br>Split at joint<br>Lifted from bds  |  |
| <b>6. ENDBAND</b> <input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> NK <input type="checkbox"/> Greek <input type="checkbox"/> Western <input type="checkbox"/> Islamic <input type="checkbox"/> Other <input type="checkbox"/> Missing<br>No. of cores<br><input type="checkbox"/> Cord<br><input type="checkbox"/> Tanned<br><input type="checkbox"/> Parchment<br><input type="checkbox"/> Tawed<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>cross section |  |   |  |  |  |
| BOARD ATTACH<br><input type="checkbox"/> None<br><input type="checkbox"/> Laced<br><input type="checkbox"/> Adhered<br><input type="checkbox"/> Other<br><input type="checkbox"/> Sewn<br><input type="checkbox"/> Sewn & recessed<br><input type="checkbox"/> NK   |  | PRIMARY<br><input type="checkbox"/> Plain thread<br><input type="checkbox"/> Silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br><input type="checkbox"/> No bead<br><input type="checkbox"/> No front bead<br><input type="checkbox"/> Reversing twist<br><input type="checkbox"/> Greek, single core<br><input type="checkbox"/> Greek, double core<br><input type="checkbox"/> Warps only<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colours<br>1<br>2<br>3 |  | Colours<br>1<br>2<br>3<br>Front<br>Back  |  |
| NO. OF TIEDOWNS<br><input type="checkbox"/> Every gathering<br><input type="checkbox"/> Frequent<br><input type="checkbox"/> Infrequent<br><input type="checkbox"/> NK  |  | SECONDARY<br><input type="checkbox"/> None<br><input type="checkbox"/> Plain thread<br><input checked="" type="checkbox"/> silk<br><input type="checkbox"/> Metal thread<br><input type="checkbox"/> Stuck-on<br><input type="checkbox"/> NK<br><input type="checkbox"/> Other<br>Colours<br>1<br>2<br>3<br>4<br>5<br>Front<br>Back   |  | <input type="checkbox"/> Extra stuck-on folded endbands  |  |
| <b>7. ENDBAND CONDITION</b>   |  |   |  |  |  |
| Slips detached from board<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br>Slips broken at joint(s)<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine  |  | HEAD TAIL<br><input type="checkbox"/> Loose<br><input type="checkbox"/> Missing<br><input type="checkbox"/> Tiedowns pulled out<br><input type="checkbox"/> Primary broken<br><input type="checkbox"/> Secondary broken<br><input type="checkbox"/> Warps broken<br><input type="checkbox"/> Primary worn away<br><input type="checkbox"/> Secondary worn away<br><input type="checkbox"/> Missing core<br><input type="checkbox"/> Missing endband<br><input type="checkbox"/> Other   |  | Slips detached from board<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br>Slips broken at joint(s)<br><input type="checkbox"/> L<br><input type="checkbox"/> R<br><input type="checkbox"/> Core broken across spine   |  |

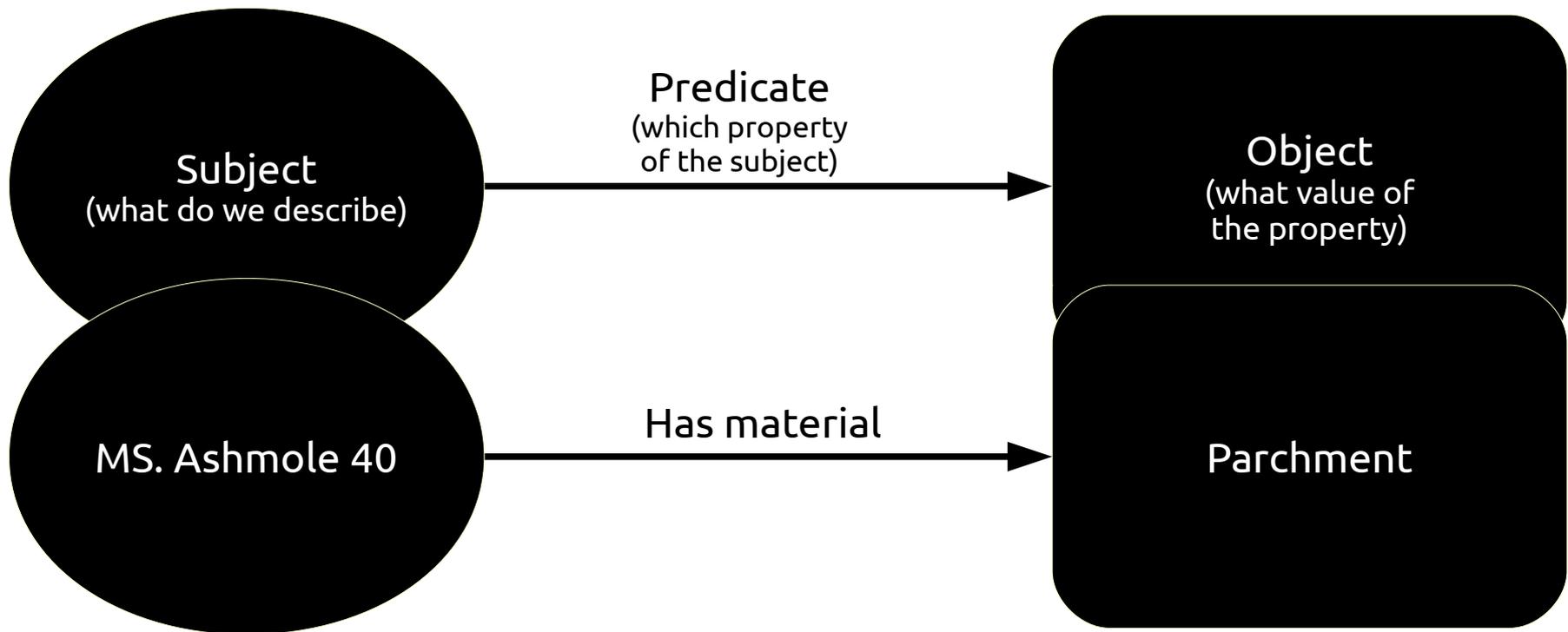
## Implied relationships

- lining **part of** spine
- spine adhesive **has type** animal
- endband **has technique** Greek
- secondary thread **has material** silk

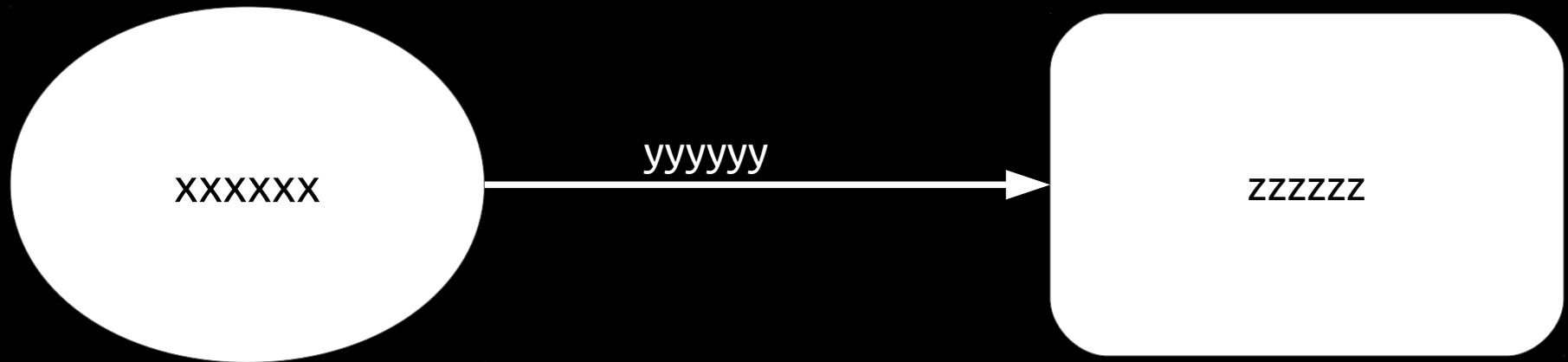
# Resource Description Framework



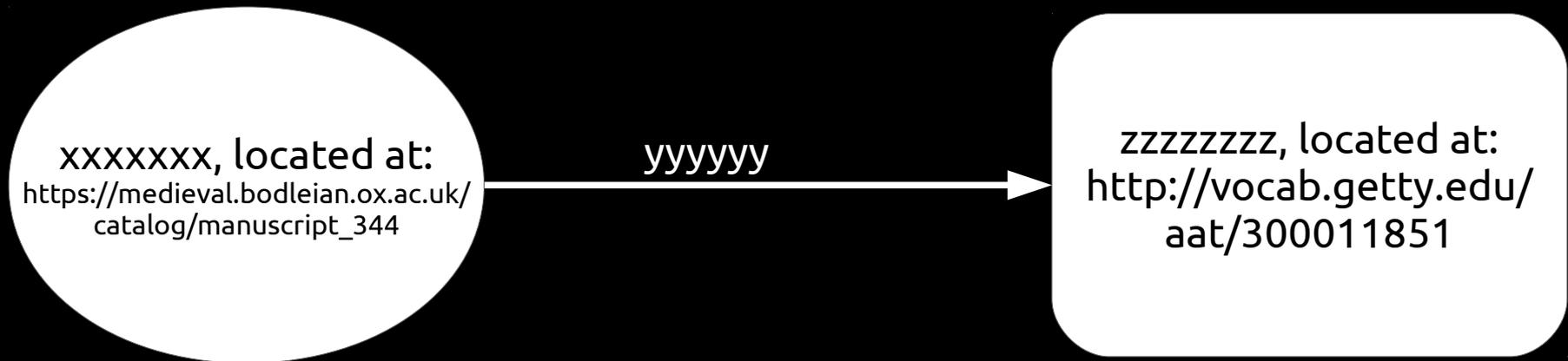
# Resource Description Framework



# Resource Description Framework



# Resource Description Framework





# The Getty Research Institute

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## Search Tools & Databases

- [Primo Search](#)
- [Getty Research Portal](#)
- [Collection Inventories & Finding Aids](#)
- [Photo Archive](#)
- [Research Guides & Bibliographies](#)
- [Digital Collections](#)
- [Article & Research Databases](#)
- [Collecting & Provenance Research](#)
- [BHA & RILA](#)
- ▼ [Getty Vocabularies](#)
  - ▼ [Art & Architecture Thesaurus \(AAT\) ®](#)
    - [About AAT](#)
    - [AAT: Frequently Asked Questions](#)
    - [How to use AAT](#)
  - [Cultural Objects Name Authority \(CONA\) ®](#)
  - [Getty Thesaurus of Geographic Names \(TGN\) ®](#)
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  - [Contribute](#)
  - [Editorial Guidelines](#)
  - [Getty Vocabularies as Linked Open Data](#)
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## Art & Architecture Thesaurus® Online

Search the AAT [Help](#)

Find Term or ID:  [Search](#)

AND  OR [Clear](#)

Note:

[Pop-up Search](#)   [Browse the AAT hierarchies](#)

### Copyright information

### Search Tips

For the Find Term or Note field, you may use **AND** and **OR** (all in upper case) [e.g., 1) windsor chairs, 2) chairs OR rockers, 3) chairs OR rockers OR armchairs, 4) bow-back AND windsor, 5) windsor AND (rockers OR chairs), 6) (windsor OR boston) AND (rockers OR chairs)]. Wildcard is the asterisk (\*); right truncation only. To find an exact match rather than a key word in the Find Term field, use quotes [e.g., "chairs"]; if you wish to search the term and note together, click on the buttons for AND or OR.

### About the AAT

Learn about the purpose, scope and structure of the AAT. The AAT is an evolving vocabulary, growing and changing thanks to contributions from Getty projects and other institutions. Find out more about the AAT's contributors.

### F.A.Q. about the AAT

Here you will find a list of the most frequently asked questions about the thesaurus.

### AAT@getty.edu

Click here to send a message to the AAT editors.

### Use of the AAT

Copyright © 2017 The J. Paul Getty Trust. All rights reserved. The Getty vocabularies are made available via the Web browsers to support limited research and cataloging efforts. Companies and institutions interested in [more extensive use](#) of AAT, TGN, or ULAN are advised to explore the Linked Open Data releases. APIs are available. Relational tables and XML releases are also available, but may be discontinued in the future. All releases are available under the Open Data Commons Attribution License (ODC-By) 1.0. Releases of CONA and the IA are under development.

Updated 7 March 2017

### Have a Question?

- [Contact the Vocabulary Program](#)



# Thesauri & authority lists

- Getty AAT, TGN, ULAN
- VIAF
- Geonames
- Language of Bindings!

## Search

Search

The Language of Bindings Thesaurus (LoB) is a thesaurus of bookbinding terms for book structures dating from the ninth to the nineteenth century. This project has been partially funded by the AHRC. Contributions to the thesaurus have been made by a number of Contributors during 3 workshops.

The screenshot shows the search results for the term 'paper' in the Language of Bindings Thesaurus. The interface includes the site logo, navigation menu, and search bar. The results for 'paper' are displayed in a structured format:

- paper**
- Preferred label:** [paper](#)
- paper**
- Refers generally to all types of thin matted or felted sheets or webs of fiber formed on a fine screen from a pulpy water suspension and dried.
- AAT**
- The Arts and Architecture Thesaurus Online, The Getty Research Institute.
- Additional reference:** <http://vocab.getty.edu/aat/300014109> (modified)
- Hierarchy:**
- [+] fibre materials
- [+] sheet (material)
- [+] paper [-]
- decorated [paper](#) [+]
- laminated [paper](#)
- [paper](#) by manufacture [+]
- [paper](#) by origin [+]



## paper

### Preferred label:

paper  
papir

Refers generally to all types of thin matted or felted sheets or webs of fiber formed on a fine screen from a pulpy water suspension and dried.

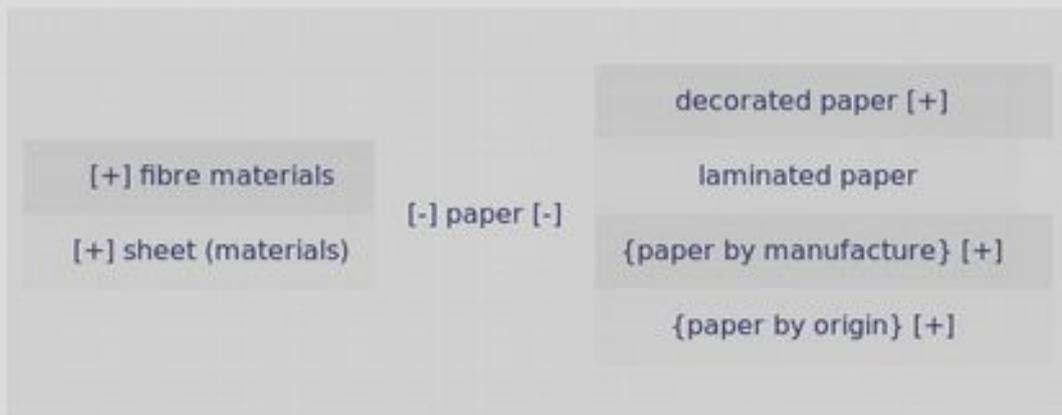
## AAT

The Arts and Architecture Thesaurus Online, The Getty Research Institute.

### Additional reference:

<http://vocab.getty.edu/aat/300014109> (modified)

### Hierarchy:



### Broader concept:

- RDF/XML  
JSON  
JSON LD  
TURTLE

The Language of Bindings  
Thesaurus is made available  
under the Open Data Commons  
Attribution License:  
<http://opendatacommons.org/licenses/by/1.0>.

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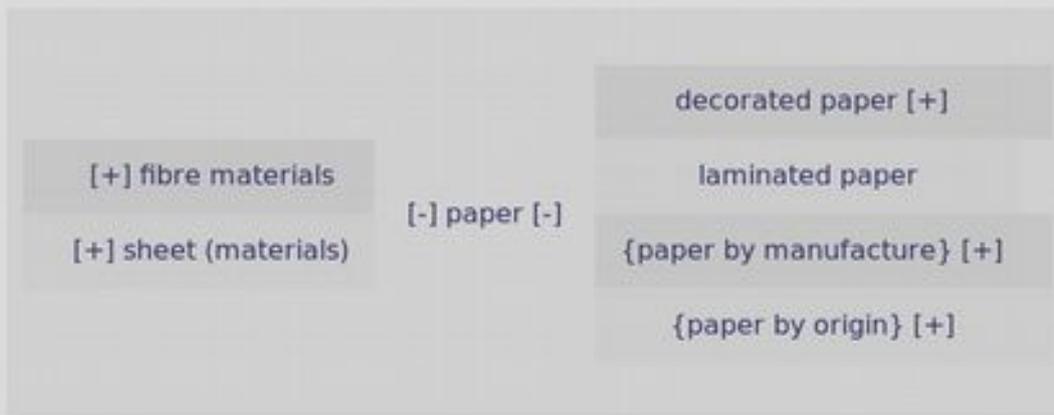
## AAT

The Arts and Architecture Thesaurus Online, The Getty Research Institute.

**Additional reference:**

<http://vocab.getty.edu/aat/300014109> (modified)

**Hierarchy:**



**Broader concept:**

fibre materials  
sheet (materials)

**Top concept:**

materials

**Getty AAT:**

paper (fiber product)

**Concept uri:**

<http://w3id.org/lob/concept/1481>

# Linked Data

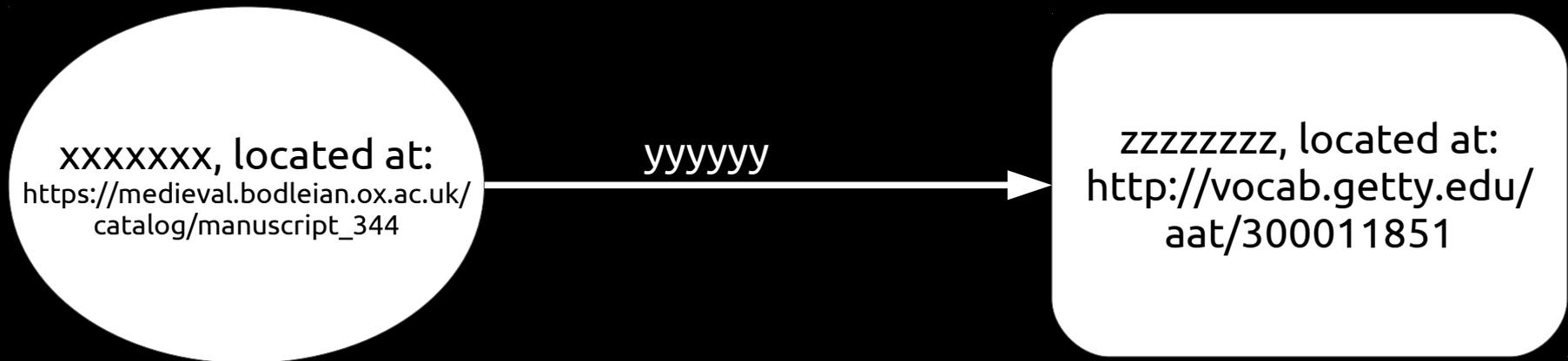
- World Wide Web Consortium
- Resource Description Framework (RDF)
- Universal Resource Identifiers (URI)
  - lots of them
  - preferable leading to an html page
  - permanent!

## BY EXAMPLE ...

Below, we provide examples for each level of Tim's 5-star Open Data plan. The example data used throughout is 'the temperature forecast for Galway, Ireland for the next 3 days':

- ★ make your stuff available on the Web (whatever format) under an open license<sup>1</sup> [example ...](#)
- ★★ make it available as structured data (e.g., Excel instead of image scan of a table)<sup>2</sup> [example ...](#)
- ★★★ make it available in a non-proprietary open format (e.g., CSV instead of Excel)<sup>3</sup> [example ...](#)
- ★★★★ use URIs to denote things, so that people can point at your stuff<sup>4</sup> [example ...](#)

# Resource Description Framework



# Resource Description Framework



yyyyyy, located at:  
<http://www.cidoc-crm.org/>  
P45\_consists\_of

xxxxxxx, located at:  
[https://medieval.bodleian.ox.ac.uk/  
catalog/manuscript\\_344](https://medieval.bodleian.ox.ac.uk/catalog/manuscript_344)

zzzzzzzz, located at:  
[http://vocab.getty.edu/  
aat/300011851](http://vocab.getty.edu/aat/300011851)

## BY EXAMPLE ...

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- ★★★★ use URIs to denote things, so that people can point at your stuff<sup>4</sup> [example ...](#)
- ★★★★★ link your data to other data to provide context<sup>5</sup> [example ...](#)



# Linked Data

- World Wide Web Consortium
- Resource Description Framework (RDF)
- Universal Resource Identifiers (URI)
- RDFS

# RDFS (RDF schema)

- RDF is only a framework
- RDFS makes it specific for a domain

# RDFS (RDF schema)

- RDF is only a framework
- RDFS makes it specific for a domain



ontology

Defines an  
ontology




## Resources

### MODEL RELATED MATERIAL

Versions of the CIDOC-CRM

- References
- Presentations
- Technical Papers
- Tutorials
- Critics
- Important Theories
- Publications
- Mappings
- Compatible Models
- Translations
- FAQ

### MEETING PRODUCTS

- Minutes
- Issues
- CRM SIG archive
- Meeting Contributions

Intro Learning Material Lock up

## Choose a shortcut

- Compatible models & Collaborations
- Link to old CIDOC CRM website
- Last official version

## Versions of the CIDOC-CRM

In this section you can find versions of the CIDOC CRM and related information.

Read more about the statuses and types of CIDOC CRM versions

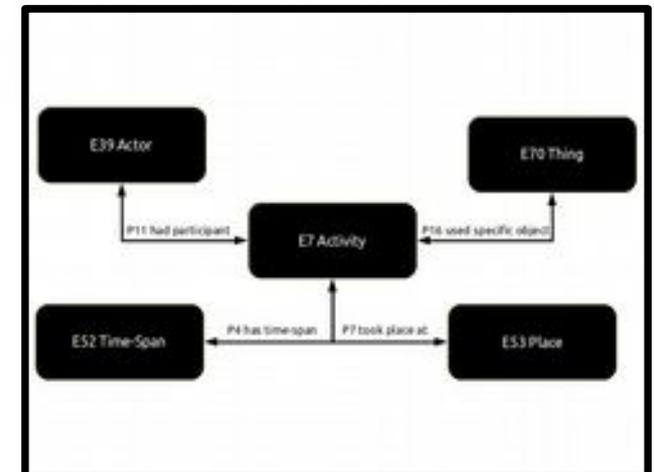
| Version                       | Announcement Date | Available Documents                                 | Document Type     | Editorial Status |
|-------------------------------|-------------------|---|-------------------|------------------|
| <a href="#">Version 6.2.3</a> | May 2018          | (.pdf),  (.docx)                                    | Current version   | Open-in progress |
| <a href="#">Version 6.2.2</a> | September 2017    | (.pdf),  (.docx)                                    | Published Version | Closed           |
| <a href="#">Version 6.2.1</a> | October 2015      | (.pdf),  (.docx),  (.rdf)                           | Published Version | Closed           |
| <a href="#">Version 6.2</a>   | May 2015          | (.pdf),  (.doc),  (.rdf),  (rdfs) v1 CRM-PC,  (OWL) | Published Version | Closed           |
| <a href="#">Version 6.1</a>   | February 2015     | (.pdf),  (.doc)                                     | Published Version | Closed           |
| <a href="#">Version 6.0</a>   | January 2015      | (.pdf),  (.doc),  (.rdf),  (rdfs) v1 CRM-PC         | Published Version | Closed           |
| <a href="#">Version 5.1.2</a> | October 2013      | (.pdf),  (.doc)                                     | Published Version | Closed           |
| <a href="#">Version 5.1</a>   | May 2013          | (.pdf),  (.doc),  (.rdf)                            | Published Version | Closed           |
| <a href="#">Version 5.0.4</a> | December 2011     | (.pdf),  (.doc),  (.rdf)                            | Official version  | Closed           |
| <a href="#">Version 5.0.3</a> | October 2011      | (.pdf),  (.doc)                                     | Published Version | Closed           |
| <a href="#">Version 5.0.2</a> | December 2010     | (.pdf),  (.doc),  (.rdf)                            | Published Version | Closed           |
| <a href="#">Version 5.0.1</a> | November 2009     | (.pdf),  (.doc),  (.rdf),  (.rar)                   | Published Version | Closed           |
| <a href="#">Version 4.1</a>   | April 2005        | (.pdf),  (.doc)                                     | Published Version | Closed           |
| <a href="#">Version 4.0</a>   | March 2004        | (.pdf),  (.doc),  (.rar)                            | Published Version | Closed           |

```

<rdfs:Class rdf:about="E39_Actor">
<rdfs:label xml:lang="de">Akteur</rdfs:label>
<rdfs:label xml:lang="ru">Агент</rdfs:label>
  <rdfs:label xml:lang="fr">Agent</rdfs:label>
  <rdfs:label xml:lang="el">Δράστης</rdfs:label>
  <rdfs:label xml:lang="en">Actor</rdfs:label>
  <rdfs:label xml:lang="pt">Agente</rdfs:label>
  <rdfs:label xml:lang="zh">角色</rdfs:label>
  <rdfs:comment>This class comprises people, either individually or in groups, who have the
potential to perform intentional actions of kinds for which someone may be held responsible.
The CRM does not attempt to model the inadvertent actions of such actors. Individual people
should be documented as instances of E21 Person, whereas groups should be documented as
instances of either E74 Group or its subclass E40 Legal Body.
</rdfs:comment>
  <rdfs:subClassOf rdf:resource="E77_Persistent_Item"/>
</rdfs:Class>

```

This class comprises people, either individually or in groups, who have the potential to perform intentional actions of kinds for which someone may be held responsible. The CRM does not attempt to model the inadvertent actions of such actors. Individual people should be documented as instances of E21 Person, whereas groups should be documented as instances of either E74 Group or its subclass E40 Legal Body.



```

<rdfs:Class rdf:about="E39_Actor">
<rdfs:label xml:lang="de">Akteur</rdfs:label>
<rdfs:label xml:lang="ru">Агент</rdfs:label>
  <rdfs:label xml:lang="fr">Agent</rdfs:label>
  <rdfs:label xml:lang="el">Δράστης</rdfs:label>
  <rdfs:label xml:lang="en">Actor</rdfs:label>
  <rdfs:label xml:lang="pt">Agente</rdfs:label>
  <rdfs:label xml:lang="zh">角色</rdfs:label>

```

<rdfs:comment>This class comprises people, either individually or in groups, who have the potential to perform intentional actions of kinds for which someone may be held responsible. The CRM does not attempt to model the inadvertent actions of such actors. Individual people should be documented as instances of E21 Person, whereas groups should be documented as instances of either E74 Group or its subclass E40 Legal Body.

```

</rdfs:comment>
  <rdfs:subClassOf rdf:resource="E77_Persistent_Item"/>
</rdfs:Class>

```

```

<rdf:Property rdf:about="P11_had_participant">
  <rdfs:label xml:lang="fr">a eu pour participant</rdfs:label>
  <rdfs:label xml:lang="ru">имел участника</rdfs:label>
  <rdfs:label xml:lang="de">hatte Teilnehmer</rdfs:label>
  <rdfs:label xml:lang="en">had participant</rdfs:label>
  <rdfs:label xml:lang="el">είχε συμμετοχο</rdfs:label>
  <rdfs:label xml:lang="pt">tem participante</rdfs:label>
  <rdfs:label xml:lang="zh">有参与者</rdfs:label>

```

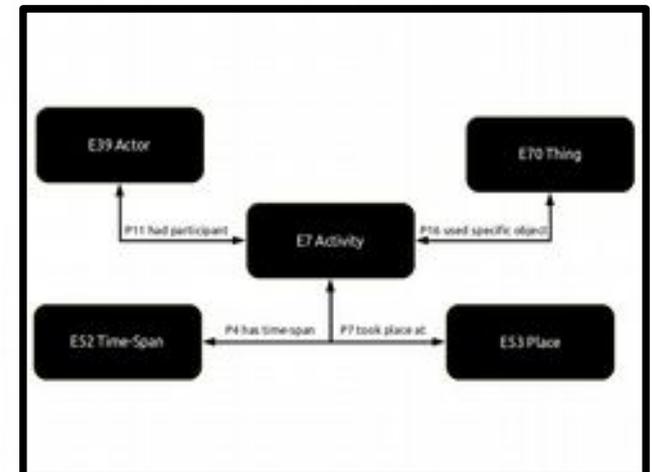
<rdfs:comment>This property describes the active or passive participation of instances of E39 Actors in an E5 Event.

It connects the life-line of the related E39 Actor with the E53 Place and E50 Date of the event. The property implies that the Actor was involved in the event but does not imply any causal relationship. The subject of a portrait can be said to have participated in the creation of the portrait.

```

</rdfs:comment>
  <rdfs:domain rdf:resource="E5_Event"/>
  <rdfs:range rdf:resource="E39_Actor"/>
  <rdfs:subPropertyOf rdf:resource="P12_occurred_in_the_presence_of"/>
</rdf:Property>

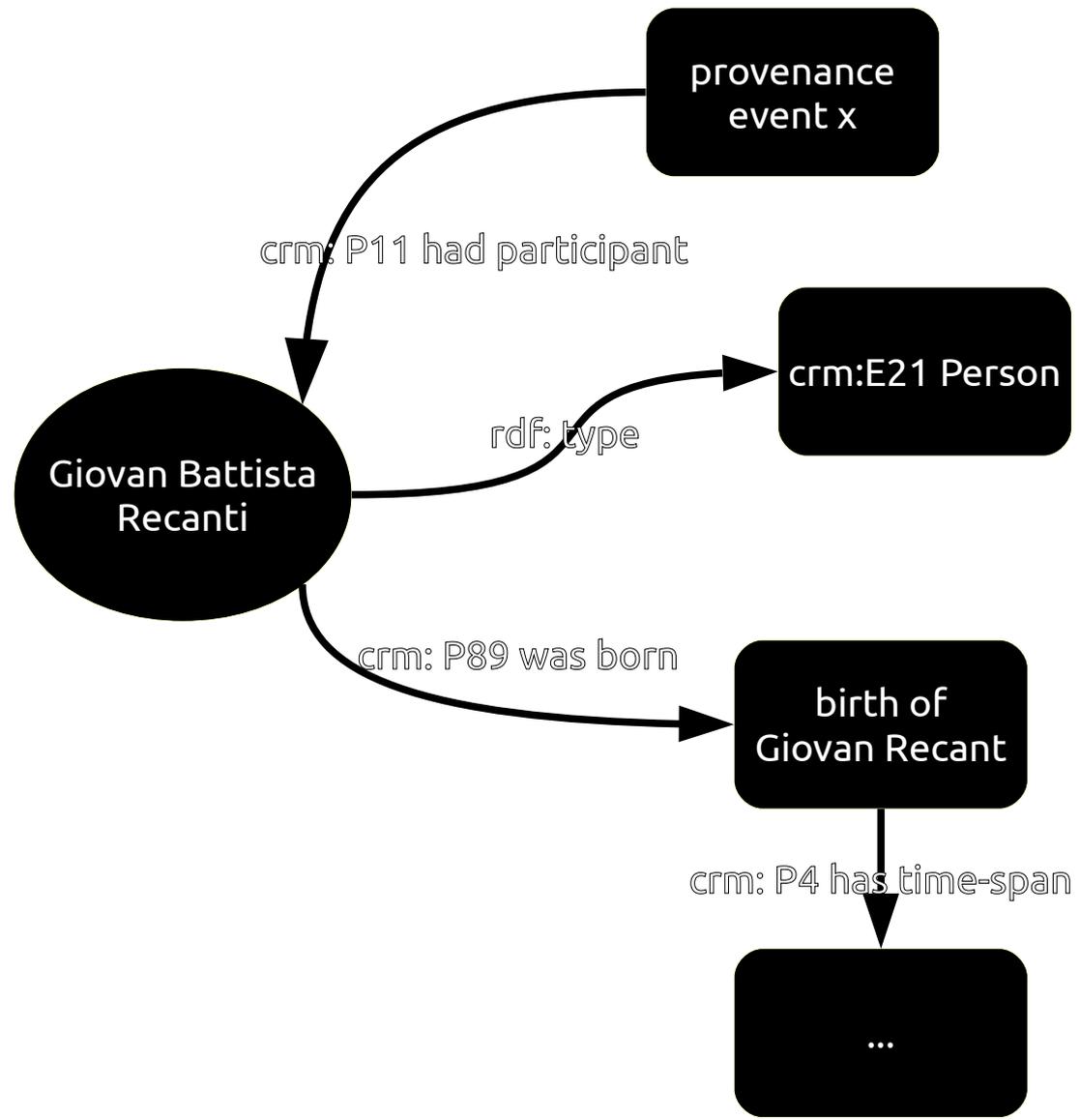
```

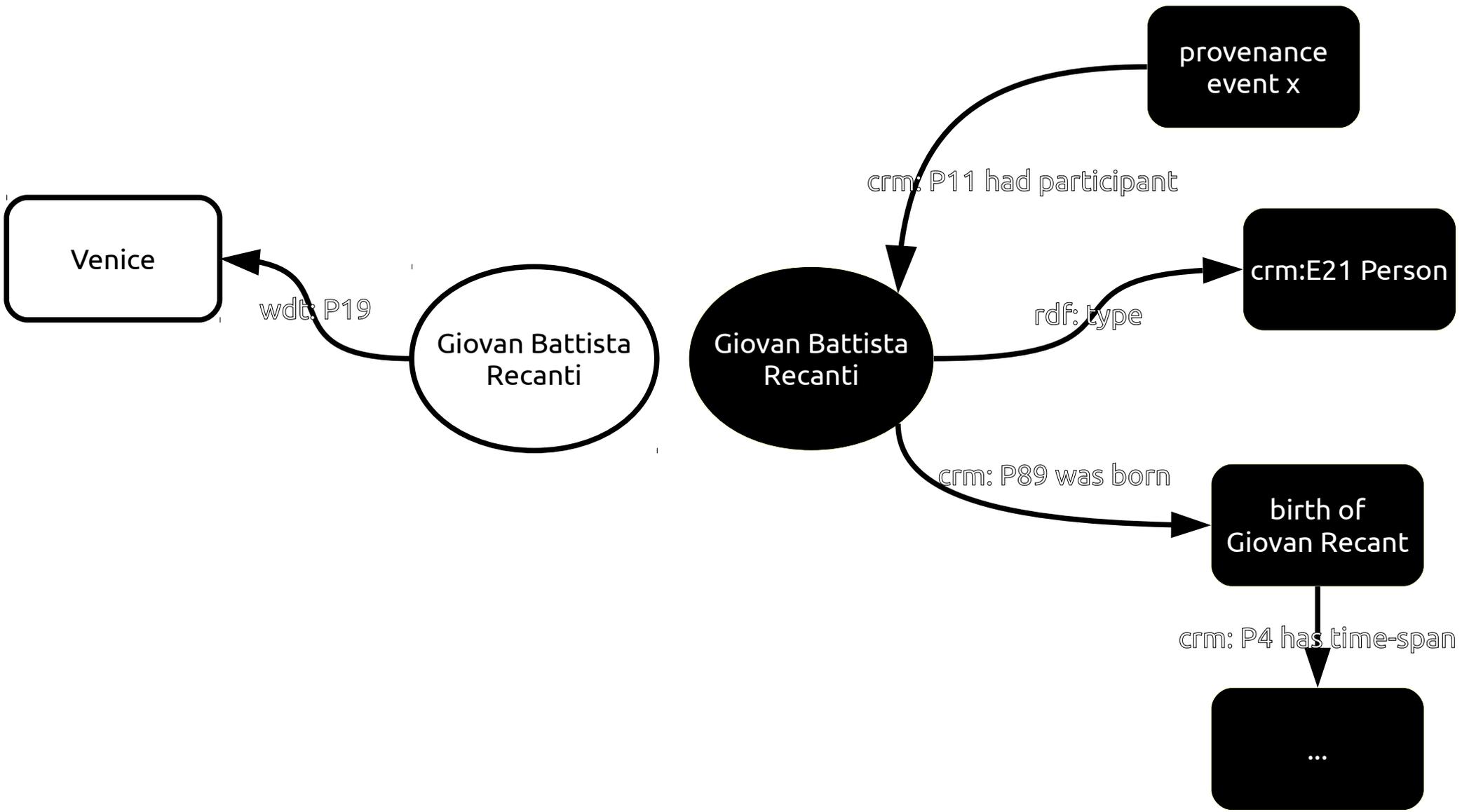


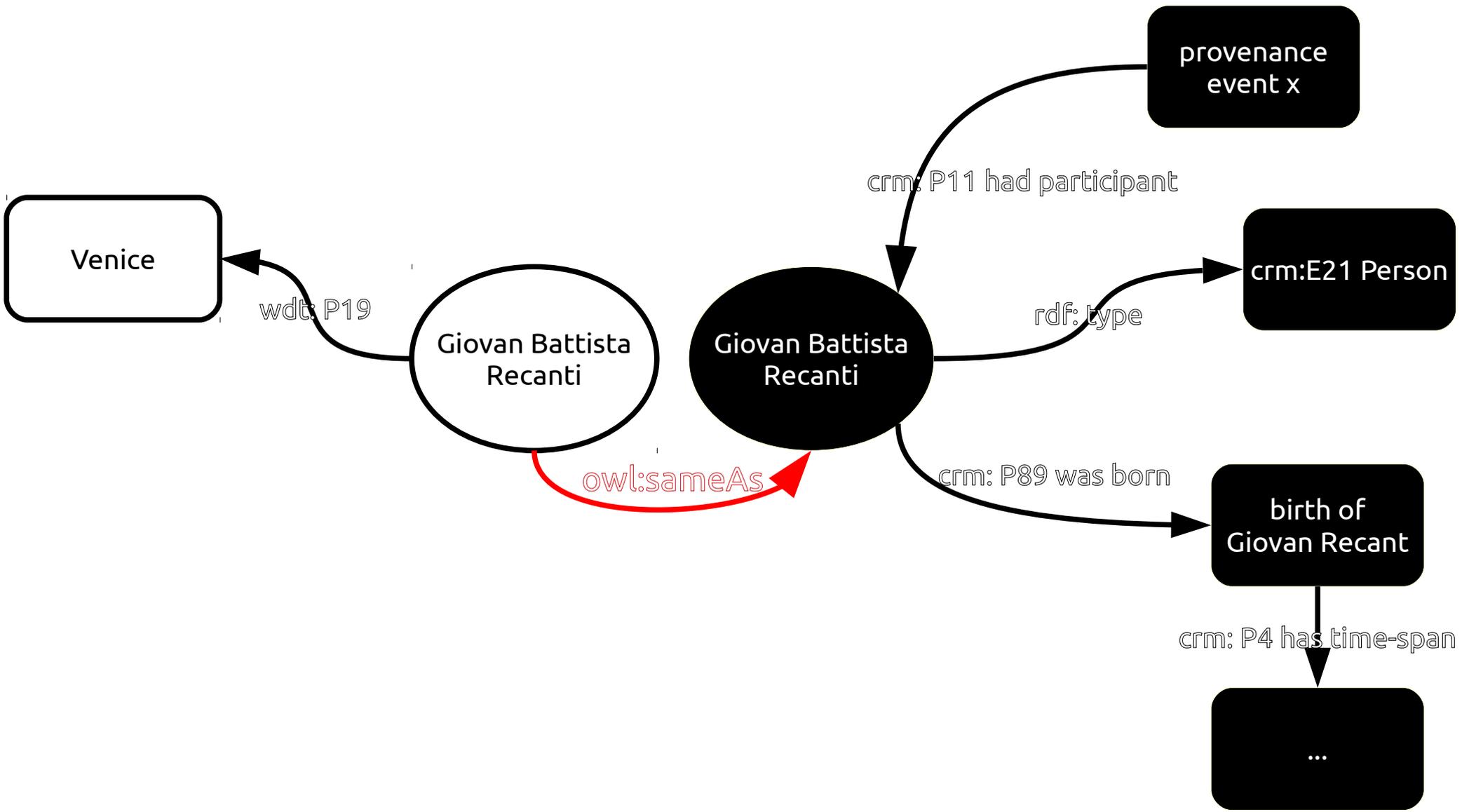
# Linked Data

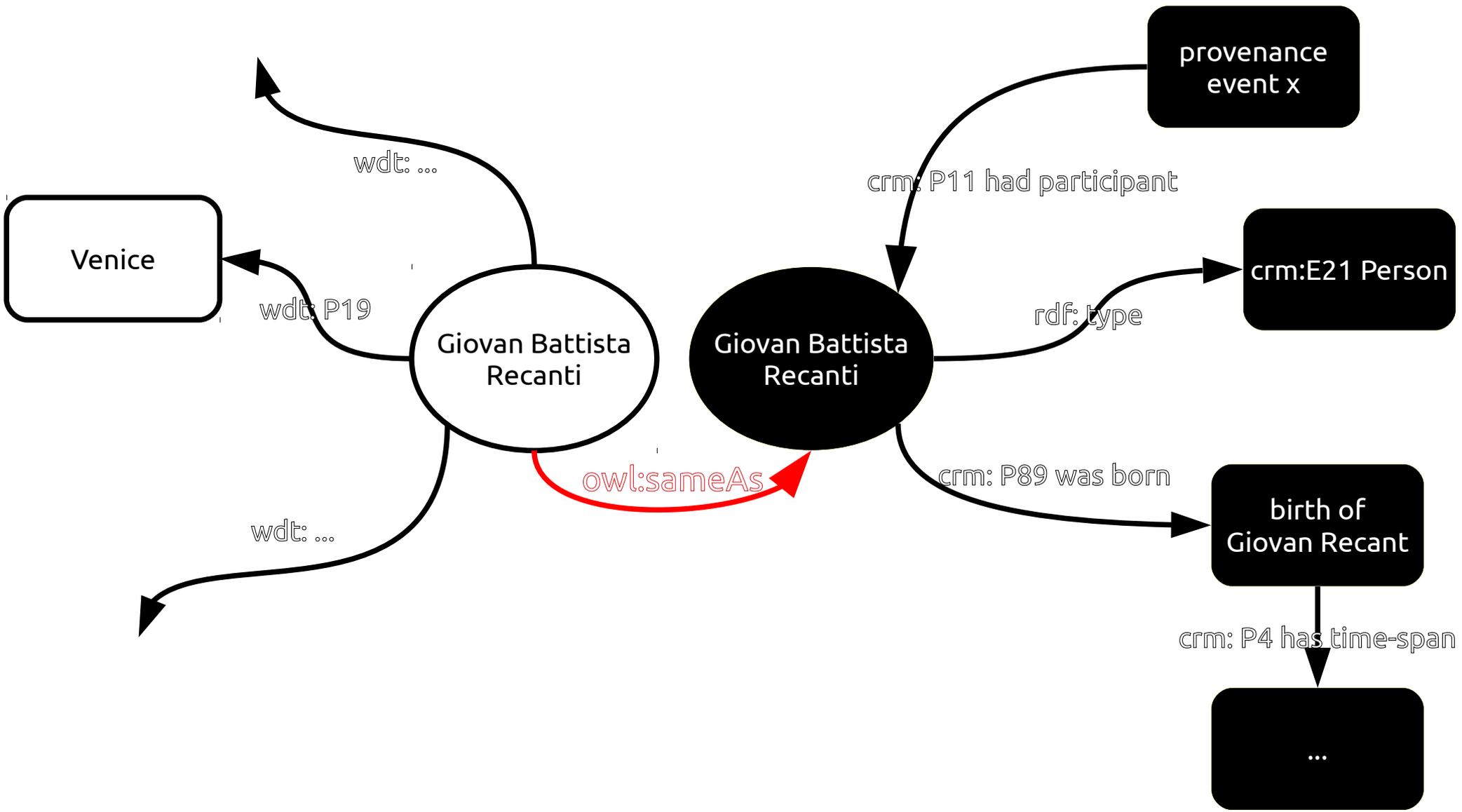
- World Wide Web Consortium
- Resource Description Framework (RDF)
- Universal Resource Identifiers (URI)
- RDFS
- SPARQL

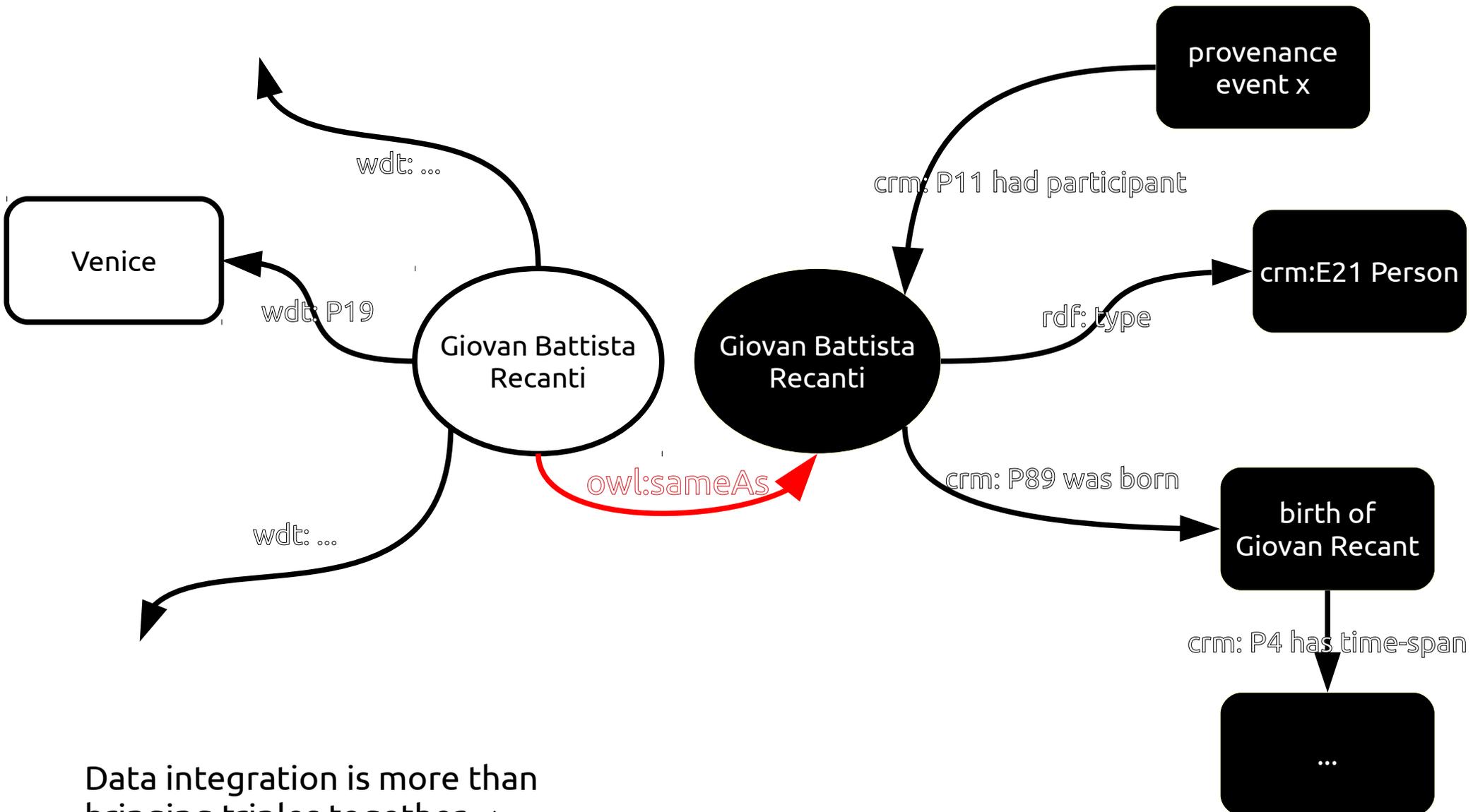
| S   | P   |  |
|---|---|--|
| <a href="http://www.mhs.ox.ac.uk/authority/places/japan">http://www.mhs.ox.ac.uk/authority/places/japan</a>                           | <a href="http://siobr.linkedmusic.org/salt/in_saltsets">http://siobr.linkedmusic.org/salt/in_saltsets</a>                                     | <a href="http://www.mhs.ox.ac.uk/authority/places/">http://www.mhs.ox.ac.uk/authority/places/</a>  |
| <a href="http://www.mhs.ox.ac.uk/authority/places/japan">http://www.mhs.ox.ac.uk/authority/places/japan</a>                           | <a href="http://www.cidoc-crm.org/cidoc-crm/P1_is_identified_by">http://www.cidoc-crm.org/cidoc-crm/P1_is_identified_by</a>                   | <a href="http://www.mhs.ox.ac.uk/authority/places/japan/appellations">http://www.mhs.ox.ac.uk/authority/places/japan/appellations</a>              |
| <a href="http://www.mhs.ox.ac.uk/authority/places/japan">http://www.mhs.ox.ac.uk/authority/places/japan</a>                           | <a href="#">rdf:type</a>  | <a href="http://www.cidoc-crm.org/cidoc-crm/E53_Place">http://www.cidoc-crm.org/cidoc-crm/E53_Place</a>  |
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| <a href="http://www.mhs.ox.ac.uk/object/inv/11390">http://www.mhs.ox.ac.uk/object/inv/11390</a>                                       | <a href="http://www.cidoc-crm.org/cidoc-crm/P2_has_type">http://www.cidoc-crm.org/cidoc-crm/P2_has_type</a>                                   | <a href="http://www.mhs.ox.ac.uk/authority/terms/balance">http://www.mhs.ox.ac.uk/authority/terms/balance</a>                                      |
| <a href="http://www.mhs.ox.ac.uk/object/inv/11390">http://www.mhs.ox.ac.uk/object/inv/11390</a>                                       | <a href="http://www.cidoc-crm.org/cidoc-crm/P3_has_note">http://www.cidoc-crm.org/cidoc-crm/P3_has_note</a>                                   | Dotchin; in parts comprising of Ivory bean and attached brass  |
| <a href="http://www.mhs.ox.ac.uk/object/inv/11390">http://www.mhs.ox.ac.uk/object/inv/11390</a>                                       | <a href="http://www.cidoc-crm.org/cidoc-crm/P45_consists_of">http://www.cidoc-crm.org/cidoc-crm/P45_consists_of</a>                           | <a href="http://www.mhs.ox.ac.uk/authority/terms/brass">http://www.mhs.ox.ac.uk/authority/terms/brass</a>  |
| <a href="http://www.mhs.ox.ac.uk/object/inv/11390">http://www.mhs.ox.ac.uk/object/inv/11390</a>                                       | <a href="http://www.cidoc-crm.org/cidoc-crm/P45_consists_of">http://www.cidoc-crm.org/cidoc-crm/P45_consists_of</a>                           | <a href="http://www.mhs.ox.ac.uk/authority/terms/cotton">http://www.mhs.ox.ac.uk/authority/terms/cotton</a>  |
| <a href="http://www.mhs.ox.ac.uk/object/inv/11390">http://www.mhs.ox.ac.uk/object/inv/11390</a>                                       | <a href="http://www.cidoc-crm.org/cidoc-crm/P45_consists_of">http://www.cidoc-crm.org/cidoc-crm/P45_consists_of</a>                           | <a href="http://www.mhs.ox.ac.uk/authority/terms/ivory">http://www.mhs.ox.ac.uk/authority/terms/ivory</a>  |
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Data integration is more than bringing triples together → potential for new conclusions



Examples



Summa de exemplis  
sanctorum

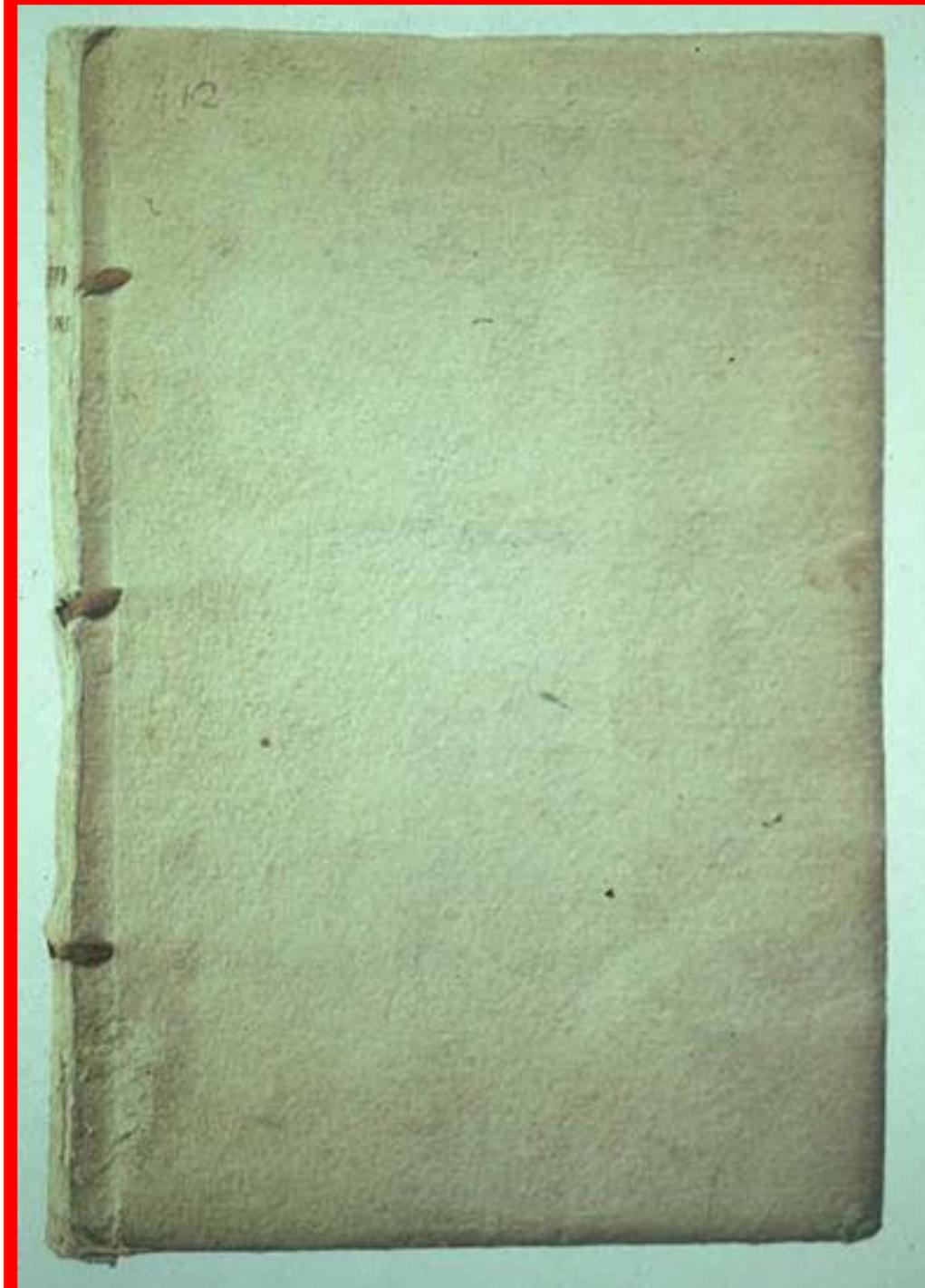


Fig. 1. Phil. D. 1. 1.



1497



1600

Jacobus Philippus, De claris mulieribus  
(Book)

Binding

1497 boards  
(Component)

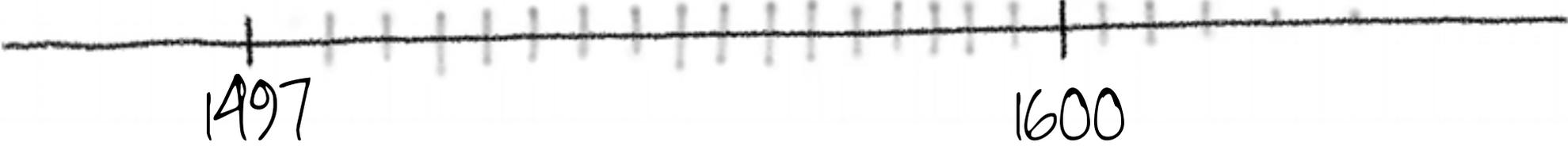
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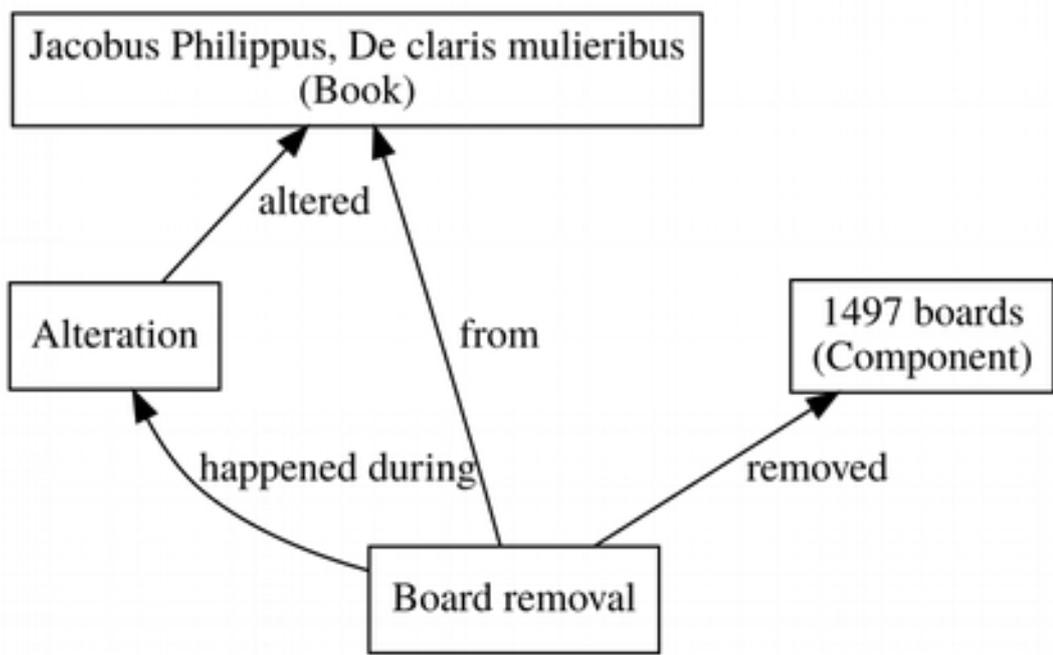
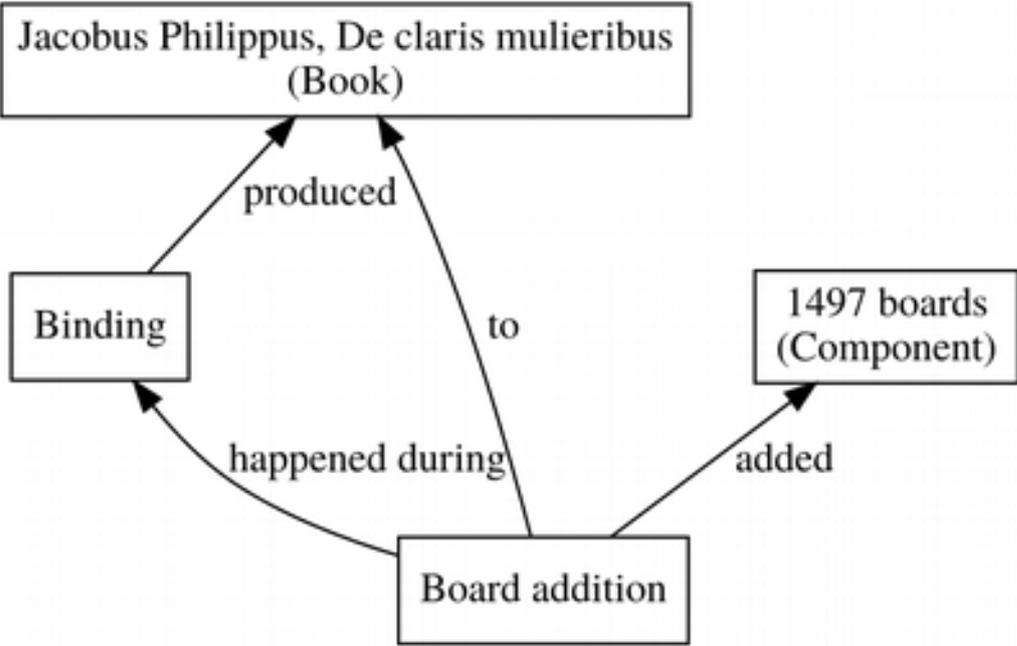
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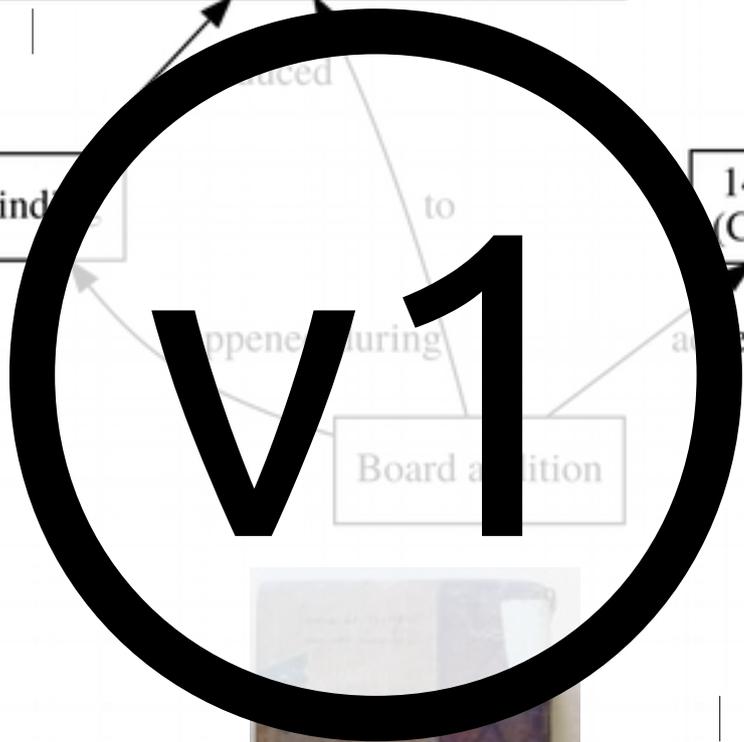


Jacobus Philippus, De claris mulieribus  
(Book)

Bind

1497 boards  
(Component)

Board addition



v1



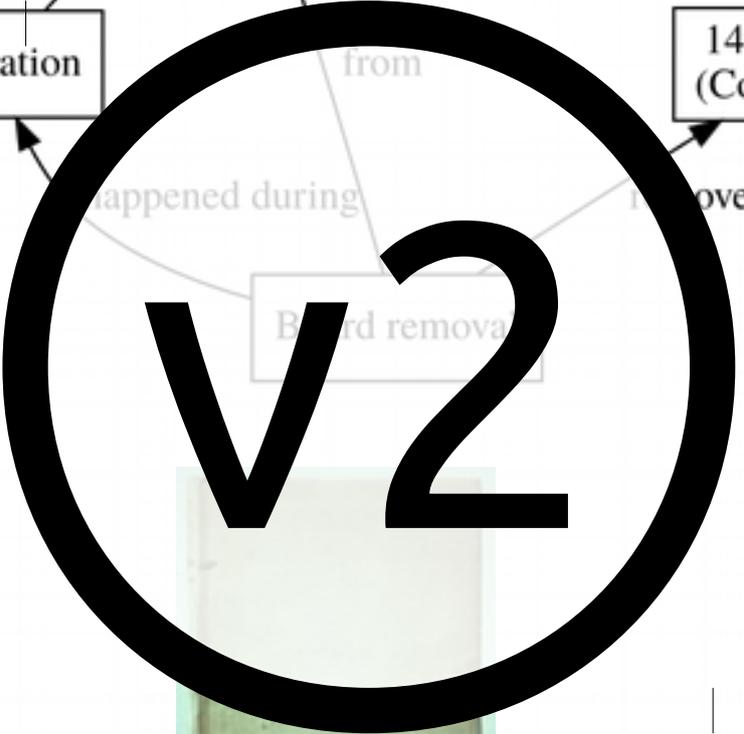
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Jacobus Philippus, De claris mulieribus  
(Book)

Alteration

1497 boards  
(Component)

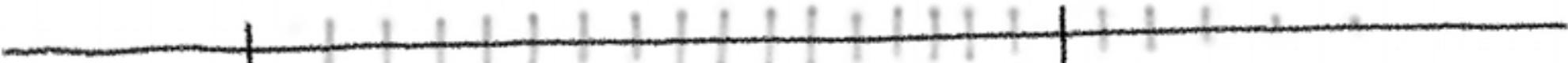
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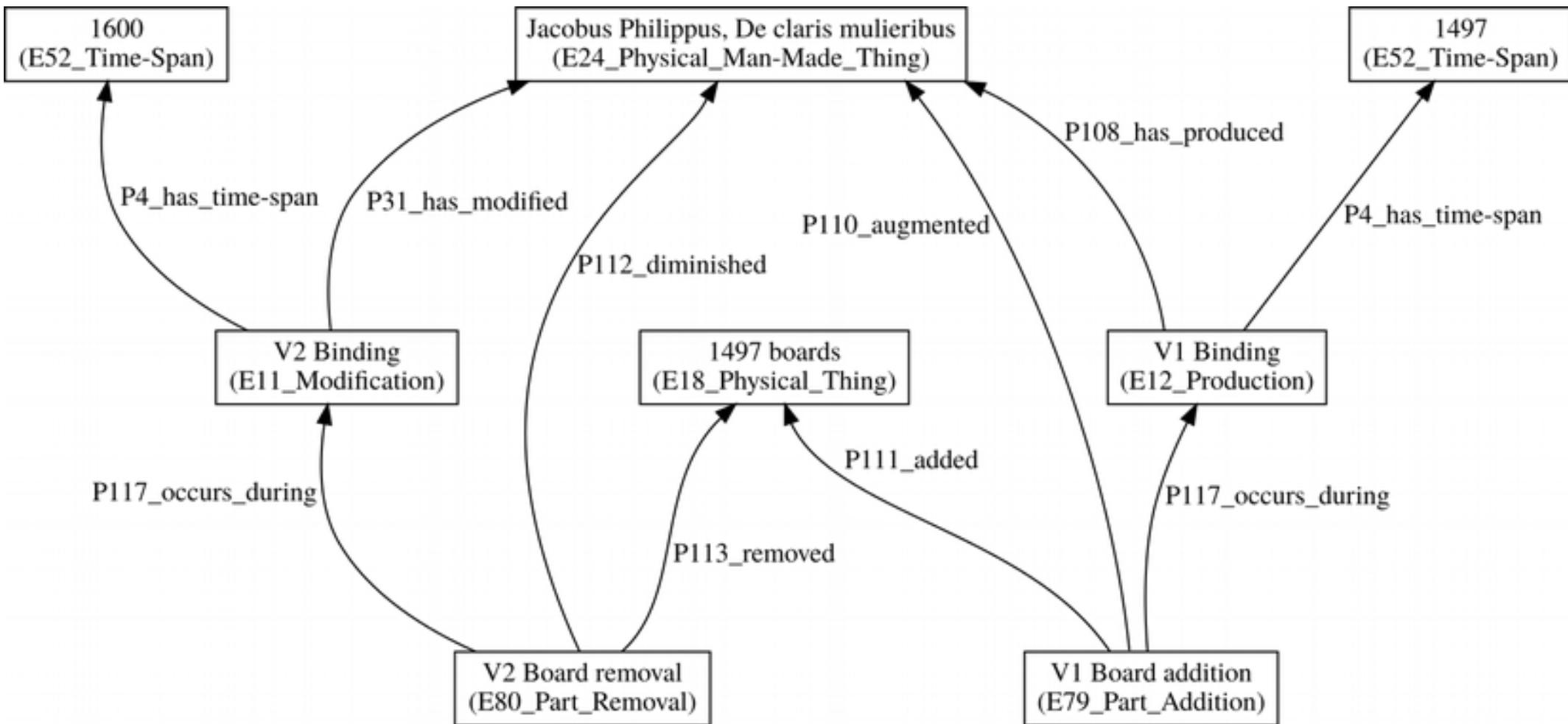


v2



1600









A catalogue of Western manuscripts at the Bodleian Libraries and selected Oxford colleges

Search Medieval Manuscripts



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OR BROWSE BY

**MANUSCRIPTS**

**WORKS**

**PEOPLE**

**PLACES**

### Collections

|                                      |  |   |   |                                  |
|--------------------------------------|--|---|---|----------------------------------|
| Christ Church MSS.                   | Dep. (Deposited manuscripts)                 | Fragments in printed books                          | MSS. Add. (Additional) A                              | MSS. Add. (Additional) B         |
| MSS. Add. (Additional) C             | MSS. Add. (Additional) D                     | MSS. Add. (Additional) E                            | MSS. Arch. Selden.<br>(Archivum Seldenianum)          | MSS. Ash. (Ashmole) Rolls        |
| MSS. Ashmole                         | MSS. Aubrey                                  | MSS. Auct. B. (Auctarium B.)                        | MSS. Auct. D. (Auctarium D.)                          | MSS. Auct. E. (Auctarium E.)     |
| MSS. Auct. F. (Auctarium F.)         | MSS. Auct. T. (Auctarium T.)                 | MSS. Auct. V. (Auctarium V.)                        | MSS. Barlow   | MSS. Barocci                     |
| MSS. Bodl. (Bodley)                  | MSS. Bodl. Rolls (Bodley Rolls)              | MSS. Bowyer   | MSS. Broxb. (Broxbourne)                              | MSS. Buchanan                    |
| MSS. Bywater                         | MSS. Bywater adds.                           | MSS. Canon. Bibl. Lat.<br>(Canonici Latin Biblical) | MSS. Canon. Class. Lat.<br>(Canonici Latin Classical) | MSS. Canon. Gr. (Canonici Greek) |
| MSS. Canon. Ital. (Canonici Italian) | MSS. Canon. Liturg.<br>(Canonici Liturgical) | MSS. Canon. Misc. (Canonici Miscellaneous)          | MSS. Canon. Pat. Lat.<br>(Canonici Patristic Latin)   | MSS. Carte                       |



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<Created>2018-07-24T10:37:48.000Z</Created>
```

```
<CreatorApplication>Digital Photo Professional</CreatorApplication>
```

```
<DirectoryPath>.:connect.ox.ac.uk:bodl:conserv:NewStructure:Images:Digital files:Digital conservation files:JPEG derivatives:</DirectoryPath>
```

```
<EXIFAperture>8.0</EXIFAperture>
```

```
<EXIFDateDigitized>2018-05-31T10:39:53.000Z</EXIFDateDigitized>
```

```
<EXIFDateTaken>2018-05-31T10:39:53.000Z</EXIFDateTaken>
```

```
<EXIFExposureBias>-0.3333333333333333</EXIFExposureBias>
```

```
<EXIFExposureTime>1/125</EXIFExposureTime>
```

```
<EXIFFNumber>8.0</EXIFFNumber>
```

```
<EXIFFlash>No Flash</EXIFFlash>
```

```
<EXIFFocalLength>40.0</EXIFFocalLength>
```

```
<EXIFISOSpeed>640</EXIFISOSpeed>
```

```
<EXIFShutterSpeed>1/128</EXIFShutterSpeed>
```

```
<EXIFWhiteBalance>Auto</EXIFWhiteBalance>
```

```
<ExtensionWin>
```

```
<uri>http://vocab.getty.edu/aat/300266224</uri>
```

```
<label>jpg</label>
```

```
</ExtensionWin>
```

```
<FileDescription>Studying copies of folios prior to research trip</FileDescription>
```

```
<FileSize>980916</FileSize>
```

```
<Filename>18C01837.jpg</Filename>
```

```
<Height>2000</Height>
```

```
<HorizontalResolution>350.0</HorizontalResolution>
```

```
<Keywords>
```

```
<uri>http://conservation.bodleian.ox.ac.uk/authority/terms/islamic</uri>
```

```
<label>Islamic</label>
```

```
</Keywords>
```

```
<Keywords>
```

```
<uri>http://conservation.bodleian.ox.ac.uk/authority/terms/baharistan</uri>
```

```
<label>Baharistan</label>
```

```
</Keywords>
```

```
<LastModified>2018-07-24T10:37:49.000Z</LastModified>
```

```
<LastUpdated>2018-07-24T10:37:59.000Z</LastUpdated>
```

```
<Libraryinstitutionorowner>Bodleian Library</Libraryinstitutionorowner>
```

```
<MultipageCount>1</MultipageCount>
```

```
<Path>http://connect.ox.ac.uk/bodl/conserv/NewStructure/Images/Digital%20files/Digital%20conservation%20files/JPEG%20derivatives/18C01837.jpg</Path>
```



| #   | SOURCE                                     | TARGET  | CONSTANT EXPRESSION |   |
|-----|--|---|---------------------|---|
| 1   | D <input type="checkbox"/> ./row           | <input type="checkbox"/> E38_Image<br><input type="checkbox"/> D9_Data_Object         |                     |   |
| 1.1 | P <input type="checkbox"/> ItemID          | <input type="checkbox"/> L20i_was_created_by  |                     |   |
|     | R <input type="checkbox"/> ItemID          | <input type="checkbox"/> D2_Digitization_Process                                      |                     |   |
| 1.2 | P <input type="checkbox"/> ColorProfile    | <input type="checkbox"/> P2_has_type  |                     |   |
|     | R <input type="checkbox"/> ColorProfile    | <input type="checkbox"/> E55_Type   |                     |   |
| 1.3 | P <input type="checkbox"/> Copyright       | <input type="checkbox"/> P3_has_note  |                     |   |
|     | R <input type="checkbox"/> Copyright       | <input type="checkbox"/> rdf-schema#Literal   |                     |   |
| 1.4 | P <input type="checkbox"/> ExtensionWin    | <input type="checkbox"/> P2_has_type  |                     |   |
|     | R <input type="checkbox"/> ExtensionWin    | <input type="checkbox"/> E55_Type   |                     |   |
| 1.5 | P <input type="checkbox"/> FileDescription | <input type="checkbox"/> P3_has_note  |                     |   |
|     | R <input type="checkbox"/> FileDescription | <input type="checkbox"/> rdf-schema#Literal   |                     |   |
| 1.6 | P <input type="checkbox"/> Project         | <input type="checkbox"/> P129_is_about  |                     |   |
|     | R <input type="checkbox"/> Project         | <input type="checkbox"/> E7_Activity  |                     |   |
| 1.7 | P <input type="checkbox"/> Keywords        | <input type="checkbox"/> P129_is_about  |                     |   |
|     | R <input type="checkbox"/> Keywords        | <input type="checkbox"/> E1_CRM_Entity  |                     |   |
| 1.8 | P <input type="checkbox"/> Width           | <input type="checkbox"/> P43_has_dimension<br><input type="checkbox"/> E54_Dimension  | [P2_has_type]       | [E55_Type = "http://vocab.getty.edu/aat/300055647"]             |
|     | R <input type="checkbox"/> Width           | <input type="checkbox"/> P90_has_value<br><input type="checkbox"/> rdf-schema#Literal | [P91_has_unit]      | [E58_Measurement_Unit = "http://vocab.getty.edu/aat/300266190"] |
| 1.9 | P <input type="checkbox"/> Height          | <input type="checkbox"/> P43_has_dimension<br><input type="checkbox"/> E54_Dimension  | [P2_has_type]       | [E55_Type = "http://vocab.getty.edu/aat/300055644"]             |
|     | R <input type="checkbox"/> Height          | <input type="checkbox"/> P90_has_value<br><input type="checkbox"/> rdf-schema#Literal | [P91_has_unit]      | [E58_Measurement_Unit = "http://vocab.getty.edu/aat/300266190"] |

Model Overview

Enter subject

<https://medieval.bodleian.ox.ac.uk/images/samples/17C02739.jpg>

Choose a Template:

Template 1

Mark same instances

**Image 22300@en [ E38\_Image ]**

P129\_is\_about

Sabina Pugh retirement display 7 December 2017@en [ E1\_CRM\_Entity ]

P3\_has\_note

Bodleian Libraries, University of Oxford@en

P43\_has\_dimension

**Width of image 22300@en [ E54\_Dimension ]**

P2\_has\_type

height@en [ E55\_Type ]

P90\_has\_value

3000@en

P91\_has\_unit

pixels@en [ E58\_Measurement\_Unit ]

**Height of image 22300@en [ E54\_Dimension ]**

P2\_has\_type

jpg@en [ E55\_Type ]

sRGB v1.31 (Canon)@en [ E55\_Type ]

After treatment@en [ E55\_Type ]

P138\_represents

MS. Bodl. 579@en [ E22\_Man-Made\_Object ]

L201\_was\_created\_by

**Digitisation process which produced image 22300@en [ D2\_Digitization\_Process ]**

L61\_was\_ongoing\_at

2017-12-08T11:15:55.000Z@en

L12\_happened\_on\_device

**Camera that shot image 22300@en [ D8\_Digital\_Device ]**

P2\_has\_type

Canon EOS 5D Mark III@en [ E55\_Type ]

P14\_carried\_out\_by

Andrew Honey@en [ E21\_Person ]

P33\_used\_specific\_technique

**Procedure for digitisation which produced image 22300@en [ E29\_Design\_or\_Procedure ]**

P67\_refers\_to

**Focal length of image 22300@en [ E54\_Dimension ]**

P2\_has\_type

Focal length@en [ E55\_Type ]

P90\_has\_value

100.0@en

P91\_has\_unit

millimeters@en [ E58\_Measurement\_Unit ]

**Exposure of image 22300@en [ E54\_Dimension ]**

**Aperture of image 22300@en [ E54\_Dimension ]**

**ISO speed of image 22300@en [ E54\_Dimension ]**

**Flash use for image 22300@en [ E54\_Dimension ]**

collapse list (5 entries)

## Model Overview

Enter subject



Choose a Template:

Template 1

Mark same instances



## Image 22300@en [ E38\_Image 📷 ]

P129\_is\_about

Sabina Pugh retirement display 7 December 2017@en [ E1\_CRM\_Entity ○ ]

P3\_has\_note

Bodleian Libraries, University of Oxford@en

P43\_has\_dimension

Width of image 22300@en [ E54\_Dimension ○ ]

P2\_has\_type

height@en [ E55\_Type ○ ]

P90\_has\_value

3000@en

P91\_has\_unit

pixels@en [ E58\_Measurement\_Unit ○ ]

Height of image 22300@en [ E54\_Dimension ○ ]

P2\_has\_type

jpg@en [ E55\_Type ○ ]

sRGB v1.31 (Canon)@en [ E55\_Type ○ ]

After treatment@en [ E55\_Type ○ ]

P138\_represents

MS. Bodl. 579@en [ E22\_Man-Made\_Object 📖 ]

L20i\_was\_created\_by

Digitisation process which produced image 22300@en [ D2\_Digitization\_Process 🔄 ]

L61\_was\_ongoing\_at

2017-12-08T11:15:55.000Z@en

Height of image 22300@en [ E54\_Dimension ○ ]



P2\_has\_type

jpg@en [ E55\_Type ○ ]

sRGB v1.31 (Canon)@en [ E55\_Type ○ ]

After treatment@en [ E55\_Type ○ ]

P138\_represents

MS. Bodl. 579@en [ E22\_Man-Made\_Object 📖 ]

L20i\_was\_created\_by

Digitisation process which produced image 22300@en [ D2\_Digitization\_Process 🔄 ]



L61\_was\_ongoing\_at

2017-12-08T11:15:55.000Z@en

L12\_happened\_on\_device

Camera that shot image 22300@en [ D8\_Digital\_Device 📷 ]



P2\_has\_type

Canon EOS 5D Mark III@en [ E55\_Type ○ ]

P14\_carried\_out\_by

Andrew Honey@en [ E21\_Person 👤 ]

P33\_used\_specific\_technique

Procedure for digitisation which produced image 22300@en [ E29\_Design\_or\_Procedure 🏗️ ]



P67\_refers\_to

Focal length of image 22300@en [ E54\_Dimension ○ ]



P2\_has\_type

Focal length@en [ E55\_Type ○ ]

P90\_has\_value

100.0@en

P91\_has\_unit

millimeters@en [ E58\_Measurement\_Unit ○ ]

Exposure of image 22300@en [ E54\_Dimension ○ ]



Aperture of image 22300@en [ E54\_Dimension ○ ]



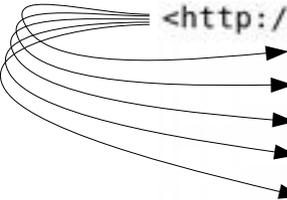
ISO speed of image 22300@en [ E54\_Dimension ○ ]



Flash use for image 22300@en [ E54\_Dimension ○ ]



collapse list (5 entries) ▲



```
<http://conservation.bodleian.ox.ac.uk/23945/dimension-height>  
  a                crm:E54_Dimension ;  
  rdfs:label       "Height of image 23945"@en ;  
  crm:P2_has_type  <http://vocab.getty.edu/aat/300055644> ;  
  crm:P90_has_value "2000"@en ;  
  crm:P91_has_unit  <http://vocab.getty.edu/aat/300266190> .
```

```
<http://conservation.bodleian.ox.ac.uk/19605/digitisation-process>  
  a                crmdig:D2_Digitization_Process ;  
  rdfs:label       "Digitisation process which produced image 19605"@en ;  
  crm:P14_carried_out_by <http://conservation.bodleian.ox.ac.uk/authority/people/andrewhoney>  
  crm:P33_used_specific_technique  
    <http://conservation.bodleian.ox.ac.uk/19605/digitisation-process-design-procedure> ;  
  crmdig:L12_happened_on_device <http://conservation.bodleian.ox.ac.uk/19605/digital-device> ;  
  crmdig:L61_was_ongoing_at   "2017-02-24T13:47:58.000Z"@en .
```

# Integrating catalogue – conservation photographs

```
PREFIX crm: <http://www.cidoc-crm.org/cidoc-crm/>
```

```
SELECT DISTINCT      ?ms {  
  ?photo crm:P138_represents ?ms .  
  GRAPH <https://medieval.bodleian.ox.ac.uk/> {  
    ?ms a crm:E24_Physical_Man-Made_Thing .  
  }  
}
```

ms

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_1596>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_7239>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_427>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_7565>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_4820>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_407>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_1719>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_8391>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_1388>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_520>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_6421>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_4630>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_7355>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_3092>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_3090>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_6682>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_6334>

<https://medieval.bodleian.ox.ac.uk/catalog/manuscript\_9998>

| photo  | ms   |
|--|--|
| <https://medieval.bodleian.ox.ac.uk/images/samples/17C02739.jpg>   | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_1596> |
| <https://medieval.bodleian.ox.ac.uk/images/samples/17C02575.jpg>   | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7239> |
| <https://medieval.bodleian.ox.ac.uk/images/samples/17C01586.jpg>   | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_427>  |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00840.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00839.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00838.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00837.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00528.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_4820> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/18C00527.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_4820> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02784.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02783.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02782.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02781.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02780.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02779.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02778.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02777.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02776.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02775.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02774.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02773.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02772.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02771.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02770.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02769.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02768.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02767.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02766.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7565> |

```

SELECT DISTINCT ?photo ?ms {
  ?photo crm:P138_represents ?ms .
  GRAPH <https://medieval.bodleian.ox.ac.uk/> {
    ?ms a crm:E24_Physical_Man-Made_Thing .
  }
} ORDER BY DESC(?photo)

```

| photo  | ms   |
|--|--|
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02702.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_8391> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02691.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_8391> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02570.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7239> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02551.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_7239> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C02537.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_1388> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C01690.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_4630> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C01035.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_3092> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C01029.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_3090> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C01013.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00836.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_4630> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00828.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00823.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_3090> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00820.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_3092> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00487.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00477.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00476.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00475.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00382.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |
| <http://connect.ox.ac.uk/bodl/conserv/...derivatives/17C00381.jpg> | <https://medieval.bodleian.ox.ac.uk/catalog/manuscript_6682> |

**PREFIX** crm: <http://www.cidoc-crm.org/cidoc-crm/>

```

SELECT DISTINCT ?photo ?ms {
  ?photo crm:P138_represents ?ms .
  ?photo crm:P2_has_type <http://conservation.bodleian.ox.ac.uk/authority/terms/02spine>
  GRAPH <https://medieval.bodleian.ox.ac.uk/> {
    ?ms a crm:E24_Physical_Man-Made_Thing .
  }
ORDER BY DESC(?photo)

```

# OXLOD Bodleian conservation search

Simple search

[Search based on photographer](#)

## Conservation photos by catalogue shelfmark

Search for conserved books e.g. type "MS. Bodl. 579" or "MS. Laud Misc. 439"

## Photos by scene setup type

Search for types of photos e.g. type "23: spine"

Applicable Templates: This resource does already have a direct corresponding page and as such no templates will be applied.

```
1+ <semantic-context repository='bod-cons'>
2+ <div class="page">
3+   <div class='page_body'>
4+     <h1> OXLOD Bodleian conservation search </h1>
5
6+   <bs-tabs id="tabs">
7+     <bs-tab event-key="1" title="Simple search">
8
9       <!-- Object search -->
10
11+    <h2> Conservation photos by catalogue shelfmark </h2>
12
13+    <semantic-search>
14+      <semantic-search-query-keyword
15+        query='
16+        PREFIX crm: <http://www.cidoc-crm.org/cidoc-crm/>
17+        PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
18+        SELECT DISTINCT ?subject ?label {
19+          ?photo crm:P138_represents ?subject .
20+          GRAPH <https://medieval.bodleian.ox.ac.uk/> {
21+            ?subject a crm:E24_Physical_Man-Made_Thing .
22+            ?subject rdfs:label ?label .
23+            FILTER REGEX(?label, str(?__token__), "i")
24+          }
25+        }
26+      '
27+      placeholder='Search for conserved books e.g. type "MS. Bodl. 579" or "MS. Laud Misc. 439"'
28+      min-search-term-length=3
29+    ></semantic-search-query-keyword>
30
31
32+    <!-- Type search -->
33
34+    <h2> Photos by scene setup type </h2>
35
36+    <semantic-search-query-keyword
37+      query='
38+      PREFIX crm: <http://www.cidoc-crm.org/cidoc-crm/>
39+      PREFIX rdfs: <http://www.w3.org/2000/01/rdf-schema#>
40+      SELECT DISTINCT ?subject ?label {
41+        ?photo crm:P138_represents ?subject .
```

# OXLOD Bodleian conservation search

Simple search

[Search based on photographer](#)

## Conservation photos by catalogue shelfmark

MS. Bodl. 579

## Photos by scene setup type

Search for types of photos e.g. type "23:"



MS. Bodl. 579



# MS. Laud Misc. 439 ● Object (Man-Made Object) record, (<http://conservation.bodleian.ox.ac.uk/>)

[Summary](#)[Annotations](#) 0[Explore Related](#)

## Links from here

| Property                         | Object   |
|----------------------------------|--|
| P108i_was_produced_by            | production                                       |
| P30i_custody_transferred_through | transfer-of-custody                              |
| P46_is_composed_of               | MS_Laud_Misc_439-part1                           |
| P46_is_composed_of               | MS_Laud_Misc_439-part2                           |
| P46_is_composed_of               | MS_Laud_Misc_439-part3                           |
| P46_is_composed_of               | MS_Laud_Misc_439-part4                           |
| P46_is_composed_of               | MS_Laud_Misc_439-part5                           |
| P46i_forms_part_of               | MSS.%20Laud%20Misc.%20%28Laud%20miscellaneous%29 |
| P48_has_preferred_identifier     | classmark  |
| P52_has_current_owner            | University%20of%20Oxford                         |

◀ 1 2 ▶

## Links to here

Subject

Property



# MS. Laud Misc. 439 ● Object (Man-Made Object) record, (<http://conservation.bodleian.ox.ac.uk/>)

[Summary](#)[Annotations](#) 0[Explore Related](#)

## Links from here

| Property              | Object                                      |
|-----------------------|---|
| <a href="#">type</a>  | <a href="#">E22_Man-Made_Object</a>         |
| <a href="#">type</a>  | <a href="#">E24_Physical_Man-Made_Thing</a> |
| <a href="#">label</a> | MS. Laud Misc. 439                          |

◀ 1 **2** ▶

## Links to here

| Subject                      | Property                        |
|------------------------------|---------------------------------|
| <a href="#">17C02546.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02547.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02548.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02549.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02550.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02551.jpg</a> | <a href="#">P138_represents</a> |
| <a href="#">17C02552.jpg</a> | <a href="#">P138_represents</a> |

# Image 22108

**URI:** <http://connect.ox.ac.uk/bodl/conserv/NewsStructure/Images/Digital%20files/Digital%20conservation%20files/JPEG%20derivatives/17C02551.jpg>

**Type:** [E38\\_Image](#), [D9\\_Data\\_Object](#)

## Outgoing Statements

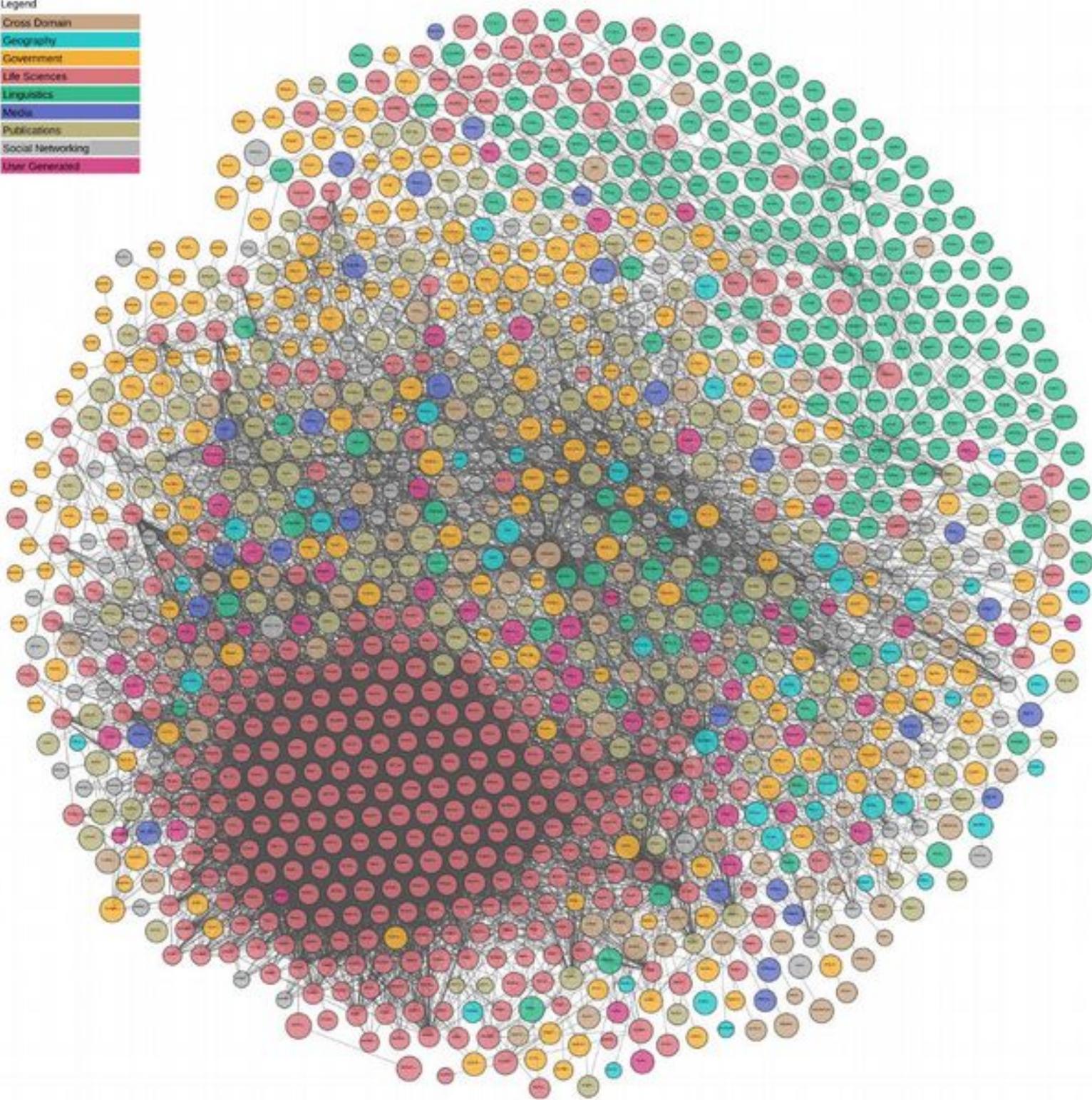
| Property                            | Object  | Named Graph   |
|-------------------------------------|---|---|
| <a href="#">P138_represents</a>     | <a href="#">manuscript_7239</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P2_has_type</a>         | <a href="#">02spine</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P2_has_type</a>         | <a href="#">beforetreatment</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P2_has_type</a>         | <a href="#">srgbv131canon</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P2_has_type</a>         | <a href="#">300266224</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P3_has_note</a>         | <a href="#">Bodleian Libraries, University of Oxford</a>                      | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P3_has_note</a>         | <a href="#">Ms has been pulled for conservation after severe water damage</a> | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P43_has_dimension</a>   | <a href="#">dimension-height</a>  | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">P43_has_dimension</a>   | <a href="#">dimension-width</a>   | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |
| <a href="#">L20l_was_created_by</a> | <a href="#">digitisation-process</a>  | <a href="http://conservation.bodleian.ox.ac.uk/">http://conservation.bodleian.ox.ac.uk/</a> |

« **1** 2 »

## Incoming Statements

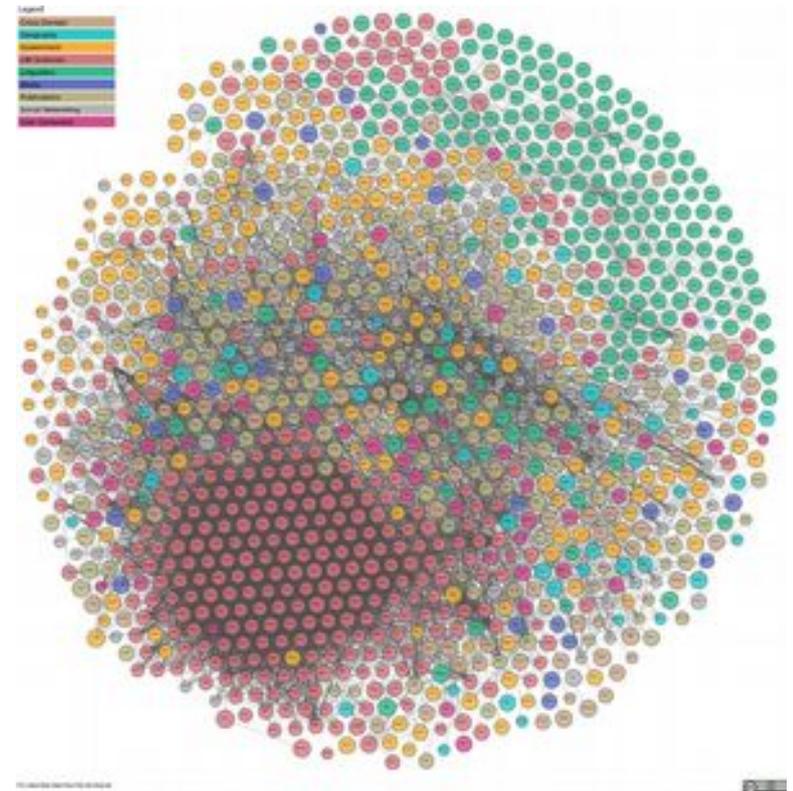
# Summary

- Data integration:
  - does not affect existing systems
  - produces new conclusions
- Existing databases:
  - require mapping
  - require links to thesauri and authority files



# Questions...

- Not discussed:
  - open data - licencing
  - observing uncertainty
  - contradicting observations



# LoB demo – 3M demo

| #   | SOURCE                                     | TARGET  | CONSTANT EXPRESSION   |
|-----|--|---|---|
| 1   | D <input type="checkbox"/> /new            | <input type="checkbox"/> E38_Image<br><input type="checkbox"/> D9_Data_Object                   |   |
| 1.1 | P <input type="checkbox"/> ItemID          | <input type="checkbox"/> L201_was_created_by  |   |
| 1.1 | R <input type="checkbox"/> ItemID          | <input type="checkbox"/> D2_Digitization_Process  |   |
| 1.2 | P <input type="checkbox"/> ColorProfile    | <input type="checkbox"/> P2_has_type  |   |
| 1.2 | R <input type="checkbox"/> ColorProfile    | <input type="checkbox"/> E55_Type   |   |
| 1.3 | P <input type="checkbox"/> Copyright       | <input type="checkbox"/> P2_has_note  |   |
| 1.3 | R <input type="checkbox"/> Copyright       | <input type="checkbox"/> r8-schematLiteral  |   |
| 1.4 | P <input type="checkbox"/> ExtensionWin    | <input type="checkbox"/> P2_has_type  |   |
| 1.4 | R <input type="checkbox"/> ExtensionWin    | <input type="checkbox"/> E55_Type   |   |
| 1.5 | P <input type="checkbox"/> FileDescription | <input type="checkbox"/> P2_has_note  |   |
| 1.5 | R <input type="checkbox"/> FileDescription | <input type="checkbox"/> r8-schematLiteral  |   |
| 1.6 | P <input type="checkbox"/> Project         | <input type="checkbox"/> P129_is_about  |   |
| 1.6 | R <input type="checkbox"/> Project         | <input type="checkbox"/> E7_Activity  |   |
| 1.7 | P <input type="checkbox"/> Keywords        | <input type="checkbox"/> P129_is_about  |   |
| 1.7 | R <input type="checkbox"/> Keywords        | <input type="checkbox"/> E1_ORM_Entity  |   |
| 1.8 | P <input type="checkbox"/> Width           | <input type="checkbox"/> P43_has_dimension<br><input checked="" type="checkbox"/> E54_Dimension | [P2_has_note] [E55_Type<br>- "http://vocab.getty.edu/aat/300055644"]<br>[P91_has_unit] [E56_Measurement_Unit<br>- "http://vocab.getty.edu/aat/300266190"] |
| 1.8 | R <input type="checkbox"/> Width           | <input type="checkbox"/> P90_has_value<br><input type="checkbox"/> r8-schematLiteral            |   |
| 1.9 | P <input type="checkbox"/> Height          | <input type="checkbox"/> P43_has_dimension<br><input checked="" type="checkbox"/> E54_Dimension | [P2_has_note] [E55_Type<br>- "http://vocab.getty.edu/aat/300055644"]<br>[P91_has_unit] [E56_Measurement_Unit<br>- "http://vocab.getty.edu/aat/300266190"] |
| 1.9 | R <input type="checkbox"/> Height          | <input type="checkbox"/> P90_has_value<br><input type="checkbox"/> r8-schematLiteral            |   |

LoB Language of Bindings

Alphabetical
Hierarchy
Search
Help
Log in

## Search

**paper**

**Preferred label:**  
[paper](#)  
 papir

Refers generally to all types of thin matted or felted sheets or webs of fiber formed on a fine screen from a pulpy water suspension and dried.

**AAT**

The Arts and Architecture Thesaurus Online, The Getty Research Institute.

**Additional reference:**  
<http://vocab.getty.edu/aat/300014109> (modified)

**Hierarchy:**

[+] fibre materials

[+] sheet (materials)

[-] [paper](#) [-]

decorated [paper](#) [+]

laminated [paper](#)

[[paper](#) by manufacture] [+]

[[paper](#) by origin] [+]