

IEG

Das Leibniz-Institut für
Europäische Geschichte
in Mainz



Digitale Forschungsinfrastruktur für die
Geistes- und Kulturwissenschaften

Overview

11:00–12:15: Finding your way in digital collections

12:15–13:00: Lunch break

13:00–14:15: Tools for quantitative text analysis

14:15–14:30 Coffee break

14:30–15:45: Tools for Geohumanities

15:45–16:00: Concluding session

Overview: Finding your way in digital collections

Part I: The Archaeology of Reading in Early Modern Europe (AOR)

- 1) Structured data and metadata
- 2) Scholarly background
- 3) Structured data and AOR: editorial principles
- 4) Navigating and using AOR

Part II: comparing digital collections

- 1) DARIAH-DE Collection Registry
- 2) EADH Catalogue of Digital Editions

Structured data and metadata

- *Unstructured data*: flat files which contain data but no metadata. Examples: Word docs, PDF, etc.
 - *Semi-structured data*: some structure is added to the data, e.g. in the form of tags. Examples: XML, [Wikidata](#).
 - *Structured data*: the data is divided into distinguishable entities that can be recognized as such by computer software (e.g. search engines). It is layered and, often, hierarchical. Example: relational databases.
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- *Metadata* is data that gives information or describes other data. It provides properties about data which can be used by computers to interpret or process that data in a particular manner.

Structured and unstructured data: an example

Letter from Thomas Bodley to William Cecil (1595):

‘....I never craved allowance for the portage of lettres, which have bin chargeable to me, nor for the expenses of many messengers, which I have purposely imploied, by expresse commaundement, and with promesse of rembourment, sometimes upon her Majesties owne lettres, and some times by order from my LL. of the Councel, from your Sonoy, of the banished *L. and Sir Francis Walsingham, about the causes of Schencke, of the Amon of Tiel, of Monsieur* men of Utrecht and Leiden, of the towne of Gertrudenbergh, when it fell from the states, and for sundrie buisnesses besides, for which all my charges being pu[t] in a reckning, will growe to a greater ~~reckning~~ /summe/, then I have reason to neglect’

XML:

```
</sup> L. and <person id="2033" person_id="Walsingham"> S<sup id="1595" replace="ir">r</sup> Francis
Walsingham
</person>, about <image name="thorn"/> e causes <newline/> of <person id="2039" person_id="Schenck, M">
Schencke, </person>
of <image name="thorn"/> e Amon of Tiel, of <person id="2045" person_id="Sonoy"> Mons <sup id="1598"
replace="ieur">
```

The Archaeology of Reading in Early Modern Europe (AOR)

- Funded by the Mellon Foundation (2014-2019)
- International collaboration: Princeton University, Johns Hopkins University, University College London
- Lisa Jardine and Tony Grafton, 'Studied for action: how Gabriel Harvey read his Livy', *Past & Present* (1990)
- Enabling a more systematic analysis of historical reading practices through the creation of a digital bookwheel
- <https://bookwheel.org/>

THE ARCHAEOLOGY OF READING

WHAT IS THE ARCHAEOLOGY OF READING?
WHO ARE THE ARCHAEOLOGISTS?
PARTNER INSTITUTIONS
CONTACT



GO TO AOR VIEWER

THE BOOKS AND THEIR READERS
BOOKWHEEL BLOG
HOW TO USE AOR
DOWNLOADS
AOR DATA

The Archaeology of Reading in Early Modern Europe (AOR) uses digital technologies to enable the systematic exploration of the historical reading practices of Renaissance scholars nearly 450 years ago. This is possible through AOR's corpus of thirty-six fully digitized and searchable versions of early printed books filled with tens of thousands of handwritten notes, left by two of the most dedicated readers of the early modern period: John Dee and Gabriel Harvey.

Though the surviving remnants of their massive libraries are scattered across research libraries throughout the United Kingdom, Europe, and the United States, AOR presents a virtual library of many of Dee's and Harvey's most engaging and revealing annotated books. Their contents span a wide range of subjects, including agriculture, alchemy, ancient and medieval history, astrology, astronomy, humor, law, linguistics, mathematics, medicine, military theory, natural history, navigation, the occult, oratory, politics, poetry, and topography.

The AOR viewer places each page of each book alongside a text panel containing full transcriptions (and English translations) of all the manuscript marginalia on that page. A second text panel enables users to conduct complex searches across all of Dee's and Harvey's marginalia. Through AOR, users can either browse or locate precisely every one of their annotations in these books, all parts of the printed texts they underlined, all their manuscript symbols and marks, all the people, places, and books they mentioned, and much more.



The early modern bookwheel, from *La diversité et artificieuse machine du capitaine Agostino Ramelli* (1538)



“Information overload”

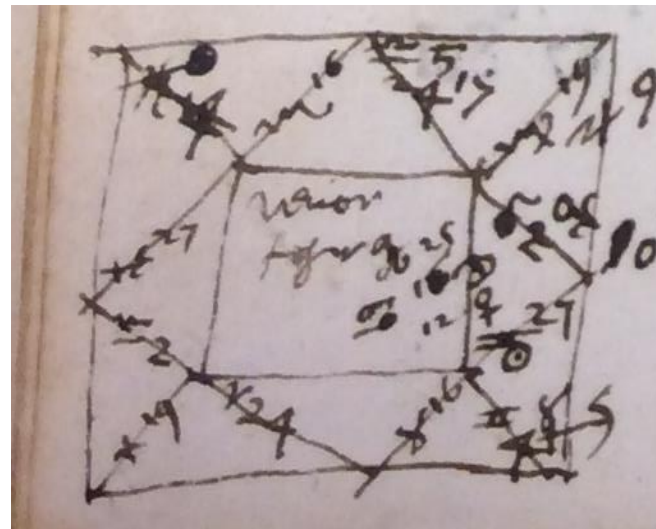
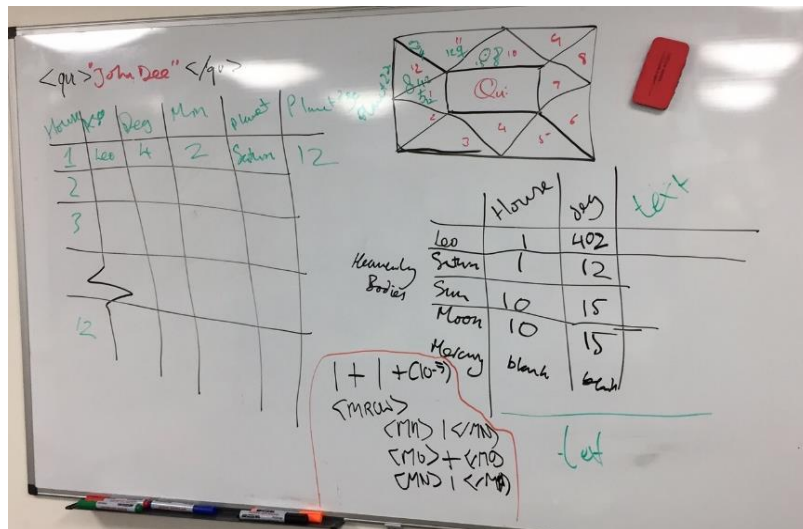
13

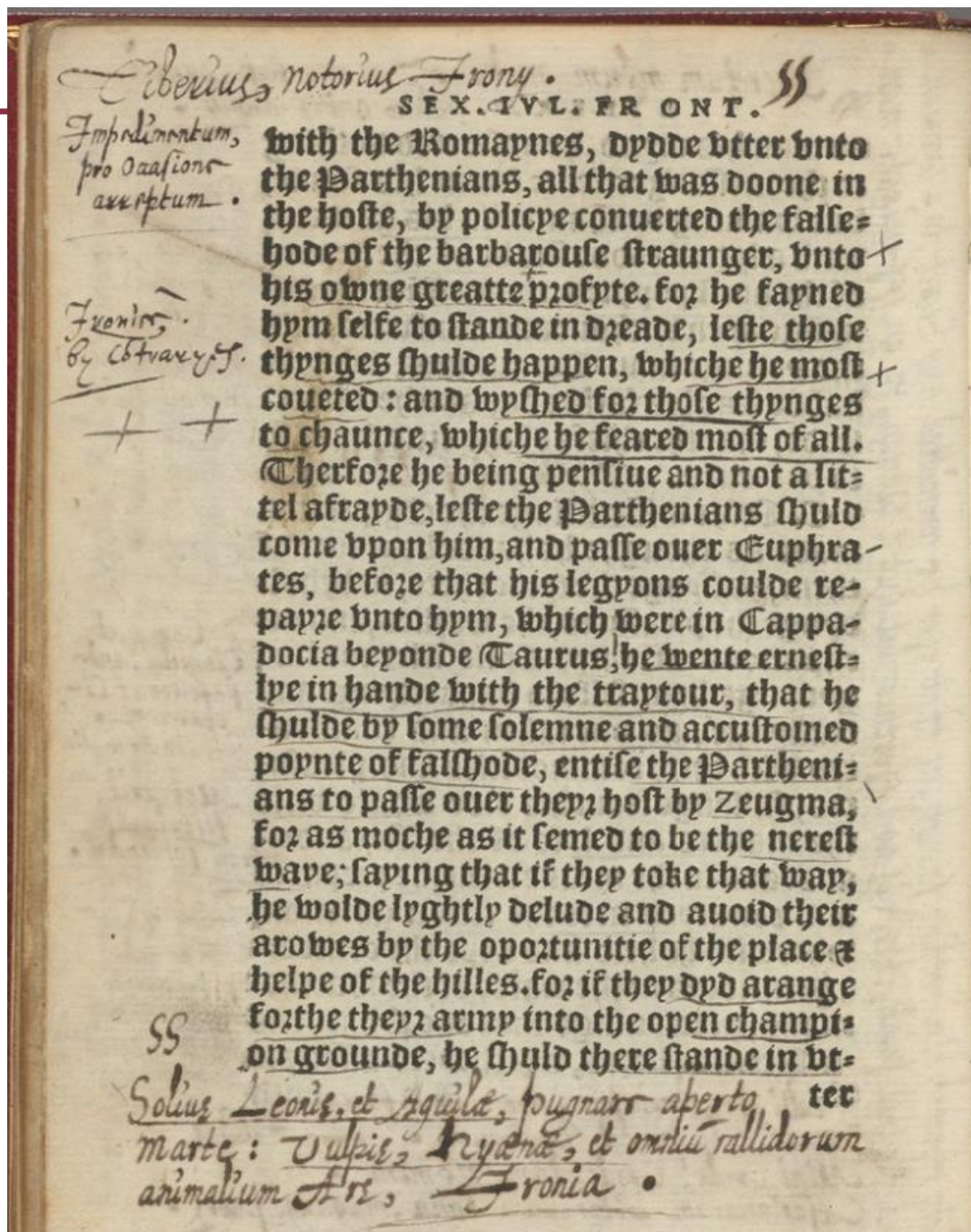
Leibniz-Institut für
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From MS annotation to structured data: AOR XML schema

- Conceptualization of annotations
- Classification
- Bespoke schema, in-house created (no TEI!)
- Editorial decisions and interventions
- Creation of structured data
- Enable query-based searches

that one of his swyftest shippes shoulde +
make out harde by his ennemies garrison: whiche sene, all the shippes that lay
to kepe the haven, made out a mayne to
pursue her: Than Chares with his other
shippes, swypte in to the haven, and got
the citie. *Or The Spanishe Armada,*
the summer 1588. rowld
What tyme the Romaynes in Sicilia
layde siege to Lilybei, bothe by land and
see: Barca, the capytayne of Carthage,
commaunded parte of his nauy, to shew
them selves a far of in theyr armur: whan
the Romaynes sawe that they made out
*not spy any
sur advantage
against England
or otherwise*





<marginalia hand="Italian">

<language ident="EN">

<position place="head">

book_orientation="0">

<marginalia_text>Tiberius, notorius

Irony.</marginalia_text>

<person name="Tiberius"/>

</position>

</language>

</marginalia>

<underline method="pen" type="straight">

language="EN" text="his owne greatte profyte"/>

<underline method="pen" type="straight">

language="EN" text="leste those thynges shulde happen"/>

<symbol name="SS" place="head"/>

<symbol name="SS" place="left_margin"/>

<mark name="vertical_bar" method="chalk">

place="intext"/>

<mark name="plus_sign" method="pen" place="intext">

language="EN" text="his owne greatte profyte"/>



De Origine & Gestis Britannorum

ante turrem iustitiae magnitudinis: portusq; subitus ad pedem applicantibus nauibus idoneum. leges patris ubiq; per regnū renouauit constanti iustitiae insistent. In diebus eius tanta copia diuitiarū populū refecit: quantam nec ante vlla aetas nec postea assecuta perhibeatur. Demū cū suprema dies ipsum ex hac vita rapuisset: cōbustum est eius corpus: & pulvis in aureo cado recōditus: quē in vrbe Ternouātinā in summitate praedictae turris mira arte locauerunt.

Mors Belini & eius spelūca.

Post Belinum regnauit Gurguintus Brabtrucus patris studiosus amulator. hic in Daciā cū exercitu profectus regem sibi tributum denegantem interemit: rediens inde exulem ex Hispaniis populū ad Orcades insulas reperiens: ad Hyberniam tunc incolis vacuā direxit. Post ipsum successit Guithelinus post quem Sisillius: ex illo tertius Morindus qui rege Maurorum cum crudelitate triumphato ab immani belua deuoratus est.

Cap. XX.

Ost hęc successit ei Gurguintus Brabtrucus eiusdem filius vir modestus & prudēs: qui per omnia actus paternos imitans pacem & iustitiam amabat: & cū vicini aduersus eum rebellabant audaciam exemplo genitoris reuocans dira praelia committebat, & hostes ad debitam subiectionem reducebat. Inter multa alia contigit q; rex Dacorum qui diebus patris tributū reddebat huic reddere diffugeret: & ei subiectionem abnegaret: qd ipse grauiter ferens duxit nauigiū in Daciā afflictosq; durissimis praeliis populo interfecit regem patriamq; pristino iugo supposuit. Ea tempestate cū post illam victoriam domū per insulas Orcades rediret: inuenit triginta naues viris & mulieribus plenas: & cum causam aduentus eorū inquisiisset: accessit ad eū dux ipsorum Partholemus nomine & adorato eo veniam & pacem rogauit. Dicebat au-

Gurguintus

Gurguintus varfdrugh i cū Barbarus.

Dacia subjugatur.

Libet. I.

Fo. XXII.

tem se ex partibus Hispaniarum expulsum fuisse & maria illa circuire vt locum mansionis haberet. Petiuit ergo ab eo portiunculam Britanniae inhabitandam: ne odium iter maris diutius pererrarent: Annus enim cum dimidio iam elapsus fuerat: ex quo patria sua pulsus per oceanum cum sociis nauigauerat. Vt igitur Gurguintus Brabtrucus ipsos ex Hispania venisse & Balenses esse vocatos petitionemq; eorum edoctus fuit: misit homines cum eis ad insulam Hyberniam quae tunc vacua ab omni incoleratur: eamq; eis concessit. Deinde creuerunt illis & multiplicati sunt: insulamq; usq; ad hunc diem tenuerunt. Gurguintus vero Brabtrucus cum dies vitae cum pace expleuisset: sepultus fuit in vrbe Legionum quam propter obitum patris aedificiis & muris decorare studuerat.

Origo Hybernensium.

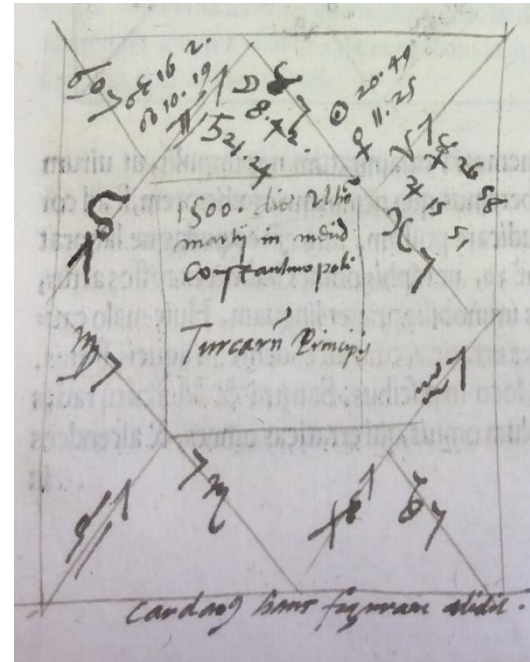
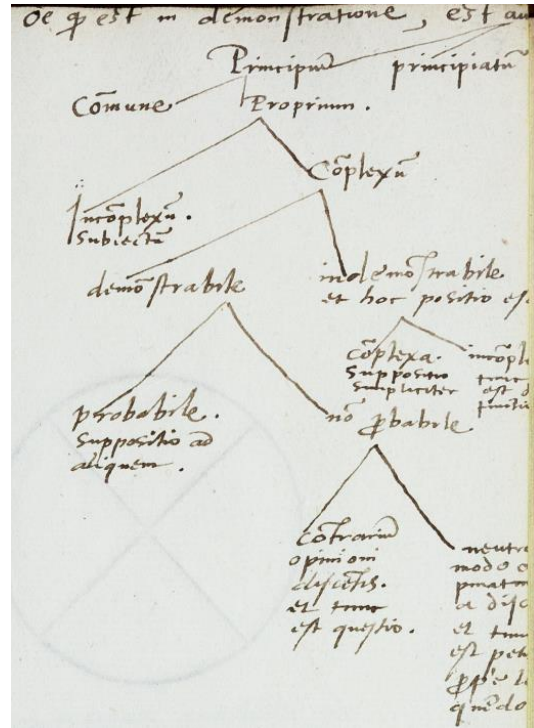
Ost illum Guithelinus diadema regni suscepit quod omni vitae suae tempore benigne & modeste tractauit. erat ei nobilis mulier Martia nomine: omnibus artibus erudita. hac inter multa & inaudita quae proprio ingenio inuenerat, inuenit legem quam Britones Martianam vocauerunt. Hanc etiam rex Aluredus inter ceteras trāstulit quā Saxonica lingua Marthe helage vocauit. At vt Guithelinus obiit cessit regni gubernaculū diāe reginae: & filio ipsius qui Sisillius vocabatur. Erat tūc Sisillius septem annorum cuius nondum aetas expetebat: vt regni moderationi praeferreretur. Quare mater cōsilio & sensu pollēs totius insule imperium obtinuit: quae cum ab hac luce migrasset Sisillius sumpto diademate regni gubernaculo potitus est. Post ipsū Kimarus eius filius regnū obtinuit. Cui successit Elamius eiusdē frater: quo defuncto Sisignitus est Morindus quē ex Taguestela cōcubina generat. Hic nimia pbitate famosissimus esset nisi immoderate crudelitati indulgisset: nemini namq; poebat iratus quin iterā

Guithelinus

Lex Martiana.

Marchenleage.

Lynvarchus



AOR DEMO

1519. die 21 Februarij,
hora 3. mi. 46. à
meridie.

Cor coeli 13 8.

add. hor. 4 m 22.
igitur R. ip. hor. 5. m 53.
Reuolutio uigesima secūda
incipiens.

Signa mortis
clara.

8 apparet loco
tot. et ad in
8a et ot
D° apparet
loco 8 radii
cis. 8

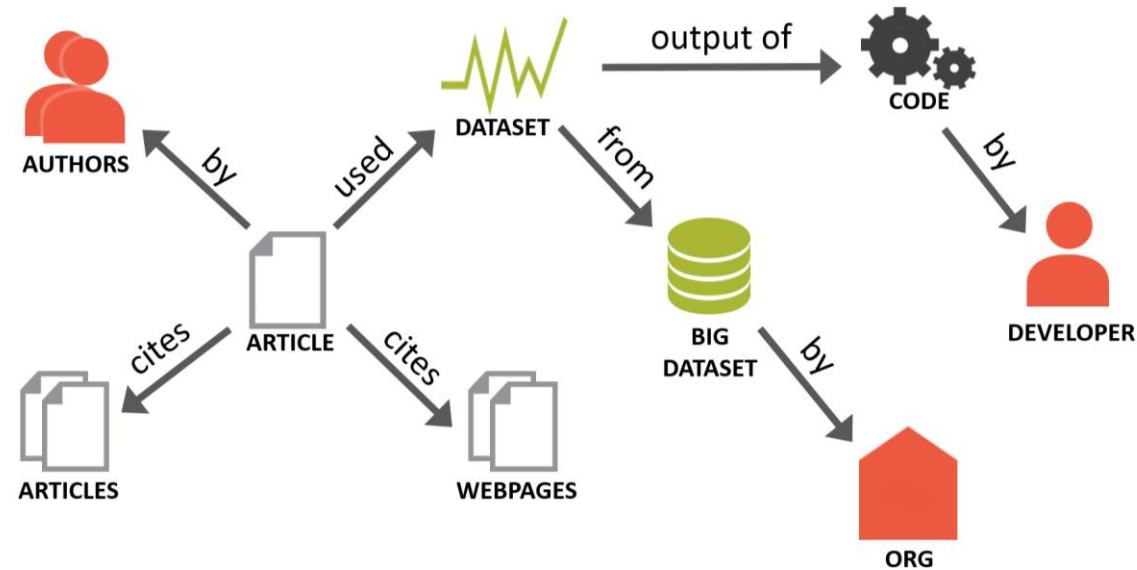
8 cadit 8
loco 8 radii
cis 8 domi
7 et 8 loci
radii orar.
et ad exad
in emdom
8° sub vera

ot ipi per
apud
8° radio ex
Signo hirma
no, et clava
4/5 loco
ad du9 octadi

Task 1: AOR Viewer

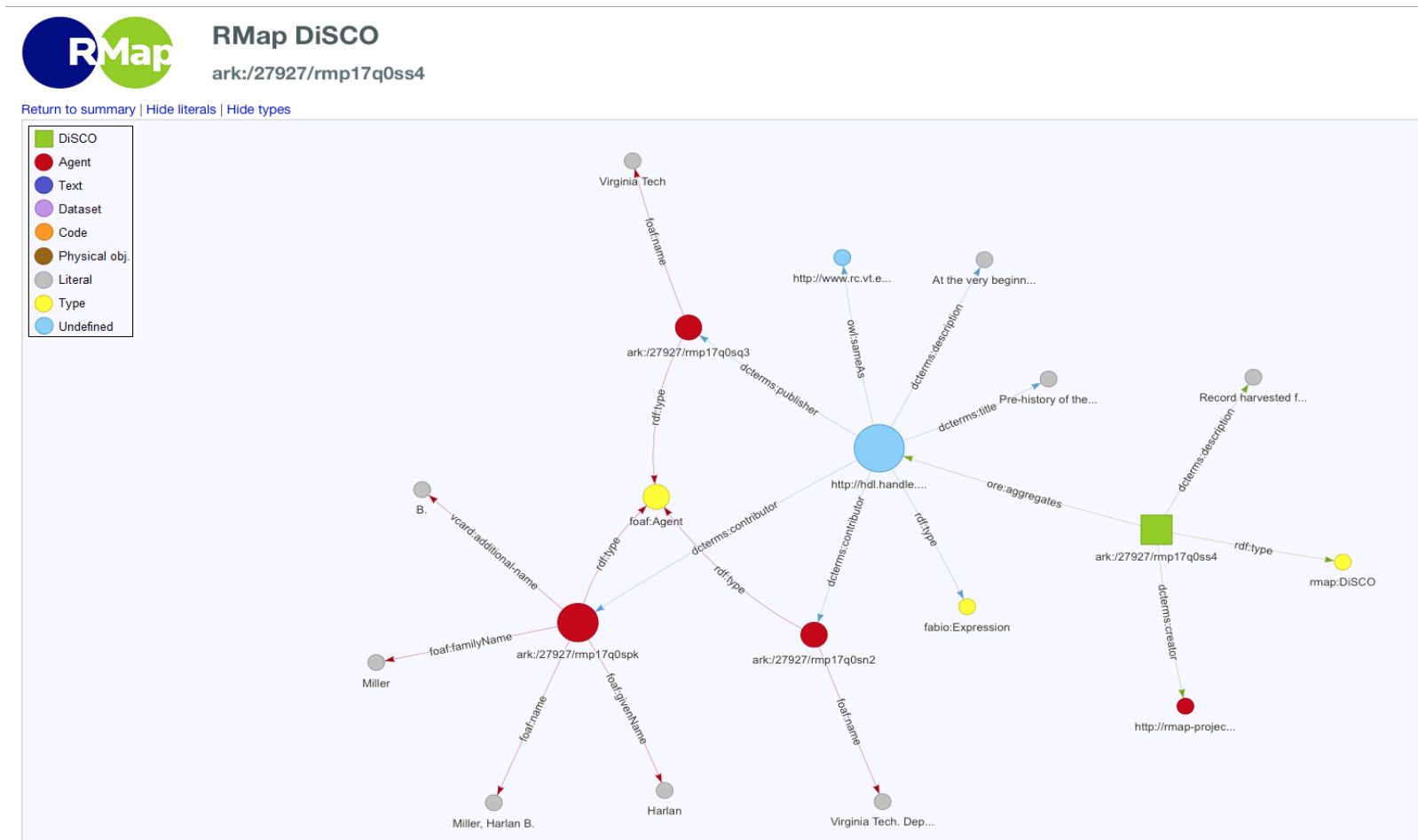
- Open a random book and try the a) basic search and b) advanced search. How do these functionalities work?
- Explore the different buttons in the AOR viewer. Do you like the interface? Why (not)?
- Open Titus Livius, *Romanae historiae principis*, and search for ‘infra’. Navigate to the first search result (p. 446) and try working with the clickable links in the annotation panel. What are your thoughts on this functionality?

- RMap (resource map)
- <https://rmap-hub.org/about>
- Preserving and visualizing links between complex relationships among scholarly publications and their underlying data



Source: http://rmap-project.info/rmap/wp-content/uploads/RMap_iPres_20161005.pptx

- DiSCO: Distributed Scholarly Compound Object
- RMap examples



Part II: comparing digital collections

1) DARIAH-DE Collection Registry

- Free tool to describe and link to collections (NB: the actual data of collection is not included)
- Broad definition of collections
- Provide searchable overview of collections that are or will be made publicly available



Task 2: DARIAH Collection Registry

Try to accomplish one (or more) of the following actions while taking into account the following aspects of this repository:

- Graphical user interface (GUI)
- available metadata
- available functionalities

- 1) Find a *manuscript* (Handschriften) collection within the registry and navigate to it
- 2) How easy is it to find all the collection associated with a particular agent, say the famous *library in Wolfenbüttel*?
- 3) Find the *Leibniz-Institut für Europäische Geschichte* (IEG) in the network overview at the home page.

2) EADH Catalogue of Digital Editions

- European Association for Digital Humanities (EADH)
- Provide overview of digital editions and identify best practice in digital scholarly editing (e.g. rationale, methodologies)
- Comprises a searchable overview of digital editions and provides means to export the data in the catalogue



Task 3: EADH Catalogue of Digital Editions

Try to accomplish one (or more) of the following actions while taking into account the following aspects of this repository:

- Graphical user interface (GUI)
- available metadata
- available functionalities

- 1) How easy is it to find all digital editions which comprise letters (from any period)? How would you go about finding these?
- 2) Try to find *all the early modern digital editions in English* that are generated by *University College London* and that are *classified in the catalogue as an edition*?
- 3) Use the network and/or map functionality (in the ‘analyze the data’ menu) to find the *Universitätsbibliothek Frankfurt am Main*. How useful are these functionalities?

Links

- AOR Website: <https://archaeologyofreading.org/>
- AOR Viewer: <https://archaeologyofreading.org/viewer/>
- DARIAH Collection Registry Homepage: <https://colreg.de.dariah.eu/colreg-ui/>
- DARIAH Collection Registry: <https://colreg.de.dariah.eu/colreg-ui/collections/>
- EADH Catalogue of Digital Editions Homepage: <https://eadh.org/projects/catalogue-digital-editions>
- EADH Catalogue of Digital Editions: <https://dig-ed-cat.acdh.oeaw.ac.at/browsing/editions/>

Vielen Dank für Ihre Aufmerksamkeit

