

HISTORICAL SOURCES THROUGH THE LENSES OF DIGITAL HUMANITIES PROJECTS:

WHAT DO WE SEE?



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DIGITAL HUMANITIES (DH)

“digital humanities explores how the questions posed in humanities scholarship are transformed and extended by the digital – both by means of tools and epistemologies” (Ray Murray)

- Early-modern European Context → humanistic scholarship intertwined with *FORMAL* and *EMPIRICAL* studies (Bod, Maat and Weststeijn 2010)

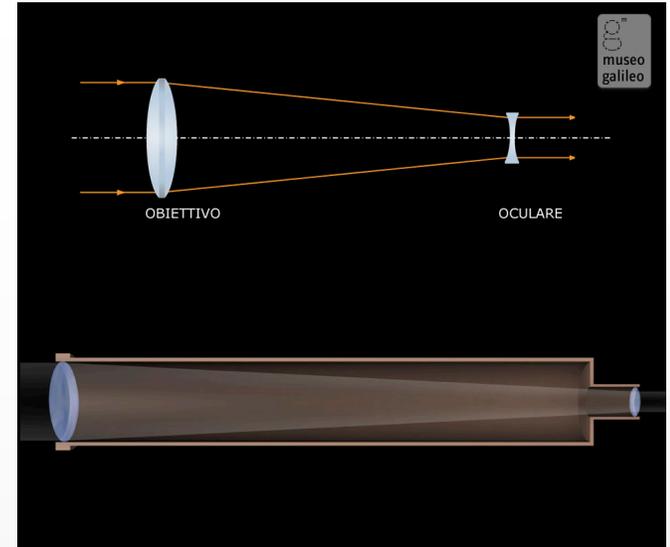
The Humanities deeply influenced and even shaped the exact sciences

- DH as renewed connection to formal/empirical studies

Is DH different from other formal/empirical Humanities approaches?

LENS METAPHOR

- Scientific optical instruments
 - Galileo Galilei



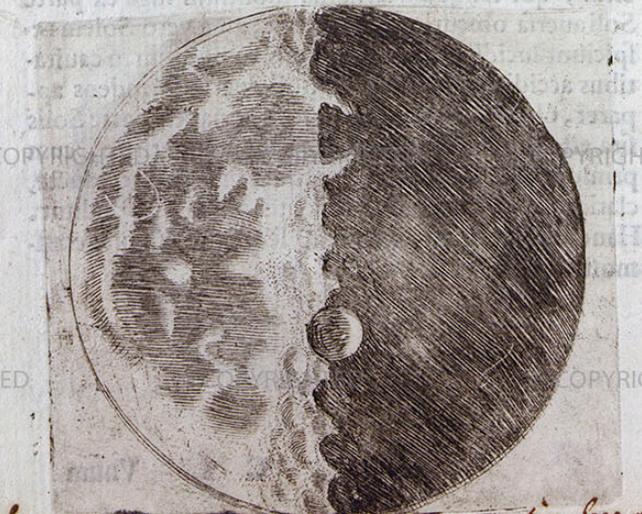
Museo Galileo 2428, 1609-10



LENS METAPHOR

- Scientific optical instruments
 - Galileo Galilei
 - Our days: from studying the stars to micro-organisms

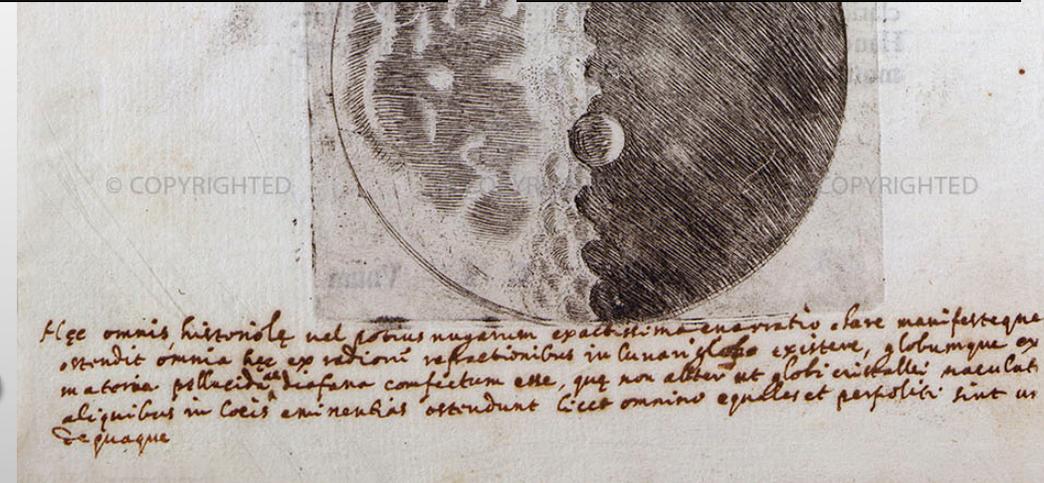
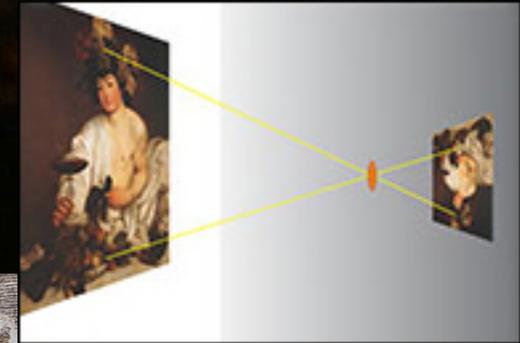
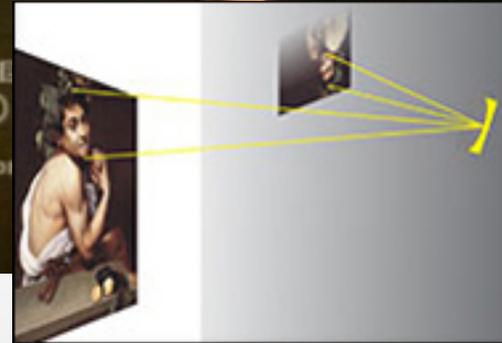
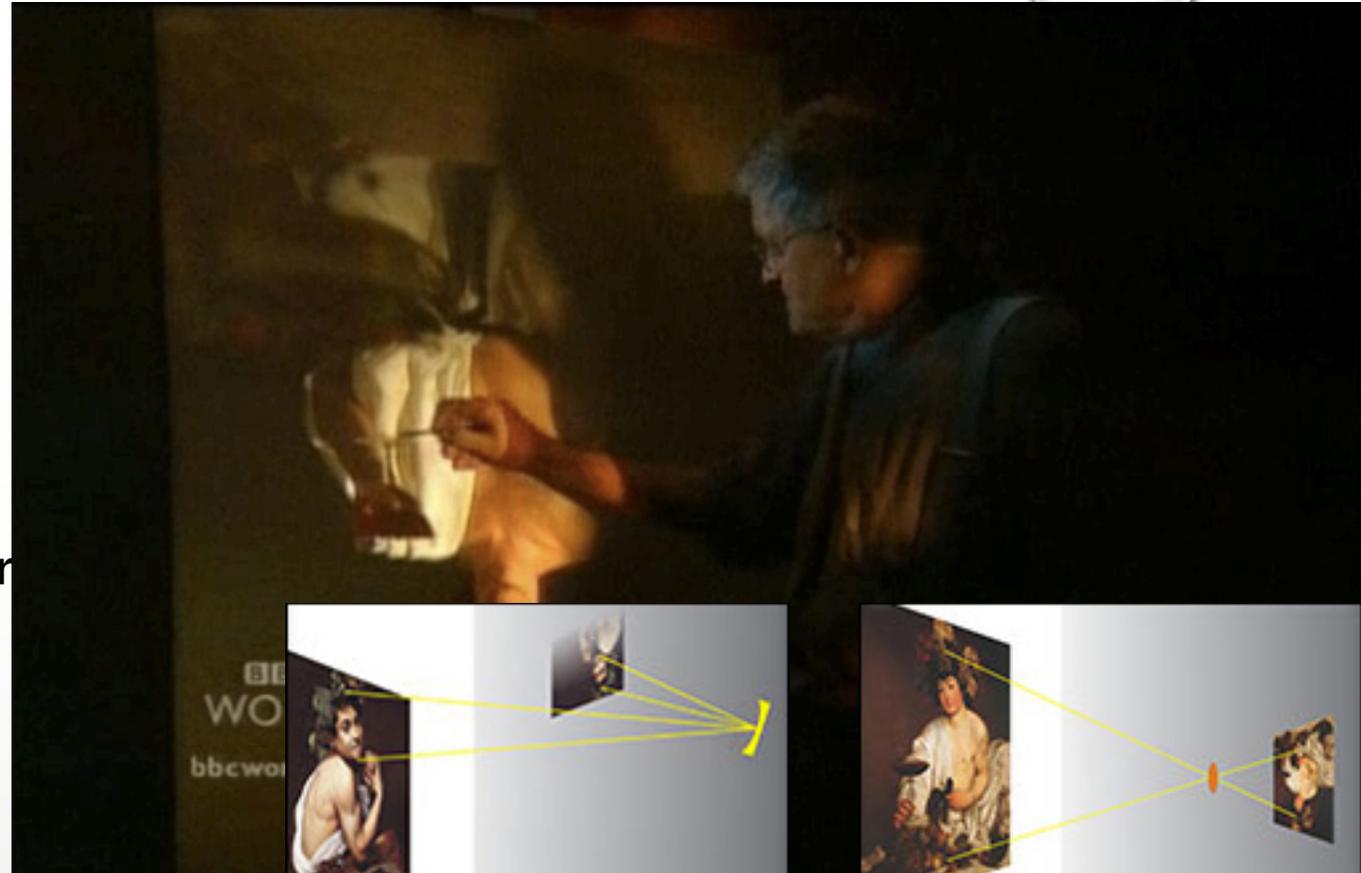
Galileo Galilei, *Sideurs Nuncijs*, 1610
Firenze, Biblioteca nazionale centrale, Post. 110



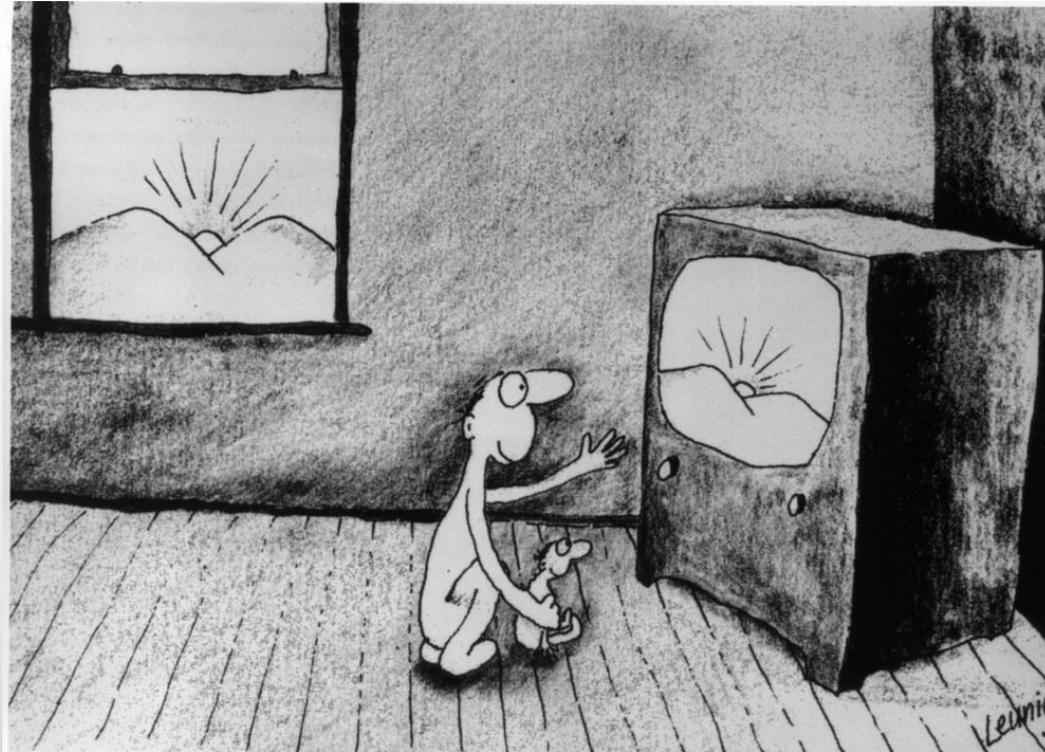
*Hæc omnis hystoria vel potius nuzerum exactissimo enarratio. hanc manifesteque
ostendit omnia hæc ex radiorum refractionibus in lunari globo existere, globumque ex
materia pellucidissima confectum esse, que non aliter ut globi vitæ maculat
aliquibus in locis eminentias ostendunt licet omnino æquales et perfectas sint ut
de quaque*

LENS METAPHOR

- Scientific optical instruments
 - Galileo Galilei
 - Our days: from studying the stars to studying organisms
- Knowledge machine
 - Optical aids used in the production of art
 - Hockney–Falco thesis; visual argument (Hockney 2006)
 - Creating and studying our cultural production



SO... WHAT DO WE SEE?



OBJECTS

SPECIFICITY of objects of study → typical of the Humanities

E.g. via digitisation

“Digitization involves the creation of a binary representation of an object which already exists, rather than the creation of new and novel pictorial information” (Terras 2008)

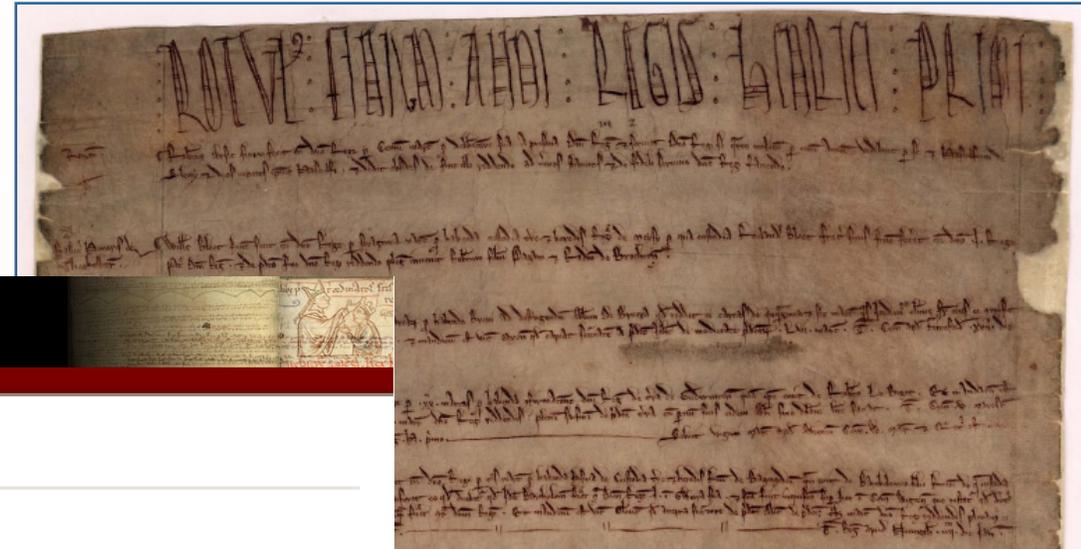
} of primary sources

also an interpretative act → make choices and take decisions

OBJECTS

Archimedes palimpsest project

- Simple but powerful display



Henry III Fine Rolls Project

You are here: Images > C 60/12 > M.9

Home
About the Project
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Copyright
Citations
Translation
Indexes
Images
 > Heads and Headings
Help
Search
Links
Events
Contacts
Fine of the Month

Thumbnails Next

Images for C 60/12

m.9

Help with the manuscript viewer

Thumbnails Next

Henry III Fine Rolls project

OBJECTS

Archimedes palimpsest project

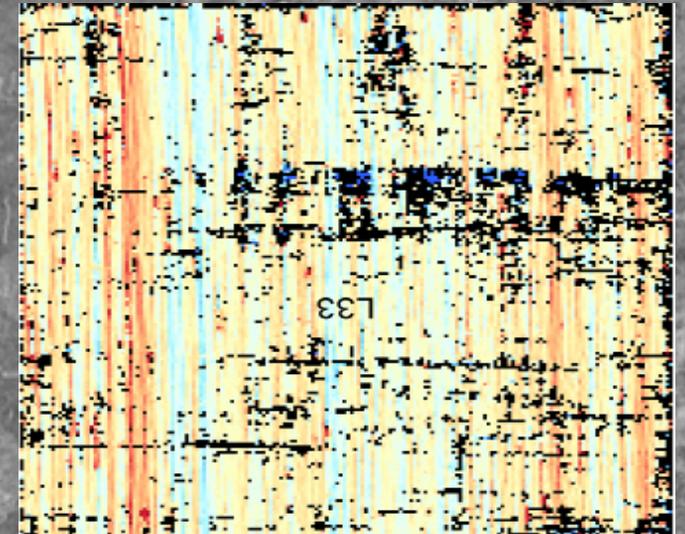


- Minute examination & reconstruction of features

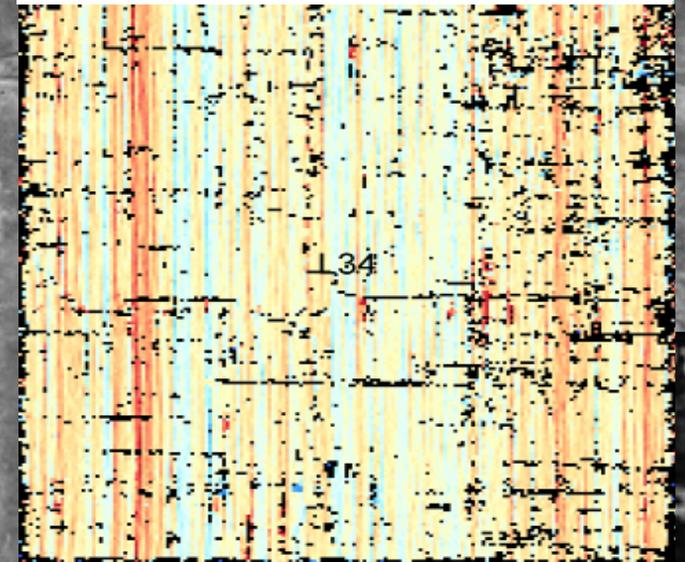
Archimedes palimpsest project



- Minute examination & reconstruction of features



Johnson, Johnson, and Liedtke
(2012)

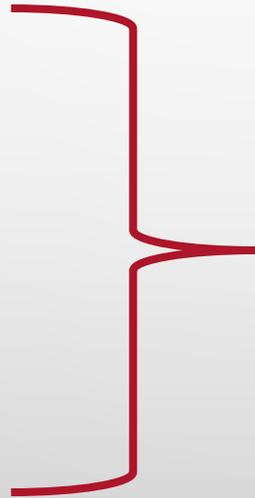


- Minute examination & reconstruction of features
→ DH connected to material culture approaches & material sciences

OBJECTS

SPECIFICITY + formal
MODELLING
(Abstraction,
classification,
manipulation)

E.g. via creation and
manipulation of
digital models

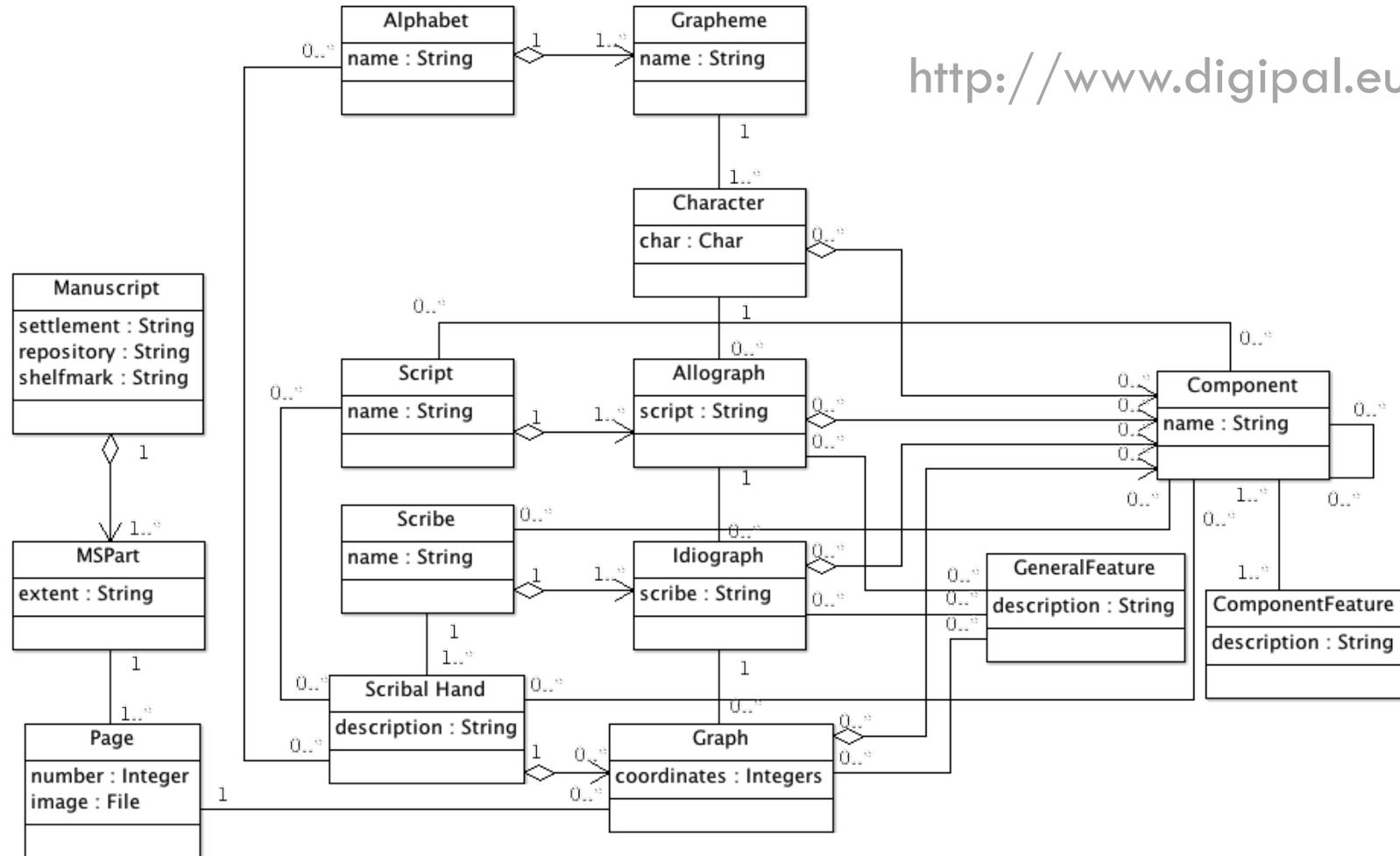


of
primary
sources/components
production/
transmission/use

OBJECTS

SPECIFICITY + formal
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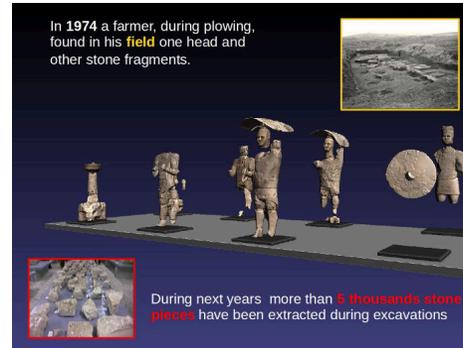


OBJECTS

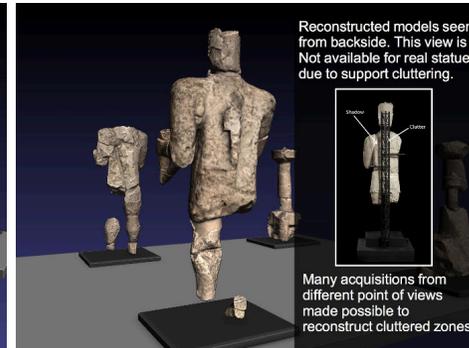
Balsa Rodriguez et al. 2015

SPECIFICITY + formal
MODELLING
(Abstraction,
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manipulation)

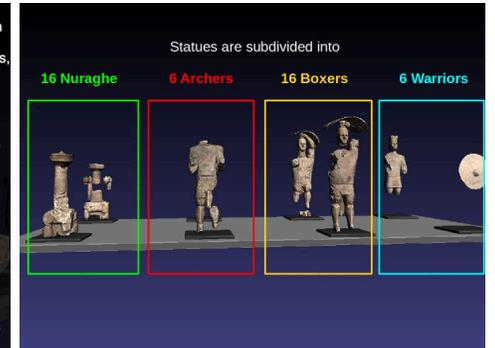
E.g. via creation and
manipulation of
digital models



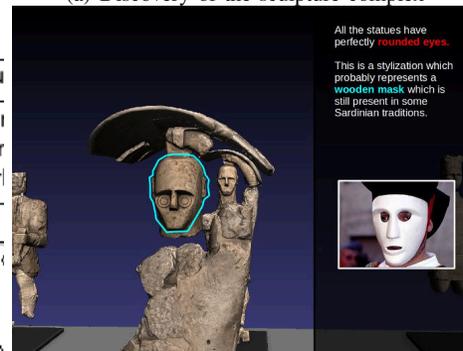
(a) Discovery of the sculpture complex



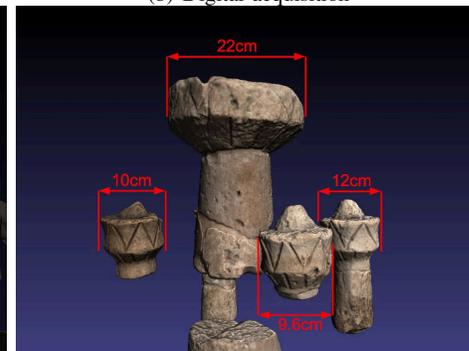
(b) Digital acquisition



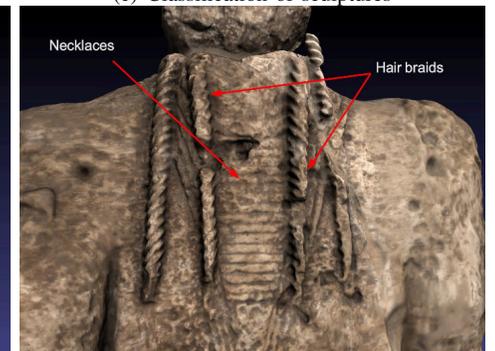
(c) Classification of sculptures



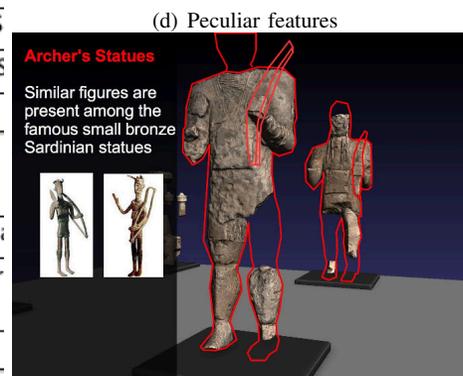
(d) Peculiar features



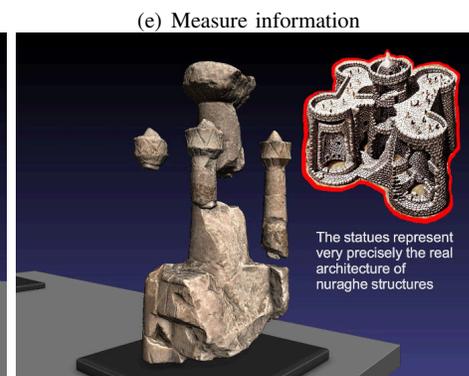
(e) Measure information



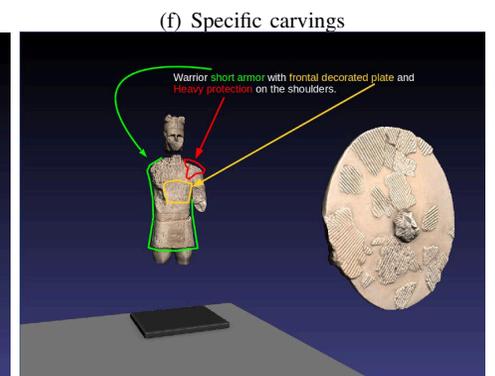
(f) Specific carvings



(g) Connections to other artworks



(h) Comparisons to other buildings



(i) Highlights of sculpture parts

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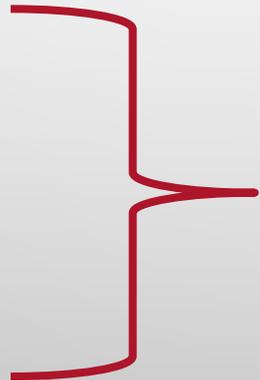
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OBJECTS

SPECIFICITY + formal
MODELLING
(Abstraction,
classification,
manipulation)

E.g. via creation and
manipulation of
digital models



of texts
and historical entities

OBJECTS

SPECIFICITY + formal
MODELLING
(Abstraction,
classification,
manipulation)

→ DH connected to textual (critical) scholarship and publishing

E.g. via creation and manipulation of digital models

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<supplied reason="lost" cert="low">ὄμο</supplied>λογῶ
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Transformation using the example EpiDoc P5 stylesheets:

- **Duke Databank style:** [ὄμο(?)]λογῶ

([Source](#))

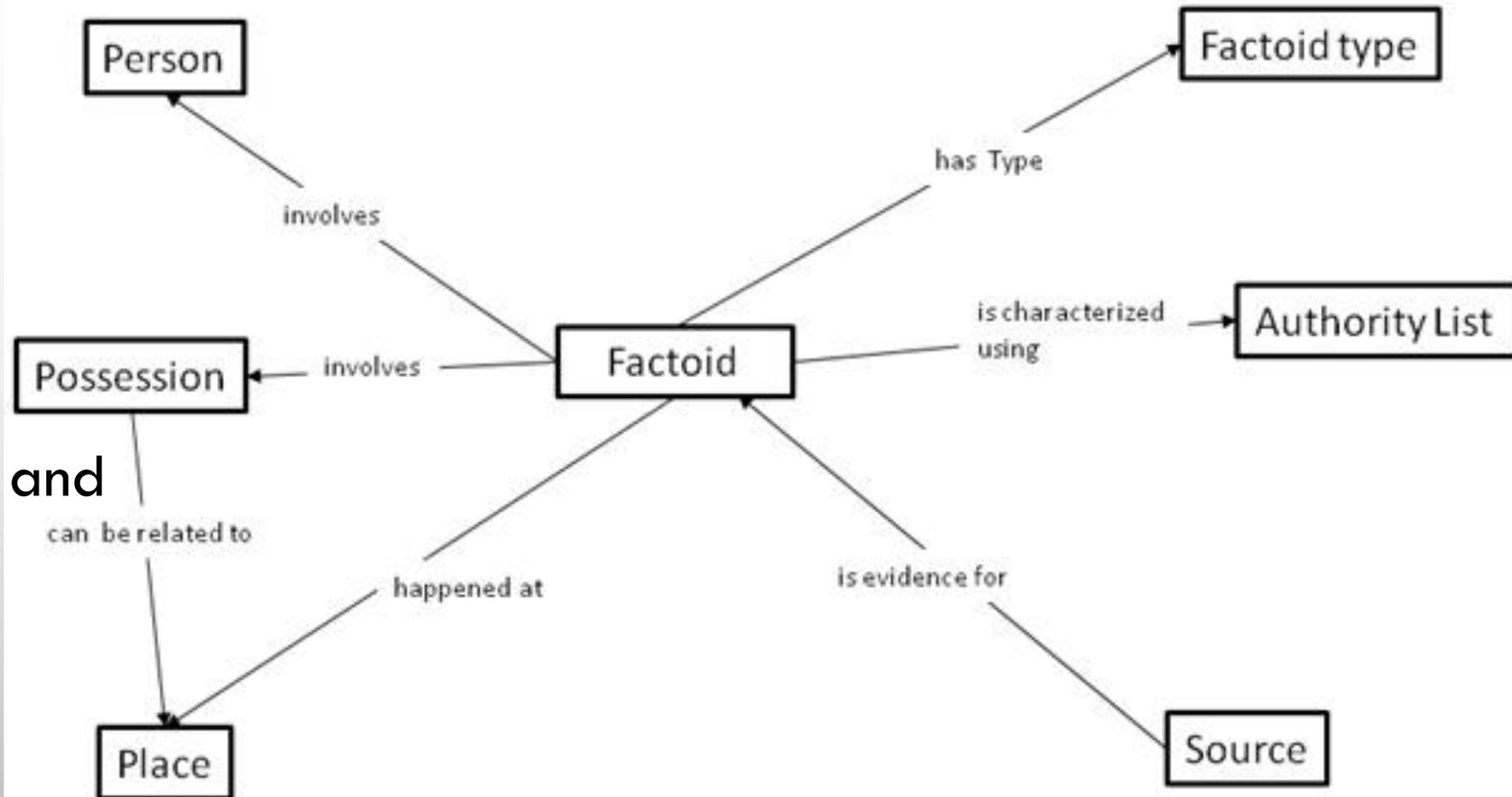
OBJECTS

SPECIFICITY + formal
MODELLING
(Abstraction,
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manipulation)

E.g. via creation and
manipulation of
digital models

Simplified data structure diagram for factoids

Bradley and Pasin 2013





PEOPLE OF MEDIEVAL SCOTLAND 1093-1314



Home About Database Information Schools News Contact **Social Network Analysis** Help

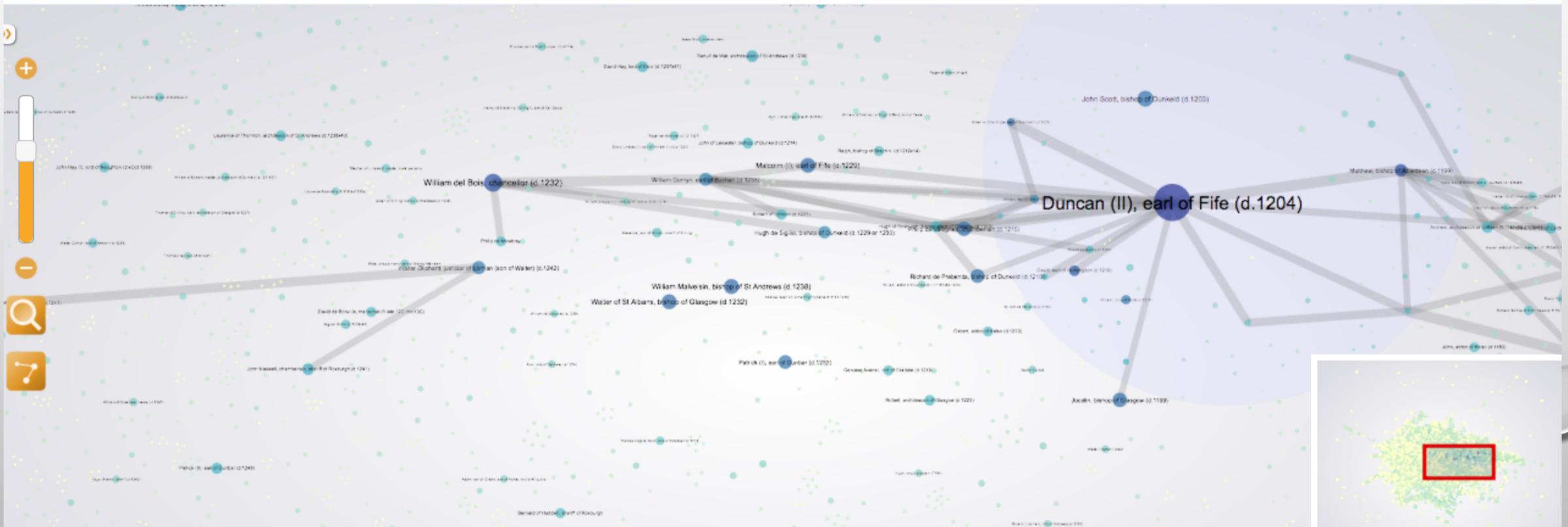
SEARCH BROWSE RECORD **SOCIAL NETWORK ANALYSIS** MAP FAMILY TREES LABS

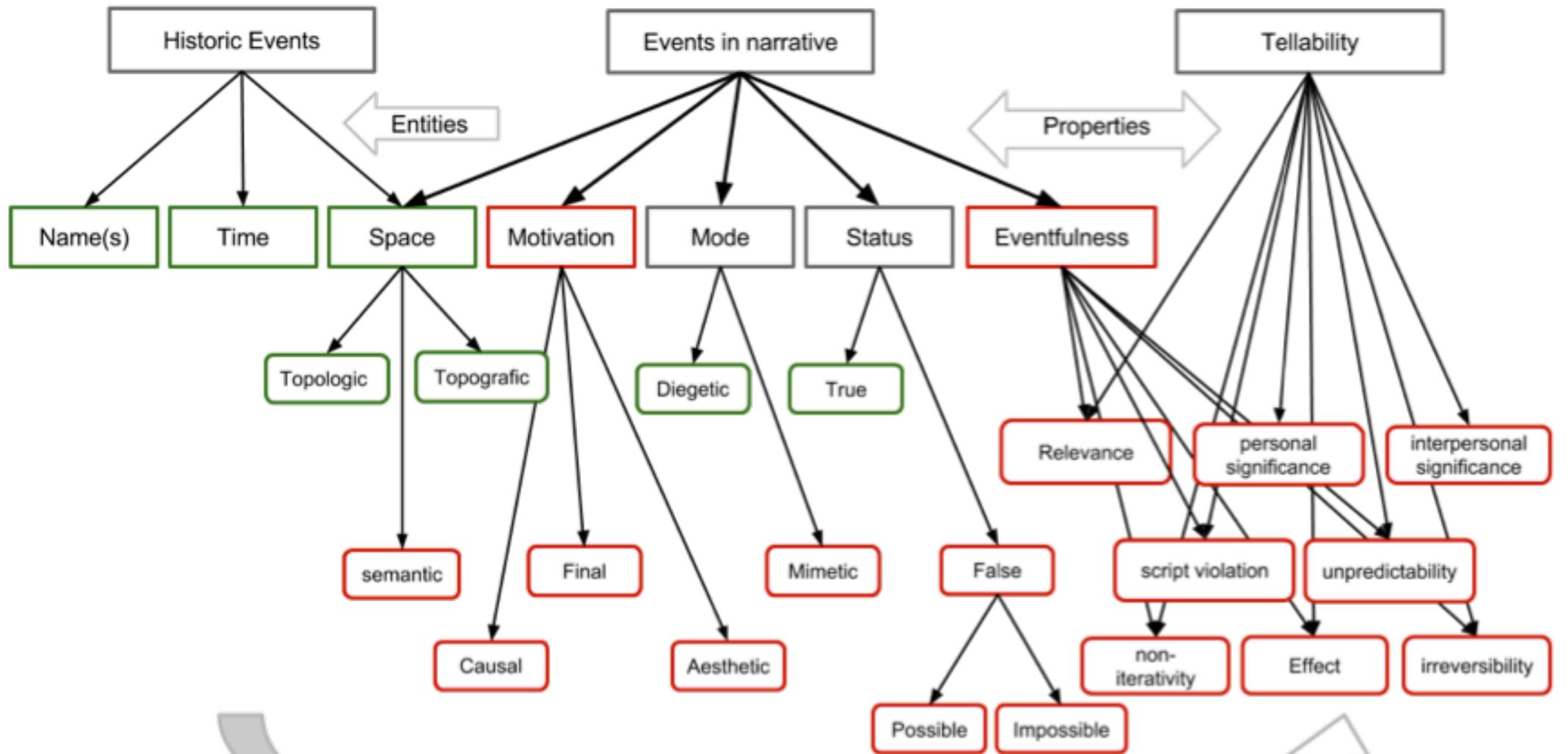
Choose graph: ---

Currently viewing: **All witnesses, thirty or more times**

Locate an individual:

(Powered by Raphael Velt's [gexf-js](#) software.)





 Found to be easily computable
 Highly depending on interpretation

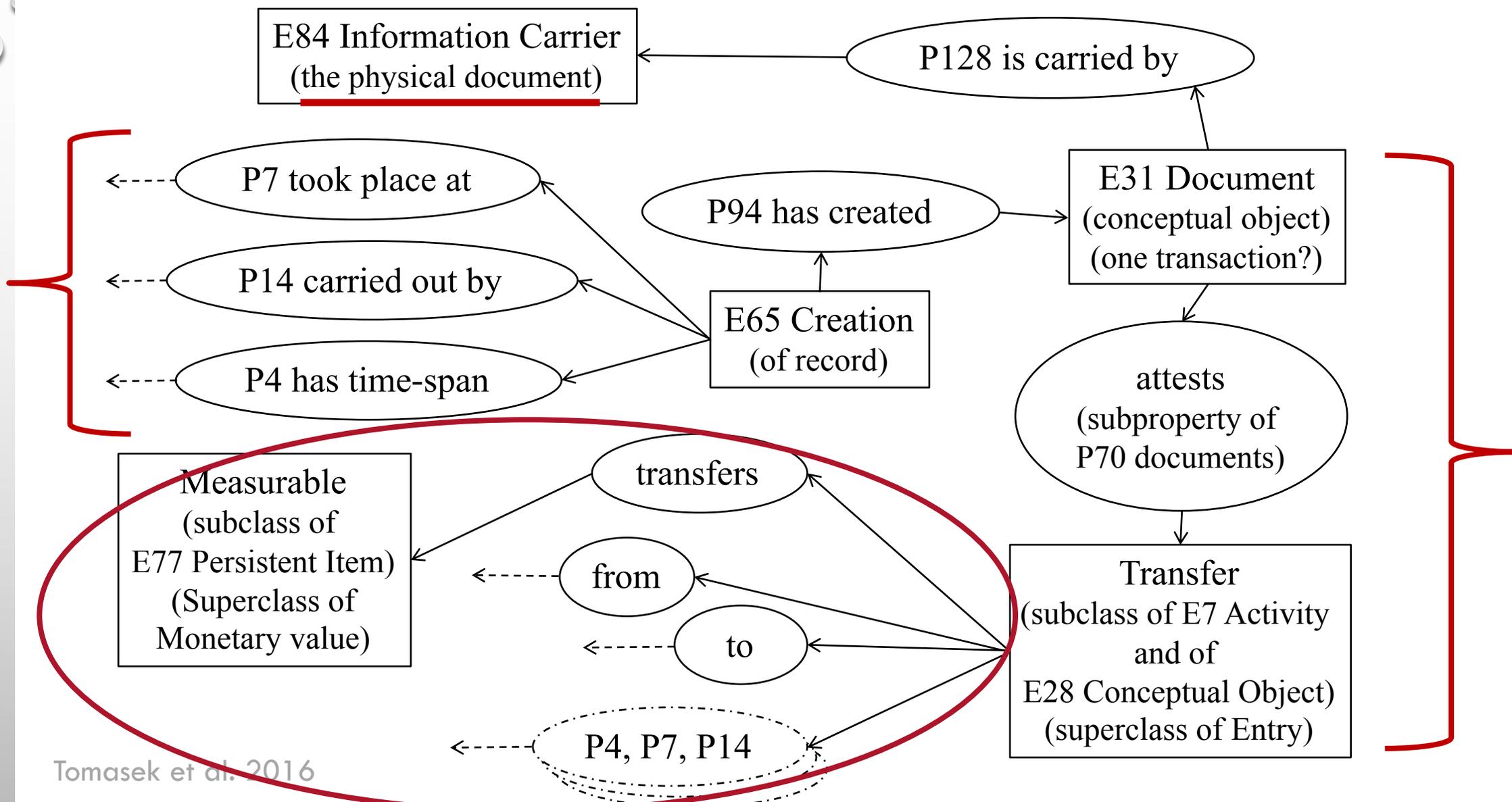
OBJECTS

Blending of perspectives

E.g.

- Textual vs. contextual and material

TEXT and CONTEXTS



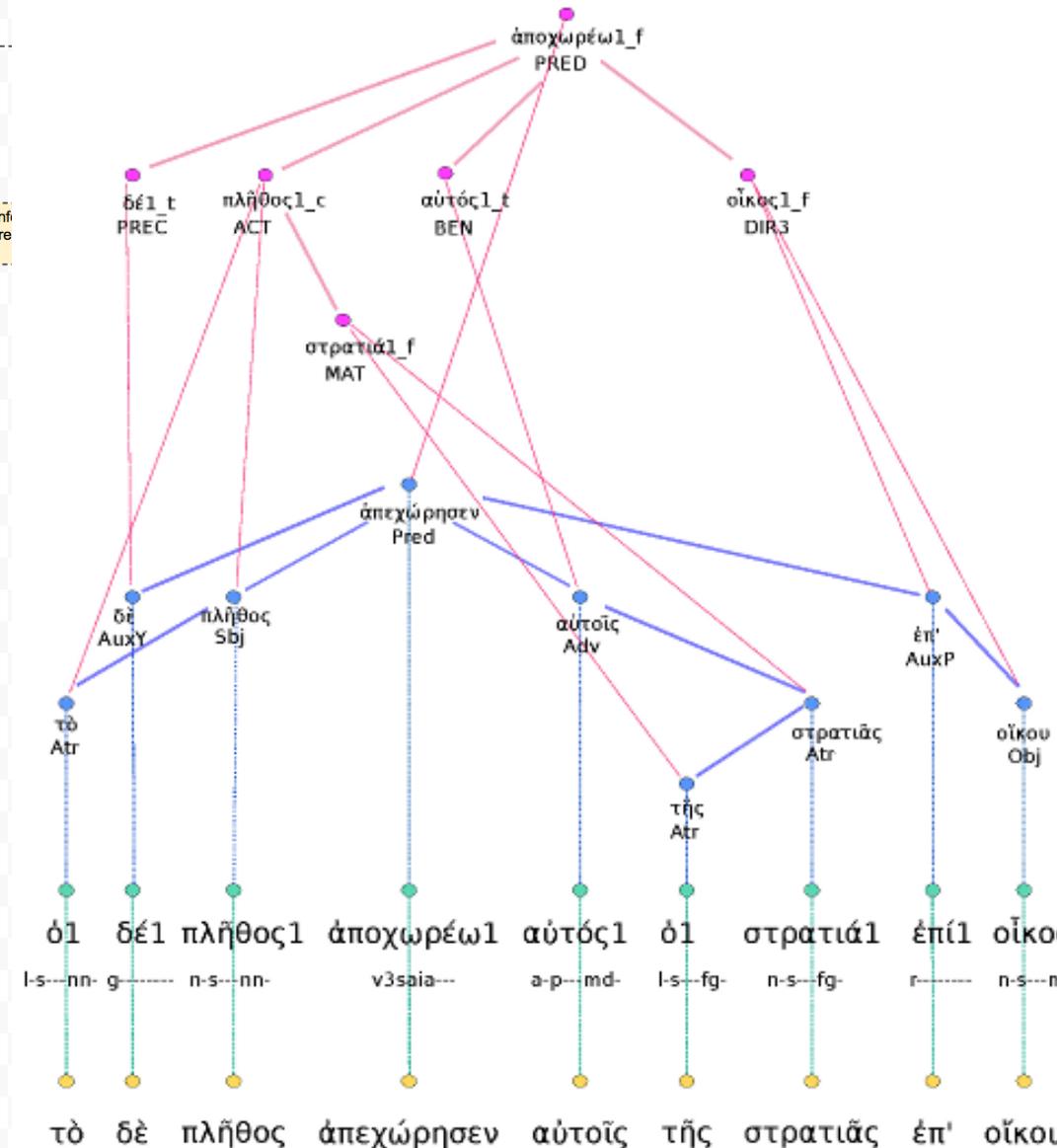
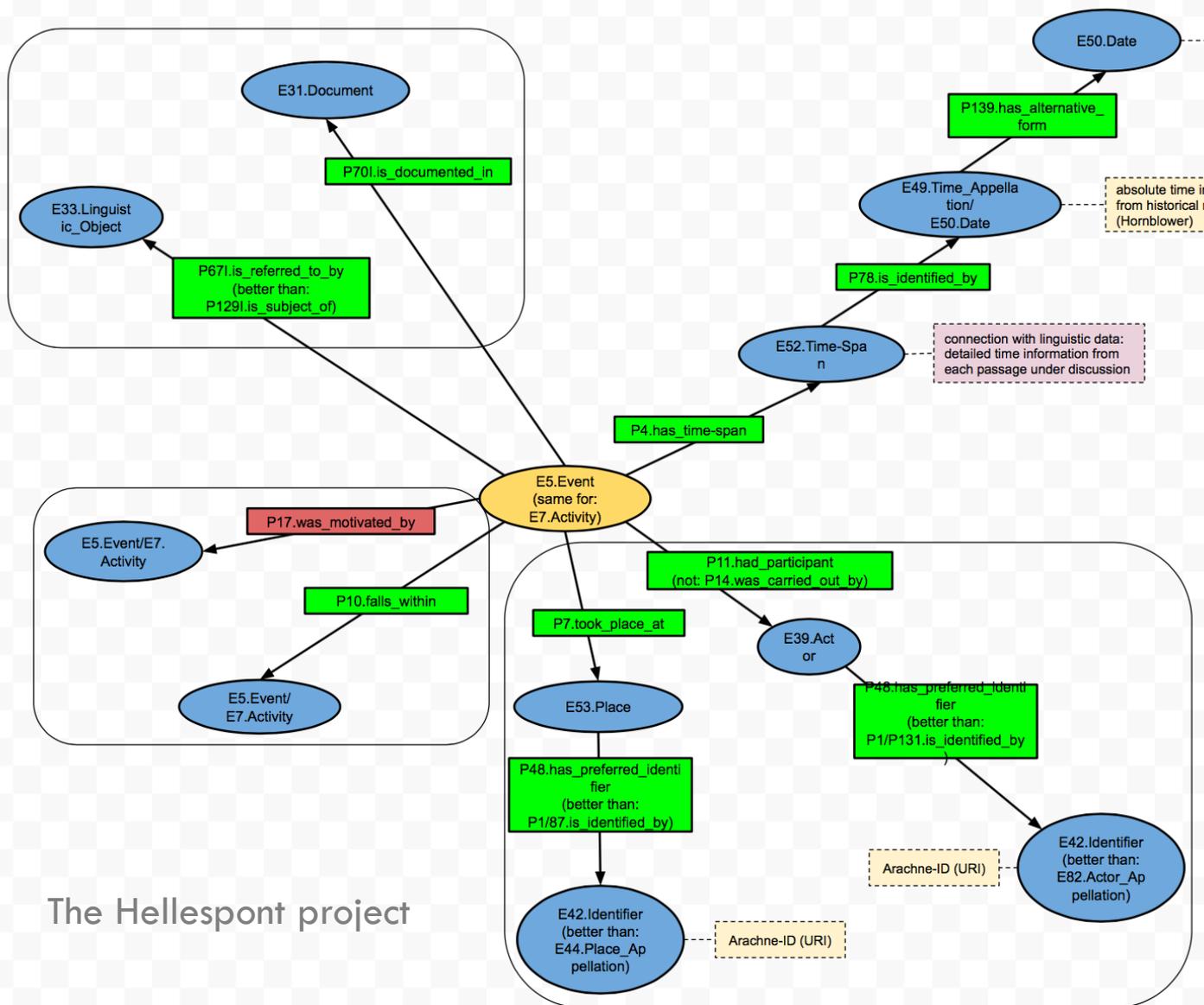
OBJECTS

Blending of perspectives

E.g.

- Textual vs. contextual and material
- Historical vs. other disciplines (e.g. linguistics)

MIXED METHODS / INTER-MULTI DISCIPLINARY



MEDIUM

Machines (software and hardware)

- Digital medium as publication medium with own constraints and opportunities



Previous Next

C 60/8

Document Contents

- ▾ Membrane 2
- ▾ Membrane 1
- ▾ Membrane 1d

1 HENRY III (28 October 1216–27 October 1217)

Images of roll C 60/8

View calendar by date 1216

Membrane 2

Image of membrane 2

Roll of fines of the first year of King Henry.

- 1 [No date]. Kent. Robert Arsic has made fine with the king by 100 m. for his delivery from the king's prison, and he is to serve the king with three knights (*se quarto militum*) for a year, namely by Robert himself, Hasculph de Soligny, and two of Hasculph's nephews, and he gave hostages for rendering that fine at the set terms and for performing faithful service to the king.
- 2 17 Dec. *Bailiff of the honour of Tewkesbury*. William Bloet has made fine with the king by 60 m. for having the custody of the land and heir of Roger de Meysey, for which custody Roeland Bloet, his brother, had made fine with King John, the king's father. He found Robert son of Payn and Ralph of Broughton as pledges for rendering the aforesaid fine to the king.
- 3 17 Dec. Fairford. *Oxfordshire*. John of Bristol gives the king the moiety of 56 m. for having a writ to distrain the abbot of Bruern to render to him the charters for 56 m., which Jordan Clerk, his brother, committed to him to keep. ¹ He has letters to distrain the abbot, and the sheriff of Oxfordshire is ordered to take security from John for the moiety of the aforesaid 56 m. ² Witness the earl.
 - 1 It is possible that the following clause was added later, as the ink is very slightly darker. It is not, however, clearly demarcated from the remainder of the entry as in the other examples on this membrane.
 - 2 An erasure has been made shortly below the body of the entry.
- 4 30 Dec. Lichfield. *Gloucestershire*. The abbot of Tewkesbury has made fine with the king by 20 m. for having his confirmation of the land of Gotherington, which he purchased from Robert Bigod. Order to the sheriff of Gloucestershire that, having accepted security from him for rendering the aforesaid 20 m. to the king, he is to cause the same abbot to have full seisin of the aforesaid land with its appurtenances without delay. He paid 20 m. at Winchester to W. earl Marshal and is quit. ¹ Witness the earl.
 - 1 The payment to the Marshal is clearly separated from the entry by a horizontal line.

FINE ROLL

1 HENRY III (28 October 1216–27 October 1217)

C 60/8

Membrane 2

ROLL OF FINES OF THE FIRST YEAR OF KING HENRY.

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Membrane 2

Images of membrane 2

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Broughton as pledges for

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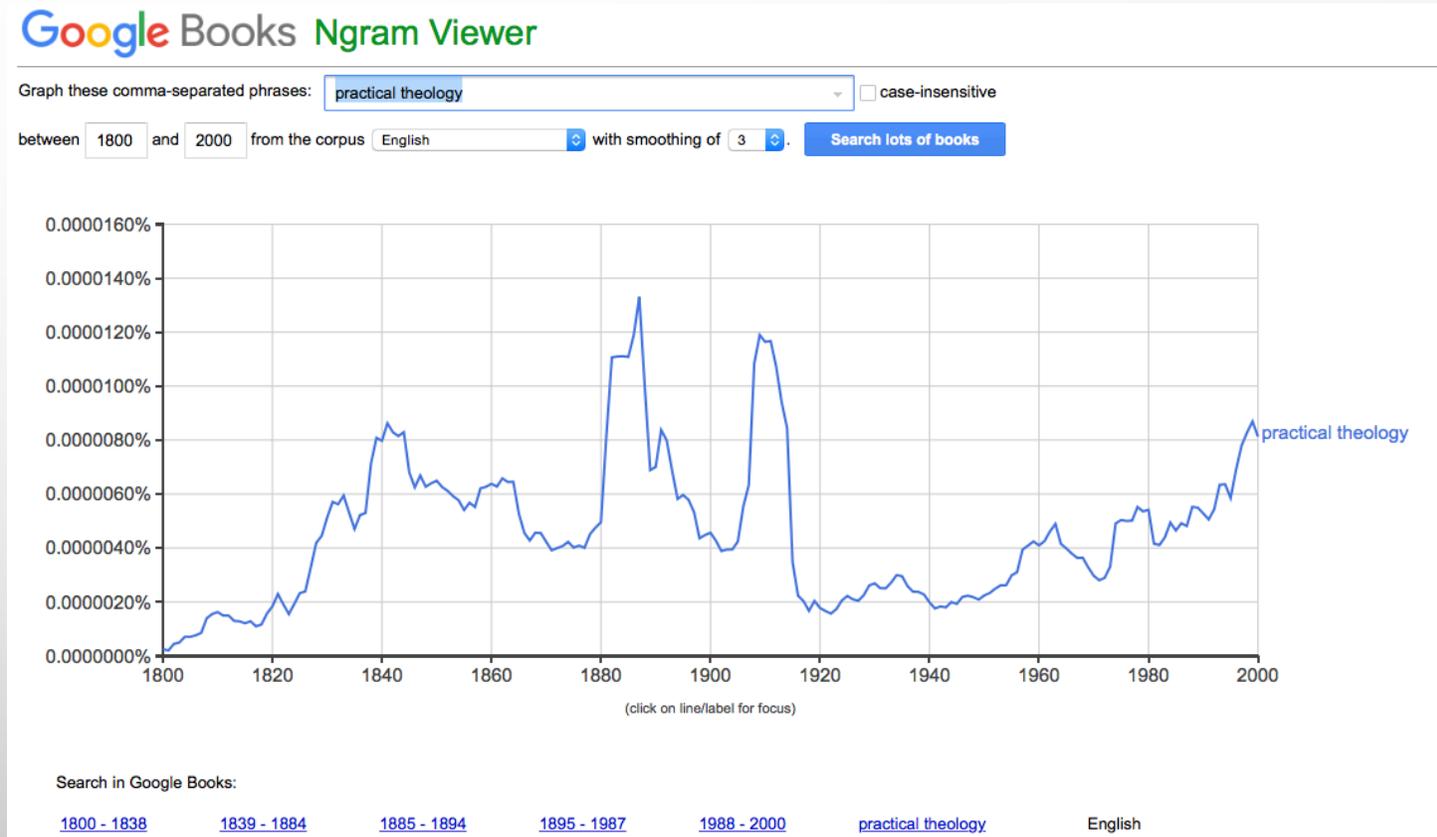
→ DH connected to information studies

→ DHers creating new intermediaries to the past

MEDIUM

Machines (software and hardware)

- Digital medium as publication medium with own constraints and opportunities
- Means for operationalising concepts – e.g. algorithms and datasets
 - How to correlate methods in (big) data analytics to historical (or literary) sources?



MEDIUM

Machines (software and hardware)

- Digital medium as publication medium with own constraints and opportunities

- Means for operationalising concepts – e.g. algorithms and datasets

- How to correlate methods in (big) data analytics to historical (or literary) sources?

Google Books Ngram Viewer

Graph these comma-separated phrases:

between and from the corpus



- OCR errors
- Dominance of scientific literature
- Messy metadata (inaccurate data)
- What does popularity means?

(click on line/label for focus)

Search in Google Books:

[1800 - 1838](#)

[1839 - 1884](#)

[1885 - 1894](#)

[1895 - 1987](#)

[1988 - 2000](#)

[practical theology](#)

[English](#)

(Pechenick, Danforth and Dodds 2015)

MEDIUM

Machines (software and hardware)

- Digital medium as publication medium with own constraints and opportunities
- Means for operationalising concepts
- Technologies within ethical perspective

SWEEEP Kuusakoski, Kent UK

Minimal computing -

<http://www.globaloutlookdh.org/minimal-computing/>



MEDIUM

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→ DH akin to techno-sciences and research management-aware (reliance on technical infrastructures and high budget research)

→ DH critical of infrastructure - outdated vertical metaphor?

“Within digital humanities, the idea of infrastructure is particularly unhelpful because it encourages a prejudice that digital work is a supporting activity, subsidiary to research and teaching.” (Prescott 2016)

“[...] use technology self-reflexively as part of the very knowledge, and not just instrument, of researching and acting ethically on society” (Liu 2016)

MEDIUM

Machines (software and hardware)

Letters of 1916 is 2 years old

2209 letters uploaded from:
42 private collections
23 collaborating institutions

Allen Library • American Irish Historical Society • Cloyne Diocesan Archives • Conradh na Gaeilge • Cork City and County Archives • Cork Public Museum • Irish Capuchin Provincial Archives • Limerick Diocesan Archives • Irish Jesuit Archives • Maynooth University Library • Medical Missionaries of Mary • Military Archives of Ireland • New York Public Library, Manuscripts and Archives Division • National Archives of Ireland • National Library of Ireland • National Museum of Ireland • Public Record Office of Northern Ireland (PRONI) • St. Patrick's College Maynooth, Archives • The National Archives, UK • Trinity College Dublin, Manuscripts & Archives Research Library • University College Cork Library Archives Service • University College Dublin, UCD Archives • Wexford County Archive

1159 registered USERS
2308911 characters transcribed since September 2014
97 NEW USERS signing up each month

transcribing letters, reviewing transcriptions, uploading family letters, translating letters and researching

36570 website visits
1577 likes
3476 followers

50 a day
1524 a month
60% new
40% returning
119 countries

1058 Ireland
216 UK
172 USA
131 37 other countries

3381 following
5873 tweets
33% retweeted
74 tweets a week

FINANCIAL SUPPORT

Department of Arts, Heritage and the Gaeltacht
Digital Repository of Ireland / HEA / PRTLIS
The European Association for Digital Humanities (EADH)
Maynooth University
Researcher Night funded by the European Commission
Science Foundation Ireland (SFI)
Trinity College Dublin, The Faculty of Engineering, Mathematics, and Science

10 #AskLetters1916 Twitter chats with 130 people
2 Teachers Workshops
17 Stories on Storify with total 1451 views
50 participants
45 lesson plans

letters1916.ie | letters1916@gmail.com | @letters1916 | Letters of 1916
Letters of 1916
A Year in the Life



→ DH connected to public humanities and 'citizen science'

from machines to humane project (McCarty 2012)

OBSERVERS

Subjectivity

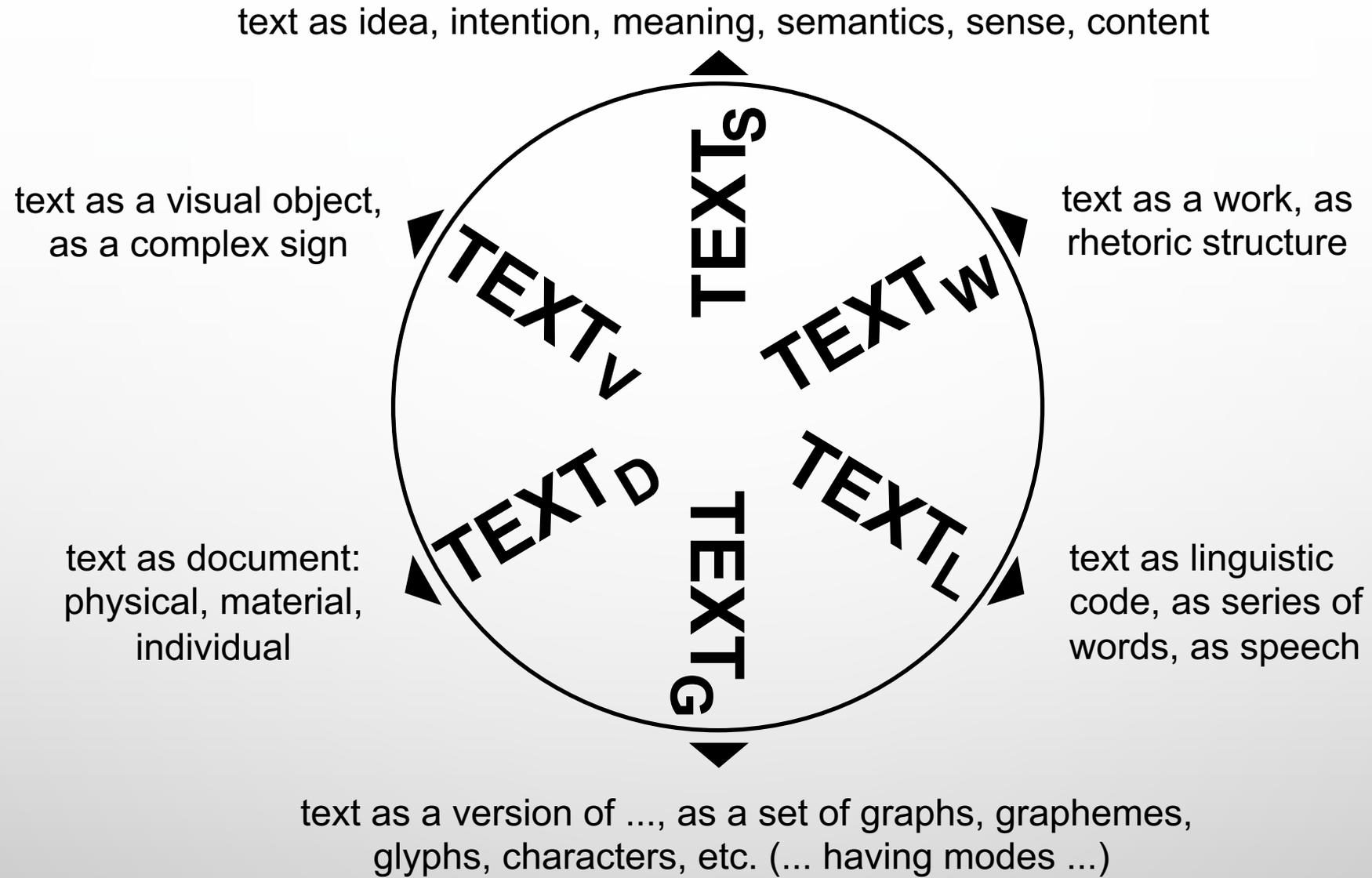
- Evident link between models and our role as observers/creators/interpreters
- Complex boundary between factual observation of the past and its context of interpretation
→ subjectivity of the humanities
(Small 2013)



OBSERVERS → AGENTS

Agency

- Ourselves and others making intellectual and technical choices/interpreting
 - e.g. in creating/selecting models, establishing units of analysis / pinpointing a theory of objects/texts



OBSERVERS

Agency

- Ourselves and others making intellectual and technical choices/interpreting
 - engagement with interpretative agents of the past (engage with meta-modelling)
- DH of the humanities in *long shelf* engagement with literature

(Agency → in the sources)

OBSERVERS → AGENTS

Agency → FUTURE

- Planning re-use, documentation, sustainable technologies, community engagement with respect to standards

→ In DH balancing out specificity of objects of study with need for flexible, sustainable and re-usable resources



CONCLUSIONS

What we see ...

- Primarily
 - OBJECTS → in detailed and expanded (also distorted) form
 - Lenses → own INSTRUMENTS, tools, media
 - OBSERVERS (ourselves) → interpreters
- Consequently
 - Abstraction, patterns, threads connecting epistemic traditions
 - Other creators, observers and interpreters → in the PAST, PRESENT and FUTURE
 - Power and limits of technology → SOCIAL and ENVIRONMENTAL SUSTAINABILITY and AGENCY



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- GO::DH Minimal computing working group <http://www.globaloutlookdh.org/minimal-computing/>
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THANK YOU!

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