

Southampton University | Hestia 2013

# Knot

An Interface for the Study  
of Social Networks in the Humanities

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Density Design Research Lab. | @densitydesign

D E N -  
S I T Y  
G N +

**Knot** is a tool to explore explicit and not explicit social relationship for humanities scholars.

**Knot** aims also better understanding the role of communication design and data visualization in the digital humanities research processes.

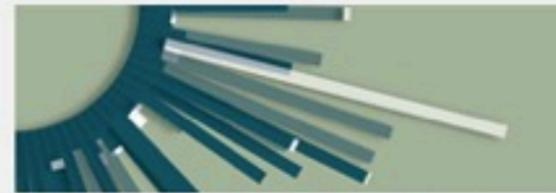
D E N -  
S I T Y  
G N +

# RESEARCH

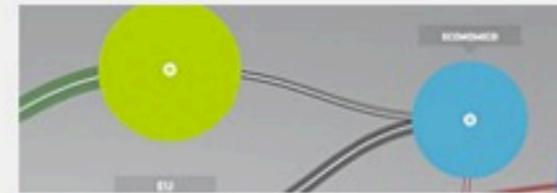
DensityDesign develops research projects in the domain of visual representation, stemming from a design perspective. Our research interests include theoretical and epistemological reflections on visualizations and analyses of their cognitive underpinnings, in addition to the development of large frameworks for data visualization and ad-hoc solutions for speculative narration. We adopt an open approach to visualization, working from visual storytelling to visual analytics. Design is, thus, treated more like a proper language than a tool. We use this language in practice to define a new—visual—epistemology.

[Read More](#)

## Visual and Digital Epistemology



Share your knowledge: Mapping...



Turtle



Versus

## Data and Information Visualization



La Lettura



ANDROMEDA - Twitterwall



Fineo





Paul Mellon Centre

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Simone Testa

Jane Everson

Dan Edelstein

Keith Baker

Jessica Riskin

Charles van den Heuvel

Nicole Coleman

Paula Findlen

Mark Peterson

Circulation

# Electronic Enlightenment

60647 Documens

7476 Historical Figures

Subscribers enter here

LETTERS (subscribers only)

LIVES 

LOCATIONS

EDITIONS

## LIVES BY SURNAME

**A** B C D E F G  
H I J K L M N  
O P Q R S T U  
V W X Y Z &c.

- lives by surname
- lives by nationality
- lives by occupation

Subscribers please log in to make full use of EE's content and functionality, including access to all letters and biographies.

## Lives listing with initial: A

<< first < previous listing lives 1-15 of 256 next > last >> jump to  go!

- Abarca y Bolea, Pedro Pablo, conde de Aranda (1718-1798), Spanish – general, diplomat, statesman
- Abauzit, Firmin (1679-1767), French – theologian, biblical scholar
- Abbot, Charles, 1st Baron Colchester (1757-1829), English – politician, member of Parliament
- Abbot, John Farr (1756-1794), English – lawyer, academy member
- Abbot, Mrs Mary (c. 1762-1793), English – unknown occupation
- Abeille, Jeanne Louise (d. 1810), French – unknown occupation
- Abeille, Louis Paul (1719-1807), French – author, economist
- Abercrombie, James (1758-1841), American – clergyman
- Abercromby, David (d. c. 1701), Scottish – Jesuit, physician, scientist, controversialist
- Abercromby, James (1706-1781), Scottish – general, politician, member of Parliament
- Abercromby, James, 1st Baron Dunfermline (1776-1858), Scottish – politician, member of Parliament
- Aberdeen, Presbytery of (founded 1560), Scottish – ecclesiastical body
- Aberdeen, Town Council of (founded 1179), Scottish – municipal body
- Abington, Frances (1737-1815), English – actress
- Abos de Binanville, Antoine Maximilien d' (1726-1766), French – lawyer

<< first < previous listing lives 1-15 of 256 next > last >> jump to  go!

British Library:  
Italian Academies  
project

Denis  
Reidy

THE  
GRAND  
TOUR

Molly  
Taylor-Poleskey



**A Dictionary of British and Irish  
Travellers in Italy**

6000 Grand Tourists

A DICTIONARY OF  
BRITISH AND IRISH  
TRAVELLERS  
IN ITALY  
1701 – 1800



*compiled from the*  
BRINSLEY FORD ARCHIVE  
*by*  
JOHN INGAMELLS

ALDRIDGE  
1750 Rome (Nov. 1750) [Venice (Jul. 1751)]  
Aldrich and Neal, 'friends of Mr Harts' [Walter Harte, see Philip Stanhope], were joined in Rome in November 1750 by Edward Thomas 'to view ye Paintings of ye Palaces'; Thomas considered they then had 'ye best judge of paintings in Rome as their antiquary'.<sup>1</sup> He was probably the Aldridge whom Richard Wilson saw in Venice in July 1751.<sup>2</sup>

1. *Thomas letters* 1855, L.27 (30 Nov. 1750). 2. Constable, *Wilson*, 22.

ALDWORTH, RICHARD NEVILLE (1717–93), statesman, o. s. of Richard Aldworth (d. 1738) of Stanlake, Berks; *educ.* Eton and Merton Oxf. 1736; *Dilettanti* 1746; MP 1747–74; *m.* 1748 Magdalen Calandrini of Geneva; changed name to Neville on *suc.* to Billingbear estates 1762; *sec.* and *min. plen.* Paris 1762–3, 1763; in Geneva 1771–4.

*c.* 1740–1 Rome

1744–5 Milan (Oct. 1744), Florence

Aldworth, 'said to be one of the merriest devils in the world',<sup>1</sup> was one of The Bloods (or Common Room Set) who gathered in Geneva in the early 1740s.<sup>2</sup> He appears to have been in Rome sometime in 1740–1 with William Windham and others of the Bloods.<sup>3</sup> On 11 October 1744 he set out for Italy from Geneva with Sir Thomas Sebright, Horatio Walpole and Dr George Turnbull,<sup>4</sup> visiting Milan and Florence.<sup>5</sup> He had returned to England by the end of 1745.<sup>6</sup>

1. *Spence Letters*, 239. 2. Moore 1985, 44–7. 3. R.W. Kington-Cremet, *Early Life and Diaries of William Windham*, 28. 4. Aldworth, 'Journal of tour in Switzerland & Italy 1743–44 & tour with H. Walpole & others to Milan 1744'; Neville and Aldworth 1855, D/EN/1.54. 5. See *Wal. Corr.*, 20:702. 6. W. Coxe ed., *Literary Life and Select Works of B. Stillingfleet*, [1811], 1:75, 170–1.

ALEXANDER, CATHERINE (1694–1736)

ing in the Strada Felice with two other Scots, the elderly Jesuit priest Patrick Leith and George Gray, a Scot of his own age.<sup>1</sup> In July 1747 he delivered a letter of recommendation as 'a lad of genius in painting' from Patrick Dawson to his cousin, James Edgar, secretary to the exiled Stuart court.<sup>2</sup> That same year he was commissioned by the Pretender to paint the portrait of his brother Charles Edward Stuart (who was not the artist) and it is likely that Alexander made an original portrait by Domenico. Further commissions came from the Pretender's family, the dates on the drawings (priv. coll.) covering his time in Paris. He met the painter George Chalmers, brother-in-law, and painted a portrait of him, including the Earl of Warrington in February 1750. Isabella Lumis, daughter of the Pretender in Rome, sent compliments to 'Alexander' and received commissions from other members of the Pretender's family. He copied Caravaggio's *Boy with a dog* and *Boy with a girl to sew*, and for Peter Paul Rubens's *Gladiator* (in grisaille) and *Boy with a dog*. In 1750 James Edgar helped him to secure a commission from the 9th Earl of Argyll for a set of prints and drawings, including *The Battle of Marston*, ordered from Palazzo Pitti, Florence (sold Christie's, 22 Feb. 1976). Lord Deskford.<sup>4</sup> Alexander made long visits to Rome, painting William Bologna, Venice, and

1. AVR 5A, S. Andrea delle Frattocchie. 2. *Scottish Painters at Home and Abroad*, 1:135. 3. Dennistoun, 1:135. 4. [1976]: 700.

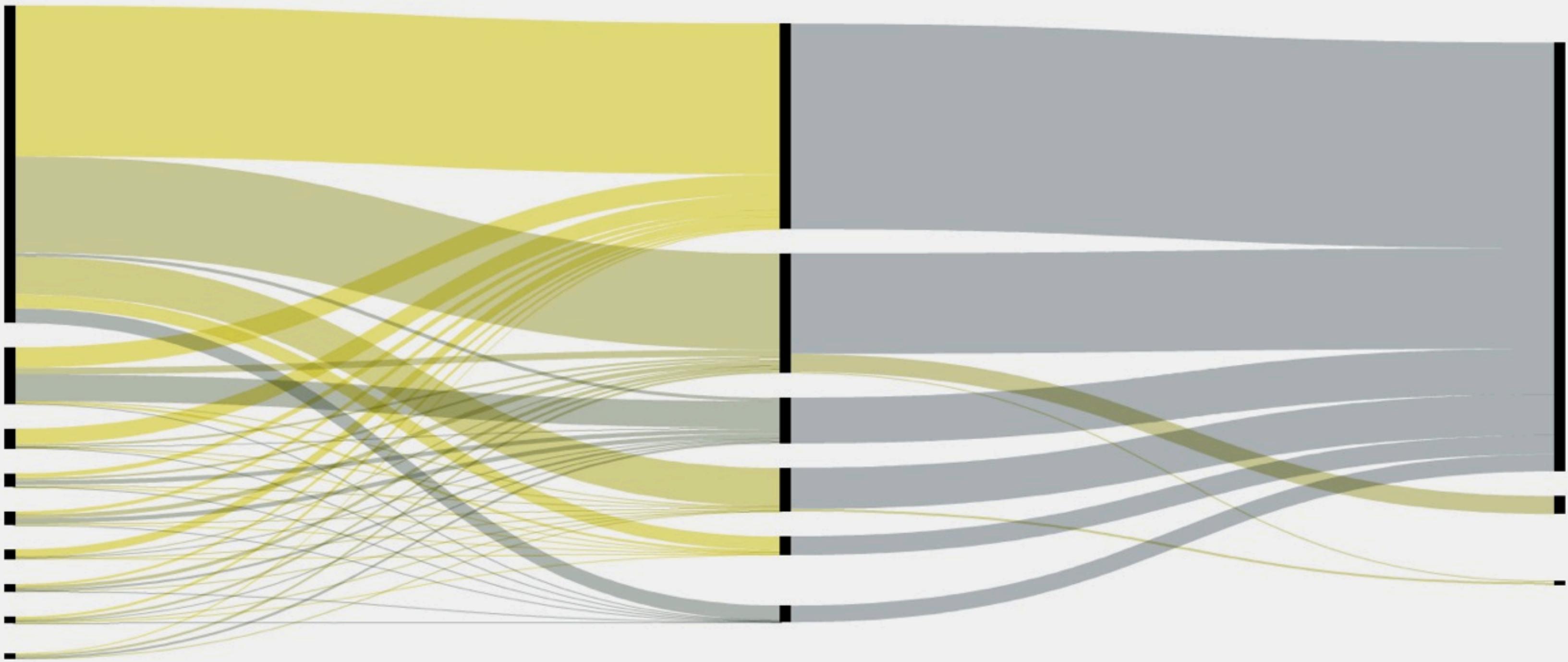
ALEXANDER, GEORGE

A	B	C	D	E	F	G	H	I	J	K	L	M	
1	Name_Last	Name_First	Name_Maiden	Gender	Name of Spouse	Social Status	Nationality	Nationality_	Title	Expertise1	Expertise2	Expertise3	Educational
2	Hume	David											
3	Abbot	Charles		M	Elizabeth Gibbes	1	1	0	Baron	16	4	0	Westmin
4	Abbot	John Farr		M	Mary Pearce	0	1	0		17	0	0	
5	Bentham	Sarah	Farr	F	John Abbot, Jeremiah Bentham	1	1	0		0	0	0	
6	Abbott	Edward		M		0	1	0		1	0	0	
7	Abbott	John		M		1	1	0		18	0	0	
8	Abercrombie	James		M		0	1	0	Maj.	19	0	0	
9	Abercromby	Ralph		M		3	1	0		0	0	0	Rugby, I
10	Aberdeen					0	2	0		0	0	0	
11	Abingdon	Willoughby Bertie		M	Charlotte Warren	2	1	0	4th Earl of Abingdon	0	0	0	Westmin
12	Abram			M		0	1	0	Col.	0	0	0	
13	Murray	Margaret											
14	Ackmooty	Robert		M		1	2	0		16	0	0	
15	Acland	John Dyke		M	Ldy. Chritiana Harriet Caroline Fox	2	1	0	7th Baronet	0	0	0	Univ.Col
16	Acton	John		M		1	1	0	capt. EICo.	20	0	0	
17	Acton	John Francis Edward		M	Mary Anne Acton	2	1	0	7th Baronet	20	0	0	
18	Adair	Robert		M	Lady Carolin Keppel	0	3	0		0	0	0	
19	Adair	William		M		1	1	0		0	0	0	
20	Adam	James		M		1	1	0		21	0	0	
21	Adam	John				0	1	0		0	0	0	
22	Adam	Robert		M		1	2	0		21	4	0	Edinbur
23	Adams	C.		M		0	1	0		0	0	0	
24	Adams	Edmond		M		1	1	0		18	0	0	
25	Adams	Mary		F		3	1	0		0	0	0	
26	Adams			M		0	2	0		0	0	0	
27	Adamson	Andrew		M		0	1	0		0	0	0	
28	Addison	Joseph		M	Charlotte Middleton	1	1	0		22	4	0	Charter
29	Adey	William				0	1	0		18	0	0	
30	Affleck	J.				0	1	0		0	0	0	
31	Agar	Henry Welbore		M	Ldy. Carolina Spencer	2	3	0	B. Clifden, Vct Clifden	0	0	0	Westmin
32	Aikman	John		M		0	2	0		0	0	0	
33	Aikman	John		M		1	2	0		18	8	0	
34	Aikman	William		M	Marion Lawson	1	2	0		1	0	0	
35	Aikman	William		M		1	2	0		18	0	0	
36	Albany	Luise Maximiliane Stolberg-Gedern		F		3	6	0	Countess of	0	0	0	
37	Albany	Charlotte		F		0	1	0	Duchess of	0	0	0	
38	Aldrich					0	1	0		0	0	0	
39	Aldworth	Richard Nevill		M	Maqдалen Calandrini	1	1	0		4	0	0	Eton an
40	Alexander	Catherine		F		0	1	0		0	0	0	
41	Alexander	Cosmo		M		1	2	0		1	0	0	
42	Alexander	George				0	2	0		0	0	0	
43	Alexander	James		M	Anne Craufurd	0	3	0	B. Caledon, Vct. Caledon, E. Caledon	4	18	0	
44	Alexander	John		M	Isobel Innes	1	2	0		1	0	0	Edinbur
45	Allan	David		M		1	2	0		1	24	0	Foulis A
46	Allard	Simon		M		1	1	0		0	0	0	
47	Allen	Edmund		M		1	1	0		26	0	0	
48	Allen	Edward		M	Catherine Shadwell	1	1	0		27	26	0	
49	Allen	George		M		1	1	0		17	26	0	
50	Allen	Jerome		M		1	1	0		0	0	0	
51	Allen	John		M	Mary Johnston	1	1	0		16	0	0	
52	Allen	William		M		1	1	0		0	0	0	
53	Allen	William		M		1	1	0		18	0	0	
54	Allen			F		1	1	0		0	0	0	
55	Allen			M		1	1	0		0	0	0	
56	Allgood	Lancelot		M	Jane Allgood	3	1	0	Knight	16	4	0	BNC Ox
57	Allott	Brian		M		4	1	0		28	0	0	Univ.Col
58	Alonze	John Baptist		M		1	7	0		18	0	0	
59	Alston	Joseph		M		1	1	0		0	0	0	
60	Alston	Robert		M		1	1	0		0	0	0	

expertise\_interests\_major\_fields

Communities

Gender

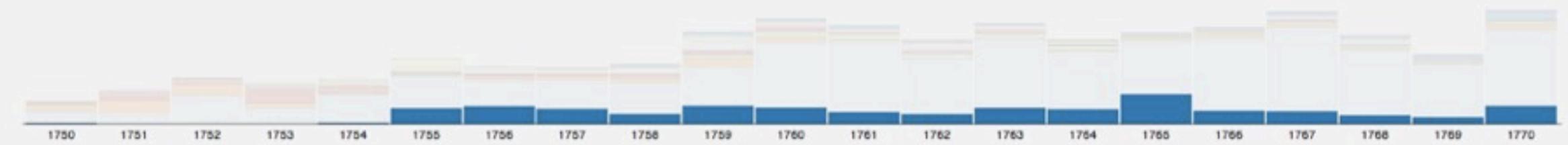




Letters : 1750 1770 Go



Plottable: 726 Not plottable: 8741



Gender Nationality Milieu

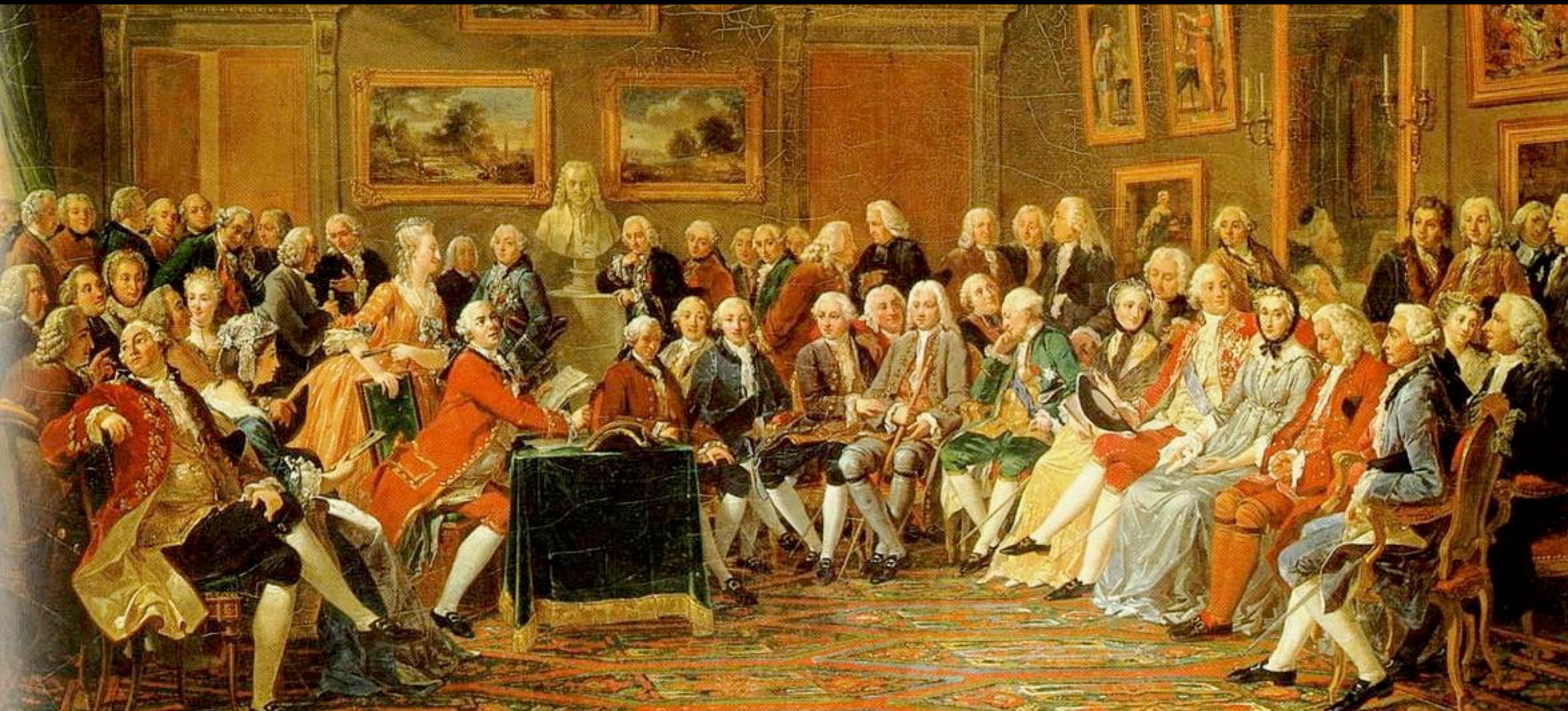


**Ink**  
(G.Caviglia)

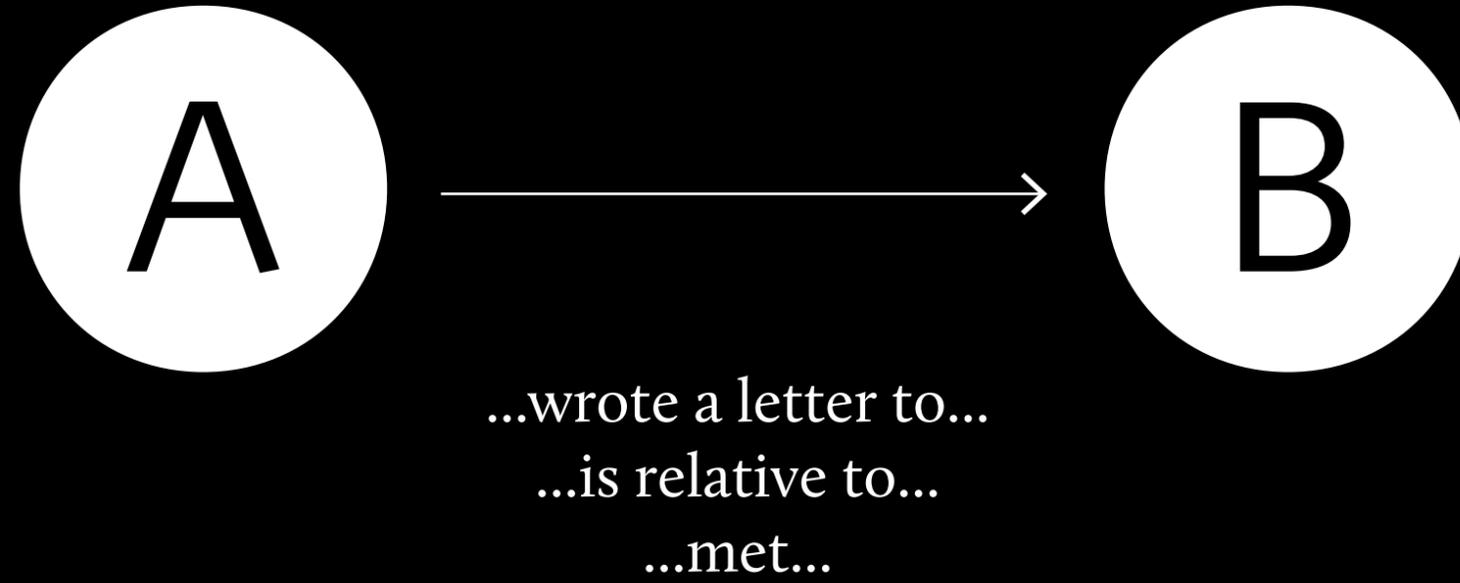
From the visualization of the correspondence network  
of some key historical figures of the project...



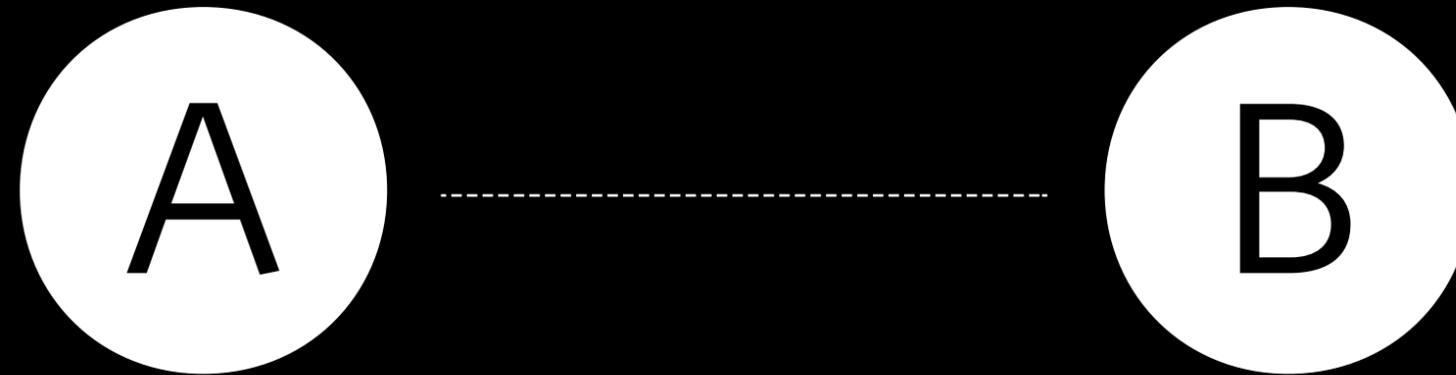
...to deeper focus on the exploration of multidimensional connections between individuals deriving from the different case studies.



Explicit relationships



Not explicit or possible relationships



...is born in the same city of...  
...lived in the same period of...  
...is part of the same social group of...

...

# The “Early Modern Time and Networks” workshop

A humanities + design collaboration

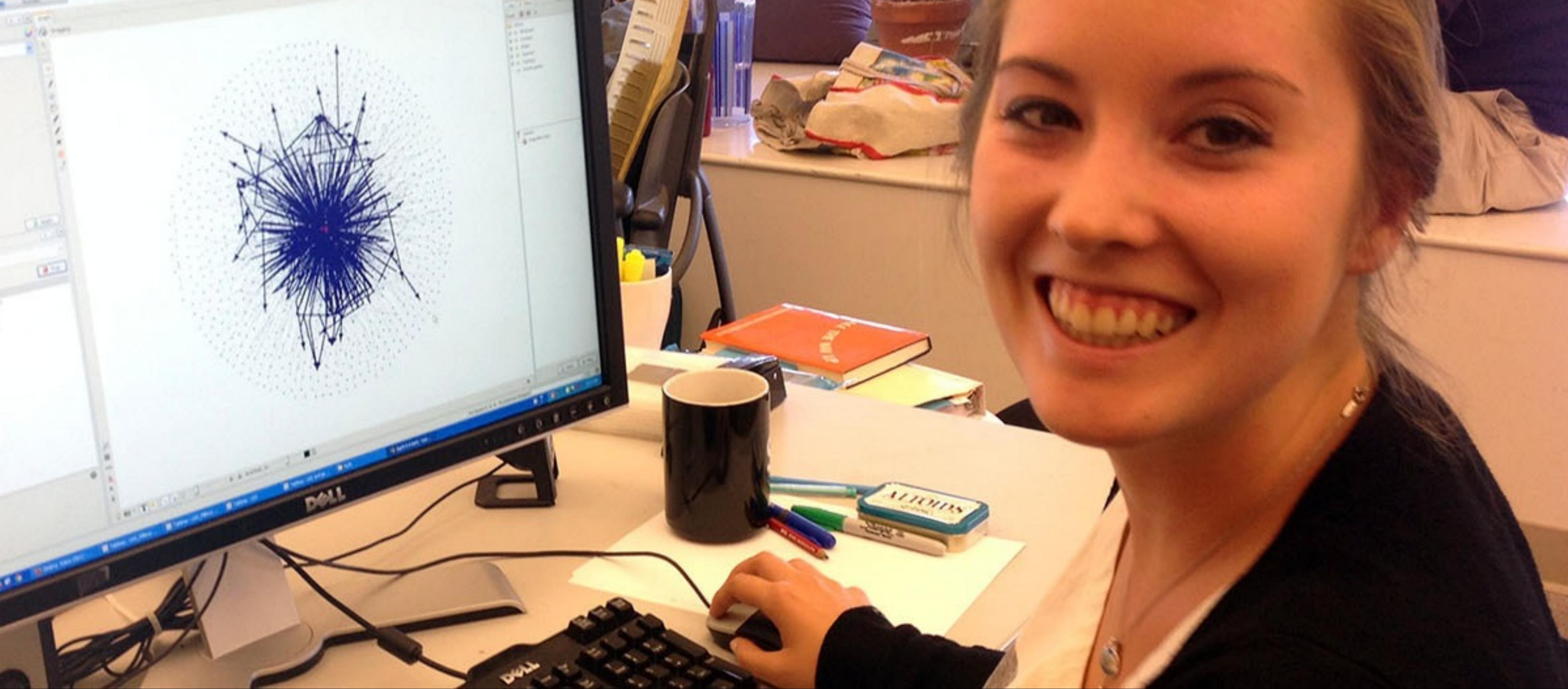


D E N -  
S I T Y  
G N +





Bringing together designers, scholars, graduate students and developers in a discussion about the design and the use of digital humanities visualization tools.



Testing and reviewing existing network visualization tools, using different case studies from humanities scholars and students.

*Overview first, zoom and filter, details on demand.*

(Shneiderman 1996)

Advantages

**Identifying communities,  
clusters and global properties**

## Advantages

**Identifying communities, clusters and global properties**

## Disadvantages

**Low level of interaction focused on the reduction of the information**

**Limits in the exploration of multidimensional data**

**Poor insights with large (and incomplete) graphs**

**Layout algorithms can be misleading**

*There is also a very large class of users that frequently deal with large network data but are not interested in global patterns in this data. Instead they are trying to learn something more about a particular datapoint in the dataset and how this point relates to the rest of the data.*

(Van Ham e Perer 2009)

*Search, show context, expand on demand.*

(Van Ham e Perer 2009)

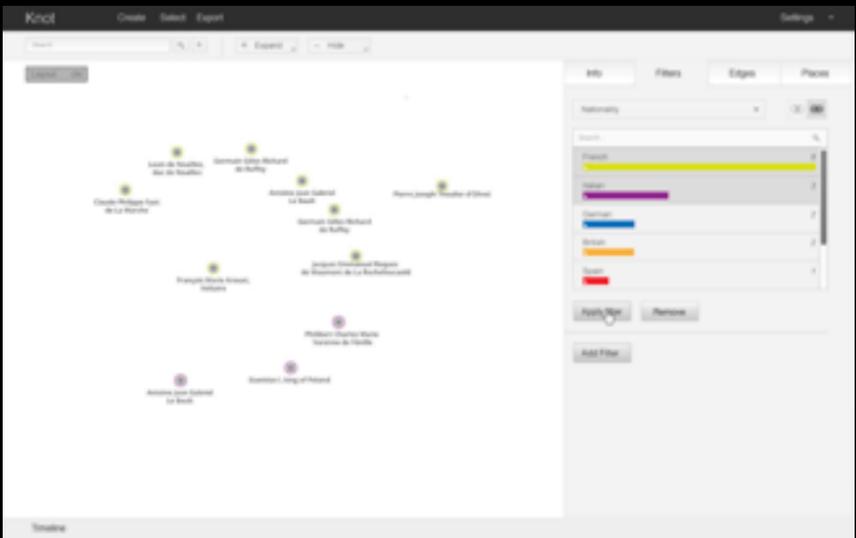
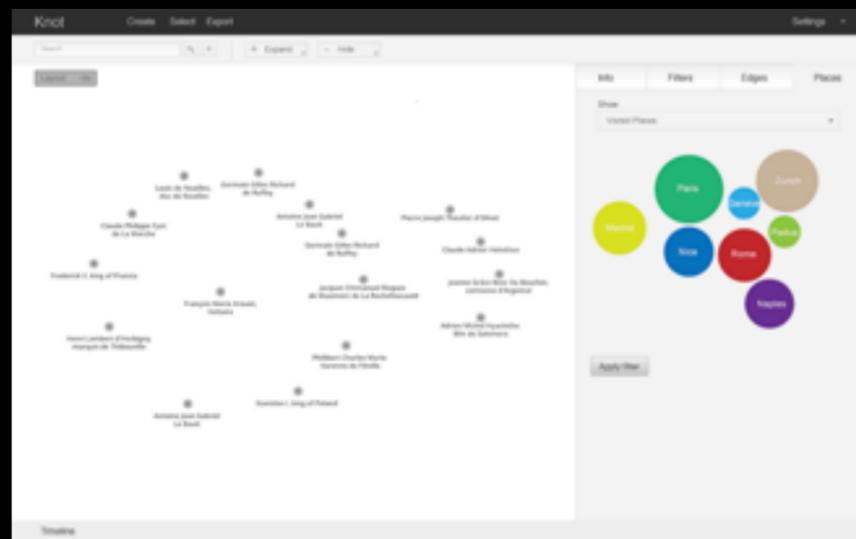
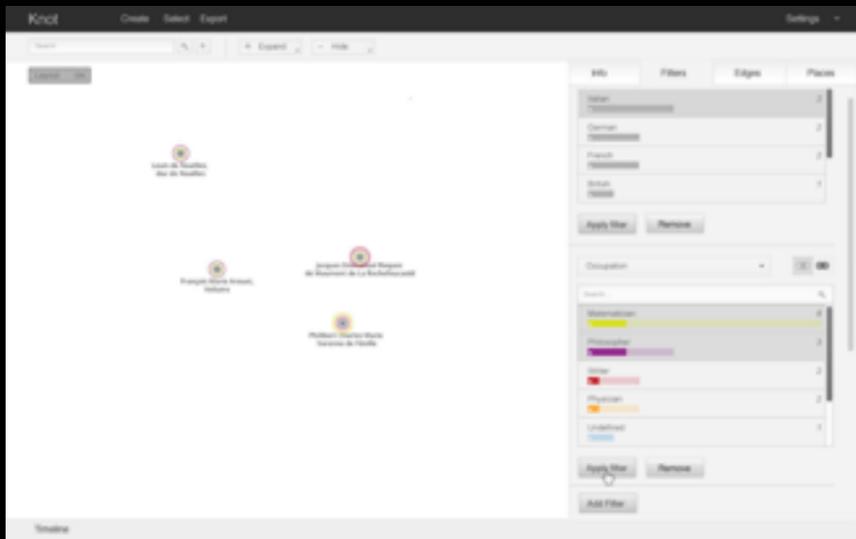
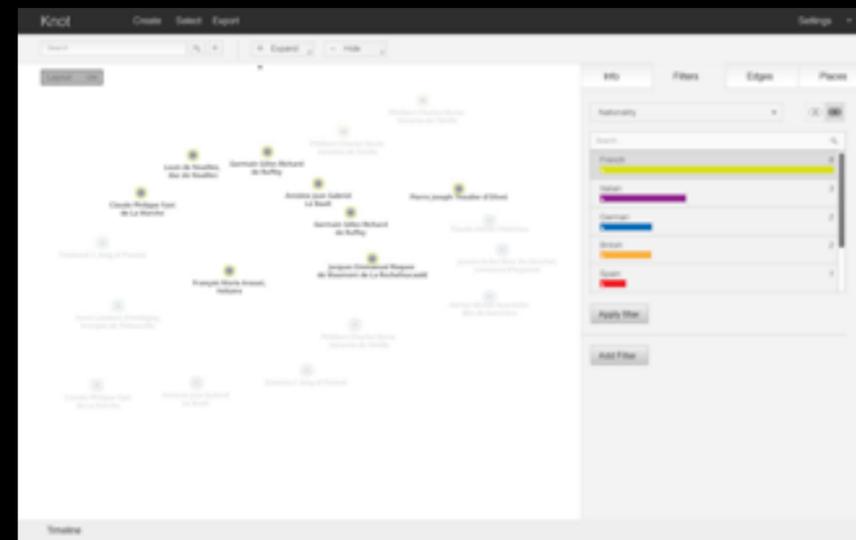
## Advantages

**Great for the exploration of the single entities and local context**

**Good for communicating insights**

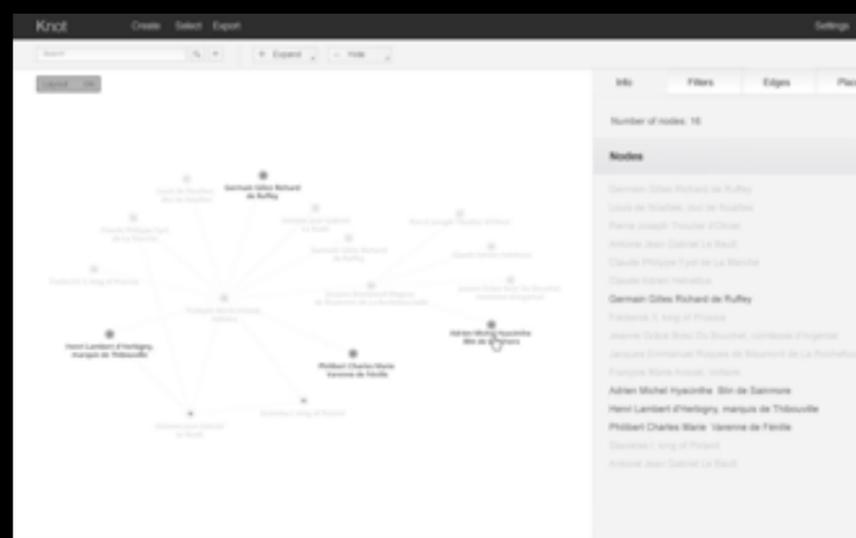


Discussing and defining needs and requirements for the design of a network visualization tool for the MRofL project.

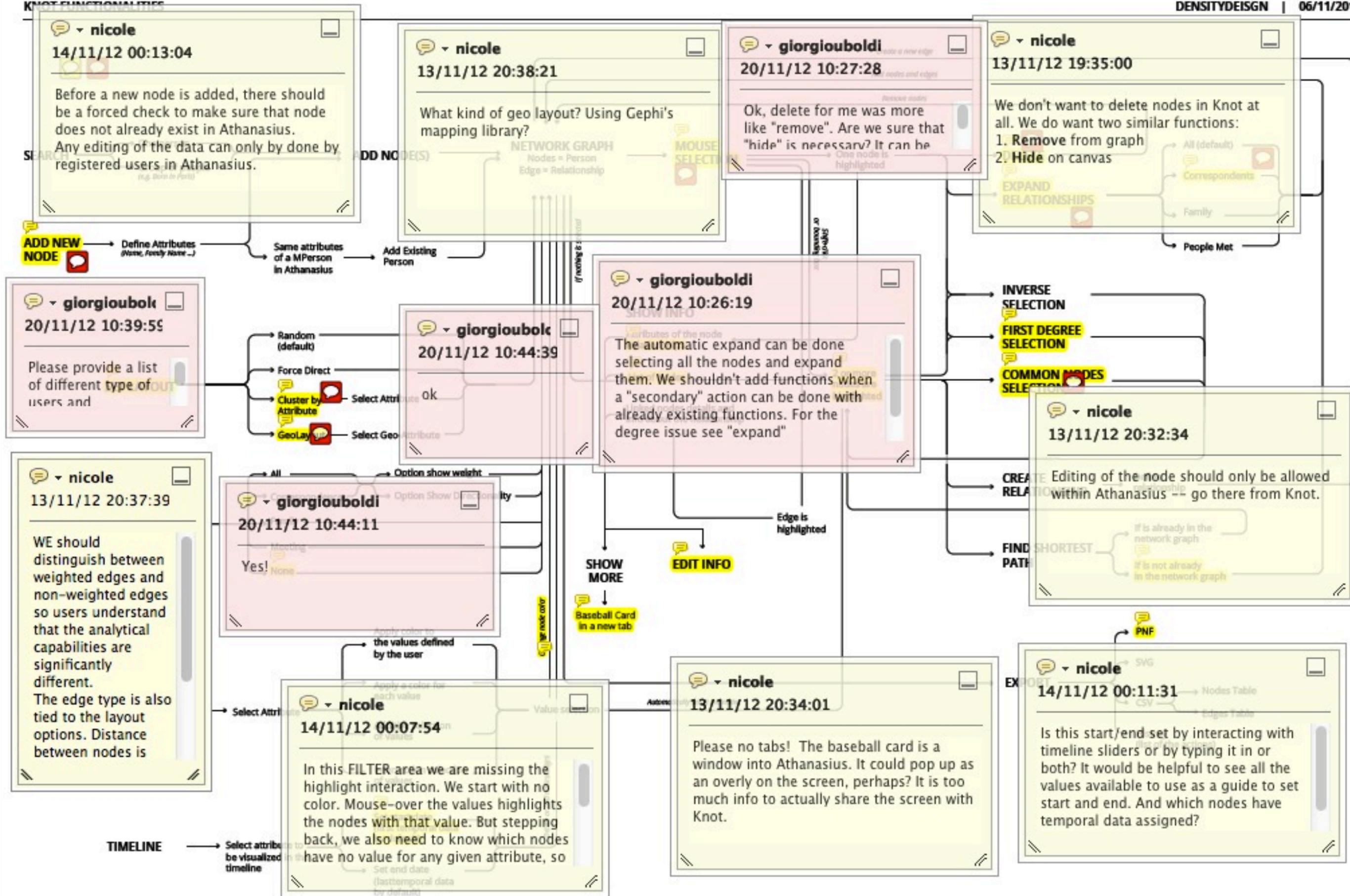


**Node information**

Name	Correspondence	Meeting
Maria Anne de Volvy-Charmont, marquise du Defland		
Antoine	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Marquise du Defland	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Title of the letter ...	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
1807	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Place of birth	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Place of death	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Château de Chammond	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Learning Society	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Society 1	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Society 2	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Society 3	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
United Place	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Place 1, 1750	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Place 2, 1743	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	
Place 3, 1745	Title of the letter ... Person 1 Person 2 02/02/1740 City 1 City 2 Name Archive	







Search for a person (or group of persons)



Graph Layout OFF



INFO

FILTERS

EDGES

PLACES

Number of nodes: 0

Nodes



## Design principles

- 1. The interface as an environment for interpretative activities**
- 2. Allowing the construction of the network**
- 3. Exploiting the multidimensional nature of the data**
- 4. Data manipulation and enrichment**

# 1. Creation of the network



Search for people, places and events

CREATE

LAYOUT

FILTERS



## 2. Exploration of the data



### 3. Visualization of the graph



Search for people, places and events

CREATE

LAYOUT

FILTERS



Arturo Veronesi

Vincenzo Monti  
Benetti XIV  
Calandrelli  
Gallani

Vercelli

▶ 18 Nodes

+	×	
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Lagrange Giuseppe

Marin

Carlo Gozzi

Porti

Goldoni

Beccaria

Gian Battista Vico

Bonifoglio

Bartolomeo Gallo

Caracciolo

Francesco Algarotti

Giovanni Meli



## 4. Understanding the data and the sources

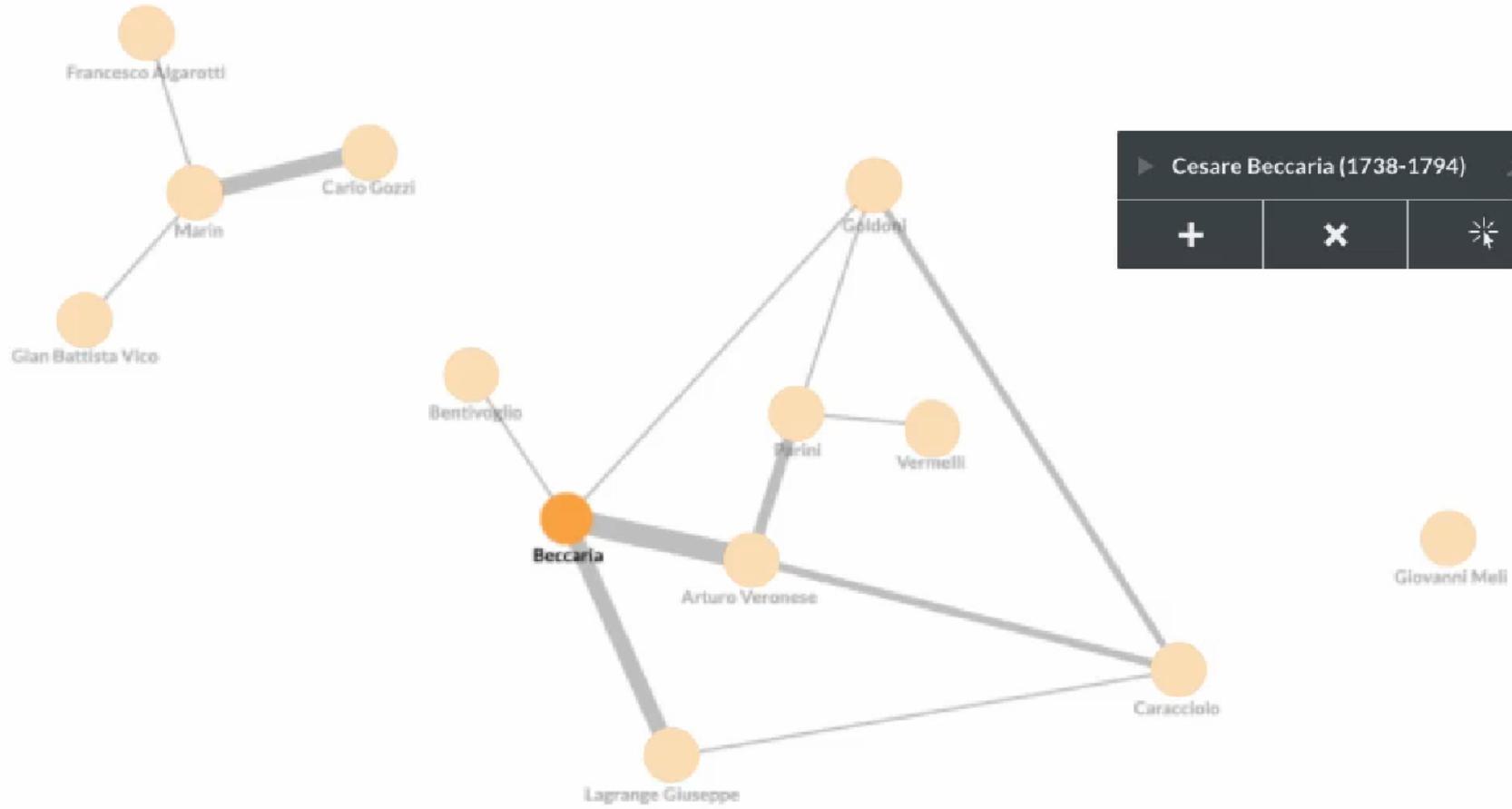


Search for people, places and events

CREATE

LAYOUT

FILTERS



## 5. Data manipulation and enrichment

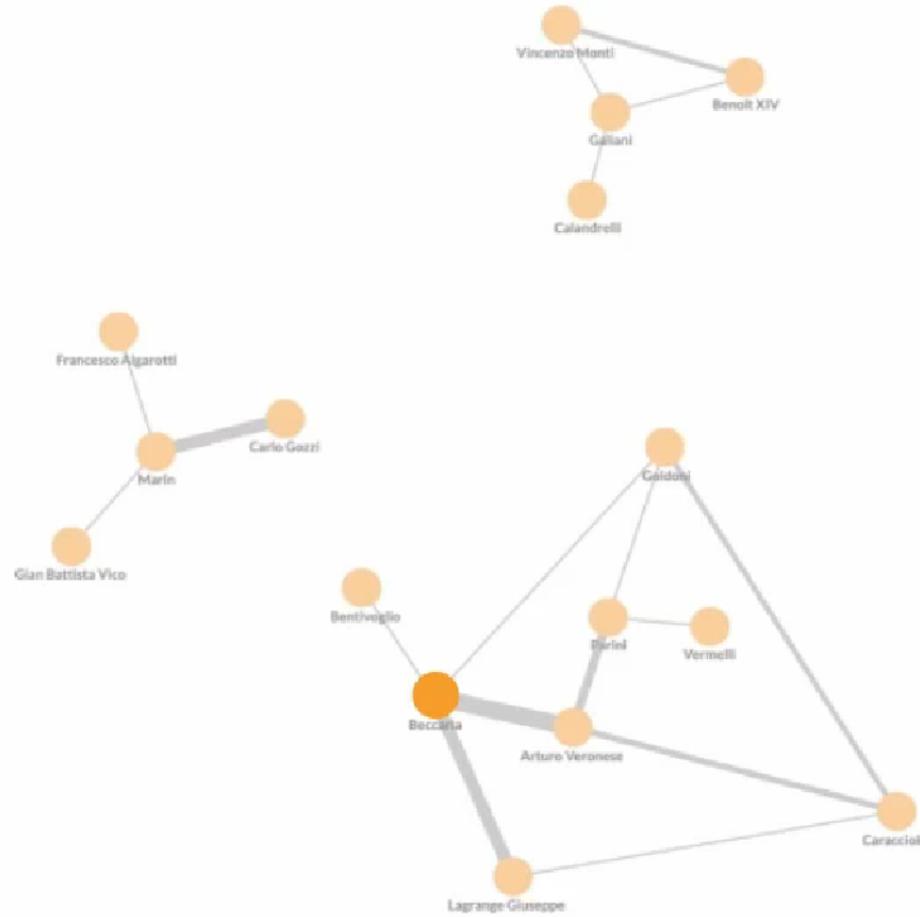


Search for people, places and events

CREATE

LAYOUT

FILTERS



▼ Cesare Beccaria (1738-1794)

Information

Correspondents	4	102
Letters Received	29	258
Letters Sent	17	301
Family	0	4
Meeting	1	12

+

×

Giovanni Mell

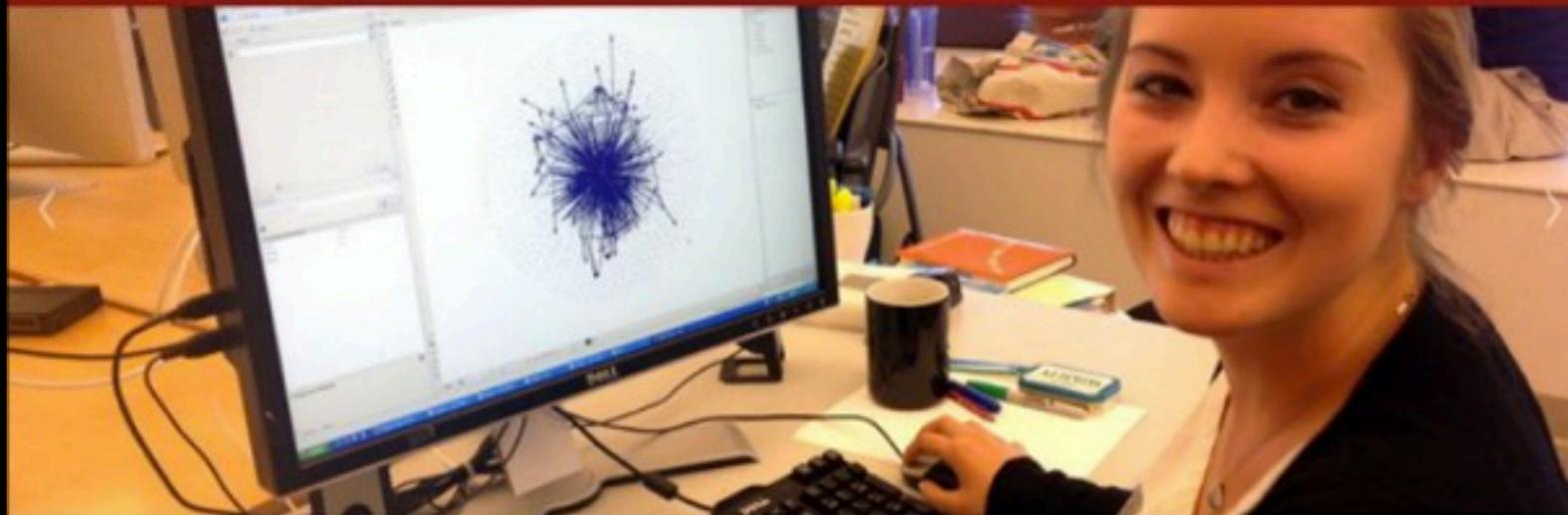


Next steps

**1. Implementation of the new design**

**2. Test the tool with the scholars**

**3. Focus on the visual representation of the uncertainty of the data**



## HUMANITIES + DESIGN

[About](#) [People](#) [Laboratory Manual](#) [Laboratory Notebook](#)

Our mission is to produce, through the lens of humanistic inquiry, new modes of thinking in design and computer science to serve data-driven research in the humanities. We believe that humanistic inquiry, grounded in interpretation, has much to contribute to the development of technologies if they are to help us reveal uncertainty and ambiguity, and allow human-scale exploration of complex systems.

We focus on developing skills that are broadly applicable to the data humanist including data management, collaboration, visual literacy, and the production of publication-ready visuals. The laboratory setting fosters critical engagement around digital methods and provides a context for the development of a visual language around specifically humanistic inquiry into data. In the process we build both small and large-scale tools driven by specific research needs.

Humanities scholars have an important role to play in problematizing data structures and visual models of data. To do this, humanities scholars need to develop an understanding of technology and its influence in the construction of meaning. Technology has a mediating influence on research, but we can influence the design of those mediating technologies.

Our research agenda is not defined by any one technology nor does it assume that the application of computing to humanities research requires quantitative methods. Instead the aim of the lab is to empower researchers to apply their own methods by exposing them to techniques and tools for managing and manipulating data.

Nicole Coleman, Dan Edelstein, Paula Findlen  
September 24, 2012

### Related Projects and Partners



Now a project of Humanities + Design, Mapping the Republic of Letters is where our work with data visualization for humanities research began.



DensityDesign Research Lab at the Politecnico di Milano is our partner lab. We have worked with them for years now on developing a visual language compatible with humanistic research.



We are part of the Center for Spatial and Textual Analysis (CESTA), funded by the Dean of Research. CESTA is also home to the Stanford Literary Lab and the Spatial History Lab.

**design** without **designers**

**Process** is the new god; not product.[...] The theory after theory is anchored in MAKING, making in the poetic sense of poiesis, but also in the sense of design carried out in action.

(Schnapp & Presner, 2009)

**humanities + design**

**design + humanities**

Giorgio Uboldi | @giorgiouboldi

Density Design Research Lab. | @densitydesign

Thanks,  
Questions?