

Towards a Network Analysis of Hans Sloane's Collection: A Preliminary Study

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Presentation Outline

- 1. The Sloane Lab Project
- 2. Knowledge Base & Data Sources
- 3. Historical Catalogues
- 4. The Dataset
- 5. The Sloane Social Network











The Sloane Lab Project

- The Sloane Lab is a TANC
 Discovery Project (2021–2024)
- We aim to integrate a highly fragmented collection through digital means...
- ...opening it up for anybody to research and study









Sloane & His Collection

- Hans Sloane (1660–1753), physician, naturalist and collector
- Collected 70,000+ objects of many different kinds
- One of the founding collections of the British Museum, Natural History Museum and British Library



 ∇E

Sloane Collection







Enlightenment Gallery (British Museum) **Sloane Herbarium** (Natural History Museum)

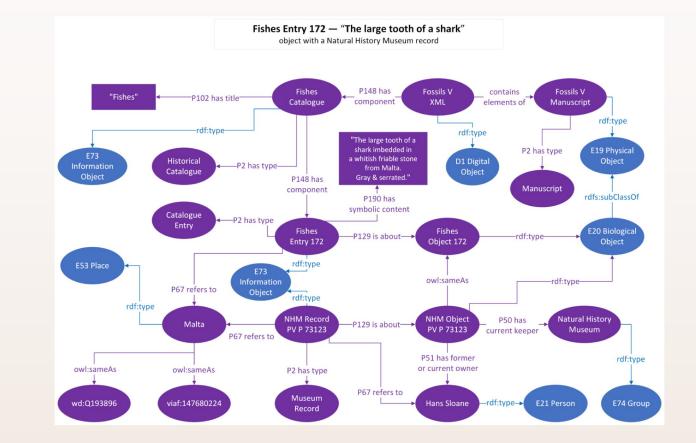
A Participatory Project

- Involve not just institutions, but also communities
- Look at the collection from different perspectives
- Attempt to remedy "data absences" and biases

Ortolja-Baird, A., & Nyhan, J. (2021). "Encoding the haunting of an object catalogue: on the potential of digital technologies to perpetuate or subvert the silence and bias of the early-modern archive". Digital Scholarship in the Humanities.

Sloane Lab Knowledge Base

- We are building a **knowledge base** that will aggregate and open up knowledge about the collection
- Data model based on
 Semantic Web standards
 and on the CIDOC CRM
 ontology



Data Sources









STATUS	SOURCE	SOURCE		
Completed ~	Sloane Lab – People v	Wikidata – People v		
ENTRY TEXT	NAME	SEARCH		
518.	John Ranby	John Ranby		
A ratle Snakes tail from Lisbon.	ALIASES	DESCRIPTION English surgeon		
213.1	Mr Ranby, Mr. Ranby, John Ranby			
	DESCRIPTION			
SELECTED MENTION	English surgeon, FRS (1703-1773)	01701518		
Mr. Ranby	LINKED IDENTIFIERS			
ENTRY NOTES	XML: John_Ranty	Link Authority to Entity		
	VAF: 09484380			

Historical	
Catalogues	

Contemporary Catalogues & Other Datasets Existing Knowledge Bases & Authority Files Annotation Tools

- Data will be imported from several different sources
- At this stage, most of the data comes from historical catalogues

Historical Catalogues



- 5 manuscripts containing
 Sloane's catalogues were
 encoded as TEI-XML in a
 previous project
- The data from these
 catalogues is readily
 available to us

Enlightenment Architectures project:

https://reconstructingsloane.org/enlightenmentarchitectures/

Mycollanios From 1355. to 1367. among an 1. A parille of knives with bone Rafts burnt in the find of Condom 6 2. A brigh of Stridges Cathers. 3. A piece of the keel of a thip ~ 199 & oat by the wormy. 1226. 4. A the from Coromandel X 1226.5. The fame 6. An wory instrumont -- 0.1.0

Many Uncertainties

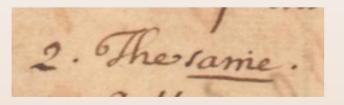
• "given to me by Mr. Smith"... but who is he?

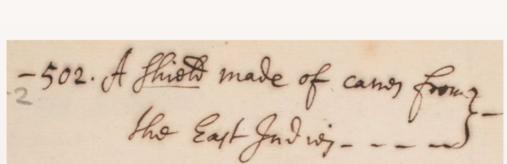


- "A shield made of canes from the East Indies"... but where?
- "A belt made of unicorns horn"



• "The same."





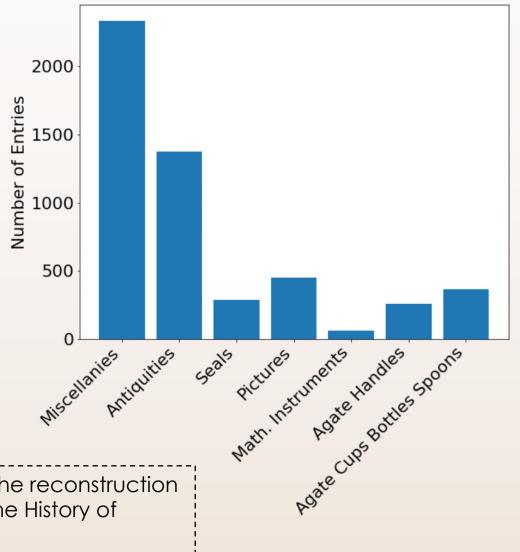


Initial Dataset



- 7 catalogues (+2 indexes)
- 5573 entries in total
- 939 (17%) mention a person
- 874 (16%) mention a place

Sloan, K. & Nyhan, J. (2021) "Enlightenment architectures: the reconstruction of Sir Hans Sloane's cabinets of 'Miscellanies'", Journal of the History of Collections 33(2), pp. 199–218.





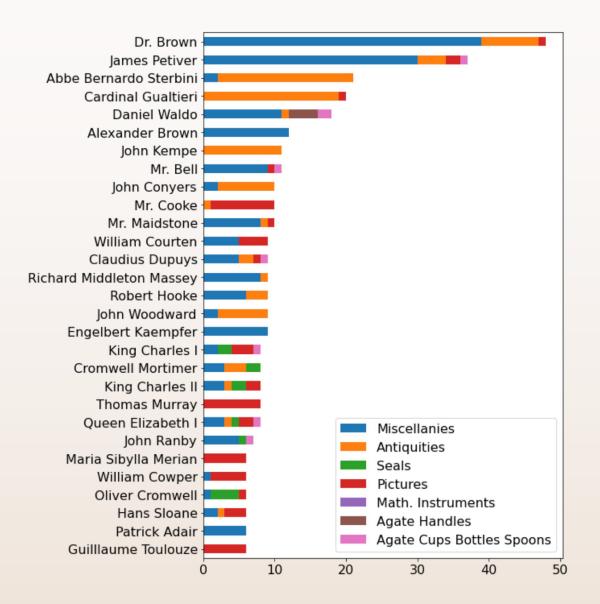
Mentions of People



Catalogue	Entries	Mentioning People	Percentage	Total Mentions
Miscellanies	2335	484	20.73%	548
Antiquities	1376	167	12.14%	195
Seals	622	56	9.00%	69
Pictures	450	191	42.44%	250
Math. Instruments	165	11	6.67%	16
Agate Handles	261	10	3.83%	10
Agate Cups Bottles Spoons	364	20	5.49%	20
Total	5573	939	16.85%	1108

People & Places

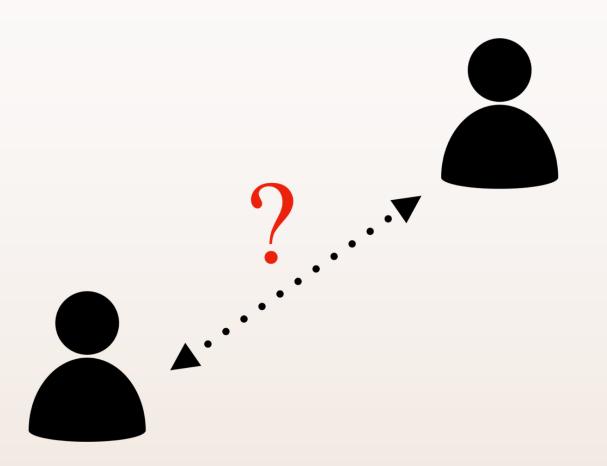






Issues with the Dataset

- Many names of people, but few links between them
- Only 2% of all entries mention 2
 or more people at the same time
- Only 6% of all entries mention both a person and a place
- Absences & biases: who is not mentioned?

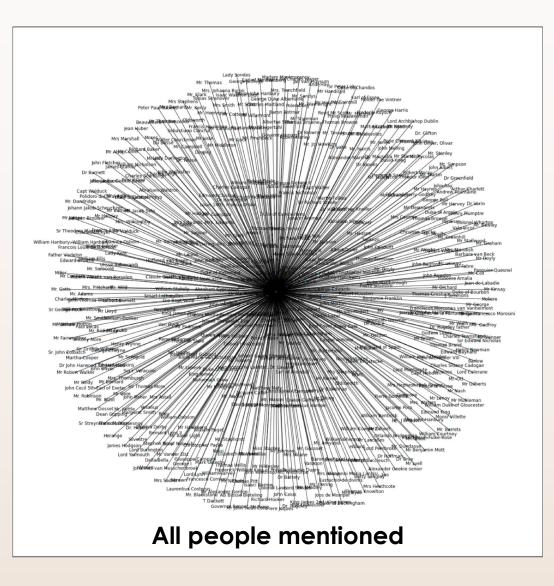


Sloane's Ego Network



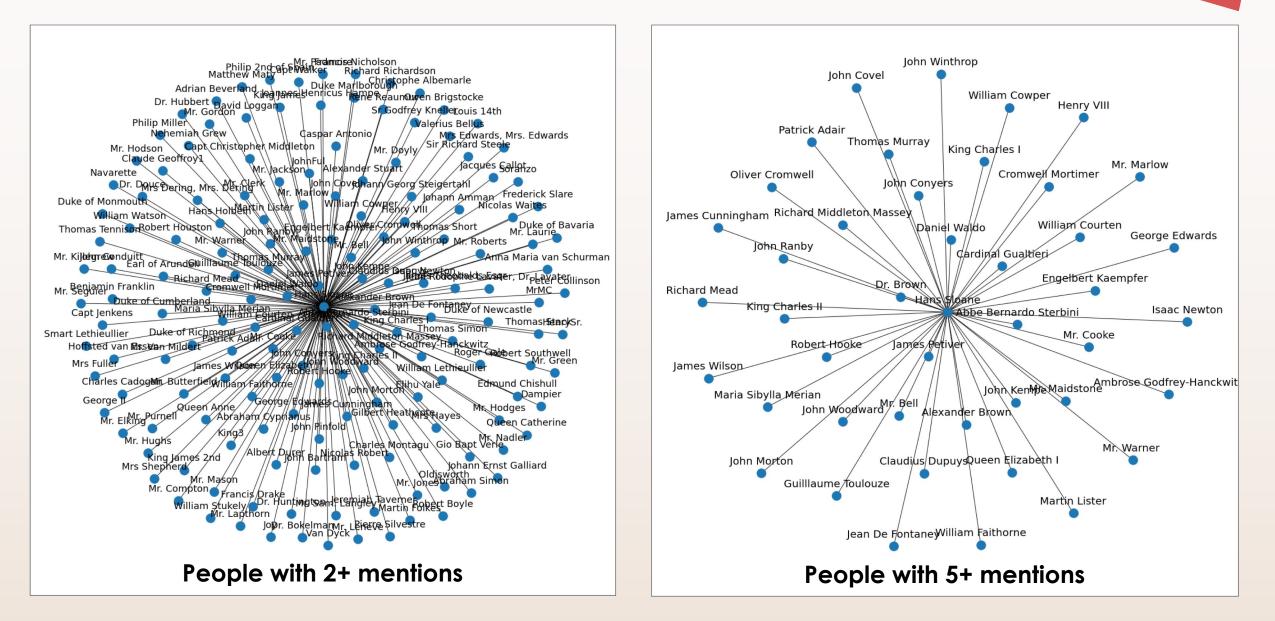
- We can build an **ego network** centred on Sloane
- Using **number of mentions** as a measure of distance
- People who are mentioned more frequently form a sort of "inner circle"

Work done with the contribution of TU Darmstadt students, Historical Network Analysis course



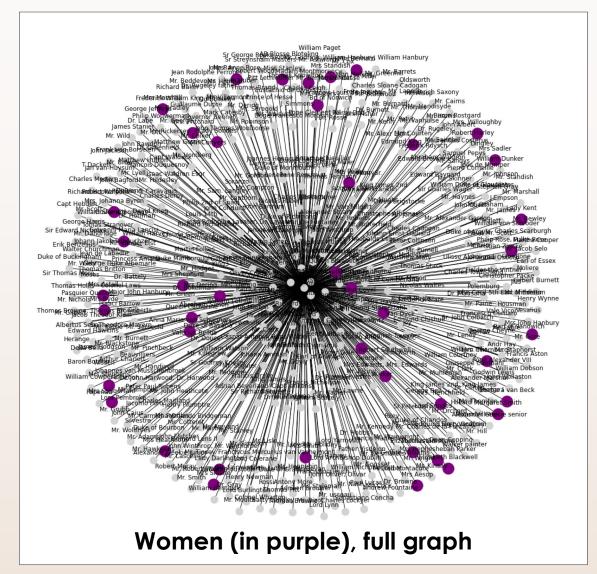
Closeups of the Network

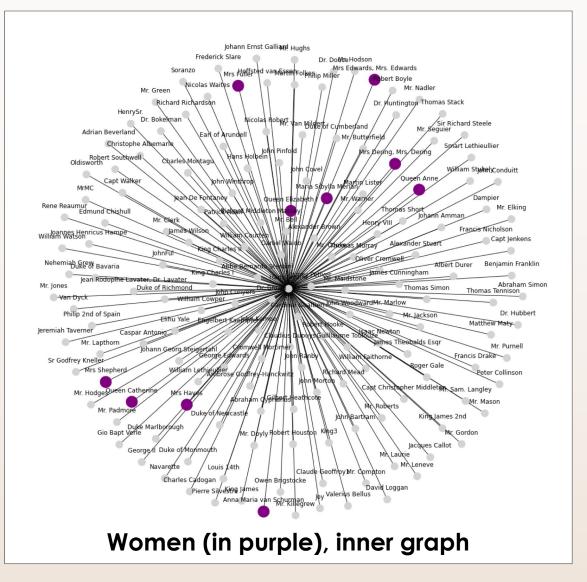




The Role of Women

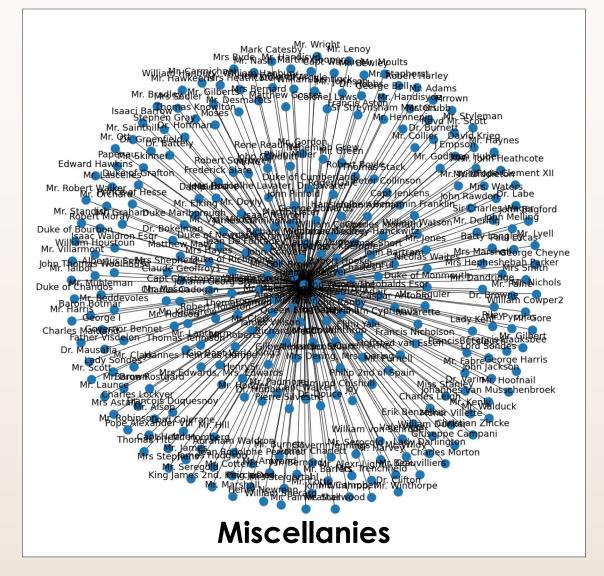


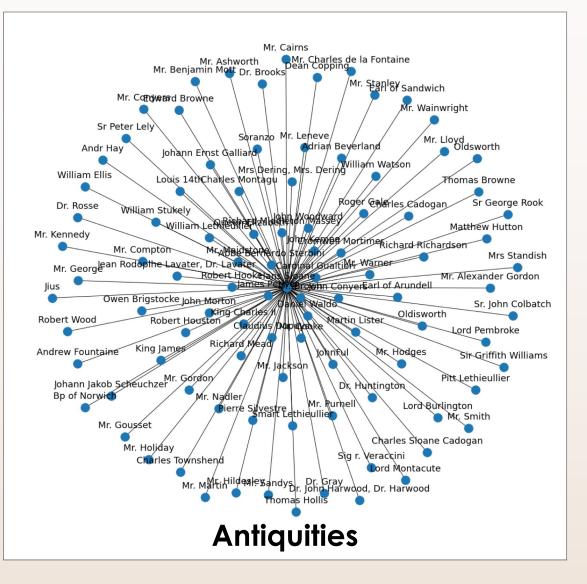




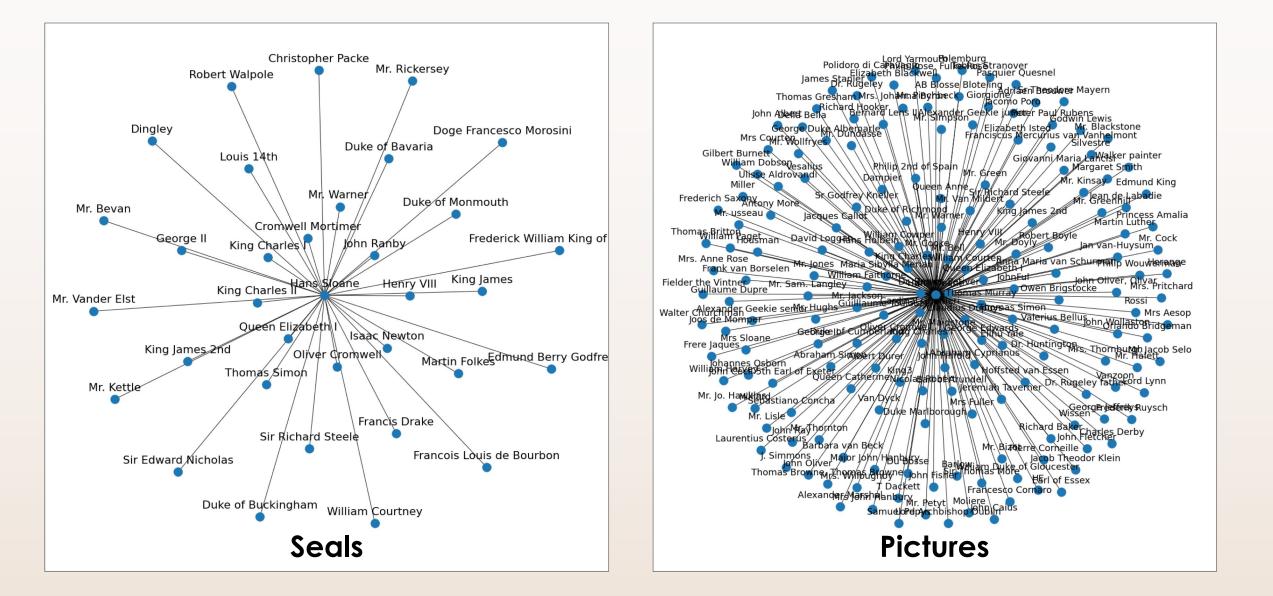
Different Catalogues (1-2)



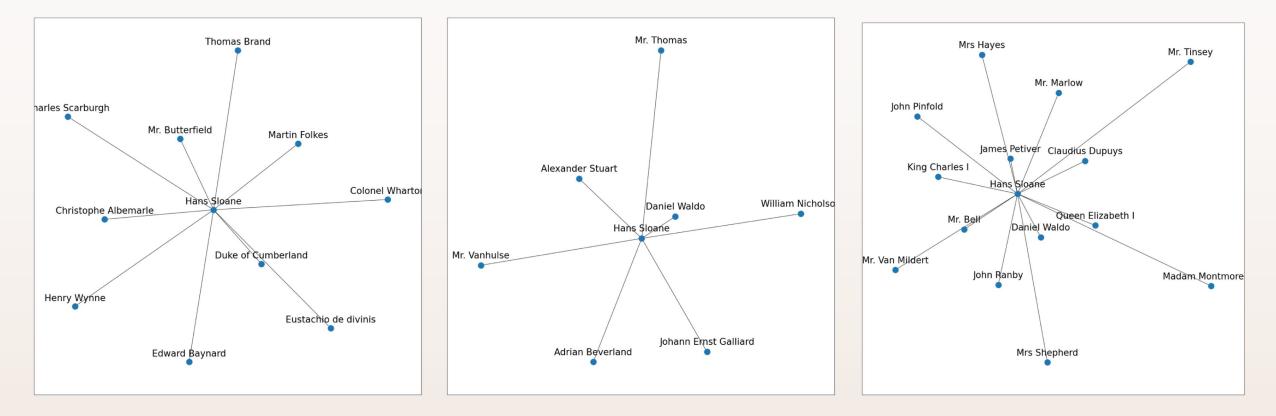




Different Catalogues (3-4)



Different Catalogues (5-6-7)



Math. Instruments

Agate Handles

Agate Cups Bottles Spoons

NE



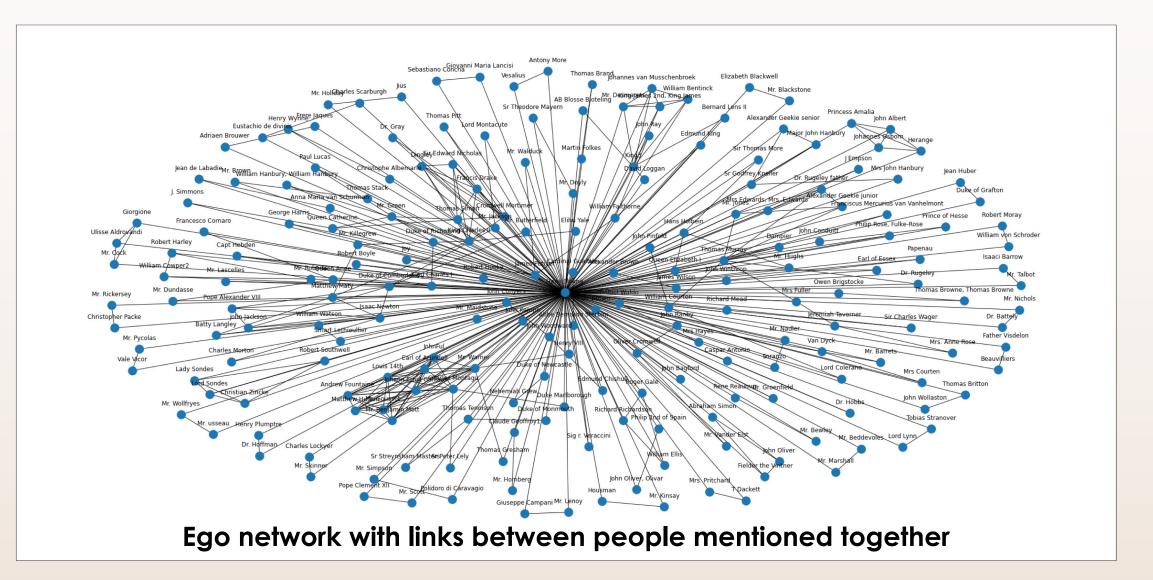
We can **augment the dataset** by annotating:

- 1. People mentioned together in the same entry
- 2. People linked through a **specific place**
- 3. People linked in a different source (e.g. Sloane Letters)
- People linked through occupation or membership (e.g. Royal Society members)

... but this is still a work in progress!

A Preview of #1







- We are working to collect data about Hans Sloane's social network and study it through network analysis
- We conducted an initial experiment on **7 catalogues**, visualising Sloane's **ego network** for each, and for the whole dataset
- We identified an "**inner circle**" of people who appear closer to Sloane, and showed the **contribution of women** to the collection
- The **individual graphs** for each catalogue show **different networks** that depend on the **type of catalogued objects**



Thank you / Q&A

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