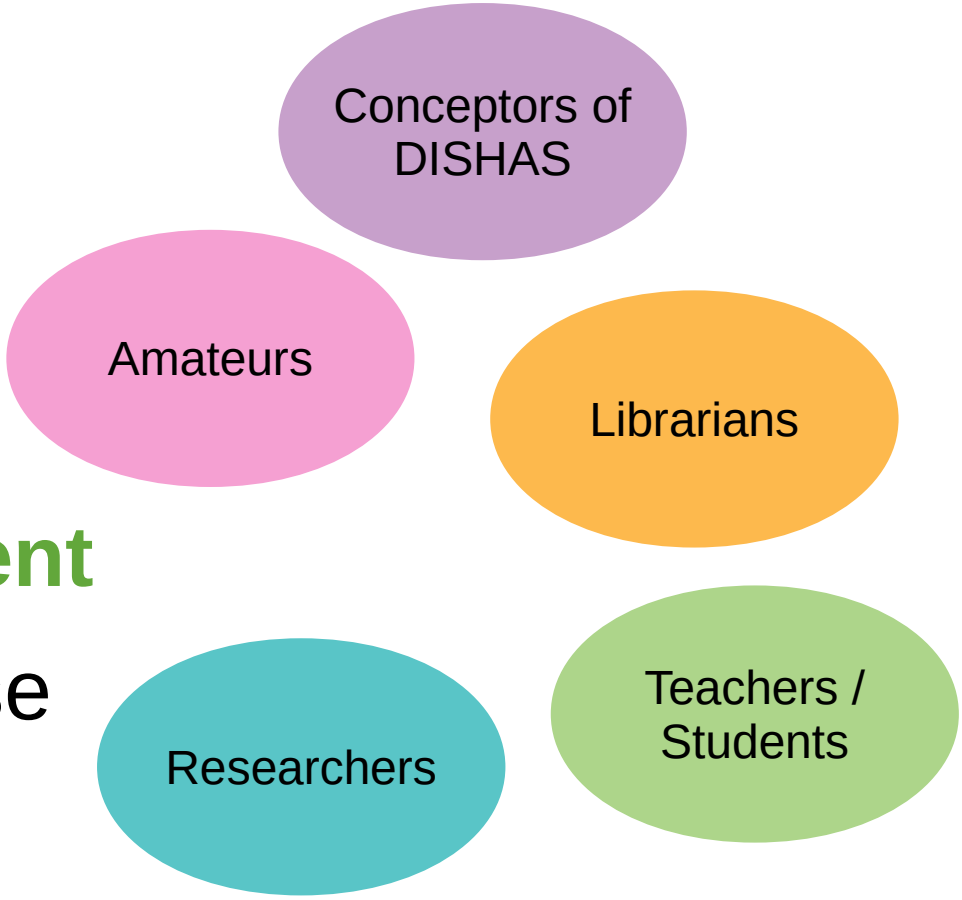
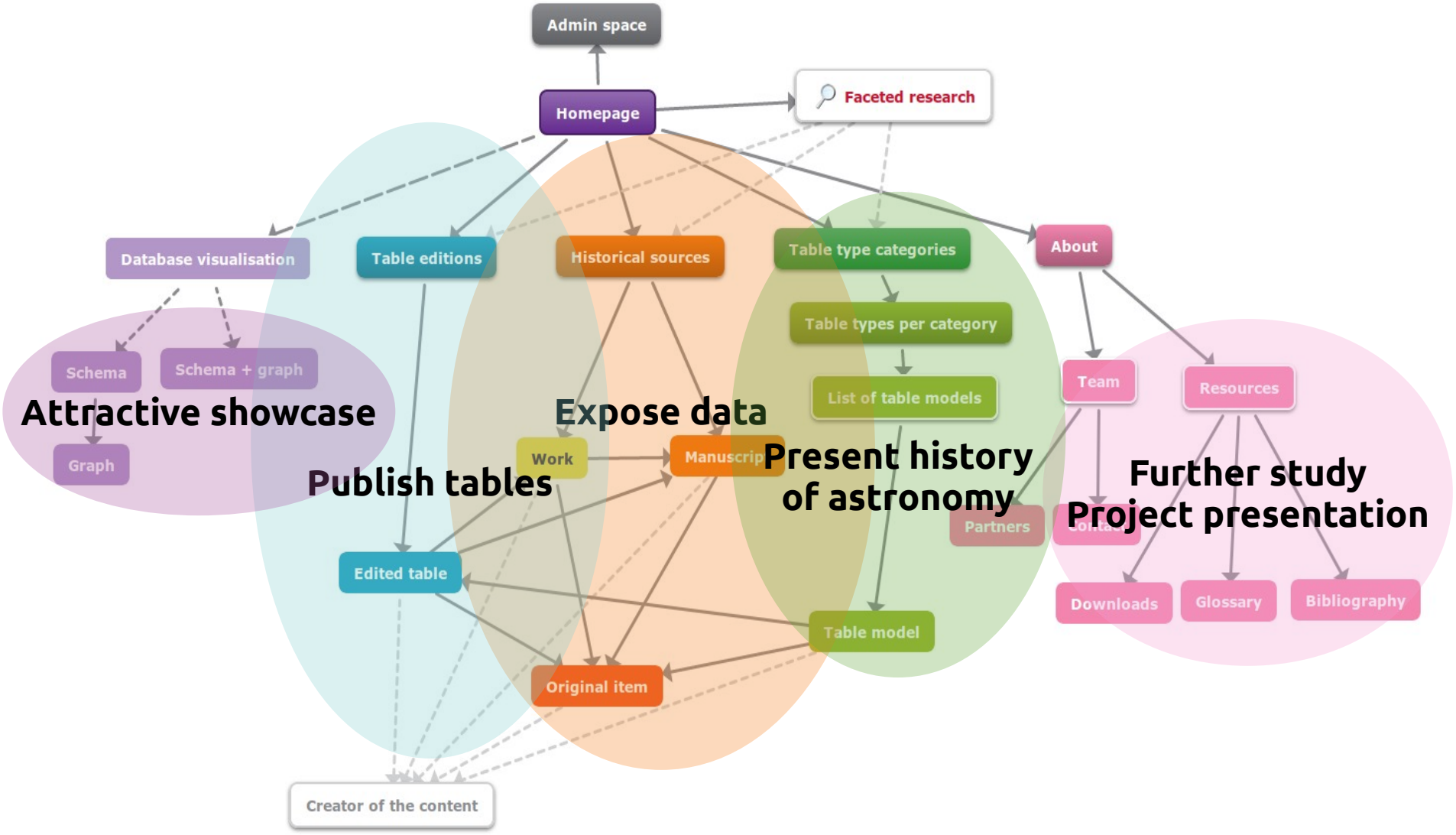
Purpose of the front office

- **Expose** the platform data
- **Publish** tables
- **Present** the project
- Provide **pedagogic content**
- Be an **attractive** showcase




Admin space
Homepage
Faceted research
Database visualisation
Table editions
Historical sources
Table type categories
About
Schema
Schema + graph
Graph
Table types per category
List of table models
Team
Resources
Attractive showcase
Expose data
Work
Manuscrip
Present history of astronomy
Publish tables
Partners
Further study
Project presentation
Edited table
Downloads
Glossary
Bibliography
Table model
Original item
Creator of the content

Aim of the visualizations

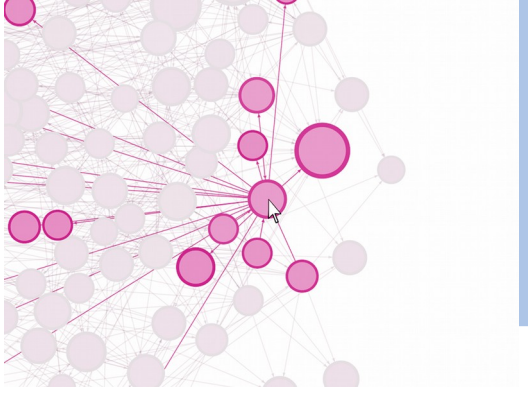
- Explore DISHAS's **data** in its specificity
- Aggregate a lot of data : **quantitative analysis**
- Illustrate the **context of production** of the tables
- Approach the subject in an **interactive way**
- Discover unexpected **correlations** between data
- Provide **course materials**

Granularity of visualizations

Project

Global visualization of **all the data**

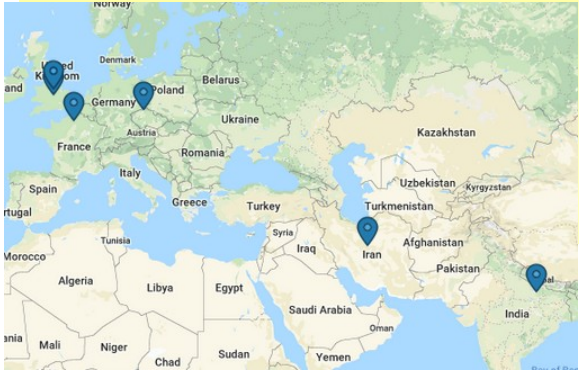
Ex : graph of the entire database



List

Visualization of **an entity** of the database

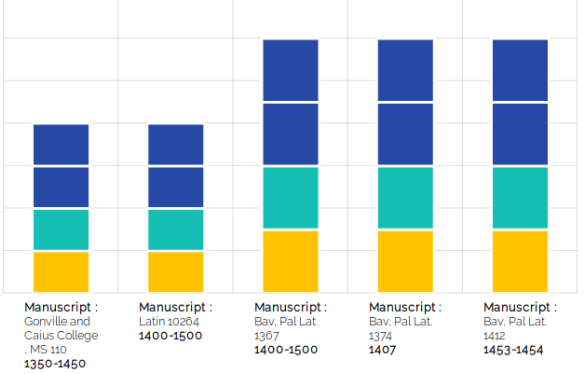
Ex : map of the places of conceptions of all the works



Record

Visualization of a **single record**

Ex : a column chart to represent the manuscript originated from a work



Entire Database

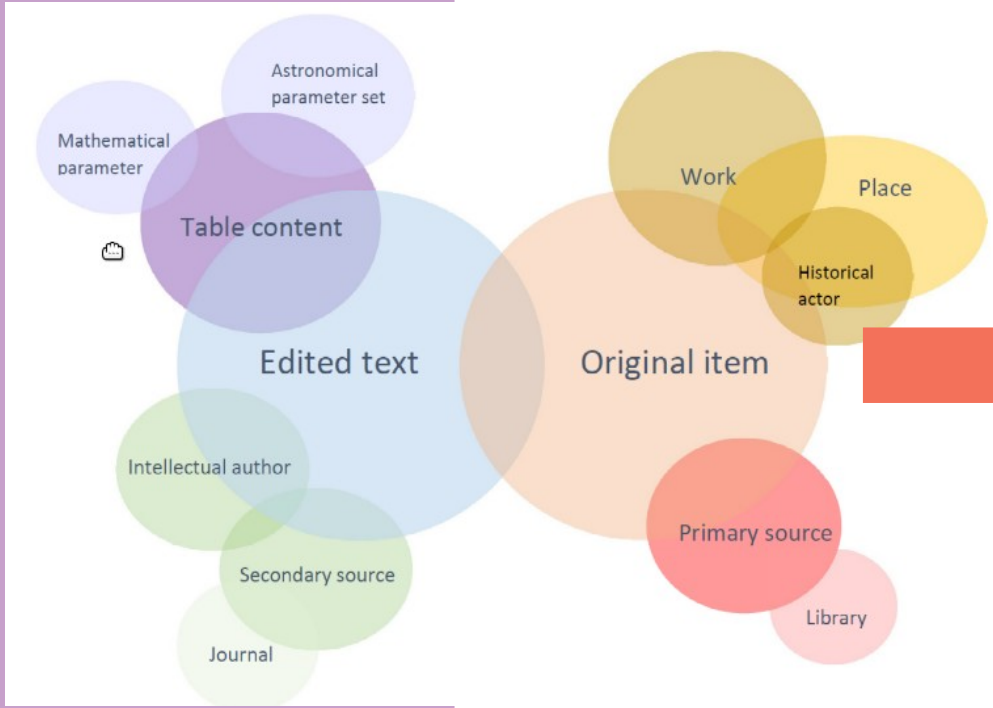
Graph of the database

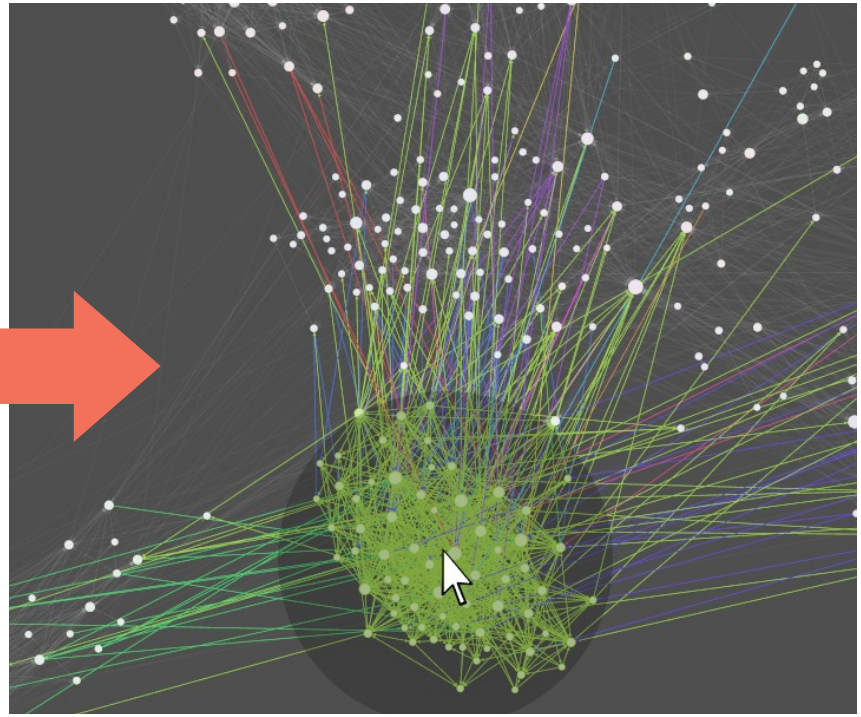
PURPOSES

- Better understanding the conceptual model of the database
- Discover unexpected corrrelations between records
- Be an attractive showcase for the project

Entire Database

Schema + graph





Example

Tools : Sigma js, cytoscape, Gephi, Kibana

Astronomical object
Table type
Formula definition

Discover table models

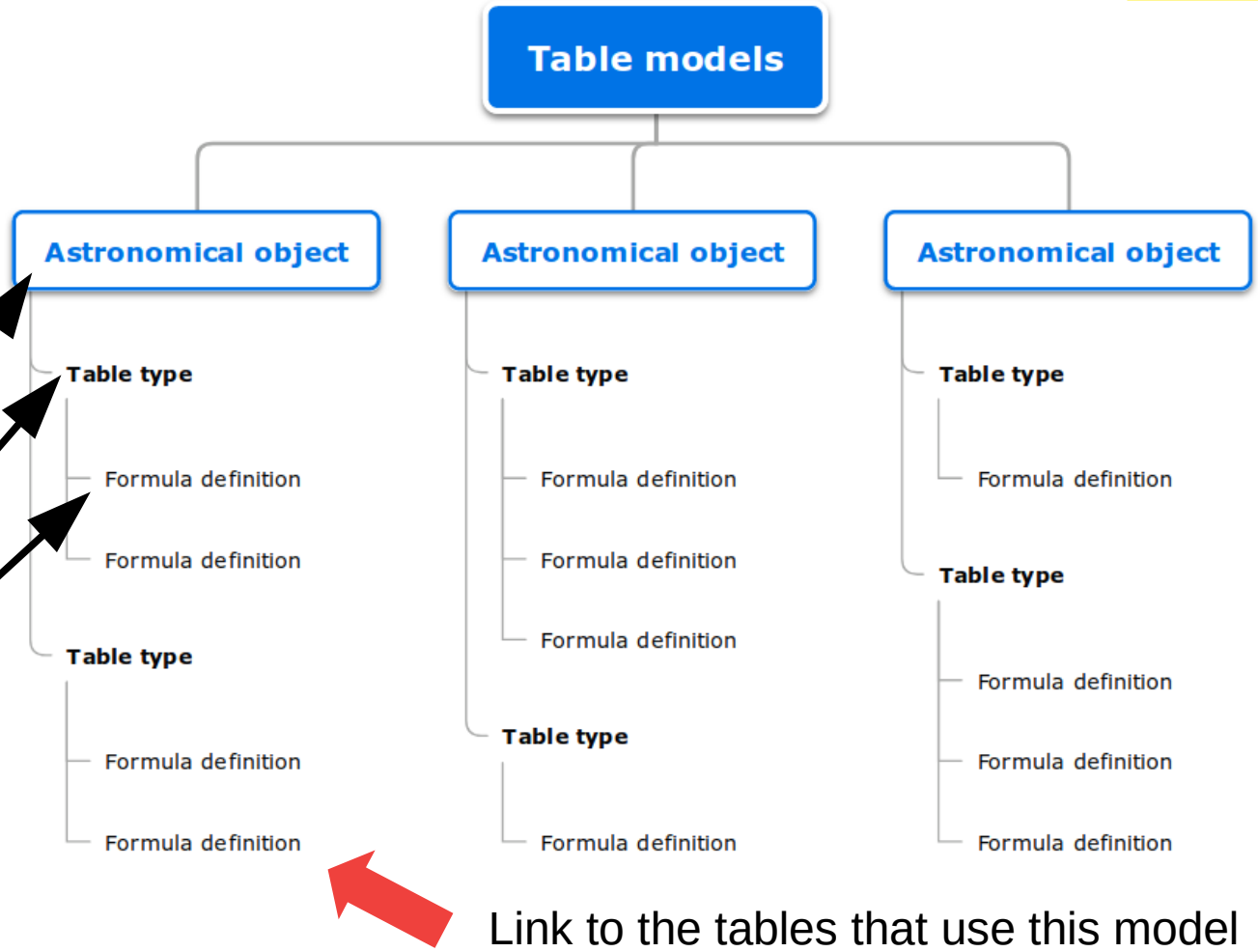
PURPOSES

- Provide editorialized scientific content for the platform
- Give access to the tables via an astronomical logic
- First milestones of a virtual exhibition on medieval astronomy

Discover table models

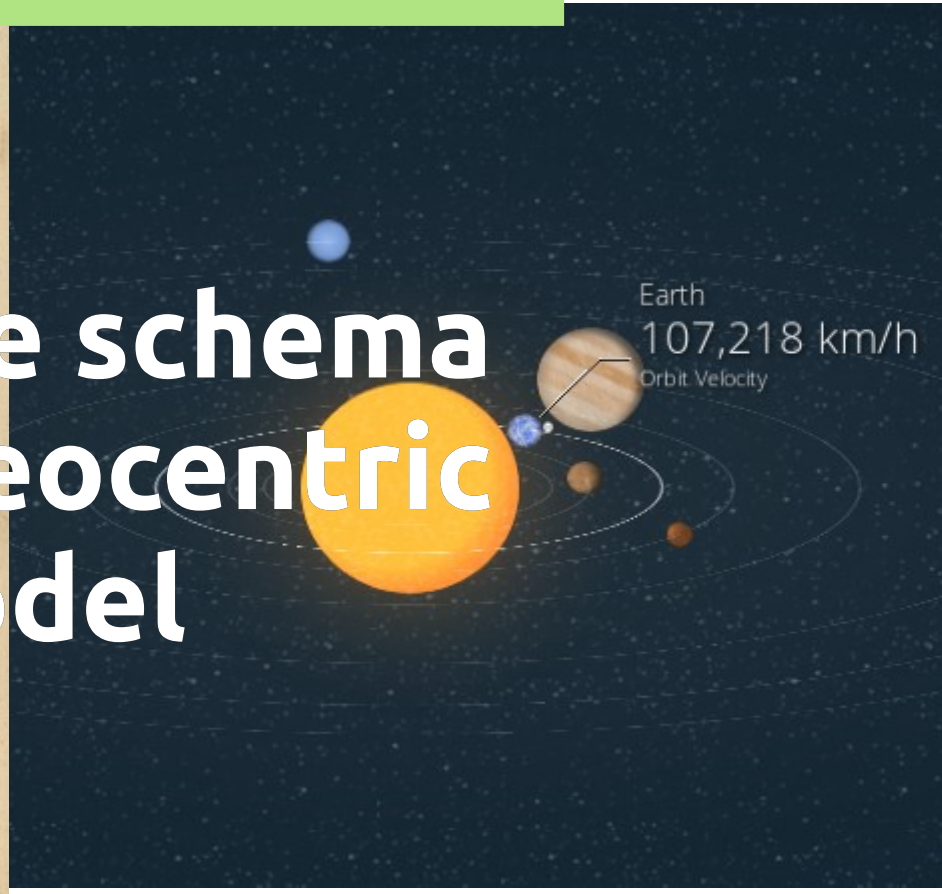
Astronomical object
Table type
Formula definition

Trigonometrical
→ Sine
→ Simple sinus



Astronomical object

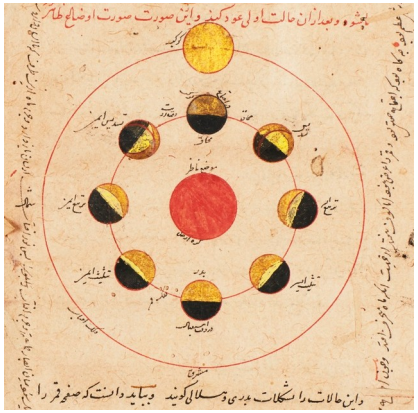
Clickable schema of the geocentric model



Example of an animated schema

Astronomical object

Extensive iconography

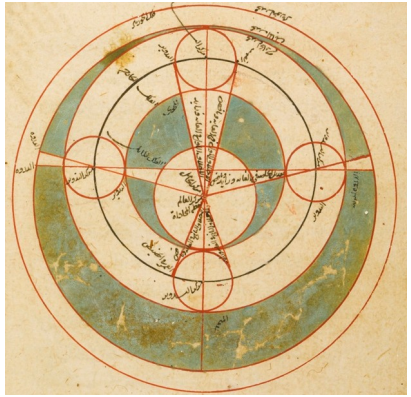


Eclipse

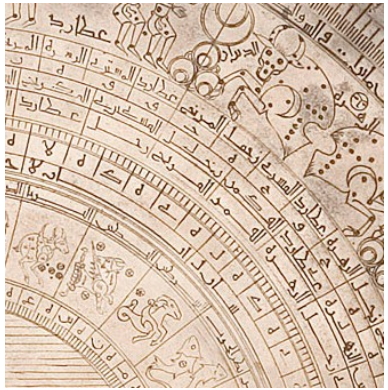
Moon

Mars

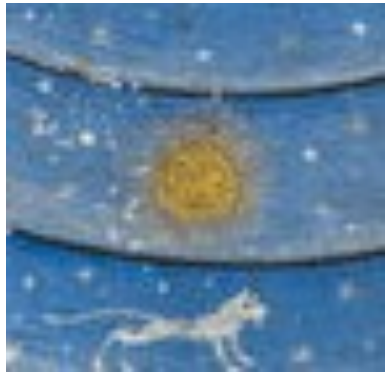
Trigonometrical

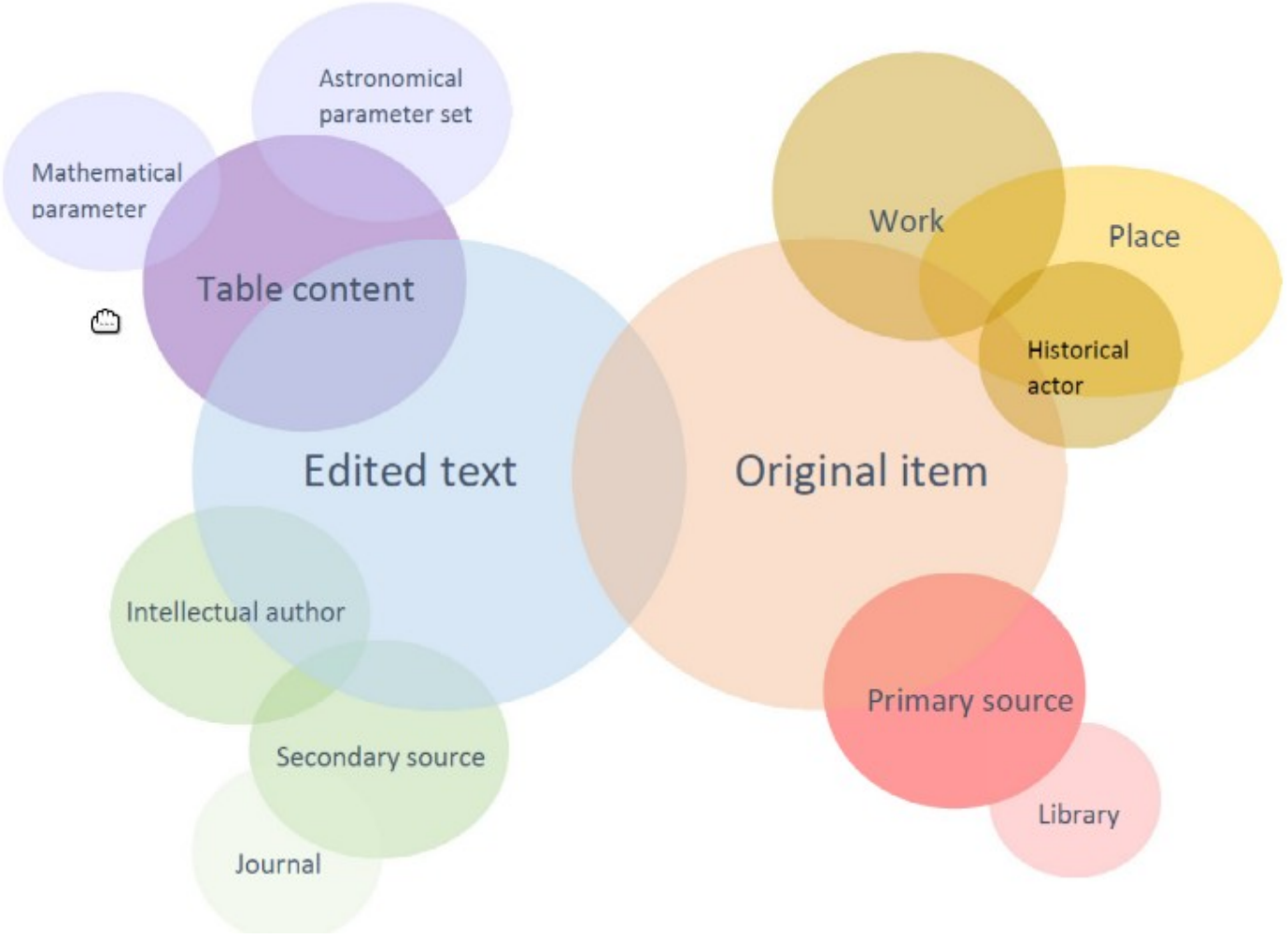


Spherical



Sun




Astronomical parameter set
Mathematical parameter
Table content
Edited text
Intellectual author
Secondary source
Journal
Work
Place
Historical actor
Original item
Primary source
Library

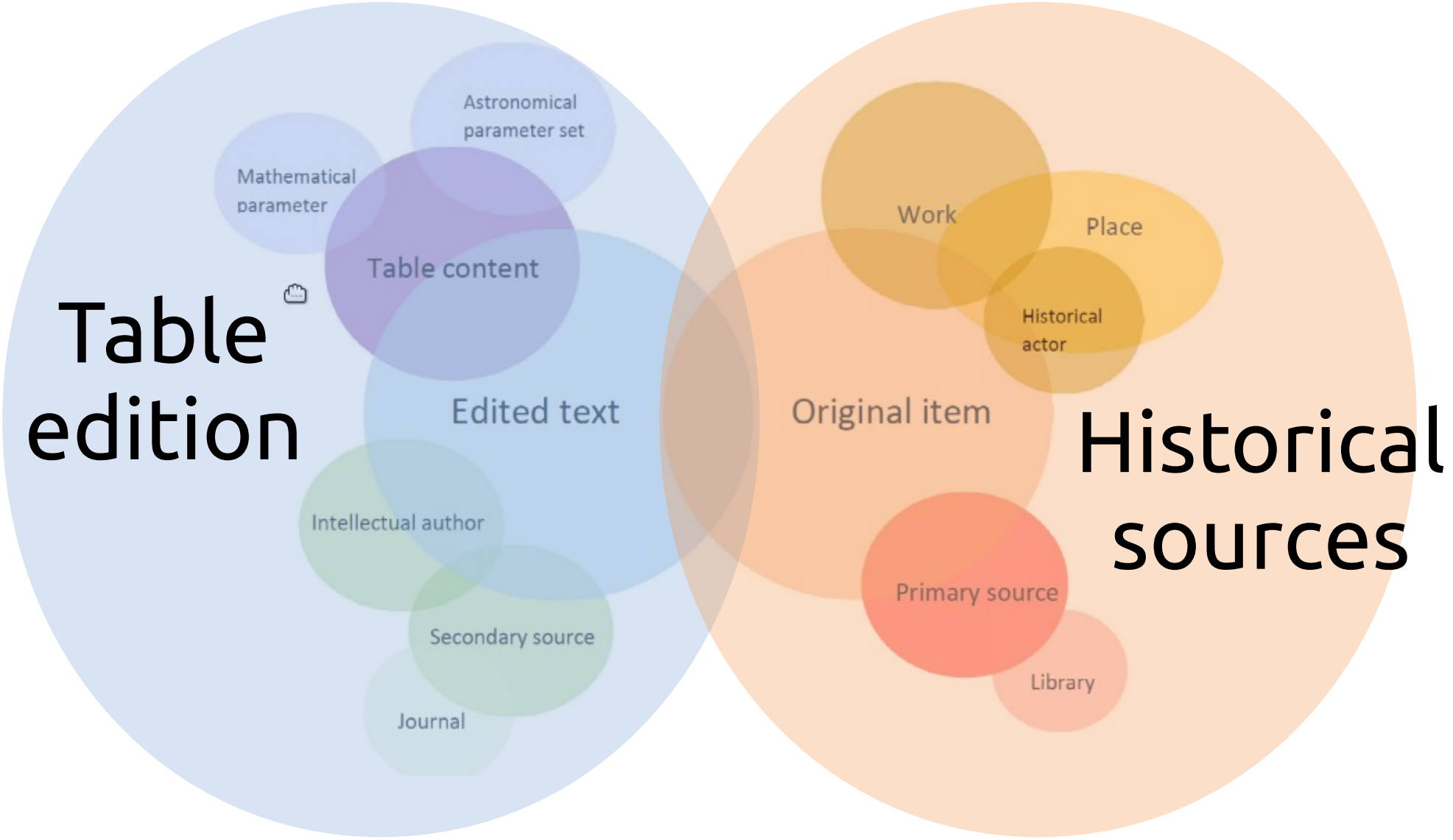
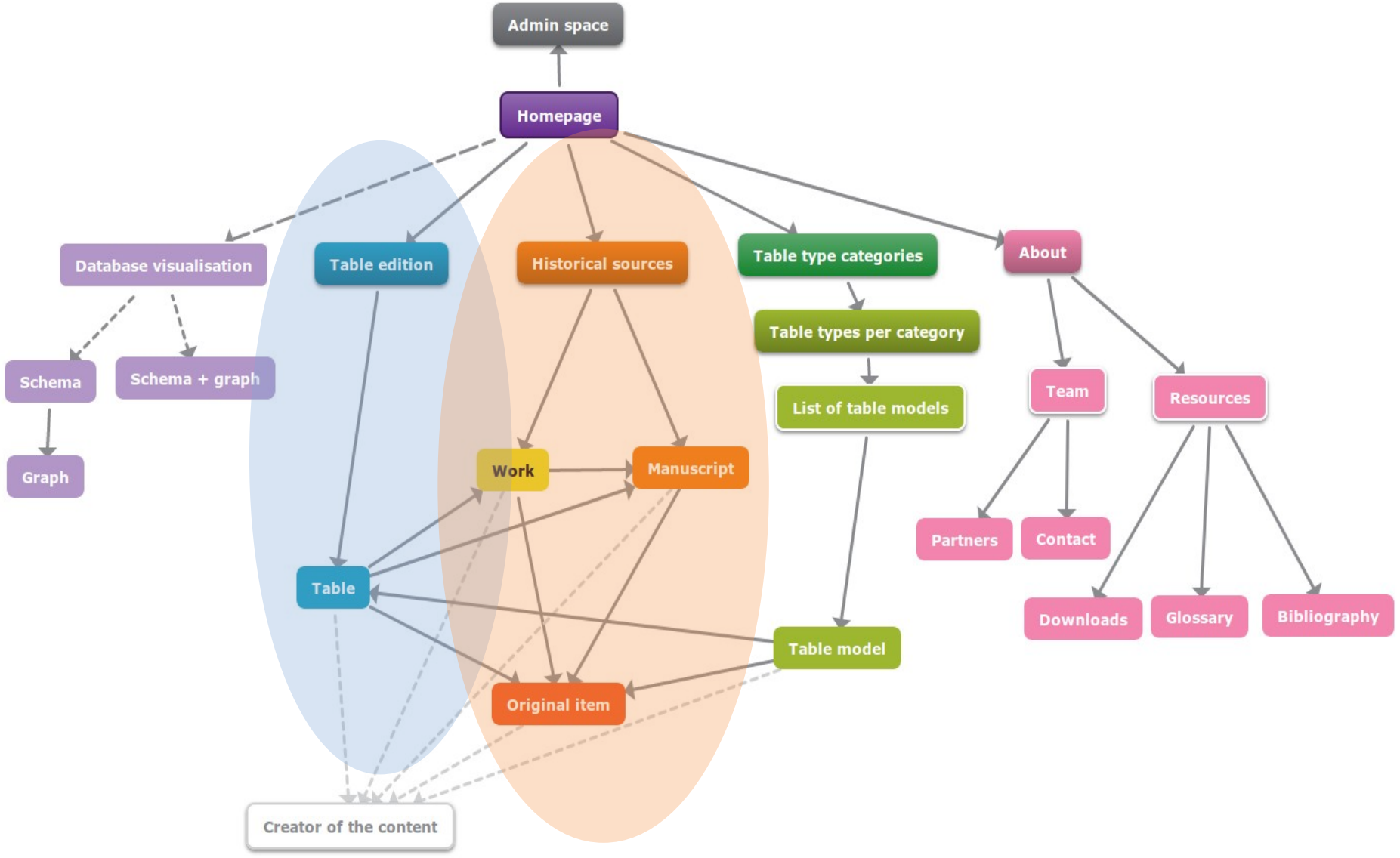


Table edition
Astronomical parameter set
Mathematical parameter
Table content
Edited text
Intellectual author
Secondary source
Journal
Work
Place
Historical actor
Original item
Historical sources
Primary source
Library


Admin space
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Manuscript
Partners
Contact
Table
Downloads
Glossary
Bibliography
Table model
Original item
Creator of the content

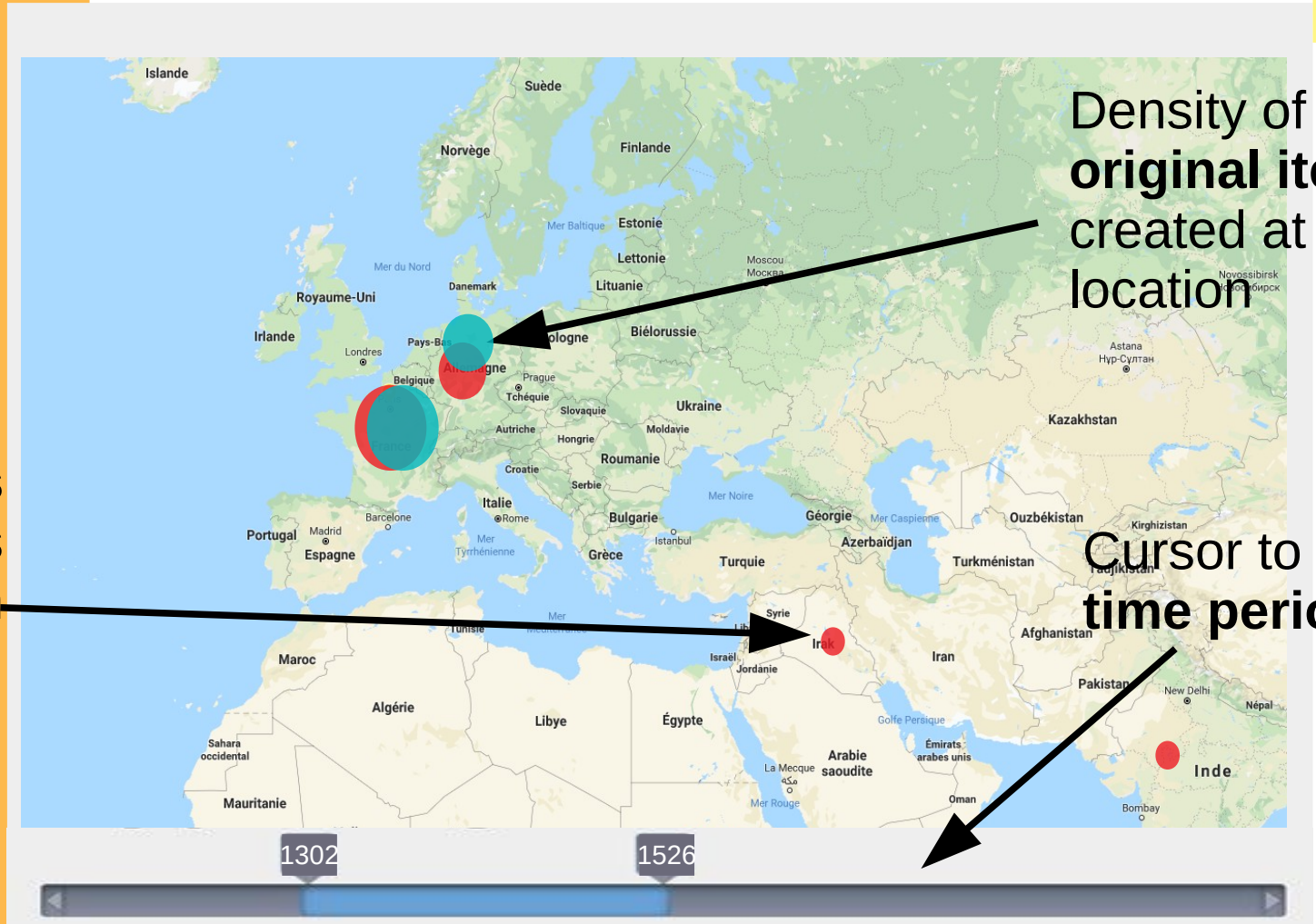
Work
Original
item

Historical sources

PURPOSES

- Focus on the creation context of the tables
- Illustrate the circulation of knowledge
- Show places and periods of intellectual profusion
- Give access to the records of work and primary source

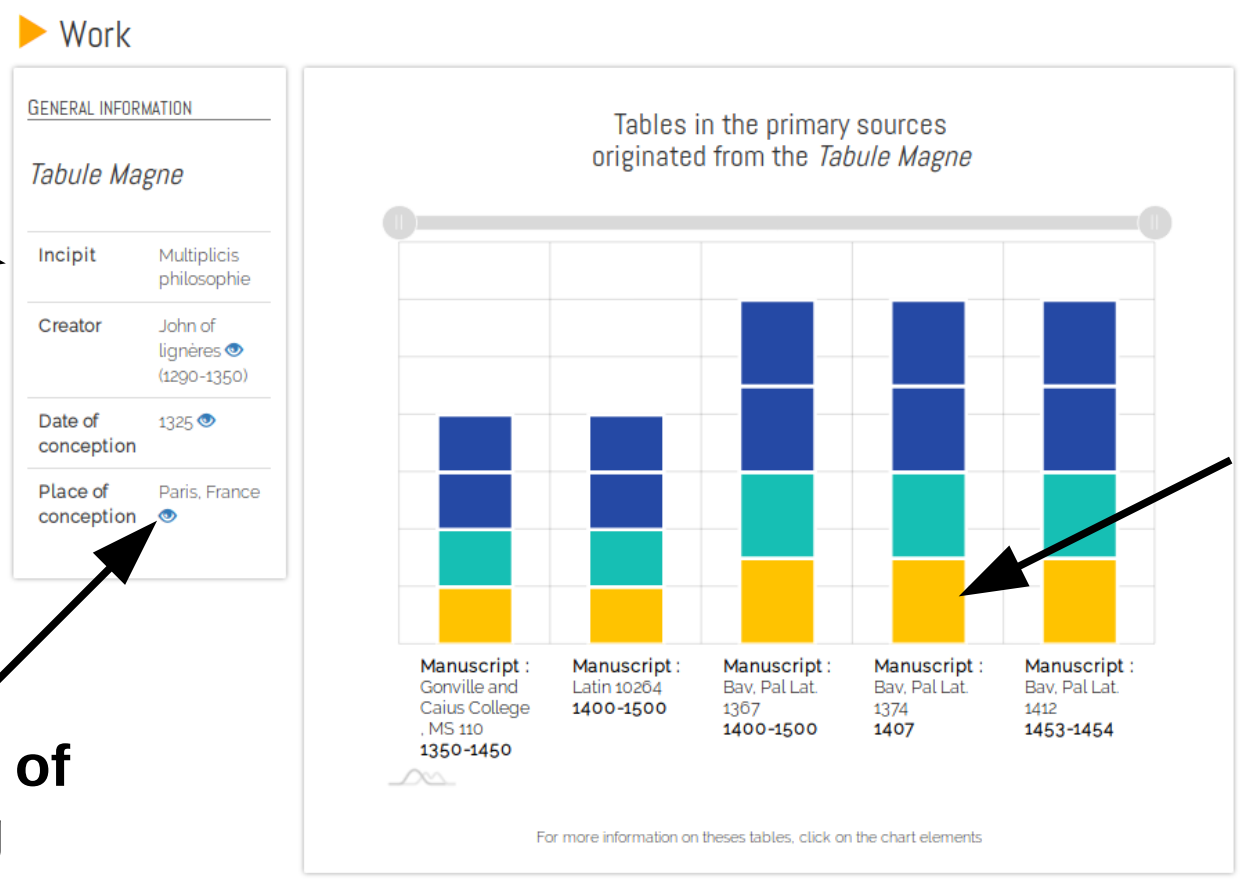
Work Original item



Work

General informations

Link to the **list of works** sharing the same characteristics



Example

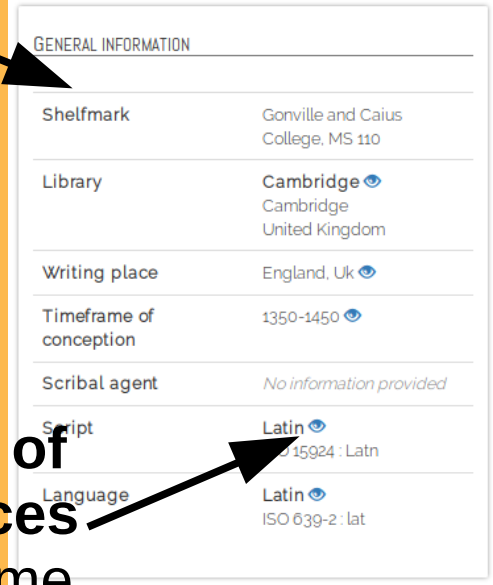
Visualisation of the **primary sources** and **original items** originated from the work

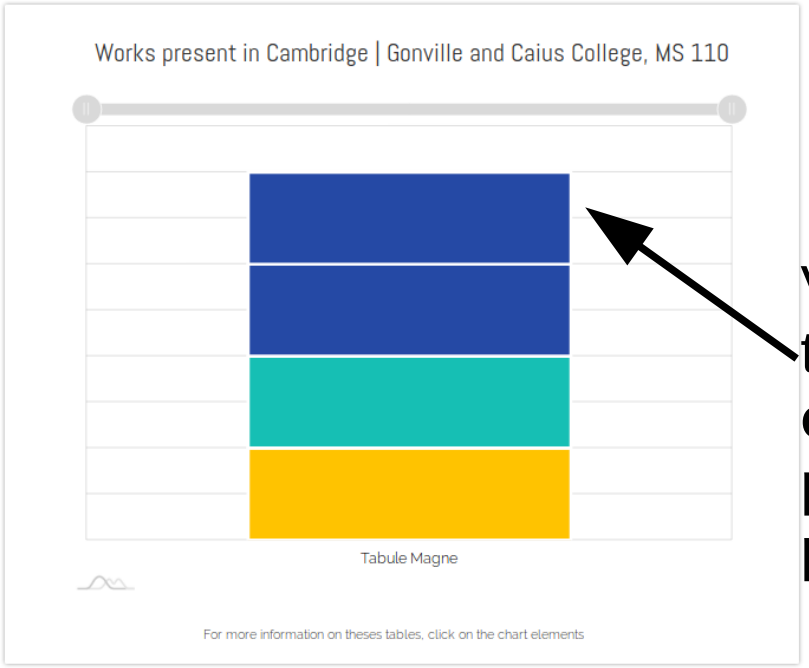
Primary source

General informations

Primary source

Manuscript — **Gonville and Caius College, MS 110**





Example

Visualisation of the **work** and **original items** present in the primary source

Link to the **list of primary sources** sharing the same characteristics

Original item

Place of creation of the **work** of the original item

Place of creation of the **original item**

Place of curation of the **manuscript** containing the original item

Edited text
Table
content

Table editions

PURPOSES

- Give an overall view of the edited content of the platform
- Show tendancies in type of table / astronomical parameter
- Give access to the records of table edition

Edited text
Table
content

Admin side

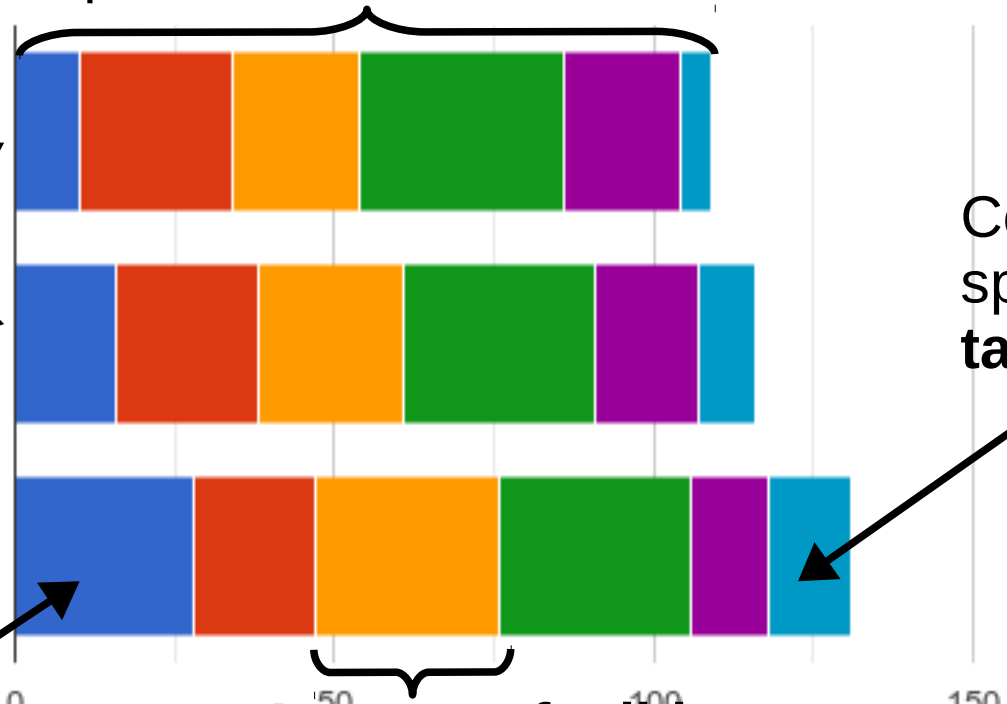
Edited text
Table
content

Stacked bars

Amount of editions of a particular work

Edited **works**

Color to specify a **table type**



One **original item**

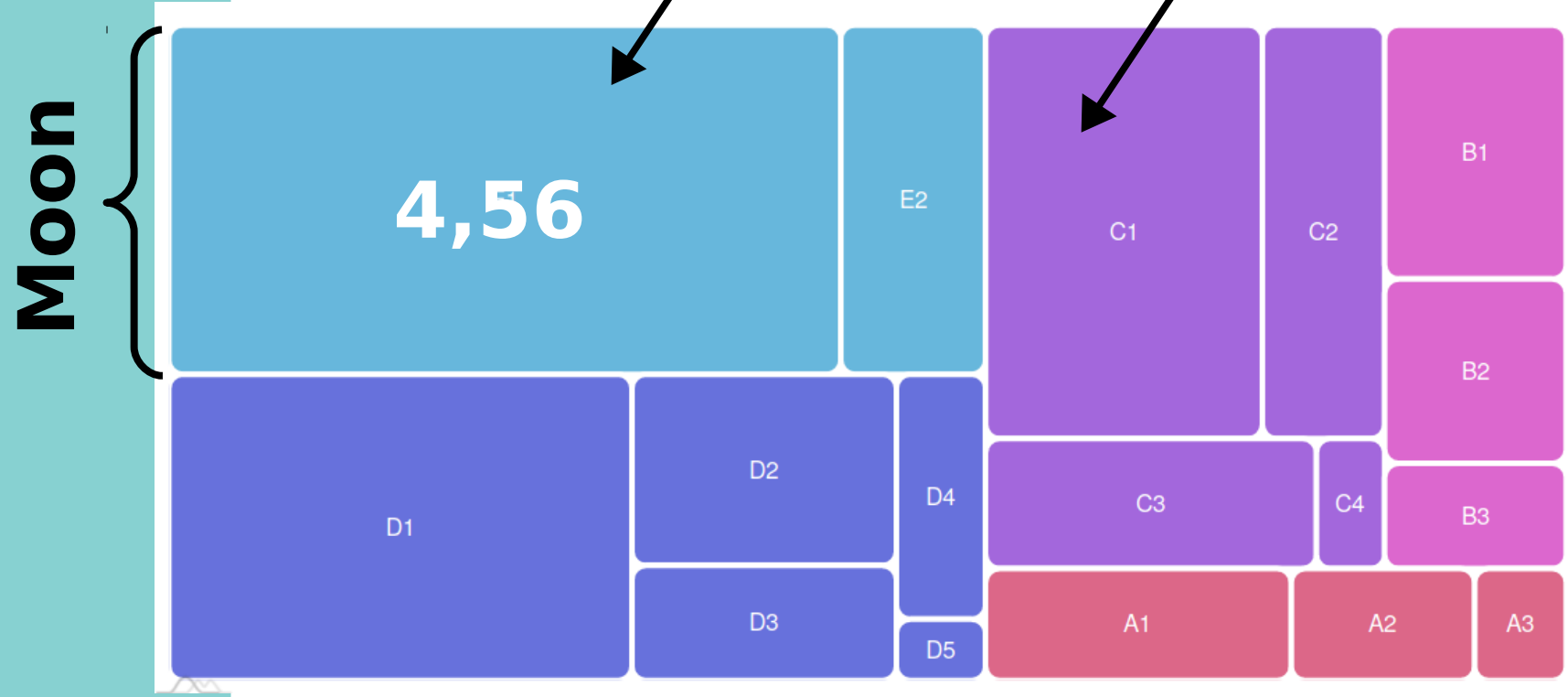
Amount of editions of a particular original item

Edited text
Table
content

Treemap

Color for an **astronomical object**

A cell for a same **parameter set**



Edited text
Table content

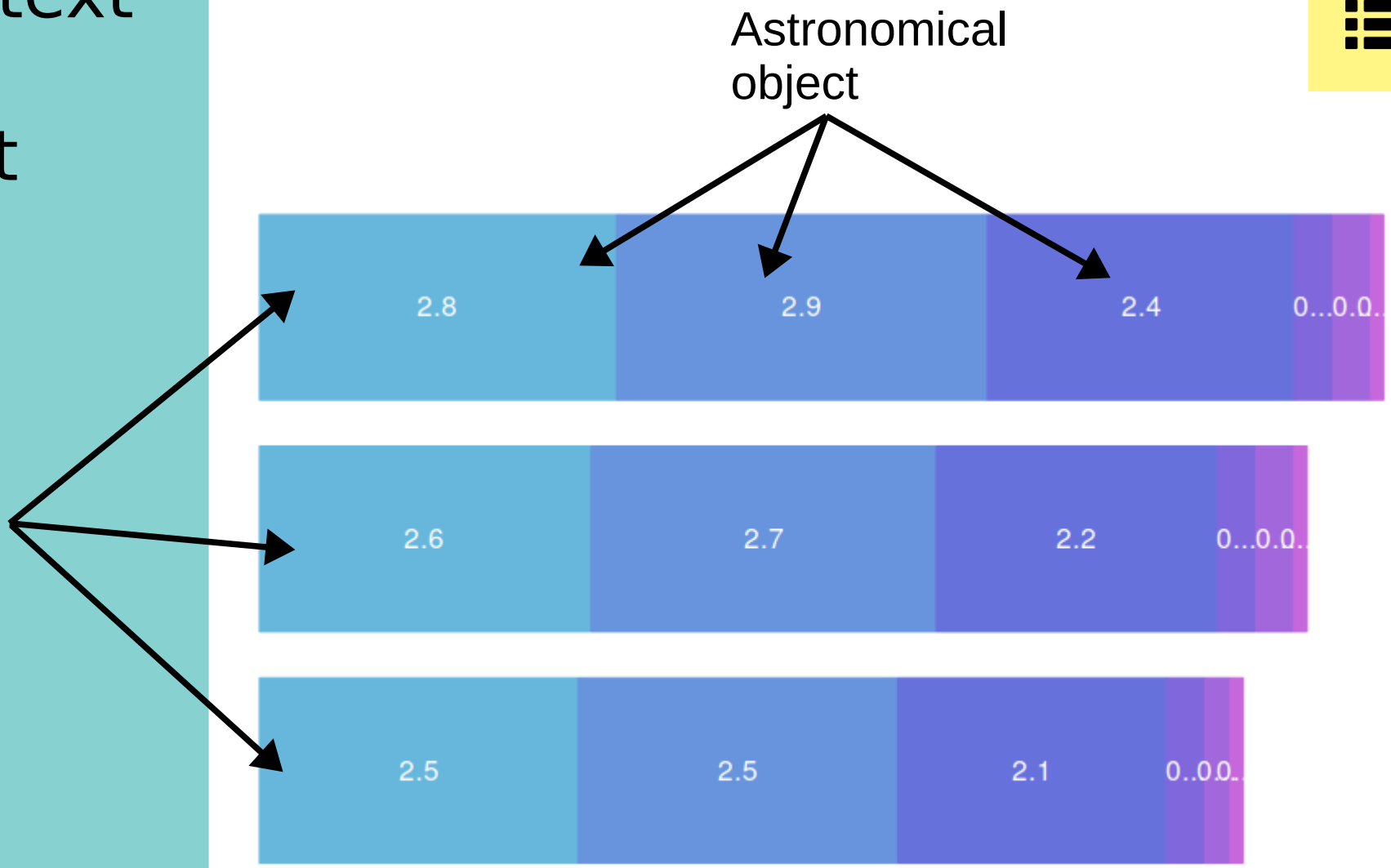


Table edition

Historical Context

(edition type A and B)

- related work
- related manuscript
- etc.

Mathematical Context

- astronomical parameter set
- table type
- etc.

Editorial Context

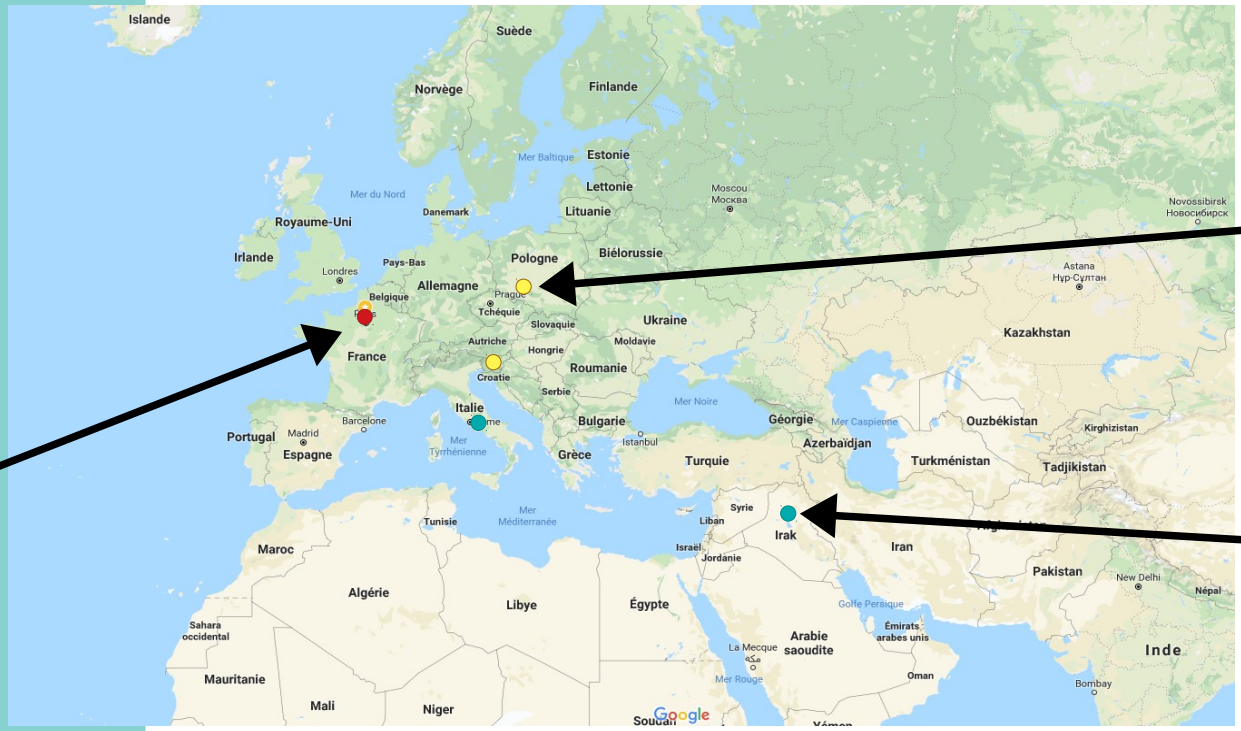
- sources of the edition
- intellectual author
- edition type

Table content

- View of the table
- Critical apparatus
- Comments

Edited text

Historical context



Place of conception of the **work**

Writing places of the **original items**

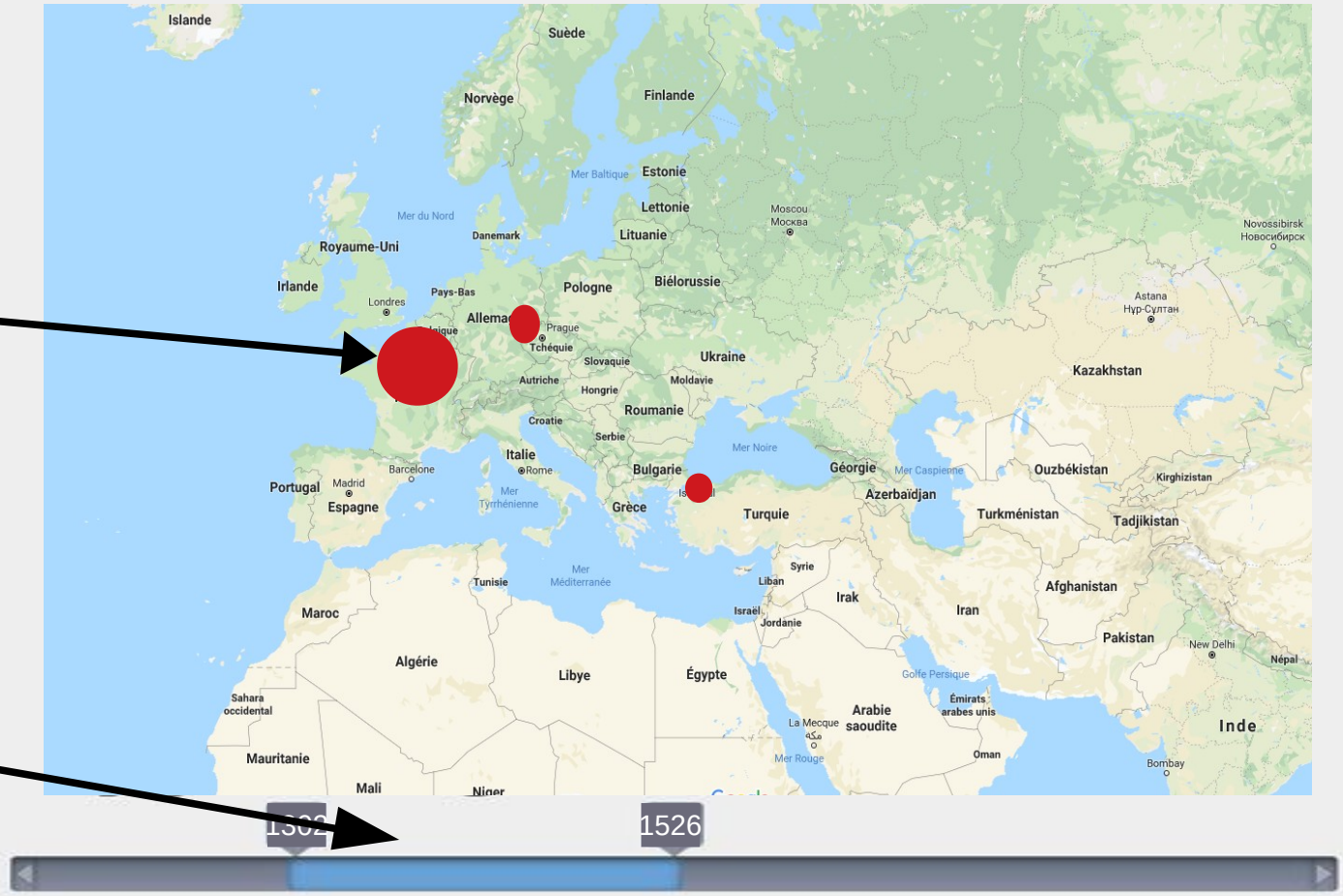
Library keeping the **primary sources**

Edited text
Table
content

Mathematical context

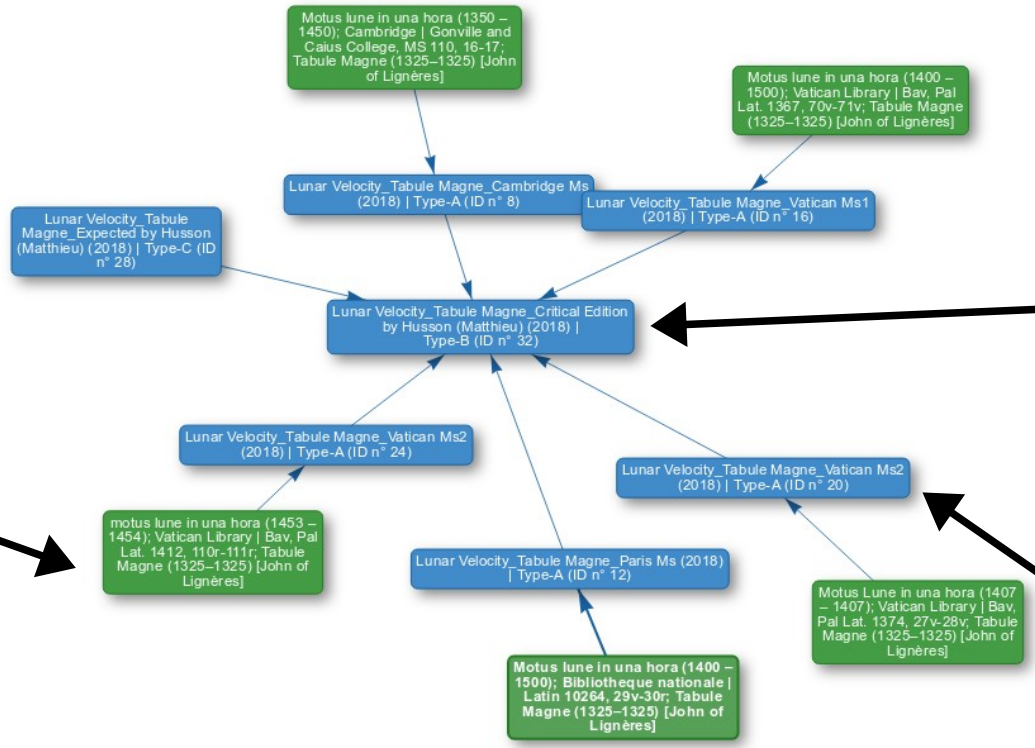
Density of original item using the same **parameter set**

Cursor to set a **time period**



Edited text
Table
content

Editorial context



Current edition

Edited **original item**

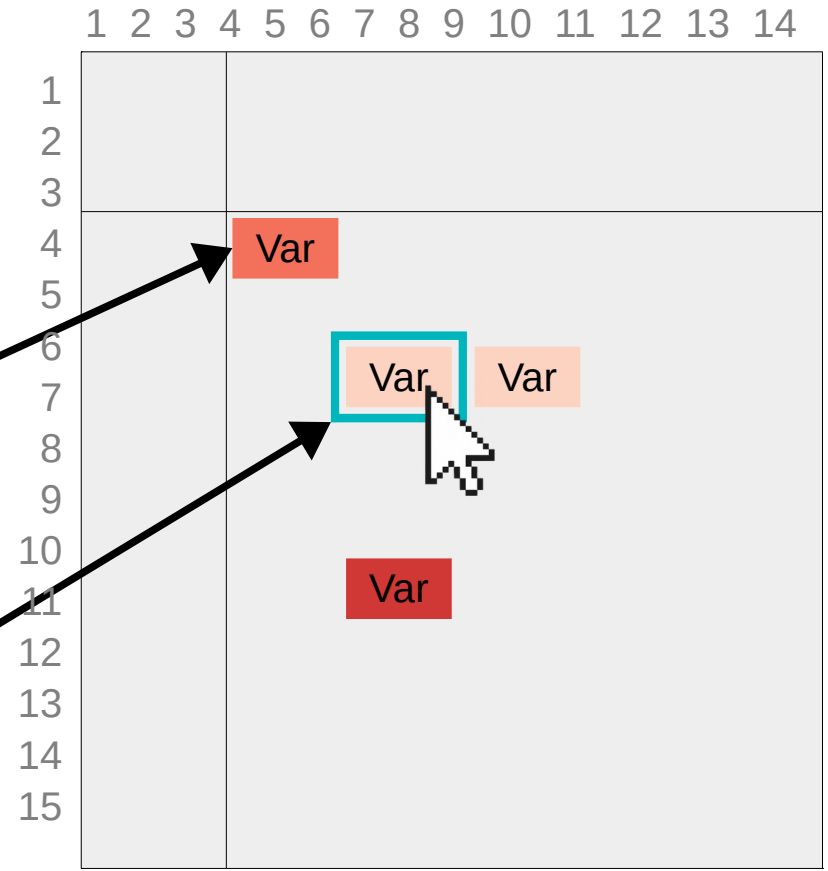
Edited text on which this edition is based

Table content

Table content

Intensity of color : **number of variants** at the same spot

Outline : **comment**



Metadata of the cell that was clicked

Location 8 – 7

Variants :
- Ms 1 : 12
- Ms 2 : 13
- Ep 3 : 11

Comment :
« blah blah blah »

Link to modify the table in DTI

Exposing the data : technical choices

Three way to query the database

SQL queries

Doctrine ORM

+ ease of use
- low performance

Elasticsearch API

+ speed of execution
- under development

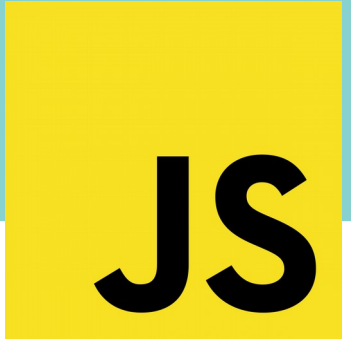
Technologies for visualization

Visualization Software

+ graphic interface
+ no loading time
- static views
- not very customizable

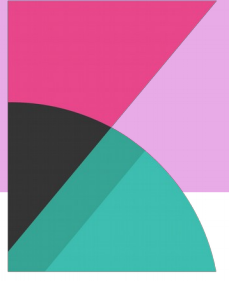
Javascript librairies

+ great diversity available
- no control over updates & backward compatibility



Kibana

+ graphic interface
+ easy installation with elastic search
- not designed for public visualizations



Choice of a javascript library

- Versatile library : chart, map, animated graph
- A lot of documentation available
- Interesting features : zoom, exports, etc.
- Easy implementation and handling
- Pricing : free on given conditions