

# Biblissima and Sustainability: challenges, priorities, possibilities

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#### bibliotheca bibliothecarum novissima

the library of libraries for the 21st century

focus on manuscripts and early printed books written in Medieval and Renaissance Europe in Arabic, French, Greek, Hebrew, Latin, etc.

circulation of texts, evolution of libraries, transmission of knowledge



funded by the Agence nationale de recherche, part of the "Investissements d'avenir" programme

7.1 million euros over 7 years (2012-2019)

team of 8 people, specialising in web development and metadata (coordinator: Matthieu Bonicel, BnF)

100 researchers

project lead: Campus Condorcet

# 9 partner institutions

I R H









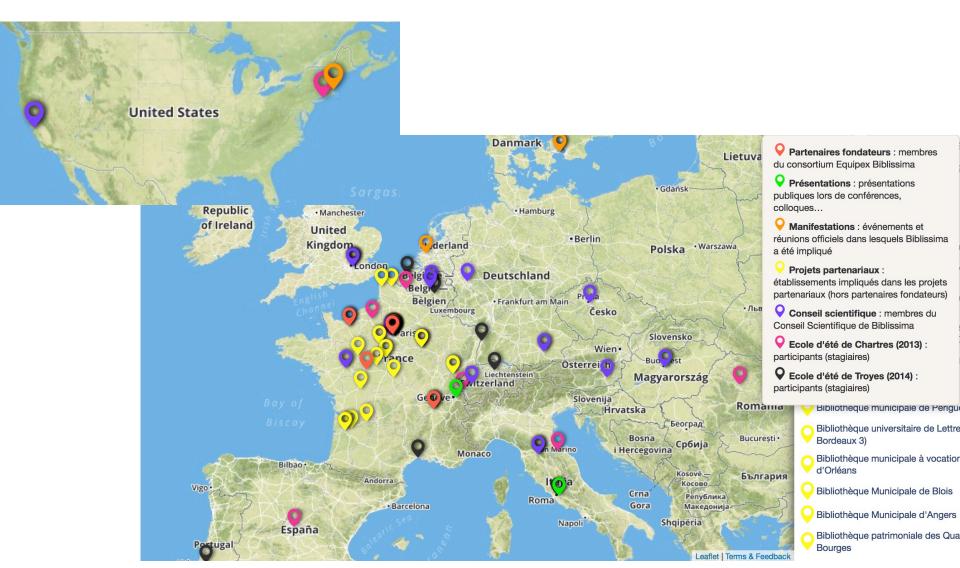








# An expanding community



### Two phases

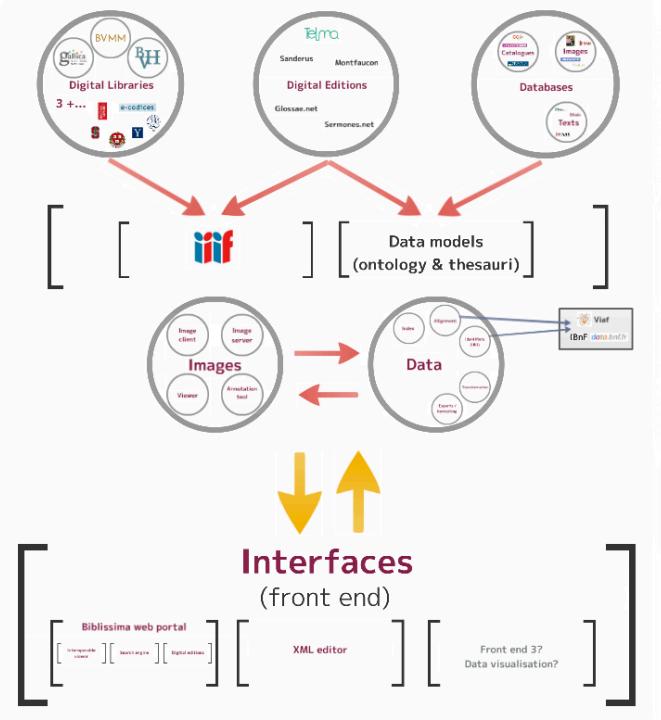
#### **Data sets**

- contents: digital libraries, databases, digital editions
- 70% of funding

#### **Observatory**

- tools and infrastructure, the portal
- 25% of funding

# The Big Picture





#### **Digital Libraries**

3 +...



e-codices











Sanderus

Montfaucon

#### **Digital Editions**

Glossae.net

Sermones.net





#### **Databases**

Πίνακες
Bibale

Texts

J⊗nas



#### Album de paléographie

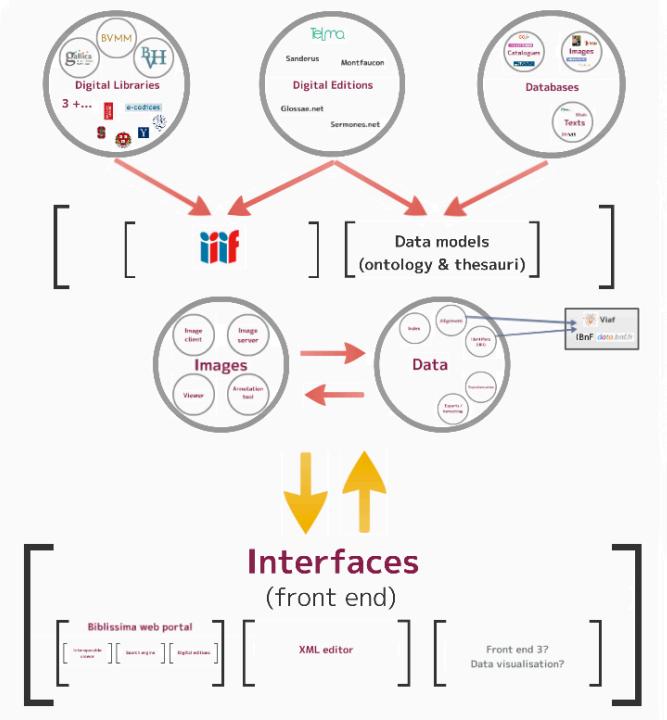


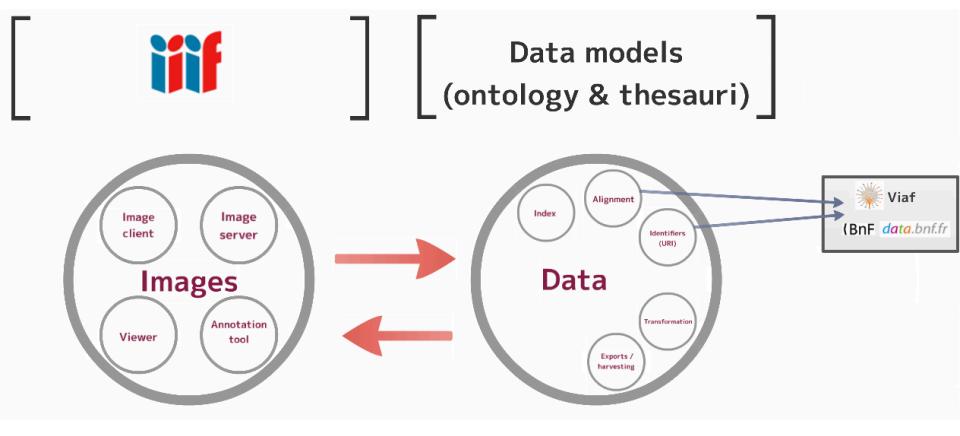
BaOBab



#### **Biblissima Toolkit**

# The Big Picture





# Image interoperability

International Image Interoperability Framework developed at Stanford University: <a href="http://iiif.io">http://iiif.io</a>

view images stored in different repositories using any compatible viewer

compare, manipulate and annotate high resolution images

images are loaded dynamically



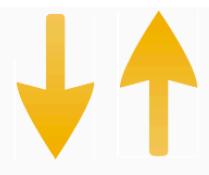
# Data interoperability

Ontology: CIDOC-CRM and FRBRoo modelling the history of collections and the transmission of texts

Thesaurus: SKOS (ISO-25964)

technical terms relating to medieval and Renaissance manuscripts, incunabula and early printed books

Authority files: BnF authority file, VIAF ...



#### Interfaces

(front end)

#### Biblissima web portal

Interoperable viewer Search engine Digital editions

XML editor

Front end 3?
Data visualisation?

Tools: <a href="http://outils.biblissima.fr/">http://outils.biblissima.fr/</a>

**Collatinus and Eulexis**: two online tools for the lemmatisation and morphological analysis of texts in Latin and Ancient Greek

**BaOBab**: a set of tools for working with medieval and Renaissance manuscripts, incunabula and early printed books

Demos: <a href="http://demos.biblissima-condorcet.fr/">http://demos.biblissima-condorcet.fr/</a>

Mirador image viewer: consult images of manuscripts held in different digital repositories

IIIF case studies: images with aligned TEI transcriptions (Roman du Mont Saint-Michel), dispersed manuscripts (Florus Dispersus)

RDF demo: SPARQL queries (Eusebius of Caesarea's *Historia ecclesiastica*)

**Documentation**: <a href="http://doc.biblissima-condorcet.fr">http://doc.biblissima-condorcet.fr</a>

information about the technologies, standards and formats adopted for the Biblissima portal to ensure image and data interoperability

updated regularly as the project progresses

Prototype: Mandragore and Initiale (development)

databases of manuscript illuminations (BnF, IRHT)

provide a common interface to search for and consult records on illuminations and illuminators from both databases

sample data set using all illuminations with geographic descriptors





# **Sustaining Biblissima**

# Sustaining the project results

#### Data and resources

the partners who develop and enrich them will also be responsible for maintaining them

partners will ensure the data they produce will be permanently accessible: databases, digital libraries, digital editions, authority files, etc.

# Sustaining the project results

#### Tools, portal and infrastructure

**challenge**: ensuring sustainability for everything that will be developed as part of the observatory

- developed by a dedicated team, hired specifically for the project (4 years), on behalf of all the partners
- no single institution will be responsible for maintaining them once developed

#### What needs to be preserved?

- the portal and its technical infrastructure, user management
- documentation
- thesaurus
- IIIF infrastructure for the image viewer
- tools: BaOBab, Collatinus, Eulexis, etc.
- XML editor (XXE)

# Developing for sustainability

choice of technical solutions based on pre-existing standards and technologies that are community developed and driven, are widely adopted and are well-maintained

- standards and formats (CIDOC-CRM, FRBRoo, SKOS, IIIF, TEI-P5...)
- open-source software wherever possible (Ginco, Ontology Browser, BaseX, Mirador, Drupal...)

# Developing for sustainability

building collaborative tools and resources to ensure that content can be updated easily by other people, even after the end of the project

- Biblissima thesaurus
- BaOBab toolkit

# Developing for sustainability

improving project visibility on an international level and expanding the user community to increase the chances of it being maintained after the funding period ends

- multilingual tools and resources: thesaurus
- DARIAH contributions in 2015: thesaurus, BaOBab, XML editor for transcribing/editing manuscript inventories, Saint-Omer summer course

#### **Possible solutions**

while no final decisions have been made at this time, several possibilities are emerging:

sharing the responsibility for sustaining different parts of the project among the partners

possible creation of a national or international network: different partners responsible for maintaining different elements according to their area of expertise

#### **Possible solutions**

in future, the Campus Condorcet might host and maintain various infrastructures as part of their mission build a campus focussed specifically on the Humanities and Social Sciences: the Biblissima portal and its infrastructure could integrate or enrich this platform (to be determined)

other partners could potentially do the same for various tools and resources where they have made significant contributions to their design and development

#### **Possible solutions**

there is no single right solution; sustaining Biblissima will likely involve some combination of several factors:

- good development choices
- existing communities around the standards, formats and tools adopted
- financial investment from the institutions in whose best interest it is to maintain these tools and infrastructure

#### Sustainability in the Humanities

to achieve sustainability, we will need to work towards the full integration and interoperability of the software, tools and platforms used to access, manage, enrich and publish project results

these platforms must in turn find their place within a larger infrastructure, at the national or international level