



# The French digital infrastructure for written heritage Biblissima+ and the challenges of musical heritage

Kévin Roger

## ► To cite this version:

Kévin Roger. The French digital infrastructure for written heritage Biblissima+ and the challenges of musical heritage. Medieval and Renaissance Music Conference 2023, Jul 2023, Munich (Allemagne), Germany. 2023, 10.5281/zenodo.8414821 . hal-04231647

**HAL Id: hal-04231647**

**<https://hal.science/hal-04231647>**

Submitted on 6 Oct 2023

**HAL** is a multi-disciplinary open access archive for the deposit and dissemination of scientific research documents, whether they are published or not. The documents may come from teaching and research institutions in France or abroad, or from public or private research centers.

L'archive ouverte pluridisciplinaire **HAL**, est destinée au dépôt et à la diffusion de documents scientifiques de niveau recherche, publiés ou non, émanant des établissements d'enseignement et de recherche français ou étrangers, des laboratoires publics ou privés.

*“The challenges of musical heritage”*

Kévin Roger &amp; David Fiala

# Biblissima

Bibliissima+ is a web portal and a multi-site digital infrastructure devoted to the history of transmission of ancient texts. It is organized into 7 clusters bringing together researchers, curators and engineers around specific objects and/or technologies.

## Cluster 6 - The challenges of musical heritage

### Cluster 4 - In-depth treatment of graphic systems

## Cluster 5 - Editing sources in TEI

Cluster 7 - Text interoperability and analysis

## Zenodo Community

## GitHub Repository

## Cluster 1 - Acquisition of interoperable source corpora

## Cluster 2 - Study and searchability of data materials

Cluster 3 - Artificial intelligence, pattern and handwriting recognition

## Connecting music resources

# AI model applied to early music

Cluster 6 has also started to develop artificial intelligence models for the automatic recognition of early musical sources (manuscripts and printed documents). The aim is, first, to recover detailed metadata generally ignored by conventional inventories (identification and precise location of musical parts on the page, notation used, etc.) but critical for the understanding of early music sources. In a second step, this information could be automatically integrated into IIF manifests and processed for aligning various external resources such as music or text encodings, annotations or audio files. In conjunction with the BnF Data Lab, Cluster 6 intends to assemble a substantial dataset of musical sources from the 13th to the 16th centuries. Certain deep learning strategies have already been defined and executed in experimental versions of the model. Model training was developed in Python, using the ImageAI library as well as the YOLO recognition model.

Bibliissima+ is funded by a French national grant, managed by the ANR under the Programme d'investissements d'avenir integrated into France 2030, bearing the reference ANR-21-ESRE-0005.

**Biblissima**   
Observatoire des cultures écrites  
de l'argile à l'imprimé



Soutenu par

 **MINISTÈRE  
DE LA CULTURE**

 Centre d'études supérieures de la Renaissance

Ricercar Lab

