

Geohistorical FAIR data: data integration and Interoperability using the OntoME platform

Francesco Beretta, Vincent Alamercery, Sebastiaan Derks, Lodewijk Petram, Jonas Schneider

▶ To cite this version:

Francesco Beretta, Vincent Alamercery, Sebastiaan Derks, Lodewijk Petram, Jonas Schneider. Geohistorical FAIR data: data integration and Interoperability using the OntoME platform. Time Machine Conference 2019, Oct 2019, Dresden, Germany. . halshs-02314003

HAL Id: halshs-02314003 https://shs.hal.science/halshs-02314003v1

Submitted on 11 Oct 2019

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.





Geohistorical FAIR data: data integration and interoperability using the OntoME platform

Francesco Beretta (1), Vincent Alamercery (2) with the contribution of Sebastiaan Derks (3), Lodewijk Petram (3) and Jonas Schneider (4)

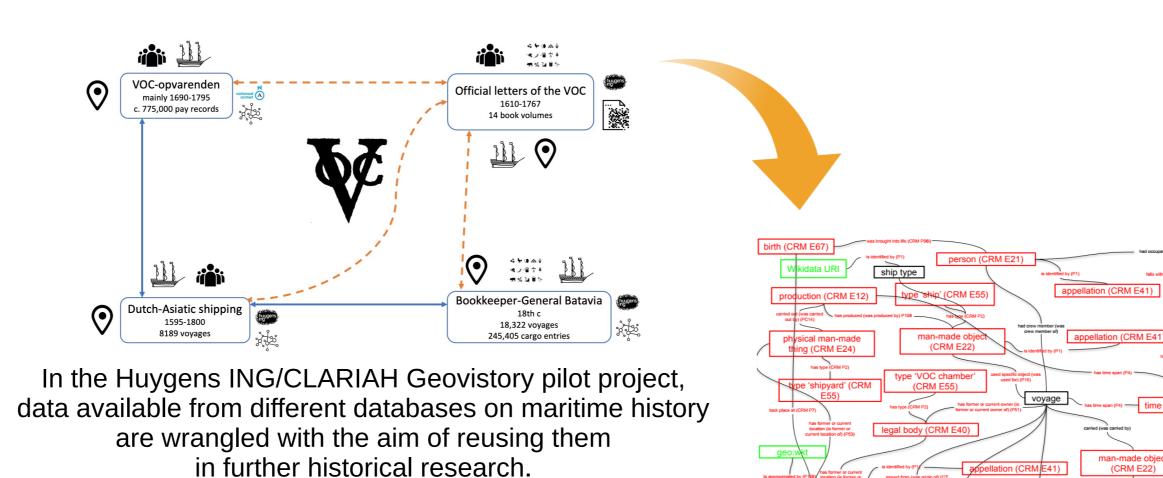


About the LARHRA

larhra.fr

The LARHRA is a joint French research unit of the CNRS and the Universities of Lyon and Grenoble, specialized in history and art history, from 16th century to present day.

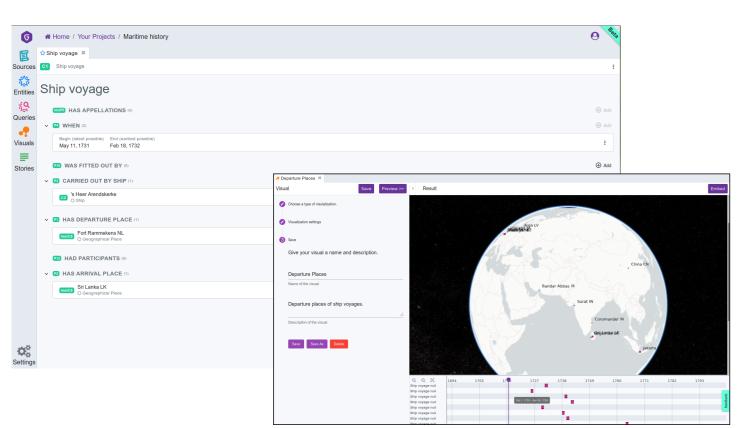
One of LARHRA research groups, the Digital history research team headed by Francesco Beretta, is particularly with concerned methodological issues in digital history and is leading an in-depth reflection on the modelling of geohistorical data. The team works in close collaboration with the CIDOC CRM SIG and initiated the creation of the Data for History consortium in 2017.



The data model is conceptualized and redefined in close collaboration with domain specialists

in order to have a clear understanding of the data to be imported.



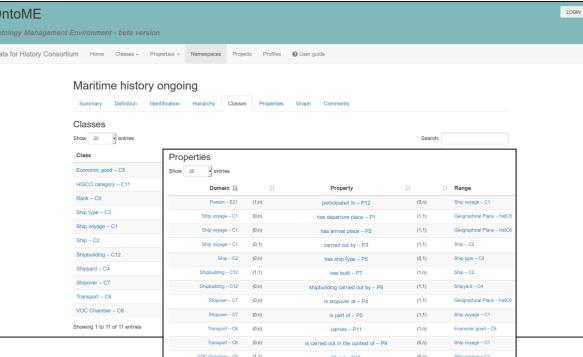


This application profile is then used in the Geovistory web application, and potentially in any other virtual research environment, to import, wrangle and analyze the integrated data from the different original datasets.

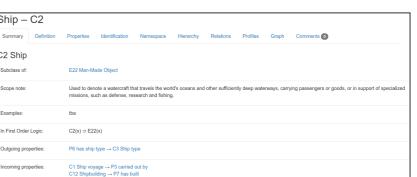


At the end of the process, the wrangled data can be made available on a human readable webpage or a SPARQL endpoint.

OntoME **Ontology Management Environment**



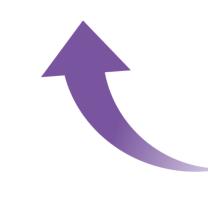
In OntoME, project-specific classes and properties are created in a dedicated namespace...



...and aligned with CIDOC CRM classes to enable interoperability.



Geovistory Toolbox







About Geovistory

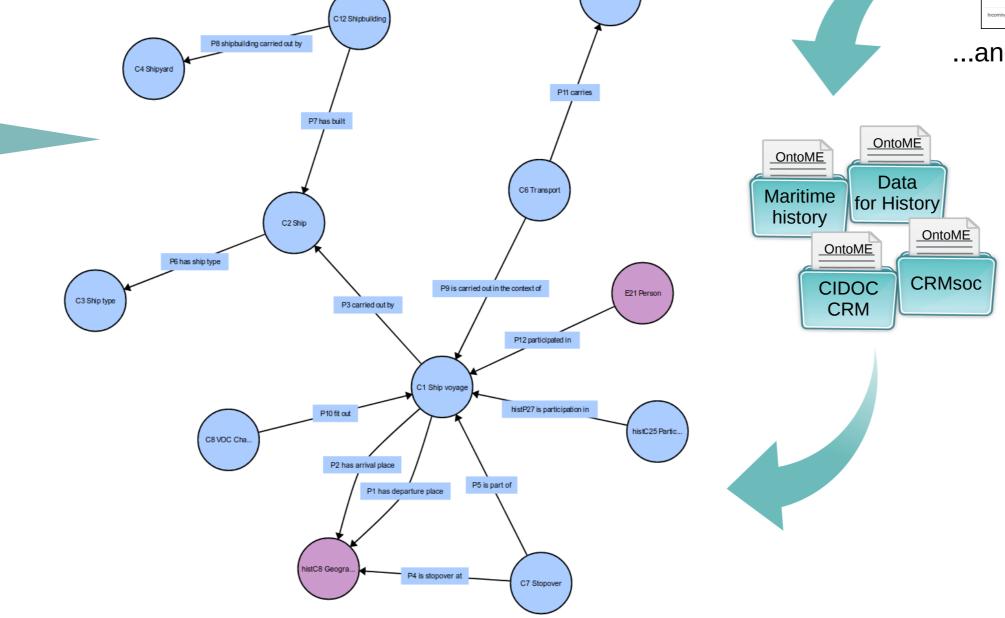
www.geovistory.com

Geovistory is a virtual research environment for digital humanists.

It allows to:

- align data with OntoME models,
- collaborate on data in teams, visualize data in time and
- space,
- publish data the FAIR way,
- share data with the community.

Geovistory is developed by KleioLab Gmbh, Basel.



An application profile, available on a public API, is created that reproduces the envisaged model as a coherent set of classes and properties from different published namespaces. The same process can be carried out in OntoME by any other project interested in making its data reusable by other researchers.

(1) CNRS – Université de Lyon – LARHRA / francesco.beretta@cnrs.fr (2) ENS de Lyon – Université de Lyon – LARHRA / vincent.alamercery@ens-lyon.fr (3) Huygens ING, Amsterdam / sebastiaan.derks@huygens.knaw.nl - lodewijk.petram@huygens.knaw.nl (4) KleioLab GmbH, Basel / jonas.schneider@kleiolab.ch

About OntoME

ontome.dataforhistory.org

OntoME, Ontology management environment, online is an application developed by the LARHRA Digital history research team that offers research projects the ability to manage their ontologies (data models) in a collaborative and open way.

OntoME is a key element in the Data for History consortium with the aim of improving geohistorical data interoperability in the semantic web.

CC BY-SA 4.0

