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

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► 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

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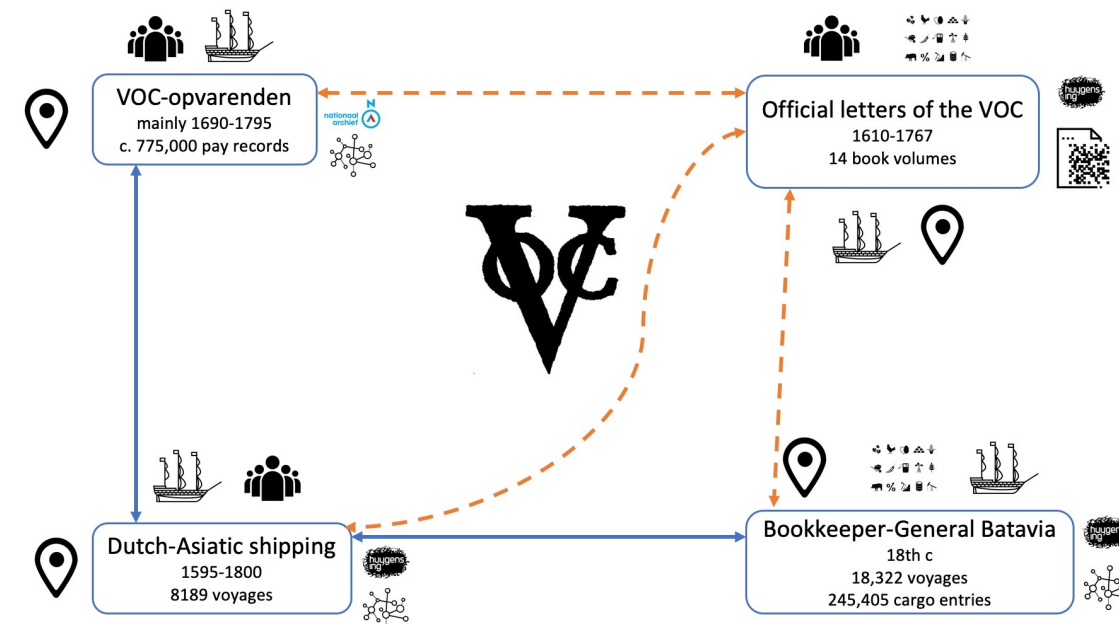
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About the LARHRA

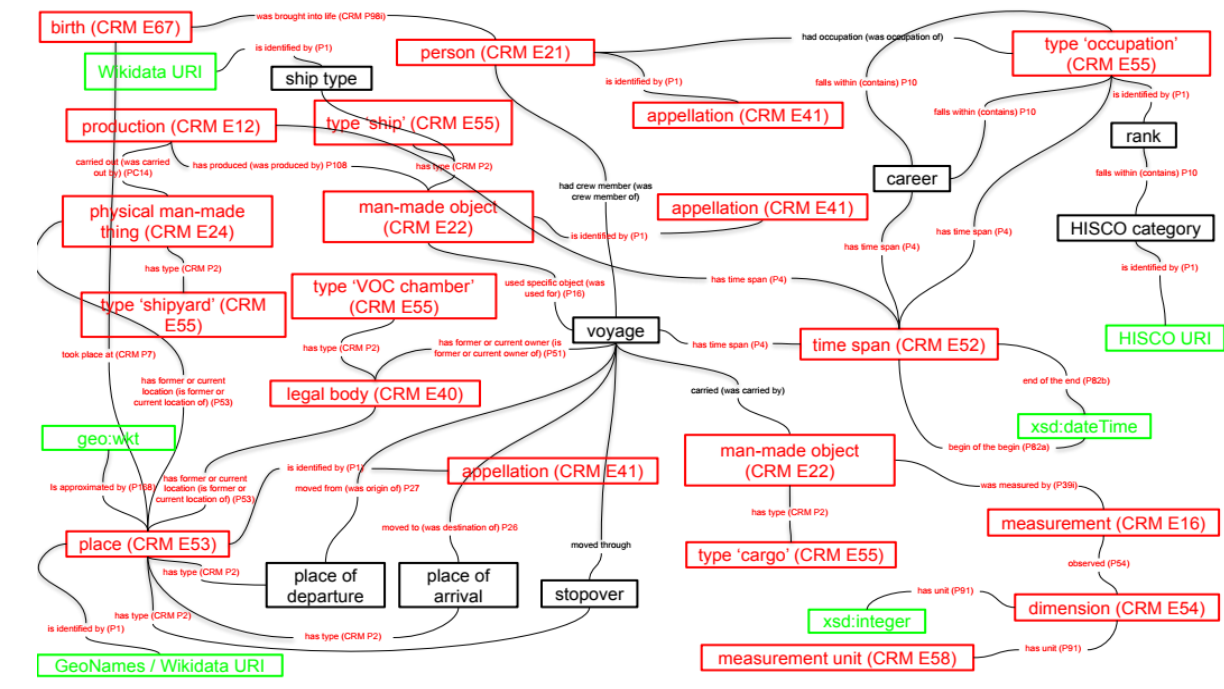
larhra.fr

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.

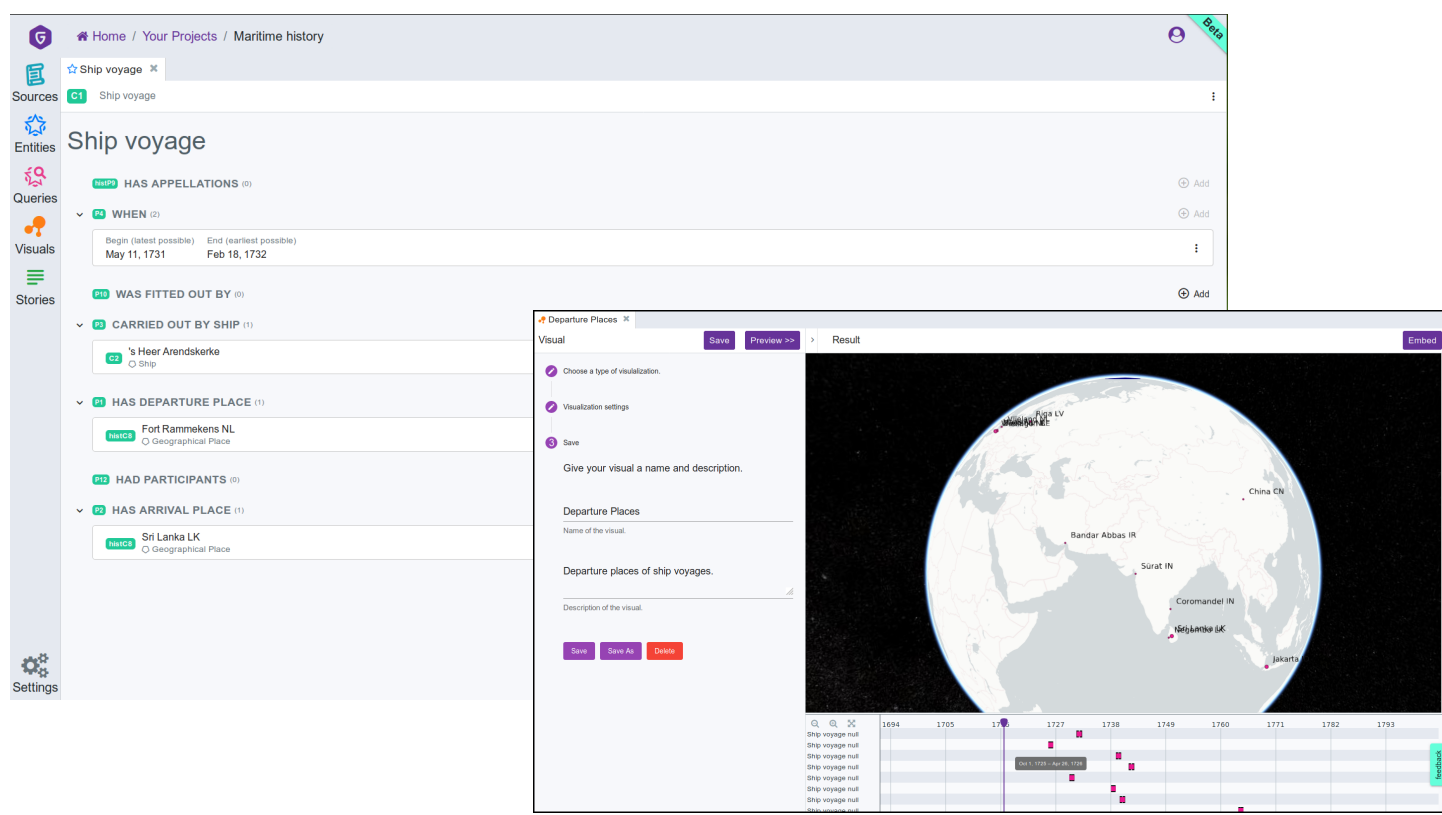
One of LARHRA research groups, the *Digital history research team* headed by Francesco Beretta, is particularly concerned with methodological issues in digital history and is leading an in-depth reflection on the modelling of geohistorical data. The team works in close collaboration with the CIDOC CRM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



In the Huygens ING/CLARIAH Geovistory pilot project, data available from different databases on maritime history are wrangled with the aim of reusing them in further historical research.



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.

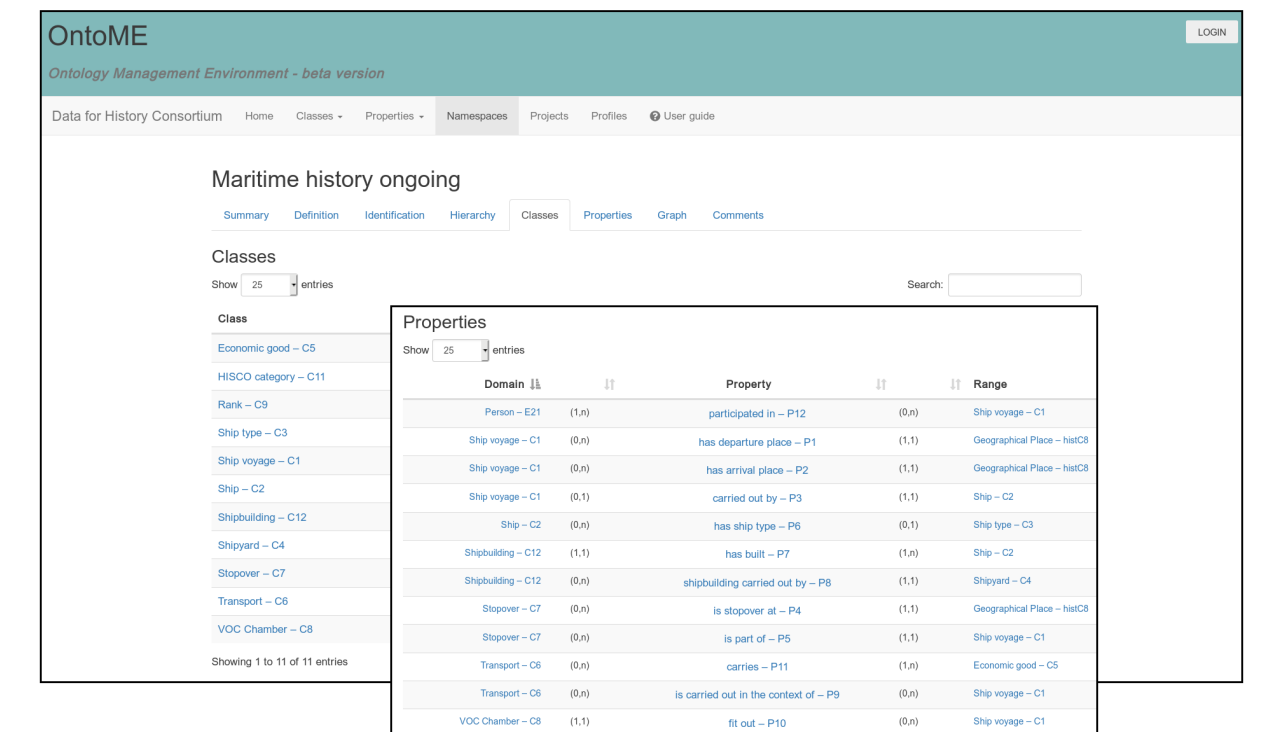


This application profile is then used in the Geovistory web application, and potentially in any other virtual research environment, to import, wrangle and analyze the integrated data from the different original datasets.

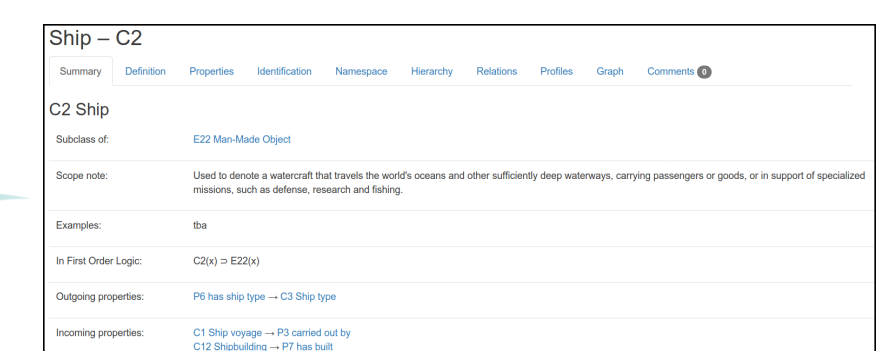


At the end of the process, the wrangled data can be made available on a human readable webpage or a SPARQL endpoint.

OntoME
Ontology Management Environment



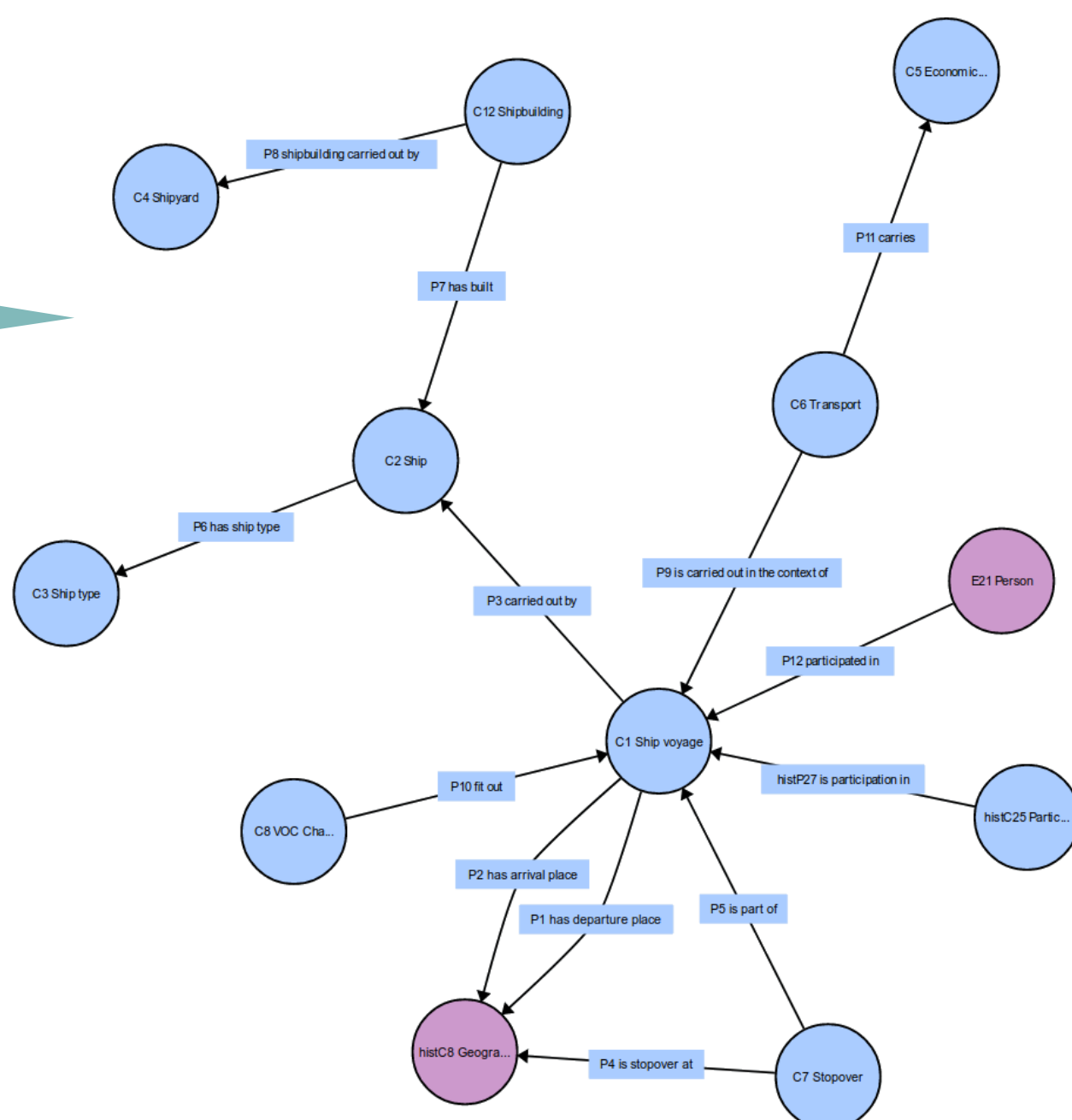
In OntoME, project-specific classes and properties are created in a dedicated namespace...



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

Geovistory Toolbox

public API



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.

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.

About OntoME

ontome.dataforhistory.org

OntoME, *Ontology management environment*, is an online 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.

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