



What is GSR?



Global Sea Routes (GSR) is a geospatial relational database aimed at the representation of European ships' sea routes on a global scale in the modern and contemporary ages, in order to understand how world interconnectedness, in terms of maritime passage times from European ports to overseas destinations, evolved over four centuries (1500-1900).

GSR geodatabase is powered by Nodegoat, a web-based research environment for the humanities developed by LAB1100. Nodegoat is a trademark of LAB1100, registered in the U.S. and in other countries.

Within the framework of GSR project, a case study has also been developed: that of the frigate Novara. A vast array of interactive tools has been realised, in order to visualise her story and evolution as well as to discover the scientific findings of her circumnavigation (1857-1859).

GSR objectives in brief



To analyse and represent
global maritime connections.
To understand

globalisation as a function of overseas expansion and the transoceanic voyages, explorations and transportations from the late 15th century to the late 19th century.

To collect data

from printed travel accounts and manuscript ship logbooks.

To build

a relational geospatial database to be accessed on the Web.

Background: state of the art and methodologies



Based on the premise that the **history of navigation** can provide an effective evidence of the modern globalization processes, **GSR** aims to answer the question: how can we represent the historical evolution of the duration time of different sorts of **early-modern and modern European transoceanic sea voyages** on a synoptic and comparative scale? We imagined to give an answer based on the most advanced **online IT representation techniques** and drew inspiration from important **digital history projects** of a similar kind.

The project originates from a **global-history research perspective** and, in particular, from interests related to the process of European expansion, to exploration sea-voyages and to scientific, military and commercial sea expeditions overseas that have taken place with increasing intensity in the centuries of the **modern age** up to the end of the **19th century**.

The history of European overseas navigation at the time of the first globalization, between the late 15th and the late 19th century, is still **lacking a comprehensive and comparative quantitative, cartographic and visual synthetic representation**. We have several partial historical reconstructions of this phenomenon in narrative or historical-cartographic formats. Computer technology allows us to create a tool capable of representing visually historical data by a geodatabase accessible online.

In order to achieve this, we rely mainly on **two kinds of sources: printed voyage accounts** - a genre of primary importance for the history of Western culture in the modern era - and **manuscript logbooks**, of which there are considerable archival repositories in various national contexts, albeit with important differences in terms of abundance and temporal continuity (England, France, Holland, Spain, Portugal, Italy, USA).

Both kinds of sources are obviously well known, but their use has so far been for purposes other than our own. The former, thanks to their essentially narrative character, have served above all for the reconstruction of the history of geographical explorations, for the history of shipping and navigation, for the history of navigators, for the history of the encounter between Europeans and non-European peoples and cultures and thus for the history of ethno-anthropological knowledge, for the history of natural sciences. Logbooks - a more technical type of documents, lacking the narrative character of voyage reports - have received comparatively less attention and have been used either

for controversial purposes (Henry Wise, 1839) or in specialised fields for the study of climate (e.g., see the CLIWOC project), or of certain types of navigation, such as those of tea clippers in the 19th century (Lubbock, 1914, 1921, 1924) or for the analysis of the speeds of naval communications in limited periods (Solar, 2013, 2015). Only in one case (Dutch-Asiatic Shipping in the 17th and 18th centuries, edited by J. R. Bruijn, F. S. Gaastra and I. Schöffer, with assistance from A. C. J. Vermeulen and E. S. van Eyck van Heslinga, The Hague, Martinus Nijhoff, 1987, 3 vols.) an attempt was made to make a systematic collection of logbooks, those of the Dutch VOC, even going as far as to create an online database, albeit with limited search capabilities. In none of these cases, however, was it considered necessary **to use the voyage reports and logbooks 1) in order to derive navigation data and to reconstruct** on this basis the actual routes (and consequently the voyage times) and the navigation methods adopted in the three centuries of the early **modern age**; and 2) in order to construct from these data **a geo-referenced cartographic representation of the routes** of global navigation.

The method adopted here, on the other hand, makes it possible **to achieve precisely this objective**, taking into consideration a great variety of voyages, selected on a chronological, geographical, typological and national basis, which, through a large and significant sample, makes it possible to obtain a cartographic and georeferenced online visual representation of the phenomenon studied. From this point of view, the project has **a twofold methodological objective: to enhance a source of exceptional value** and interest for the history of navigation, but largely underused, and to **carry out an advanced experiment** in the field of **digital history**.

Team



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