

Ship, Navire, Navío, Nave, Buque: Creating a Multi-Language Glossary for Early Modern Ships

by Marijo Gauthier-Bérubé

For the past 10 years a group of international scholars has been working on a multi-language glossary for early modern Iberian ships, a preliminary version of which was recently published on the Academia website. The project, conducted under the supervision of Dr. Filipe Castro, of the J. Richard Steffy Ship Reconstruction laboratory (Nautical Archaeology Program) at Texas A&M University, originated from the Nautical Archaeology Digital Library (NADL) Project¹. A multilingual glossary was a central tool in the NADL that allowed the collection and interpretation of archaeological data stored in different formats. The NADL made it possible to carry out research in five complementary areas: site excavation, the recovery process, artifact collections, research into shipbuilding treatises, and the modeling and reconstruction of ships. An interface was developed to depict the different terms relative to shipbuilding with translation as part of a wider ontology or categorizing of shipbuilding.

Since the NADL was part of a research grant, it was not possible to secure funding to populate and maintain the digital library. It also could not grow as an open tool that archaeologists could use to enter data and query existing data. Therefore, the NADL project did not continue after 2009. Castro later became involved with the ForSea Discovery Project², at which time the need for a glossary became evident, given the diversity of the multidisciplinary team. A comprehensive illustrated glossary that focused on early modern Iberian shipbuilding was thus developed in a format designed to be shared and improved.

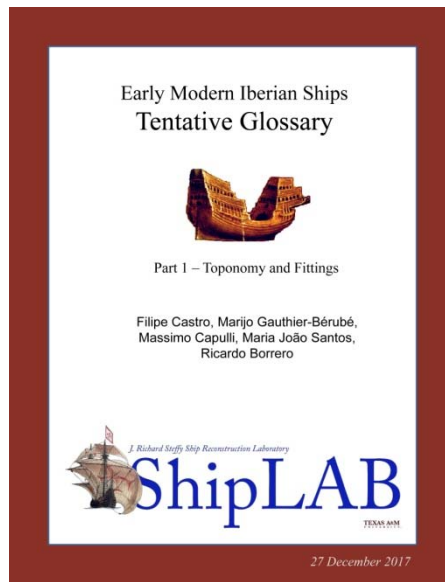
Many arguments can be made in favor of creating an illustrated glossary of shipbuilding terms. First of all, despite the dominance of English as the language of scholars and international communication, nautical archaeology is widely practiced outside the Anglo-Saxon

world by non-English-speaking scholars. No statistic exists to support this statement, but a quick look at the papers presented at major international conferences eloquently illustrates the wide variety of languages spoken within the discipline. And in spite of the fact that most modern journals are in English, scholars must do their underlying research in the original languages of the primary data—and most shipbuilding treatises and contracts were not written in English.

Secondly, it should be noted that even within one language, the vocabulary used to designate nautical structures or features can vary. It is not uncommon to see variation in the terms used for the different timbers in a mast step complex, for example, or to describe rigging elements of the same period. The use of different dictionaries, different treatises and different background knowledge brings variations that can be confusing when trying to gather information for a holistic analysis of shipbuilding traditions. Rising awareness within our community about the importance of sharing a common language can only be beneficial for the growth of our discipline.

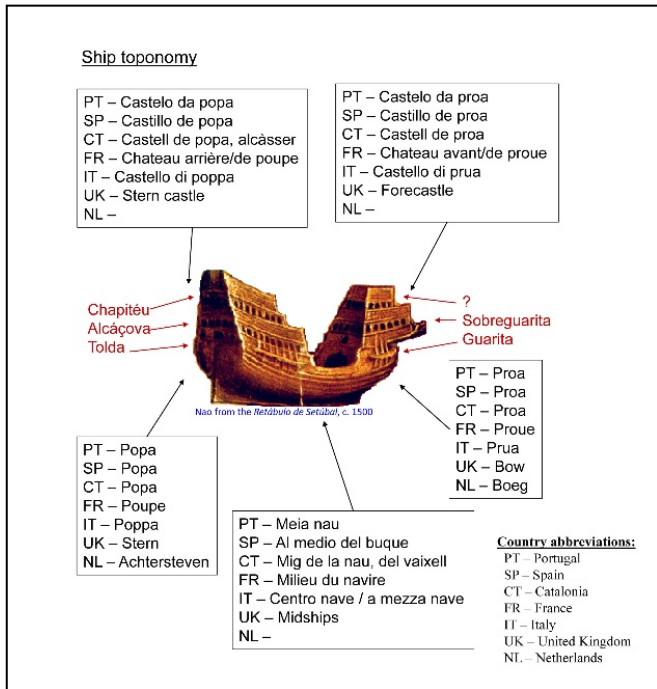
Thirdly, it can be hard to find reliable sources when dealing with multi-language research. Often scholars rely on the English sources as a bridge between other languages, and this practice increases the risk of losing precision and meaning in translation. We do not deny the existence of many dictionaries that have proven their usefulness, but we do have to recognize their limitations. Moreover, many of the historical dictionaries were published in the 19th century, and they can be problematic when dealing with vocabulary pertaining to earlier shipbuilding. And finally, glossaries found in archaeological publications are often limited to the structures discovered on the shipwreck being detailed.

The rise of technology and automatic translation tools can bring partial answers to the translation of shipbuilding terminology. It is, however, important to understand that these tools are far from perfect, and the results should never be taken for granted. As an example, I once stumbled on a scholar who used one of these automatic tools to translate a French treatise on rigging. The person was getting slightly frustrated as she kept getting *parrots* as the translation of the French



¹ NSF Grant IIS-0534314, PIs: Richard Furuta and Filipe Castro (2006–2009), <http://nadl.tamu.edu>

² Marie Curie Multi-ITN projects (agreement no.: 607,545) entitled *Forest resources and Ships for Iberian Empires: ecology and globalization in the Age of Discovery*. PI: Dr. Ana Crespo Solana and Dr. Nigel Nayling (2013–2017).



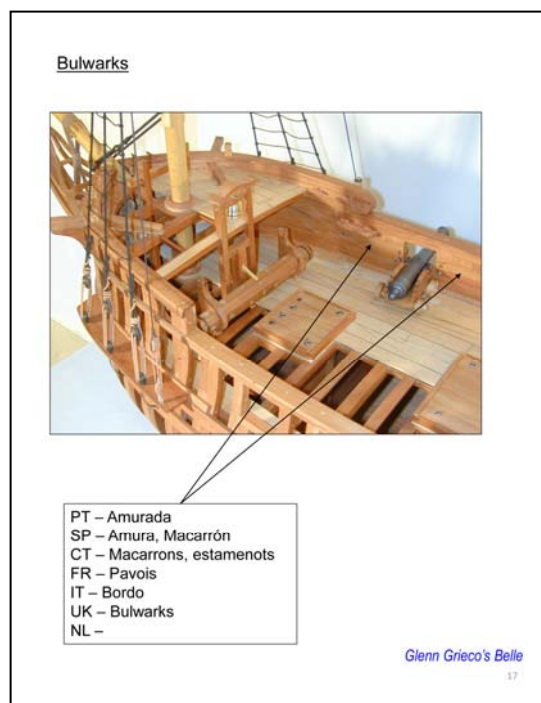
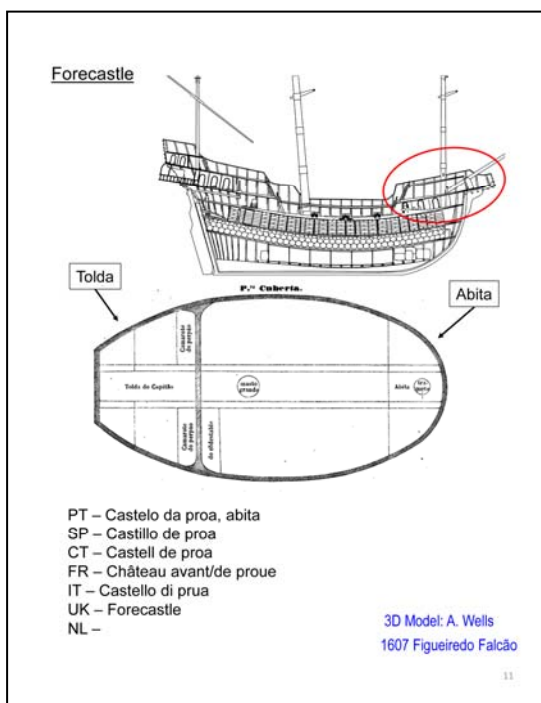
Sample page from the Glossary showing basic ship terms.

term *perroquet*, which did not make sense. Of course, the translation was not wrong in itself; in vernacular French, it is logical. However, when dealing with shipbuilding, one must know that the French used to give birds' names to their sails, and that the right translation was a topgallant sail.

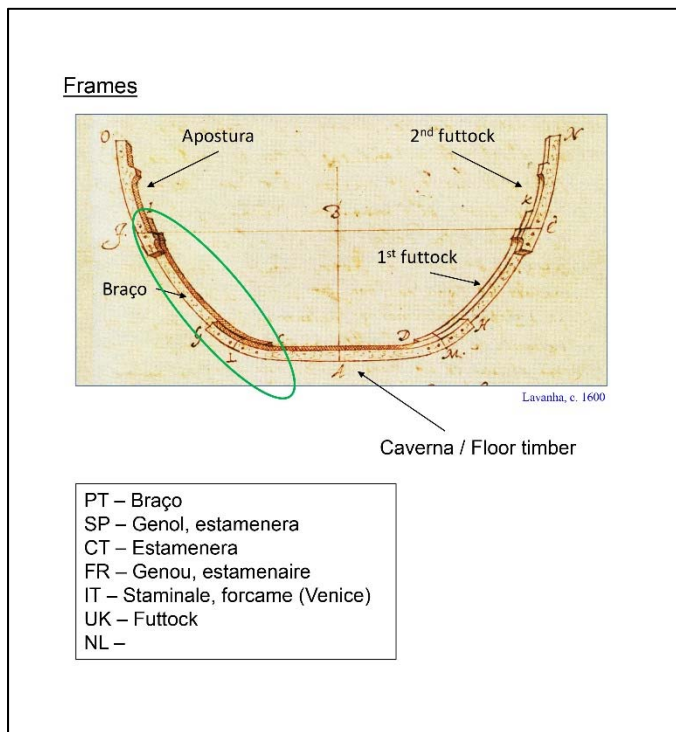
How can we overcome this obstacle to achieve greater understanding and promote discussion? First, we

can engage scholars and urge them to use common technical language when describing a wreck and to provide project-specific glossaries with their publication to ensure a better understanding of their work. Secondly, we can engage students by providing them with documentation made by nautical archaeologists, but also by encouraging them to learn a second language, especially in the English-speaking countries. As an example, data from the United States Census Bureau and the European Commission show that in the years 2009–2013, approximately 80 percent of the United States population spoke only English, in contrast to the European Union, where 54 percent of the population spoke a second language, and among those, 25 percent reported a conversational knowledge of a least two languages other than their own, and 10 percent of at least three other languages.

The result of this research is the multi-language lexicon *Early Modern Iberian Ships: Tentative Glossary*, a specialized glossary of nautical terms in a variety of languages. Issued in late 2017, this work aims at disseminating knowledge within our discipline, but also to the general public interested in wooden shipbuilding. As of today, the glossary is presented in three volumes. The first is related to the toponymy, or terms for general locations within a ship such as port/starboard, bow/stern, or the various decks. Also included in the first volume are fittings such as catheads, bits and anchors. The second volume is dedicated to ship timbers. The third volume describes the different rigging elements and terms for ships types according to their rigging arrangement. The Glossary currently includes seven



Ship terminology from the Glossary: left forecastle; right, bulwarks.



Sample page from the Glossary showing terms for ship frames.

European languages, reflecting the major shipbuilding traditions of the early modern period: Portuguese, Spanish, Catalan, French, Italian, English and Dutch.

The Glossary is a work in progress, improving through the input of the scholars working on the project, but also by comments and suggestions coming from the archaeology community and the general public. We intend to include more information on the variation of terms within the same language, both through time and from place to place. At a later stage we intend to include sources and semantic interpretations of words whose significance and origins are not always well understood. For example, in a Portuguese treatise by Fernando Oliveira, the word *buçarda* (in English, breasthook) is used to describe the bow Y-frames. Both structures have a similar shape but do not refer to the same architectural structure.

A fourth volume has been proposed that would include vocabularies used to describe the environment surrounding the shipbuilding industry in general, such as tools, shipyards, the art of rope making and other processes. The compilation of the Glossary has also triggered interesting discussions about the linguistic evidence of some common roots or the unique development of particular nautical structures, subjects that will be investigated in the future.

The project represents many hours of work, and it can only be achieved through the dedication of graduate students and scholars. We are always happy to welcome any input and anyone who wishes to contribute to it.

For further information about the *Early Modern Iberian Ships: Tentative Glossary*, please consult the Academia page of Dr. Filipe Castro or of the author: (http://www.academia.edu/34462963/Early_Modern_Iberian_Ships_Tentative_Glossary_Part_1_Toponymy_and_Fittings).

The author also suggests the following articles on the NADL project:

Monroy, C., Furuta, R., and Castro F., "Using an Ontology and a Multilingual Glossary for Enhancing the Nautical Archaeology Digital Library". *Joint Conference on Digital Libraries JCDL*, Queensland, Australia, 2010, pp. 259–262.

Monroy, C., Furuta, R., and Castro F., "Ask Not What Your Text Can do For You. Ask What You Can do For Your Text (a Dictionary's perspective)" *Digital Humanities 2009*, College Park: University of Maryland, MD, June 22-25 2009:344–347.

Monroy, C., Furuta, R., and Castro, F., "Design of a Computer-based Frame to Store, Manage, and Divulge Information from Underwater Archeological Excavations: the Pepper Wreck Case," in Castro, F. and Custer, K., eds., *Edge of Empire*. Proceedings of the Symposium held at the 2006 Society for Historical Archaeology Annual Meeting, Sacramento, California. Lisbon: Caleidoscópico, 2008.

Monroy, C., Furuta, R., and Castro, F., "A Multilingual Approach to Technical Manuscripts: 16th and 17th-century Portuguese Shipbuilding Treatises," Edie Rasmussen (Chair) Proceedings of ACM/IEEE Joint Conference on Digital Libraries, Vancouver, BC, Canada (2007), 413–414.

Monroy, C., Furuta, R., and Castro F., Poster: "Ancient Technical Manuscripts: the Case of 17th-century Portuguese Shipbuilding Treatises." Schmit et al. (eds.) *Digital Humanities 2007 Conference Proceedings*. University of Illinois, Urbana-Champaign, June 4–7, 2007, 67–69.

Monroy, C., Furuta, R., and Castro F., "Texts, Illustrations, and Physical Objects: The Case of Ancient Shipbuilding Treatises." 11th European Conference on Research and Advanced Technology for Digital Libraries ECDL, Budapest, Hungary, 2007.

Monroy, C., Parks, N., Furuta, R., and Castro, F., Poster: "The Nautical Archaeology Digital Library," in Gonzalo et al. (eds.), *European Conference on Digital Libraries 2006 LNCS 4,172* :544–547, Berlin and Heidelberg: Springer-Verlag, 2006.

Marijo Gauthier-Bérubé is currently conducting her doctoral studies at Texas A&M University in the Nautical Archaeology Program. Her research focuses on France's forestry management behind the shipbuilding industry in the 17th and 18th centuries. She is a co-founding member of the Canadian non-profit Institut de Recherche en Histoire Maritime et Archéologie Subaquatique and is involved in public outreach through that organization. ⚓