

INTRODUCTION

Introducing *The View from the Sea. The Practice of Early Modern Transoceanic Commercial Navigation*

Giulia Iannuzzi 

University of Trieste, Trieste, Italy
Email: giulia.iannuzzi@unifi.it

Abstract

Research into maritime history using digital tools is a growing field, with projects that in recent years have focused on the role of sea spaces in the dynamics of globalisation on an economic and juridical level as well as on a cultural level, with respect to the circulation of knowledge. In this introduction to our special issue, we offer some historiographical observations on the codification of knowledge in seafaring practice, emphasising how the use of digital tools to process and represent primary sources may encourage historians to formulate new questions about the relationship between European culture and the sea during the early modern age. In order to present the articles in this issue and the original contribution they make to the field, we also focus on the historical and cultural significance and methodological challenges posed by primary sources such as logbooks. We illustrate how the analysis of logbooks in a digital environment such as Global Sea Routes (GSR), a project conceived and coordinated by Guido Abbattista, can foster a better understanding of the role of routine navigations in early commercial globalisation.

KEYWORDS: maritime history; history of navigation; logbooks; digital history; Global Sea Routes

Early Globalisation through Logbooks: Introductory Remarks

This special issue of *Itinerario*, *The View from the Sea. The Practice of Early Modern Transoceanic Commercial Navigation* addresses the role of the commercial voyages of European companies in the era of early globalisation. The contributions presented here are set against the backdrop of maritime history and the history of navigation, which are transnational domains par excellence given the circulation of people, goods, and knowledge that characterised sea spaces as connective tissues exploited for human activities. The case studies examined focus on the English East India Company and the Royal Navy between the sixteenth and nineteenth centuries, with a particular emphasis on the eighteenth century.¹ The starting hypothesis is that a particular kind of documentation—logbooks—produced by sea voyages which formed the infrastructure of early commercial

¹ The bibliography on the history of the fleets and Asian sailings of the major European companies is endless. We only mention here, for the East India Company, the works of Jean Sutton, *The East India Company's Maritime Service, 1746–1834: Masters of the Eastern Seas* (Woodbridge: Boydell Press, 2010); and *Lords of the East: The East India Company and Its Ships, 1600–1874* (London: Conway Maritime Press, 2000); for the Dutch company, J. R. Bruijn and F. S. Gaastra, eds., *Ships, Sailors, and Spices: East India Companies and Their Shipping in the Sixteenth, Seventeenth, and*

globalisation may shed light on the actual practice and daily experience of transoceanic navigation and the kind of knowledge which supported it and at the same time contributed to increasing it—a perspective that has yet to be fully investigated.

The scientific contributions gathered in this monographic issue share important methodological aspects and stem from an interest in the cultural aspects of the history of navigation, and in particular in the processes of knowledge creation, circulation, and organisation in the field of navigation practice, and beyond. All of these studies focus on the connections that the history of navigation has with the broader political, social, and cultural phenomena and contexts that have characterised the relations between humankind and the sea. A number of the articles in this issue present research that has made use of digital tools in the handling and processing of primary sources, and in the collection, analysis, and reporting of information. The attention to the practice of seafaring as a junction of cultural processes, coupled with the use of digital research environments, provides an original contribution to existing historiography. This special issue puts forward new fundamental questions that can shape historical research and introduces new ways to interrogate sources while examining unpublished manuscript documents and under-studied cases. In so doing, the analysis fosters a better understanding of navigation in the early modern period, understood both as a practice that lies at the intersection of a wealth of disciplinary knowledge and skills and as a collective and individual experience. Furthermore, it offers original analyses of how this experience was represented through the reading of primary sources such as ship's logbooks.

How, in the absence of the diary or narrative accounts typical of major sailings, can we represent the routine navigations of the trading companies of the early modern age in such a way as to depict the actual daily progress of their transoceanic routes, given the large number of variables and the different impact of those variables in different historical contexts and periods? How can we capture life on board and the contribution of daily observations and activities to the production of knowledge fundamental to the art of navigation? Can such an analytical approach serve to give a more nuanced representation of what is revealed by the serialisation studies carried out, for example, by those who have attempted to examine the speed of maritime transport or the quantitative analysis of its economic impact? Here we propose possible answers to these questions. What emerges is the centrality of the logbook as a source for georeferenced digital representations of routes as part of the complexity of everyday navigation, offering a repository of nautical data and descriptive elements. This information substantiates the contribution of the Royal Navy's and East India Company's navigations to the development of geographical, nautical, meteorological, and naturalistic knowledge and helps to form a more precise idea of the operations characterising daily life on board sailing ships engaged in transoceanic routes.

Three of the contributions collected in this issue are based on an in-depth reading and georeferenced analysis of ship's logs. Logbooks are historical sources of a technical nature. They contain records kept daily by captains or other officers on board, using formats and conventions that changed through time. They focus primarily on aspects of navigation such as date, time, port of departure, destination, the ship's daily position (latitude and longitude measured by different methods), and the direction and progress of the course, distances travelled, direction and strength of winds, depths, sea currents, weather conditions, seabed, characteristics of coastlines, and other details of a similar kind. In addition to this type of data, logbooks may also contain concise notes on various events that

Eighteenth Centuries (Amsterdam: NEHA, 1993); and for the French company, Philippe Haudrière, ed., *Les flottes des Compagnies des Indes, 1600-1857* (Vincennes: Service historique de la marine, 1996).

accompanied the day-to-day navigation.² By reconstructing voyages in their complexity, these three contributions offer an original methodological example of how it is possible to “make the ship’s logs speak.” By cross-referencing the logbooks with logs and diaries of similar voyages, manuals and instructions on contemporary navigation and cartography, and secondary literature, these articles retrace the untold stories of the voyages they deal with, and render the events of those voyages tangible. By focusing on routine navigations, these articles offer the results of analyses and representations capable of capturing the real day-to-day progress of transoceanic navigations, within the complexity of the innumerable variables involved and the changes resulting from the differences between historical and geographical contexts, thus updating the seminal contributions that have paved the way in past decades with the possibilities provided by new digital tools and historiographical insights.³

Maritime History, Cultural Studies, Digital Tools

There is a rich and lively historiography on European shipping companies in the early modern era, which in recent years has advanced our understanding of political and institutional,⁴ diplomatic and military, economic and commercial,⁵ and labour and employment aspects,⁶ as well as the technical and scientific knowledge involved in the practice of navigation and its evolution,⁷ and, of course, the role of commercial shipping in the processes of globalisation and the development of transcontinental and (inter-) regional connectivity.⁸ Recent contributions have also explored the accumulation and circulation of knowledge related to European trade initiatives in fields such as natural history, meteorology, geography, cartography, navigation tools and skills, and “travel knowledge” in general.⁹ An exhaustive review of the changes that have affected the interdisciplinary field of maritime history or even just the historiography related to the role of

² W. E. May, “The Log-Books Used by Ships of the East India Company,” *Journal of Navigation* 27:1 (1974), 116–8, <https://doi.org/10.1017/S0373463300025236>; Phillip Reid, *The Merchant Ship in the British Atlantic, 1600–1800: Continuity and Innovation in a Key Technology* (Leiden: Brill, 2020), 175–82; Margaret Schotte, “Expert Records: Nautical Logbooks from Columbus to Cook,” *Information & Culture* 48:3 (2013), 281–322; Clive Wilkinson, “The Non-Climatic Research Potential of Ships’ Logbooks and Journals,” *Climatic Change* 73:1 (2005), 155–67.

³ Elena Fasano Guarini, “Au XVIIe siècle: comment naviguent les galères,” *Annales. Histoire. Sciences Sociales* 2 (1961), 279–96.

⁴ Adam Clulow and Tristan Mostert, eds., *The Dutch and English East India Companies: Diplomacy, Trade and Violence in Early Modern Asia* (Amsterdam: Amsterdam University Press, 2018).

⁵ Peter M. Solar, “Opening to the East: Shipping between Europe and Asia, 1770–1830,” *Journal of Economic History* 73:3 (2013), 625–61; Richard W. Unger, ed., *Shipping and Economic Growth, 1350–1850* (Leiden: Brill, 2011).

⁶ Sara Caputo, “Alien Seamen in the British Navy, British Law, and the British State,” *Historical Journal* 62:3 (2019), 685–707.

⁷ Simon C. Davidson, “Marine Chronometers: The Rapid Adoption of New Technology by East India Captains in the Period 1770–1792 on Over 580 Voyages,” *Antiquarian Horology* 40:1 (2019), 76–91; Peter M. Solar and Pim de Zwart, “Why Were Dutch East Indiamen So Slow?,” *International Journal of Maritime History* 29:4 (2017), 738–51, <https://doi.org/10.1177/0843871417725487>; Peter M. Solar and Luc Hens, “Ship Speeds during the Industrial Revolution: East India Company Ships, 1770–1828,” *European Review of Economic History* 20 (2015), 66–78.

⁸ David Abulafia, *The Boundless Sea: A Human History of the Oceans* (Oxford: Oxford University Press, 2019); Jan De Vries, “Connecting Europe and Asia: A Quantitative Analysis of the Cape-Route Trade, 1497–1795,” in *Global Connections and Monetary History, 1470–1800*, ed. by Dennis O. Flynn, Arturo Giráldez, and Richard von Glahn (Aldershot: Ashgate, 2003), 34–106; Arturo Giráldez, *The Age of Trade: the Manila Galleons and the Dawn of the Global Economy* (Lanham, Md.: Rowman and Littlefield, 2015); Manuel Perez-Garcia et al., “Big Data and ‘New’ Global History: Global Goods and Trade Networks in Early Modern China and Europe,” *Itinerario* 46:1 (2022), 14–39, <https://doi.org/10.1017/S0165115321000310>.

⁹ “Alternative Histories of the East India Company,” special issue, *Journal for Early Modern Cultural Studies* 17:3 (2017); Aske L. Brock, Guido van Meersebergen, and Edmond Smith, eds., *Trading Companies and Travel Knowledge in*

navigation in globalisation processes would go far beyond the scope of these pages.¹⁰ Nonetheless, it is useful for us to note some general trends that the articles collected in this issue deal with. Royal navies and privileged companies have been analysed as sources of written information of different types in terms of purpose, recipients, and political charge, from voyage reports to correspondence, instructions, and port documents. Individuals and organisations involved in commercial shipping enterprises have been studied not only as economic and institutional agents but also as producers of culture and bearers of emotions.¹¹ Alongside the economic, jurisprudential, and technological strands of history with which the transnational dimension inherent in maritime history has been examined, a variety of social, cultural, and linguistic dimensions have also been increasingly revealed. Through the typological variety of primary sources, a multitude of subjectivities and agencies at various levels within the companies have been brought to light. Ambassadors, merchants, ship captains and ensigns, soldiers, agents, intermediaries, and local and indigenous correspondents have been studied as employees or collaborators within the organisational and institutional apparatuses of the companies, as well as producers of information, mediators of intercultural encounters, promoters of private or special interests, sometimes in competition and sometimes in conflict with each other.¹² Against this background, this special issue makes an original contribution by considering primary sources that have been rather rarely studied before with these intents and objectives, and by presenting research results obtained with the aid of innovative digital tools.

Some of the research presented in this issue was developed with and is the result of the Global Sea Routes project, or GSR. Conceived and coordinated by Guido Abbattista of the University of Trieste, GSR employs a geodatabase, which is a relational database with an associated geo- and chrono-referencing system. This allows “objects” such as routes, ports, or docks to be located within a geodetic reference system.¹³ This environment enables dynamic visualisations of voyages (which are also offered to external users via a web interface) whose time scale is customisable.¹⁴ Routes and times may be analysed and represented, with specific reference to European trading companies and the practices, knowledge, and experiences of those involved “in the field.” These tools make it possible to transform the analysis of historical sources such as ship’s logs into an analytical

the Early Modern World (London: Routledge, 2022); Richard Dunn and Rebekah Higgitt, eds., *Navigational Enterprises in Europe and Its Empires* (New York: Palgrave, 2015).

¹⁰ For a historiographical survey, see John J. Hattendorf, “Introduction,” in *The Oxford Encyclopedia of Maritime History*, 4 vols. (Oxford: Oxford University Press, 2007), 1: xviii; Jari Ojala and Stig Tenold, “Maritime History: A Health Check,” *International Journal of Maritime History* 29:2 (2017), 344–54, <https://doi.org/10.1177/0843871417695490>; David M. Williams, “Maritime History: Contexts and Perspectives,” *International Journal of Maritime History* 32:2 (2020), 370–5, <https://doi.org/10.1177/0843871420921268>.

¹¹ Sara Caputo, “Exploration and Mortification: Fragile Infrastructures, Imperial Narratives and British Naval Discovery Vessels 1760–1815,” *History of Science* (2020), 1–20, <https://doi.org/10.1177/0073275320970042>.

¹² Tim Riding, “Managing Expertise: The Problem of Engineers in the English East India Company, 1668–1764,” *Itinerario* 45:2 (2021), 228–51, <https://doi.org/10.1017/S0165115321000140>.

¹³ In this case the World Geodetic System 1984, EPSG:4326; on Geographic Information Systems and spatial humanities, see Alberto Giordano, Shih-Lung Shaw, and Diana Sinton, eds., “The Geospatial Humanities: Transdisciplinary Opportunities,” special issue, *International Journal of Humanities and Arts Computing* 14:1–2 (2020). GSR employs the digital research environment Nodegoat, developed by LAB1100, <https://nodegoat.net/>.

¹⁴ See the public website of GSR—Global Sea Routes, PI Guido Abbattista, 2021, <http://gsr.nodegoat.net/> (CC BY-NC-ND 4.0); see also the website <https://globalsearoutes.net/>; see also Guido Abbattista and Andrea Favretto, “Global Sea Routes: An Historical Geodatabase of Global Navigations in the Modern Age (16th–19th Centuries),” in *International Conference on Innovations in the Social Sciences and Humanities ISSH 2019: Conference Proceedings* (Ho Chi Minh City: Ton Duc Thang University, 2019), 61–6; Erica Grossi and Filippo Chiochetti, “Global Sea Routes: La navigazione europea commerciale transoceanica tra XVI e XX secolo”, *Quaderni storici* 1 (2022), 273–86, <https://www.rivisteweb.it/doi/10.1408/106206..>

reconstruction of the routes that is faithful to the spatiotemporal dimension of the voyages, capable of graphically showing both the temporal development of individual routes and the long-term historical evolution (1500–1900) of maritime connection systems. In addition, the relational model of the database allows each voyage and each route segment to be linked to information pertaining to a number of elements—from the fleet to the identity of notable roles and persons on board (e.g. crew members and dignitaries), from the nautical and cartographic instruments used to the commodities transported and exchanged. The GSR analyses commercial ship's logs in a way that has hitherto been reserved for isolated cases of particular historical relevance (such as notable scientific circumnavigations or diplomatic voyages), in a systematic manner and with attention to the informative details that these sources contain on a variety of aspects of navigation, which are not only strictly technical. The case studies presented in this issue provide ample evidence of this.

The logbook has attracted particular attention in historiography of recent decades, illustrating how the information recorded in it can be exploited according to a multitude of multidisciplinary interests.¹⁵ In the field of historical climatology, large-scale transnational projects such as the Climatological Database for the World's Oceans (CLIWOC),¹⁶ covering 1750–1850, and Recovery of Logbooks and International Marine Data (RECLAIM), focusing on the nineteenth century,¹⁷ have extracted and digitised data from thousands of logbooks from modern and contemporary times (mainly English, French, Dutch, and Spanish). The logbooks have proven to be valuable mines of meteorological, oceanographic, and biosphere-related observations which were fed into datasets aimed at climate research from a diachronic perspective. In this field significant efforts were also made at a transnational standardisation of data models.¹⁸

Digital history has increased the speed and ease of both selection and access to information and the heuristic potential of pre-existing studies through new tools. An example of this is the database dedicated to Dutch-Asiatic shipping between the seventeenth and eighteenth century, created from the publication *Dutch-Asiatic Shipping* produced in the 1970s and 1980s.¹⁹ The original research made use of the data contained in administrative documents on Asian trades (*Uitloopboeken*), ship registers, and reports on vessels entering and leaving Batavia and other Asian ports contained in the *Overgekomen Brieven en Papieren* to record and index the voyages of the *Voorcompagnieen* and *Verenigde Oostindische Compagnie* (VOC) between 1595 and 1795.²⁰ The creation of a database made it possible to exploit data, such as the speed of vessels, to give just one example, for a quantitative analyses of various aspects of the history of Dutch trade in Asia, and more generally from a comparative perspective.²¹

¹⁵ Schotte, "Expert Records."

¹⁶ CLIWOC: Climatological Database for the World's Oceans 1750–1850 (2001–2003), <https://webs.ucm.es/info/cliwoc/>; Ricardo García Herrera et al., *CLIWOC Final Report*, 2003, https://webs.ucm.es/info/cliwoc/Clwoc_final_report.pdf.

¹⁷ RECLAIM: Recovery of Logbooks and International Marine Data, <http://icoads.noaa.gov/reclaim/>; Clive Wilkinson et al., "Recovery of Logbooks and International Marine Data: The RECLAIM Project," in "Achievements in Marine Climatology," special issue, *International Journal of Climatology* 31:7 (2011), 968–79, <https://doi.org/10.1002/joc.2102>.

¹⁸ ICOADS: International Comprehensive Ocean-Atmosphere Data Set, hosted by the U.S. National Oceanic and Atmospheric Administration (1985–), <https://icoads.noaa.gov/>.

¹⁹ "The Dutch East India Company's Shipping between the Netherlands and Asia 1595–1795," <http://resources.huuygens.knaw.nl/das>; Robert Parthesius, *Dutch Ships in Tropical Waters: The Development of the Dutch East India Company (VOC) Shipping Network in Asia 1595–1660* (Amsterdam: Amsterdam University Press, 2010), 15–28; Jaap R. Bruijn et al., eds., *Dutch-Asiatic Shipping in the 17th and 18th Centuries*, 3 vols. (The Hague: Martinus Nijhoff, 1975–1987).

²⁰ Bruijn, *Dutch-Asiatic Shipping*, 3: 195–209.

²¹ Solar and de Zwart, "Why Were Dutch East Indiamen So Slow?"

The interest in economic and commercial aspects of shipping and their role in the creation of stable networks of transnational relations has guided the construction of wide-ranging projects such as Navigocorpus, a database dedicated to commercial maritime transport mainly in the Mediterranean between the seventeenth and twentieth centuries,²² GECEM—Global Encounters between China and Europe: Trade Networks, Consumption and Cultural Exchanges in Macau and Marseille, 1680–1840,²³ and World Seastems, a database for the collection and graphic representation of maritime traffic flows on various geographic and temporal scales from the early eighteenth century onwards, with the aim of highlighting hierarchical structures and regional articulations within the dynamics of globalisation.²⁴

While Seastems relied on a homogeneous set of sources (Lloyd’s printed registers), Navigocorpus brought together data extracted from primary archival sources, such as port and consular registers, as well as Health Offices records, and integrated a number of pre-existing datasets. GECEM, on the other hand, pooled data dispersed in Spanish, Portuguese, French, and Chinese primary sources, and modelled a relational structure to include in its database information on merchants, types of goods, geographical locations, ship routes, tariffs and taxes, and institutions. Guided by interests that lay primarily in economic history, the use of digital tools in these projects has made it possible to overcome the geographical fragmentation of archives and the typological fragmentation of sources, fostering a new understanding of changes in the circulation of goods, consumption, and the functioning of trade networks between the sixteenth and nineteenth centuries. Navigocorpus and GECEM in particular have exemplified, in different ways, the potential of data modelling—that is, the way data is categorised, stored, and linked together in a database—to provide knowledge infrastructures that are sufficiently flexible and open to allow the integration of different datasets, thus enabling the use of pre-existing information in new ways. Projects such as Navigocorpus demonstrate the fruitfulness of giving pre-existing data a “second life.” Particularly in the case of Navigocorpus, this has enabled the creation of a meta-database.

Increasing consideration of the durability and sharing of data is leading to the adoption of open standards to promote the dissemination and reuse of data and its preservation in the medium and long term. Several projects mentioned here, including GSR, make their data available under open licences and in formats that maximise interoperability.²⁵ Similar considerations on the amassing of dispersed archival sources and the use of big data in historical research could be made with regard to another long-standing large-scale

²² Navigocorpus: Corpus Itineraries of Merchant Ships XVIIe–XIXe Siècles, Silvia Marzagalli, Pierrick Pourchasse, and Jean-Pierre Dedieu, project directors (2007–2011), <http://navigocorpus.org/>; see also the project’s weblog for details on further development: Navigocorpus, <https://navigocorpus.hypotheses.org/>; Jean-Pierre Dedieu et al., “Navigocorpus: A Database for Shipping Information, a Methodological and Technical Introduction,” *International Journal of Maritime History* 23:2 (2011), 241–62.

²³ GECEM: Global Encounters between China and Europe: Trade Networks, Consumption and Cultural Exchanges in Macau and Marseille, 1680–1840, principal investigator Manuel Perez-Garcia (2015–2021), <https://www.gecemdatabase.eu/>; Manuel Perez-Garcia and Manuel Diaz-Ordoñez, “GECEM Project Database: A Digital Humanities Solution to Analyse Complex Historical Realities in Early Modern China and Europe,” *Digital Scholarship in the Humanities* (2022), <https://doi.org/10.1093/llc/fqac046>.

²⁴ World Seastems, principal investigator César Ducruet (2013–2018), <https://www.world-seastems.cnrs.fr/>; César Ducruet, ed., *Advances in Shipping Data Analysis and Modeling: Tracking and Mapping Maritime Flows in the Age of Big Data* (London: Routledge, 2017); for the geodatabase, see especially, César Ducruet and Mattia Bunel, “GeoSeastems: An Innovative Tool to Map Global Shipping Flows: Application to the Mediterranean Region,” *Portus Online* 33 (2017), <https://portusonline.org/geoseastems-an-innovative-tool-to-map-global-shipping-flows-application-to-the-mediterranean-region/>.

²⁵ GSR: Global Sea Routes open access dataset, dataset 1.0.0, 25 August 2022, <https://doi.org/10.5281/zenodo.7022766>

digital history project, *Slave Voyages*, in which the aspect of visual processing, including cartographic and animated visualisations, contribute to the understanding of information and dissemination of research results in a critical way.²⁶

Aspects of social and labour history have been at the heart of other projects, such as *Seafaring Lives in Transition: Mediterranean Maritime Labour and Shipping 1850s–1920s* (SeaLiT), which focuses on the impact of the transition from sailing to steam navigation on seafaring communities in the Mediterranean and Black Sea area between the nineteenth and twentieth centuries.²⁷ Alongside logbooks, SeaLiT also used various types of archival sources, from commercial guides to crew lists, notarial deeds, and personnel records. A project such as SeaLiT brought to the fore once more the archival dispersion and the multilingual nature of primary sources of interest in (Mediterranean) maritime history, and sought to provide scholars with a bridging tool to facilitate access to these materials. Other projects launched in recent years, such as *Rutter*, have opened up promising avenues of research. Using early modern nautical rutters (sailing directions) as well as logbooks, *Rutter* has begun to explore the evolution of global concepts about the earth and the growth of scientific descriptions of the globe in the sixteenth and seventeenth centuries that these sources document.²⁸

While far from constituting an exhaustive review of existing digital history projects, even if only with reference to maritime connections in the early modern era, these examples do illustrate some of the central issues that have been addressed by the use of digital tools since the 2000s, and some of the new questions that digital cognitive infrastructures have enabled historians to ask of known sources. Digital history projects have made it possible to store, organise, and make searchable large amounts of data, giving new impetus to quantitative and comparative research. This has resulted in the development and enhancement of opportunities made available virtually by archival sources and their catalogues.

The *Global Sea Routes* (GSR) project fits well in this lively context. As briefly mentioned above, GSR stores in a relational structure information on the routes of European trade voyages and the institutional and human actors involved, along with a wealth of information on the equipment (technological, cartographic) with which they were provided, their goals, exchanges of goods, meetings with other vessels, and more.²⁹ This information is in significant part drawn from logbooks, cross-examined through a number of other primary and secondary sources. However, unlike some of the projects mentioned so far, GSR goes beyond simply demonstrating the multiple and comparative value that can be derived from collecting information on numerous voyages within a single environment: The project also aims to develop a representation of each voyage under consideration, one that is accurate in its spatiotemporal coordinates.³⁰ Transforming the navigation and voyage data contained in a logbook into a georeferenced representation entails selecting a series of

²⁶ *Slave Voyages 2.0: Trans-Atlantic and Intra-American Slave Trade Databases* (current website 2015–), <https://www.slavevoyages.org/>; David Eltis, “A Brief Overview of the Trans-Atlantic Slave Trade,” *Slave Voyages: The Trans-Atlantic Slave Trade Database* (April 2018), <https://www.slavevoyages.org/voyage/about>.

²⁷ SeaLiT: *Seafaring Lives in Transition, Mediterranean Maritime Labour and Shipping, 1850s–1920s*, project director Apostolos Delis (2017–2021), <https://www.sealitproject.eu/>.

²⁸ *Rutter: Making the Earth Global*, Henrique Leitão, principal investigator (2019–), <https://rutter-project.org/>.

²⁹ On the concept of relational databases in the context of humanities research, see Stephen Ramsay, “Databases,” in *A Companion to Digital Humanities*, ed. by Susan Schreibman, Ray Siemens, and John Unsworth (Oxford: Blackwell, 2004), <http://www.digitalhumanities.org/companion/>.

³⁰ For background on visualisation in the context of digital history, but also with regard to the much longer history of visual representation in the study and understanding of the past, see John Theibault, “Visualizations and Historical Arguments,” in *Writing History in the Digital Age*, ed. by Jack Dougherty and Kristen Nawrotzki (Ann Arbor: University of Michigan Press, 2013), 173–85.

recorded positions on each voyage and translating each one into coordinates that individuate its geographical location in a current reference system. This is far from a mechanical or simple operation when dealing with logs in which the determination of the ship's daily position (and of longitude in particular) in open seas was far removed from today's techniques, fixed points, and standards, and followed different conventions depending on the historical period and origin of the vessel. Just think, to mention a feature of early modern logs that is particularly evident to today's reader, of the use of different zero meridians: more than six hundred have been identified in European transoceanic navigation records between the seventeenth and the nineteenth century. The frequency and accumulation of errors in longitude estimated by dead reckoning results in more than 50 percent of the ship routes recorded in logbooks needing major revisions in order to be replotted in a credible manner on today's cartographic backgrounds, in other words, so that they do not "sail on dry land." Likewise the parallel recording of longitude calculations made using different techniques may require particular methodological reflections and decisions from today's historian.³¹ These are problems that the articles in this issue examine, highlighting the role of commercial navigations and their protagonists within processes of knowledge accumulation that have been anything but linear, and showing the capacity of the georeferencing and visual representation system offered by GSR to help in the reading of primary sources and in their cross-examination, both thanks to other coeval experiences and sources and to the comparison with today's cartographic knowledge and conventions. In this sense, GSR's approach to the logbook as a primary source has revived its historicisation as a textual, graphic, and typographic repository in which the concrete navigational experiences of practitioners within the difficult oceanic "medium" are deposited—to paraphrase the words of Clive Wilkinson in his article in this issue.

Early Modern Transoceanic Commercial Navigation from the Practitioners' Perspective

As anticipated above, this monographic issue aims at advancing our understanding of how the logbooks of commercial voyages in the early modern era contribute to the accumulation of knowledge in the field of oceanic navigation, based on processes that are far from being a progressive summation, and instead consist of mechanisms of trial, error, and correction in which the singular experiences of practitioners of navigation were critical. Clive Wilkinson's contribution presents a rich overview of European sailors' observations of the environment and emphasises their role—alongside that of formalised disciplinary knowledge such as mathematics and astronomy—in determining the daily position of the ship, which was a distinctive concern of European and North American navigation. Through logbooks of British voyages, as well as journals, voyage accounts, and sailing directions, it is possible to note the role of the observation of landfalls and soundings of the seabed and their use in reducing margins of error in position estimation, the reading of clouds, fog banks, and other elements, as well as knowledge of weather systems, in the prediction of weather conditions, the observation of marine fauna to estimate

³¹ David Philip Miller, "Longitude Networks on Land and Sea: The East India Company and Longitude Measurement 'in the Wild,' 1770–1840," in Dunn and Higgitt, *Navigational Enterprises in Europe*, 223–47; on zero meridians and longitude errors: *CLIWOC Final Report*, 11–3; Clive Wilkinson, *British Logbooks in UK Archives 17th–19th Centuries: A Survey of the Range, Selection and Suitability of British Logbooks and Related Documents for Climatic Research* (National Oceanic and Atmospheric Administration and Climate Database Modernization Program, 2009), 26; Andrew Jackson et al., "Four Centuries of Secular Geomagnetic Variation from Historical Records," *Philosophical Transactions: Mathematical, Physical and Engineering Sciences* 358:1768 (2000): 957–90.

orientation, and the use of magnetic field detection to determine the ship's course. Wilkinson's work valorises the natural environment as a complex canvas of the practitioners' observations and interpretations. It delineates the genetic link that textual genres such as sailing directions had with the knowledge accumulated in the field and transmitted through logbooks and correspondences. The centrality of environmental observation and the transmission and systematisation of knowledge derived from it was linked to a crucial problem in the age of sail: the need to find the best route to a given destination in terms of environmental conditions, upon which the movement of the ship was naturally dependant. This practical need gave rise to the information gathering and processing initiatives that resulted in thousands of logbooks and journals being summarised and published in sailing directions and charts.

Wilkinson refers to the eighteenth century as a pivotal moment in the codification of knowledge and practices, for instance with regard to the measurement of water temperature being used to estimate the distance to the shore or as a warning of the proximity of ice. The articles by Phillip Reid, Erica Grossi, and Filippo Chiocchetti show the critical process which characterised the eighteenth century through specific case studies. In Reid's contribution, the Atlantic crossings of the American-built British schooner *Sultana* (1768–72), the scow *George*, and the brig *Reward* (1805–6) are reconstructed through logbooks, paying particular attention to the techniques by which currents and winds in the North Atlantic were managed while navigating the different crossings. The geographical visualisation produced within the environment provided by GSR made it possible to highlight and analyse in depth the sharp contrast between the jagged westward route and the clean-cut curve of the eastward return. Thanks to GSR it was possible to connect this evidence to observations from the ship's logs on weather conditions, sail combinations used, and the tactics employed by the crew to adapt to continuous and drastic changes in wind strength and direction, sea state, and visibility. Based on the analysis of voyages made by GSR, Reid's article offers a vivid reconstruction of the struggles to survive Atlantic storms on journeys that were "ordinary" at the time but risky nonetheless.

While information on the technical aspects of navigation naturally springs from the primary purposes for which logs were kept, they are also important for other cultural-historical elements that can be found in the "remarks" column, or between the lines, thus making the logbook an "epistemic genre" of particular polysemic value.³² The articles by Grossi and Chiocchetti give intriguing examples of this, focusing on two voyages from England to Asia that were engaged in intra-Asian trade: those of the East Indiamen *Compton* to Bombay (1723–6) and the *Nassau* to India and China (1781–5). Both, in different ways, enrich our view of the complex (inter-)cultural elements involved in the practice of sailing, and open up unusual glimpses into historical processes and events as "seen from below" and as "seen from the sea."

The logbook kept by Captain William Mawson on the *Compton* makes it possible to exploit the source's potential for reconstructing daily life on board, beyond the explicitly technical-administrative purpose for which the record was kept. Grossi's research brings to light the singularity of voyages which, due to their commercial ordinariness, are rarely made the object of specific reconstructions, and tend to "disappear" within broader datasets and statistics. This work echoes the recent trends in cultural history and postcolonial historiography that invite us to give full recognition, in the reconstructions of sea voyages, not only to the institutional agency and economic interests of bureaucratic-administrative apparatuses such as that of the East India Company, but also to the presence and role of the actors in the field, even if they were not direct

³² Gianna Pomata, "Observation Rising: Birth of an Epistemic Genre, 1500–1650," in *Histories of Scientific Observation*, ed. by Lorraine Daston and Elizabeth Lunbeck (Chicago: University of Chicago Press, 2011), 45–80.

producers of documents preserved in the archives and we may find their voices in between the lines of sources such as logbooks.³³ The focus on the captain's voice allows Grossi to highlight the value of the linguistic aspects of the log and use them to draw out local interlocutors and collaborators, and to outline the multilingual quality of life on board the Company's ships, as well as the importance of nautical and commercial jargons and trade languages. The reconstruction of the *Compton's* voyage and its geo- and chrono-referenced visualisation in GSR shows the density of crossings in the inter-Asian phase of the voyage and the central role of navigation along the coast or through gulfs and straits compared to the long transoceanic routes. This also invites a reassessment of the relative importance of contingent elements and local constraints during the voyage compared to the orders from above with which the ship set sail.

The case of the East Indiaman *Nassau*, analysed by Chiocchetti with reference to a number of other voyages encountered or comparable, is paradigmatic of the peculiarities that in the eighteenth century rendered unique those voyages often considered by historiography as routine, and whose exceptionalities tend to become invisible within studies and representations of "average" routes. The *Nassau's* trading activities from India to the China Seas were profoundly shaped by military events and necessities, as the vessel became involved in the operations of the Second Anglo-Mysore War (1780–1784) both directly and by transporting troops. Chiocchetti's article gives us an eloquent example of a "history seen from the sea," shedding new light on known events, thus giving us a deeper and more concrete understanding of the Anglo-Mysore conflict and of Anglo-American relations during those years. The case of the *Nassau* clearly illustrates the well-known political-military role of the East India Company in the Asian theatre.³⁴ The comparison of the voyage to others, coeval and analogous in destination, also makes it possible to highlight common structures and trends, for example elements of seasonality or the increase, in the last quarter of the century, of East India Company ships extending their voyages from India to China. The comparative analysis carried out in GSR enables the information contained in the logbook to be linked to specific route segments, allowing the researcher to detect and analyse errors in longitude calculation as well as the consequences on the ship's mobility arising from the use of "wetware" in navigation, episodes of desertion, insubordination, violence, and military engagements.

Navigations such as those of the *Nassau* and the *Compton* give us a picture of an ocean made up of anything but deserted expanses of water, populated as it was by a biosphere whose observation was crucial and profoundly anthropised, ploughed by innumerable routes and vessels that made each voyage dense with encounters and exchanges of information as well as risks and potential conflicts. Grossi and Chiocchetti's articles focus on the East India Company's sailing experiences to draw widely transnational, or rather transimperial and multicultural pictures, on board the vessels, in the ports, and in the encyclopaedia of knowledge and skills shared by the practitioners of navigation.

³³ Samuli Kaislaniemi, "The Linguistic World of the Early English East India Company: A Study of the English Factory in Japan, 1613–1623," in "Alternative Histories of the East India Company," special issue, *Journal for Early Modern Cultural Studies* 17:3 (2017), 59–82; Dunn and Higgitt, *Navigational Enterprises*; "Alternative Histories of the East India Company," special issue, *Journal for Early Modern Cultural Studies* 17:3 (2017); Brock, van Meersebergen, and Smith, *Trading Companies*; Anna Winterbottom, *Hybrid Knowledge in the Early East India Company World* (London: Palgrave MacMillan, 2016).

³⁴ Julia Schleck and Amrita Sen, Introduction, "Alternative Histories of the East India Company," special issue, *Journal for Early Modern Cultural Studies* 17:3 (2017), 1–9; Philip Stern, *The Company-State: Corporate Sovereignty and the Early Modern Foundations of the British Empire in India* (Oxford: Oxford University Press, 2012); Clulow and Mostert, *The Dutch and English East India Companies*.

Concluding Remarks

This special issue of *Itinerario, The View from the Sea. The Practice of Early Modern Transoceanic Commercial Navigation*, proposes a new appreciation of the practitioners' experience in improving navigation in terms of safety and efficiency, alongside aspects hitherto more closely examined by existing historiography, such as advances in scientific disciplines like mathematics and astronomy and the development of instruments like the quadrant, the sextant, and the marine chronometer. The cases of the *Sultana*, the *Compton*, and the *Nassau* brilliantly exemplify and substantiate the role of observation and practical know-how of which Wilkinson's analysis provides a broad overview. Against the technical and cultural background outlined by Wilkinson, there is a methodological value that Reid, Grossi, and Chiocchetti's contributions share, which concerns the deciphering of the eighteenth-century logbook, its processing through GSR, and the exploitation of its heuristic potential. The use of standardised grids and tables, of abbreviations in numerical and descriptive entries, of implicit conventions in estimations and computations, the very criteria for recording events and circumstances, and the presence of "blank spaces," so to speak, in other words of all those elements that are not normally mentioned in a log, all are aspects that make these sources textual objects in need of specific decoding tools in order to be read, interpreted, and reconciled with contemporary systems of measuring space and time. Added to this is the particular moment of change that affected the structure of logs in the eighteenth century, which was the development of the preprinted template by the Royal Navy, as well as by the East India Company, as discussed in Reid's and Grossi's articles, and the subsequent addition of a specific space dedicated to the recording of longitude as calculated with the aid of the chronometer or "time piece," the introduction of which, as Wilkinson points out in his contribution, brought with it specific new problems.

This special issue delivers the results of a project, GSR, that may yet yield many further results about particular case studies as well as from a comparative perspective. The research presented here makes it possible to grasp aspects, moments, and methods, as well as forms of life on board and forms of the production of knowledge fundamental to the art of navigation, providing a complementary foundation to studies that in recent years have exploited similar primary sources but that only subjected them to quantitative, serialised, and statistical approaches. In this sense, the use of digital tools in the analysis and visual representation of the case studies analysed in some of these articles demonstrates the fruitfulness of understanding quantitative and qualitative approaches to using the digital—"distant" and "close" readings of sources to use Franco Moretti's terms—in a complementary sense. This is exemplified with particular clarity by the contributions that derive nautical data from the analysis of logbooks, allowing for the georeferenced digital representation of routes in their everyday complexity, as well as descriptive elements that enable the understanding of commercial voyages as they actually occurred. This type of information processing in a digital environment opens up new perspectives on how these experiences and sources have participated in the elaboration of climatological, ecological, and human–environmental knowledge, as well as presenting new possibilities for enhancing their testimonial potential within linguistically and cross-culturally historiographical narratives.

Giulia Iannuzzi's research interests lie in the history of publishing and translation processes, the history of speculative imagination in a comparative perspective, the conceptualization of human diversity in early modern European culture, and the cultural history of time. She is honorary fellow in Early modern history at the University of Trieste (Italy). Her books include: *Futuristic Fiction, Utopia, and Satire in the Age of the Enlightenment. Samuel Madden's Memoirs of the Twentieth Century (1733)* (Turnhout: Brepols, 2023).

Cite this article: Iannuzzi G (2024). Introducing *The View from the Sea. The Practice of Early Modern Transoceanic Commercial Navigation*. *Itinerario* 48, 14–24. <https://doi.org/10.1017/S0165115324000068>