

Advances in Shipping Data Analysis. Contributions to maritime studies

 $\mathbf{T}$  he last two years 2016 and 2017 have been particularly productive in terms of largescale, edited publications about maritime-related topics. All of them condense such a vast quantity of contributors, questions, sources, methods, and operate across so many scientifically disciplines, geographic areas, and historical periods that summarizing their contents seems an impossible mission. We thus deliver the key messages of these new and innovative contributions to a better understanding of the maritime world, letting readers appreciate and select their favorite readings for the cold winter to come.

## A quantitative and multidisciplinary perspective on shipping data analysis

Following the international workshop (Paris, 25-27 April 2016) funded and organized through the World Seastems research project supported as Starting Grant No. 313847 by the European Research Council (ERC) over the period 2013-2019 (see PORTUS No. 26, <u>www.portusonline.org</u>), the second of its kind following the first workshop (see PORTUS No. 28, <u>www.portusonline.org</u>), a new edited book has been released [1]. This book certainly shares certain similarities with the previous edited book entitled "Maritime Networks. Spatial Structures and Time Dynamics", released in 2015 [2].

First, it belongs to the same collection recently launched by the publisher Routledge entitled "Series in Transport Analysis", which aims to provide state-of-the-art research about particular transport modes – the maritime mode occupies half of the collection. It is entitled Advances in Shipping Data Analysis and Modeling – Tracking and Mapping Maritime Flows in the Age of Big Data.

Second, and related with the multidisciplinary nature of the last workshop, it gives paramount importance to the representation of most scientific disciplines (albeit mainly social sciences and humanities) interested in shipping, ports, and maritime transport: archaeology, cartography, computer science, econometrics, economics, engineering, geography, geomatics, geopolitics, history, management, mathematics, operations research, physics, regional science, statistics, and territorial planning. The 24 chapters written by no less than 44 authors from 15 countries are preceded by a foreword by the World Bank, and are followed by an afterword (UNCTAD) and an epilogue (Concordia University). Inciting



and creating bridges and discussions across those different worlds and approaches is again the philosophy of the book, in order to enhance the recognition of maritime studies towards mainstream academic research as well as towards policymakers and the wider society.

Third, the book looks at a wide array of geographical areas, as being a voyage across all continents, from Brazil to the Mediterranean basin and North Korea; and of data sources, from archaeological records, antique texts, papyrus, ancient ship logbooks, vessel movements, customs data, liner shipping schedules, and AIS or radar data. The quantitative nature of the book should not obscure the in-depth qualitative dimension brought by experts of specific periods (i.e. antiquity, modern times, and contemporary age) and terrains (i.e. specific actors and local contexts) when it comes to make the data speak.

Nevertheless, this book innovates in many ways compared with its predecessor. First, the relational or "network" perspective, which is so inherent to shipping, is not anymore the principal focus of the book. The perspective has been enlarged to all methodologies, for the sake of providing an overview on the diversity of approaches to maritime flows of all kinds. Second, it is organized differently in three different parts: connectivity analyses, where network analysis and graph theory keep their due share; geospatial analyses that put data visualization on the forefront; and vulnerability analyses, where the impacts of political change and other dimensions (e.g. peripherality, hierarchy, strategy) on the pattern of shipping flows are discussed. Third, and as reflected in the foreword and afterword, this book is more widely open to policymakers and transport actors, who are not always aware of the evolution of shipping research in terms of data and methods that can support their visions and decisions. Lastly and as rightly underlined by Prof. Brian Slack in the epilogue, data-driven approaches should always be taken with care given the limits of quantitative measures to translate a trend or phenomenon. Further research is needed to complement the offered applications by a lot more studies on much neglected dimensions such as passenger or bulk shipping, which are somewhat bypassed in this book, or other existing data such as satellite information for instance.

All in all, *Advances in Shipping Data Analysis* should not only attract the attention of the shipping world, but also of anyone interested in wider aspects of digital humanities, data mining, globalization and regionalization dynamics, international trade, and urban/regional studies.



## The diversity of other contributions to maritime studies: history, mobility, explorations and perceptions

Condensing the contents of all the other contributions in the field of maritime studies would be an impossible task, given the diversity of their research background and objectives, etc. Nonetheless, it is important, at least, to offer a panoramic view on the recent surge of academic production on the matter, without being fully exhaustive. We start with two enormous contributions from maritime history, namely *La maritimisation du monde de la* préhistoire à nos jours [3] and The Sea in History [4]. The first book published by Paris Sorbonne is ambitious by the long-term view it provides about one unique phenomenon, the "maritimisation" of the world, a concept probably taken from the famous French geographer André Vigarié (1995), defined by a reinforcement of the importance of the sea (and thus, maritime transport) in the socio-economic development of all nations. The second book published by Boydell & Brewer is even more ambitious, supported by the *Océanides* [5] association, whose president Mr. Christian Buchet is also the main scientific editor of this 4volume encyclopedia. Published in both English and French, each volume is a set of chapters about one historical period (Antiquity, Middle Ages, Modern Times, and Contemporary Age). The whole set is driven by the sea as a "key to history" and a "catalyst of our future". However, one should acknowledge that this collection is more a mosaic of dispersed contributions than an encyclopedia stricto sensu, with reference to the previous Oxford Encyclopedia of Maritime History [6] published in 2007 and edited by John Hattendorf, organized alphabetically with cross-references between the various articles. In The Sea in History, each of the 200 chapters written by no less than 260 scholars originating from about 40 countries remains an academic paper on its own, like in a special issue of a journal. It thus lacks the encyclopedical dimension that it claims. Nevertheless, it provides a vast quantity of information that has rarely been provided within a single publication, maritime history (and history in general) being highly fragmented by nature according to periods and geographic areas.

A drastically different tone and content is provided by two other edited volumes, namely *L'océan à découvert* [7] by CNRS Editions and *Maritime Mobilities* [8] by Routledge. The first book, in French, is mainly concerned with current challenges of understanding, discovering, and analyzing more or less everything related with the sea, from undersea explorations to fisheries and coastal management. Written by 160 scholars through 135 articles organized in 8 parts, it also aims to provide solutions for a better future in relation



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with the U.N. sustainable development objectives. The second book on mobilities recalls an earlier albeit recent contribution by the same publisher, *Cargo Mobilities* [9], because it sees the maritime element from a more social, and critical perspective, which is not the classic approach in either natural or social sciences. *Maritime Mobilities* by Gordon Wilmsmeier and Jason Monios rightfully and explicitly address issues through an uncommon vocabulary as illustrated by "hangover", "waste", "shadow", "unproductive", "harmful", etc. They deliberately propose a much-needed critical approach to what happens across the oceans, which is not always necessary, legitimate, and promising for our next generations. This complements very well the quantitative approach proposed by *Advances* ... and the classic ones of the other books reviewed in this article. Last but not least, the cognitive approach proposed by another recent book, *The Geography of the Ocean: Knowing the Ocean as a Space* [10], is another complement based on narratives and perceptions to evaluate our awareness of the (importance of the) sea, using historical geography as a base approach to such issues [11].

## References

Vigarié A. (1995) La mer et la géostratégie des nations. Paris: Economica.

Notes

[1]https://www.routledge.com/Advances-in-Shipping-Data-Analysis-and-Modeling-Tracking-and-Mapping-Mari time/Ducruet/p/book/9781138280939

[2]https://www.routledge.com/Maritime-Networks-Spatial-structures-and-time-dynamics/Ducruet/p/book/978 1138911253



- [3] https://pups.paris-sorbonne.fr/maritimisation
- [4] https://boydellandbrewer.com/the-sea-in-history-set-hb.html
- [5] https://oceanides-association.org/
- [6] https://www.oxfordreference.com/view/10.1093/acref/9780195130751.001.0001/acref-9780195130751
- [7] https://www.cnrseditions.fr/sciences-de-la-terre/7516-l-ocean-a-decouvert.html
- [8] <u>https://www.routledge.com/Maritime-Mobilities/Monios-Wilmsmeier/p/book/9781138232808</u>

[9]https://www.routledge.com/Cargomobilities-Moving-Materials-in-a-Global-Age/Birtchnell-Savitzky-Urry/p/bo ok/9780415720953

[10] https://www.amazon.com/Geography-Ocean-Knowing-Studies-Historical/dp/1409421430

[11] see also the 4<sup>th</sup> edition of *The Geography of Transport Systems* (2017) by Jean-Paul Rodrigue et al. containing numerous maritime-related chapters and elements, <u>https://www.routledge.com/The-Geography-of-Transport-Systems-4th-Edition/Rodrigue-Comtois-Slack/p/book</u>/9781138669574

Head Image: Publications about maritime-related topics.



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