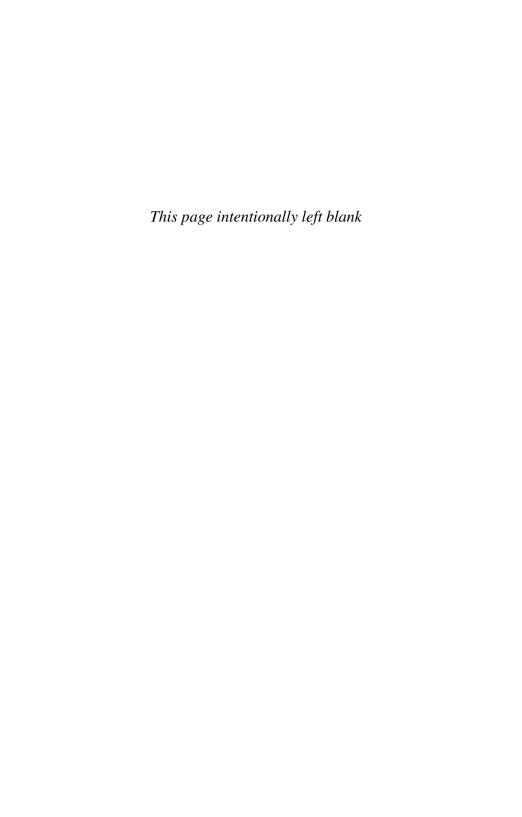


Law, Labour and Empire



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Comparative Perspectives on Seafarers, c. 1500–1800

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Contents

List of Figures and Maps List of Tables		Vii
		ix
Pr	eface and Acknowledgements	X
No	Notes on Contributors	
1	Overview. Trades, Ports and Ships: The Roots of Difference in Sailors' Lives Richard W. Unger	1
Pa	rt I Seamen and Law	
2	The Invasion of Northern Litigants: English and Dutch Seamen in Mediterranean Courts of Law <i>Maria Fusaro</i>	21
3	Until the Very Last Nail: English Seafaring and Wage Litigation in Seventeenth-Century Livorno Andrea Addobbati	43
4	Sailors' Legal Rights in a Mediterranean Hub: The Case of Malta <i>Joan Abela</i>	61
5	Between Oléron and Colbert: The Evolution of French Maritime Law until the Seventeenth Century Bernard Allaire	79
6	The Legal World of English Sailors, c. 1575–1729 Richard J. Blakemore	100
Pa	rt II Seamen and Labour	
7	Sailing through the Strait: Seamen's Professional Trajectories from a Segmented Labour Market in Holland to a Fragmented Mediterranean Tijl Vanneste	123
8	The Hanseatics in Southern Europe: Structure and Payment of German Long-Distance Shipping, 1630–1700 <i>Magnus Ressel</i>	141
9	Mobility, Migration and Human Capital in the Long Eighteenth Century: The Life of Joseph Anton Ponsaing <i>Ielle van Lottum. Aske Brock and Catherine Sumnall</i>	158

vi Contents

10	Dividing the Spoils: Research into the Paybook and Other Documents relating to the Privateering Voyage of the <i>Duke</i> and <i>Dutchess</i> , 1711 <i>Tim Beattie</i>	177
11	Coral Fishermen in 'Barbary' in the Eighteenth Century: Between Norms and Practices Olivier Lopez	195
Par	t III Seamen and Empire	
12	Portuguese Seafarers: Informal Agents of Empire-Building Amélia Polónia	215
13	Spanish Mariners in a Global Context Carla Rahn Phillips	236
14	Deserters, Mutineers and Criminals: British Sailors and Problems of Port Jurisdiction in Genoa and Livorno during the Eighteenth Century Danilo Pedemonte	256
15	Claiming their Rights? Indian Sailors under the Dutch East India Company Matthias van Rossum	272
16	Chinese Seamen in London and St Helena in the Early Nineteenth Century Yu Po-ching	287
Afterword Maria Fusaro		304
General Bibliography		311
Index		340

List of Figures and Maps

Figures

4.1	Shipping departures from Malta for the years 1611 and 1711	63
4.2	Monthly shipping departures from Malta for the years 1582, 1588, 1611 and 1711	64
4.3	The loan given by the <i>padrone</i> to the sailors prior to the voyage	72
4.4	Extract from a copy of the notarial deed presented at the <i>Consolato</i> tribunal	74
5.1	Seventeenth-century maritime edicts and ordinances in France	89
5.2	Admiralty court of Marseille: maritime litigation, 1609–23	92
5.3	Admiralty court of Marseille: seamen appearing as plaintiffs and defendants	93
5.4	Number of trials at the Admiralty court of Marseille, 1675–1690	95
5.5	Origins of the 1681 Ordonnance de la marine	96
6.1	Acts, ordinances and proclamations on maritime issues in England, 1509–1729	104
6.2	Judgments of the Trinity House of Hull, 1582–1664	114
8.1	Estimated number of German ships engaged in South European waters, 1631–1697	146
9.1	Origin of ships and crews in the Prize Papers Dataset	162
9.2	Place of origin of maritime migrants residing in Copenhagen during the eighteenth century	170
9.3	Proportion of resident migrants, non-resident migrants and native workers in the Danish merchant marine	171
11.1	Quantities of coral fished and sent from the French concessions in North Africa, 1741–90	198
12.1	Pilots' examinations in Lisbon, 1596–1648	223
12.2	Portuguese pilots examined in the <i>Casa de la Contratación</i> of Seville, 1574–1650	232
13.1	Ships and tonnages in Spain's transatlantic trade, 1505–1778	238

viii List of Figures and Maps

Maps

7.1	The United Provinces in the Seventeenth Century	127
11.1	The trading posts of the Royal Company of Africa in 'Barbary'	196

List of Tables

4.1	Similarities between the Consolati del Mare of Malta,	6 -
	Messina, Valencia and Barcelona	67
7.1	Roster of the St Jan (1629)	134
8.1	Payment for sailors on board Hamburg convoy ships, 1662–1746 (Mark Lübisch per month)	149
9.1	Destination of voyages beginning in Copenhagen during the eighteenth century, by global region	172
12.1	Vila do Conde – shipbuilding contractors, 1560–1620	224
12.2	Vila do Conde – shipowners, 1560–1620	225
12.3	Shipbuilding partnerships – number of contractors	226
12.4	Endogamic familial connections between Vila do Conde seamen's families	226
12.5	Agents involved in overseas trade (Vila do Conde, 1560–1620)	229
13.1	Wages in <i>reales</i> of seamen and officers on Spain's Indies fleets	239
13.2	Monthly wages of free wage-earners on Spanish galleys, 1584	242
13.3	Annual salaries of officers, bureaucrats, and master artisans on Spanish galleys, 1584	243
13.4	Men receiving supplementary pay in the squadron of Spain, 1584	244
16.1	Contractors of the EIC for Asiatic Seamen, 1797–1834	292
16.2	The Medical Superintendent and Resident Surgeon at Gravesend, 1798–1836	29 3

Preface and Acknowledgements

Seafarers were the first workers to inhabit a truly international labour market. They worked in an economic sector – the maritime one – which, throughout the early modern period, drove European economic and imperial expansion, technological and scientific development and cultural and material exchanges around the world. The period from the late sixteenth to the early nineteenth centuries was a time of economic and cultural transition, punctuated by crises, in which new emergent powers challenged the dominance of older centres, legal systems were reshaped by international interactions, and skilled labourers were subjected to the pressures of interconnecting and growing economies. Sailors were key protagonists throughout all of these developments, intertwined in the long and complicated process of globalisation. The cumulative actions of their myriad and diverse working lives are of pivotal importance to understanding this era and its consequences.

Although frequently seen as homogeneous and powerless, seamen possessed a degree of individual agency which deserves to be recognised: to understand that agency, its limits and its consequences is the primary aim of this volume. Given the mobility of seafarers and the flexibility of their employment between different national domains, it is of crucial importance to adopt a comparative approach if we are to contemplate the workings of this global labour market, the actions of seamen within it and their ultimate impact. It is equally critical to reconcile the vast but practically faceless context of economic factors and legal codes in maritime trade with the experiences of individual people and communities. These two dimensions have sometimes been overlooked in historical research on seafarers, often written within a single national history or, when international comparisons are pursued, most regularly presented in broad statistical terms. Even beyond national histories, there has been a tendency to work within oceanic regions rather than to draw comparisons and connections between them, and more attention has been given to European sailors' activities in the Atlantic and Indian Oceans than to seafaring in the Mediterranean, despite its continuing importance to the European economy and international politics, and the profound influence of Mediterranean traditions upon maritime practices elsewhere. Moreover, where research has explored the globalisation of European legal regimes and seafarers' involvement in it, scholars have often focused on colonisation, piracy and war, while the customary and civil law apparatus through which the vast bulk of maritime trade was regulated has been neglected.

In order to analyse how the choices and actions of seafarers contributed to legal, political and economic transformation, therefore, it is essential to

trace this process from the Mediterranean powers which dominated medieval Europe through to the economic and imperial rise of north-western European states, both within Europe and elsewhere across the globe. It is important, too, to embrace multiple perspectives; to investigate not only the policies at the centre but the actions and reactions at the periphery (in both political and geographical senses). This volume therefore brings together essays by scholars from different countries and traditions in order to tackle the diversity and complexity of our subject. We do not seek to be comprehensive, but rather to provide a series of specific studies drawn from current scholarship. The volume combines research on a range of levels from micro to macro, and across different regions, to explore the intersections and balance between economic processes, legal regimes and individual working lives, and how these cumulatively tipped the balance of power first in Europe, from the Mediterranean to the north, and subsequently in other world regions.

The book opens with a general overview, by Richard Unger, of the major factors which structured seafarers' lives and their working conditions during the early modern period. Unger considers the relationships between market forces, technology and the decisions made by individual men and women. In particular, he identifies the competitive advantages upon which the northern European states built their successes. This chapter thus sets the scene for the more specific contributions which follow and which we have organised around three broad and interrelated themes: law, labour and empire. To highlight connections between the three sections, all contributions provide internal cross-references.

In Part I, 'Seamen and Law', the essays focus upon the legal systems and institutions within which seafarers worked, with which they grappled, and to which their individual actions also contributed. The first three chapters look at the maritime laws of major Mediterranean ports. Maria Fusaro investigates the increasing use of courts in Venice and Genoa by northern seafarers during the seventeenth century, and the reactions of these two states. Similarly, Andrea Addobbati studies the policies of the Tuscan government and their impact upon English seafarers' wage litigation in Livorno during the latter half of the same century. Joan Abela tackles similar issues in her chapter on the Consolato del Mare di Malta, a tribunal established in Valletta in 1697 which incorporated pre-existing maritime legal conventions, but was at the same time responsive to current practice amongst merchants and sailors. All three chapters deal with the attempts by specific Mediterranean authorities to determine maritime law, and assert their own jurisdiction, even as the fastdeveloping shipping sector grew increasingly beyond their control.

The final two chapters in this section take a different approach by analysing changes within national legal systems. Bernard Allaire challenges the idea that Colbert's famous Ordonnance de la marine represented a new form of maritime legislation, suggesting instead that there was a long legal tradition both in specific ports and French national legislation, and that Colbert's Ordonnance sought to harmonise and extend these laws to the entirety of the realm and unify procedures, rather than impose a radical break. Richard Blakemore assesses the legal world of English sailors from the sixteenth to the early eighteenth centuries, arguing – like Abela and Allaire – that it was largely defined by custom which was continually negotiated between seafarers and the English authorities both in and outside of court, until an act of Parliament in 1729 established a new basis for seafaring employment. All contributions in this section collectively stress the legal agency of early modern seafarers and the resilience of their customary law, while at the same time acknowledging the pressures placed upon them by state-driven legal reform, for which the second half of the seventeenth century was a pivotal moment.

Part II, 'Seamen and Labour' (a term we employ in a loose sense), turns attention to the practicalities of seafaring and the shipping industry during these centuries. Contributions by Tijl Vanneste and Magnus Ressel discuss some operational consequences of the Mediterranean 'invasion of the northerners', in Fernand Braudel's well-known phrase, which was at the origin of the legal developments described by Fusaro and Addobbati. Vanneste interrogates the idea that the Dutch labour market was locally and professionally 'segmented', its international nature, and the implications of this situation for Dutch activity in the Mediterranean. Ressel demonstrates that, though they are often overlooked, northern German ports such as Hamburg also participated in Mediterranean trade during the seventeenth century, and he assesses the political and economic factors which influenced trade levels and seafarers' employment. Taking us further afield and into microhistory, Jelle van Lottum, Catherine Sumnall and Aske Brock introduce Joseph Ponsaing, a German-born shipmaster of the Danish East India Company from the late eighteenth century, whose life and voyages to the Indian Ocean open a window onto the significance of migration and human capital within the shipping industry.

The chapters by Tim Beattie and Olivier Lopez provide another form of comparative perspective, addressing maritime workers in other sectors than trade proper. Beattie's essay considers privateering as a commercial enterprise, and presents a close reading of the 1711 lawsuit which followed the roundthe-world privateering voyage of the Duke and Dutchess, discussing how sailors were recruited, managed and rewarded, and their treatment at the hands of the English Court of Chancery. Lopez examines the activities of French coral fishermen on the North African coast, governed in the late eighteenth century by the French Royal Company of Africa. With striking similarities to the topics analysed in the first section, Lopez shows how the Company sought to impose its own norms upon its employees, but ultimately failed to change their traditional practices. Part II brings together several dimensions of northern European shipping during the seventeenth and eighteenth centuries, as well as throwing light upon the experiences of sailors themselves.

In the third and final section, 'Seamen and Empire', contributors present analyses of maritime employment within the Portuguese, Spanish, Dutch and British empires. In her chapter on the Portuguese situation during the fifteenth and sixteenth centuries, Amélia Polónia argues that sailors were part of self-organising networks and acted as informal but essential agents in the overseas expansion of this relatively small state. Using a biographical approach similar to that of Van Lottum, Sumnall and Brocke, Carla Rahn Phillips describes the careers of Spanish seafarers, both administrative officers and seamen, who crossed the world in the service of the Spanish crown and who alternated between mercantile and naval activities during the course of their careers. In these two contributions we see the crucial role played by seafarers of various kinds in European empire-building.

The point of view is reversed in the last three essays of the volume, which show how developing imperial systems impinged on the working lives of European and Asian seafarers. Danilo Pedemonte takes up the story begun by Fusaro and Addobbati, discussing lawsuits involving British sailors in Genoa and Livorno during the eighteenth century and the attempts by the British government and its representatives to assert authority over their seafaring subjects, notwithstanding the local governments' efforts to defend their own jurisdictions. Matthias van Rossum analyses the working environment of Asian sailors employed by the Dutch East India Company during the same period, emphasising its hierarchical structure and built-in violence, and analysing the ways in which these sailors challenged or appropriated the system. Yu Po-ching takes us into the early nineteenth century in his discussion of the treatment of Chinese sailors in London and St Helena: British attitudes towards these workers, who were increasingly necessary due to the expansion of global trade, were complex and the authorities struggled to protect both the sailors and the social order in the districts where they resided. The nineteenth century is a good time to conclude this volume, as Yu Po-ching's analysis shows some of the later consequences of the early modern legal changes identified in Part I and the development of the shipping industry introduced in Part II, while taking the European imperialism of Part III into its temporal zenith.

As a whole, the volume highlights seafarers' agency in legal, economic and political terms, but also the frequently tense relationship between that agency and the broader frameworks of law, labour and empire which seafarers helped to build, but which also constrained them.

In bringing this project to fruition, we have incurred many debts that we are glad to acknowledge here. First and foremost we are grateful to the European Research Council for funding our research project – 'Sailing into Modernity: Comparative Perspectives on the Sixteenth and Seventeenth Century European Economic Transition' - of which this volume was conceived, from the beginning, as an integral part. We are also thankful to all the participants of the conference 'Working Lives Between the Deck and the Dock: Comparative Perspectives on Sailors as International Labourers (16th–18th century)', both speakers, including those whose papers do not appear in this volume, and audience. This gathering at the University of Exeter (10–12 September 2013) gave us the opportunity to present the preliminary results of our researches, to test our interpretation in front of a receptive and engaged audience, and to learn about how these issues developed in different parts of the globe. These conversations, rich in suggestions and constructive criticism, have been essential in producing this volume, and have also tremendously benefitted the overall development of our project.

Amongst the administrative staff at Exeter who supported us, Sandi Smith and Claire Keyte deserve special mention, both of whom have greatly helped us in the grant administration with efficiency, patience and good humour. At Palgrave, Jenny McCall, Jade Moulds, Alec McAulay and Holly Tyler have given us generous editorial support from our first proposal onwards, and we would like to thank the anonymous peer reviewers for their enthusiasm for the volume and their helpful criticisms. Last but not least, a fundamental role in the book production has been played by Richard Blakemore, who enthusiastically bore the burden of being the only English native speaker of the team, and by our copy-editor Ruth MacKay, who not only negotiated the challenges of harmonising texts translated from many different languages with numerous different styles, but also made an important contribution with her deep scholarly knowledge of early modern global history and fine analytical skills, both of which allowed us to greatly improve the final result.

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1

Overview. Trades, Ports and Ships: The Roots of Difference in Sailors' Lives

Richard W. Unger

Shipping was a major source of increased efficiency and, ultimately, of economic growth in Europe from the sixteenth through to the eighteenth century. People who worked in the maritime sector made a significant contribution to the economy and society during the period. The conditions which framed the working lives of those sailors and dockworkers were generated and constrained by factors external to shipping. The general framework, the gross differences between the maritime states in the north-west of the continent and the lands surrounding the Mediterranean, dictated long-run competitive advantages constraining the scope of workers' actions. More immediate circumstances shaped daily labour in the maritime sector. Workers were not silent tools of external, powerful impersonal forces. There were factors which framed workers' lives, but the actions taken by workers contributed significantly to the frame. The interaction, the feedback from market forces and technology and the choices made by the men and women active in the maritime sector created a circularity of causation. Any discussion of labour and shipping must take account of the choices people on board and in ports made. There were matters beyond sailors' and dockworkers' and merchants' control which dictated many features of what they had to do. But there were things which they did on board, on the quay and in the counting house which dictated long-term developments in Europe and beyond.

In the three centuries before the Industrial Revolution many measures indicate a faster pace of economic growth in northern than in southern Europe. Gains throughout Europe and especially in the north-west depended very heavily, directly and indirectly, on the success of moving goods by sea. Labour productivity in shipping grew faster from the sixteenth through to the eighteenth century than virtually all other sectors of the economy. The great beneficiaries of expansion were the places, the states and the people

¹Lucassen and Unger, 'Shipping'.

engaged in long-distance trade. The growth in shipping along with greater output of shipping services gave a unique character to the working conditions of sailors, who were becoming more productive.

There were diverse reasons for the greater efficiency of ocean shipping. Falling labour requirements per ton of the vessels; better, more durable ships that came from European shipyards or yards in the Americas and Asia that imitated European practice; better organisation of work in ports; scale economies from the growth in the total volume of trade; and a reduction in violence at sea and improved diffusion of information all contributed to the ability to move goods by sea at prices which sustained commercial expansion. Gains could be found throughout Europe from 1500 to 1800, but it was the 'maritime states' of the Dutch Republic² and England³ that benefited most from the growth in shipping in the seventeenth century. That was, if anything, even more the case in the eighteenth century, though by that time the expansion in seaborne commerce had a positive effect on French and German ports in northern Europe, with some centres in the Iberian peninsula enjoying a revival of fortunes after falling back from success in the decades just after 1500.4 Growth in shipping tonnage was most obvious in the maritime states. The Dutch merchant fleet doubled in size in the seventeenth century and the English one grew fourfold in the eighteenth. On the other hand, in the Mediterranean local shipping did not disappear by any means. Estimates dating from the 1780s put the merchant fleet in Italy at three-quarters of that of the Dutch Republic and a third of that of Britain. Venice alone had about 6 per cent of the tonnage of Britain sailing under its flag.5

The shift in the economic centre of Europe away from the Mediterranean after 1500 has long been a subject of discussion among historians and is often associated with changes in patterns of trade.⁶ To a certain degree the north was catching up with the south, which had enjoyed the advantages of trade for some centuries. From the fifteenth century, Iberian access to new goods from beyond Europe led to growth in Spanish and Portuguese shipping and brought foreign traders to peninsular ports.⁷ The economy of Europe became more and more open, more integrated and, even if slowly, more and more global. In the seventeenth, but even more the eighteenth, century European exchange across the Atlantic and with maritime Asia

²See Van Lottum et al. (Chapter 9) and Van Rossum (Chapter 15) in this volume.

³See Blakemore (Chapter 6) in this volume.

⁴See Allaire (Chapter 5) and Ressel (Chapter 8) in this volume; on the earlier sucess of the Iberian empires, see Polónia (Chapter 12) and Phillips (Chapter 13) in this volume.

⁵Unger, 'Tonnage', 260-261.

⁶Recently Acemoglu et al., 'The Rise'.

⁷Heers, 'L'expansion maritime', 21–22.

flourished. Extra-European trade had a profound influence on the urban pattern of Europe. The greatest growth in cities in the sixteenth and seventeenth centuries was in Britain and the Netherlands. In the period from 1500 to 1700 port cities constituted, after capitals, the class of cities with the greatest growth. About 55 per cent of them doubled or even tripled their populations.8 Ports in the Mediterranean basin grew as well, but not as fast as those on the Atlantic, which had easier access to long-distance trades reaching outside Europe. 9 These greater concentrations of population, talent and capital in trading centres enhanced the commercial competitiveness of the north and the employment of sailors.

In addition, northerners made inroads in the Mediterranean itself. At the close of the sixteenth century, Dutch and English skippers brought much-needed grain to Italian ports.¹⁰ The arrival of vessels from what would become the maritime states was not a single, cataclysmic event but rather a product of long-established connections which blossomed into a rapid expansion in exchange between north and south in the late sixteenth century and then long-term growth for northern European shipping over the following 200 years and more. In the seventeenth century, northerners took over part of the carrying trades within the Mediterranean as well, supplanting Italian, Greek and Muslim ships and shipping. Regional trades supplemented northerners' original business. Not incidentally, the process was to some degree repeated in Asian waters in the seventeenth and eighteenth centuries. The pattern of change generates an impression of relative shipping decline in the Mediterranean, a decline which appeared to mirror political change. In the three centuries after 1500 there was unquestionably a shift in the political focus away from the south, but with trade, as with power politics, it is too easy to dismiss the international importance of the Mediterranean basin in this period.

Pitfalls in accounting for performance differences

The causes of the relative success of French, Dutch and English shippers in the Mediterranean were varied. While a number of reasons can be and have been identified, assessing the relative importance of each has proven difficult.

The increasingly centralising states in the north were better able to mobilise financial resources for public expenditure, but the south had a number of large states while the North suffered from considerable political fragmentation. The Mediterranean was plagued by a divide along religious lines, although, despite the chasm between Christians and Muslims, followers of

⁸Bairoch et al., The Population, 177-188.

⁹Acemoglu et al., 'The Rise', 547–549.

¹⁰Fusaro (Chapter 2) in this volume.

the two religions found ways to cooperate for mutual benefit. By the midseventeenth century, formal political mechanisms were in place to deal with sailors seized in conflicts across religious lines. Because of the development of a system of licences sold by European states to captains after paying bribes to rulers on the North African coast to give their ships safe passage. the tendency over time was to allow freedom of movement to all parties, at a price. 11 Meanwhile, the north was plagued by religion-based violence as well. Protestant-Catholic antagonism often lay near the surface of conflicts. Peacetime piracy was admittedly rare in the north, but licensed predation was a common feature of war. Northern admiralties recast their navies in the eighteenth century, concentrating more on protection against pirates and privateers, and so acknowledging the importance of predation not only in the Caribbean but also in European waters.¹² The maritime states, the Scandinavian kingdoms and France took an increasing role in ensuring safety at sea for their subjects. 13 By the late seventeenth century, governments were requiring merchant vessels to travel in convoy and charged shippers for the cost of maintaining the naval vessels that protected the cargo ships. 14 The British navy in the eighteenth century proved especially effective in stopping privateering and piracy in the New World and in European waters, except for the Mediterranean, where naval action against Barbary pirates continued into the nineteenth century. Northern European states used diplomacy as well. Naval officers, ambassadors and consuls negotiated treaties with North African states¹⁵ and consuls offered aid in various forms to Christians doing business in Muslim lands. 16 They acquired information on business and political conditions and acted as commission agents and even legal representatives in court for their countrymen. They provided valuable service to trade and shipping. 17

The impression that northern European states were more willing and able to use their powers to protect shipping may well be false. Mediterranean maritime republics and states also mobilised naval forces and organised convoys to protect shipping. They too made agreements with Barbary pirates, and, if anything, it was they who pioneered the practices that the maritime states and others used in making inroads into Mediterranean trade. What is more, northerners paid heavily for the protection which their governments supplied. The cost might have been borne not just by the shippers. The tax

¹¹Bejjit, 'Merchants', 66–76; Davis, 'England', 130–132.

¹² Glete, *Warfare*, 11–14, 72–73, 125–126; Müller, 'Consuls', 30–31; Unger, 'Investment', 41–59.

¹³ Davis, 'England', 126-32.

¹⁴Unger, 'Investment', 52-54.

¹⁵Bejjit, 'Merchants', 61–63, 72–74; Davis, 'England', 131; Müller, Consuls, 31.

¹⁶Steensgaard, 'Consuls', 36.

¹⁷ Müller, Consuls, 225–226; Müller and Ojala, 'Consular Services', 24–26, 35–40.

burdens that, in general, Dutch and, later, British populations sustained were far in excess of what people around the Mediterranean basin had to pay, either absolutely or as a share of income. 18

Northern Europeans used more energy than their counterparts around the Mediterranean. In England coal was growing in importance as the source of heat for homes and for industry; in the Netherlands it was peat. With more energy at their disposal, northerners could produce goods more cheaply and more quickly, thereby gaining a competitive advantage in trade and ultimately in shipping. Exactly how much energy people in the Dutch Republic got out of how much peat is a subject of debate, while for England figures are more reliable. Coal in 1650 was supplying each individual in England and Wales on average with about 6.6 gigajoules per year. Peat in the Dutch Republic at the same time was supplying on the order of 11.9 gigajoules per person per year. For England in 1650, total energy consumption from all sources was about 18.4 gigajoules per person per year, so coal was already supplying over a third of the total. Levels of reliance on fossil fuels in both countries rose over the next 150 years so that by about 1800 England was getting 34.3 gigajoules per person per year from coal, 68 per cent of total energy consumption, and the northern Netherlands as much as 55.3 gigajoules per person per year. 19 Contemporary energy consumption in southern Europe was less. If it is true that people in Italy were burning on average about a kilogram of wood per person per day throughout the seventeenth and eighteenth centuries then they had at hand annually about 4.6 gigajoules per person.²⁰ Northerners consumed more energy, but people in Italy did not need to generate as much heat to stay warm. As late as 1700 in England 50 per cent of coal consumed went on home heating, or about 8.0 gigajoules per person per year.²¹ Counterparts around the Mediterranean were using only a very small share of their 4.6 gigajoules per person per year for home heating, leaving them perhaps as much as 4 gigaioules per person for industrial production. Coal burning was somewhat more efficient than wood burning, so the effective energy deployed for production was greater than 4 gigajoules around the Mediterranean compared to 8 gigajoules in England. The difference between north and south, though considerable, was not as dramatic as it might seem at first, but northerners did have more energy to deploy in, say, manufacturing, and the difference did increase in the eighteenth century, creating more industrial and commercial possibilities.

¹⁸O'Brien, 'The Political Economy', 1–8, 23–25; O'Brien, 'Inseparable Connections', 64; O'Brien, 'The Nature', 426-436.

¹⁹Unger, 'Energy Sources'; Van Zanden, 'Over het energieverbruik', 490–494; Warde, Energy Consumption, 116-119,132-135.

²⁰Malanima, 'The Energy basis', 53.

²¹ Flinn, The History, 212.

Another, and probably more telling, indicator for the economy was the relative real cost of energy in the two parts of Europe, that is, whether people in general and industrial users in particular had some cost advantage relative to others thanks to more easily accessible and cheaper fuel.²² In the first half of the seventeenth century, Florentines, in real terms, paid almost double what Londoners did for energy, and Neapolitans more than three times as much. In the second half of the eighteenth century the ratios had shortened to about a third more for people in Florence and half as much again for people in Naples. Prices in Madrid at the same time were even higher, about two-thirds more than those in London. In general, the north had access to lower-cost energy than did buyers in urban markets in the south.²³ The warmer temperatures in Italy and Spain meant that the high cost of wood made less of a dent in household budgets and so had less of an impact on production and exchange than a strict comparison of prices might suggest.

Technical advance would be one of the cornerstones of the Industrial Revolution which began in Britain. Superior technology certainly was an asset for the economies of north-western Europe, but that did not become obvious until late in the eighteenth century. Contrary to historians' efforts to discredit science and technology in southern Europe as enterprises hand-cuffed by a conservative Roman Catholicism, the south did have scientists and thinkers of considerable accomplishment in the seventeenth and eighteenth centuries. What is more, in the sixteenth century in matters of shipping, navigation and finance it was northern Europe which relied on and borrowed from Iberia and lands around the Mediterranean.²⁴ The sixteenth and seventeenth centuries were more a period of northerners closing the gap and overcoming the headstart that southerners had. If there was an advantage to northern shippers, it was slow in coming.

In southern Europe, with many microregions, adaptability was a necessity for farmers, since change could be sudden and highly localised.²⁵ That is not to say farmers elsewhere were free from risk, only that their counterparts around the Mediterranean functioned in a world of greater uncertainty. Presumably, the previously unknown plants brought from the New World in the sixteenth century benefited farmers in all parts of Europe. Potatoes and maize found places in fields throughout the continent and offshore islands, though admittedly the pace of adoption varied considerably. Foods like peppers and tomatoes may have had a massive impact on diets in southern Europe, but it was maize which increased calories produced per hectare

²² Allen, 'Timber Crisis'.

²³ Ibid., 479.

²⁴Unger, 'Dutch Nautical Sciences'.

²⁵ Horden and Purcell, *The Corrupting Sea*, 230–231, 235.

and offered some cushion against the risk of harvest failure in an uncertain world.²⁶ It appears that agriculture, at least in Italy, even after the adoption of maize, some drainage projects and the development of rice cultivation, generally went through a long period of depression from the late sixteenth to the second half of the eighteenth century, ²⁷ though there were some areas and periods of exception.

Reductions in food production would have had a limited and often short-term impact on shipping. This was less true of access to funds for investment. German. Dutch and English businessmen and governments imitated Italian methods of transferring funds and mobilising capital in the sixteenth and seventeenth centuries. The rising scale of operations over time had the potential to increase efficiencies. There were some innovations introduced in the north. Exchange banks grew up in a number of ports²⁸ and, in a more novel departure, governments promoted the creation of the joint-stock company, an institution first developed to capitalise trade from the maritime states to the East Indies. Northern Europeans may have had access to capital at lower rates of interest than merchants in Mediterranean ports, and merchants did worry about the price of loaned money²⁹ because of the potential impact of higher borrowing costs on commerce. In general skippers took luxuries northward and bulk goods southward. The imbalance in volume, always a considerable hurdle, was compounded by a long-term balance of payments deficit the south faced with the north. The decline in service industries in Italy, especially shipping, from the sixteenth century on and banking from a later date, only meant a larger balance of payments deficit and resulting export of capital to pay for imports. That draining away of loanable funds should have resulted in rising and relatively higher interest rates for Mediterranean traders, restriction of investment in commerce and shipping and, ultimately, to poorer working conditions for sailors.

The framework of sailors' labouring lives

No one explanation, no one feature of the politics, economy, ecology or religion is in itself adequate to explain the pattern of change in European shipping through the seventeenth and eighteenth centuries. A source of the shift northward may be found in the parameters within which sailors worked. There can be little doubt that conditions of employment had an effect on the performance of the men on board ships. The same can be said

²⁶Crosby, The Columbian Exchange, 170–185.

²⁷Romano, 'Italy', 188–192.

²⁸Heers, Gênes: activité économique, 97–191; Lindberg, 'Comparative Institutional Perspective', 28.

²⁹ Barbour, 'Merchant Shipping', 270–272; Hutchison, Before Adam Smith, 58–67; Finkelstein, Harmony, 130-143, 149-160.

for what people did in the ports that ships visited or on vessels in which mariners worked. Within that large category of the framework of employment are many facets of what sailors, merchants and dockworkers, among others, faced. The essays in this volume address a number of the characteristics of sailors' labour. Wages, their level and how paid, legal restrictions on sailors and any legal recourse they had, the cultural homogeneity of crews, structures of labour markets and the danger of the work, especially in the Mediterranean – since acts of war or piracy could mean enslavement – were in the minds of those who signed on to go to sea. Such aspects of sailors' work must, therefore, be in the minds of those trying to describe and understand the nature of maritime labour in early modern Europe.

The goods traded, the commodities shipped, set the scale and character of maritime labour. For millennia in the Mediterranean wine, olive oil and grain were the bulk goods of commerce. Wood might be easier to ship, since it is not dense and floats, but it, too, had a long history of carriage by ship, as environmental changes and human action increased the importance of forest products over time. Grain continued to be a critical commodity, as the late sixteenth-century influx of northern cereals into the Mediterranean showed. The price history of urban centres in north-western Europe and in Italy – for example Windsor in England compared to Siena in Tuscany in the first two-thirds of the eighteenth century – indicates that there were many years when prices for grain in the south were lower than in the north.³⁰ Grain was not an export to the Mediterranean every year. For the other principal bulk goods, wine and olive oil, climatic conditions made those goods, if anything, exports from the Mediterranean.

The Italian cloth industry declined in the seventeenth century, imports from northern Europe contributing to the regression.³¹ Cloth finishing shrank as well, so trade in related raw materials, such as dyes and alum, fell. Shipping those goods was important, for example, to the trade of Genoa with the Ottoman Empire, at least through the fifteenth century.³² New trades or new directions of trade partially compensated for any losses attributable to the decline of the southern textile industry. And there was the intercontinental trade in spices but that was not new, although the goods came from a new direction. Many of the relatively high-value items that traders classified as spices were produced in the Mediterranean region and continued to be exchanged and even exported to the north. The spices which originated in South and South-east Asia had long come overland or by ship and then overland to the Levant before shipment to ports like Venice for redistribution to various west European markets. After 1499 some made their way

³⁰ Allen and Unger, Allen-Unger Database.

³¹Cipolla, 'The Economic Decline', 135, 142–143; Davis, 'England', 118–124.

³² Heers, Gênes: activité économique, 392–398.

first to Lisbon and then on to various destinations. In the seventeenth and eighteenth centuries more and more they went directly to Dutch and English ports. It was from there that supplies went on to markets in France, Germany and north-eastern Europe and, especially after about 1610, in the Mediterranean basin. It was not just in the exotic spices from afar but also in locally produced spices that north-western shipping came to predominate. Cultivation of sugar cane had come to the Mediterranean in the Middle Ages through Arabic lands, and landowners established production in Sicily and southern Spain. By the fifteenth century sugar growing in the Atlantic Islands. the Canaries and Madeira made it possible for shippers to profit from carrying the commodity through the Strait of Gibraltar and as far as the Aegean Sea.³³ As Portuguese and Spanish settlers took sugar-growing to the other side of the Atlantic, and then their Protestant competitors developed plantations on islands in the Caribbean, sugar prices fell and the volume of sugar consumed rose dramatically. In the process the source of the commodity for the continent became ports in north-western Europe.³⁴

As the population of lands on the other side of the Atlantic recovered from the demographic disaster of the sixteenth century, thanks to voluntary as well as involuntary migration, production of goods for European markets rose. People in the Americas also bought more of the industrial goods which Europe produced. In all cases developments worked to the advantage of shippers along the Atlantic front of Europe. As suppliers of manufactures, as markets for American products and as distribution centres for those products, the ports on the Atlantic and North Sea were better off than cities on the Mediterranean. Already in the sixteenth century Lisbon was sending goods from India and the Atlantic islands to Antwerp, where they were sent on to buyers in the Netherlands, France and Germany.³⁵ After 1585 Amsterdam became the centre for redistribution. As the trades grew, more ports came to compete, and soon London outstripped Amsterdam while Hamburg, Bristol, Bordeaux and a number of lesser ports took on tasks of redistribution.

The extent and type of work on board was heavily influenced by the routes ships needed to travel to carry cargoes from sellers to buyers. In the Mediterranean, winds tended to be more stable, their directions more easily anticipated through the seasons of the year than in the Atlantic. On the other hand, in the Mediterranean, peninsulas and islands were often in the way of direct routes between any two ports. The open Atlantic offered more options and fewer shores to be caught up on. The navigation techniques and knowledge mariners needed in the Atlantic were less demanding

³³Heers, 'L'expansion maritime', 20–22.

³⁴Davis, Atlantic Economies, 250–260.

³⁵ Harreld, *High Germans*; Van der Wee, *Growth*, 2: 124–130, 153–157, 177–183.

and certainly did not require the consistent attention to location and surroundings that plagued those sailing in the Mediterranean, but the lack of tides gave mariners in the south one less thing to worry about. On the Atlantic front and in the North Sea the differences between high and low tides could be considerable, and the currents placed serious limitations on navigation. All parts of Europe and, for that matter, the world had storms. Bad weather at sea would have meant hard labour on occasion everywhere. Whether there were more storms in the seventeenth and the eighteenth centuries than before or after is probably impossible to measure. There is some suggestive evidence that wind patterns in the eastern Atlantic did change in the eighteenth century. The development was apparently not the result of some short-term oscillation but rather a long-term shift in the ways the wind blew. The change did force wind-powered ships to alter their time of travel, though the adjustment in direction had little effect on courses taken, except in specific instances.³⁶

It was easier and more common for ships in southern waters to make stops on voyages. Tramping was common in both the north and the south, but stops that were not for trading were easier in the Mediterranean. There the larger number of anchorages and the proximity of land along so many routes gave sailors more options.³⁷ At some time in the twelfth century a technical revolution made possible long-distance voyages from one end of the Mediterranean to the other with few if any stops. 38 In the north around the same time long-distance open sea voyages were becoming more common, moving bulky cargoes. Specialisation, carrying a single cargo between two ports, meant less time spent on land and in varied locales. As the length of voyages increased, working conditions of men on board changed. With short or regular trips sailors could be firmly attached to a home, family and friends and even maintain alternative employment. Such possibilities declined as voyages increased in distance and duration. Trips between north-western Europe and the central and eastern Mediterranean, often carrying a single cargo from one port to another, lengthened the time sailors were away from home. The development in the seventeenth and eighteenth century of what was called in the Dutch Republic the voorbijlandvaart, with ships passing by the Netherlands and going straight from the Baltic to southern Europe, was a source of complaint about the loss of business for Amsterdam as a distribution centre. The practice also created new kinds of sailors with less attachment to some home and little or no chance for seasonal employment when not on board. To what degree the long time at sea,

³⁶Wheeler and Suarez-Dominguez, 'Climatic Reconstructions'; Wilkinson *et al.*, 'Recovery'.

³⁷ Guilmartin, Gunpowder, 63–66.

³⁸ Pryor, 'A Medieval Mediterranean Maritime revolution'.